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 brief, self-contained and explicit. One encounters short comments of this kind in earlier literature in linguistics. 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 challenges accepted generalizations or influential theoretical proposals;
- 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 remark we would like to publish. Some of them posed unobserved puzzles. For instance, a squib by Postal and Ross in *Linguistic Inquiry* 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 contains 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 solicit submissions twice a year. The submissions that we accept will be posted on the journal website approximately 3 months after each deadline, and all accepted submissions will remain permanently 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 published snippets 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), a Rich Text Format (RTF) file, or a PDF. The files must be anonymous, but must be accompanied with information about the authors: name, affiliation, and (postal or electronic) address. Submissions can be of any length below 500 words (including examples), with an additional half page allowed for diagrams, tables, and references. The submissions may not contain footnotes or general acknowledgments, except acknowledgements of funding sources, which must be credited in a line following the references. Authors who wish to acknowledge language consultants are allowed but not required to do so. We will not consider abstracts.

4. Editorial policy

Submissions will be reviewed by our editorial board and review board, and review will be name-blind both ways. While we guarantee a response within 3 months of the submission deadline, we will not necessarily provide more than a yes/no response to the submitter. We allow resubmission (once) of the same piece.

This statement reproduces with minor modifications the editorial statement in Issue 1 of Snippets (January 2000), edited by Carlo Cecchetto, Caterina Donati and Orin Percus.

A note on Logical Integrity

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Anvari (2018a) proposes the principle of Logical Integrity (henceforth LI) to capture the intuition that the speaker should make the strongest utterance that is compatible with the given context.

(1) **Logical Integrity**:
Let S be a sentence and S' be one of its alternatives. S is infelicitous in context C if the following two conditions hold.
   a. S does not logically entail S'.
   b. S contextually entails S' in C. (Anvari 2018a, p. 4)

While LI uniformly accounts for many infelicitous sentences that were previously captured by *Maximize Presupposition!* (Heim 1991; Percus 2006), Presupposed Ignorance (Spector and Sudo 2017), and Blind Implicatures (Magri 2009), separately, it leads to problematic predictions in certain cases.

Consider (2), where a bare numeral phrase accompanies a collective predicate. Since Anvari (2018a) assumes a standard theory of alternatives where sentential alternatives are formed by replacing certain lexical items with their lexical alternatives (Horn 1972), (2a) and (2b) are alternatives to each other. Neither sentence entails the other logically, but each entails the other in the given context. Therefore both are predicted by (1) to be infelicitous. Intuitively, however, (2a) and (2b) are both acceptable in the given context.

(2) *Context: There are eight students in total in the class. Some of them formed a group and the rest formed a group.*
   a. Three students formed a group.
   b. Five students formed a group.

Anvari (2018b) gives a more sophisticated version of LI – LI*. LI* imposes a restriction on the alternative that potentially blocks the other, a restriction that was absent in LI. It requires that at the level of competition (global or local), the alternative that blocks the other itself *not* contain any constituent that violates LI. By this additional restriction, (2a) is no longer blocked, because its competitor (2b) has a constituent — namely (2b) itself — that violates LI. The converse is also true for (2b), which is blocked by LI on account of (2a), but not blocked by LI* because the competitor (2a) itself violates LI.

It appears, then, that the challenge posed by (2) to LI is resolved by LI*. But LI* still faces challenges. Consider (3), where the two sentences stand in a similar relation to those in (2). Neither entails the other logically, but contextually the two sentences are equivalent.

(3) *Context: There are six students in total in the class.*
   a. Exactly three students came.

b. Exactly three students didn't come.

Unlike (2), the two sentences in (3) are not of the same formal complexity. According to the independently motivated constraint on alternatives in Katzir 2007, an alternative is formally at most as complex as the original sentence. This constraint makes (3a) a viable alternative to (3b), but not vice versa. As a result, (3a) is not predicted to be infelicitous by LI* because (3b) is not even an alternative to it. (3b), on the other hand, should have (3a) as an alternative, so by LI* it should be unacceptable. This prediction is not borne out. (3b) is felicitous in the given context.

In conclusion, in order for Logical Integrity to accommodate (3), it must be accompanied by a view where (3b) does not have (3a) as a formal alternative, despite the fact that the latter is derivable from the former by structural simplification. I leave open the question of what this view should be, but highlight that it cannot merely assume the sufficiency of structural simplification in alternative generation.

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A novel algorithm for minimal search

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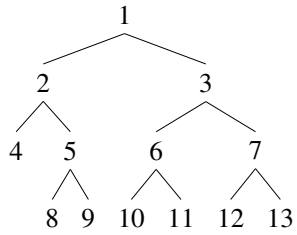
Much work in contemporary syntactic theory since Chomsky 2004 refers to an operation of "minimal search" as underlying syntactic dependency formation, without a concrete description of this procedure. Preminger (2019) proposes that any candidate algorithm should at least satisfy the properties in (1), thereby deriving well-known constraints on attracting the "closest" goal: those based on c-command (Chomsky 1995; Kitahara 1997; Rizzi 1990), and the A-over-A condition (Ross 1967; Chomsky 1964).

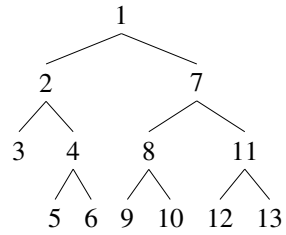
(1) a. If *y* asymmetrically c-commands *x* (Reinhart 1976), then the algorithm encounters *y* before *x*.
b. If *y* asymmetrically dominates *x*, then the algorithm encounters *y* before *x*.

Ke (2019), Atlamaz (2019), and Branan and Erlewine (forthcoming) discuss two well-studied algorithms for tree traversal in computer science, Breadth-First Search (BFS) and Depth-First Search (DFS), as candidates for minimal search. The example trees in (2) illustrate the order in which nodes are considered by the algorithms.

(2) a. Breadth-First Search



b. Depth-First Search



In brief, BFS (2a) considers all nodes at a given depth level before considering nodes at a subsequent depth level. DFS (2b) considers the left daughter at each step, searching deeper into the tree until a terminal node is reached. It then minimally backtracks to a node with daughters not yet visited. These algorithms require the non-standard assumption that linearisation occurs before probing to impose an ordering between sisters which may later be reordered by probing and subsequent operations, and that search privileges left over right sisters. (See Ke and Atlamaz for detailed descriptions of these algorithms.)

Ke (2019) proposes to adopt BFS for minimal search because DFS may violate Closest c-command (1a) by considering a c-commandee before its c-commander (e.g. node 5 before node 7 in (2b)). In contrast, BFS satisfies both Closest c-command and A-over-A.

However, Branan and Erlewine (forthcoming) argue that adopting BFS over DFS may be premature, as there are cases where DFS is preferred in derivations involving "smuggling" (Collins

2005; Belletti and Collins 2020). In smuggling derivations (3), a goal is contained within a phrase moving across other potential goals, and the containing specifier is not made inaccessible to probing. As all attested instances of smuggling involve extraction from a left specifier, it is crucial that elements within the left specifier are searched before those in its sister, thus avoiding a non-target goal.

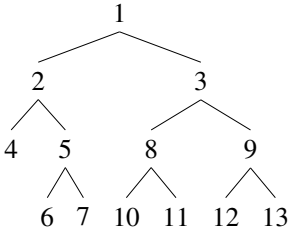
(3) [PROBE: F] [[$_{\text{container}}$ ... F ...] [... F ... t]]

I propose a novel search algorithm in (4) which (i) fulfils both of Preminger's desiderata, thus deriving Closest c-command and A-over-A (like BFS), and (ii) is compatible with derivations involving smuggling (like DFS). Here, "consider" means to check whether a node matches the probe's feature specification.

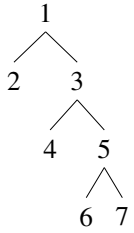
(4) Proposed algorithm
   a. Consider the root node, N.
   b. Consider N's left daughter, followed by N's right daughter, and mark N as visited.
   c. Continue the search with the left daughter as node N in step (b).
   d. Upon reaching a terminal node, minimally backtrack (in the order nodes were visited) to a visited node with an unvisited daughter node, and continue the search with that daughter as node N in step (b).

(5) Examples involving proposed algorithm

a.



b.



Before searching deeper into nodes within the left daughter, the left daughter's sister is first considered (but not yet "visited"). The algorithm thus satisfies Closest c-command, since the immediate daughters of any node are considered before nodes they asymmetrically c-command, and A-over-A, since parent nodes are always considered before their descendants.

Suppose (5a) represents a smuggling configuration where the subtree rooted at 2 is a movement-derived specifier containing the desired goal. The algorithm ensures search into the complex left specifier before its sister's contents, deriving the desired result for smuggling. For strictly right-branching trees (5b), the algorithm produces the same order as BFS and DFS.

The proposed algorithm, like DFS, searches left before right daughters regardless of their moved/non-moved status or structural status (as specifiers, adjuncts, or complements), as long as the constituent is not made inaccessible to probing. One prediction of the algorithm, thus, is that in languages which allow extraction from leftward adjuncts, extraction of a goal within a leftward adjunct is preferred over a competing goal within the non-adjunct sister. Conversely, in a

similar configuration involving a rightward adjunct, extraction of a goal in its non-adjunct sister is favoured instead. As the validity of this prediction regarding adjuncts is currently unclear, I leave this open to further empirical investigation.

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