snippets

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Contents

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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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Sluiced fragment answers: another puzzle involving islands and ellipsis

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Fragment answers -- like Speaker B's utterance in (1) -- and sluicing ((2)) receive the same analysis in Merchant (2004), where PF-deletion of TP leaves material extracted from TP overt (deleted structure in grey font):

(1) Speaker A: Who did Sally fire?
Speaker B: Bill$_i$ [$_{TP}$ Sally fired t_i]

(2) Sally fired someone, guess who$_i$ [$_{TP}$ Sally fired t_i].

Merchant notes that fragments, unlike sluices, do not ameliorate island violations. In example (3) (from Merchant 2001), extraction of *which Balkan language* violates an island:

(3) They hired someone [$_{CP}$ who speaks a Balkan language], but I don't know which Balkan language$_i$ [$_{TP}$ They hired someone [$_{CP}$ who speaks t_i]]

However, testing island-sensitivity for fragments is not straightforward, since an island-violating analog of (1) is unacceptable:

(4) A: *Which Balkan language did they hire someone who speaks?
B: Albanian.

Merchant (2004) circumvents this by using questions like Speaker A's in (5); a yes-no question with a focused constituent (in *italics*) contributes an implicit Wh-question, licensing a fragment. With island-bound constituents, fragments are unacceptable:

(5) A: Did *Abby* refuse to dance with Ben?
B: No, *Christine*

(6) A: Did Ben leave the party because *Abby* wouldn't dance with him?
B: *No, *Beth* [Example (88), Merchant (2004)]

However, the grammar provides us with another tool for circumventing the problem in (4); sluicing ameliorates island violations. We can fix (4), by replacing the set-up question with a sluice. Surprisingly, island-violating fragments become acceptable:

(7) A: They hired someone who speaks a Balkan language.
B: Which one?
A: Albanian.

(8) A: Ben left the party early because someone wouldn't dance with him.
B: Who?
A: Christine.

The generalization is: fragment answers become insensitive to islands when they are answers to sluiced questions (call them "sluiced fragments", to distinguish from cases like (6)).

Merchant's (2004) account for the difference between sluicing and fragments involves a PF-uninterpretable feature '*' which marks intermediate traces of successive cyclic Wh-movement in island-violating extractions. Ellipsis "hides" '*' from PF, rendering violations acceptable under sluicing, but not fragment answers:

(9) Which Balkan language$_i$ did they [$_{vP}$ *t_i hire someone [$_{CP}$ who t_i speaks t_i]]?
(10) [$_{CP}$ Which Balkan language [$_{C'}$ C^0 [$_{TP}$ did they [$_{vP}$ *t_i hire…
(11) *[$_{F(ocus)P}$ Beth$_i$ [$_{F'}$ F^0 [$_{CP}$ *t_i [$_{C'}$ C^0 [$_{TP}$ Ben [$_{vP}$ *t_i left the …]]]]]]

Fragment answers are argued to occupy a higher specifier position than Wh-phrases under sluicing; Spec, Focus^0, above CP. Deletion of TP under fragment answers fails to erase the PF-uninterpretable '*'. This theory accounts for the difference in acceptability between (5) and (6), but what about (7) and (8)?

An additional asymmetry between fragments and sluiced fragments involves possible answers.

(12) A: Did Ben leave the party because *Abby* wouldn't dance with him?
B: No, because *Beth* wouldn't dance with him. (cf. 6)

(13) A: Ben left the party early because someone wouldn't dance with him.
B: Who?
A: *Because Christine wouldn't dance with him. (cf. 8)

Whatever account is given for sluiced fragments should also account for the pattern in (12)-(13).

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2.

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Change of state and change of location verbs in Chinese

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There are two classes of verbs that involve change: change of state verbs, e.g. *break*, *open*, and change of location verbs, e.g. *come*, *enter, put*. The two classes of verbs are similar in a number of aspects. Both are telic, indicating change; when used intransitively, both are unaccusative. In the event structure representation of verb meaning (e.g. Dowty 1991, Pinker 1989, Pustejovsky 1991, Rappaport Hovav & Levin 1998, Tenny 1994, Van Valin & LaPolla 1997), change of state of verbs have a complex structure, as in (1a), which can be detransitivized, as in (1b).

(1) a. [x ACT] CAUSE [y BECOME <STATE>]
b. y BECOME <STATE>

Similarly, transitive change of location verbs also have a causative, complex structure, as in (2a), which can also undergo detransitivization, as in (2b):

(2) a. [x ACT] CAUSE [y BECOME AT <PLACE>]
b. y BECOME AT <PLACE>

In the event structure approach to verb meaning, it is predicted that verbs of change of location would participate in the alternation between (2a) and (2b), in the same way change of state verbs participate in the alternation between (1a) and (1b). Is this prediction supported empirically?

I would like to suggest that support can be found in Mandarin Chinese, although (2b) occurs in inversion only. Consider (3-4):

(3) a. Xiaoming kai -le men
Xiaoming open -PERF door
'Xiaoming opened the door.'

b. Men kai -le
door open -PERF
'The door opened.'

c. Houyuan kai -le yige men
back-yard open -PERF one-CL door
'In the back yard opened a door.'

(4) a. Xiaoming fang -le yifen zuoye zai lanzili
Xiaoming put -PERF one-CL assignment at basket-in
'Xiaoming put an assignment in the basket.'

b. Zuoye fang zai lanzili
assignment put at basket-in
'The assignment was put in the basket.'

---

c. Lanzili fang -le yifen zuoye
basket-in put -PERF one-CL assignment
'In the basket is an assignment.' (Lit: 'In the basket was put an assignment')

The (a) sentences are causative, the (b) sentences could be causative (with an unexpressed subject) or intransitive, and the (c) sentences are intransitive. Among (3b-c) and (4b-c), it can be shown that (4b) is still agentive, while the other three have undergone detransitivization. The reasoning is as follows. I take detransitivization to mean that the agent is no longer part of the event structure. One way to tell if a verb is used agentively is to determine its compatibility with adverbial modifiers that imply agentivity, e.g. *xiaoxinde* 'carefully'. If a sentence is acceptable with such adverbs, we can assume that the verb retains agentivity in its meaning. (5a) shows that (3b) is not compatible with *xiaoxinde* 'carefully', whereas (5b) shows that (4b) is:

(5) a.*Men xiaoxinde kai -le
Door carefully open-PERF
'*The door opened carefully.'

b. Zuoye xiaoxinde fang zai lanzili
assignment carefully put at basket-in
'The assignment was put in the basket carefully.'

In contrast, the (c) sentences in (3-4) do not take an agent-oriented adverb, as in (6):

(6) a. *Houyuan xiaoxinde kai -le yige men
back-yard carefully open -PERF one-CL door
'In the backyard was opened a door carefully.'

b. *Lanzili xiaoxinde fang -le yifen zuoye
basket-in carefully put -PERF one-CL assignment
'In the basket was put an assignment carefully.'

This suggests that detransitivization has taken place in (3b), (3c) and (4c), and the verb no longer has agentivity as part of its meaning; however, it has not taken place in (4b).

It thus seems that the alternation between (2a) and (2b) can only be demonstrated with locative inversion, while the alternation between (1a) and (1b) does not require inversion. Nonetheless, the above examples show that in Mandarin both change of state and change of location verbs participate in the causative-intransitive alternation.

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3.

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Sprouting tolerates preposition omission

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This snippet offers empirical evidence against the observation, due to Chung (2005), that no preposition-stranding language tolerates preposition omission in sprouting, an elliptical construction where wh-remnants lack overt correlates, as in (1)-(2).

(1) They're jealous but it's unclear of who/*who.
(2) The UN is transforming itself, but into what/*what is unclear.

Chung et al. (2011) argue that this pattern is predicted neither on deletion-based approaches to ellipsis (Ross 1969, Merchant 2001) nor direct-interpretation approaches (Ginzburg and Sag 2000, Culicover and Jackendoff 2005). It, however, follows from a copying approach updating the Chung et al. (1995) proposal. Derivations that Chung et al. (2011) propose must be sensitive to the lexical requirements of the relevant parts of the predicates expressed in the antecedent: the adjective *jealous* (1), and the verb *transform* (2). What is problematic for even this approach is that *which*-NP phrases may appear without prepositions in sprouting.

English data like (3)-(6), collected from the Switchboard corpus and Google, have not been noticed before. Importantly, all the wh-remnants are *which*-NP phrases, not bare wh-phrases (cf. (1)-(2)).

(3) A: I'm a student right now.
B: **Which university?**

(4) Our grandson just had open heart surgery, but I'm not sure **which hospital**.

(5) A: My neighbor did it [stenciling] first and I've seen her house and I saw how beautiful it looked, so then I decided I was going to do it. It turned out really, really good.
B: What design did you use?
A: Mostly flowers.
B: **Which room?**

(6) I have heard of people being able to check a bag full of scuba gear which was more than the wt limit and not being charged extra, but I don't remember **which airline**.

No current analysis of sprouting predicts a contrast between these two kinds of wh-remnants, nor is it clear how to motivate this contrast, if we only appeal to the lexical requirements of predicates.

To explore the naturalness of these four prepositionless phrases, I collected ratings from forty English speakers via Amazon's Mechanical Turk. For each experimental item, the antecedent was followed by three continuations, arranged in random order. Participants rated the naturalness of each continuation by assigning between 1 and 100

points to it. Across all items, the continuations included a *which*-NP with and without a preposition, and a cleft (see Fig. 1). For example, in (3), they were:

(7) a. At which university? b. Which university is it? c. Which university?

Because (7b) could be a cleft source for (7c) on a deletion-based analysis, this design permitted a comparison of the naturalness of both continuations. A mixed-effects regression model of speakers' ratings shows a significant dispreference for clefts with respect to *which*-NP phrases with ($p < 0.001$) and without prepositions ($p < 0.03$), while the latter two differ unreliably ($p = 0.18$).

It is unclear how to account for the unexpected similarity between *which*-NP remnants with and without prepositions, given the current analyses of ellipsis. Further, the dispreference for clefts is particularly problematic for deletion-based approaches.

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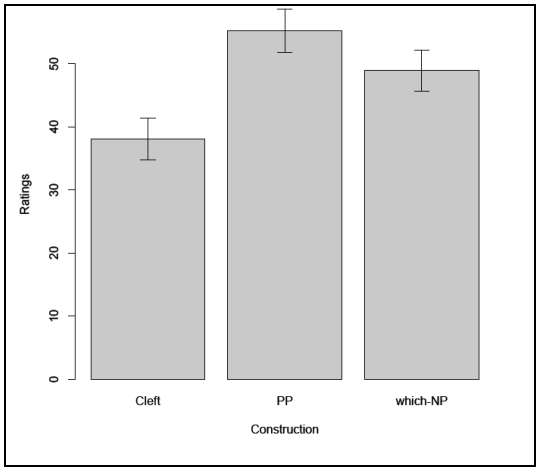

Figure 1: Mean naturalness ratings by construction

4.

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Obligatory scalar implicatures and relevance

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Background.

A sentence like (1a), unlike the minimally different (1b), sounds odd. However, the contrast is surprising: we know that all Italians come from the same country, hence (1a) and (1b) are truth-conditionally equivalent given common knowledge.

(1) a. #Some Italians come from a warm country (Magri 2010)
b. Italians come from a warm country

Magri (2010) proposes that the source of the oddness of (1a) is its scalar implicature (SI) in (2), which contradicts common knowledge (see also Magri 2011). To make this work, Magri (2010) assumes a theory of SIs with the properties in (3a) and (3b).

(2) Not all Italians come from a warm country

(3) a. The computation of SIs is blind to common knowledge.
b. The computation of SIs is mandatory.

(3a) is needed or (2) would not even be generated in the first place and (3b) is needed or (2) would have just been suspended or cancelled.

Magri (2010) obtains (3b) by assuming that SIs are obligatorily computed at every scope site. A question for this account is how to account for the context dependence of SIs. Magri (2010)'s response, building on Fox and Katzir (2011), is relativizing the computation of SIs to relevant alternatives, so that for each alternative, either it's not relevant or it gives rise to a scalar implicature corresponding to its negation. In other words, he proposes the generalization in (4).

(4) When alternatives are relevant the corresponding SIs are obligatory.

The Problem.

(5a) is a problematic case for (4). It is felicitous and does not give rise to the SI in (5b). However, I submit that alternatives that are mentioned explicitly must be relevant. Hence, given (4), Magri (2010) wrongly predicts that the SI in (5b) should be computed for (5a) in every context.

(5) a. I don't know whether John corrected all of the assignments, but he corrected some of them.
b. It's not true that John corrected them all.

One might consider the easy fix of weakening (4) as (6).

(6) When alternatives are relevant and the speaker is opinionated about its truth-value the corresponding SIs are obligatory.

However, this move is problematic, at least for the SI theory based on a covert exhaustivity operator adopted by Magri (2010) (see also Chierchia et al. to appear, Fox 2007). One argument for this theory is the parallelism between the covert operator and overt "only". So one would expect that "only" obeyed a principle corresponding to (6). However, if this was the case (7a) should be felicitous with the reading in (7b).

(7) a. I don't know whether most of the students came, #but only some of them did
b. I don't know whether most of the students came, but some of them did and not all of them did.

In fact, the relevant alternative "most of the students came" would be ignored given the first sentence, but the alternative "all students came" should be able to give rise to the inference that not all of them came.

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5.

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Where does the Strongest Meaning Hypothesis apply?

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The Strongest Meaning Hypothesis (SMH henceforth), a pragmatic principle motivated in Dalrymple et al.'s (1998) study of reciprocals, has recently been applied to problems in implicatures (Chierchia et al. to appear) and Vagueness (Cobreros et al. 2011). In this snippet, I argue that the SMH can apply to embedded sentences, which is perhaps unusual for a pragmatic principle.

Dalrymple et al. (1998) argue that reciprocal sentences possess a variety of potential readings, for example the universal and existential reciprocal readings given for (2). (These two are often called the *strong* and *(oneway) weak* reading, but this terminology would be confusing for my present purposes). Furthermore a potential reading must be compatible with general world knowledge and the non-linguistic information available in the context. Dalrymple at al.'s SMH states that a sentence with a reciprocal allows only the logically strongest of its potential readings (if there is a unique, strongest potential reading):

(1) a. universal reciprocal reading for R and D: $\forall x, y \in D: x \neq y \rightarrow R(x,y)$
b. existential reciprocal reading for R and D: $\forall x \in D \, \forall y \in D \, . \, x \neq y \, \& \, R(x,y)$

For example, Dalrymple et al.'s (1998) account predicts that (2) only allows the universal reciprocal reading because the universal reading entails the existential reading and both readings are possible with the relationship *know* given general world knowledge. Only examples like (3) with the relationship *hold hands with* allow the existential reading. This follows because the universal reading cannot be true for groups with four or more members given our knowledge that people generally have only two hands.

(2) The team members knew each other in advance.
(D = the team members, R = $\lambda x, y \, . \, x$ knew y in advance)

(3) The team members are holding hands with each other.
(D = the team members, R = $\lambda x, y \, . \, x$ is holding hands with y)

Now consider examples (4), (5), and (6) where a reciprocal occurs in the scope of a downward entailing operator. In this case, the application of SMH at the matrix level predicts that only the existential reading should be available: both readings are possibly true and the existential reading is now stronger than the universal reading.

(4) If the team members knew each other in advance, they won.

(5) Every team where the team members knew each other in advance was victorious.

(6) No team whose members knew each other in advance lost.

But the prediction does not correspond to speaker intuitions. Let's assume we are

talking about volleyball teams with six members each. Some of these teams have played together in the past, so their members knew each other in the universal sense of (1a). One other team, team X, however, was started by player 1 who invited her friend, player 2, to the team. Player 2 then invited his friend, player 3, who had never met with player 1 before the first match. The other members of the team were gathered up in a similar manner, so the members of team X didn't know each other in the universal sense of (1a) before starting to play together. But, the members of team satisfy the existential reading (1b) of *know each other*. Therefore, sentences (4), (5) and (6) should have to false if team X lost if the SMH can only be applied at the utterance level. This prediction is not borne out. One possible explanation for the data in (4), (5) and (6) is to assume that the SMH can also be applied to embedded clauses -- i.e. to the content of the conditional clause in (4) and the relative clauses in (5) and (6). Such an embedded application of the SMH predicts that the universal reading is available for (4), (5), and (6).

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6.

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Complement set anaphora and structural iconicity in ASL

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INVITED SNIPPET

Recent dynamic approaches to 'donkey' pronouns are designed to account for cases of 'maximal set' anaphora as in (1), where a pronoun refers to the maximal group of individuals that satisfy both the restrictor and the nuclear scope of a generalized quantifier.

(1) **Maximal Set Anaphora**
(a) Few / (b) Most students came to class, (a) but / (b) and they asked good questions.

Two additional patterns are in need of analysis: in 'restrictor set' anaphora, a pronoun refers to the individuals that satisfy the restrictor of the noun phrase antecedent – in (2), the entire set of students; in 'complement set' anaphora, a pronoun appears to refer to the complement within the restrictor set of the maximal set – e.g. in (3a), *they* seems to refer to the students who did *not* come to class.

(2) **Restrictor Set Anaphora**
(a) Few / (b) Most students came to class. They (a) aren't / (b) are a serious group.

(3) **Complement Set Anaphora**
(a) ?Few / (b) #Most students came to class. They stayed home instead.

Complement set anaphora is notoriously restricted: it is often impossible with non-negative quantifiers, as in (3b); and some cases involving negative quantifiers can be re-analyzed in terms of a 'restrictor set' reading with a collective interpretation that tolerates exceptions. Following Nouwen 2003, we assume that when complement set anaphora is genuinely available it involves *inferred* discourse referents, and that no *grammatical* mechanism makes available a discourse referent denoting the complement set.

ASL signers can realize anaphora by (i) associating a locus in signing space to an antecedent; and (ii) pointing towards this locus (or 'indexing' it) to establish pronominal reference. However, step (i) can involve a single *default locus*, in front of the signer – in which case locus establishment need not be explicit. Alternatively, non-default loci can be introduced. We show below that in the first case, English-style judgments can be replicated: complement set anaphora is severely restricted. By contrast, complement set anaphora in ASL versions of (3) becomes available when several *embedded* loci are introduced, with one locus denoting the set of all students, and a sublocus the set of students who came to class.

When the 'default locus' strategy is used, maximal set anaphora (as in (4a-b)) and restrictor set anaphora (as in (4a'-b')) appear to be available, as suggested by high

ratings obtained from our main ASL consultant (1 = worst, 7 = best; average score over 3 iterations on separate days).

(4) a. 6.7 POSS-1 STUDENT FEW a-CAME CLASS.
'Few of my students came to class.'
IX-arc-a a-ASK-1 GOOD QUESTION
'They asked good questions.'

b. 6 POSS-1 STUDENT MOST a-CAME CLASS.
'Most of my students came to class.'
IX-arc-a a-ASK-1 GOOD QUESTION
'They asked good questions.'

a'. 6 POSS-1 STUDENT FEW a-CAME.
'Few of my students came.'

IX-arc-a NOT SERIOUS CLASS.
'They are not a serious class.'

b'. 6.7 POSS-1 STUDENT IX-arc-a MOST a-CAME CLASS.
'Most of my students came to class.'
IX-arc-a SERIOUS CLASS.
'They are a serious class.'

The crucial data involve complement set anaphora, which we tested with our main consultant (3 iterations) and with two further consultants (one iteration each), with degraded averages that appear in (5) (1st score: equal weight for each trial; 2nd score: equal weight for each consultant).

(5) POSS-1 STUDENT FEW a-CAME CLASS. POSS-1 STUDENT MOST a-CAME CLASS.
a. 3.6 [3.6] IX-arc-a a-STAY HOME b. 2.8 [2.7] IX-arc-a a-STAY HOME
Intended: 'Few/Most of my students came to class. They [the students that didn't come] stayed home.'

In (6), by contrast, we provide our main consultant's judgments (3 iterations) based on the second anaphoric strategy ('embedded loci'), which consists in establishing a large plural locus *A* for the restrictor set [= the set of all students], and a sublocus *a* for the maximal set [= the set of students who came]. Remarkably, this strategy automatically makes available a locus *A-a* for the complement set. As a result, all three readings become equally available, though with different indexings (importantly, all involve normal plural pronouns, and not the word *OTHER*). For perspicuity, we notate the large area *A* as *ab* to indicate that it comprises subloci *a* and *b* – although it is just signed as a large circular area (due to the subtlety of the *a* vs. *ab* contrast, we asked our main consultant to check the transcription, and we provide one that he accepted):

(6) POSS-1 STUDENT IX-arc-ab MOST IX-arc-a a-CAME CLASS.
a. 7 IX-arc-b b-STAY HOME
b. 7 IX-arc-a a-ASK-1 GOOD QUESTION
c. 7 IX-arc-ab SERIOUS CLASS.

Data pertaining to complement set anaphora were also assessed in the same video as (5) (same 3 consultants); the scores confirm that with embedded loci complement set anaphora becomes readily acceptable ((7b) is similar to (6a) but was part of a different video):

(7) a. 6.7 [6.5] POSS-1 STUDENT IX-arc-ab FEW IX-arc-a a-CAME.
IX-arc-b b-STAY HOME

b. 6.3 [5.8] POSS-1 STUDENT IX-arc-ab MOST IX-arc-a a-CAME.
IX-arc-b b-STAY HOME

'(a) Few/ (b) Most of my students came to class. They [= the students who didn't come] stayed home.'

We hypothesize that assignment functions assign values to loci (Schlenker 2011), and we further assume that: (a) geometric properties of plural loci (*qua* areas of space) guarantee that if a locus *A* and a sublocus *a* have been introduced, a complement locus *(A-a)* becomes *ipso facto* available; (b) relations of inclusion and subtraction among loci are preserved by the interpretation function *via* constraints on assignment functions - an instance of 'structural iconicity'. Specifically:

(8) Let LOC be the set of plural loci that appear in signing space, and let s be an admissible assignment function that assigns values to loci. We make the assumptions in (a)-(b), where we view plural loci as sets of geometric points, and loci denotations as sets of individuals.

a. Conditions on LOC: for all a, b $\in$ LOC,

(i) a $\subseteq$ b or b $\subseteq$ a or a $\cap$ b = Ø; (ii) if a $\subset$ b, (b-a) $\in$ LOC

b. Conditions on s: for all a, b $\in$ LOC, if a $\subset$ b, (i) s(a) $\subset$ s(b); (ii) s(b-a) = s(b)-s(a)

In examples (4)-(7), we take the grammar to make available (i) a discourse referent for the maximal set and the restrictor set, but (ii) no discourse referent for the complement set. In case a default locus is used, ASL roughly behaves like English, and complement set anaphora is highly restricted (because of (ii)). In case embedded loci are used, ASL allows for complement set anaphora in all cases. Here is why: if *a* is a proper sublocus of a large locus *ab*, we can infer by (8a.ii) that *(ab-a)* (i.e. *b*) is a locus as well; by (8b.i), that s(a) $\subset$ s(ab); and by (8b.ii), that s(b) = s(ab)-s(a). In effect, complement set anaphora becomes available because ASL can rely on an iconic property which is inapplicable in English.

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Author's note

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Editor's note

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7.

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The English modal had

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There exists a non-standard counterfactual construction in English, often called the "plupluperfect" or "superpluperfect" (Wilson 1993), that is created from the combination of *had* + *have* ((1)):

(1) a. I**f I had have** known about John, I wouldn't have come.
b. It would have been better **had I have been** there.
c. **If I had have been** there, I could have helped.

It is often reduced to one of many phonological and orthographic variants, many of which create homophonous forms with another counterfactual construction employing *would* + *have* ((2)):

(2) a. **If I'd have known**, I could have helped. (ambiguous)
b. **If I had've known**, I could've helped.
c. **If I had of known**, I could of helped.
d**. If I'da' known**, I coulda' helped. (ambiguous)

The construction, while non-standard, is certainly not new – it dates as far back as the 15th century when English began to use analytical constructions rather than subjunctive voice for counterfactuals (Moelecki 2000). A number of different arguments have been postulated for the construction: that it is a redundant repetition of the perfect marker (Wilson 1993; Huddleston & Pullum 2002); that the second *have* contributes the counterfactual meaning (and is thus an irrealis marker) (Molencki 2000); that it is a phonological harmony effect (Molencki 2000); and that it is a psychological effect (Boyland 1995). This construction is separate from the other two instances in English where two *haves* can appear together: 1) the combination of perfect and possessive main verb (e.g. *I have had this book for too long*) and 2) the combination of perfect and the obligation pseudo-modal (e.g. *I have had to leave for some time*). In fact, all four forms of *have* (the perfect marker, the counterfactual modal, the pseudo-modal, and the main verb) can co-occur (e.g. *We would have been done already if John hadn't have had to have his way*). Below we argue based on distributional evidence that the simplest account of this pattern is that the first *have*, which is always realized as *had*, is in fact an irrealis modal and the second is just a standard instance of perfect aspect.

The unlikelihood of a phonological account. The modal *had* undergoes V to T movement past Neg or is projecting a TP above Neg (*If I had not have been there...*) and it also undergoes T to C movement (*Had I have been there...*). In both positions, the movement results in an intervening head separating *had* from the *have* that marks perfect aspect. This indicates that it is a separate syntactic element from the second *have*, strongly suggesting that a non-syntactic account is unlikely.

Complementary distribution with other modals. The *had +have* construction cannot co-occur with other modals, even those that carry counterfactual meaning. *Had + have* is in complementary distribution with every other modal + perfect voice construction.

(3) a. *If I **would have have** been there, I could have helped.
b. *If I **could have have** been there, I could have helped.

Dialectal variation with *would + have*. The *had +have* construction is in dialectical variation with and carries precisely the same meaning as the also non-standard counterfactual *would + have* construction (Huddelston & Pullum 2002). In fact, since both reduce to *'d* in cases such as (2a,d) above , in such reductions it is impossible to tell which modal is being used. Since the *would + have* construction is the more novel (Huddleston & Pullum 2002), it is not unreasonable to assume that the *would + have* construction is a reanalysis of the reduced *had + have* construction.

(4) a. If I would have been there, I would have stopped them.
b. If I had have been there, I would have stopped them.

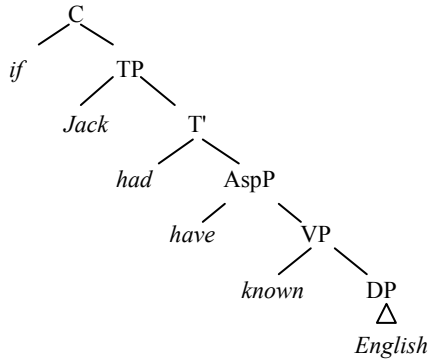
Consistent past-tense marking. The first *have* only appears as the past tense form *had* (**If I* have *have been there on time*, *things would have ended better*). Similarly, past tense is marked on all the other irrealis modals of English when receiving counterfactual interpretation (*could, would, should, might*) and, similarly, the counterfactual meaning is prohibited from the present tense form of those irrealis modals (*can, will, shall, may*). These modals, including *had,* are members of a set of English verbs called present-preterit verbs (Milward &Hayes 2011) that are always past tense in morphological form regardless of present tense meaning (such as *got*). Curiously, some of the other non-modal counterfactual constructions in English such as the periphrastic pseudo-modal construction (*ought to*) and the mostly obsolete subjunctive voice (*If I were to*) also carry this unconditioned past tense marking.

Licensing of unmarked auxiliary (rather than participial form). Like all other modals, *had* licenses the unmarked form of the following auxiliary (*If I had* have *known*; *I should* have *known*; *I should* go). Only the modals (including *do* and *to*) of the English auxiliaries license bare forms. The other auxiliaries (Asp and Voice) license one of the two participial forms (*I am* running*; I have* run).

Licensing of four-way reduction pattern of *have*. The modal *had* licenses the four way reduction pattern of *have* to *have, 've, 'a,* and *of* (see Kayne 1997): *If I had have known...; If I had've known...; If I had of known...; If had'a known*. This complete reduction pattern is only licensed by modals preceding the *have* aspect marker (**I of known English for years; *I 'a known English for years*).

Based on the above distributional qualities of the *had +have* construction, it is clear that the simplest account for it is that *had* is a modal (projecting a TP or always moved to T from a modal projection) and the phonologically reducing *have* that follows it is the aspect marker (see (5)).

(5) If Jack had have known English...



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8.

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Being simultaneously an NPI and a PPI: a bipolar item in French

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It is well known that the licensing contexts for Negative Polarity Items (NPIs) and the anti-licensing contexts for Positive Polarity Items (PPIs) are not identical (cf. van der Wouden 1997, Szabolcsi 2004, Homer 2011). In particular, while some NPIs are licensed in every downward-entailing (DE) context (*weak* NPIs, cf. Zwart 1998), all PPIs seem to be acceptable in the antecedent of a conditional clause and the restrictor of universal quantifiers. This fact opens the possibility that a certain expression be simultaneously a weak NPI and a PPI. Van der Wouden and Nishiguchi (2005) have already suggested that 'bipolar items' exist. The distribution of such an item would be constrained as follows: it should be able to occur in all NPI-licensing contexts which are not simultaneously PPI-anti-licensing contexts.

More specifically, such an item will display the following four properties:

1. Being an NPI, it must be interpreted under the scope of a DE operator.

2. Being a PPI, it cannot occur in the immediate scope of an unembedded negation. (If occurring in the syntactic scope of negation, it will generally not be able to escape its semantic scope, due to its NPI status, and will thus be unacceptable on every conceivable reading.)

3. Being a PPI, it can occur (be 'rescued') in the immediate scope of a negation that is itself embedded in a DE environment (see Szabolsci 2004, Homer 2011; thanks to V. Homer for emphasizing this point). It will then occur in a globally upward-entailing context, but the NPI-licensing requirement from 1. will nevertheless be satisfied because it will still be interpreted under the scope of a DE operator, namely, negation.

4. Being a *weak* NPI, it will be licensed in the antecedent of a conditional clause or the restrictor of a universal quantifier, among others.

I argue that the French locution *un tant soit peu* (which means something like 'minimally') is an especially good example of a bipolar item:

1. *un tant soit peu* is disallowed if not in the scope of a DE operator [it is an NPI]
   (1) Ce livre est (*un tant soit peu) abîmé.
   This book is *un tant soit peu* damaged.
   (2) Chaque livre est (*un tant soit peu) abîmé.
   Every book is *un tant soit peu* abîmé.
   (3) Marie est (*un tant soit peu) en colère.
   Marie is *un tant soit peu* angry.
   (4) Tous les étudiants sont (*un tant soit peu) en colère.
   All the students are *un tant soit peu* angry.
2. *un tant soit peu* is disallowed in the scope of a clause-mate negation... [It is a PPI]

---

(5) Ce livre n'est pas (*un tant soit peu) abîmé.
This book is not *un tant soit peu* damaged.
(6) Marie n'est pas (*un tant soit peu) en colère.
Marie is not *un tant soit peu* angry.

3 ... unless the relevant negation is itself in a DE environment. [Rescuing]

(7) Je ne peux pas croire que ce livre ne soit pas un tant soit peu abîmé.
I can't believe that this book is-SUBJ not *un tant soit peu* damaged.
(8) Je ne peux pas croire que Marie ne soit pas un tant soit peu en colère
I can't believe that Marie is-SUBJ not *un tant soit peu* angry.

4. *un tant soit peu* is licensed in the restrictor of universal quantifiers and the antecedent clause of conditional sentences. [It is a *weak* NPI]

(9) Chaque livre (qui était) un tant soit peu abîmé a été jeté
Every book (that was) *un tant soit peu* damaged were thrown away.
(10) Si ce livre est un tant soit peu abîmé, il sera jeté
If this book is *un tant soit peu* damaged, it will be thrown away.
(11) Tous les étudiants (qui étaient) un tant soit peu en colère sont partis.
All the students (that were) *un tant soit peu* angry left.
(12) Si Marie avait été un tant soit peu en colère, elle serait partie
If Marie had been *un tant soit peu* angry, she would have left.

Finally, in the scope of a negative quantifier, *un tant soit peu* is, to my ear, marginally acceptable. This is consistent with the fact that some PPIs are acceptable in such environments, e.g. *déjà* ('already' in French) and its German and Dutch counterparts (see van der Wouden 1997).

(13) Aucun de ces livres n'est (?? un tant soit peu) abîmé
None of these books is *un tant soit peu* abîmé
(14) Aucun des étudiants n'est (?? un tant soit peu) en colère
None of the students is *un tant soit peu* angry

Given that *un tant soit peu* is a complex expression, it is tempting to analyze it as containing a PPI-part and an NPI-part. Note, in particular, that *un peu* ('a bit') is a PPI. Thus, deleting *tant soit* in *un tant soit peu* makes the sentences from (1) to (4) perfectly acceptable, but does not change anything to other judgments. We might then want to analyze *tant soit* as an NPI, presumably as a minimizer. In this case, *un tant soit peu* would be, quite literally, made up of an NPI and a PPI. It should be noted, however, that *tant soit* never occurs outside of the environment *un ... peu*, so that there is no independent evidence for its NPI status. (At the same time, *tant* does appear in other syntactically complex NPIs, such as *tant que ça* 'as much as that' (E. Chemla, p.c.)).

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