snippets

Contents

EDITORIAL STATEMENT

1. Purpose.

The aim of *Snippets* is to publish specific remarks that motivate research or that make theoretical points germane to current work. The ideal contribution is the ideal footnote: a side remark that taken on its own is not worth lengthy development but that needs to be said. One encounters many short comments of this kind in the literature of the seventies. We feel that there no longer is a forum for them. We want *Snippets* to help fill that gap.

2. Content.

We will publish notes that contribute to the study of syntax and semantics in generative grammar. The notes are to be brief, self-contained and explicit. They may do any of the following things:

- point out an empirical phenomenon that goes against accepted generalizations or that shows that some aspect of a theory is problematic;
- point out unnoticed minimal pairs that fall outside the scope of any existing theory;
- point out an empirical phenomenon that confirms the predictions of a theory in an area where the theory has not been tested;
- explicitly describe technical inconsistencies in a theory or in a set of frequently adopted assumptions;
- explicitly describe unnoticed assumptions that underlie a theory or assumptions that a theory needs to be supplemented with in order to make desired predictions;
- call attention to little-known or forgotten literature in which issues of immediate relevance are discussed.

We also encourage submissions that connect psycholinguistic data to theoretical issues. A proposal for a pilot experiment in language acquisition or language processing could make for an excellent snippet.

The earliest *Linguistic Inquiry* squibs exemplify the kind of note we would like to publish. Some of them posed unobserved puzzles. For instance, a squib by Postal and Ross in LI 1:1 ("A Problem of Adverb Preposing") noted that whether or not we can construe a sentence-initial temporal adverb with an embedded verb depends on the tense of the matrix verb. A squib by Perlmutter and Ross in LI 1:3 ("Relative Clauses with Split Antecedents"), challenging the prevailing analyses of coordination and extraposition, noted that conjoined clauses neither of which contain a plural noun phrase can appear next to an "extraposed" relative that can only describe groups. Other squibs drew attention to particular theoretical assumptions. For instance, a squib by Bresnan in LI 1:2 ("A Grammatical Fiction") outlined an alternative account of the derivation of sentences containing believe and force, and asked whether there were principled reasons for dismissing any of the underlying assumptions (among them that semantic interpretation is sensitive to details of a syntactic derivation). A squib by Zwicky in LI 1:2 ("Class Complements in Phonology") asked to what extent phonological rules refer to complements of classes. None of these squibs was more than a couple of paragraphs; all of them limited themselves to a precise question or observation.

3. Submission details.

Snippets is an electronic journal. We will publish issues roughly twice a year, and all issues will remain on the website.

Snippets is intended as a service to the linguistics community. Consequently, authors are advised that, when they submit to *Snippets*, we understand them as allowing their submission to be reproduced if published. At the same time, the rights for the notes themselves will remain with the authors. As a result, citation of *Snippets* material will have to indicate the author's name and the specific source of the material.

We will accept electronic submissions at the address snippetsjournal@gmail.com. Electronic submissions may take the form of (a) the text of an e-mail message, or (b) an attached file. The attached file should be a simple text file, a Word file (Mac or Windows), or a Rich Text Format (RTF) file. All submissions must state the name and affiliation of the author(s), and a (postal or electronic) return address.

Submissions are to be a maximum of 500 words (including examples), with an additional half page allowed for diagrams, tables and references. Given that we envision the submissions themselves as footnotes, the submissions may not contain footnotes of their own. The ideal submission is one paragraph; a submission of five lines is perfectly acceptable. We will not consider abstracts.

4. Editorial policy.

Submissions will be reviewed by our editorial board, and review will be name-blind both ways. We will provide a response within 3 months of the moment when we acknowledge receipt of a submission. At the same time, we do not guarantee more than a simple yes/no response to the submitter. We will not require revisions (barring exceptional cases). We allow resubmission (once) of the same piece.

1.

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Projection of supplements in alternatives

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Non-restrictive relative clauses (NRRs) and expressives -- supplements, for short -- have non-assertive import. This note presents data that suggests that the projective behavior of this non-assertive import is *prima facie* distinct from that of presuppositions. We begin by contrasting two classes of examples where supplements are anchored to a nominal containing a bound pronoun, *his mother*. In (1a) and (2a), supplements are anchored to a nominal in which the possessive pronoun *his* is bound by *every boy*. The sentences trigger the inferences described in (1b) and (2b) (see Nouwen 2007 for an approach to deriving these inferences).

(1) a. [Every boy]$_i$ listens to his$_i$ mother, who loves him$_i$
   b. ==> for every boy x, x's mother loves x

(2) a. [Every boy]$_i$ listens to his$_i$ damn mother
   b. ==> for every boy x, the speaker has a negative attitude towards x's mother

These inferences parallel those that are generated by a presupposition trigger like *realize* (3). Thus, on the basis of the data in (1-3), there does not seem to be any difference in the projective behavior of the non-assertive content of supplements and presupposition triggers.

(3) a. [Every boy]$_i$ realized his$_i$ mother was listening to him$_i$
   b. ==> for every boy x, x's mother was listening to x

   This parallelism between supplements and presupposition triggers like *realize* disappears when we switch to certain other binding configurations. In (4a) and (5a), we have sentences where supplements are anchored to a nominal in which the possessive pronoun is bound by *only John* -- the sentences can be used to describe a situation in which John, but no other boy, listens to his own mother and all other boys listen to John's mother as well.

(4) a. Among all the boys, [only John]$_i$ listens to his$_i$ mother, who loves him$_i$
   b. =/=> for every boy x, x's mother loves x

(5) a. Among all the boys, [only John]$_i$ listens to his$_i$ damn mother
   b. =/=> for every boy x, the speaker has a negative attitude towards x's mother

The sentences in (4a) and (5a) do not trigger inferences parallel to those in (1) and (2), as indicated in (4b) and (5b). This clearly contrasts with the projective behavior of the

presupposition trigger *realize* (6). Thus, the data in (4-6) present a discrepancy in the projection of non-assertive content of supplements and presupposition triggers.

(6) a. Among all the boys, [only John]$_i$ realized his$_i$ mother was listening to him$_i$
    b. ==> for every boy x, x's mother was listening to x

    Such contrasts can be easily multiplied. For instance, they can be reproduced with sentences in which the NRR is uncontroversially in the syntactic scope of *only* (7). The sentence in (7a) can describe a state of affairs where Facebook but not Yahoo got a report last year that they will have to fire their CFO tomorrow to remain profitable and where, independently, the Facebook CFO but not the Yahoo CFO is planning to go to Bahamas tomorrow. The sequence of tense in (7a) requires the NRR to be in the scope of *only Facebook* (cf. Schlenker 2010a). Accordingly, the supplement should feature in the focus alternatives on which *only* operates. However, its non-assertive content does not project from the alternatives (7b), unlike that of *realize* (7c).

(7) a. Among Facebook and Yahoo, [only Facebook]$_i$ realized last year that they$_i$ would
      have to fire their$_i$ CFO tomorrow, who was about to go to Bahamas
    b. =/=> Yahoo's CFO is about to go to Bahamas
    c. ==> Yahoo's CFO will be fired tomorrow

    All in all, we have shown in (4-7) that the projective behavior of supplements and presupposition triggers differs in the scope of *only*. There are at least two related ways of dealing with this puzzling data. First: On the multidimensional treatment of supplements (e.g. Potts 2005), the non-projection of supplements in (4-5) and (7) is explained if we assume that their non-assertive non-presuppositional import does not feature in the focus alternatives. Second: On the unidimensional treatment of supplements (e.g. Schlenker 2010a,b), the data can be explained in a similar way: the focus semantic value of supplements has to be such as to effectively offset them in focus alternatives (e.g. either supplements have vacuous alternatives or their focus semantic value is, non-standardly, an empty set).

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Structurally distant haplology

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Previous works on "distinctness" or "syntactic haplology" have described bans against the same abstract features (Hiraiwa 2010, Richards 2010) or sequential homophonous items (Neeleman and van de Koot 2006) *within* a particular syntactic domain, e.g. Spellout domains. Here I present similar restrictions that target words that are linearly adjacent but structurally far apart. (1) represents this configuration: α_1 and α_2 are distinct syntactic nodes with the same phonological realization, but only one α can be pronounced.

(1)
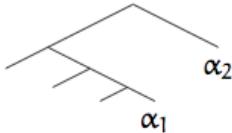
Mandarin Chinese has a sentence-final 'only' word, *éryǐ*. Unlike most sentence-final particles, it is allowed in embedded clauses as well as matrix clauses, yielding the ambiguities in (2). A version of (2) with two *éryǐ*s is ungrammatical. Both *éryǐ*s can be pronounced by right extraposing the embedded clause (3).

(2) wǒ zuótiān gàosùle yīge háizi tā kěyǐ chī yīge   dàngāo **éryǐ (*éryǐ)**
     I   yesterday told   one child he can   eat one   cake   **ONLY**
       'Yesterday I told one child that he can eat **only** [one cake]$_F$.'
       'Yesterday I told **only** [one child]$_F$ that he can eat one cake.'
      [?] 'Yesterday I told **only** [one child]$_F$ that he can eat **only** [one cake]$_F$.'

(3) wǒ zuótiān gàosùle yīge háizi **éryǐ**,   tā kěyǐ chī yīge dàngāo **éryǐ**
     I   yesterday told   one child **ONLY** he can eat one cake   **ONLY**
       'Yesterday I told **only** [one child]$_F$ that he can eat **only** [one cake]$_F$.'

A similar restriction has also been documented for final negators in a variety of languages (Bell 2004, Biberauer 2008, Hagemeijer 2009).

Yucatec Maya has deictic markers which cliticize to the end of DPs. When a postnominal relative clause is used, the deictic clitic is positioned after the relative clause. Consider a relative clause which itself ends with a deictic marker on a DP (5), based on (4). Only one deictic marker is produced. (Data: Norcliffe 2009.)

(4) le chàan xibpàal=**o'**   k-u=ts'éent-ik le mono=**o'**
     the little boy=**DEICTIC** feeding   the monkey=**DEICTIC**
      'The little boy is feeding the monkey.'

(5) [le chàan xibpàal ts'éent-ik le mono=**o'** (***=o'**)] yàan-u ya'ax p'ok
     [the little boy feeding the monkey=**DEICTIC**] exist green hat
     '[The little boy who is feeding the monkey] has a green hat.'

   The same can be seen with Haitian Creole postnominal determiners. Possessors are linearized between the head noun and determiner. With a plural noun with a plural possessor, only one plural determiner *yo* can be pronounced (6). (Data: Michel DeGraff, p.c.)

(6) fil yoyo **yo** (***yo**)
     thread yoyos **DEF-pl**
     'the threads of the yoyos'

   Unlike previously described haplologies that occur *within* syntactic domains, the haplologies presented here (as well as Afrikaans negation) occur *across* different Spellout domains. This structural insensitivity may point to a PF-oriented analysis—perhaps related to the linearization process itself—but it is not merely a phonological redundancy filter, as evidenced by the multiple grammatical *yo*s in (6).

   Interestingly, all of the haplologies here occur on the right edge. However, it is unclear whether this tendency is a crucial property of this type of phenomenon.

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3.

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Pied-pipe your preposition and strand it too

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Languages differ in whether they allow stranding prepositions under wh-movement (1) or require pied-piping of the preposition (2), or even neither of the two. Snyder (2007) provides a comprehensive overview of the history of the P-stranding parameter and points out that there might exist varieites of English that permit either pied-piping or stranding, the two options possibly associated with different grammars in the same speaker. I would like to propose that another logically possible option may in fact be realized: some speakers of American English use a construction in informal speech that appears to combine both pied-piping and stranding (3a,b).

(1) What subject did they talk **about** t? (Snyder, Sugisaki 2003)

(2) a. Spanish (Snyder, Sugisaki 2003) :
   * Cuál asunto hablaban   **sobre**   *t* ?
    which subject were-they-talking about

   b. **Sobre** cuál   asunto hablaban   *t* ?
    about   which subject were-they-talking

(3) a. A Joliet man was stabbed in the head with a screwdriver by the husband of a woman **with** whom he was speaking **with** at a local bar, police said. (Liberman 2009)

   b. **For** who did you buy this **for**?

Speakers I have discussed these constructions with characterise them as informal and not infrequent; not surprisingly, many do not accept these constructions at all. Doubled Ps seem more acceptable in relative clauses than in matrix wh-questions, (see Hoffman (2011) for a quantitative discussion of British English). Nevertheless, one of my students, a native of Sussex County in Delaware, USA, enthusiastically accepts a large number of such questions as something he would definitely say; a number of other students accept them more cautiously. They quickly suggest a connection to the prescriptive ban on ending sentences with a preposition. I would not chalk these constructions up to the prescriptive ban, however, because they occur in informal speech where there is no reason to satisfy prescriptive rules. Moreover, this phenomenon is not restricted to modern colloquial American English. Mark Liberman (and Nuria Yanez-Bouza) provide examples of relative clauses with doubled Ps from different stages of the history of English. (4) is an early Modern English example:

(4) Behinde the Lunges, towarde the Spondels, passeth Mire or Isofagus, **of** whom it is
    spoken **of** in the Anatomie of the necke
    (Helsinki Corpus, science, Thomas Vicary 1548, s2, p62, chVIII)

Thus, the examples in (3) are not isolated instances of attempts to satisfy prescriptive
rules or of performance errors.

The explanations we have for the stranded P in the base position will make the full
copy of the PP at the landing site unexplained, and vice versa. If further research
establishes conclusively that doubled Ps are a feature of some speakers' grammars, we
will want to re-examine the idea that P-stranding and pied-piping are necessarily
mutually exclusive options within a speaker's grammar. Snyder's (2007) proposal that
wh-movement of PP-complements is determined by a cluster of parameters regulating
movement will then receive a strong confirmation.

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4.

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Remarks on gapping in ASL

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Small-conjunct analyses of Gapping analyze the category coordinated in sentences like (1) as VP or vP.

(1) John likes coffee and Mary, tea.

The left-conjunct subject moves into the shared Spec,TP, and the right remains in-situ. The identical verbs either undergo ATB movement to an intermediate projection (2a; Johnson 2009), or the rightmost verb is elided (2b; Coppock 2001).

On large-conjunct analyses, in contrast, Gapping structures consist of coordinated categories of the size of TP or CP. The clause in the left conjunct is normal, while the one in the right conjunct has undergone movement of the rightmost Gapping remnant followed by ellipsis of some lower category (2c; Wilder 1994).

(2a)

(2b)

```
                          TP
              ┌───────────┴───────────┐
            DPᵢ                        T
             │            ┌────────────┴────────────┐
           John           T                        VP
                          │          ┌──────────────┴──────────────┐
                                     VP                          ConjP
                              ┌──────┴──────┐          ┌──────────┴──────────┐
                             tᵢ            V′        Conj                   VP
                                     ┌─────┴─────┐    │           ┌──────────┴──────────┐
                                     V          DP   and         DP                    V′
                                     │           │                │             ┌───────┴───────┐
                                   likes      coffee             Mary           V              DP
                                                                                │               │
                                                                              ~~likes~~        tea
```

(2c)

```
                                   CP
               ┌───────────────────┴───────────────────┐
              CP                                      Conj′
        ┌──────┴──────┐                        ┌───────┴───────┐
        C            TP                       Conj             CP
              ┌───────┴───────┐                │        ┌──────┴──────┐
             DP              T′               and       C            TP
              │        ┌──────┴──────┐                          ┌─────┴─────┐
            John       T            VP                         DP          T′
                              ┌─────┴─────┐                     │     ┌─────┴─────┐
                            likes        DP                    Mary   T          VP
                                          │                               ┌──────┴──────┐
                                        coffee                           VP            DP
                                                                    ┌─────┴─────┐       │
                                                                 ~~likes~~  tⱼ        teaⱼ
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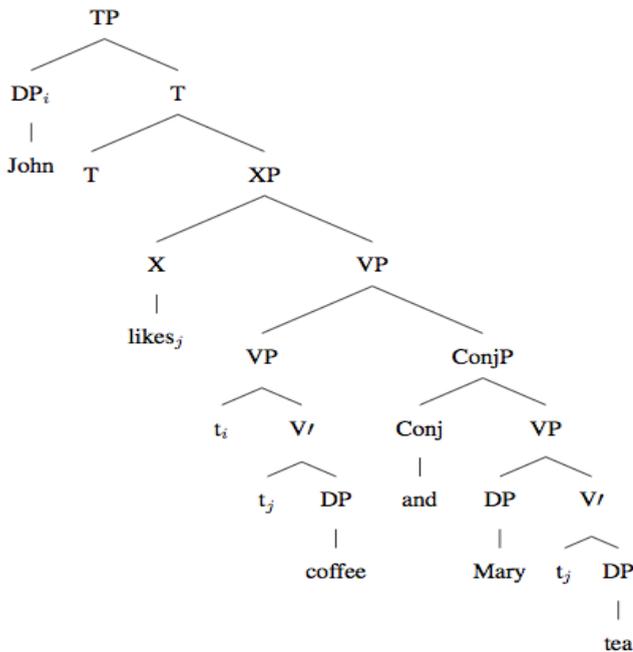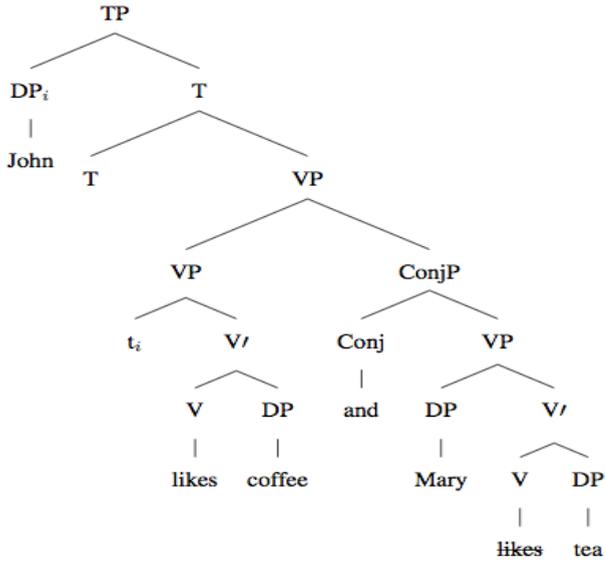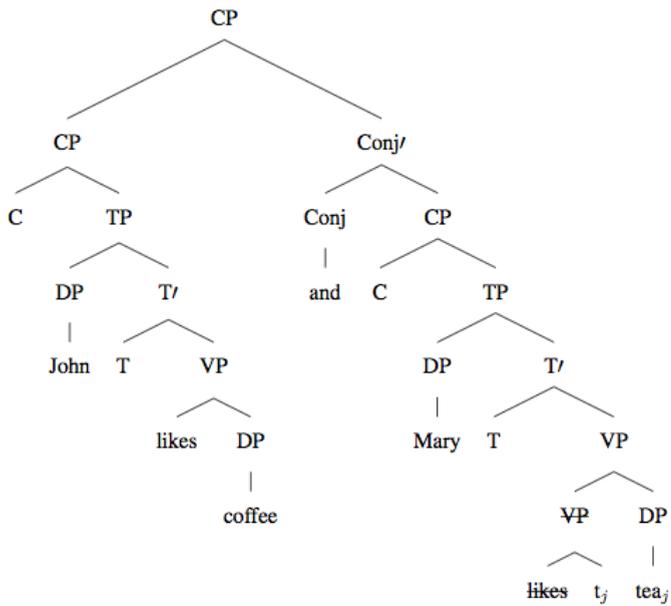
American Sign Language (ASL) possesses a Gapping construction (3) similar to English's. (Glossing for ASL represents signs in uppercase English words of loosely equivalent meaning and indexical elements as IX1, IX2, etc.)

(3) IX1 LIKE COFFEE, IX2 TEA.
   He likes coffee, and she, tea.

One kind of coordination in ASL is realized prosodically, as contrastive shoulder movement. The signer shifts so that her torso is facing slightly to the left during the first conjunct, and then to the right during the second conjunct. Here the scope of this contrast prosody is indicated by brackets, like so: [shoulders left], [shoulders right].

This unique feature of this ASL coordinator affords evidence for the size of the conjuncts in Gapping. The Small-Conjunct analysis of Gapping predicts that the leftmost subject will be outside the scope of the contrast prosody, since it has raised into the shared Spec,TP (Braze 2004). Under accounts where the verb raises ATB, it should be as well. In contrast, the Large-Conjunct analysis of Gapping predicts that the leftmost subject will occur inside the contrast prosody. As shown in (4a) and (4b/c) below, the latter prediction obtains.

(4) a. [IX1 LIKE COFFEE], [IX2 TEA].
   b. *IX1 [LIKE COFFEE], [IX2 TEA].
   c. *IX1 LIKE [COFFEE], [IX2 TEA].

If ASL's contrast prosody is "greedy," extending past the actual syntactic domains being coordinated, we would expect to see the same pattern in clear VP-coordination, like (5); but the prosodic pattern illicit in (4b) is perfectly fine here.

(5) IX1 [LIKE COFFEE], [DISLIKE TEA].
   She likes coffee and dislikes tea.

The contrast between (5) and (4b) suggests that the latter is not VP-level coordination and thus provides indirect support for the Large-Conjunct analysis. Similarly, in cases of unambiguous clausal coordination, the contrast prosody is as in (4a).

(6) [IX1 LIKE COFFEE], [IX2 DISLIKE TEA].
   He likes coffee and she dislikes tea.

These rather simple observations about Gapping in ASL receive a principled account on the Large-Conjunct analysis of Gapping: ASL's contrast prosody simply extends across the conjunct, whatever the category coordinated, and Gapping derives from coordination of at least TP-sized categories. Because these same facts are mysterious on a small-conjunct analysis, they suggest that such accounts are, for ASL at least, not on the right track.

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5.

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Shifty operators in Dhaasanac

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There has been much debate on whether or not contexts are shiftable. Kaplan 1977 claimed that they are not, but Schlenker 2003 and Anand and Nevins 2004, among others, have argued that context shifters (referred to as *monsters*) exist in languages such as Amharic and Zazaki. Without context shift, an indexical *I* only refers to the speaker or the writer as in the English (1a). The result of context shift is that indexicals such as *I*, *you*, *here*, *now*, and *yesterday* can potentially change their reference – similarly to what happens in direct quotation as in (1b).

(1) a. Baali said that I am an idiot.
    b. Baali said "I am an idiot."

   In this snippet I present data from Dhaasanac that contradict Kaplan's claim and that echo Anand and Nevins' Zazaki data. Dhaasanac is a Cushitic language spoken by approximately 48,000 people in Ethiopia and Kenya (Lewis 2009, Tosco 2001). The data used in this study are based on fieldwork I conducted in 2011.

   In (2), the subject of the embedded clause refers either to the matrix subject Baali or the speaker of the sentence. Here, in contrast to the English (1a), the reference of *I* appears to be shifted by a monstrous attitude predicate *say*.

(2) Baali$_i$ kieye   yaa/yu$_{\{ i/speaker\}}$ deech.
    Baali   say.3SG.PAST   I.SUB/I.ABS   idiot
    `Baali said {I/he} was an idiot.'

 Note that (2) does not seem to be a direct quotation. Direct discourse is known to be opaque to A' extraction (Partee 1973, Recanati 1999, Schlenker 1999). However, the object extraction in (4) and (5) does not affect the reference of *I* in the relative clauses.

(3) Baali$_i$ kieye   "yaa/yu$_{\{ i/speaker\}}$ deech".
    Baali   say.3SG.PAST   I.SUB/I.ABS   idiot
   `Baali said "{I/he} was an idiot".'

(4) Ini   giri Hassan$_i$ kieye   yu$_{\{i/speaker\}}$ af   gaa duŋeka   he   miðab.
    girl that Hassan say.3SG.PAST I.ABS   mouth on kiss.1SG.PAST be beautiful
    `The girl that Hasan said {Hasan/I} kissed is pretty.'

(5) Maaya   Baali$_i$ kieye   NY ha   yu$_{\{i/speaker\}}$ gaa aargira?
    who   Baali   say.3SG.PAST   NY PREVERBAL I.ABS   in see.FUTURE
    `In NY, who did Baali say {Baali/I} would meet?'

   Moreover, the indexical *yesterday*, which on a Kaplanian view should never shift temporal reference from one day before the utterance, seems indeed to shift reference

in Dhasaanac embedded clauses. From (6), it is interpreted that Loya met Baali one day before the reference time of the matrix, that is, eight days ago.

(6) Ram tiiya   beeyetia   Baali$_i$ ye   geey   kieye
    days seven   ago   Baali   to me tell.3SG.PAST   say.3SG.PAST
          Loya gefere   mu$_{\{\surd i/*speaker\}}$ hol   arge.
          Loya yesterday him   REFLEXIVE   meet.3SG.PAST
   `A week ago, Baali told me that Loya met him the day before.'
   ($\surd$Loya met Baali eight days ago./*Loya met Baali yesterday.)

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6.

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Strong NPIs and Neg-raising desire predicates

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Strong NPIs (e.g., *until Thursday*, *in weeks*) exhibit a more restricted distribution than weak ones (e.g., *any*, *ever*) (Zwarts, 1998). Gajewski (2011) and Chierchia (to appear) propose to account for this difference by postulating that while both strong and weak NPIs are licensed in D(ownward) E(ntailing) environments, the former are also sensitive to presuppositions. The gist of the idea is that in evaluating DEness for strong NPI licensing we should look at the conjunction of assertion and presuppositions. This can account for the contrast between (1) and (2), as the latter, but not the former, is presuppositional (see Geurts 2007 a.o.).

(1) Mary didn't leave **until Thursday**.
(2) *Every student who left **until Thursday** missed the class on presuppositions.

The two components of the meaning of (2) can be schematized as (3a) and (3b) (where D is the domain of quantification).

(3) a. **presupposition**: $\exists x \in D$ [[[left until Thursday]](x)]
    b. **assertion**: $\forall y \in D$ [[[left until Thursday]]$(y) \rightarrow Q(y)$]

Indeed, in (4), *until Thursday* is not in a DE environment. In other words, (4) does not entail (5), for any predicate *P*, hence the infelicity of (2) is predicted.

(4) $\exists x \in D$ [[[left until Thursday]](x)] $\wedge$
         $\forall y \in D$ [[[left until Thursday]]$(y) \rightarrow Q(y)$]

(5) $\exists x \in D$ [[[left until Thursday]]$(x) \wedge P(x)$] $\wedge$
         $\forall y \in D$ [([[left until Thursday]]$(y) \wedge P(y)) \rightarrow Q(y)$]

A problem for this approach arises, however, when we look at sentences like (6), where a strong NPI appears felicitously in the scope of a negated Neg-raising desire predicate (see Horn 1978, Gajewski 2005, 2007).

(6) John doesn't want Mary to leave **until Thursday**.

To illustrate, consider (a simplified version of) the semantics of *want* by von Fintel (1999) (nothing hinges on this and the same argument applies to the non-monotonic semantics by Heim (1992)). What (7) says is that in all *a*'s doxastic worlds, *f(a,w)*, the

best ones according to *a*'s desires, $g(a,w)$, are *p*-worlds -- and crucially it presupposes that *p* and its negation are possible in *a*'s doxastic worlds.

(7) [[want]]$(f)(g)(p)(a)(w)$

        a. **presupposition**: $\exists w' \in f(a,w) \ [\ p(w') \ ] \wedge \exists w'' \in f(a,w) \ [\ \neg p(w'') \ ]$
        b. **assertion**: $\forall w''' \in \text{BEST}_{g(a,w)}(f(a,w)) \ [\ p(w''') \ ]$

Applying this semantics to (6), the conjunction of assertion and presupposition, represented schematically in (8), is such that the context in which *until Thursday* occurs is not DE. In particular, the problematic part is the first conjunct (i.e., it's possible for John that Mary leaves until Thursday): this disrupts the DEness of the context in which *until Thursday* occurs, thus (6) is wrongly predicted to be infelicitous.

(8) $\exists w' \in f(j,w) \ [\ \phi_{\text{NPI}}(w') \ ] \wedge \exists w'' \in f(j,w) \ [\ \neg\phi_{\text{NPI}}(w'') \ ] \wedge$
                            $\neg\forall w''' \in \text{BEST}_{g(j,w)}(f(j,w)) \ [\ \phi_{\text{NPI}}(w''') \ ]$

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7.

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Informativity-based maximality conditions

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The usual lexical entry for *the* in (1) makes reference to a notion of mereological maximality, as in (2) (Link 1983; see also Sharvy 1980). Von Fintel, Fox and Iatridou 2005/2012 (henceforth FFI) argue that information-based maximality should be preferred, as in (2'):

(1) $[\![the]\!](\varphi_{<e,st>})$ is defined only if there is a unique x such that x is a maximal φ-object ($M_x \varphi$ for short). When defined, $[\![the]\!](\varphi)$ refers to the maximal φ-object.

(2) **Link's proposal:** $M_x \varphi$ iff (i) x satisfies φ, (ii) no object x' is such that
        (a) x' satisfies φ, and (b) x < x', where < is strict mereological inclusion.

(2') **FFI's proposal:** $M_x \varphi$ iff (i) x satisfies φ, (ii) no object x' is such that
        (a) x' satisfies φ, and (b) the proposition $\varphi(x')$ asymmetrically entails $\varphi(x)$.

We argue that a similar correction should be made to the maximality conditions introduced by generalized quantifiers in recent dynamic treatments of 'donkey' anaphora (e.g. Brasoveanu 2008).

FFI note that when ordering by informativity and ordering by size are inversely correlated, (2') but not (2) correctly predicts that *the φ* should denote the *smallest φ*-object:

(3) I have the amount of flour sufficient to bake a cake. (FFI)

In this case (henceforth 'reversal'), 'propositions of the form *d-much flour is sufficient to bake a cake* become more informative the *smaller* d is' (FFI) – hence the *smallest* such amount is denoted. This argument can be replicated with donkey anaphora:

(4) A certain amount of plutonium is sufficient to trigger a nuclear explosion. I will obtain it.

Here *it* refers to the minimal rather than to the maximal amount of plutonium sufficient to trigger a nuclear explosion.

For an E-type theorist, this fact is unsurprising given FFI's initial observation, since *it* just stands for: *the amount of plutonium sufficient to trigger a nuclear explosion.* But other cases require a dynamic treatment: they combine 'reversal' with a context in which two pronouns have semantically symmetric ('bishop'-style) antecedents, as in (5) (the sequence *mix it with it* is infelicitous, hence we resort to *mix it with its counterpart* or a French equivalent involving two clitics).

(5) a. In order to trigger a nuclear explosion, it will be enough for me to mix a certain quantity of plutonium with an equivalent quantity of the same compound. I'll be very careful when I mix it with its counterpart.

    b. Pour déclencher une explosion nucléaire, il me suffira de mélanger une certaine quantité de plutonium à une quantité identique de plutonium. Je promets que je

serai très prudent lorsque je la lui adjoindrai.

[= first sentence of (a), followed by: *I promise that I will-be very cautious when I it to-it adjoin.*]

Giving the underlined pronouns in (5) an E-type meaning (e.g. 'the smallest quantity of plutonium that I will mix with an identical quantity of plutonium') would give rise to the same problems that motivated dynamic approaches in the first place: uniqueness fails because the two antecedents play semantically symmetric roles. Dynamic theories can eschew this difficulty, as in (6) – but they must adopt (2') over (2) ((6b) uses the notations of van den Berg 1994; importantly, we take the quantification here to be over *parts* of plutonium rather than over measures thereof):

(6) a. [a x: quantity-of-plutonium x][a y: quantity-of-plutonium y $\wedge$ equivalent(x, y)] sufficient mix-with(x,y).

   b. $\varepsilon_x \wedge \varepsilon_{x'} \wedge M_{x'}$(quantity-of-plutonium x') $\wedge M_x(x \subseteq x' \wedge \varepsilon_y \wedge \varepsilon_{y'} \wedge M_{y'}$(quantity-of-plutonium x' $\wedge$ equivalent(x, y')) $\wedge M_y(y \subseteq y' \wedge$ sufficient mix-with(x,y))

If mixing amount x of plutonium with the same amount of plutonium is sufficient to trigger an explosion, this plausibly holds of *larger* amounts than x – hence (5) is a reversal environment, and (2') correctly predicts that the witnesses of the two existential quantifiers should involve the *minimal* amounts with the desired property. There is one proviso, however: the minimality effect we predict plausibly arises when we have the contextual entailment in (7):

(7) for all x, x', y, y', (x $\subseteq$ x' and y $\subseteq$ y') $\Rightarrow$ [sufficient mix-with(x,y) $\Rightarrow$ sufficient mix-with(x',y')]

Without this assumption, we won't have a maximality effect, but we also won't have a minimality effect; thus the absence of the maximality effect rather than the presence of a minimality effect is what is crucial for our purposes.

   In principle, one could test the informativity-based analysis with simple plural indefinites. Brasoveanu 2008 (fn. 9) argues that plural *some* is maximal, as in: *Every driver who had some dimes put them in the meter* – which differs from *Every driver who had a dime put it in the meter* in yielding a maximal reading only. Since maximality is involved, one could ask whether it is informativity-based or size-based. The examples needed to distinguish the two hypotheses are complex and the judgments are subtle, however, and thus we leave this issue for future research.

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