# snippets

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## Contents

- 1. Jeremy Kuhn, David Nicolas, and Brian Buccola. *Deriving dimensions of comparison*.
- 2. Andrew Murphy. *Parasitic gaps diagnose A-movement in quotative and locative inversion.*
- 3. Qiuhao Charles Yan. *The structure of* SAY *verbs and temporal modifica-tion*.



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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 <u>snippetsjournal@gmail.com</u>. 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 nameblind 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.

# **Deriving dimensions of comparison**

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In English, using the comparative *more* with a mass noun (*more coffee*) allows comparison along various dimensions, including volume and weight, while using *more* with a plural (*more cats*) typically only allows comparison by cardinality.

Wellwood (2019) proposes capturing these facts via a constraint on the measure function  $\mu$  expressed by the comparative when it is combined with a nominal expression whose denotation *P* has a parthood relation  $\leq$ . Wellwood's constraint is that  $\mu$  must satisfy "automorphism invariance":

(1) Automorphism invariance

 $\forall h \in Aut(\langle P, \leq \rangle) \ \forall x \in P \ [\mu(x) = \mu(h(x))]$ 'Any automorphism on  $\langle P, \leq \rangle$  leaves the value of the measure constant.'

(2) *h* is an *automorphism* on  $\langle P, \leq \rangle$ ,  $h \in Aut(\langle P, \leq \rangle)$ , iff *h* is a bijective function from *P* onto itself which respects parthood:  $\forall x, y \in P \ [x \leq y \text{ iff } h(x) \leq h(y)]$ .

For plurals, Wellwood shows that any automorphism respecting parthood must map atomic individuals to atomic individuals. Since two individuals may have different weights or volumes, weight and volume are not automorphism invariant, thus capturing the restriction of  $\mu$  to cardinality for plurals.

However, the constraint in (1) is too strong: by that criterion, volume and weight would not be admissible measure functions for mass nouns either! Identify the denotation of *coffee*, reductively, with the closed interval between zero and six — [0,6] — with mereological parthood understood as set inclusion, and  $\mu$  as interval length. Define *f* as follows (cf. Figure 1):

(3) 
$$f(x) = \begin{cases} 2x+1 & \text{for } 1 \le x \le 2\\ (x-1)/2 & \text{for } 3 \le x \le 5\\ x & \text{otherwise} \end{cases}$$

Let the function h apply f to each member of a set:

(4) 
$$h(S) = \{f(x) \mid x \in S\}$$

The function *h* is an automorphism respecting the subset (i.e. parthood) relation. However, it does not preserve measure: h([1,2]) = [3,5], but  $\mu([1,2]) = 1$ , while  $\mu([3,5]) = 2$ .

An analogous function can be constructed for area or volume, as illustrated in Figure 2, where corresponding points in squares A and B are mapped to each other, and everything else is mapped



Figure 1: One-dimensional counterexample to automorphism invariance



Figure 2: Two-dimensional counterexample to automorphism invariance

to itself. If we consider a substance of uniform density, the same mapping shows that mass and weight are also not admissible measure functions.

Is there an alternative? In related work (Schwarzschild 2006), both pseudo-partitives and quantity comparisons have been shown to disallow non-monotonic measure functions like temperature (10 liters of water vs. \*10 degrees of water; more coffee  $\neq$  hotter coffee). For pseudo-partitives, Champollion (2017:92) has argued that this constraint is best captured by "stratified reference". We propose that a modification of stratified reference can additionally capture the constraint on plural quantity comparisons: the constraint in (5) requires that the *P*-parts of *x* have *the same small* measure.

#### (5) Fixed-scale stratified reference

 $\forall x \left[ P(x) \to x \in {}^*\lambda y [P(y) \land \mu(y) = \varepsilon_x] \right]$ 

'Every x satisfying P can be divided into parts that satisfy P and have the same small measure.'

For plurals, it may not always be possible to divide an entity into parts (in *P*) with the same small volume or weight (e.g. cats have different sizes and weights); hence, neither volume nor weight are admissible. On the other hand, cardinality satisfies fixed-scale stratified reference, since any plurality of cats can be divided into individual cats, whose cardinality, 1, is small. By the same reasoning, one expects that with 'object' mass nouns such as *furniture*, comparison involves cardinality, a generalization with experimental support (Barner and Snedeker 2005, but see also Rothstein 2017). In contrast, any instance of a mass noun like *coffee* can be divided into small parts by volume or weight, while an assignment of cardinality would seem meaningless.

Finally, for Wellwood, automorphism invariance must be supplemented with an additional constraint on monotonicity (Schwarzschild 2006). Here, a single constraint plays both roles. We leave for future work a full comparison of the constraints on pseudo-partitives and quantity comparisons, and whether/why they may differ.

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# Parasitic gaps diagnose A-movement in quotative and locative inversion

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It is well-known that English has two inversion constructions in which a finite lexical verb can exceptionally precede the subject: quotative inversion (1a) and locative inversion (1b).

- (1) a. 'It's cold'<sub>1</sub>, [TP  $Op_1$  [T' [T said ] [ $_{\nu P}$  Max \_\_\_\_ [T] ]]
  - b.  $[_{TP} [_{PP} Into the room] [_{T'} [_{T} came ] [_{\nu P} Julia \__{V} \__{PP} ]]]$

As (1) indicates, a frequent line of analysis in the literature treats the two inversion constructions as involving phrasal A-movement to subject position, i.e. Spec-TP (Collins 1997; Alexiadou and Anagnostopoulou 2001; Culicover and Levine 2001; Doggett 2004; Den Dikken 2006). In quotative inversion, Collins (1997) proposes that a null operator coindexed with the quote moves to Spec-TP (also see Bruening 2014:387 for A-movement of a null operator), whereas it is the PP that moves to the subject position (and then possibly further) in locative inversion (e.g. Culicover and Levine 2001). An important argument for A-movement in (locative) inversion involves the absence of weak crossover effects in inversion (2) (Culicover and Levine 2001:289-291).

- (2) a. Intro every<sub>i</sub> dog's cage peered its<sub>i</sub> owner  $\_\__{PP}$ 
  - b. \*Intro every<sub>i</sub> dog's cage, its<sub>i</sub> owner peered  $\_\__{PP}$

There is another diagnostic that can be used to distinguish A- from  $\bar{A}$ -movement, namely parasitic gaps (Engdahl 1983:11-14; also see Van Urk 2017).  $\bar{A}$ -movement of a phrase is able to license a parasitic gap (PG) (3a), whereas A-movement is not (3b).

- (3) a. Which articles<sub>1</sub> did you file  $\__1$  [without reading  $pg_1$ ]?
  - b. \*These articles<sub>1</sub> were clearly filed  $\__1$  by you [without reading  $pg_1$ ]

This diagnostic has not yet been applied to the two inversion constructions, but doing so provides further support for the A-movement analysis of each.

For quotative inversion, this is rather straightforward. Assuming that the quotative operator is nominal, it should be possible to license a corresponding PG in an adjunct. We find exactly this without inversion in (4a), where Op is presumably  $\bar{A}$ -moved to Spec-CP. In an inversion structure where Op presumably A-moves to Spec-TP, however, licensing of a PG is not possible (4b). Both inversion and non-inversion are compatible with an overt co-referent pronoun in the adjunct clause (4c), as we would expect.

- (4) a. 'We should leave,'  $Op_1$  Max thought  $\__1$  [without actually saying  $pg_1$ ]
  - b. ?\*'We should leave,'  $Op_1$  thought Max \_\_\_1 [without actually saying  $pg_1$ ]
  - c. 'We should leave,'  $Op_1$  (thought) Max (thought) \_\_1 [without actually saying it\_1]

For locative inversion, things are a little more complicated, as the moved phrase is necessarily nonnominal. Contrary to what has been claimed in much of the literature on PGs (e.g. Cinque 1990), parasitic gaps can be licensed by PP movement in English (albeit somewhat marginally). The following example from Levine et al. 2001:185 illustrates this, where the moved PP is construed as the obligatory PP argument of the verb *put* in the adjunct clause (i.e. a parasitic gap):

(5) (?)This is the kind of table [PP on which] it would be wrong to put silverware  $\__{PP}$  [without also putting a fancy centerpiece  $pg_{PP}$ ]

With this as our baseline, we can test for non-nominal PG-licensing in locative inversion. The ungrammatical example without movement is given in (6a). With  $\bar{A}$ -movement, either wh-movement (6b) or clefting (6c), the moved PP can be construed as the goal argument of *slide NP PP* with a similar degree of acceptability as (5). The author and two other consultants find a sharp contrast between these examples and the locative inversion example in (6d), where a PG interpretation for the PP is absent, similar to (6a) (Erik Zyman, Matthew Hewett p.c.). It should be mentioned, however, that I have encountered some variation in judgments with some speakers not finding the contrast quite as clear or not accepting PP parasitic gaps to begin with. Further empirical work on the range of variation with these data would be useful. For speakers with the judgments in (6), this provides a novel argument for A-movement in locative inversion.

- (6) a. \*Julia peered under the door [before sliding a mysterious sealed envelope  $pg_{PP}$ ]
  - b. (?)[PP Under whose door] did Julia peer \_\_\_PP

[before sliding a mysterious sealed envelope  $pg_{PP}$ ]?

c. (?)It was [PP under the door] that Julia peered \_\_\_\_PP

[before sliding a mysterious sealed envelope  $pg_{PP}$ ]

d. ?\*And then, [PP under the door] peered Julia \_\_\_PP

[before sliding a mysterious sealed envelope *pg*<sub>PP</sub>]

The absence of parasitic gap licensing in inversion constructions, unlike  $\bar{A}$ -movement configurations, provides further support for an analysis in which both quotative and locative inversion involve phrasal A-movement to Spec-TP. Assuming that these types of clausal adjuncts containing PGs can only be licensed by an intermediate stopover of  $\bar{A}$ -movement at Spec-vP (Nissenbaum 2000; Van Urk 2017), obligatory A-movement to subject position in quotative/locative inversion rules out this possibility.

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# The structure of SAY verbs and temporal modification

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It has been long pointed out that in a temporal adverbial clause (TAC), *when* can relate to either the local verb or a more deeply embedded one, known as ambiguity in high/low construal (Geis 1970, 1975; Larson 1987, 1990; Haegeman 2012):

- (1) I saw Puffy in Canary Wharf *when* [she said [that she would leave]].
  - a. High construal: at the time that Puffy made the statement
  - b. Low construal: at the time of Puffy's presumed departure

If the TAC is constructed in a non-bridge verb context, e.g. *exclaim*, rather than the bridge context *say*, only the high construal is available:

- (2) I saw Puffy in Canary Wharf *when* [she exclaimed [that she would leave]].
  - a. High construal: at the time that Puffy made the exclamation
  - b. \*Low construal: at the time of Puffy's presumed departure

As extraction out of a clausal complement is unacceptable in non-bridge contexts Erteschik-Shir (1973), it is attractive to explain the "disappearing" low construal via the idea that movement from the lower position is blocked by *exclaim*.

However, a new observation is that ambiguous construal reflects syntactic and semantic differences of SAY verbs. Following Grimshaw (2015), Major (2021) proposes that *say* has either the eventive use (3a) or the stative use (3b), requiring an Agent or a Source as subject respectively:

(3) I visited the suspects in the detention centre yesterday.

a.	Suspect #2 said that he is guilty.	Agent, Eventive say
b.	Suspect #2's sweating says that he is guilty.	<b>Source</b> , Stative say

Since their syntax and semantics are different, eventive *say* is compatible with subject-oriented/manner adverbs (4a) and the progressive aspect (4b); in contrast, stative *say* demonstrates the opposite pattern (5).

(4)	I visited the suspects in the detention centre yesterday.	Eventive say
	a. Suspect #2 <i>enthusiastically/loudly</i> said that he is guilty.	
	b. Suspect #2 was saying that he is guilty.	
(5)	I visited the suspects in the detention centre yesterday.	Stative say
	a. *Suspect #2's sweating <i>enthusiastically/loudly</i> says that he is guilty.	

b. \*Suspect #2's sweating *is saying* that he is guilty.

The contrast between the two uses of *say* ostensibly correlates with ambiguity in high/low construal. The diagnostics from above show in (6) that an unambiguously eventive *say* leads to the high reading rather than the low one. This leads to the conclusion that the high construal is only allowed by eventive *say*, and the low construal is available only with stative *say*.

- (6) I saw Puffy in Canary Wharf
  - a. when she *enthusiastically/loudly* said that she would leave. High ✓, Low X
  - b. when she was saying that she would leave. High  $\checkmark$ , Low  $\checkmark$

A correlation between the construal and structure of SAY verbs can also account for the disappearing low construal in (2) in a different fashion: since *exclaim* is incompatible with a Source subject (7), but compatible with the eventive diagnostics (8), it only has the eventive use, with the low construal unavailable.

- (7) \*Puffy's message *exclaimed* that she would leave at midnight. \*Source, Eventive SAY
- (8) a. Puffy *enthusiastically/loudly* exclaimed that she would leave.
  - b. Puffy was exclaiming that she would leave.

Note that Major (2021) also discusses other distributional distinctions between the two uses of SAY verbs, which can be explored further in light of the one-on-one correlation presented here.

Finally, the observation here leads to the prediction that construals of *when* will be unambiguously high/low in TACs with verbs that are unambiguously eventive or stative. Future work can explore this prediction, and explore the details of how the syntax/semantics of eventive/stative predicates leads to the different construals noted above.

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