

snippets

Issue 1

January 2000

Contents

1. David Gil. *Riau Indonesian: a VO language with internally-headed relative clauses.*
2. Ray Jackendoff. *Curiouser and curiouser.*
3. Pauline Jacobson. *Extraction out of tough.*
4. Winfried Lechner. *Bivalent coordination in German.*
5. Jeffrey Lidz. *A three-legged chicken.*
6. Ian Roberts. *Auxiliary reduction and negation reduction – a rough sketch.*
7. Uli Sauerland. *"How many"-questions and pair-list situations.*



Edizioni Universitarie di Lettere Economia Diritto

ISSN 1590-1807

Published in *Led on Line* - Electronic archive by
LED - Edizioni Universitarie di Lettere Economia Diritto - Milano - Italy
<http://www.lededizioni.it/ledonline.html>

January 2000

Copyright

The works included in *Snippets* are the property of their authors and are used by permission. Readers must apply the same principles of fair use to the works in this electronic archive that they would to a printed archive. These works may be read online, downloaded and printed for personal use, copied and freely distributed, or the URL of *Snippets* included in another electronic document. Any reference to material included in *Snippets* must cite the author and the source. The texts may not be published commercially (in print or electronic form), edited, or otherwise altered without the permission of the author.

Editors

Carlo Cecchetto (University of Siena)
Caterina Donati (University of Urbino)
Orin Percus (NSF/ University of Milan)

Review Board

Sigrid Beck (University of Connecticut)
Rajesh Bhatt (University of Texas)
Valentina Bianchi (Scuola Normale Superiore Pisa)
Daniel Büiring (UC Santa Cruz)
Danny Fox (Harvard Society of Fellows)
Roumyana Izvorski (USC)
Hisatsugu Kitahara (Keio University)
Josep Quer (Universidad Autónoma de Barcelona)
Norvin Richards (MIT)
Anna Roussou (University of Cyprus)
Uli Sauerland (Universität Tübingen)
William Snyder (University of Connecticut)
Michal Starke (University of Geneva)

E-mail: snippets@unimi.it

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.

The best examples of what we have in mind are the earliest *Linguistic Inquiry* squibs. Some of these 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.

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:

- a. point out an empirical phenomenon that goes against accepted generalizations or that shows that some aspect of a theory is problematic;
- b. point out unnoticed minimal pairs that fall outside the scope of any existing theory;
- c. point out an empirical phenomenon that confirms the predictions of a theory in an area where the theory has not been tested;
- d. explicitly describe technical inconsistencies in a theory or in a set of frequently adopted assumptions;
- e. explicitly describe unnoticed assumptions that underlie a theory or assumptions that a theory needs to be supplemented with in order to make desired predictions;
- f. propose an idea for a pilot experiment in language acquisition or language processing that directly bears on theoretical issues;
- g. call attention to little-known or forgotten literature in which issues of immediate relevance are discussed.

3. Submission details.

We will solicit submissions issue by issue. A new submission deadline will be announced for each issue, and the submissions that we receive we will consider only for that issue. The submissions that we accept will be printed in the upcoming issue; none will be scheduled for a later issue.

It is important to us that readers will be able to copy the newsletter and freely distribute its content. 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.

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.**

We will accept electronic submissions at the address

snippets@unimi.it

and paper submissions at the address

Caterina Donati
Facoltà di Lingue
Università di Urbino
Piazza Rinascimento 7
61029 Urbino
ITALY

We strongly encourage electronic submissions. 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.

4. Editorial policy.

Submissions will be reviewed by our editorial board, and review will be name-blind both ways. While we guarantee a response within 3 months of submission, **we will only provide a yes/no response to the submitter**. We will not request revisions (barring exceptional cases). Space constraints mean that we may reject a large proportion of submissions, but with this in mind we allow resubmission (once) of the same piece.

5. Distribution.

Our initial plan is to publish 2 or 3 times a year, with a maximum of 10 pages for each edition. Our goal in publishing the newsletter is to provide a service to the linguistics community, and *Snippets* will therefore be **free of charge**. There will be a limited number of copies, which we will send to institutions on request. Individuals who wish to take advantage of the newsletter should therefore ask their institutions to request a copy, and make their own copy of the institution's version. Individuals who are not affiliated with an institution and do not have access to the web version of the newsletter can request copies by writing to us at the postal address above. Further questions should be addressed to snippets@unimi.it.

1.

David Gil - *Department of Linguistics, Max Planck Institute
for Evolutionary Anthropology, Leipzig*

Riau Indonesian:

A VO Language with Internally-Headed Relative Clauses

Downing (1978:399) and Cole (1987) have proposed that internally-headed relative clauses occur only in languages in which the basic word order is OV, or in which the other relative clauses are right-headed. This paper provides a counterexample to this claim, from the Riau dialect of Indonesian, a colloquial variety of Indonesian spoken in East Central Sumatra, described in Gil (1994, 1999, to appear b,c).

In Riau Indonesian, word order is quite free, but in general, VO order occurs with greater frequency than OV. Moreover, adpositions invariably occur before their NPs, further supporting the characterization of the language as basically VO. Relative clauses in Riau Indonesian may be left headed (the most common option), right headed, or internally headed, as illustrated in examples (1) - (5) below.

- (1) **Saya beli ikan tadi?**
1:sg buy fish pst:prox
[Interlocutor says he ate all the fish; speaker asks which fish; interlocutor says the red and white ones; speaker, verifying reference, asks]
"The fish I bought before?"
- (2) **Kemarin ada kawan sini mana?**
previous.day exist friend here where
[Hotel receptionist, at hotel, where, last time, I had come with friend]
"Where's your friend who you were with last time?"
- (3) **Damsir beli celana sama si Man**
Damsir buy trousers accompany pers:non.voc
Man sudah bulu-bulu
fam-Mansudir pfct distr-feather
[About a pair of trousers]
"The trousers that Damsir bought with Mansudir are already frayed"
- (4) **Saya ada beli kaca mata dulu, mana dia?**
1:sg exist buy glass eye pst:dist where 3
[Looking for glasses]
"The eye-glasses I bought before, where are they?"
-

- (5) **Ada** perempuan **tadi**, ininya nampak
 exist woman pst:prox dem:prox-assoc ag-see
 [Commenting on a women with a low front to her blouse, speaker
 points to his own chest and says]
 "The woman before, her [this] was showing"

(The above examples are all taken from a naturalistic corpus of spontaneous speech specimens; the context in which each example was uttered is indicated in square brackets.) In the above examples, the entire internally-headed relative-clause construction is indicated in bold-face, and the head of the construction is underlined. In each of the above examples, the head of the relative clause occurs internally to the construction, flanked by the attributive material. There is no relative pronoun or any other kind of relative marking.

Thus, the above examples provide a counterexample to the claim that internally-headed relative clauses occur only in languages with OV basic word order, or otherwise right-headed relative clauses. Similar constructions are attested in other colloquial varieties of Malay and Indonesian, including Kuala Lumpur Malay, Jakarta Indonesian and Ternate Malay, though not in Standard Malay and Indonesian. In addition, internally-headed relative clauses occur in another geographically proximate language variety with VO word order and left-headed relative clauses, namely, Colloquial Singapore English, also known as Singlish — see Gil (to appear a) for examples and discussion.

References

- Cole, P. (1987) "The Structure of Internally Headed Relative Clauses", *Natural Language and Linguistic Theory* 5:277-302.
- Downing, B.T. (1978) "Some Universals of Relative Clause Structure", in J.H. Greenberg ed., *Universals of Human Language, Vol. 4, Syntax*, Stanford University Press, Stanford, 375-418.
- Gil, D. (1994) "The Structure of Riau Indonesian", *Nordic Journal of Linguistics* 17:179-200.
- Gil, D. (1999) "Riau Indonesian as a Pivotless Language", in E.V. Raxilina and Y.G. Testelec eds., *Tipologija i Teorija Jazyka, Ot Opisanija k Objasneniju, K 60-Letiju Aleksandra Evgen'evicha Kibrika (Typology and Linguistic Theory, From Description to Explanation, For the 60th Birthday of Aleksandr E. Kibrik)*, Jazyki Russkoj Kul'tury, Moscow, 187-211.
- Gil, D. (to appear a) "English Goes Asian; Number and (In)definiteness in the Singlish Noun-Phrase", in F. Plank ed., *Noun-Phrases in European Languages*, Empirical Approaches to Language Typology, Mouton, Berlin and New York.
- Gil, D. (to appear b) "Reflexive Anaphor or Conjunctive Operator? Riau Indonesian *sendiri*", in P. Cole, G. Hermon and J. Huang eds., *Long Distance Reflexives, Syntax and Semantics*, Academic Press, New York.
- Gil, D. (to appear c) "The Prefixes *di-* and *N-* in Malay / Indonesian Dialects", in F. Wouk and M. Ross eds., *Papers From the 8-ICAL Workshop on Focus*, Pacific Linguistics, Canberra.

2.

Ray Jackendoff - Brandeis University *Curiouser and curiouser*

As is well known, the comparative adjective/adverb in English exhibits a suppletion between morphological and phrasal forms: *fatter* vs. *more beautiful*. The choice depends on prosody: the morphological form is chosen when the adjective/adverb is monosyllabic or bisyllabic ending in -y (e.g. *luckier*); the phrasal form is chosen otherwise. A few cases are ambidextrous, e.g. *oftener* or *more often*.

This suppletion poses an interesting problem for a rarely discussed construction that might be called the "reduplicated comparative," used to express a change over time. With the morphological comparative we get *fatter and fatter*; with the phrasal comparative we get *more and more beautiful*, not **more beautiful and more beautiful* or **more beautiful and beautiful*.

The standard assumption, I believe, is that the phrasal comparative more closely reflects underlying syntactic form: the comparative morpheme takes its own specifiers (*much/far more beautiful*, **much/far beautiful*) and complements (*more beautiful than Madonna*, **beautiful than Madonna*), and it alternates freely with other degree morphemes such as *less*, *so*, and *too* (Jackendoff 1977, chapter 6).

Under this assumption, the reduplicated phrasal comparative arises by reduplicating the morpheme *more*. Thus *more and more beautiful* has the structure [_{AP} [_{Spec} more and more] [_A beautiful]].

Turning to the morphological comparative, it is usually assumed that the *-er* affix (and the suppletions *better* and *worse*) are the result either of adjoining the comparative morpheme to the adjective or vice versa. But then, in the case of the reduplicated comparative, where does the extra copy of the adjective come from? Under the assumption that the affix adjoins to the adjective, there is no source for the second adjective nor a way for the conjunction between the two comparative morphemes to become a conjunction between the adjectives. If, alternatively, the adjective adjoins to the comparative morpheme, the conjunction can remain in situ, but the adjective still needs to be reduplicated in the course of movement. This would appear to be a case of across-the-board insertion, the converse of the well-known across-the-board extraction, but an operation heretofore unknown (to me at least) in generative grammar.

References

Jackendoff, R. (1977) *X-Bar Syntax*, MIT Press, Cambridge MA.

3.

Pauline Jacobson - Brown University *Extraction out of tough*

It is well known that the gap in a *tough* construction shares a number of properties with a *wh*-movement gap. As shown in (1) (and as first observed in Postal and Ross 1971) it can be separated in an unbounded fashion from its licenser:

- (1) Lima beans are hard (for me) to imagine anyone liking ___/wanting to eat ___/
thinking they can get Mary to eat ___.

And -- while a *tough* gap is well-known to be a bit fussier than a *wh*-movement gap -- both can be in any argument position (object, prepositional object, etc.). Thus a common view is that a *tough* adjective takes a complement with a gap of the same sort that is found in *wh*-movement; the particular implementation of this idea depends, of course, on the particular theory (see, e.g., Chomsky 1977; Fodor 1983; Jacobson 1984; Browning 1987). But there is a well-known mystery: while neither a *tough* nor a *wh* gap can be within an island, the latter of course creates an island domain while the *tough* construction does not:

- (2) Which violin_i is that sonata_j easy to play ____j on ____i? (Chomsky 1977)

However, the plot thickens, and the purpose of this snippet is to draw attention to a fact noted in Jacobson 1991 which at least partially removes the above anomaly. Notice that standard cases in the literature in which *wh*-movement is good out of a *tough* domain always involve cases in which the *tough* gap is within the highest VP under the *tough* adjective. Strikingly, though, when the gap is embedded further down we find a robust island effect -- (3) is at least as bad as normal extraction out of, say, a relative clause.

- (3) *Which violin is that sonata hard to imagine (anyone) playing ___ on ___ /
wanting to play ___ on ___?

Note that this contrasts vividly with a similar sentence in which there is no *tough* gap:

- (4) Which violin is it hard to imagine (anyone) playing that sonata on ___ / wanting
to play that sonata on ___?

While a full explanation is of course beyond the present scope, a conjecture is in order. Perhaps there are two different kinds of "gaps" here (put differently, two

different mechanisms at work which sanction missing material in the *tough* construction), and a *tough* adjective allows for a complement with either kind of gap. Only the "unbounded" type of gap creates an island. Note that the conjecture that there are two different gap-sanctioning mechanisms involved in the *tough* construction receives some support from the fact that (for at least some speakers) the *too/enough* construction only allows "bounded" gaps:

- (5) a. That violin is too cheap to play that sonata on ____
b. ?*That violin is too cheap to imagine anyone playing that sonata on ____

References

- Browning, M. (1987) *Null Operator Constructions*, Ph.D. dissertation, MIT.
Chomsky, N. (1977) "On Wh-movement", in P. Culicover, T. Wasow, and A. Akmajian eds., *Formal Syntax*, Academic Press, New York.
Fodor, J.D. (1983) "Phrase Structure Parsing and the Island Constraints", *Linguistics and Philosophy* 6, 163-223.
Jacobson, P. (1984) "Connectivity in Phrase Structure Grammar", *Natural Language and Linguistic Theory* 1, 535-581.
Jacobson, P. (1992) "The Lexical Entailment Theory of Control and the *Tough* Construction", in I. Sag and A. Szabolcsi eds., *Lexical Matters*, CSLI publications, Stanford.
Postal, P. and J. R. Ross (1971) "Tough Movement Si, Tough Deletion No!", *Linguistic Inquiry* 2, 544-546.

4.

Winfried Lechner - Seminar für Sprachwissenschaft, Universität Tübingen *Bivalent Coordination in German*

In this squib, I present two paradoxa from bivalent coordination in German. I have to delegate possible solutions to further research.

Paradox I

In German, coordinate structures joined by the bivalent coordinator *entweder-oder* 'either-or' permit CP-coordination:

- (1) [_{CP} Entweder hat Hans gesungen] oder [_{CP} Peter hat getanzt]
either has H. sung or P. has danced
“Either John sang or Peter danced”

Both conjuncts in (1) are verb second clauses. It follows that *entweder* is located in SpecCP of the first conjunct. At the same time, *entweder* is part of the complex disjunction operator, and should therefore be parsed in a position that c-commands the CP (e.g. as head of a BooleanP, which in turn takes the CP as a complement; Munn 1993). These two conflicting requirements lead to a first phrase structure paradox.

Constructions involving *weder-noch* generalize the observation made above to both conjuncts. In verb second clauses joined by *weder-noch* / 'neither-nor', *weder* as well as *noch* have to remain inside their respective clauses. (2) contrasts with (3), where *noch* is located external to the second CP:

- (2) [_{CP} Weder hat Peter das Theorem verstanden] [_{CP} noch konnte Maria dem
neither has P. the theorem understood nor could M. the
Beweis folgen]
proof follow
“Neither has Peter understood the theorem, nor could Mary follow the proof”

- (3) * [_{CP} Weder hat Peter das Theorem verstanden] noch [_{CP} **Maria konnte** dem
neither has P. the theoreme understood nor M. could the
Beweis folgen]
proof follow

Paradox II

The second paradox arises from the interpretive properties of the *weder-noch* construction, and consists in the observation that there is contradictory evidence as to the scope domain of the negative operator which is encoded in *weder*. Note to begin with that *weder* can be ‘immersed’ in the first conjunct, such that it comes to lie to the right of the subject:

- (4) [_{CP} Peter hat **weder** das Theorem verstanden] [_{CP} noch konnte Maria dem
P. has neither the theorem understood nor could M. the
Beweis folgen]
proof follow
“Neither has Peter understood the theorem, nor could Mary follow the proof”

Now, low *weder* does not license NPIs to its left (see (6)), indicating that the scope of negation is limited to the surface position of *weder*:

- (5) [_{CP} **Weder** hat **auch nur einer** das Theorem verstanden]
neither has even one (person) the theorem understood
[_{CP} noch konnte jemand dem Beweis folgen]
nor could somebody the proof follow
“Neither has even a single person understood the theorem,
nor could somebody follow the proof”

- (6) * [_{CP} **Auch nur einer** hat **weder** das Theorem verstanden]
even one (person) has neither the theorem understood
[_{CP} noch konnte jemand dem Beweis folgen]
nor could somebody the proof follow

At the same time, however, the negative portion of *neither* has to take scope over the whole disjunction, in order to ensure that *weder A noch B* is assigned the correct interpretation given in (7a):

- (7) a. $\neg[A \vee B]$
b. $[\neg A] \vee [\neg B]$

The alternative representations according to which negation takes narrow scope w.r.t. both disjuncts, as in (7b), yields the wrong truth conditions (assuming that the meaning of *noch* is ‘not or’).

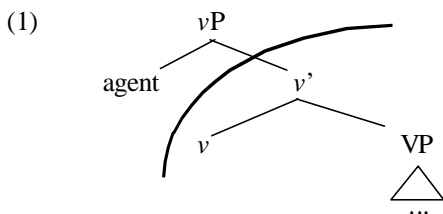
References

Munn, A.B. (1993) Topics in the Syntax and Semantics of Coordinate Structures, University of Maryland.

5.

Jeffrey Lidz - University of Pennsylvania
A Three-Legged Chicken

Marantz 1997, building on observations of Marantz 1984, claims that the domain for “special meanings” is v' .



The idea is that the head that projects an agent provides a boundary across which idiomatic elements cannot be created. In other words, the list of semantically idiosyncratic words or phrases (what we normally think of as the “lexicon”) cannot contain any piece of phrase structure that includes/dominates an agent position. One of the generalizations that, according to Marantz, falls out from this hypothesis is the nonexistence of idioms containing fixed agentive pieces. Any idiom which does contain a subject must be such that the subject is not an agent. “The shit hit the fan” is not a counterexample since we don’t interpret this expression agentively.

In Kannada, there is an idiomatic expression which fits this descriptive generalization but is not explained by the “domain of special meanings” hypothesis.

- (2) tannu hid-id-a kooL-ige muuru keelu
 self-NOM catch-PST-REL chicken-DAT three legs
 ‘The chicken that one caught has three legs’

The idiom in (2) means that the person being referred to (i.e., the person who caught the three-legged chicken) is persisting to hold an unreasonable position despite evidence to the contrary (Amritavalli 1991). This idiom has the form of a possession sentence in which the possessor subject is marked with dative case and the possessed element is not morphologically casemarked. The subject itself is a complex NP containing a relative clause. Although the subject itself is not an agent, the subject contains a relative clause which includes an agent position. The agent position inside the relative clause can be filled by any NP, as in (3), although (2) is the most polite way of using the expression.

- (3) alec hid-id-a kooL-ige muuru keelu
 Alec catch-PST-REL chicken-DAT three legs
 ‘The chicken that Alec caught has three legs’

This idiom fits Marantz’s descriptive generalization because it does not have a fixed agent. However, the idiom requires building syntactic structure that includes the agentive *vP*. This is because the agent position is contained within a relative clause (which, in turn, is inside the subject of the possession relation). The structure of (2) is as in:

- (4) [_{IP} [_{NP} [_{CP} [_{IP} self-NOM *t_i* catch]-REL][_{NP} chicken_i-DAT]] [_{NP} three legs]]

The complex NP subject contains a relative clause CP, which includes an agentive verb with an agent. Because the relative clause is an obligatory part of this idiom, the idiom requires building a structure larger than (1), namely the relative CP inside the subject NP. Therefore, maintaining Marantz’s explanation of the “no-fixed-agent idioms” generalization would require either complicating the inclusion relation over which the domain of special meanings is defined or else allowing nonmonotonic structure composition, so that the agent can be merged into its nonroot position inside the idiom.

References

- Amritavalli, R. (1991) “Lexical Anaphora in Kannada,” ms., CIEFL, Hyderabad.
 Marantz, A. (1984) *On the Nature of Grammatical Relations*, MIT Press, Cambridge MA.
 Marantz, A. (1997) “No Escape from Syntax: Don’t Try Morphological Analysis in the Privacy of Your Own Lexicon,” in A. Dimitriadis et al. eds, *Penn Working Papers in Linguistics* 4.2.

6.

Ian Roberts - University of Stuttgart *Auxiliary reduction and negation reduction -- a rough sketch*

Reduced negation is incompatible with auxiliary reduction:

- (1) a. John hasn't finished.
- b. John's finished.
- c. *John's n't finished.

(It is unlikely that phonology can explain this, since the subject of (1c) would be pronounced *jonz nt*, which doesn't violate any English syllable-structure constraints).

Now, there are reasons to think that auxiliary reduction is a process of head-movement. First, no material can intervene between a reduced auxiliary and the subject. In IP, the auxiliary must always attach to the subject (the auxiliary can attach to a Wh-constituent ("Who's John seen today?") and to a higher verb where that is deleted ("Who do you think's the best?"), but not to any other fronted material (*"Never in his life's he been so insulted!"). This is not due to phonological conditions either, as the following contrasts show:

- (2) a. I wonder if John ever is rational.
- b. *I wonder if John ever's rational.
- c. I wonder if living forever's rational.
- (3) a. We probably have said enough.
- b. *?We probably've /..iv/ said enough.
- c. We've /wiv/ probably said enough.
- (4) a. He really will finish tomorrow.
- b. ?*He really'll finish tomorrow.
- c. He'll really finish tomorrow.

These facts can be accounted for by saying that reduced auxiliaries occupy the head whose specifier position is filled by the subject. Therefore, as with finite verbs in French, nothing can intervene between them and the subject (see Pollock 1989). This account implies that unreduced auxiliaries occupy a lower position (see Kayne 1989).

Second, possessive *have* reduces exactly for those speakers who allow it to raise to I and C (essentially speakers of conservative and Northern varieties of British English):

- (5) a. Have you a car?
- b. I haven't a car.
- c. I've a car.

If auxiliary reduction is fed by movement to "I", then this is straightforwardly accounted for.

A final point that we need to observe is the well-known fact that neg-reduction cannot take place in infinitives:

- (6) a. John promised to not talk.
- b. *John promised ton't talk.

A condition on neg-reduction seems to be that it must attach to a finite T.

We can now account for the impossibility of combined negation reduction and auxiliary reduction in terms of the head-movement constraint and the crucial (if rather suspect) idea that neg-reduction is a PF movement rule. If negation-reduction involves adjunction of Neg to the aux in T, then the HMC prevents reduction when the aux has moved on.

The problem with this approach is the following: if the aux raises from a lower position, why can it skip Neg? If it attaches to Neg (on the left -- cf. Kayne 1994), why can't the combination keep moving? And note that it can move to C:

- (7) Why didn't I think of this before?

Besides stipulating that the negative forms of auxiliaries can't reduce, which is just restating the fact, I can't see any way to prevent the negated aux from raising.

References

- Kayne, R. (1989) "Notes on English Agreement," CIEFL Bulletin, Hyderabad.
Kayne, R. (1994) *The Antisymmetry of Syntax*, MIT Press, Cambridge MA.
Pollock, J.-Y. (1989) "Verb Movement, Universal Grammar and the Structure of IP," *Linguistic Inquiry* 20: 365-424.

7.

Uli Sauerland - Seminar für Sprachwissenschaft, Universität Tübingen **"How many"-Questions and Pair-List Situations**

The contrast this squib discusses was observed by Calixto Aguero-Bautista (p.c.). It concerns the felicity of the questions in (1) in the following context, which I will call a Pair-List Situation: Last night, three students (John, Bill and Mary) read *War and Peace*, five other students (Tom, Ian, Sue, Ann, and Lea) read *Buddenbrooks*, and two other students (Tina and Lina) read *Ulysses*. No other reading took place last night. Since there's no student that read every book, the question (1a) is infelicitous in this situation. Surprisingly, though, (1b) is a felicitous question in the same situation. Furthermore, the answer in (1b), which looks like a pair-list answer, is possible.

- (1) a. #Which students read every book last night?
b. How many students read every book last night?
Three *War and Peace*, five *Buddenbrooks*, and two *Ulysses*.

I believe the primary difference to be understood about (1) is that of the felicity of the questions. The felicity can be explained by looking at the presuppositions of each of the questions.

For "which"-questions with quantifiers like (1a), I adopt Chierchia's (1993) analysis but use Engdahl's (1980) syntactic theory of reconstruction (see also Aguero-Bautista 1999). Chierchia derives the following felicity condition for "which"-questions with universals in pair-list situations: the universal must bind an implicit variable in the trace position of the "which"-phrase. As the semantic representation (2a) illustrates, this binding relation is ruled out in (1a) by weak crossover. Therefore, only the analysis (2b) without an implicit variable is possible for (1a). But this presupposes that there is a single student who read every book.

- (2) a. *Which_f every book_j f(student of j) read t_j
b. Which_f every book_j f(student) read t_j

I show now that the "how many"-question (1b), however, is felicitous when the universal quantifier takes scope over the trace of the "how many"-phrase, without binding a variable in this position. This LF-representation, as shown in (3), doesn't violate the weak crossover condition.

- (3) How_n every book_j [n-many students] read t_j
-

According to Cresti's (1995) and Rullmann's (1995) semantics of "how many", (3) asks for the maximal number n such that every book was read by at least n students. Because "every book" takes scope above "n-many students", it's not important for (3) whether there are students that read every book. Therefore (3) is a felicitous question in a pair-list situation where every book was read by a different number of different students, like the one described above.

The felicity contrast in (1) is explained. Now consider the pair-list answer in (1b). The complete answer (3) requires is "Two students read every book". I believe, however, that an overly informative answer to a question is always possible, as long as it provides the relevant information. The answer given after (1b), I claim, is such an overly informative answer.

The weak crossover condition states an empirical mismatch between inverse scope and inverse binding. Here, we saw this familiar scope/binding difference in a new environment with pair-list answers. The result therefore supports Chierchia's claim that weak crossover is at work in (1a).

References

- Aguero-Bautista, C. (1999) "On Pair-List Readings," unpublished ms., MIT.
Chierchia, G. (1993) "Questions with Quantifiers," *Natural Language Semantics* 1: 181-234.
Cresti, D. (1995) "Extraction and Reconstruction," *Natural Language Semantics* 3: 79-122.
Engdahl, E. (1980) *The Syntax and Semantics of Questions in Swedish*, PhD dissertation, University of Massachusetts, Amherst.
Rullmann, H. (1995) *Maximality in the Semantics of Wh-Constructions*, PhD dissertation, University of Massachusetts, Amherst.