The information structure of subject extraposition in Early New High German
Caitlin Light (University of Pennsylvania)

This paper investigates the information-structural characteristics of extraposed subjects in Early New High German (ENHG), using data from a parsed corpus of Martin Luther's first translation of the New Testament, the *Septembertestament*, 1522. The corpus was hand-parsed by the author according to the parsing guidelines followed by the Penn Parsed Corpora of Historical English, with some minor modifications for use with German. Relevant examples have been automatically extracted from this corpus and manually coded for information including the focus structure of the clause and the discourse status of (potentially) extracted subjects. I will argue that unlike objects, subjects in ENHG have two motivations for extraposing. First, subjects may extrapose in order to receive narrow focus, which is the pattern Bies (1996) has shown for object extraposition in ENHG. Secondly, however, subjects may extrapose in order to receive a default sentence accent, which is most visible in the case of presentational focus. This motivation does not affect objects, which may achieve the same prosodic goal without having to extrapose.

This paper is roughly based on a theory of information structure as in Vallduví (1992), in which every sentence is divided into a focus-ground partition, and every sentence has only one information-structural focus. I assume that any constituent (and possibly some non-constituents) may be the focus of a sentence. I use the term 'narrow focus' to describe a DP which is, in itself, the sole focus of a clause (that is, neither part of the ground, nor part of a larger focused constituent). The term 'narrow focus' in this sense quite broad. A subset of narrowly focused DPs are then described by the term 'presentational focus,' which describes the type of focus which introduces a new entity into the discourse (it has in other works been described by the term 'new information focus'). Other narrowly focused DPs may be interpreted as other types of focus, for example contrastive focus, which will not be discussed in detail in the current paper.

Bies (1996) provides a detailed analysis of the information structure of DP extraposition, based on a corpus of examples collected from ENHG texts. She considers two possible motivations for extraposition, discourse newness and narrow focus on the DP. Before considering discourse factors, however, Bies identifies external influences on DP extraposition; first, quantified and indefinite objects are much less likely to extrapose. Second, DP length (or 'weight') also strongly influences extraposition (Bies 1996).

Based on these observations, Bies restricts her data set to non-quantified DPs of 'regular length' (that is, without PP modifiers, relative clauses or conjunction). She also excludes topicalized and scrambled objects from the set of non-extraposed DPs, assuming that they represent unrelated information structural phenomena. Bies then separates her (restricted) data set into three informational categories: discourse-new, evoked/inferred, and given information, adapted from a broader hierarchy of information types in Prince (1981). She observes a gradient relationship between newness and extraposition (Table 1).

Table 1. Discourse status of extraposed objects in ENHG (Bies 1996).

	Postposed	Non-postposed	Rate of postposing
Given	11	100	10%
Evoked/Inf.	37	81	31.4%
Disc.-new	16	21	43.2%
Total	64	202	24.1%

She then asks: is this the main discourse motivation for DP extraposition, or a symptom of it? Bies suggests that discourse-newness of a DP may contribute to its likelihood of being narrowly focused: discourse-new elements often are the focus of a sentence. She suggests the relationship between discourse-newness and extraposition is simply a consequence of the fact that these elements are more likely to be narrowly focused. To explore this alternate hypothesis, she further classifies her sentences into (narrow) DP focus and (wide) VP focus, wherever context allowed an unambiguous classification (Table 2). The effect of narrow focus is stronger than that of information status. Bies therefore concludes that narrow focus in a general sense motivates object extraposition in ENHG.

Table 2. Focus structure of clauses with an extraposed object in ENHG (Bies 1996).

	DP focus	VP focus	Percent DP focus
Non-postposed DP	19	123	13.4%
Postposed DP	46	4	92%

Prince (1989) demostrates that there is a unique phenomenon of 'subject postposition' in Yiddish, which (unlike DP extraposition in ENHG) specifically targets discourse-new DPs. Considering a dataset extracted from a Yiddish text, she finds that in certain subordinate clause types, brand-new subjects are highly motivated to postpose. My goal in this study is to determine whether ENHG had a single general rule of DP extraposition, or whether subject extraposition demonstrates an information-structural pattern distinct from object extraposition in ENHG.

From the *Septembertestament* corpus, I extracted all unambiguous examples of extraposed subjects, using clause-final verbs and verbal particles as diagnostics. I found 76 such examples, all of which were coded for definiteness, syllable length, and discourse status of the subject (based on Bies's classifications). I also coded the examples for focus structure using a binary measure: either (1) they had narrow focus on the extraposed subject or (2) they had a focus structure of another type (I did not code in more detail in this case). These were compared to 864 examples of subjects that could have been extraposed but were not (this excludes pronominal subjects and demonstrative determiners, which cannot extrapose). Each of these tokens was coded for syllable length and the definiteness of the subject. Different sub-samples of this set were isolated for the consideration of the pragmatic and information-structural characteristics of subject extraposition, which will be discussed shortly.

In the sample collected, subject extraposition occurs at an overall rate of 8.1%. This is lower than the rate of object extraposition described in Bies (1996), 13.2%. As Bies showed for object extraposition, weight proved to be a strong influence on subject extraposition (I deviate from Bies in measuring DP weight by syllables, rather than by modifier presence and type). For extraposed subjects, the minimum weight was 2 syllables, while the maximum was 64 (due to a sequence of embedded clauses within the DP). The average weight of extraposed subjects was 13.07 syllables, while the average weight of non-extraposed subjects was only 3.29 syllables. To minimize the effect of DP weight on the sample, I chose to limit my sample to subjects of 15 syllables or less. The adjusted sample includes 56 extraposed subjects and 862 non-extraposed subjects, or extraposition at a rate of about 6.1%.

The consideration of definiteness exposes a striking difference between subject and object extraposition: quantified/numeric subjects are extraposed more, and definite subjects less frequently. This is true of the entire sample regardless of weight; Table 3 shows the distribution of subject types for the full sample of clauses. However, note that the sample contains no extraposed negated subjects.

Table 3. DP types of extraposed subjects in ENHG.

	Non-extraposed	Extraposed	% Extraposed
Negative	25	0	0.0%
QP/Numeric	45	9	16.67%
Indefinite	76	1	1.3%
Bare	7	12	36.84%
Free rel.	11	23	32.35%
Definite	700	31	4.24%
Total	864	76	8.09%

I then compared the discourse status of all extraposed subjects to all non-extraposed subjects in matrix clauses only (for purposes of examining a smaller subset of the data). As Bies found for object extraposition, discourse-new or presentational subjects extrapose much more frequently (Table 4). 23 (41.1%) of all extraposed subjects in the sample are discourse-new. Another 15 (26.8%) are of the evoked/inferrable category. The other 18 (32.1%) are given. In the sample of matrix clauses, 59 (13.26%) of non-extraposed subjects are discourse-new. 133 (29.89%) are evoked/inferrable. 253 (56.85%) are given.

Table 4. Discourse status of extraposed subjects in ENHG.

	Non-extraposed	Extraposed	% Extraposed
Discourse-new	59	21	26.25%
Evoked/Inf.	133	9	6.34%
Given	253	12	4.53%
Total	445	42	8.6%

The 56 clauses with extraposed subjects were then compared to a randomly selected sample of 60 clauses with non-extraposed subjects, for a detailed consideration of the focus structures of these groups. An example of an extraposed subject coded for narrow focus is given in (1). Note that the extraposed subject contains the focus particle *auch*, making the focus structure particularly clear.

(1) denn es werden falsche Christi, vnd falsche propheten auff stehen, vnd grosse tzeychen
for it will false Christs and false prophets up stand and great signs
vnd wunder thun **das verfuret werden, yhn denn yrthum wo es muglich**
and wonders do that misled will.be in the confusion where it possible
were auch die auserweleten.
would.be also the chosen
'For false Christs and false prophets will come forward and perform great signs and wonders, so that in the confusion, where possible, even the chosen will be misled.'
(*Septembertestament*, Matthew 24:24)

Extraposed subjects are narrowly focused more often than non-extraposed subjects (Table 5). However, whereas Bies found that 92% of extraposed objects were narrowly focused, only 62% of subjects are. I therefore reject the hypothesis that subject extraposition is driven solely by narrow focus as a broad category.

Table 5. Focus structure of clauses with extraposed subjects in ENHG.

	Narrow S-foc.	Other foc.	% Narrow foc.
Extraposed	31	19	62.0%
Non-extraposed	4	41	8.9%
Total	35	60	36.8%

As the data show, there are some ways in which subject and object focus pattern similarly; for example,many extraposed subjects involve narrow focus on an extraposed definite object, as (2) demonstrates; note that two contrastive subjects have been extraposed in two separate clauses. I argue that in cases such as these, subject and object extraposition do in fact have the same motivation: narrow focus on the DP.

(2) vnnd eynem gab er funff centner, dem andern zween, dem dritten eyn, eynem ydern
     and one   gave he five talents the other two   the third   one one   each
     noch seynem vermugen vnd zoch hynweg . . . **vnd da tratt ertzu, der da   funff**
     after his   ability   and went away . . . and then tread forward who PART five
     centner empfangen hatte . . . **Do   trat auch ertzu, der do   zween centner**
     talents received   had . . . Then tread also forward who PART two   talents
     empfangen hatte . . .
     received   had . . .
     'And he gave five talents to one, two to another, one to the third, each according to his ability, and went away . . . and then the man who had received five talents came forward . . . Then also, the one who received two talents came forward . . . '
     (*Septembertestament*, Matthew 25:15–22)

However, the frequencies at which quantified subjects extrapose, as well as discourse-new/presentational subjects, makes this look more like Yiddish, where the discourse status of the subject plays a more important role. Therefore, I will argue that subject extraposition in ENHG can also be motivated by a more specific type of focus.

In German, the sentence accent generally falls on the rightmost argument of the VP by default, even if followed by a clause-final non-finite verb or verbal particle (see Ladd 1996; Truckenbrodt 2007, for a summary of the literature on this). As a result, object DPs may generally receive default sentence accent *in situ*. Scrambling of other elements can help to situate a non-topicalized DP at the right edge of the 'middle field,' so that it may be in the rightmost position and receive the default accent. Because this is permitted, extraposition of object DPs may be expected to have more specific motivations than simply to obtain default accent; this seems to be compatible with Bies's data. However, more elaborate means are often required to maneuver the subject into the location of default accent. For example, expletive *es* may be inserted in topic position, so that the subject may appear low.

I hypothesize that extraposition of subject DPs may be usable as a general means to obtain a default accent on a subject. There is a specific clause type that may demonstrate this: presentational or existential clauses. In fact, a large subset of the extraposed subjects are presentational, and best translated into English with the use of existential *there*, as in (3). The nature of these subjects implies that they will generally be quantified, indefinite or bare DPs. Additionally, they will generally be new entities in the discourse. This embodies the difference between subject and object extraposition in ENHG, and offers an explanation for the fact that quantified objects extrapose less often, and quantified subjects more often, than definites.

(3) Aber die kinder des   reychs   werden außgestossen ynn die außersten finsternisß,
     but the children of-the kingdom will-be cast-out   in   the outermost darkness
     da   wirt seyn weynen vnd tzeen klappen.
     there will be   weeping and teeth gnashing
     'But the children of the kingdom will be cast out into the outermost darkness. In that place
     there will be wailing and gnashing of teeth.'
     (*Septembertestament*, Matthew 8:12)

A further exploration of the data supports the argument that presentational focus is a major motivation for subject extraposition to take place in ENHG. While only 62 out of 864 (7.18%) of non-extraposed subjects occur in copular clauses, the same context accounts for 15 of 76 (19.74%) of extraposed subjects. The difference is significant (chi-square = 13.0327, p = 0.0003). This also means that the rate of extraposed subjects in copular clauses is 19.48%, compared to a rate of 7.1% in non-copular clauses. I argue that this is because many copular clauses are existential/presentational, and that this context strongly favors extraposition of the subject.

I conclude, based on this new data, that there are both similarities and differences between subject and object extraposition in ENHG. Both subjects and objects may be extraposed to express narrow focus on the extraposed DP. However, subjects may also be extraposed for a more specific motivation: as a means to achieve default accent on the subject, frequently in presentational contexts. As a result, subject extraposition occurs more frequently with quantified subjects, as well as with entities are new to the discourse. This demonstrates a similarity between subject extraposition in ENHG and subject postposition in Yiddish, as described by Prince, and also fits into a broader set of crosslinguistic focus phenomena which show a subject-object asymmetry (see for example Hartmann and Zimmermann 2007; Skopeteas and Fanselow 2010). DP extraposition in ENHG also presents an example of a phenomenon in which there is no one-to-one correspondence between syntactic construction and information structural interpretation, but rather a syntactic construction which may be manipulated to achieve a different interpretation depending on context.

Bies, Ann. 1996. Syntax and discourse factors in Early New High German: Evidence for verb-final word order. Master's thesis, University of Pennsylvania.

Hartmann, K., and M. Zimmermann. 2007. In place - out of place? Focus in Hausa. In *On Information Structure: Meaning and Form*, ed. K. Schwabe and S. Winkler, 365–403. Amsterdam: John Benjamins.

Ladd, D. Robert. 1996. *Intonational phonology*, volume 79 of *Cambridge studies in linguistics*. United Kingdom: Cambridge University Press.

Prince, Ellen. 1981. Toward a taxonomy of given-new information. *Radical pragmatics* .

Prince, Ellen. 1989. Yiddish Wh-clauses, subject-postposing, and topicalization. In *ESCOL '88*, ed. J. Powers and K. de Jong, 403–15. Columbus, OH: Ohio State University.

Skopeteas, S., and G. Fanselow. 2010. Focus types and argument asymmetries: a cross-linguistic study in language production. In *Contrastive information structure*, ed. C. Breul and E. Göbbel, 169–197. Benjamins.

Truckenbrodt, Hubert. 2007. The syntax-phonology interface. *The Cambridge handbook of phonology* 435–456.

Valⅾuví, Enric. 1992. *The informational component*. New York: Garland.