"Don't leave me behind, I lean on you!": Ellipsis remnants at the syntax-prosody interface*

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1 Overview

- We propose a new generalization on remnants in various ellipsis constructions: unstressed functional material <u>cannot be stranded if its (potential) prosodic host is</u> elided.
- For example, an unstressed object pronoun cannot be stranded if its verb is elided (gapped).
 - (1) a. I called Sheryl on Monday, and called her again on Tuesday.
 - b. *I called Sheryl on Monday, and called her again on Tuesday.
- We analyze this as an instance of **syntax-prosody mismatch**.
 - Within *indirect reference* theories¹, like Match Theory (Selkirk, 2009, 2011), such syntax-prosody mismatches are treated as arising from competition between the pressure to reflect syntactic structure, and prosodic well-formedness constraints.
 - Capturing this interaction requires an architecture in which the prosody and ellipsis are evaluated in parallel.

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¹So-called because prosody operates over prosodic constituents, instead of directly on syntactic constituents.

- Specifically, we propose that ellipsis is a systematic violation of Match constraints, in order to phonologically reduce given material ('ellipsis as radical deaccenting').
 - This is implemented directly in the syntax-prosody mapping, via an optional reranking of a constraint forcing reduction of given material (DESTRESS-GIVEN) over a constraint forcing material to map to phonological words (MATCH WORD).
 - We show that the Stranding Generalization falls out of this optional reranking, given independently motivated prosodic wellformedness constraints.
- The broader implications of our analysis, if successful, is that it motivates a view of ellipsis whereby **any constraints on ellipsis beyond semantic recoverability are the result of competition between candidates** for the possible phonological output of the syntactic input.
 - This competition is regulated by the relative ranking between Match constraints and prosodic well-formedness constraints.
- The handout is structured as follows:
 - In **section 2**, we illustrate what we call the Stranding Generalization, and explain why it is a puzzle for many contemporary theories of ellipsis.
 - * We also show show that the Stranding Generalization cannot be reduced to a putative generalization that remnants of e.g. gapping must contrast. We provide counterexamples, and explore the consequences for theories which derive ellipsis via movement.
 - In **section 3**, we introduce our theory, which places the calculation of ellipsis at the syntax-phonology interface. We show that it derives the Stranding Generalization, and predicts a previously unnoticed form of ellipsis that we dub *auxiliary gapping*.
 - In **section 4**, we suggest possible extensions of this theory to other ellipsis constructions and other languages.

2 The Stranding Generalization

- This section motivates the following generalization, which as we will show manifests itself in various ellipsis contexts:
 - (2) **Stranding Generalization**: In ellipsis contexts, unstressed functional material cannot be stranded without its prosodic host.
- By '*prosodic host*,' we mean material with which it would—in the absence of ellipsis—form a **phonological word** in the phonological representation (Itô & Mester, 2009).

- For example, an **object pronoun** forms a phonological word with a verb or preposition to its left, by phonologically cliticizing to it;² its own prosodic status is that of a bare (stressless) syllable.
 - This can be diagnosed by object pronouns' inability to bear lexical stress (when unfocused), and the possibility of vowel reduction and consonant deletion, e.g. seen-[əm] (=them).
 - See Itô and Mester (2009) for extended argumentation in support of this view of function words.
- Consider now what happens to object pronouns in verb gapping.
- In conformance with the Stranding Generalization, they cannot survive the deletion of the verb (3b).
 - (3) a. I called Sheryl on Monday, and called her again on Tuesday.
 - b. *I called Sheryl on Monday, and called her again on Tuesday.³
- The only way for an object pronoun to appear in a gapping context is to be independently stressed as a result of contrastive focus (4).⁴
 - (4) I called Sheryl₍₁₎ on Monday, and called MAry/HER₍₂₎/HIM on Tuesday.
- Particles display the same behavior, when used in the verb-particle order (5).
 - Though we don't have vowel reduction, Harley (2007) offers intriguing evidence of a prosodic relationship between the verb and particle.
 - Particles are generally impossible with verbs—mostly Latinate in origin—with a weak-strong stress pattern (hence *write up/*compose up)*.
 - Eliminating the weak syllable allows a particle, hence **confess up/'fess up*.
 - (5) then is another instance of the stranding generalization.
 - (5) a. *Turn off the lights, and turn off the computer!
 - b. Turn ON the lights, and turn OFF the computer!

²This is a strictly phonological process, not to be confused with syntactic cliticization.

³The inclusion of the adverb controls for the size of conjunction in (3b) and ensures that it underlyingly contains a verb. Constructions like these are sometimes discussed in connection to the phenomenon of 'non-constituent coordination' (see e.g. Bruening, 2015; Kubota, 2015 and references therein). We call (3b) 'gapping' even though this name standardly refers to cases where a subject appears in the second conjunct. We use this name simply as a cover term for cases of verb deletion.

⁴Here and throughout, we will sometimes use Big Caps to represent high prosodic prominence, signaling contrastive focus.

- Although it is tempting to attribute this to some independent requirement of gapping remnants to conrast, we show in section 2.2 that this is not the right generalization.
- Possessor pronouns display the opposite behavior to object pronouns: they cliticize to the right.
 - This is most easily demonstrated in non-rhotic Englishes, with vowel reduction in e.g. '[hə] book' (=her).
- Posessor pronouns are thus expected to exhibit the Stranding generalization with respect to **NP ellipsis**.
- Indeed, NP ellipsis cannot strand an unstressed possessor pronoun:
 - (6) a. I played Beyonce₁'s indie album in the car. John played her₁ indie album at home.
 - b. I played Beyonce's indie album in the car. *John played her(s) $_1$ indie album at home.
- Again, contrastive stress in this position allows the possessor pronoun to appear:
 - (7) I played BeYONce₁'s indie album in the car, and $HERS_2$ indie album at home.
- But if lexical material—such as an ordinal adjective—intervenes and provides a host, the possessor pronoun can survive the NP ellipsis, even when unfocused.
 - (8) I played Beyonce₁'s first indie album in the car, and her₁ SECond indie album at home.
- 'Portmanteau' function complexes—like usedta- ('used to'), wanna ('want to'), should'a ('should have')—cliticize rightward, as feet.⁵
 - Evidence comes from the distribution of *r*-insertion (see Itô and Mester, 2009 for details).
- Again, as the Stranding Generalization predicts, they cannot be stranded by ellipsis of their host verbs (9).
 - (9) a. Reginald used[tə] run in the mornings, and Rose used to/*used[tə] in the mornings as well.
 - b. I wanna leave. Do YOU want to/*wanna leave?
 - c. I should'a left, and YOU should have/should'av/*should'a leave too.

⁵Other examples of such portmanteau complexes are *gonna* ('going to'), *haftə* ('have to'), and *oughta* ('ought to').

2.1 Why is this a puzzle?

- Although the Stranding generalization may seem at first glance unsurprising, it constitutes a real puzzle for many theories of ellipsis.
- The generalization seems to be that these functional items **require** a host.
- But in other contexts <u>cliticization is not obligatory</u>. It is a prosodic process that only applies when its structural description is met.
 - It can be bled by movement, or if syntax does not provide a host from the get-go.
- For example, we saw that object pronouns normally cliticize to the left. But if there is nothing to cliticize to, as in (10b)—including as the result of movement as in (10c)—an unreduced form is used.
 - (10) a. I remember-im⁶ leaving very vividly.
 - b. Him/*-im leaving surprised me.
 - c. Him/*-im leaving, I remember very vividly.
- The same holds for possessor pronouns: if they do not have a host to cliticize to, an unreduced (in this case suppletive) form is used.
 - (11) This book is hers.
- Given that insertion of an unreduced form is available when the syntax does not provide a host, **why does ellipsis bleed this possibility**?
- This poses a problem for **LF-copying** theories of ellipsis, according to which 'ellipsis' sites are null anaphors whose value is retrieved from an antecedent (rather than hosting unpronounced but syntactically represented lexical material).
 - Consider (6b), repeated here as (12). If the ellipsis site is a null anaphor that needs to retrieve its value (an NP-meaning) from an antecedent, the pronoun will simply never have an appropriate host in the syntax.
 - The prediction of LF-copying, then, is that the unreduced form of the possessor pronoun should be allowed, contrary to fact.
- (12) I played Beyonce's indie album in the car. *JOHN played her(s)₁ indie album at home.

⁶We will sometimes use notations like *-im* as a mnemonic for cliticization. We do not intend this as an accurate phonetic representation; we have found that some speakers exhibit diagnostics of cliticization like vowel reduction without consonant deletion.

- But it is equally a problem for many **PF-deletion** theories, on which ellipsis is assumed to feed vocabulary insertion.
 - If ellipsis deletes the host, why is the unreduced form not used?

2.2 Not a general condition on Contrast

- The Stranding generalization, repeated in (13), was motivated by verb gapping data, repeated in (14).
- (13) **Stranding Generalization**: In ellipsis contexts, unstressed functional material cannot be stranded without its prosodic host.
- (14) a. I called Sheryl on Monday, and called her again on Tuesday.
 - b. *I called Sheryl on Monday, and called her again on Tuesday.
 - c. I called $Sheryl_{(1)}$ on Monday, and called MAry/HER₍₂₎/HIM on Tuesday.
 - Before we proceed to our analysis of the Stranding generalization, we need to make sure (13) is the correct generalization to conclude from data like (14).
 - In particular, as mentioned earlier, it is tempting to take (14) to exhibit a more general requirement that gapping remnants contain contrastive focus.
 - On this view, it might be objected that repeating the full DP rather than using a pronoun in the same position in (14b) is also unacceptable, and this isn't covered by (13) (since lexical words don't need a prosodic host).
- (15) %I called Sheryl on Monday, and Sheryl again on Tuesday.
- (16) **Contrast Generalization (to be rejected)**: Remnants of gapping must be part of a constituent that contains a contrastively focused element.
 - It is in fact widely believed that remnants in gapping (and pseudo-gapping) must contain 'new information,' or 'contrast', relative to the parallel position in the first conjunct (see Kuno, 1976; Féry and Hartmann, 2005; Gengel, 2007; Winkler, 2011 among many others).⁷
 - However, there is reason to believe that the behavior of weak pronouns in remnants is a separate phenomenon, and furthermore that there apparently is no absolute requirement for contrast on remnants.

⁷Many Move + Delete theories of gapping (see section 2.3) motivate movement via a requirement that focused constituents evacuate the ellipsis site (Boone, 2014; Weir, 2015 among others).

- First, as the diacritic in (15) indicates, some speakers we consulted actually found this sentence acceptable out of the blue.
- Second, all speakers find it acceptable in contexts like the following:
 - (17) Q: Who did you call this week, and when?A: I called Sheryl on Monday, and Sheryl again on Tuesday.
 - (18) Last week, I called Li on Monday, and Jian on Tuesday. This week, I called Sheryl on Monday, and Sheryl again on Tuesday.
- These examples show that in some contexts, <u>objects that are already salient in the</u> discourse, or 'given', are suitable gapping remnants.
 - We suggest that the speakers who found (15) acceptable out of the blue are more easily able to accomodate such a context.
- We are not sure what it is about certain contexts that don't allow given material to serve as gapping remnants; in any case, crucially, all consulted speakers also agree that replacing the name with a pronoun in (17–18) results in ungrammaticality:
 - (19) a. Q: Who did you call this week, and when?A: *I called Sheryl on Monday, and her again on Tuesday.
 - b. Last week, I called Li on Monday, and Jian on Tuesday. *This week, I called Sheryl on Monday, and her again on Tuesday.
- The only time a weak pronoun seems to be able to appear as a gapping remnant is when a host—i.e. a preposition—is available for it:
 - (20) a. I sent a cake to $Jian_1$ on Monday, and some wine to- im_1 on Tuesday.
 - b. I got a book from $Jian_1$ on Monday, and a letter from $-im_1$ on Tuesday.
 - c. *I sent Jian₁ a cake on Monday, and him_1 some wine on Tuesday.
 - Note the minimal pair of (20a) and (20c). The crucial difference is that the pronoun in (20a) is provided with a host that is missing in (20c).
- The examples in (20a–20b) reveal another difficulty for the Contrast generalization in (16). Recall that the Contrast Generalization says that remnants must be contained in a constituent that contains a focused element (but excludes the elided verb⁸).

⁸The candidate constituent must exclude the verb since otherwise the Contrast Generalization would always be satisfied, because the whole second conjunct needs to contain a focused constituent independently.

- But 'to him' and 'from him' in (20a–20b) do not meet this requirement.
- See the Appendix for clear evidence that to him does not bear pitch accent.^{9,10}
- The same is true for cases like (21a) and (21b), where the depictive 'raw' and the adverb 'quickly' are given, and nevertheless can serve as gapping remnants.
 - (21) a. The chef served the meat raw on Monday, and the fish raw on Tuesday.
 - b. She ran to the park quickly on Monday, and to the lake quickly on Tuesday.
- One possible line of response is to be creative with the kinds of constituents that the Contrast Generalization can apply to.
 - One might argue that *the fish raw* or *some wine to him* are constituents, perhaps small clauses of some kind.
 - The given elements then satisfy the Contrast Generalization by being part of this constituent.
- Even if such a constituent structure can be motivated, it would be too weak to account for the Stranding Generalization data.
- If the Contrast Generalization can be satisfied in a larger constituent, then we predict that a non-contrastive pronoun will be able to appear in this constituent if the other element is contrastive.
- Consider the examples in (22).
 - Here instead of a focused object and given depictive/Goal, we have a given object and focused depictive/Goal.
 - The pronouns in (22) should then satisfy this weaker form of the Contrast Generalization, contrary to fact.
 - (22) a. *I sent Jian to MASA on Monday, and him to MEI on Tuesday.
 - b. *The chef served the meat RAW on Monday, and it COOKED on Tuesday.
- We conclude that there is no general constraint on un-focused, or 'given', material serving as gapping remnants.

⁹We have also included accompanying recordings in the project folder.

¹⁰We used non-initial given material to test for the presence of pitch accent. This is because material at the beginning of a conjunct might receive optional pitch accent independent of contrast—perhaps marking the edge of an intonational phrase—just as given subjects optionally bear pitch accent outside of ellipsis.

- Before moving on, we would like to point out that we have also found cases in which the Contrast Generalization doesn't seem to hold even without complicated contextual manipulations like in (19).
- One relevant case is that of weak definites as in (23).
 - It is not clear what notion of contrast could be implicated in (23).
 - (23) I took the bus to work, and the bus again on the way back.
- Pronouns remain bad:
 - (24) * I took the bus to work on Monday, and it to the department on Tuesday.
- Similarly, mass nouns can serve as gapping remnants, again without perceived contrastive accent:
 - (25) a. I ate soup on Monday, and soup again on Tuesday.
 - b. *I ate soup on Monday, and it again on Tuesday.
- To conclude:
 - The Stranding Generalization holds. It does not reduce to a requirement that remnants contrast. Moreover...
 - The Contrast Generalization is not exceptionless. Gapping remnants do not have to contrast.
- Given the above, from here on we assume that the Contrast Generalization is false, and we leave to future research the question of the role context plays on allow-ing/disallowing given material to serve as remnants of ellipsis.

2.3 Consequences for Move + Delete theories of ellipsis

- The falseness of the Contrast Generalization poses a challenge for theories of ellipsis remnants involving **movement and deletion** (henceforth 'Move + Delete'), on which the ellipsis process in gapping targets a syntactic constituent (usually *v*P), and any remnants in the ellipsis site move out of it prior to deletion.
- Such theories generally assume, for the purpose of deriving the Contrast Generalization in (16), that it is the presence of focus that allows a constituent to evacuate the ellipsis site and survive as a remnant (Jayaseelan, 1990; Gengel, 2007; Toosarvandani, 2013; Boone, 2014; Weir, 2015).
- However, we have seen that the Contrast Generalization is wrong.

- This necessitates Move + Delete theories to weaken the restriction on remnants, and allow also completely 'given' material to evacuate the ellipsis site.
 - This is illustrated in (26) for (20c). On Move + Delete, the non-focus-containing [to-im] would have to move out of the ellipsis site prior to deletion.
 - (26) I sent a cake to Jian on Monday, and $[\text{some wine}_F]_j [\text{to-im}]_k [\text{sent } t_j t_k]$ on Tuesday.
- The trouble for Move + Delete doesn't end here, however.
- First and foremost, this leaves us with no account of the Stranding Generalization.
 - We saw that, when stranding of given material is possible, pronouns are still not possible as gapping remnants (27).
 - (27) Q: Who did you call this week, and when?
 A: I called Sheryl_j on Monday, and [Sheryl]_j [called t_j] again on Tuesday.
 A': * I called Sheryl_j on Monday, and [her]_j [called t_j] again on Tuesday.
- If the movement of 'her' were possible, the prediction is that it should behave like any other given pronoun stranded by movement.
 - The unreduced form should be inserted, and the structure should be licit.
- A Move + Delete theory needs a way to rule this movement out, but allow optional movement of other given material.
 - But there is no clear way to do so.
- We conclude that a Move + Delete theory, in which ellipsis is deletion of a given constituent, has no plausible way to derive the Stranding Generalization.
- Second, with this weakening of the conditions on remnants, we now lose a potential explanation for the apparent **exceptionality** of ellipsis site-evacuating movement.
 - The movement process required on Move + Delete analyses is indeed exceptional. For example, English does not allow medial focus-fronting *without* ellipsis:
 - (28) a. *I sent a cake on Monday, and [some wine_{*F*}]_{*i*} [sent t_i] on Tuesday.
 - b. I sent a cake on Monday, and [some wine_{*F*}]_{*i*} [sent t_i] on Tuesday.

- Boone (2014) and Weir (2015) impute this restriction on the idea that exceptional movement for the purpose of ellipsis licensing has some kind of 'last resort' character: since ellipsis absolutely cannot delete focused phrases, they are always allowed to evacuate an ellipsis site.
- Crucially, **only** focused phrases are granted this last resort mechanism; non-focused phrases can in principle be elided and so are not equipped with the ability for such exceptional movement.
- But now, the weakening on remnants invalidates this reasoning, and the exceptional nature of the required movement is left without justification.
- What is driving the exceptional movement of the given PP in (26)?
- **To conclude**, Move + Delete analyses of gapping phenomena do not help us in accounting for the Stranding generalization, and are problematic in hypothesizing otherwise unattested movement operations.
- In the next section we develop an alternative theory of ellipsis aimed to correct for this, which will furthermore not depend on a Move + Delete architecture.

3 Proposal

- In the previous section we argued for a Stranding generalization on remnants of certain ellipsis constructions, repeated in (29) from (2).
 - (29) **Stranding Generalization**: In ellipsis contexts, unstressed functional material cannot be stranded without its prosodic host.
 - a. The *prosodic host* of functional material is material with which—in the absence of ellipsis—it forms a phonological word in the phonology.
- In this section, we offer an analysis of (29). Our analysis will in turn motivate a new theory of constraints on ellipsis, grounded in the **syntax-prosody mapping**.
- Accouning for (29) requires making reference to a level of representation in which such notions as **prosodic host** can be defined. The most natural candidate for such a representation is in the syntax-prosody mapping.
 - This is where processes like prosodic cliticization are calculated. Crucially, we can assume that the input to this mapping includes the potential host for the pronoun.
 - It is also where, we propose, ellipsis of 'given' (i.e. semantically-recoverable) material is encoded.

3.1 Overview of proposal

- Our account is couched within **Match Theory** (Selkirk, 2009, 2011). The rough idea is as follows:
 - Match Theory provides a set of violable constraints governing the mapping of syntactic constituents to prosodic constituents.
 - Ellipsis is a systematic violation of Match constraints, as a way to satisfy an independent pressure to reduce 'given' material.
 - * This arises from an optional re-ranking between Match constraints and constraints governing deaccenting of given material.
 - Reduced given material will then be subject to independent prosodic constraints. If able to satisfy them, given material can survive ellipsis. If not, it must delete.
- We therefore propose that ellipsis is baked into the working of the syntax-prosody mapping.
- We give a detailed analysis just of the instantiation of (29) in the realm of verb gapping, though we believe this can be extended to the other cases discussed in section 2 using the same tools we develop below.
- The basic data we aim to capture is recapped in (30):
 - The Stranding Generalization: given function material cannot strand without its (potential) host (30a).
 - But given functional material can survive the ellipsis when provided with a host (30b).
 - Given lexical material can strand in all of these cases (in the right conversational contexts, 30c).
 - (30) a. *I sent Jian₁ a cake on Monday, and him₁ some wine on Tuesday.
 - b. I sent a cake to $Jian_1$ on Monday, and some wine to- im_1 on Tuesday.
 - c. (Who did you sent what when?)I sent Sheryl some cake on Monday, and Sheryl some wine on Tuesday.
- The relevant difference between *Sheryl* in (30c) and *him* in (30a) is one of prosody: weak pronouns prosodically cliticize onto a host when available; unstressed lexical noun phrases do not.
- The idea is that, given prosodic well-formedness constraints relating functional elements to their host, *him* in (22) must be deleted if the verb is.

- *Him* in (30b) is provided with a host, and is therefore not required to delete.
- The remainder of this section is structured as follows:
 - In section 3.2 we briefly introduce Match Theory.
 - In section 3.3 we outline our assumptions about how to derive the behavior of function words within Match Theory, drawing on Tyler (2019).
 - In section 3.4 and 3.5 we do the same for the treatment of focus and givenness.
 - * A minor extension of an existing Givenness constraint from Kratzer and Selkirk (2020)—together with an optional reranking with respect to a MATCH WORD constraint—derive ellipsis.
 - In section 3.6 we tie the strings together and show that this theory of ellipsis together with the other independently motivated constraints—derive the Stranding Generalization.

3.2 Match Theory

- Match Theory (Selkirk, 2009, 2011) is an 'indirect reference' theory of the mapping between syntax and prosody.
- There is a desire for syntactic categories in the input to match correponding prosodic categories in the output.
- This desire will be mediated by OT constraints, informally represented as follows:
 - (31) a. MATCH CLAUSE: CPs/clause correspond to ι (intonational phrases).
 - b. MATCH PHRASE: XPs corresponds to ϕ (phonological phrases).
 - c. MATCH WORD: X^0 correspond to ω (phonological words).
- However, Match constraints can be violated if outranked, e.g. by prosodic well-formedness constraints.
- For example, there have been argued to be constraints militating that phonological phrases (ϕ s) are both minimally (BINMIN) and maximally (BINMAX) binary.
 - When BINMIN outranks MATCH PHRASE, the output imperfectly matches the syntactic structure (32).
 - Rankings like this are argued to be the source of syntax-prosody mismatches.

(32)

	[_{DP} dogs]	BINMIN	МатснРн
a.	$(_{\phi} (_{\omega} \text{ dogs}))$	*!	
b.	\mathbb{R} ($_{\omega}$ dogs)		*

3.3 Function words

- It is common to assume that MATCH WORD does not apply to function words, since they generally fail to map to ω (Selkirk, 2011).
- However, we will follow Tyler (2019), who argues that MATCH WORD is not restricted in this way.
- Instead, many function words have (violable) prosodic **subcategorization (SUBCAT) frames**, which outrank MATCH WORD and MATCH PHRASE.
- Most relevantly to our current concerns, Tyler proposes that object pronouns have the SUBCAT frame in (33).
 - This is a requirement that the pronoun have as its mother a node of category ω , and material within the category ω to its left.
 - In simpler terms, the pronoun must prosodically cliticize to its left, by mapping onto a bare syllable (σ).
 - (33) Left-cliticizing frame: $(_{\omega} [...] (_{\sigma} D^{0}))$
- Because SUBCAT outranks MATCH WORD and MATCH PHRASE, the pronoun will always cliticize when possible.
 - This will favour a prosodic structure like (35).

34)					
		[_{VP} need them]	SUBCAT	MATCHW	МатснРн
	a.	($_{\phi}$ ($_{\omega}$ need) ($_{\omega}$ them))	*!		
	Ъ.	($_{\phi}$ ($_{\omega}$ need) ($_{\sigma}$ them))	*!	*	
	c. $(_{\omega} (_{\omega} \text{ need}) (_{\omega} \text{ them}))$		*!	*	*
	d.	($_{\omega}$ need ($_{\sigma}$ them))		***!	*
	e.	$\mathbb{R} (_{\omega} (_{\omega} \text{ need}) (_{\sigma} \text{ them}))$		**	*

(34)



- From here on we omit representing *σ* in the mapping rules and tableaux, and follow the convention that anything not within brackets is smaller than *ω*. So, (*ω* (*ω* need) *them*) abbreviates (*ω* (*ω* need) (*σ* them)) for the winner in (34).
- If there is nothing for the pronoun to cliticize onto, however, there will be no choice but to violate SUBCAT.
 - The MATCHW-compliant structure, with an unreduced form, will then be used (36).
 - Prosodic strengthening in these contexts is thereby treated as an 'emergence of the unmarked' effect.
 - Tyler (2019) extends this treatment to a range of other functional items.

(36)

	[_{DP} him leaving]	SUBCAT	MATCHW
a.	\square ($_{\omega}$ him ($_{\omega}$ leaving))	*	
b.	$(_{\phi} (_{\omega} \text{ him}) (_{\omega} \text{ leaving}))$	*	*!

- It is important to note a further fact about object pronouns: they cannot cliticize when embedded in a conjunct, even when there is a linearly adjacent host.
 - (37) a. *Mary and-im left (*cf.* Mary and him left).
 - b. *for[-im and Mary] (*cf.* for [him and Mary])
 - c. *saw[-im and Mary] (cf. saw [him and Mary])
- We therefore need a way to rule out a parse like (38).



• This shows that Tyler's (2019) SUBCAT constraint for object pronouns is not quite sufficient.

- Note that what seems to be relevant here is the presence or absence of a syntactic relationship between V/P and the pronoun.
 - There is no such relationship between the verb and a pronoun conjunct, or between *and* and a pronoun.
- We will build this restriction into the SUBCAT constraint itself (39).
 - The constraint now specifies that the pronoun must cliticize leftward onto verbs/prepositions that selects or case-assigns them.
 - (39) Object pronoun SUBCAT frame: $[_{\omega} [V_{sel}/P_{sel}] D_{sel}^{0}]$
- Note that this SUBCAT constraint has the effect of preserving a syntactic relationship between a pronoun and its selecting (or case-assigning) head.
 - There is no such relationship between a pronoun embedded in a conjunction and *and*.
- The SUBCAT constraints that Tyler (2019) proposes potentially all have this character.
 - Determiners cliticize right, within the noun phrase; finite auxiliaries often cliticize to the subject with which they agree.
- They therefore bear a strong resemblance to other constraints that have been argued to preserve syntactic relationships in the prosodic structure:
 - See for example the family of constraints in Contiguity Theory (Richards, 2016), and the Argument-φ condition of Clemens (2014).
- The behavior of reflexives is illustrative: we might expect the accusative pronominal component of a (3rd person) reflexive¹¹ to behave like other accusative pronouns, and cliticize to the left.
 - However, they cliticize to the right, as diagnosed by vowel reduction, as shown by the exempt anaphor in (40). We believe this is a novel observation.
 - This suggests that lexical items like *them* do not have SUBCAT constraints, but rather are subject to a more general desire to preserve syntactic relations in the word-level prosody.
 - We leave the implementation of such an approach to future work, and continue to use SUBCAT constraints.

¹¹Ahn and Kalin (2018) show that the pronoun is separable from the rest of the reflexive, e.g. *his own damn self*, with loss of accusative case. This means anaphors cannot be analyzed as single lexical items.

(40) [Thəm]selves aside, Peter and Scott don't tolerate hypocrites.

3.4 Focus

- When a functional item is contrastively focused, there is no cliticization onto adjacent elements.
- This is explained by a constraint like STRESS-FOCUS, adopted from Truckenbrodt (2006).
 - (41) STRESS-FOCUS: A contrastively focused element¹² must contain ϕ -phrasal stress.¹³
- Focused phrases, including functional phrases like pronouns, will have to map to ϕ in order to bear pitch accent and satisfy this constraint.¹⁴
 - (42) She praised $(HIM)_{\phi}$, not $(HER)_{\phi}$.
- This demonstrates the ranking STRESS-FOCUS \gg SUBCAT.

(43)

	$[_{VP} \text{ praised } [HIM]_F]$	STRESSF	SUBCAT
a.	\square ($_{\phi}$ ($_{\omega}$ praised) ($_{\phi}$ him))		*
b.	($_{\phi}$ ($_{\omega}$ praised) him))	*!	

3.5 Givenness

- An element is Given if it denotes an individual, a property, a relation or a proposition that has been made salient in the preceding discourse.¹⁵
- Given constituents have a strong tendency to avoid prosodic prominence.

¹²The notion of 'contrast' relevant for focus and prosodic promotion is notoriously difficult to pin down (See Büring, 2019 for recent discussion and relevant references), but in many cases–and in all cases of concern in this work—it is easily identifiable intuitively. To quote Büring, paraphrasing a famous proverb: "I know (a contrast) when I see it."

¹³We could strengthen the effect of STRESS-FOCUS with another constraint that, roughly, maps the last focused element in the sentence to the head of the corresponding ι -phrase. This would account for the fact that the last focus in a sentence bears the nuclear pitch accent. STRESS-FOCUS is sufficient for our purposes.

¹⁴An exception to this is second-occurrence focus, where pronouns only map to ω . Cliticization is still impossible in second-occurrence focus, as first noted by San Tunstall and reported in von Fintel (1994).

¹⁵There is debate about how exactly to cash out the notion of Givenness that's responsible for prosodic demotion (for relevant discussion see Schwarzschild, 1999; Buring, 2016; Wagner, 2012, among others). This informal characterization, we hope, is sufficient for our purposes.

- We will utilize an adjusted version of Kratzer and Selkirk's 2020 implementation. Kratzer and Selkirk (2020) propose DEPHRASE-GIVEN, which assumes that Given elements are marked with a G-feature in the syntax and maps them to a prosodic level lower than ϕ .
 - (44) DEPHRASE-GIVEN: A G-marked constituent corresponds to a prosodic constituent which is not a ϕ and contains no ϕ . (Kratzer and Selkirk, 2020)
 - If a G-marked constituent must be phrased less than ϕ , it follows that it cannot contain ϕ -phrase level stress, i.e. no pitch accent.
- With a ranking DEPHRASE-GIVEN \gg MATCH PHRASE, Given constituents will fail to map to ϕ , and thereby fail to receive pitch accent.¹⁶
 - (45) When did John's mother praise him? She praised John on Monday.

(46)

	$[_{VP} praised_G [_{DP}John]_G]$	DephraseG	МатснРн
a.	($_{\phi}$ ($_{\omega}$ praised) ($_{\phi}$ John))	*!	
b.	\square ($_{\phi}$ ($_{\omega}$ praised) ($_{\omega}$ John))		*

- In a system with both DEPHRASE-GIVEN and STRESS-FOCUS, examples like (47) establish the ranking STRESS-FOCUS \gg DEPHRASE-GIVEN.¹⁷
 - (47) Q: Who did John_i's mother praise?A: She praised [HIM_i]_F

(48)

$[_{VP} praised_G [_{DP} him_G]_F$		STRESSF	DephraseG	МатснРн
a.	\square ($_{\phi}$ ($_{\omega}$ praised) ($_{\phi}$ him))		*	
b.	($_{\phi}$ ($_{\omega}$ praised) ($_{\omega}$ him))	*!		*

- Note that DEPHRASE-GIVEN as formulated by Kratzer and Selkirk applies only to given phrases. It is silent on the status of given words.
 - But sub-phrasal elements (i.e. words) can be given too.

¹⁶Though e.g. given subjects may receive a pitch accent. Kratzer and Selkirk (2020) analyze pitch accents in such cases as marking the boundary of ı.

¹⁷See Schwarzschild (1999) for a different view.

- We generalize DEPHRASE-GIVEN in terms of DESTRESS-GIVEN, formulated in (49): just as given constituents avoid phrasal stress, given **words** avoid **lexical** stress.
 - Informally: given elements must avoid any kind of stress.
 - More precisely:
 - (49) <u>DESTRESS-GIVEN</u> (replaces DEPHRASE-GIVEN in (44)):
 A G-marked XP corresponds to a prosodic constituent which is not a φ and contains no φ.
 A G-marked X⁰ corresponds to a prosodic constituent which is not a ω, and contains no ω.
- If our DESTRESS-GIVEN is dominated by MATCH WORD, its effects on word-level constituents will never be seen.
 - A lexical word will then have to map to ω , even if it is G-marked.
 - This is shown in (50); the result is deaccenting as usual
 - Candidates (c–e), with ellipsis, are ruled out by MATCH WORD.

(50)

	[_{VP} praised _G [_{DP} John _G]]	MATCHW	DestressG	МатснРн
a.	($_{\phi}$ ($_{\omega}$ praised) ($_{\phi}$ John))		*!	
b.	\square ($_{\phi}$ ($_{\omega}$ praised) ($_{\omega}$ John))			*
c.	($_{\omega}$ praised)	*!	*	**
d.	(_ω John)	*!	*	**
e.	Ø	**!		**

- But with the ranking Destress-Given \gg Match Word, G-marked words will be barred from mapping to $\omega.$
- **Our proposal:** <u>ellipsis arises from the optional ranking DESTRESS-GIVEN >> MATCH WORD.</u>
- Crucially, the effect this will have will depend on the realization possibilities available to the word.
- With DESTRESS-GIVEN \gg MATCH WORD, <u>a G-marked word will be able to be phonologically</u> realized only if it can cliticize to adjacent material.
 - ...Because cliticized elements can map to σ ; mapping σ leads to a realization that does not violate DESTRESS-GIVEN.
 - Many G-marked function words, then, won't have to elide to satisfy DESTRESS-GIVEN.

- But **lexical** words do not have the option of cliticizing in English.¹⁸
- G-marked lexical words, then, will <u>have to delete</u>, with the ranking Destress-Given \gg Match Word.

3.6 Putting the pieces together

- We now have all we need to explain the stranding generalization.
- Importantly, the verb is present in the syntax, hence present in some candidates in the evaluation.
- This means that for the purposes of SUBCAT, the pronoun will behave as though the verb is there.
- Consider the ungrammatical example in (51).

(51) *I saw John_i on Monday, and saw him_i on Wednesday.

- Any candidate in which the verb maps to ω will violate DESTRESS-GIVEN (52).
- And any candidate in which the pronoun does not cliticize onto the verb will violate SUBCAT.
 - SUBCAT is vacuously satisfied when the pronoun is deleted.
- When DESTRESS-GIVEN and SUBCAT both outrank MATCH WORD, the only way to simultaneously satisfy SUBCAT and DESTRESS-GIVEN is to delete both the verb and the pronoun.

	[_{VP} sa	aw _G [_{DP} him] _G]	SUBCAT	DESTRESSG	MATCHW
a.	ß	Ø		, 	**
b.		(him)	*!	 	**
c.		($_{\omega}$ him)	*!	*!	*
d.		($_{\phi}$ ($_{\omega}$ saw) him))	*!	*!	
e.		($_{\omega}$ and him)	*!	1	*
f.		($_{\phi}$ ($_{\omega}$ saw) him)		*!	*

(52)

• Why then is a G-marked lexical noun phrase able to strand in the same position?

¹⁸This seems to be a near-universal. Tyler (2019, p. 26) notes a few possible counterexamples, such as prosodically weak/proclitic verbs in Chamorro (Chung, 2003), and speculates as to why this possibility is rare/unattested.

- DESTRESS-GIVEN has different effects on phrases than on words.
- According to our amended DESTRESS-GIVEN, G-marked words avoid lexical stress by not mapping to ω .
- But G-marked phrases merely need to avoid phrasal stress by not mapping to ϕ .
 - The Match-compliant structures in (53) will be ruled out by DESTRESS-GIVEN, forcing deletion of the verb.
 - DESTRESS-GIVEN will also force *John* to map to ω , instead of ϕ .

(53)

	[_{VP} saw _G [_{DP} John] _G]	SUBCAT	DestressG	MATCHW	МатснРн
a.	🖙 (_ω John)			*	**
b.	(_@ John)		*!	*	*
c.	$(_{\phi} (_{\omega} \text{ saw}) (_{\omega} \text{ John}))$		*!		*

- We can now also explain why given pronouns can serve as gapping remnants when they cliticize to a preposition.
 - The preposition allows the pronoun to satisfy SUBCAT and DESTRESS-GIVEN simultaneously.

(54)

$[_{PP}$ to him _G]		SUBCAT	DestressG	MATCHW
a.	\square ($_{\omega}$ to) him))			*
b.	($_{\omega}$ to ($_{\omega}$ him))	*!	*!	

- The ranking STRESS-FOCUS \gg SUBCAT in turn guarantees that focused pronouns can be realized.
 - The need for prominence on focused items forces pronouns to violate SUBCAT.
 - STRESS-FOCUS also ensures that deleting the pronoun entirely is not an option.
 - And because the pronoun is focused, it is not subject to DESTRESS-GIVEN.
 - Note that this will ensure that <u>any focused constituent escapes ellipsis</u>, without the need for exceptional movement (cf. section 2.3).

(55)

$[_{VP} \operatorname{saw}_{G} [_{DP} \operatorname{HIM}]_{F}]$		STRESSF	SUBCAT	DestressG	MATCHW	МатснРн	
a.	ß	(_{\phi} him)		*	 	*	*
b.		Ø	*!			**	**
c.		$(_{\phi} (_{\omega} \text{ saw}) (_{\phi} \text{ him})))$		*	*!		
d.		$(_{\phi} (_{\omega} \text{ saw}) \text{ him}))$	*!		*	*	*
e.		$(_{\phi} (_{\omega} \text{ saw}) (_{\omega} \text{ him}))$	*!	*	*		

3.7 Constituency Conditions

- As Johnson (2017) notes, gapping cannot just elide any string.
- He cites the following, from Hankamer (1979):
 - (56) a. Charley writes with a pencil and John writes with a pen.
 - b. *Charley writes with a pencil and John writes with a pen.
 - c. *Charley writes with a pencil and John writes with a pen.
- These and other similar cases lead him to formulate the following condition on gapping remnants:
 - (57) Constituency Condition on Remnants

Let P(x) be a parse for a string x. If A is a string of words in a coordinate, from which the substring B has Gapped leaving the string C, then there must be away of factoring C into a series of maximal projections found in P(A).

- The Constituency Condition follows from a Move + Delete theory.
 - We want to ensure that our prosodic theory of ellipsis does not generate the unacceptable strings in (56).
- By the general logic of our theory, there must be prosodic well-formedness constraints that prevent these kinds of remnants.
- Many such ill-formed remnants are straightforwardly ruled out by independently motivated SUBCAT constraints.
- For example, the determiner *a* prosodically cliticizes to the right (Itô & Mester, 2009).

- Evidence is as usual from vowel reduction.
- This requires a rightward-cliticizing SUBCAT frame (Tyler, 2019).

(58) SUBCAT frame for *a*: $[_{\omega} D^0 [...]]$

- From this SUBCAT constraint, it follows that *pen* cannot serve as a gapping remnant to the exclusion of the determiner.
- The logic of the explanation is the same as in the previous cases.
 - Because the determiner is in the input, candidates will be evaluated with respect to its SUBCAT constraint.
 - SUBCAT will make determiners and their potential hosts—like verbs and pronouns behave as a unit. They will be either pronounced together or deleted together.

(59)

[_{DP} a PEN _F]		STRESSF	SUBCAT	DestressG	MATCHW
a.	$\square (\phi (\omega a (\omega pen)))$				*
b.	(_{\$\phi\$} pen)		*!		*
c.	($_{\omega}$ pen)	*!			
d.	(_ω a)	*!	*		*

- This explanation carries over without modification to cases like (60).
 - We saw in section 2 that possessor pronouns cliticize to the right.
 - Vowel reduction also shows rightward cliticization of *some* and *the*.
 - SUBCAT will again rule out deletion of one element in a SUBCAT constraint.
 - We don't have clear evidence that *every* cliticizes. We hypothesize that SUBCAT is a general constraint that applies to all determiners.¹⁹
 - (60) a. *Some remember your mother and others remember your father.
 - b. *Some brought every package and others brought the wrapper.
 - c. *Some brought every package and others brought some wrappers.
 - d. *Some brought every package and others brought every wrapper.

¹⁹Given its disyllabic status, *every* would have to be cliticizing as a foot, as Ito and Mester argue for portmanteau function complexes like *hafta*.

- It also extends to the following contrast, originally from Ross (1970):
 - (61) a. I want to try to begin to write a novel and Mary wants to try to begin to review a play.
 - b. *I want to try to begin to write a novel and Mary wants to try to begin to review a play.
- Infinitival *to* cliticizes to the right, again diagnosed by vowel reduction (*[tə] whom did you talk?/who did you talk [tu]?*).
 - SUBCAT derives the impossibility of deleting *to* without a host.
 - Notably, the unacceptability of (61b) <u>does not follow from the Constituency</u> <u>Condition.</u>
- We pointed out in section 3.3 that SUBCAT constraints generally had the effect of preserving syntactic relationships in the prosody.
 - Determiners and possessors cliticize within the noun phrase, accusative pronouns to their case-assigning heads.
 - We speculated that SUBCAT constraints could be assimilated to other such constraints, like those in Contiguity Theory (Richards, 2016) and Clemens (2014).
- If this is on the right track, then the fact that ellipsis remnants generally behave like constituents is unsurprising.
 - But we expect that phenomena that do not have an explanation in constituency alone, like the Stranding Generalization, will arise from high-ranking prosodic well-formedness constraints.

3.8 Summing Up

- We argued for an implementation of ellipsis at the syntax-prosody interface that requires minimal assumptions.
 - One is that DESTRESS-GIVEN applies to G-marked words as well as phrases.
 - The other is that DESTRESS-GIVEN can optionally be ranked above MATCH WORD.
- These two assumptions together have the effect that—when DESTRESS-GIVEN is optionally ranked above MATCH WORD—G-marked lexical words must delete, while G-marked functional words must cliticize if possible.
- This explains the Stranding Generalization, in conjunction with independently motivated prosodic well-formedness constraints.

4 Consequences and further applications

4.1 A new species of ellipsis?

- Our theory predicts what (to our knowledge) is a previously unnoticed form of ellipsis, which we dub *auxiliary gapping*. It is exemplified in (62).
 - (62) Mei will have gone to 10 countries by 2025, and've gone to 20 countries by 2030.
- We have ensured that (62) is TP conjunction by future-adverbial modification.
 - This means that there is an underlying *will* which has been elided.
 - (63) Mei will have gone to 10 countries by 2025, and [will've] gone to 20 countries by 2030
- How is this possible? We argue that it falls out independently from the less restrictive SUBCAT requirements of adverbs like *will*.
- We saw that object pronouns are unable to cliticize onto elements other than verbs and prepositions (64a).
 - *Have* is not so picky: it can cliticize onto anything to its left, including *and*, as shown above.
 - (64) a. *Mei and-im
 - b. They've
 - c. They certainly've
 - d. Who do you think've been here?
- This can be explained with the following SUBCAT frame, closely following Tyler (2019):
 - (65) SUBCAT frame for *have*: $[_{\omega} [...] Have^{0}]$
- This means that after *will* in (62) deletes, *have*—unlike the pronoun—will be able to satisfy its SUBCAT frame by cliticizing onto *and*.
- It is not clear how a Move + Delete theory theory could account for this, in particular the movement of *have* above the ellipsis site.
 - Either *have* moves alone, which would violate the Head Movement Constraint.

- Or the entire PerfP moves. This is independently impossible in English.
- (66) *Have been to 20 countries by 2030, Mei will.

4.2 VP ellipsis

- On the face of it, VP ellipsis seems to contradict our theory of ellipsis.
- In VP ellipis, at least one auxiliary must strand, even when it is given.
 - With the ranking DESTRESS-GIVEN \gg MATCH WORD, we would expect the auxiliary to obligatorily elide or reduce: it does neither.
 - (67) If Masa has been to Samarkand, Mei *(has) been to Samarkand too.
- This is the phenomenon of ellipsis licensing. This and a range of related data have led to the claim that VP ellipsis is syntactically licensed by T (Lobeck, 1993; Merchant, 2001; Aelbrecht, 2010; Johnson, 2012).
 - Our theory has no place for something like syntactic licensing.
- But we argue that the necessary presence of finite T results again from the presence of a prosodic well-formedness constraint.
- Richards (2016) argues at length that many movements in syntax are motivated by the desire to satisfy prosodic conditions like the following:
 - (68) *Probe-Goal Contiguity* Given a probe α and a goal β , α and β must be dominated by a single ϕ , within which β is Contiguity-prominent.
- In English this will have the effect that finite T and the subject will have to be dominated by a single ϕ , with the subject at the left edge.
 - We refer the reader to Richards (2016) for details and evidence.
- Given that syntax has gone to the effort to create this prosodic structure, it stands to reason that there is a high-ranking constraint preserving it in the output.
 - This constraint will then play the same role as SUBCAT in regulating possible ellipses.
 - (69) CONTIGUITY: ProbeP must correspond to a ϕ which satisfies Probe-Goal contiguity.

- Given the presence of a finite TP in the input, the ranking CONTIGUITY \gg DESTRESS-GIVEN will ensure that the finite auxiliary is never elided.
 - (70) I think that Mei has been to Samarkand, and Masa thinks that Mei has been to Samarkand too.

[_{TP} Mei _G has _G]		Contiguity	DestressG	MATCHW	МатснРн
a.	$\mathbb{I} = (_{\phi} (_{\omega} \text{ Mei}) (_{\omega} \text{ has}))$		*		
b.	(_ω Mei)	*!		*	*
c.	($_{\omega}$ has)	*!	*	*	*
d.	Ø	*!		**	*

(71)

- This line of analysis offers a potential simplification in the theory of ellipsis licensing.
- It has been a persistent puzzle that although T appears to be licensing ellipsis, a larger constituent than its complement can (72)—and sometimes must (73)—be elided.
 - (72) Masa should've been arrested, and Mei should've been arrested too.
- Various attempts have been made to make sense of this.
 - Aelbrecht (2010) proposes, in addition to Merchants [E]-licensing feature on T, an agreement relation between T and the elided constituent for this [E]-feature.
- Our theory makes instead the following predictions:
 - The highest auxiliary must be realized, to satisfy CONTIGUITY.
 - Other auxiliaries may be realized, so long as they can cliticize to the left.
 - Any material that cannot cliticize must delete to satisfy DESTRESS-GIVEN.
 - If an auxiliary has a SUBCAT frame, it must be satisfied if possible.
- If *have* has a left-cliticizing SUBCAT frame, this would explain why it cannot be elided, even when not in T (Aelbrecht & Harwood, 2015).

(73) *Masa should've been arrested, and Mei should have been arrested too.

- If *being*, on the other hand, has a right-cliticizing frame, this would explain why it must be elided.
 - (74) *Masa was being arrested, and Mei was being arrested too.
- We hope to explore these predictions more fully in the future.

4.3 St'at'imcets VP ellipsis

- We have found several cross-linguistics ellipsis phenomena that support our approach.
- Davis (2014) notes an interesting pattern in St'at'imcets VP ellipsis²⁰.
 - 'Light' auxiliaries cannot be stranded at the right of the string following ellipsis (75b).
 - So they instead undergo what he calls 'rhetorical' lengthening (75b).
 - (75) a. *wá7=ha es-(s)7ílhen?* IMPF=YNQ STA-food 'Does s/he have any food?'
 - b. ??*wa7, iy* IMPF yes 'S/he does, yes.'
 - c. *wá...a7, iy* IMPF yes 'S/he does, yes.'
- He suggests that this lengthening is to satisfy the following condition:
 - (76) *Minimal Foot Condition on Ellipsis*The remnant left by ellipsis must end in a well-formed foot.
- He suggests that this derives from the need for the auxiliary to procliticize to following material, noting that there is no rhetorical lengthening if e.g. the second position clitic *t'u7* is present (77b).
 - (77) a. $w\dot{a}7 = ha = t'u7$ $\dot{a}ma$ IMPF = YNQ = PART good 'Is s/he doing ok?'
 - b. wá7 = t'u7IMPF = PART 'S/he is.'
- He also notes the following pattern, with three auxiliaries in the antecedent: *plan* 'already,' *wa7* 'imperfective,' and the motion verb *p'an't* 'to return.'

²⁰We are grateful to Kenyon Branan for pointing this out to us.

(78) a. plán=lhkacw=ha wa7 p'an't alkst alread=2sG.SU=YNQ IMPF return work. 'Have you already gone back to work?'
b. ?? iy, plán=lhkan wa7 yes already=1sG.SU IMPF 'Yes, I have.'
c. ?? iy, plán=lhkan wa7 p'an't yes already=1sG.SU IMPF return 'Yes, I have.'

- The St'at'imcets pattern can be handled straightforwardly in our theory.
- This for us would involve a right-cliticizing SUBCAT frame, following Davis' suggestion that auxiliaries procliticize.
- This SUBCAT constraint must be satisfied when possible, even when it means pronouncing given material.
 - This establishes the ranking SUBCAT \gg DESTRESS-GIVEN.
- When SUBCAT is necessarily violated, however—as in (75)—St'at'imcets has the option of lengthening the auxiliary to satisfy independent footing conditions.
 - This would follow from a sufficiently low-ranked Dep constraint.
- These are exactly the kinds of interactions between ellipsis and independent prosodic well-formedness constraints that are predicted in a theory like ours that places ellipsis directly in the syntax-prosody computation.

5 Conclusion

- In this work we offered a generalization on ellipsis remnants in various ellipsis constructions, and proposed a way to explain it using a theory in which constraints on the mapping from syntax to prosody limit the range of allowable targets of ellipsis.
- Our account relied on an interaction between two constraints on the mapping:
 - One is a constraint requiring semantically-recoverable ('Given') material (DESTRESS-GIVEN) to prosodically reduce.
 - The other is a constraint requiring X^0 in the input to match ω in the output.
 - Optional reranking between these two constraints derives either ellipsis or deaccenting.

- This preserves the tight link between ellipsis and deaccenting (Tancredi, 1992).
- Indeed, if this account is on the right track, deaccenting and ellipsis are both archetypal syntax-prosody interface phenomena.
- Any mismatches between syntax and prosody should then receive an explanation in terms of independent prosodic well-formedness constraints.

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Appendix



Figure 1: The second conjunct of a gapping construction with all remnants contrasted: *I* sent some brandy to Neil on Monday, and some Brandy to Mona on Tuesday.



Figure 2: The second conjunct of a gapping construction with a given PP: I sent some brandy to Neil on Monday, and some Brandy to Mona on Tuesday.