

Default Sentential Stress and Non-Exceptional Reflexives

Byron Ahn

byron-[æ̀t]-ucla-[dat]-edu

UCLA Department of Linguistics

0 Introduction

Default Sentential Stress (**DSS**) is the **assignment of the sentence's Nuclear Stress** in out-of-the-blue contexts

↳ In many cases, **DSS tends to fall on the rightmost word** of an English sentence:

- (1) A: What happened in the kitchen?
B: Remy accidentally burned *Marie*.

↳ This has led to linear-order-based **DSS**-assignment rules, such as the Nuclear Stress Rule (NSR) of Chomsky and Halle 1968:

- (2) **Nuclear Stress Rule**: The rightmost primarily-stressed vowel in a domain receives the strongest stress

↳ In this way, **reflexive anaphors of English seem to behave differently**, at first glance:

- (3) A: What happened in the kitchen?
B: Remy accidentally *burned himself*.

↳ Thus it has been stipulated that **reflexives are simply exceptions** to normal **DSS**-assignment

However, **the data is more complex** than an exception-to-NSR analysis would allow

↳ For example, (4) is a syntactic minimal pair with (3), and **DSS** falls on **the reflexive**:

- (4) A: What happened in the kitchen?
B: Remy accidentally burned Marie and *himself*.

↳ Additionally, besides (4), I find another syntactic effect of **DSS** and **reflexives** in the grammatical voice of the clause

Thus, we need to account for what determines the distribution of **DSS** on anaphors

↳ **Following a syntactic account of phrasal stress** like Cinque 1993, I argue that the **reflexive** as in (3), there is **syntactic movement that feeds the prosody**

1 Methods

The question thus pursued here is: **which reflexives bear DSS, and which reflexives don't?**

- ↳ To answer this, English native speakers are recorded reading short scripts
- ↳ Participants silently read the entire script first, to fully understand the context, and then read the script aloud (two repetitions)
- ↳ Here is a **sample script with the test sentence is underlined**:

(5) A: What a day! I'm tired.
 B: I bet you are! How are you liking your job here at the camp?
 A: It's a lot of fun, but the kids are a little rowdy.
 B: Yeah. What was all that commotion in the crafts room yesterday?
 → A: Moira was gluing Noah to herself. It was in good fun, though.
 B: As long as everyone's having a good time!
- ↳ The contexts are set up in so that **everything in the test sentence is new information**, in hopes of eliciting broad-focus on the whole sentence (the context for **DSS**)
- ↳ The test conditions were set up so that **reflexives, r-expressions and pronouns were all tested in the same context**, to allow for direct comparison between the three types of DP

Each test sentence is to be prosodically labelled by (at least) two native-speaker coders, who follow the conventions of MAE_ToBI. (Beckman and Hirschberg 1994)

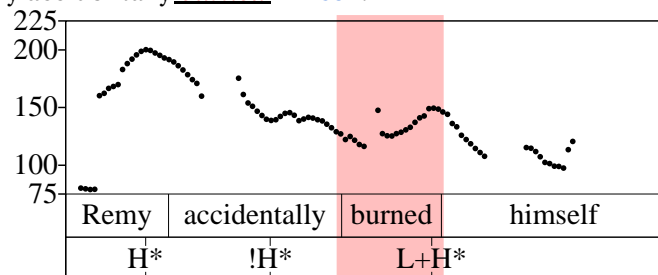
- ↳ If the **reflexive** bears a pitch accent that both coders perceive as the most prominent, it is considered as the **DSS**

2 Data

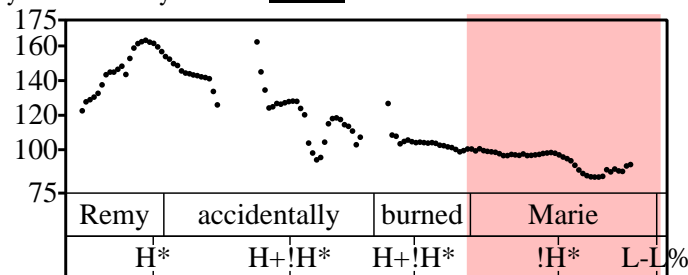
Consider the two minimal triplets below: the **reflexive** must not bear the **DSS**, even though an r-expression must (and the (c) examples are not attested):

(6) A: What had happened in the kitchen?

a. B: Remy accidentally *burned* himself.



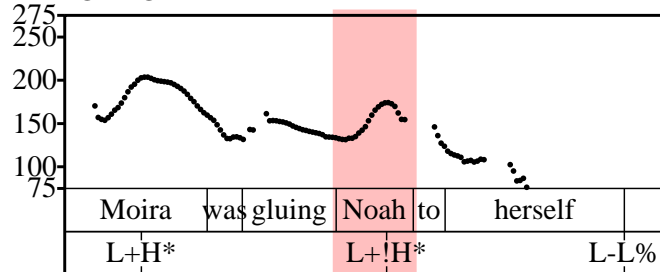
b. B: Remy accidentally burned *Marie*.



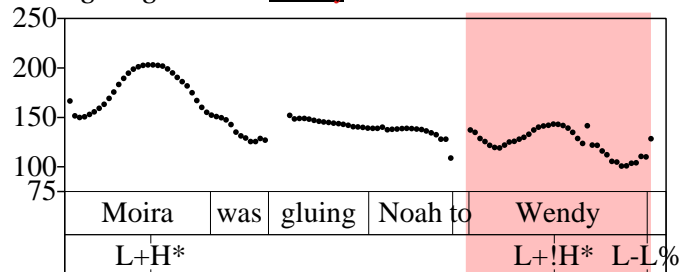
c. B: *Remy accidentally burned *himsélf*.

(7) A: What was all that commotion in the crafts room yesterday?

a. B: Moira was gluing *Nóah* to herself.



b. B: Moira was gluing Noah to *Wéndy*.



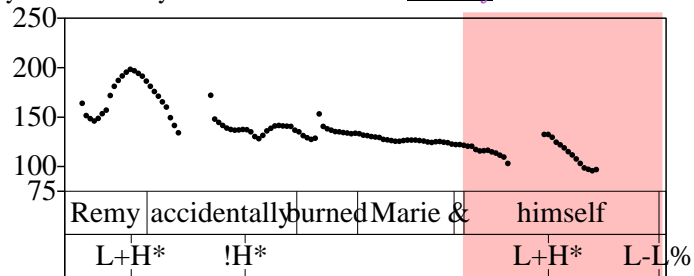
c. B: *Moira was gluing Noah to *hersélf*.

↳ The data above could be accounted if anaphoric elements **DSS** (e.g. Bresnan 1971, Kahnemuyipour 2009) or functional elements (e.g. Zubizarreta 1998) just never bear DSS

↳ But (8)-(9) – minimal pairs with the above data – are entirely unexpected because **these reflexives must bear the DSS** :

(8) A: What had happened in the kitchen?

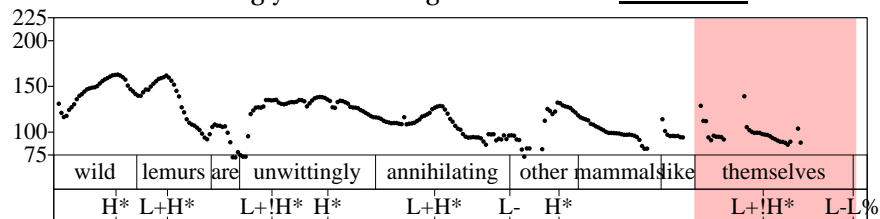
a. B: Remy accidentally burned Marie and *himsélf*.



b. B: *Remy accidentally burned *Maríe* and himself.

(9) A: What are you learning about in ecology?

B: Wild lemurs are unwittingly annihilating mammals like *themséives*.



B: *Wild lemurs are unwittingly annihilating mammals *like themselves*.

The fact that some reflexives do bear **DSS**, and the fact that other reflexives do not bear **DSS**, rules out a NSR-based analyses

3 Analysis

3.1 Movement and DSS

Constituents **inside of syntactic islands** are ineligible for movement operations (Ross 1967).

↳ *Marie and X*, as in (8), and *mammals like X*, as in (9), **are both islands**:

- (10) a. *Who did Remy accidentally burn Marie and ____?
 b. *Which animals are wild lemurs unwittingly annihilating mammals like _____

Notice that there is a correlation between movability and inability to bear DSS

↳ (6)-(7): no syntactic island, no **DSS** on the reflexive

↳ (8)-(9): syntactic island, **DSS** borne by the reflexive

↳ The natural conclusion for this fact is:

↳ **syntactic movement is taking place** in (6)-(7), and it somehow feeds “**DSS-avoidance**”

↳ but the **island constraints block “DSS-avoidance” movement** in (8)-(9)

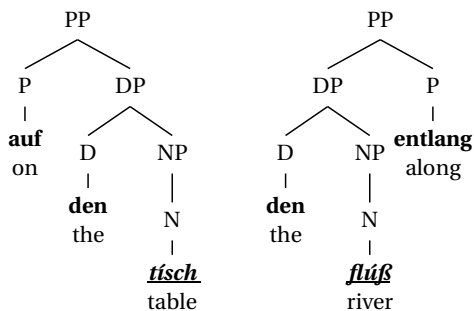
↳ This being the case, **we need a syntactic model of DSS**, such as Cinque’s (1993) Null Theory of Phrasal Stress:

- (11) **Null Theory of Phrasal Stress**: The most deeply embedded constituent in the S-structure receives the phrasal stress.

↳ This is motivated by cross-linguistic patterns, whereby **the object (more embedded than the verb) bears DSS regardless of headedness** (e.g. Donegan and Stampe 1983):

	DSS on Object	DSS on Verb
VO-language	✓	✗
OV-language	✓	✗

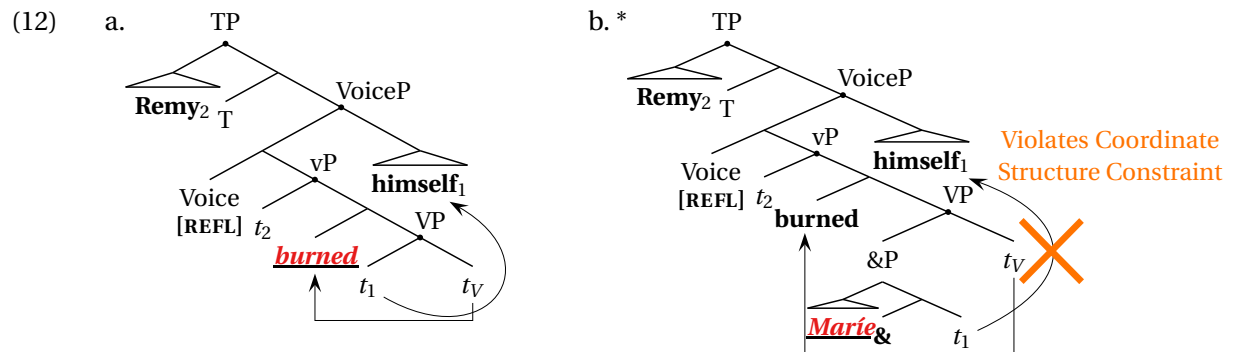
↳ **DSS** also directly correlates with syntactic headedness within a language, e.g. in German PPs in which **phrasal stress always is borne by the NP** (more embedded than the P), regardless of whether the PP is head-final or head-initial (Cinque 1993):



↳ Moreover, in this syntactic model, **movement feeds the prosody** (as has been long noted, going back to at least Bresnan 1971)

- ↳ Object reflexives and r-expressions originate in the same, most-embedded position
- ↳ Reflexives that don’t bear **DSS** **must no longer be most-embedded**, due to movement
- ↳ When movement is blocked by an island, the reflexive (like the r-expression) will bear **DSS**

↳ This is exemplified in these trees:



3.2 Voice Syntax

In the structures above, I have the **reflexive** moving to a VoiceP – **what is this VoiceP?**

- ↳ Voice⁰ is an “argument structure” head (Sailor and Ahn *in progress*)
 - ↳ It takes the v/VP (and thus all the arguments of the clause) as its complement
 - ↳ It is the “pivot” which **determines a surface structure of the clausal arguments**
 - ↳ This is **distinct** from the way VoiceP is used in, for example, Kratzer 1996, Alexiadou et al. 2006
- ↳ Thus, we have at least Active, Passive and Middle Voice⁰s (e.g. Collins 2005, Ahn and Sailor *to appear*)
 - ↳ This allows identical underlying argument structure for all these grammatical voices
 - ↳ This is **highly** desirable, given a principle like UTAH (Baker 1988)

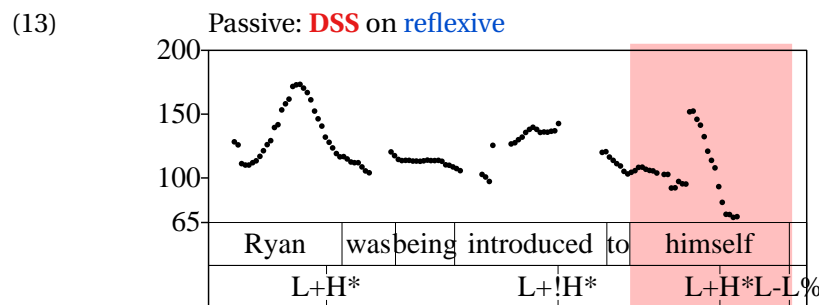
Moreover, **there is another Voice⁰: Reflexive**

- ↳ Reflexive Voice is responsible for the **compositional interpretation of reflexive clauses**
- ↳ In English-type languages, **Reflexive Voice syntactically requires an anaphor to move to VoiceP**
 - ↳ For more argumentation in favor of this, see Ahn (In Progress)
 - ↳ (Reuland 2011 has a very similar movement operation, but the motivations are quite different)

3.3 Prosodic Predictions of the VoiceP

If *Reflexive* Voice is what triggers movement of the **reflexive anaphor**, we predict other voices will not cause the **reflexive** to move

- ↳ A clause with, for example, the Passive Voice⁰ cannot also have a Reflexive Voice⁰
- ↳ Prediction: **any reflexive in a passive clause is (in principle) eligible to bear DSS**
- ↳ This prediction is supported by the data

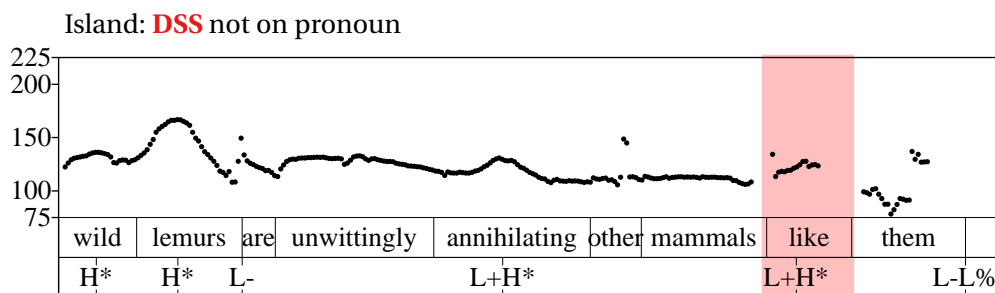
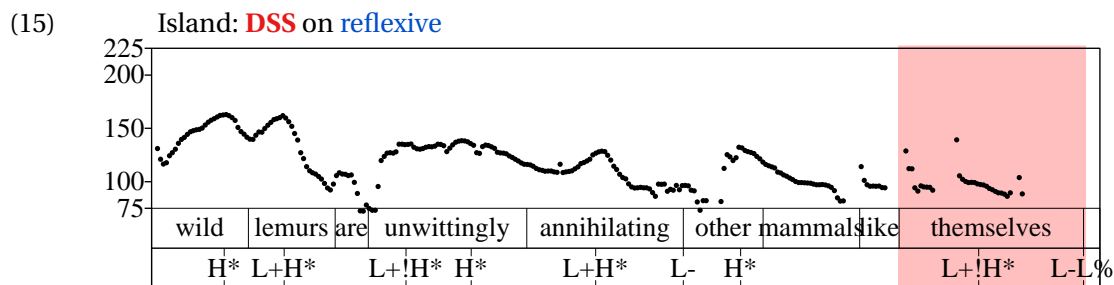
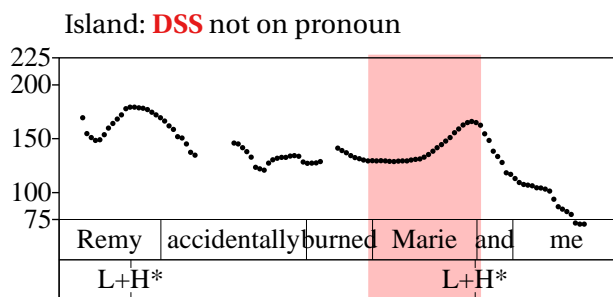
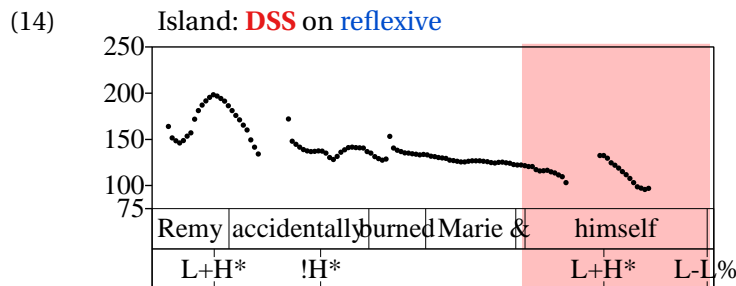


This provides further support for an analysis in which the **reflexive** moves to VoiceP

3.4 Reflexives vs. Pronouns

Finally, though **reflexives** and pronouns share superficial similarities, in terms of usually not bearing **DSS**, **it cannot be that both involve this movement to VoiceP**

- ↳ Since pronouns also don't often bear **DSS**, the NTPS would require that **pronouns are not at the same level of embedding as r-expressions**, similar to **reflexives**
- ↳ Though **reflexives** arrive at their surface position by movement, **it is not necessarily the case that pronouns undergo movement of this nature**
- ↳ In fact, **pronouns “avoid DSS” even when movement would be impossible:**



- ↳ Therefore, whatever derives which pronouns ‘avoid’ **DSS** should be treated as different from what derives when **reflexives** ‘avoid’ **DSS**

4 Conclusion

This analysis provides further **evidence that DSS is determined structurally**

- ↳ Supporting existing research (e.g. Cinque 1993, Kratzer and Selkirk 2007, Kahnemuyipour 2009)

This analysis is supported by the fact that **syntactic movement has been independently argued to feed the DSS prosody**

- ↳ e.g. relative clause data in Bresnan 1971 and Stowell's (Forthcoming) analysis of which post-verbal adverbs of English can bear **DSS**

Finally, **reflexives are not prosodically exceptional**

- ↳ When they do or do not bear **DSS depends on structural factors** such as island-hood and the clause's Voice
- ↳ Any analysis that would require such a stipulation of exceptionality is inadequate
- ↳ This lends further support the idea that **the mapping from syntax to prosody is very direct** (e.g. Kratzer and Selkirk 2007)

5 Further Research

This Voice-analysis has further independent support in that it can explain the following complex phenomena rather simply:

- (16) a. Henry defended himself and Anne did too. (Ahn 2011a)
 = Anne defended herself.
 ≠ Anne defended Henry.
- b. The diaper won't throw **ITSELF** away. (Ahn 2011b)
 = Someone else will throw the diaper away.
 ≠ The diaper will throw something else away.

Moreover, English **reflexives** do not look so different from Romance clitics

- ↳ The **reflexives** that move are only slightly different from Romance clitics – see Ahn (In Progress) for discussion of the striking similarities

Finally, a Reflexive Voice⁰ is, in principle, easily applicable to languages that mark reflexivity with some kind of verbal affix

- ↳ In fact, Finnish provides especially good insight, since it can utilize either an English-style DP or a verbal affix

To find further support for this analysis, **the extent to which the prosodic properties of the reflexive, as motivated here, is cross-linguistically extendable** must be explored

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