What Doesn’t Change, Doesn’t Change: antisymmetry and HNPS across Germanic

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July 14, 2010
DIGS 12: Cambridge University

1. A unified theory of Heavy NP Shift

- In Modern English “heavy” DPs (i.e. long and/or accented in the prosody of the intonational phrase), are displaced to the right of the clause:
  - (1) a. I met [my rich uncle from Detroit] on the street.
  - b. I met on the street [my rich uncle from Detroit].

- **The classical (pre-Kayne 1994) analysis:** has the offending DP moving to right-adjoin to whichever maximal projections are available, i.e. VP/vP and/or TP.
- **The Current analysis:** HNPS is derived from leftward movement (cf. Kayne 2005).

- **In particular, it is focus-movement of the object, hence the prosodic effect.**

Why not the rightward movement analysis?

  - To the extent that these theories are interesting and useful, it is worth exploring other analyses of HNPS and asking: do we lose anything? Do we gain anything?

- **Problem 2:** “rightward” HNPS becomes difficult to distinguish from “leftward” scrambling. (see also Wallenberg 2009)
  - If scrambling is a form of adjunction, these two operations are hierarchically identical.
  - If the narrow syntax operates on hierarchical structure, it is difficult to explain why modern English has rightward HNPS but no leftward scrambling.

- Saito & Fukui (1998) take the position that HNPS and scrambling are identical, and the syntax only operates on hierarchy. Therefore, English and Japanese only differ in (late) linearization rules.
  - This theory is falsified by a language which scrambles leftward and moves objects rightward.
Scrambling and HNPS Simultaneously

- Early New High German:
  (2) lieber Peham, ich pit euch, dear Peham, I ask you,
  ir welt Sewald Furzagel von mir ausreichtten III haundert und XXX guldn. you will Sewald Furzagel from me pay three hundred and thirty guilders.
  'Dear Peham, I ask you to pay Sewald Furzagel three hundred and thirty guilders from me.'
  (ENHG example from Bies 1993: 8)

- Analogous examples occur in Old English, Yiddish (historical and modern), and throughout the history of West Germanic varieties more generally.

- Interim Conclusion: Either the syntax makes reference to directionality explicitly, or HNPS and scrambling are structurally different.

Leftward movement of what?

- The analysis suggested in Kayne (1994: 74); leftward scrambling of the PP or adjunct:
  (3) I met [on the street], my rich uncle from Detroit \( t_i \).

- Problem #1: HNPS licenses parasitic gaps, indicating that the DP moves by A'-movement:
  (4) I met \( t_i \) on the street, without recognizing \(<pg_i>\) immediately, my rich uncle from Detroit.

- Problem #2: this analysis is only plausible if modern English is considered in isolation.

OV, Tense-final Germanic with HNPS

- Early New High German
  (5) es begab sich, da Jhesus vollendet hatt solche gepott zu seynen it came-to-pass that Jesus completed had such teachings to his
tzweffl iungermn... twelve disciples
  "And it came to pass that Jesus completed such teachings to his twelve disciples"
  (Martin Luther’s Bible (Septembertestament), Matthew 11:1, date: 1522)

Old English
(6) Pa æfter þam þe hi gewyld hæfdon eall heora feonda land
Then after that-DAT that they controlled have all their enemies’ land
  "After that time when they conquered all of their enemies’ land…"
  (Saint Eustace and his Companions, date: c. 11th century)

OV, Tense-final Germanic with HNPS

- Approach from Hinterhölzl (2000, 2006, 2009) and subsequent work: the German vP/VP is “evacuated” by constituents moving leftward.

- HNPS in OV languages would be derived by stranding an object in post-verbal position, while the remaining elements of the vP/VP move leftward to a series of specifiers.

  - Benefit: could potentially generate HNPS across Germanic OV and VO languages.

  - Problem 1: same problem for parasitic gaps in English as Kayne 1994. The parasitic gaps indicate that the HNPS object has \( A' \) moved, not everything else.

  - Problem 2: Requires many ad hoc projections, in fact, a projection for every constituent in an OV clause.

  - Problem 3: Lands adjuncts in the wrong place for modern English.
Diachronic Stability of HNPS in English

- It should be possible to unify Old English and modern English HNPS.
- Kroch & Pintzuk (1989): both show the same characteristic prosody.
- The frequency never changed. The following table compares:
  1) The frequency of DP objects to the right of final verb clusters in unambiguously Tense-final Old English (subordinate) clauses
  2) The frequency of DP objects to the right of >2-word AdvP or PP in Early Modern English (from the PPCEME: Kroch, Santorini & Delfs 2004) subordinate clauses ($\chi^2 = .001$ on 1 df, $p = .97$)

<table>
<thead>
<tr>
<th></th>
<th>HNPS</th>
<th>No HNPS</th>
<th>Total N</th>
<th>% HNPS</th>
</tr>
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<tr>
<td>Old English</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tense-final clauses</td>
<td>123</td>
<td>754</td>
<td>877</td>
<td>14.0%</td>
</tr>
<tr>
<td>(Pintzuk 2002)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Modern English</td>
<td>345</td>
<td>2120</td>
<td>2465</td>
<td>13.9%</td>
</tr>
<tr>
<td>(dates c. 1500-1710)</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

What we need from an analysis of HNPS:

1. The construction appears throughout West Germanic (at least), in both Tense-final and Tense-initial varieties.
2. In particular, HNPS occurs in Old English Tense-final clauses as well as in modern English, Tense-initial clauses, and does not appear to have changed over time.
3. The PP/adjunct-scrambling analysis proposed in Kayne (1994: 74) cannot account for all of these at once. Rightward movement might be able to, but with theoretical costs.
4. HNPS licenses parasitic gaps, and so appears to be A'-movement of the DP.
5. HNPS can occur in subordinate clauses, both in Tense-final Germanic and modern English.

Motivation for “Split-C” with TopP, FocP

- Welsh:
  (8) Dywedais i mai fel arfer y dynion a fuasai’n gwerthu’r ci
  said I MAI as usual the men     A   would-Asp sell-the dog
  “I said that it’s as usual the men who would sell the dog.”
  (Roberts 2005: 32)

- Hungarian:
  (9) János PETERT mutatta be Marinak.
  John-NOM PETER-ACC introduced VM Mary-to
  “As for John, it was PETER that he introduced to Mary.”
  (É. Kiss 2002: 79)

- Germanic merges complementizers in Force (Roberts 2005), and differs from Hungarian in restricting Spec(TopicP) to TP or vP.
Germanic complementizers are in Force

- Note that HNPS regularly applies in environments that do not license embedded root phenomena:

Relative Clause:

(11) The letter of the former is somewhat imprudent, [upon which I will communicate to him a piece of my mind];

(Selections from the dispatches and general orders of Field Marshal the Duke of Wellington; date: 1815; WELLESLEY-1815,833.7 in Kroch & Santorini forthcoming)

Embedded Question

(12) It is a marvel to us, [how at least fidelity on the wife’s side could become to such an extent a heathen virtue.]

(Edward B. Pusey’s Lenten sermons, preached chiefly to young men at the universities, between A.D. 1858-1874; PUSEY-186X,301.297 in Kroch & Santorini forthcoming)

3. The Fine-Grained Information Structure of HNPS

- HNPS is a DP-focus construction in both OV (Bies 1993, Sapp 2009) and VO Germanic.
  - The “shifted” DP, as the focus, moves to Spec(FocP), while the remnant TP, as the topic, moves to Spec(TopP).

- Prince (1999: 6): the topic is an “open proposition” which the speaker presupposes to be the true in the world, and it contains a variable which is instantiated by the focus constituent of the sentence [J.W.: i.e., the focus].

- Vallduví (1992: 59): the topic is “an address pointer in the sense that it directs the hearer to a given address…in the hearer’s knowledge-store, under which the information carried by the sentence [J.W.: i.e., the focus] is entered.”

vP/VP Focus vs. DP Object Focus

Object DP Focus:

(13) Question: Who did John interrupt at DIGS?
   Answer: (John interrupted) Mary (at DIGS).
   - Ground/Presupposition (Answer): John interrupted X at DIGS.
   - Focus (Answer): Mary.

vP/VP Focus:

(14) Question: What did John do?
   Answer: John interrupted Mary at DIGS.
   - Ground/Presupposition (Answer): John VPed.
   - Focus (Answer): interrupted Mary at DIGS.
Focus Movement in OV Germanic

- Bies (1996) showed that Early New High German postposed DPs were focused, as in the following vP/VP-presupposition, object-focus discourse.

In Early New High German:

(15) (Question:) Ob er auch das wort Gots predig.
Whether he [the prior] also the word of God preached

(Answer:) Ja, prior hab predicirt [F festivus diebus.]
Yes, Prior has preached [F festivus diebus ] (mass-festival of the day)

(example from Bies 1993: 8)

- **Ground/Presupposition (Answer):** He/Prior preached X.
- **Focus (Answer):** {Yes, festivus diebus.}

Focus Movement in OV Germanic

- Pennsylvania German (relatively modern):

(16) Benjamen Y. Lapp ist gestorben ten 14 den May 1915
Benjamen Y. Lapp is died the 14th the May 1915

[er] ist alt worden 9 Jahr 1 Mo und 12 tag
[he] is old become 9 years 1 month and 12 days

“Benjamen Y. Lapp died May 14th, 1915. He was nine years, one month, and twelve days old.”

(Amish gravestone in Lancaster County, near Bird-in-Hand, Pennsylvania; the dates of the inscriptions are presumably the same as the dates of death)

Focus Movement in Modern English

- In VO Germanic, the movements to Spec(TopP) and Spec(FocP) are not indicated by post-verbal DPs, but rather post-AdvP or post-PP DPs.

- The argument structure of “call” make the focus crystal-clear here:

(17) "Nothing changes tragedy into comedy like gayness. It’s what we call [in the entertainment world] the GAY EX MACHINA.”

(from the “That’s Gay” feature on the TV program *infoMania*)

(18) Context: conversation about touring lighthouses

Speaker 1: “We toured the St. Joseph one.”

Speaker 2: “We toured [last year...] the one in Ludington.”

(Overheard in Michigan)
Corpus Study of Early Modern English

- Corpus study of personal letters from the Parsed Corpus of Early English Correspondence (PCEEC) (2006).
- Production of HNPS and In Situ orders of two individuals:
  - Nathaniel Bacon (born c. 1546)
  - Anne Conway (born c. 1619)
- Matrix and Subordinate Clauses containing a finite auxiliary, nonfinite verb, nominal object, and > 2-word PP or AdvP.
  - For every clause where focus could be determined, I coded whether the DP object was in focus or whether the vP/VP (or something else) was in focus.

Results from the PCEEC

Nathaniel Bacon

- HNPS: N = 21
- In Situ: N = 119

Anne Conway

- HNPS: N = 10
- In Situ: N = 76

\[ \chi^2 = 6.9 \text{ on 1 df, } p = .008 \]

\[ \chi^2 = 3.3 \text{ on 1 df, } p = .06 \]
4. Diachronic Quantitative Experiment

- **Topic/Focus analysis of HNPS**: movements to clausal left-periphery.
  - **Prediction 1**: Changes in structure of IP/TP and vP have no obvious consequences for HNPS.
  - Therefore, all other things being equal, diachronic stability is predicted.
  - The English change from **Tense/Infl-final structure to Tense/Infl-medial** (Old English through Early Middle English) should have no effect, and neither should the change from **OV to VO** in the vP structure (Middle English through Early Modern Eng.).

- **Rightward adjunction analysis**: right-adjoint to available maximal projections.
  - **Prediction 2**: The measurable frequency of HNPS should increase from Old English through Early Middle English, and then fall back to the Old English frequency by Early Modern English.

**Prediction 2, Continued**

- In a classical symmetric syntax with rightward movement, vP and TP are possible adjunction sites for HNPS.
- However, in Tense-final languages interruption of the verb cluster by adjunction to vP is disallowed (Pintzuk 1991, Kiparsky 1996) for some independent reason (e.g. a PF filter).
- Therefore, while the HNPS rule targets 2 adjunction sites, only 1 ever surfaces: right adjunction to TP.

**Prediction 2, Continued**

- Once the language changed to Tense-medial and OV, the filter no longer applies: vP and TP adjunction should both be observed.
- The language changes to VQ, HNPS is string-vacuous unless it applies across adjuncts, which are frequently TP-adjoined: mostly TP adjunction will be observed.
Prediction 2, Continued

- Once the language changed to Tense-medial and OV, the filter no longer applies: vP and TP adjunction should both be observed.
- The language changes to VO, HNPS is string-vacuous unless it applies across adjuncts, which are frequently TP-adjoined: mostly TP adjunction will be observed.

Tense-final Old English: 0.140
OV Middle English: ???
Modern English: 0.139

OV and HNPS in Purpose Infinitives

- P(SurfaceVO), P(SurfaceOV): Estimated from nominal, non-quantified objects in purpose infinitival clauses.
- P(UnderlyingVO), P(UnderlyingOV): Estimated from pronominal objects in purpose infinitival clauses.

\[
P(\text{SurfaceVO}) = P(\text{UnderlyingVO or UnderlyingOV and HNPS})
\]
\[
= P(\text{UnderlyingVO}) + P(\text{UnderlyingOV and HNPS})
\]
\[
= P(\text{UnderlyingVO}) + (P(\text{UnderlyingOV})P(\text{HNPS}))
\]

\[
P(\text{HNPS}) = \frac{P(\text{SurfaceVO}) - P(\text{UnderlyingVO})}{P(\text{UnderlyingOV})}
\]

Tense-medial OV Middle English

- It has not been possible to calculate the rate of HNPS for ME directly.
- There are nearly no Tense-final clauses in Middle English (Pintzuk & Taylor 2005)
- Clauses containing an OV diagnostic and a nominal object are too rare.

- Estimating the frequency of OV independently from pronominal objects would allow a comparison with surface OV with nominal objects, but the cliticization of pronominal objects to pre-Tense position (Pintzuk 1996) obscures both OV and VO (Wallenberg 2009).
- Fortunately, purpose infinitival clauses do not allow pronominal objects to cliticize out of them (no examples in PPCME2); they are adjunct islands to extraction.
- And under the assumption that they do not have any kind of verb movement to a Tense head, they should reflect OV and VO.

<table>
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<tr>
<th>Text</th>
<th>OV pronouns</th>
<th>VO pronouns</th>
<th>Total</th>
<th>Freq.</th>
<th>OV DPs</th>
<th>VO DPs</th>
<th>Total</th>
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</table>
OV and HNPS in Purpose Infinitives

Conclusions

- It is possible to provide a unified analysis of HNPS across both OV and VO Germanic varieties, and diachronically within English (at least).
- The antisymmetry hypothesis does not make this task harder, but rather, suggests a straightforward analysis.
  - The new antisymmetric analysis only uses structures which have independent motivation from the Celtic complementizer system and the Hungarian focus system.
  - It makes correct predictions about, e.g., parasitic gaps and information structure.
- However, rightward movement makes the correct diachronic prediction. In fact, an odd prediction, which is borne out with remarkable accuracy.
- Preliminary results show a similar increase in HNPS for Yiddish in Tense-medial OV clauses. Old Icelandic also went through Tense-medial OV stage; replicate? (Using the Icelandic Parsed Historical Corpus (IcePaHC))

Open Question for Further Research

- Clearly HNPS is associated with focus on the “shifted” object.
- However, in both the Bies (1993) corpus study of Early New High German and in my corpus study of Early Modern English, there is a non-trivial residue of cases where HNPS has applied but the primary focus is on the vP, not the object.

For comments on this ongoing research, I am especially grateful to Anthony Kroch and Ian Roberts, as well as Elisabet Engdahl, Richard Kayne, and other attendees at the recent CGSW in Tromsø.

Thank You!

(BACON,II,255.288.4941)


