1. Introduction

Although it has been noticed from time to time in the literature that unstressed pronouns in English show some syntactic behavior that is not shared by their full DP counterparts, these differences have not yet been studied and accounted for in a systematic way. This is not particularly surprising, as the special behavior of English pronouns is confined to only a few contexts, and so very few clues are provided to the analyst about the underlying processes involved (in contrast to, e.g., pronoun scrambling in German or Dutch). But this is only the case if we confine ourselves to data from the modern language. It is possible to learn a great deal more, however, by taking a broader, historical perspective of the phenomenon. With the help of corpus data from earlier stages of English, I will argue that the exceptional syntax of modern English object pronouns actually results from their status as “weak pronouns”, in the sense of Cardinaletti & Starke (1999), and their ability to undergo “Object Shift” of the Scandinavian type (Holmberg 1986, Holmberg 1999, inter alia). However, object shift is severely restricted in the modern language by a combination of Holmberg’s Generalization and an independent, but intersecting, phenomenon: the loss of movement of main verbs to Tense in the overt syntax. In this way, English is not the odd language out in Germanic, but rather patterns with the rest of the family in having a leftward movement process that applies to its unstressed object pronouns. It just so happens that this object shift is not very easy to see, because it has been obscured by the loss of V-to-T movement. In fact, when one controls for this change in verb movement, it becomes apparent that English object shift has been remarkably stable over time during the history of the language.

In the first section below I present some examples of the special syntax of weak object pronouns in modern English, and provide an analysis in terms of object shift and phrasal affixation. Section 3 discusses the history of object shift in English, which supplies further evidence in favor of the object shift analysis of modern English, using two parsed corpora of early English: the Penn-Helsinki Parsed Corpus of Middle English (“PPCME2”, Kroch & Taylor 2000b) and the Penn-Helsinki Parsed Corpus of Early Modern English (“PPCEME”, Kroch et al 2004). Finally, I offer some conclusions in Section 4.

2. Weak pronouns in modern English

In this section, I will argue that the facts about the syntax of English unstressed object pronouns are best understood by taking them to be deficient, or weak pronouns in the sense of Cardinaletti & Starke (1999): they are phonologically weak, leaning leftward on a (verb) host if possible, and they obligatorily move from their base (theta) positions. As Cardinaletti & Starke (1999: 170) point out, however, weak pronouns are not true clitics in that they are not heads. They are still phrasal, and as such, they can adjoin to maximal projections as “phrasal affixes” (cf. Klavans 1985). I suggest that the Scandinavian “object shift” phenomenon (Holmberg 1986) is a subtype of weak pronoun movement with phrasal affixation, and that the behavior of English pronouns is also an instance of object shift. As such, the leftward movement of English pronouns is expectedly constrained by the position of their theta-assigning verb, according to Holmberg’s Generalization: they cannot move leftward to any

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*I would like to thank Anthony Kroch in particular, for constant help and discussion on all the these issues, as well as Don Ringe and David Embick for many helpful discussions. Many students at the University of Pennsylvania also deserve my thanks, and I would like to thank Marjorie Pak in particular for a number of good suggestions. And thanks to Jean-Francois Mondon for proofreading. All errors are, of course, my own.*

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Cascadilla Proceedings Project
Completed March 17, 2008
The landing sites of weak pronoun objects are also sites that are in the extended projection of the verb, e.g. TP, vP; in other words, the sites of phrasal affixation should form a natural class, as in the “landing sites” theory of Baltin (1982). In Scandinavian, it is easy to observe the leftward movement of pronoun objects because the finite verb moves leftward to T (in all clauses in Icelandic) or to C (in matrix clauses in the mainland Scandinavian languages), and so object pronouns frequently shift across negation, adverbs, and other elements inside the vP. In English, on the other hand, non-auxiliary verbs do not move any farther left than little-v, even if they are finite. This makes object shift even more restricted in English than it is in Scandinavian, and much harder to observe. However, there are still a few constructions which hint at the presence of object shift and the existence of weak pronouns in modern English.

The most obvious of these constructions is the well-known verb-particle alternation, which is illustrated in (1) and (2) below:

1. The poodle ate my supper up.
2. The poodle ate up my supper.

Unstressed pronouns, unlike full DP objects, do not participate in this alternation, as the two sentences below demonstrate.

3. Irene threw it out.
4. *Irene threw out it.

The order in (2) and (4) is not available to pronouns unless they are contrastively stressed, as in (5), and it is not available at all to pronoun objects that cannot be stressed, such as it in (4) above, or the weak form of the 3pl object pronoun, 'em, as in (6) and (7) below.

5. I didn’t pick up HIM, I picked up HER!
6. I threw ’em out.
7. *I threw out ’em

Note that the 3pl pronoun also clearly has a distinct phonological form for its weak version which is not the product of general phonological rules (though the same might be true of ’im and ’er for him and her, which are also restricted as in 7); having a special form associated with a special syntactic position is characteristic of the weak pronouns discussed in Cardinaletti & Starke (1999), as well as the Swedish and Norwegian object-shifting pronouns in Hellan & Platzack (1995).

Following Svenonius (1996; see also den Dikken 1995 for a similar proposal), I will assume that the particle and object form a small clause complement to the verb, with the particle as a PP predicate of the small clause, as in (8).

8. The poodle ate [SC [DP my supper] [PP up]]

However, the particle is simultaneously minimal and maximal (P and PP), and is able to undergo a short movement to a head (called Pred in Svenonius 1996) at the left of the small clause, as in (9):

9. The poodle ate [PredP up i-Pred [SC [DP my supper] [PP/P t i]]]

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1. A complete analysis of the constraint active in Holmberg’s Generalization is clearly beyond the scope of this article. For the purposes of this study, I assume that the final surface-structure landing site of the verb creates a barrier to further leftward movement of weak object pronouns. For some proposals, see Holmberg (1999), Fox & Pesetsky (2005), references therein, and the reviews of the Fox & Pesetsky (2005) in the same volume.

2. Whether or not this movement of the particle is truly head-movement is not crucial to the analysis presented here. The key point is that the particle undergoes a short movement to the left periphery of the small clause. Similarly, it is not necessarily the case that the Pred head is present both in the order in (8) and in the order in (9), though Svenonius does assume this (i.e., it may actually be absent in the type of sentence in 8).
This derives the two verb-particle orders with DPs. Weak object pronouns, on the other hand, do not alternate with particles, because they must move from their base positions (as in Cardinaletti & Starke 1999) and left-adjoin to a maximal projection associated with their theta-assigning verb. At this point, it’s necessary for me to say a bit more about the structure of the verb phrase. As in Embick & Noyer (2001) and other proposals in the Distributed Morphology framework, I assume that the traditional “VP” is composed of a vP, headed by a functional verbalizing head v, which takes as its complement a RootP (this projection corresponds to the “VP” in many Minimalist proposals). The RootP is headed by the lexical “verb”, which is in fact category-neutral, and must therefore move out of the RootP by head movement to incorporate with the v head and become verbalized. Thus we can more fully articulate the structure in (9) as (10) below:

(10) The poodle \[ \text{VP ate} \ \text{v} \ \text{RootP t} \ \text{PredP up} \ \text{Pred SC DP my supper} \ \text{PP/P t} \ ]]])

It is now clear what the effect of object-shifting a weak object pronoun will be for this structure. Because a weak pronoun, like it, cannot remain in its base position in the small clause, it must move to left-adjoin to some projection of the verb. However, it cannot cross the final landing site of the verb at v, as per Holmberg’s Generalization. Therefore the only landing site available to the object pronoun is RootP. For this reason, the unstressed, unfocussed pronouns will always appear to the left of the particle, whether or not the particle movement has applied. This is shown in the two possible structures for (11), in (12) and (13) below.

(11) The poodle ate it up.
(12) The poodle \[ \text{VP ate} \ \text{v} \ \text{RootP it} \ \text{RootP t} \ \text{PredP Pred SC DP it} \ \text{PP/P up} \ ]]])
(13) The poodle \[ \text{VP ate} \ \text{v} \ \text{RootP it} \ \text{RootP t} \ \text{PredP Pred SC DP it} \ \text{PP/P t} \ ]]])

This adjunction to the RootP also licenses the appearance of weak object pronouns in the simple case, sentences without particles. That is, when a verb takes a single object, it is possible for that object to be a weak pronoun, as in (14) below, because of the presence of the vP and RootP projections; the result does not become ineffable. Of course, the leftward movement is string-vacuous in this case:

(14) The poodle ate {his supper / my socks / the woman / the man}.
(15) The poodle ate {it / ’em / ’er / ’im}.
(16) The poodle \[ \text{VP ate} \ \text{v} \ \text{RootP ’em} \ \text{RootP t} \ \text{PredP up} \ \text{Pred SC DP it} \ \text{PP/P t} \ ]]])

And in (15), the weak pronouns avoid the sentence-final intonational peak that falls on the object in (14) because they are leftward-leaning phonologically, and can form a prosodic word with the verb, thereby forcing the intonational boundary tone to fall on the verb (i.e. the first syllable of the verb+pronoun phonological complex). Again, this is similar to the Swedish and Norwegian object-shifting pronouns, which are syllabified with the verb when they immediately follow it (Hellan & Platzack 1995). Additionally, a nice result of this analysis of verb-particle constructions is that it formalizes the astute observation in Rögnvaldsson (1982) that English particle shift and Scandinavian object shift appear to be parallel and are probably related.

With the analysis above, it is now also possible to understand a peculiar aspect of the English double-object construction. Larson’s study (1988: 364) noted that it is not possible for the direct object of a double-object sentence to be an unstressed pronoun if the indirect object is a full DP, as in (17).

(17) * John gave the boy it.

It is, however, possible for the indirect object to be a pronoun when there is full DP direct object, as in (18), or for both objects to be pronouns, as in (19):

(18) John gave him the book.
(19) John gave him it.
Note that this effect cannot be analyzed as purely the result of a phonological requirement for the unstressed pronoun to be adjacent to the verb. In (20), the sentence is grammatical even though the unstressed pronoun is not adjacent to the verb, by virtue of the fact that the pronoun is inside a QP.\(^3\)

(20) John had no money left, because he’d given the boy it all.

Therefore, the effect in (17) must be the result of a syntactic property the pronoun has when it occurs alone, rather than because of some surface phonological constraint. I would suggest that this syntactic property is the requirement that weak pronouns leave their theta positions. If we adopt a Larsonian VP-shell analysis for the double-object construction of the type proposed in Harley (2002), and then transpose it into the theory of the vP that I sketched out above, then the structure of the vP in (17) would be as below.

(21) [Diagram of VP structure]

In this type of shell analysis, ditransitives such as *give* are semantically decomposed in CAUSE and HAVE predicates, and so there is a recursive RootP here for *give*. CAUSE and HAVE then compose in the syntax via head-movement, and then become verbalized by moving again to incorporate with v. The weak pronoun *it* must leave its base position to adjoin to one of the RootPs. However, it cannot move to the lower RootP to derive *gave it the boy* because of an independent constraint which prevents it from moving across the direct object *the boy*. It is beyond the scope of this paper to provide a full discussion of the nature of this constraint, but Bobaljik (2005: 123-4) has shown that the constraint is independent of the other workings of object shift. He points out that languages can differ on whether or not this constraint applies, since some Swedish and Norwegian speakers can object shift a direct object over the indirect, as in (22), while Danish does not.

(22) Jag gav den inte honom.
    I gave it not him.
    “I didn’t give it to him.”

Furthermore, Norwegian also allows the passivization of a direct object over an indirect ("symmetric passives"), while Danish does not, and so this constraint on movement in double-object constructions is clearly an independent principle of the grammar. Also, note that Early Modern (British) English did allow shifting of a direct object over an indirect, as in (23), unlike modern American English; there are 6 such examples in the PPCEME, and no examples parallel to (17), with an in situ direct object pronoun. Not surprisingly, Early Modern English also allowed symmetrical

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\(^3\) It is true, however, that *it* still sounds most natural when immediately adjacent to the verb and parsed with it phonologically.
passives, as in (24), whereas this is not possible in modern American English; 14/129, or 10.9%, of the
ditransitive passives in the PPCEME are of this type.

(23) I think he will carry this island home in his pocket, and give it his son for an apple.
(Shakespeare, The Tempest, II, i, 92-93)
(24) ...and those were sent a Friend of mine for a present.
(Elizabeth Oxinden, The Oxinden and Peyton letters,
EOXINDEN-1 660-E3-H,308.10 in the PPCEME, date: 1642-1670)

For languages like Early Modern English or Swedish, the weak pronoun in (21) can indeed move
to left-adjoin to the lower RootP. However, for modern English, it can only move to the lower RootP if
the indirect object has also moved, to adjoin to the higher RootP. This is the derivation of the John
gave him it in (19). And, trivially, if the higher object is a weak pronoun and the lower one is not, it
moves to adjoin to the higher RootP, deriving the pattern in (18). The sentence in (23) is also a
particularly good example of this context for object shift, because there is an auxiliary in the clause,
will, and so give cannot have moved to Tense to license the shifting of it over his son. This shows
unambiguously that object shift operated in English even in the absence of verb-movement to T.

Finally, there is another construction that indicates the presence of two sets of object pronouns in
English with different syntax, one strong, the other weak. It is a very colloquial construction with an
ancestry dating back to the Old English case-marking system, which I will refer to as the dative-
benefactive construction. It occurs in sentences like (25), which involve a non-reflexive object
pronoun that is nevertheless coreferential with the subject of the clause.4 (25) corresponds to the
standard English I’m going to get myself a beer.

(25) I’m gonna get me a beer.

This construction is interesting in that the object pronoun is restricted to be of the strong, stressed
variety. The weak pronouns are not available in this construction under the interpretation in which the
object pronoun is coreferential with the subject, as one can see in the contrasts below.5

(26) They’re gonna get them a new car.
(27) * They’re gonna get’em a new car.
(28) They’re gonna get’em a new car.

Similarly:6

(29) He needs to get him a new car.
(30) * He needs to get’im a new car.
(31) He needs to get’im a new car.

The fact that this construction requires the strong versions of the English pronouns is further
confirmation that their syntactic distribution is not precisely the same as that of the weak pronouns.
And under an interpretation other than the dative-benefactive, there is nothing preventing the weak
pronouns from appearing in what is otherwise the same syntactic position, as in (28) and (31). Zwart
(1996: 584) makes the same argument for Dutch on the basis of a similar type of reflexive

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4 This apparent binding violation probably shows that this construction is a retention from a time in the history of
the language before reflexive pronouns developed.
5 Several native speakers of American English agreed on the judgments above, and they also represent my own
judgments. This construction is nonstandard and stigmatized in the U.S., so it is not particularly easy to get clear
judgments on it. However, all of the speakers I have questioned (5/5, not including myself, and including one
Texan speaker from a core area of this construction) who accept (25) and (27) also agree with the remainder of the
judgments.
6 Thanks to Marjorie Pak for pointing out the parallel facts with regard to him vs. ’im in (29)-(31).
construction, which is restricted to the weak, rather than the strong set of object pronouns. An example is in (32) below:

(32) Jij schaamt {je / *jou}.

“You’re ashamed”

3. Evidence from historical English: what doesn’t change, doesn’t change.

The analysis above becomes more plausible in light of diachronic data, which shows object shift to be highly stable over time. Verb movement, on the other hand, becomes more restricted over time in English, as overt movement of the verb to T is gradually lost and do-support enters the language, beginning around the year 1400 (Kroch 1989). Consequentially, examples of object shift become more and more rare over time, as the leftward movement of the object pronoun is bounded by the position of the verb to its left (Holmberg 1986). However, it is possible to show that the object shift rule is statistically stable even as verb movement is in flux, by looking at clauses which contain some element that is both diagnostic for verb movement and for the leftward movement of object pronouns. Once the verb-movement parameter is controlled for, the statistical study shows that object shift never really changed in English, and minus any other interfering factor, it should still be present in the language today.

Middle English and Early Modern English still showed a large amount of V-to-T movement with finite main verbs, and so it is not difficult to find unambiguous examples of object shift. Although leftward shifting of the pronominal object was still bound by the position of its licensing verb, finite main verbs appeared in T, and so the object was able to shift leftward past sentential negation and adverbs, in the modern Scandinavian way; compare the modern Icelandic sentence in (33) to the Middle English sentence in (34) and the Early Modern English sentence in (35) (the shifted object pronouns are in boldface):

(33) að þær lásu hana ekki.

that they read her not

“that they didn’t read it” (Hellan & Plat Zack 1995: 53)

(34) Whi telles tu mi rihuisnes wid þi muz, and dos it noht?

Why tell you me righteousness with the mouth, and does it not

“Why do you talk to me about righteousness but don’t do it?”

(The Northern Prose Rule of St. Benet, CMBENRUL.5.152 in PPCME2, date: 1425)

(35) but if thy conscience condemne thee not, I thinke thy sinne one of the least sinnes;

(Henry Smith’s A preparative to mariage, SMITH-E2.H,E7R.311 in PPCEME, date: 1591)

In all three sentences, the verb has moved to T, and the object has also moved from its base position, appearing to the left of negation. Note also the late date of the example in (35).

Earlier stages of English also allowed another type of object shift, in which a verb has moved higher in the structure to C, and an object pronoun has consequently shifted further leftward to a position higher than T. This V-to-C movement lands the verb in a position that is higher than, and so to the left of, the subject in Spec(TP), and also licenses the further shifting of an object pronoun past the subject, as shown in (36) and (37):

(36) ne set me neauner na þing se luðere ne se sare.

NEG oppressed me never no thing so painful nor so sore

“Nothing ever oppressed me so painfully or so sorely.”

7 Of course, this discussion only refers to VO clauses, in which the verb to the immediate left of the object will always be a non-auxiliary verb, the which assigns a theta-role to the object. However, as Kroch & Taylor (2000) have shown, Middle English contained a mixture of underlyingly OV and VO clauses. It is beyond the scope of this paper to discuss the interaction between the change from OV to VO in English and object shift, but this will be the topic of future publications.
(37) Then answered them the Pharisees, Are ye also deceived?
(The Holy Bible Authorized Version, AUTHNEW-E2-H.VII.40J.968 in PPCEME date: 1611)

Both (36) and (37) involve well-established V-to-C triggers in historical English (cf. Kroch & Taylor 1995 and Kemenade 1987: 138-9): (36) has a negated verb with prefixed negation (which was common in Old English and found in the more conservative ME dialects), and (37) contains the trigger “Then” in Spec(CP). In (36), the object pronoun *me* has moved not only past the subject *na þing*, but also past the clausally-adjoined adverb *neauer*. Incidentally, this type of example also provides an argument that object-shifted pronouns are adjoined to maximal projections: the only possible position for the pronoun in (36) is left-adjoined to the TP just as *neauer* is, under the standard assumption that it is not possible for a pronoun to be right-adjoined to a head via head-movement (cf. Kayne 1991, Kayne 1994). The pronoun *them* in (37) has similarly shifted to a position preceding the subject *The Pharisees*. And again, note the late date of the example in (37), contrasting with the early date of the example in (36). The latter also occurs in a text from the conservative Middle English dialect area in the Southeast of England (cf. Kroch & Taylor 1995, 2000). Finally, this analysis of these examples, as involving a type of object shift under V-to-C movement, is confirmed by the fact that this same phenomenon is found in modern Swedish; it is called “long-object-shift” in Josefsson (1992) and Hellan & Platzack (1995). Compare the English examples above to the Swedish one below:

(38) Igår kammade sig Erik inte på hela dagen.
Yesterday combed self Eric not on whole day
(Hellan & Platzack 1995: 58)

The examples above in (33)-(37) serve to illustrate the two diagnostic contexts, sentential negation and the position of the subject, which allow us to estimate the frequency of object shift in the various stages of English. When the negation context is restricted to clauses in which the finite verb appears to the left of negation, it becomes diagnostic for V-to-T movement as well. Similarly, the long-object-shift context only includes clauses in which a finite main verb has inverted with the subject, and so the verb must have undergone V-to-T-to-C movement. In this way, it is possible to factor out the effect of the historical change in verb-movement, holding that parameter constant across the time variable. The chart below plots the frequency of object shift across negation (i.e., the string *finite-V > object-pronoun > neg* vs. the *finite-V > neg > object-pronoun* order), as well as the frequency of long-object-shift across a full DP subject, out of all the relevant clauses containing inversion of the subject and a finite verb (*V > obj-pron > sbj* vs. *V > sbj > obj-pron*). The time period over which the frequencies are plotted begins in the 12th century, in Early Middle English, and ends at the end of the Early Modern English period in the 18th century. As the chart below shows, the frequencies are essentially stable over more than five centuries, and in both object shift contexts, the shifted order is consistently preferred over the in situ order.
If anything has changed at all over this time period, it is that object shift actually becomes somewhat more frequent in the Early Modern English period, after 1500, though it is also possible that this effect is merely an artifact of the small number of examples that the later frequencies are based on. As one can see in the tables below, the N for both object shift contexts drops off as one goes forward in time, even though the frequency of object shift remains nearly constant. This shows that the syntax of object shift in English remains unchanged even as the loss of V-to-T movement goes to completion. And, of course, the loss of V-to-T movement bleeds movement of the main verb to C as well, and so the long-object-shift context also eventually disappears (to be replaced by do-support, as shown in Kroch 1989 and Kroch & Han 2000).

Table 1:
Object-Shift of Object Pronouns Past NEGation in Middle English and Early Modern English, matrix and subordinate clauses containing finite main verbs

<table>
<thead>
<tr>
<th></th>
<th>V &gt; pron-Obj &gt; NEG</th>
<th>V &gt; NEG &gt; pron-Obj</th>
<th>TOTAL N</th>
<th>% object shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>early ME (pre-1350)</td>
<td>43</td>
<td>2</td>
<td>45</td>
<td>95.56%</td>
</tr>
<tr>
<td>late ME (post-1350)</td>
<td>165</td>
<td>25</td>
<td>190</td>
<td>86.84%</td>
</tr>
<tr>
<td>1500-1569</td>
<td>69</td>
<td>7</td>
<td>76</td>
<td>90.79%</td>
</tr>
<tr>
<td>1570-1639</td>
<td>114</td>
<td>8</td>
<td>122</td>
<td>93.44%</td>
</tr>
<tr>
<td>1640-1710</td>
<td>15</td>
<td>0</td>
<td>15</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Table 2:
Long-Object-Shift of Object Pronouns past DP Subjects in Middle English and Early Modern English, matrix and subordinate clauses containing finite main verbs

<table>
<thead>
<tr>
<th></th>
<th>V &gt; pron-Obj &gt; Sbj</th>
<th>V &gt; Sbj &gt; pron-Obj</th>
<th>TOTAL N</th>
<th>% long-OS</th>
</tr>
</thead>
<tbody>
<tr>
<td>early ME (pre-1350)</td>
<td>22</td>
<td>13</td>
<td>35</td>
<td>62.86%</td>
</tr>
<tr>
<td>late ME (post-1350)</td>
<td>31</td>
<td>16</td>
<td>47</td>
<td>65.96%</td>
</tr>
<tr>
<td>1500-1569</td>
<td>12</td>
<td>0</td>
<td>12</td>
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<td>1570-1639</td>
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<td>3</td>
<td>100.00%</td>
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<tr>
<td>1640-1710</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

The ultimate effect of the loss of V-to-T movement on object shift is to cause object pronouns to be trapped below v by the Holmberg’s Generalization constraint, as their theta-assigning main verbs no longer move any farther than v in the modern language. But the diachronic stability of object shift, even into the late period when V-to-T movement had already been mostly lost, suggests that the syntax of object shift in English never really changed at all.

4. Conclusion

This paper has argued that there are two sets of pronouns in English: one stressed set, and one deficient or weak set. This study has further shown that the two are distinguished by different syntax, and that the exceptional syntax of the weak pronouns may be observed throughout the recorded history of the language. This diachronic continuity, as well as the syntactic patterns themselves, shows English to be more alike to the rest of the Germanic family than different from it in its pronominal system and its constraints on pronoun scrambling. In particular, English pronouns undergo object shift just as Scandinavian pronouns do, modulo the effect of a different verb-movement system. In future research, I hope to more fully investigate the characteristics of object shift in historical English and historical Scandinavian, as well as the interaction between Holmberg’s Generalization and changes in the structure of the verb phrase in this set of closely-related languages. While there is certainly much more to do on these and related topics, I hope this study has proved a first step in giving a unified account to scrambling processes across Germanic.
References: