August 7, 1998

## Ellipsis and Identity

## Howard Lasnik lasnik@sp.uconn.edu University of Connecticut

- (1) a John slept, and Mary will too
- b \*John slept, and Mary will slept too
- c John slept, and Mary will sleep too
- (2)a John sleeps (every afternoon), and Mary should too b \*John sleeps, and Mary should sleeps too
  - c John sleeps, and Mary should sleep too
- (3) It appears that a sort of 'sloppy identity' is at work here, permitting tense and aspectual differences to be ignored in the same way that φ-feature differences typically can be.
- (4) Williams (1977) suggests, instead, that tense identity <u>is</u> required, and that it obtains in LF via a rule he calls 'Tense Interpretation'.
- (5)  $[[Bob]_{NP} [left]_{VP}]_s$
- (6) [Past ([Bob]<sub>NP</sub> [leave]<sub>VP</sub>)]<sub>s</sub>
- (7) a \*John was here, and Mary will too
  - b \*John was here and Mary will was here too
  - c John was here and Mary will be here too
- (8) ?John will be here, and Mary will too
- (9) The bare form of a verb V other than <u>be</u> or auxiliary <u>have</u> can be 'deleted under identity' with any other form of V. <u>Be</u> or auxiliary <u>have</u> can only be deleted under identity with the very same form.
- (10) In English, finite auxiliary verbs raise while finite main verbs do not.
- (11)a John was not here
- b \*John slept not
- (12)a Was John here
  - b \*Slept John
- (13) "Hypothesis a trace of verb movement cannot serve as part of a VPE antecedent" Potsdam (1997)
- (14) Mary is clever and John is too
- (15) "...if corresponding X<sup>0</sup> traces are present in ellipsis antecedent and target clauses, they must be bound by the same verb."

- (16) Q: Salaxt et ha-yeladim le- beit-ha-sefer you-sent Acc the kids to school "Did you send the kids to school?" A: Salaxti
  - I sent

"I did" Doron (1990)

- (17) A Martas deu um livro ao João? Sim, deu. the Martha gave a book to-the John yes gave "Did Martha give a book to John? Yes, she did." Martins (1994)
- (18) Q: Ar chuir tú isteach air INTERR COMP put [PAST] you in on it "Did you apply for it?"
  - A: Chuir put [PAST] "Yes." McCloskey (1994)
- (20) "...a [trace of a?] raised V has fewer features than a non-raised V, assuming that the features that cause raising are not copied..."
- (21)a John went to the automobile registry b Tell me why <del>IP</del>
- (22)a Never will [IP I t go to the automobile registry again] b Tell me why IP
- (23)a If you don't believe me, you will ø the weatherman
  - b I rolled up a newspaper, and Lynn did ø a magazine
    - c Kathy likes astronomy, but she doesn't ø meteorology Levin (1978)
- (24)a The DA proved Jones guilty and the Assistant DA will prove Smith guilty
  - b ?John gave Bill a lot of money, and Mary will give Susan a lot of money
- (25) You might not believe me but you will Bob
- (26) NP-raising to Spec of Agr<sub>o</sub> ('Object Shift') is overt in English. [Koizumi (1993;1995), developing ideas of Johnson (1991)]
- (27) Pseudogapping as overt raising to Spec of Agr<sub>o</sub> followed by deletion of lower VP. [Lasnik (1995)]





(33) Suppose the strong feature driving V-raising resides in the lexical V rather than in the higher 'shell' V. The strong feature of the verb must either be checked by overt raising to the shell V or be contained in an ellipsis site. PF deletion could eliminate the unchecked strong feature.



(35) The trace of <u>believe</u>, as in (34), serves as part of the antecedent for the ellipsis of VP headed by <u>believe</u> itself, as in (32).

- (36) Potsdam and Roberts claim that raising of finite aux is directly responsible for the limitation on ellipsis seen above. Another possibility, proposed by Lasnik (1995), is that the property responsible for the raising asymmetry between auxiliaries and main verbs in English is the source of the ellipsis asymmetry.
- (37)a English auxiliaries are 'lexicalist': fully inflected as drawn from the lexicon. They raise to check inflectional features against an abstract featural Infl.
  - b English main verbs are drawn from the lexicon 'bare', as in <u>Syntactic Structures</u>. They associate with an affixal Infl by a low-level merger process demanding adjacency.
- (38) <u>slept</u> is <u>sleep</u> through (almost) the entire derivation. was and be are always distinct.
- (39) In (25), <u>believe</u> in the antecedent and <u>believe</u> in the ellipsis site are identical (assuming the copy theory of movement).
- (40) You might not believe me but you will Bob
- (41) \*You might not believe me but Mary will believe Bob
- (42) Apparently the trace of <u>me</u> can antecede the ellipsis of the trace of <u>Bob</u> (Pseudogapping, lower VP), even though <u>me</u> cannot antecede ellipsis of <u>Bob</u> (standard VP ellipsis, higher VP). The former possibility is quite standard for A-traces:
- (43) John was promoted t<sub>John</sub> after Mary was promoted t<sub>Har</sub>
- (44) Mary is likely t<sub>Hary</sub> to solve the problem, but John isn't likely t<sub>solm</sub> to colve the problem
- (45) \*John, who Bill saw, and who Bob did too Williams (1977)
- (46) Could it be that distinct variables (wh-traces of separate operators) do not count as identical (unlike traces of distinct A-movements)? There are two reasons to doubt such an account of (45), one empirical, the other technical.
- (47) I know which book Max read and which book Oscar didn't
- (48) Philby, who Angleton suspected, but who Dulles didn't
- (49) What John knows is minimal, and what he doesn't is vast Fiengo and May (1994)



- (51) Under classic VP-ellipsis (i.e., ellipsis of  $VP_2$ ) the ellipsis site does include the variable. But if the ellipsis site is  $VP_1$  (Pseudogapping), it includes only an A-trace.
- (52) ()I know which book Max thinks Mary read, and which book Bill doesn't Fiengo and May (1994)
- (53) \*Max thinks Mary read <u>Syntactic Structures</u> and Bill does <u>Aspects</u>
- (54) F&M bring up (47-49) precisely to argue against Williams's factual claim, and they present (52) precisely to exclude a Pseudogapping account of those examples. But I wish the status of (52) were clearer. If it is, contrary to F&M, bad, this would argue for Williams's generalization (and evidently for an LF theory of ellipsis, Williams's main point). If it is good, a PF theory would be quite consistent: as far as PF is concerned, one would expect that a gap is a gap.
- (55) John saw everyone you did
- (56) John saw everyone you saw
- (57) John [vp saw everyone [Op [you did [vp e]]] [vp saw everyone [Op [you did [vp e]]]

- (59) This proposal could be reinterpreted as raising to Spec of Agr<sub>o</sub> creating an ellipsis configuration, as in Hornstein (1994). (Virtually) equivalently, it could be Pseudogapping.
- (60) \*Dulles suspected Philby, who Angleton did May (1985)
- (61) Dulles suspected Philby, who Angleton did not
- (62) Dulles suspected Philby, who Angleton did as well Wyngaerd and Zwart (1991)
- (63) Dulles suspected Philby, and Angleton did Burgess
- (64) John believed everyone you did to be a genius
- (65) \*John believed (that) everyone you did was a genius Larson and May (1990)
- (66) John believed Mary to be a genius, and you did Susan
- (67) \*John believed Mary was a genius, and you did Susan
- (68) \*Mary stood near Susan, who Emily did not Lasnik (1993)
  (69) \*Mary stood near Susan, and Emily did Harriet
- (70) Mary stood near everyone Emily did
- (71) There is general agreement that the ellipsis site cannot remain inside of its antecedent. For the appositive instances, Pseudogapping, and only Pseudogapping provides a source for resolving Antecedent Contained Deletion. For the restrictive instances, there must be another source (arguably OR). cf. Fiengo and May (1992)
- (72) John believed everyone was a genius that you did
- (73) ????

## Bibliography

Tiedeman (1995)

- Bouton, Lawrence F. 1970. Antecedent-Contained Pro-Forms. In Proceedings of the Sixth Annual Meeting of the Chicago Linguistic Society.
- Chomsky, Noam. 1957. Syntactic Structures. The Hgue: Mouton.
- Chomsky, Noam. 1995. Bare Phrase Structure. In Gert Webelhuth, ed. Government and Binding Theory and the Minimalist Program. Oxford: Basil Blackwell.
- Chomsky, Noam. 1995. The Minimalist Program. Cambridge: MIT Press.
- Doron, Edit. 1990. V-Movement and VP-Ellipsis. Hebrew University of Jerusalem ms.
- Fiengo, Robert and Robert May. 1992. Ellipsis and Apposition. City University of New York and UCIrvine ms.
- Fiengo, Robert and Robert May. 1994. Indices and Identity. Cambridge: MIT Press.
- Halliday, M. And Ruqaiya Hasan. 1973. Cohesion in Spoken and Written English. London: Longmans.
- Hornstein, Norbert. 1994. An Argument for Minimalism. Linguistic Inquiry 25,455-480.
- Jackendoff, Ray. 1971. Gapping and Related Rules. Linguistic Inquiry 2, 21-35.

- Jayaseelan, K.A. 1990. Incomplete VP Deletion and Gapping. Linguistic Analysis 20, 64-81.
- Johnson, Kyle. 1991. Object Positions. Natural Language and Linguistic Theory 9, 577-636.
- Koizumi, Masatoshi. 1993. Object Agreement Phrases and the Split VP Hypothesis. MIT Working Papers in Linguistics Vol. 18.
- Koizumi, Masatoshi. 1995. Phrase Structure in Minimalist Syntax. Ph.D. Dissertation. MIT.
- Lappin, Shalom. 1992. The Syntactic Basis of Ellipsis Resolution. IBM Research Report.
- Larson, Richard and Robert May. 1990. Antecedent Containment or Vacuous Containment: A Reply to Baltin. Linguistic Inquiry 21, 103-122.
- Lasnik, Howard. 1993. Lectures on Minimalist Syntax. UConn Working Papers Occasional Papers in Linguistics.
- Lasnik, Howard. 1995. Last Resort. In Proceedings of the First Numazu Conference on Formal Linguistics.
- Lasnik, Howard. 1995. Last Resort and Attract F. In Proceedings of the Sixth Annual Meeting of the Formal Linguistics Society of Mid-America.
- Lasnik, Howard. 1995. A note on Pseudogapping. In MIT Working Papers in Linguistics Volume 27, 143-163.
- Lasnik, Howard. 1995. Verbal morphology: Syntactic structures meets the Minimalist Program. In Evolution and Revolution in linguistic theory: Essays in honor of Carlos Otero, ed. Paula Kempchinsky and Hector Campos. Washington, D.C.: Georgetown University Press.
- Levin, Nancy. 1978. Some Identity-of-Sense Deletions Puzzle Me. Do They You. In Proceedings of the Fourteenth Annual Meeting of the Chicago Linguistic Society.
- Levin, Nancy. 1979/1986. Main Verb Ellipsis in Spoken English. (Ohio State Ph.D. dissertation.) New York: Garland.
- Martins, Ana Maria. 1994. Enclisis, VP-deletion and the Nature of Sigma. Probus 6.
- McCloskey, James. 1990. Clause Structure, Ellipsis and Proper Government in Irish. Syntax research Center, Cowell College, UCSC.
- May, Robert. 1985. Logical Form. Cambridge, Mass.: MIT Press.
- Potsdam, Eric. 1997. English Verbal Morphology and VP Ellipsis. In Proceedings of the 27<sup>th</sup> NELS.
- Roberts, Ian. n.d. Have/be-raising, Move F and Procrastinate. Unpublished University of Wales ms.
- Sag, Ivan. 1976. Deletion and Logical Form. Ph.D. Dissertation. MIT.

Takahashi, Daiko. 1993. On Antecedent Contained Deletion. University of Connecticut ms.

- Tiedeman, Robyne. 1995. Some Remarks on Antecedent Contained Deletion. In Proceedings of the First Numazu Conference on Formal Linguistics.
- Wasow, Thomas. 1972. Anaphoric Relations in English. Ph.D. Dissertation. MIT.
- Williams, Edwin. 1977. Discourse and Logical Form. Linguistic Inquiry 8, 101-139.
- Wyngaerd, Guido Vanden and Jan-Wouter Zwart. 1991. Reconstruction and Vehicle Change. In Linguistics in the Netherlands 1991.

-8-