

## #7 – (Pseudo)gapping etc.

### Pseudogapping

Inspired by, and many examples taken from, Lasnik (1995), “A Note on Pseudogapping”, *MITWPL* 27, 143–163.

Examples from Lasnik and elsewhere

- (1) a. Mary hasn't dated Bill, but she has ~~dated~~ Harry.  
b. John reviewed the play, and Mary did ~~review~~ the book.  
c. Has he sold his collection yet? He has ~~sold~~ some of his paintings, but I'm not sure...  
d. I rolled up a newspaper, and Lynn did ~~roll up~~ a magazine.  
e. Kathy likes astronomy, but she doesn't ~~like~~ meteorology.  
f. If you don't believe me, you will ~~believe~~ the weatherman.

- (2) a. \* These leeks taste terrible, but your steak will ~~taste~~ better.  
b. \* Rona sounded annoyed, and Sue did ~~sound~~ frustrated.  
c. \* You probably just feel relieved, but I do ~~feel~~ jubilant.

- Strings of verb/auxiliary heads don't allow pseudogapping very liberally

- (3) a. ?Mary won't have dated Bill, but she will ~~have dated~~ Harry.  
b. ?\* John has been reviewing the play, and Mary has ~~been reviewing~~ the book.  
c. \* I could have bought a newspaper, and Lynn might ~~have bought~~ a magazine.

- Pseudogapping can target a *surface non-contiguous* sequence of VP-material, stranding the first NP object of the verb.

- (4) a. John gave Mary a ring, and Bob did ~~give~~ Sue ~~a ring~~.  
b. The DA will prove Jones guilty, and the Assistant DA will ~~prove~~ Smith ~~guilty~~.

- (5) a. ?John gave Bill a lot of money, and Mary will ~~give~~ Susan ~~a lot of money~~.  
b. \*John gave Bill a lot of money, and Mary will ~~give~~ Susan a lot of advice.

- (6) a. ?John gave a lot of money to Bill, and Mary will ~~give~~ a lot of advice ~~to Bill~~.  
b. \*John gave a lot of money to Bill, and Mary will ~~give~~ a lot of advice to Susan.

- (7) a. ??John gave a ring to Mary and Bob did ~~give~~ a book ~~to Mary~~.  
b. John proved Bob guilty and Sue did ~~prove~~ Mary ~~guilty~~.  
c. ?John hammered the metal flat and Sue did ~~hammer~~ the floorboards flat.

Lasnik's (1995) analysis: 'remnant' object NP vacates VP by raising to Spec, AgrOP, VP constituent then undergoes deletion.

- Second object of a verb is a poor remnant for pseudogapping

- (8) a. \* John gave Bill a lot of money, and Mary ~~gave~~ Bill some useful advice.  
b. \*John gave a lot of money to Bill, and Mary did ~~give~~ a lot of money to Sue.

Correlation of possibility of pseudogapping with possibility of pseudopassive (i.e. passivization of object of preposition). Lasnik claims no correlation with Heavy NP Shift.

- (9) a. John spoke to Bill, and Mary should ~~spea~~~~k~~~~to~~ Susan.  
 b. Bill was spoken to by John.
- (10) a. John talked about linguistics and Mary will ~~talk~~~~about~~ philosophy.  
 b. Linguistics was talked about by John.
- (11) a. \* John swam beside Bill and Mary did ~~swim~~~~beside~~ Susan.  
 b. \*Bill was swum beside by John.
- (12) a. \* John stood near Bill, and Mary should ~~stand~~~~near~~ Susan.  
 b. \*Bill was stood near by John.
- (13) a. John took advantage of Bill, and Mary will ~~take~~~~advantage~~~~of~~ Susan.  
 b. Bill was taken advantage of by John.
- (14) a. \* John spoke to yesterday the man he met at the beach.  
 b. \*John talked about yesterday the man he met at the beach.  
 c. \* John took advantage of yesterday the man he met at the beach.  
 d. \*John swam beside yesterday the man he met at the beach.  
 e. \* John stood near yesterday the man he met at the beach.

Lasnik uses these examples to argue against an analysis due to Jayaseelan (1990) in which pseudogapping is analyzed as VP-ellipsis fed by HNPS.

- No pseudogapping deleting V+infinitival: surprising under Lasnik's AgrO analysis
- (15) a. \*?John believes Bill to be guilty and Sue does ~~believe~~ Mary ~~to be~~ guilty.  
 b. \*John wants Bill to review the article, and Sue does ~~want~~ Mary ~~to review~~ the article.
- Long-distance pseudogapping: marginally possible for V-to-V sequences, not for more complex sequences.
- (16) a. ?I tried to buy a newspaper, and Lynn did ~~try~~~~to buy~~ a magazine.  
 b. ? I decided to buy a newspaper, and Lynn did ~~decide~~~~to buy~~ a magazine.  
 c. ?\*I hoped to buy a newspaper, and Lynn did ~~hope~~~~to buy~~ a magazine.
- (17) a. \* I wanted Bill to buy a newspaper, and Lynn did ~~want~~ Bill ~~to buy~~ a magazine.  
 b. \*I told Bill to buy a newspaper, and Lynn did ~~tell~~ Bill ~~to buy~~ a magazine.  
 c. \* I believed Bill to have bought a newspaper, and Lynn did ~~believe~~ Bill ~~to have~~ bought a magazine.
- (18) a. \* I realized that Bill had bought a newspaper, and Lynn did ~~realize~~ that Bill ~~had~~ bought a magazine.  
 b. \*I knew that Bill would buy a newspaper, and Lynn did ~~know~~ that Bill ~~would buy~~ a magazine.

Rather than analyzing as raising of NP-object to SpecAgrOP, pseudogapping may create a constituent by rightward *lowering* of the verb in the left conjunct to an embedded V position in the complex predicate. This, then, licenses deletion of a V+XP constituent.

Accounts for (i) impossibility of long-distance pseudogapping, (ii) impossibility of ECM subject as remnant of pseudogapping.

- Scope possibilities in pseudogapping differ from partial-VP ellipsis
- (19) a. John read all the books quickly, and Bob did slowly  
\* distributive, ok collective
- b. John read all the books quickly, and Bob did ~~read~~ all the articles ~~quickly~~  
ok distributive, not sure collective
- (20) a. John wrote all his term-papers in an afternoon, and Bob did in a weekend.  
\* distributive, ok collective
- b. John wrote all his term-papers in an afternoon, and Bob did ~~write~~ all his letters ~~in an afternoon~~.  
ok distributive, ok collective

Analysis of VP-ellipsis assumed that collective reading is forced because ellipsis is only possible when adverbial right-adjoins to VP. Analysis suggested for pseudogapping requires the opposite – V + PP must be a constituent. Interestingly, both scope readings seem to be available, not just the distributive scope reading.

## Gapping

*Many examples inspired by Johnson 1994 and Steedman 1996, both of whom are drawing on a large literature before them, e.g. Ross 1970, Neijt 1979.*

- (21) I want to try to begin to write a novel, and
- a. you, ~~want~~ to try to begin to write a play.  
b. you, ~~want to try~~ to begin to write a play.  
c. you, ~~want to try to begin~~ to write a play.  
d. you, ~~want to try to begin to write~~ a play.
- Simple Gaps (deleted material comes from just one clause)
- (22) a. Some ate nattoo, and others ~~ate~~ rice.  
b. Some ate the nattoo hungrily, and others ~~ate the nattoo~~ timidly.  
c. Some talk about problems openly, and others ~~talk about problems~~ cautiously.
- Sequences of auxiliaries, verbs and objects may be gapped
- (23) a. Some will have eaten nattoo, and others ~~will have eaten~~ rice.  
b. Some will have eaten nattoo hungrily, and others ~~will have eaten nattoo~~ timidly.  
c. Some will have talked about problems openly, and others ~~will have talked about problems~~ cautiously.

On the assumption that the remnants in (23) are in-situ inside VP, gapping violates predictions about constituency made on the basis of phenomena such as VP-ellipsis and pseudogapping.

Possibilities:

- (i) Gapping does not respect constituency
- (ii) Remnants in (23) are not in-situ, but have been moved (rightwards?)

- Gapping respects islands for extraction (Neijt 1979)
- (24)
- a. \* John wondered what to cook today, and Peter ~~wondered what to cook~~ tomorrow.
  - b. \*John asked which candidates to interview this morning, and Peter ~~asked which candidates to interview~~ this afternoon.
  - c. \* Who did John wonder what to cook for \_\_?
  - d. \*Who did John ask which candidates to tell \_\_ that the company hired \_\_?
- (25)
- a. \* John must be a fool to have married Jane, and Bill ~~must be a fool to have married~~ Martha.
  - b. \*Tom went to Florida to learn to play tennis, and Bill ~~went to Florida to learn to play~~ squash.
  - c. ??Who must John be a fool to have married \_\_?
  - d. ? What did Tom go to Florida to learn to play \_\_?
- (26)
- a. \* I read out the order to fix tortillas, and Mary ~~read out the order to fix~~ beans.
  - b. \*I reviewed the decision to fire the line-workers, and Mary ~~reviewed the decision to fire~~ the inspectors.
  - c. ??What did Mary read out the order to fix \_\_?
  - d. ??Who did Mary review the decision to fire \_\_?

Note: in showing island-sensitivity, Gapping contrasts with Right Node Raising.  
 Question: can this contrast between Gapping and RNR be captured in the CCG account of the constructions?

Observation (Johnson 1994): island-violations triggered by Gapping are often rather more degraded than corresponding island-violations for wh-movement.

Can uncontroversial non-constituents gap? Apparently not.

- (27)
- a.\* Men who like pizza prefer anchovies, and women ~~who like pizza prefer~~ pepperoni.
  - b.\* Songs about Ireland comfort Patrick, and stories ~~about Ireland comfort~~ Frank.

Complex local gaps (from Johnson 1994; adapted from Larson 1990, Jackendoff 1971)

- (28)
- a. Some gave albums to their spouses, and others ~~gave tapes to their spouses~~.
  - b. Some put plants in their offices, and others ~~put art in their offices~~.
  - c. John worded the letter carefully, and Mary ~~worded the memo carefully~~.
  - d. Max paints barns red, and Bill ~~paints houses red~~.
  - e. Betsy rolled the dough flat, and Sam ~~rolled the butter flat~~.
- (29)
- a. Time believes Agnew to have been guilty, and Newsweek ~~believes Nixon to have been guilty~~.
  - b. Arizona elected Goldwater senator, and Pennsylvania ~~elected Schweiker senator~~.
  - c. Niels proved a theorem wrong, and Albert ~~proved an entire theory wrong~~.

- Note contrast between pseudogapping and gapping in treatment of ECM subjects

- (15)
- a. \*?John believes Bill to be guilty and Sue does ~~believe Mary to be guilty~~.
  - b. \*John wants Bill to review the article, and Sue does ~~want Mary to review the article~~.

- (30) a. John believes Bill to be guilty, and Sue believes Mary ~~to be guilty~~.  
 b. John wants Bill to review the article, and Sue ~~wants Mary to review the article~~.

- In (monoclausal) constructions in which discontinuous gaps are possible, continuous gaps are also allowed.

- (31) a. Some gave albums to their spouses, and others ~~gave albums~~ to their colleagues.  
 b. Some put plants in their offices, and others ~~put plants~~ in their kitchens.  
 c. John worded the memo carefully, and Mary ~~worded the memo~~ cautiously.  
 d. Max paints barns red, and Bill ~~paints barns~~ pink.  
 e. Betsy rolled the dough flat, and Sam ~~rolled the dough~~ long.

- In bi-clausal constructions, continuous counterparts to discontinuous gaps to not seem possible.

- (32) a. \* Time believes Agnew to have been guilty, and Newsweek ~~believes Nixon to have been innocent~~.  
 b. \*Arizona elected Goldwater senator, and the nation ~~elected Goldwater president~~.  
 c. \* Niels proved a theorem wrong, and Andrew ~~proved a theorem right~~.

- Non-local gapping: appears to be less restrictive than pseudogapping, but similar gradation from V-to-V sequences, to infinitivals with ECM subjects, to finite complement clauses.

- (33) a. Some tried to buy a newspaper, and others ~~tried to buy~~ a magazine.  
 b. Some decided to buy a newspaper, and others ~~decided to buy~~ a magazine.  
 c. Some hoped to buy a newspaper, and others ~~hoped to buy~~ a magazine.

- (34) a. \*?Some wanted Bill to buy a newspaper, and others ~~wanted Bill to buy~~ a magazine.  
 b. \*? Some told Bill to buy a newspaper, and others ~~told Bill to buy~~ a magazine.  
 c. \*?Some believed Bill to have bought a newspaper, and others ~~believed Bill to have bought~~ a magazine.

- (35) a. \* Some realized that Bill had bought a newspaper, and others ~~realized that Bill had bought~~ a magazine.  
 b. \*Some knew that Bill would buy a newspaper, and others ~~knew that Bill would buy~~ a magazine.

#### Complex non-local gapping?

- (36) a. ?Some wanted to give albums to their spouses, and others ~~wanted to give tapes to their spouses~~.  
 b. ? Some expected to put plants in their offices, and others ~~expected to put art in their offices~~.  
 c. ??Some needed to word the letter carefully, and others ~~needed to word the memo carefully~~.

- However good non-local gapping including an ECM subject are (cf. 34), they don't seem to allow discontinuous gaps.
- (37) a. \* Some wanted the employees to give albums to their spouses, and others ~~wanted the employees to give tapes to their spouses.~~  
 b. \*Some expected their bosses to put plants in their offices, and others ~~expected their bosses to put art in their offices.~~  
 c. \* Some needed their friends to word the letter carefully, and others ~~needed their friends to word the memo carefully.~~

What incremental structure-building has to offer

as a first approximation

- (i) island-sensitivity could be accounted for if remnant in non-local gapping is extraposed
- (ii) complex gaps could be treated in terms of 'verb-lowering', but this would fail to account for the possibility of ECM subjects as remnants ... in general, an account of the contrast between gapping and pseudogapping in this regard is needed.

### German Subject-Gap Coordination

*Examples largely drawn from Heycock & Kroch 1993; analysis is somewhat different*

- (38) a. Das Gepaeck ließ er fallen und rannte zum Ausgang.  
 the luggage let he fall and ran to-the exit  
 'He let the luggage fall, and ran to the exit.'
- b. In Mainz faehrt Karl am Abend los und kommt am Morgen in Bonn an.  
 in Mainz goes Karl at evening away and comes at morning in Bonn to  
 'Karl will leave Mainz in the evening and will arrive in Bonn in the morning.'
- (39) a. Die Briefmarken hat Claus gekauft, und will sie jetzt wieder verkaufen.  
 the stamps has Claus bought and wants them now again sell  
 'Claus bought the stamps, and now (he) wants to sell them again.'
- b. \*Claus hat die Briefmarken gekauft und hat Barbara sofort wieder verkauft.  
 Claus has the stamps bought and has Barbara at-once again sold  
 'Claus bought the stamps and Barbara immediately sold them again.'
- (40) a. \* Gestern ist Margot krank gewesen und glaubt jeder sei im Bett geblieben.  
 yesterday is Margot ill been and believes everybody is in bed stayed  
 'Yesterday Margot was ill, and everybody thinks she stayed in bed.'
- b. Gestern ist Margot krank gewesen und hat deshalb den ganzen Tag im Bett verbracht.  
 yesterday is Margot ill been and has therefore the whole day in bed spent  
 'Yesterday Margot was ill, and therefore (she) spent the entire day in bed.'

Subject-gap coordination is problematic for standard phrase-structure theories because the conjunct appears to need to be large enough to contain the verb, but small enough to exclude the subject. Given that the subject appears following the verb, this is impossible based on the surface string alone.

Analysis in terms of verb-lowering (from C to I) could account for these.