

# snippets

Issue 23

# May 2011

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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 <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), 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.

# Jason Kandybowicz, Harold Torrence – Swarthmore College and University of Kansas How why is different: wh-in-situ in Krachi

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Several varieties of *wh*-in-situ have been documented. One type is found in multiple questions in languages like English, where one *wh*- expression moves and the other remains in-situ. A second variety is found in languages like Chinese and Japanese, where *wh*-in-situ is not limited to multiple questions. Languages that employ this strategy often have dedicated interrogative particles. There is also a third variety, where the option to move or freeze the interrogative exists outside the domain of multiple questions and no overt question particle appears in the clause. French has been reported to belong to this class, and Krachi, a Kwa language of Ghana, clearly employs this strategy. As illustrated below, in Krachi, a *wh*- expression may either appear in-situ or in a left-peripheral position. When moved, the constituent accompanies the focus marker *jt*, which is also found outside interrogative clauses.

- (1) a. ɔt∫íw ε-mò bwatéo momo?
   woman 3<sup>RD</sup>.SG-kill.PST chicken which
   'Which chicken did the woman kill?'
  - b. Bwatéo momo jí ot∫íw ε-mô?
     chicken which FOC woman 3<sup>RD</sup>.SG-kill.PST
     'Which chicken did the woman kill?'

In Krachi, there is a striking asymmetry with respect to the merge possibilities of *wh*- constituents. Unlike all other interrogatives in the language, *why* may not appear in-situ. It must surface pre-verbally in a left-peripheral focus position.

- (2) a. Nse ε-mò bwatéo?
   who 3<sup>RD</sup>.SG-kill.PST chicken
   'Who killed the chicken?'
  - b. ot∫íw ε-mò ne?
     woman 3<sup>RD</sup>.SG-kill.PST what
     What did the woman kill?'
  - c. ot∫íw ε-mo bwatéo nene?
     woman 3<sup>RD</sup>.SG-kill.PST chicken how
     'How did the woman kill the chicken?'
  - d. Nání jí ⊃t∫íw ε-mò bwatéo (\*nání)?
     why FOC woman 3<sup>RD</sup>.SG-kill.PST chicken why
     'Why did the woman kill the chicken?'

Similar facts obtain in embedded domains, as illustrated below. Space limitations preclude an enriched paradigm, but see Kandybowicz & Torrence (2011) for a

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comprehensive data set covering all wh- expressions and a variety of embedded contexts, including embedded questions, which display the same pattern as in (1)-(2).

(3)	a.	Fe	nu	fé	ət∫íw	ε-mò	ne?	
		$2^{ND}.SG$	hear	COMP	woman	3 <sup>RD</sup> .SG-kill.PST	what	
						woman killed?		
	b.	Fe	nu	fé	⊃t∫íw	ε-mò	bwatéo	<b>nene</b> ?
		$2^{ND}.SG$	hear	COMP	woman	3 <sup>RD</sup> .SG-kill.PS	г chicken	how
		'How did you hear that the woman killed the chicken?'						
	c.	*Fe	nu	fé	ət∫íw	ε-mò	bwatéo	nání?
		$2^{ND}.SG$	hear	COMP	woman	$3^{\text{RD}}$ .SG-kill.PST	chicken	why

This asymmetry suggests a fundamental difference between *why* and the other interrogatives of Krachi, and dovetails with similar asymmetries observed for why cross-linguistically. For example, Reinhart (1998) observes that *why* in English does not occur in-situ even in multiple *wh*- questions (*Who ate what* versus *\*Who ate the rice why*). Muriungi (2005) shows that in the Bantu language Kitharaka *why* and *how* are unlike other *wh*- expressions in the language in that they cannot occur in-situ. Similarly, Sabel (2003) shows that in Malagasy, an optional *wh*- movement language, *why* and *how* do not occur in-situ. (Note that *how* can occur in-situ in Krachi, cf. (3b).)

This cross-linguistic comparison raises the issue of how to analyze *why* (and *how* in Kitharaka and Malagasy). Recent analyses account for these kinds of asymmetries by positing that *why* alone is native to the left periphery. Rizzi (2001) argues that unlike other *wh*- expressions in Italian, *why* is base-generated in the left periphery and surfaces higher than the positions occupied by other moved interrogative constituents in the language. Ko (2005) shows that Korean *why* is base-merged in the left periphery and, unlike other interrogatives in the language, does not undergo covert movement to the clausal edge. For Zulu, another Bantu language, Buell (2011) demonstrates that, when *why* occurs postverbally, it occupies a (left-peripheral) position different from that of other post-verbal *wh*- expressions in the language that surface vP/TP-internally.

Krachi thus furnishes additional evidence that among *wh*- expressions, *why* is different. It does not have low or high merge variants, but is rather a dedicated peripheral operator.

### **References**

Buell, L. (2011) "Zulu Ngani 'why': Postverbal and yet in CP." Lingua 121, 805-821.

- Kandybowicz, J. and H. Torrence. (2011) "Krachi Wh-In-Situ: a question of prosody." Ms. Swarthmore College and University of Kansas.
- Ko, H. (2005) "Syntax of why-in-situ: merge into [spec, CP] in the overt syntax." *Natural Language and Linguistic Theory* 23, 867-916.
- Muriungi, P. (2005) "Wh-questions in Kitharaka." Studies in African Linguistics 34: 43-104.

Reinhart, T. (1998) "Wh-in-situ in the framework of the minimalist program." *Natural Language Semantics* 6, 29-56.

- Rizzi, L. (2001) "On the position Int(errogative) in the left periphery of the clause," in *Current Studies in Italian Syntax: Essays Offered to Lorenzo Renzi*, ed. G. Cinque and G. Salvi. Amsterdam: Elsevier North-Holland, 287-296.
- Sabel, J. (2003) "Malagasy as an optional wh-fronting language," in *Multiple Wh-fronting*, ed. C. Boeckx and K. Grohmann. Amsterdam: John Benjamins, 229-254.

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# Hideki Kishimoto – Kobe University Empty verb support as a morphological adjustment rule

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According to Chomsky (1991), *do*-insertion is a language specific rule, and it applies to save a syntactic representation which would otherwise result in an illegitimate output. In English, the empty verb *do* is inserted when tense is separated from a main verb by *not*; when it is not, *do*-insertion does not take place.

(1) John {did not/\*did} read the book.

Even though *do*-insertion by itself is a language specific rule, the same sort of operation (i.e. 'empty verb support') is implemented in many other languages. In Japanese, the empty verb *suru* 'do' is inserted when a verbal bound morpheme is separated from its host verb by an adverbial particle like *mo* 'also'. In (2), *suru* may be inserted in two different places because both passive and tense morphemes are bound elements that need to be hosted by a verb. The empty verb cannot be inserted when particles are not present, as indicated by the unacceptability of *\*home-rare si-ta* (praise-PASS do-PAST) and *\*home s-are-ta* (praise do-PASS-PAST). This suggests that Japanese *suru*-insertion, just like English *do*-insertion, is used to save a representation that would not yield a legitimate output otherwise.

(2) John-ga Mary-ni {home-rare-ta, home-rare-mo si-ta, home-mo s-are-ta}. John-NOM Mary-by praise-PASS-PAST praise-PRT do-PAST praise-PRT do-PASS-PAST 'John was (also) admired by Mary.'

One notable fact regarding Japanese *suru*-insertion is that it is not compatible with 'subject honorification', which is syntactically conditioned:

(3) Sensei-ga hon-o {yomi-mo si-ta, \*yomi-mo nasat-ta} teacher-NOM book-ACC read-PRT do-PAST read-PRT do.HON-PAS 'The teacher read the book.'

In Japanese, verbs are changed to honorific forms under subject honorification, and this process is triggered if the clause contains a subject judged worthy of deference (Harada 1976). Note that in (4), *suru* can be changed to the honorific form *nasaru*, even if the verb does not carry any significant meaning. In (4), *suru* is a light verb used to create a predicate in combination with a verbal noun. The presence of *suru* is required syntactically in (4), and the subject can trigger subject honorification. By contrast, subject honorification fails in (3), where the empty verb *suru* is inserted on the grounds that a bound morpheme is stranded from the main verb.

(4) Sensei-ga Mary-to {aiseki-si-ta, aiseki-nasat-ta}. teacher-NOM Mary-with seat-do-PAST seat-do.HON-PAST 'The teacher sat with Mary.'

There are two different views on empty verb support. One view is that an empty verb is inserted in the syntactic component (Chomsky 1991), and another is that its insertion takes place at PF for the purpose of a morphological adjustment (Bobaljik 1994, Halle and Marantz 1993); i.e. when there is no way of deriving a well-formed morphological sequence after syntax, an empty verb is inserted. Syntactically conditioned subject honorification should be possible if an empty verb is inserted in the syntax; therefore, the failure of honorific verb replacement in (3) suggests that empty verb support should be implemented at PF just for maintaining morphological well-formedness.

### **References**

- Bobaljik, J.D. (1994) "What does adjacency do?" in MIT Working Papers in Linguistics 22: The Morphology-Syntax Connection, ed. H. Harley and C. Phillips. Cambridge: MITWPL, 1-32.
- Chomsky, N. (1991) "Some notes on economy of derivation and representation," in *Principles and Parameters in Comparative Grammar*, ed. R. Freidin. Cambridge, Mass.: MIT Press, 417-453.
- Halle, M. and A. Marantz (1993). "Distributed morphology and the pieces of inflection," in *The View from Building 20*, ed. K. Hale and S. J. Keyser. Cambridge: MIT Press, 111-176.
- Harada, S.-I. (1976) "Honorifics," in *Syntax and Semantics* 5: *Japanese Generative Grammar*, ed. M. Shibatani. New York: Academic Press, 499-561.

# **Timothy Leffel** – New York University English proximal/distal non-deictic demonstratives align with hearer-new/ hearer-old information status

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In this snippet I identify a new (as far as I know) generalization about non-deictic demonstrative DPs: proximal demonstratives presuppose hearer-novelty of their referents, while distal demonstratives presuppose their referents to be hearer-old. This observation motivates an extension of Potts & Schwarz' (2010) (P&S) corpus study of speaker-hearer solidarity effects (roughly: parallel evaluation judgments) in demonstratives.

Demonstrative determiners are used non-deictically in indefinites, generics, epithets and "affectives:"

- (1) a. There was an/\*the/this obnoxious guy at the party.
  - b. Tim had a/\*the/that silly idea about demonstratives.
- (2) a. I watched a documentary about (these) exotic Caribbean fish.b. (Those) Boston Terriers are so adorable.
- (3) This/That (Socialist) Obama is raising taxes again.

Each of these constructions has been discussed individually, e.g. in Gundel *et al.* (1993); Partee (2006); Prince (1981); Ionin (2006); Bowdle & Ward (1995); Lakoff (1974), though they were not examined together until P&S. However, P&S do not isolate non-deictics, and do not analyze demonstrative-headed epithets at all.

From (4-5) we see that proximal indefinite demonstratives presuppose hearernovelty; the distal forms presuppose the referent to be hearer-old:

(4) (A was at a party; B was not.)

B: Tell me about the party.

- A: Well, there was this/ #that guy playing these/ #those annoying songs on the piano, but I chatted with this/ #that friendly bartender all night.
- (5) (A and B were at a party; B has forgotten parts of the night.)
  - B: Tell me about the party.
  - A: Well, there was that/ #this guy playing those/ #these annoying songs.
  - B: I don't remember that/ #this guy or those/ #these songs.
  - A: Well, there was this/ #that guy playing these/ #those annoying songs on the piano.
  - B: Oh, right, then we chatted with that/ #this bartender for hours!

Generics display similar behavior:

- (6) a. A: My roommate just bought a Labrador.
  - B: Oh, those/#these Labradors make great pets.
  - b. Let me tell you about these/#those exotic Caribbean fish.
- (7) (A is a customer; B is a clerk.)
  - a. A: Can you help me choose a breed of dog to buy?
  - B: Well, these/#those Labradors make great pets.
  - b. After you and I talked, I told Mary about those/#these exotic Caribbean fish.

Epithets and proper names also follow this pattern:

- (8) a. That (socialist) Obama is really something. #I can't believe you haven't heard of him.
  - b. This (socialist) Obama is really something. I can't believe you haven't heard of him.

P&S state that "[the] content of the evaluative predication involving the *this*headed proper name is assumed by the speaker to be uncontroversial." (p.5) The speaker-hearer solidarity evoked by *that* in (8a), and the fact that hearer-familiarity is a necessary condition for solidarity, suggest that *that*-epithets are more likely to presuppose "uncontroversialness" than *this*-epithets. This hypothesis could be tested in an extension of P&S's corpus study. The prediction is that if solidarity effects are measured for *this*- versus *that*-epithets, there will be a stronger correlation between *that*-epithets (e.g. *that bastard Schmidt*) and solidarity than between *this*-epithets (e.g. *this bastard Schmidt*) and solidarity. More generally, if we examine all types of nondeictic demonstratives, the same contrast between distal and proximal forms should hold. This is consistent with the results of P&S, which do not distinguish between deictic and non-deictic uses.

### **References**

- Bowdle, B. and G. Ward. (1995) "Generic demonstratives," in *Proceedings of the Twenty First* Annual Meeting of the Berkeley Linguistics Society, 32-43.
- Gundel, J., N. Hedberg and R. Zacharaski. (1993) "Cognitive status and the form of referring expressions in discourse." *Language* 69, 274-307.
- Ionin, T. (2006) "This is definitely specific: specificity and definiteness in article systems." Natural Language Semantics 14(2), 175-234.
- Lakoff, R. (1974) "Remarks on 'this' and 'that'." Chicago Linguistic Society 10, 345-356.
- Partee, B. (2006) "A note on Mandarin possessives, demonstratives, and definiteness," in Drawing the Boundaries of Meaning: Neo-Gricean Studies in Pragmatics and Semantics in Honor of Laurence R. Horn, ed. B. Birner and G. Ward. Amsterdam: John Benjamins. 263-280.
- Potts, C. and F. Schwarz. (2010) "Affective 'this'." *Linguistic Issues in Language Technology* 3(5), 1-30.
- Prince, E. (1981) "On the inferencing of indefinite 'this' NPs," in *Elements of Discourse Understanding*, ed. B.L. Webber, I. Sag and A. Joshi. Cambridge: Cambridge University Press, 231-250.

# Joan Mascaró – *CLT*, Universitat Autònoma de Barcelona The realization of features in asymmetric agreement in DPs

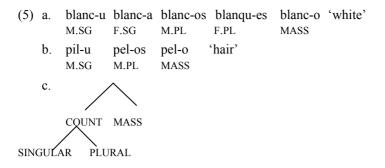
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Bonet et al. (in press) devise a system of agreement in DPs that makes two basic predictions: (A) when agreement shows a prenominal-postnominal asymmetry, the prenominal elements are the ones that don't show agreement; (B) non-agreeing elements can be realized either as bare roots or as words inflected for default values. (A) is the result of split agreement, i.e. syntactic agreement between the head and postnominal elements, and morphological agreement at PF that affects, when active, all the elements in the DP. This predicts three typological possibilities: overall agreement, no agreement, and asymmetric agreement, which is predicted to be only postnominal as observed in (1)-(4). (B) results from the interaction of constraints controlling deletion of morphemes and non-matching agreement features. (1)-(3) illustrate the realization as words inflected for default values is (4).

(1)	a.	bon- good-	profession profession		b.professional-s professional-M.		<i>NE Central Catalan</i> .PL
(2)	a.	Ū (	-o) piso appartmen	t-M.SG	b.pis-o appartment-M.S	algun-o G some-M	SpanishSG
(3)	a.	nessun( no	*-o) libro book-M.	SG	b.nessun-o nobody-M.SG'		Italian
(4)		ch-o ch-м.sG	agu-a water-F.SG	frí-a cold-F.So		nish (collo	quial, some varieties)

In fact, however, (4) is not a real case. This is because, as argued in the paper, there is actually prenominal agreement for masc. sg. caused by an anomalous gender change in a small class of nouns. We could conclude then that there are no cases of split agreement with lack of agreement expressed through words inflected for default values. But Asturian furnishes a clear case. It is also a clearer case of asymmetric agreement, because it is not restricted by other grammatical factors, as in Catalan, or to some specific lexical items, as in Italian and Spanish.

In several Asturian varieties (Arias Cabal 1999, Fernández-Ordóñez 2007) there is a count-mass distinction, count being further subclassified for number (5c). Most adjectives show the inflective paradigm exemplified in (5a). Nouns are inherently masculine or feminine; most masculine nouns (5b) show the count-mass distinction, with count also subclassified for number (feminine nouns and some masculines only show an overt singular-plural distinction; but when singulars are interpreted as mass, they trigger the same kind of agreement).



There is mass agreement with postnominal elements, but prenominal elements do not show mass agreement: they appear agreeing in gender and show the default singular number.

(6) a.	guap-u nice-M.SG	fig-u ma fig-M.SG rip	idur-u e-M.SG	'(individual) nice ripe fig'	
b.	guap-os nice-M.PL	fig-os madur-os fig-M.PL ripe-M.PL		'(set of) nice ripe figs'	
c.	guap-u nice-M.SG	fig-o fig-M.MASS	madur-o ripe-MASS	'nice ripe fig (mass)'	
d.	*guap-o nice-MASS	fig-o fig-M.MASS	madur-o ripe-MASS		

These data give real support to the claim that absence of agreement in asymmetric cases can be realized via default feature values; they are also important because they are a clear instance of asymmetric agreement not conditioned by lexical factors.

# **References**

Arias Cabal, Á. (1999) *El morfema de 'neutro de materia' en asturiano*. Santiago de Compostela: Universidade de Santiago de Compostela.

Bonet, E., M.-R. Lloret and J. Mascaró (In press) "The prenominal allomorphy syndrome," in Understanding Allomorphy. Perspectives from Optimality Theory, ed. B. Tranel. London: Equinox. [http://webs2002.uab.es/clt/membres/professors/bonet.html]

Fernández-Ordóñez, I. (2007) "El 'neutro de materia' en Asturias y Cantabria. Análisis gramatical y nuevos datos," in *Ex admiratione et amicitia. Homenaje a Ramón Santiago*, eds. I. Delgados Cobos and A. Puigvert Ocal. Madrid: Ediciones del Orto, 395-434.

# **Philippe Schlenker** – Institut Jean-Nicod and New York University Singular pronouns with split antecedents

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We argue that two independently motivated mechanisms can yield an analysis of (1a) (after Stone 1992) in which *it* is a singular pronoun with split antecedents, as is illustrated in (2b) (see also Simons 2000 and Elbourne 2005):

a. Mary will bake a strudel or John will buy a tiramisù. I will devour it.
 b. Mary will bake [a strudel]<sub>i</sub> or John will buy [a tiramisù]<sub>k</sub>. I will devour it<sub>i+k</sub>.

The first mechanism is the device of multiple indexing needed to account for plural pronouns with split antecedents, as in (2). Multiple indexing is essential to account for the ambiguity in (3), where *they* can carry any combination of indices which together denote a plural individual.

- (2) Mary will bake [a strudel]<sub>i</sub> and John will buy [a tiramisù]<sub>k</sub>. I will devour them<sub>i+k</sub>.
- (3) [Each boy]<sub>i</sub> told [each girl]<sub>k</sub> that [each teacher]<sub>m</sub> thought they<sub>i+k/i+m/k+m/i+k+m</sub> should work together.

The second mechanism is special to recent versions of dynamic semantics in which quantifiers introduce discourse referents together with some maximality conditions (van den Berg 1996a,b, Nouwen 2003, Brasoveanu 2006, 2008). These analyses can be seen as elaborations of the theories of Kamp 1981, Heim 1982 and Groenendijk & Stokhof 1991, which provided various means of giving 'wide scope' existential force to indefinites, but without maximality conditions, as illustrated in (4). The simplest versions of these 'wide scope' analyses fail for the quantifiers in (5) (where  $\geq 2$ -donkeys and < 5-donkeys are predicates that are true of objects that contain at least 2 and fewer than 5 donkeys respectively). (5a) intuitively entails that John beats *all the donkeys that he has*, but this entailment is not captured by (5a'). The same problem arises in (5b-b'), but in addition, (5b') does not even entail that John owns fewer than five donkeys.

- (4) a. John owns a donkey. He beats it.
  b. ∃x [John owns x & donkey x & John beats x]
- (5) a. John owns [at least 2 donkeys]. He beats them.
  a'. Wrong analysis: ∃X [John owns X & ≥2-donkeys(X) & John beats X]
  b. John owns [fewer than 5 donkeys]. He beats them.
  b'. Wrong analysis: ∃X [John owns X & <5-donkeys(X) & John beats X]</li>

To address this problem (solved by other means in Kamp & Reyle 1993), recent dynamic accounts take quantifiers such as *at least two* and *fewer than five* to introduce discourse referents *together with explicit maximality conditions*. For simplicity, we use a variant of the system of Nouwen 2003, one in which (A) discourse referents range over a domain of singular, plural, <u>or null</u> objects (hence a variable *can* denote the null object 0 – which is not a standard assumption); and (B) the maximality condition is presupposed rather than asserted. (5a,b) are then analyzed as in (6), where we write presuppositions inside curly brackets (and where  $\geq 2(X)$  means that X denotes an object that contains at least two singular objects).

(6) a. John owns [at least 2 donkeys]<sub>X</sub>. He beats them<sub>X</sub>.
a'. ≥2(X) {X = Max X': donkey(X') & John owns X'} & John beats X
b. John owns [fewer than 5 donkeys]<sub>X</sub>. He beats them<sub>X</sub>.
b'. <5(X) {X = Max X': donkey(X') & John owns X'} & John beats X</li>

Now if we combine our two mechanisms (multiple indices, and discourse referents with presupposed maximality conditions), we obtain an account of (1a). It is reasonable to assume that a singular pronoun comes with a presupposition that it denotes a singular object. For (7), this leads to the prediction that X+Y is presupposed to denote a singular object. In other words: either Mary bakes one strudel, or John buys one tiramisù – but not both. In this case, this sounds about right. There are other solutions to the problem of disjunctive antecedents (e.g. Brasoveanu 2008 fn. 94; Wang 2005 section 7.5); but ours is one that our two simple mechanisms taken together yield almost 'for free'.

(7) a. Mary will bake a strudel or John will buy a tiramisù. I will devour it.

b.  $[ \ge 1(X) \{ X = Max X': strudel(X') \& Mary will-bake X' \}$ 

or  $\geq 1(Y) \{Y = Max Y': tiramisu(Y') \& John will-buy Y'\} \}$ 

& I will-devour  $it_{X+Y}$ 

(There is some leeway in the implementation. What is essential is that the disjunctive sentence in (7) should give rise to an information state that collects assignment functions that assign to X the maximal group of strudels that Mary bakes and to Y the maximal group of tiramisù that John bakes; our assumption that the maximality conditions are presupposed is just one way to achieve this result.)

# **References**

- Brasoveanu, A. (2006) *Structured Nominal and Modal Reference*. PhD dissertation, Rutgers, The State University of New Jersey.
- Brasoveanu, A. (2008) "Donkey pluralities: plural information states versus non-atomic individuals." *Linguistics and Philosophy* 31: 129-209.

Elbourne, P. (2005) Situations and Individuals. Cambridge, Mass.: MIT Press.

- Groenendijk, J. and Stokhof, M. (1991) "Dynamic predicate logic." *Linguistics and Philosophy*, 14(1):39-100
- Heim, I. (1982) *The Semantics of Definite and Indefinite Noun Phrases.* PhD dissertation, University of Massachusetts, Amherst.

Kamp, H. (1981) "A theory of truth and semantic representation," in Formal Methods in the

Snippets - Issue 23 – May 2011 http://www.ledonline.it/snippets/ *Study of Language*, ed. J.A.G. Groenendijk, T.M.V. Janssen, and M.J.B. Stokhof. Mathematical Centre, Amsterdam.

Kamp, H. and Reyle, U. (1993) From Discourse to Logic. Dordrecht: Reidel.

Nouwen, R. (2003) *Plural Pronominal Anaphora in Context*. Number 84 in Netherlands Graduate School of Linguistics Dissertations, LOT, Utrecht.

Simons, M. (2000) Issues in the Semantics and Pragmatics of Disjunction. New York: Garland.

Stone, M. (1992) "Or and anaphora," in Proceedings of SALT 2. 367-385.

- van den Berg, M. (1996a) "Dynamic generalized quantifiers," in *Quantifiers, Logic, and Language*, ed; van der Does, J. and van Eijck, J. Stanford: CSLI.
- van den Berg, M. (1996b) Some Aspects of the Internal Structure of Discourse. ILLC Dissertation Series 1996-3.
- Wang, L. (2005) *Dynamics of Plurality in Quantification and Anaphora*. PhD dissertation, University of Texas, Austin.

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# **Daniel Siddiqi** – Carleton University **The English intensifier ass**

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English has recently developed a new intensifier, *ass*, which means something very close to *very*, is marked as vulgar and colloquial, and appears in cases such as in (1):

- (1) a. That is a big-ass chair
  - b. It is a cold-ass night
  - c. It is freezing-ass cold

However, to my knowledge, no one has ever listed or discussed some of the interesting features of *ass*. The first difference between *ass* and the other intensifiers in English is that *ass* is a bound morpheme, and apparently suffixal. However, *ass* also doesn't act like the other suffixes that can attach to adjectives (*-ly*, *-er*, *-est*) nor does it have the same distribution of the other intensifiers. *Ass* seems to have a requirement that it appear right of the adjective that it is modifying AND left of the head the adjective modifies (i.e. it cannot be phrase final, (2)):

- (2) a. The night is very cold. \*The night is cold-ass.
  - b. I am very happy.
- \*I am happy-ass.
- c. I am hottest in leather.
- \*I am hot-ass in leather. \*I run guick-ass.
- d. I run quickly.

The only time that *ass* can appear phrase-finally is when attached to *bad* (e.g. *That receiver is badass*), but, in such cases it is always stressed (otherwise it is not). I expect *badass* is the source of the affix rather than an exception.

In this regard, the word *ass* has similar distribution to another intensifier in English, expletive insertion, which, as an infixation, also requires that there be phonological material on either side of it (McCarthy 1982). Expletive insertion famously behaves like a true infix appearing in the middle of even mono-morphemic words as long as there is a prosodic foot on either side of it (*in-freakin`-side, halle-freakin`-lujah*). It happens that this infixation, because of this constraint, occasionally appears between an adjective and its head, giving it an identical distribution to *ass* in (1) and (2), see (3). However, *ass* behaves differently from expletive insertion in that it cannot appear in the middle of a word (*\*in-ass-side, \*halle-ass-lujah*).

- (3) a. That is a big-freakin'-chair
  - b. It is a cold-freakin`-night
  - c. It is freezing-freakin`-cold
  - d. \*The night is cold-freakin`.
  - e. \* I am happy-freakin`.
  - f. \*I am hot-freakin` in leather.
  - g. \*I run fast-freakin`.

Ass has a restriction that it appear with phonology on either side, suggesting that it is an infix. However, unlike other infixes, ass's restrictions on its distribution are that it requires syntactic heads (in the same phrase) to be on either side of it. This, of course, seems to be a standard case of tmesis, but tmesis, on a morpho-syntactic level, is typically constrained to compound nouns or morphologically complex words (suggesting morpho-phonemic restriction). This suggests that ass infixation does not seem to be typical tmesis either. This makes the English intensifier ass a curious SYNTACTIC infix, perhaps providing more evidence for a sophisticated morphologysyntax interface.

### **References**

McCarthy, J. (1982). "Prosodic structure and expletive insertion." Language 58, 574-590.

# **Christos Vlachos** – University of Patras *Sluicing and relatives*

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Sluicing, originally discussed by Ross (1969), is exemplified by elliptical representations of the form in (1) that give rise to full-fledged interpretations of the kind in (2). We see in (1) that the interpretation of *who* (the SLUICE) is anaphorically dependent on that of the preceding clause *someone left*. We can speak of this clause as containing an "antecedent" (here: *someone*) with which the SLUICE is associated. (See Chung, Ladusaw & McCloskey 1995; Merchant 2001 for more discussion).

- (1) Someone left and I wonder who.
- (2) "Someone left and I wonder who left."

AnderBois (2010) proposes the generalization in (3), on the basis of evidence such as the example in (4). Specifically, the observation is that the SLUICE *which* fails to be associated with the inner antecedent *a word* that surfaces within the (appositive) relative clause *who misspelled a word last night*.

- (3) Sluicing is ungrammatical if the prospective inner antecedent is in an appositive.
- (4) \*? Amy, who misspelled a word last night, forgot which.

In this snippet, I point out that AnderBois' generalization (3): a) extends to relative clauses in general; and b) is too strong.

Note first that (5) is also ungrammatical, and to the same degree that (4) is. Here, the antecedent *one of the most famous songs of the decade* surfacing in the (restrictive) relative clause *who wrote one of the most famous songs of the decade* may not serve as the associate of the SLUICE. This might suggest the reformulation of (3) that I give in (6).

- (5) \*? The composer who wrote one of the most famous songs of the decade didn't want to reveal which.
- (6) Sluicing is ungrammatical if the prospective inner antecedent is in a relative clause.

However, as it stands, (6) predicts that (7) and (8), which are comparable to (4) and (5) respectively, are ungrammatical, contrary to judgments.

- (7) (?) Amy, who misspelled a word last night and (she) forgot which, feels very embarrassed.
- (8) (?)The composer who wrote one of the most famous songs of the decade, but (he) didn't want to reveal which, is one of my closest friends.

7.

In (7) and (8), the clause that hosts the inner antecedent (*a word*, *one of the most famous songs of the decade*) is coordinated with the clause hosting the SLUICE (*which*). Taking into account all of these data, I suggest recasting (6) as in (9). (An alternative formulation -- with different implications -- might be as in (10).)

- (9) Sluicing is ungrammatical if the prospective inner antecedent is in a relative clause, unless the clause hosting the SLUICE is coordinated with the clause that hosts the inner antecedent.
- (10) Sluicing is ungrammatical if the prospective inner antecedent is in a relative clause, unless the SLUICE projects in the same level of embedding with and linearly follows the clause that hosts the inner antecedent.

### **References**

- AnderBois, S. (2010) "Sluicing as anaphora to issues." Paper presented at SALT 20, UBC / SFU (to appear in *Proceedings of SALT 20*).
- Chung, S., W. Ladusaw and J. McCloskey. (1995) "Sluicing and Logical Form." *Natural Language Semantics* 3, 239–282.
- Merchant, J. (2001) *The Syntax of Silence: Sluicing, Islands and the Theory of Ellipsis.* Oxford: Oxford University Press.
- Ross, J. (1969) "Guess who?" in *Proceedings of CLS*, ed. R. Binnick, A. Davison, G. Green and J. Morgan, 252–286.