

YIDDISH VP ORDER AND THE TYPOLOGY OF OBJECT
MOVEMENT IN GERMANIC*

The ordering of NPs in Germanic languages has received a great deal of attention in the literature on scrambling and object shift. This paper examines the relevant data from Yiddish, and concludes on the basis of a number of tests that the underlying word order in the VP is VO. Among the diagnostic tests used are the semantic constraints placed on shifted objects in Yiddish; that is, they must be definite or specific/generic. It is proposed that this constraint is due to a general interpretation condition which requires the fixing of scope relations in the syntax (relying on the notion of semantically-driven movement developed in Diesing and Jelinek 1995). Examination of the reordering possibilities in Yiddish in comparison with both West Continental Germanic and Scandinavian leads to the conclusion that Yiddish allows scrambling (rather than object shift), placing it in a unique position among the VO Germanic languages. The paper concludes with a discussion of semantically-driven movement in the context of economy conditions such as those proposed by Chomsky (1995).

1. INTRODUCTION

The issue of the possible positions of object NPs within the clause in the Germanic languages has been subject to much scrutiny in recent syntactic work. In particular, the phenomenon of leftward movement of objects has received a great deal of attention. Holmberg (1986) discussed the properties of object shift and scrambling in the Scandinavian and Continental West Germanic languages, showing that the two types of leftward reordering should be regarded as resulting from different types of movement processes. Holmberg's work on object shift in particular has since served as a basis for more recent theoretical work in phrase structure, including checking theory within the Minimalist Program of Chomsky (1993), in which leftward movement is driven by a requirement that morphological features be 'checked off' in inflectional positions external to the VP. Leftward movement of objects also plays a prominent role in the proposals

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made in Kayne (1994), where surface word orders are derived from a universal VO base via an asymmetric c-command relation. Zwart (1993) presents an interesting amalgamation of the Chomsky and Kayne proposals in deriving the surface word order of Dutch from a head-initial base.

These developments raise a number of questions, among them the issue of whether all cases of movement can be reduced to morphological feature-checking, and also the question of how to characterize the differences (if any) between languages traditionally taken to be underlyingly OV (such as German and Dutch) and those regarded as underlyingly VO (such as English and Swedish), if both are to be derived from a VO base.

In this paper I extend the consideration of object positions in Germanic by bringing in data from Yiddish. The underlying word order of the Yiddish VP has been a subject of debate, with researchers claiming that Yiddish has mixed OV/VO properties. I demonstrate that when certain semantic properties of the various orders are considered, the emerging conclusion is that Yiddish is SVO. Furthermore, I show that the various word order possibilities in Yiddish are a result of scrambling (as seen in German), placing Yiddish in a unique position in the Germanic family of languages as an SVO language with scrambling (the other scrambling languages in Germanic are all SOV). I also show that in both German and Yiddish, scrambling can be shown to reflect the application of certain conditions on semantic interpretations, and as such forms an instance of semantically-driven movement (in the sense that movement is necessary as a result of the interpretive requirements of certain types of noun phrases), rather than purely morphologically-driven movement. I then extend this approach to object shift in Scandinavian, and show that although object shift and scrambling have rather different syntactic properties, they show very similar semantic effects. Finally, I discuss the implications that this broad application of semantic interpretation conditions has for the analysis of Germanic word order within a system of economy conditions such as are proposed in Chomsky (1993).

The overall outline of the paper is as follows. In Section 2 I give the basic outlines of the semantic theory I am assuming, with illustrations from German. Section 3 lays out the analytical dilemma of the Yiddish VP. Section 4 goes through some apparent arguments for an OV base in Yiddish, and concludes that these arguments are not convincing. Section 5 examines the semantic properties of OV and VO orders in Yiddish and reaches the conclusion that Yiddish is in fact an SVO language. Section 6 examines the properties of clause-internal leftward movement in Yiddish, and shows that it has the properties of scrambling (rather than object

shift). Section 7 turns to object shift in the Scandinavian languages and shows that it shares the semantic properties of scrambling, though it differs from scrambling in other respects. Section 8 examines the problems the facts of Germanic and the analysis proposed here raise for the Minimalist Program of Chomsky (1993, 1994, 1995). Finally, Section 9 summarizes the major conclusions of the paper.

2. THE SEMANTICS OF OBJECT MOVEMENT

Diesing and Jelinek (1995) examine object movement from the point of view of the syntax/semantics interface, proposing a set of conditions on interpretation which together have the effect of inducing syntactic movement, resulting in reordering of arguments. The incidence of this reordering is dependent on available S-structure movement rules. In this section I present an overview of the Diesing and Jelinek (henceforth D&J) proposals.

2.1. *Semantic Background*

D&J rely on a number of background assumptions. First, following Partee (1987), D&J assume that the syntactic category of noun phrase corresponds to a family of semantic types. The first of these basic semantic types for NPs is the REFERENTIAL type *e*. These are NPs which refer to entities; examples include proper names and pronouns (*she*, *Hildegard*). PREDICATIONAL NPs are of type $\langle e, t \rangle$; here indefinites (e.g., *a turtle*) constitute the typical case. Finally, there are the inherently QUANTIFICATIONAL NPs (of type $\langle \langle e, t \rangle, t \rangle$); these include quantified noun phrases like *most turtles*. Essential to the D&J proposal is the idea that the various semantic types have differing interpretive requirements which become evident in the mapping from the syntax to the semantic representation. The claim of specific interest in this paper is that the semantic type of an object NP determines its behavior with respect to two conditions on LF – repairing ‘type mismatches’ and scope fixing. The specific nature of these two conditions will be explained below.

A second point of background concerns the analysis of indefinites. D&J follow Heim (1982) in assuming that indefinites are not inherently existentially quantified (*contra* Russell 1919), but simply introduce variables into the semantic representation. An important motivation underlying this analysis is the ‘quantificational variability’ of indefinites: the interpretation of an indefinite can vary with its context, as illustrated

by the following examples (paired with paraphrases) from Diesing (1992, p. 5):

- (1)a. Contrabassoonists usually play too loudly.
- b. Most contrabassoonists play too loudly.
- (2)a. Cellists seldom play out of tune.
- b. Few cellists play out of tune.

These examples demonstrate that indefinites can take their quantificational force from other elements in the sentence (in these cases the quantificational adverbs *usually* and *seldom* which unselectively bind the variables introduced by the indefinite NPs, yielding a quantificational reading).¹ On Heim's account, the existential interpretations of indefinites result from their being bound by a default process of 'existential closure' which binds variables left unbound by other operators. Since the indefinites in the examples above are bound by the adverbs *usually* and *seldom*, they are not bound by existential closure. In the absence of other binders, the existential interpretation does arise, as in the following example illustrating existential closure:

- (3)a. A dog chased a cat.
- b. $\exists_{x,y} \text{dog}(x) \ \& \ \text{cat}(y) \ \& \ \text{chased}(x, y)$

In this example, there is no adverb of quantification or other binder, so the two indefinite NPs are 'existentially closed', resulting in an existential interpretation for both.

The domain of existential closure is called the NUCLEAR SCOPE. Quantifiers (OPERATORS) like *usually*, *seldom*, and *every* quantify over a restricted set, specified in the RESTRICTIVE CLAUSE. These components yield a 'tripartite representation' consisting of the OPERATOR, the RESTRICTIVE CLAUSE, and the NUCLEAR SCOPE. The following example includes a quantificational NP (in which the determiner functions as the operator and the N-bar as the restrictive clause) and an indefinite NP bound by existential closure:

¹ It has been argued that adverbs of quantification should quantify over situations, rather than individuals (see, for example, Berman 1987, Heim 1990, and von Stechow 1995). However, the unselective binding analysis continues to have its proponents, among them Kratzer (1995), Chierchia (1992), and Dekker (1993). At this point it is safe to say that both approaches have both strengths and shortcomings.

- (4) Every turtle ate a banana.
 EVERY_x [turtle(*x*)] \exists_y banana(*y*) & ate(*x*, *y*)
 Quantifier Restrictive Clause Nuclear Scope

The question of how the semantic representation is 'read off' the syntactic structure is handled in part by Diesing's (1992) Mapping Hypothesis, a process which derives tripartite quantificational representations by splitting the syntactic tree into two parts. Under this procedure, a tripartite structure consisting of an operator (e.g., a quantifier), a restriction (the domain that quantifier quantifies over), and a nuclear scope (the remainder of the sentence) is derived in the following fashion:

- (5) The Mapping Hypothesis:
 1. VP maps into the Nuclear Scope (the domain of existential closure)
 2. IP maps into the Restriction (of an operator)

As mentioned above, variables which are *not* bound by the operator are 'closed' by a default operation of existential closure. Thus, the Mapping Hypothesis gives the result that the VP forms the domain for default existential closure, and variables introduced in the material above VP are bound by the operator. This has the effect that different noun phrase interpretations are associated with distinct syntactic positions in the tree – existential interpretations are associated with VP-internal positions, while quantificational interpretations are associated with positions higher in the tree.

The Mapping Hypothesis combines with the multiple NP types to yield a number of predictions. The first is a result of the system of multiple semantic types itself, and is that essentially quantificational NPs in object position will have to undergo movement by LF. This movement is forced by the principles of semantic composition. I follow here Heim and Kratzer (1997) in assuming a very restricted set of compositional principles, essentially limited to function application (which combines predicates with their arguments) and lambda-abstraction (for the interpretation of traces and modification). Crucially, the principle of function application constrains the manner in which predicates can combine with their arguments; the semantic types of predicate and argument must be compatible. Quantificational NPs (type $\langle\langle e, t \rangle, t \rangle$) necessarily combine with a type $\langle e, t \rangle$ predicate (essentially a one-place predicate) to yield a truth-value (type *t*). Thus, quantificational NPs in object position produce a 'type mismatch'. This is because quantificational NPs of type $\langle\langle e, t \rangle, t \rangle$ cannot directly com-

bine with the transitive verb type (the two-place predicate type $\langle e, \langle e, t \rangle \rangle$, which combines with an argument of type e to yield a one-place predicate of type $\langle e, t \rangle$) and yield a well-formed derivation. To repair this 'type mismatch', the quantifier must be syntactically raised, leaving behind a trace, to create a clausal predicate of the appropriate type $(\langle e, t \rangle)$ (cf. QR in the sense of May 1985):²

- (6) [IP₂ QP₁ [IP₁ NP_{subj} [VP V t_i]]]

In (6), the raising of the QP creates the predicate IP₁ (the trace acts as a variable) which can combine with the quantificational NP. If we assume some version of the VP-internal subject hypothesis (Kuroda 1988, as well as many others), adjoining to VP will also satisfy the compositional requirements, and in some cases may in fact be necessary (see May 1985 and also Diesing 1992 for discussion of some of the relevant examples). It is important to note that regardless of the adjunction site, IP or VP, the raised NP is no longer contained within VP (following the assumptions concerning the relations of dominance and containment in adjunction structures proposed in May 1985 and Chomsky 1986). Thus, the principles of compositionality motivate the syntactic raising process, which results in inherently quantified NPs being raised out of the VP.³ This condition of TYPE MISMATCH REPAIR is the first of the semantic conditions which D&J claim force movement.⁴

A second semantic condition concerns the nature of the existential closure operation. D&J claim that it is genuinely unselective in the sense that any free variable within the scope of existential closure (that is, within the VP domain) will be existentially quantified. 'Free' is taken to mean

² The interpretation of structures such as given in (6) is simply that of lambda-conversion. See Heim and Kratzer (1997, Chapter 9) and also Chierchia and McConnell-Ginet (1990, Chapter 7).

³ This process of resolving type mismatches roughly corresponds to the notion that quantifiers must (syntactically) bind variables, as expressed in the government-binding literature cited above.

⁴ The problem of interpreting quantifiers in object position is a classic one in the semantic literature, and there are other ways of dealing with the problem of type mismatch that do not involve movement. One is to permit TYPE-SHIFTING (see Partee and Rooth 1983). On this approach the type of an element can vary to accommodate the mismatch. Another approach is to utilize FUNCTION COMPOSITION in conjunction with lambda abstraction to enable the QP to combine with the transitive verb (effectively, the QP is combined with the passive counterpart of the verb). Both these approaches involve a substantial enrichment of the basic compositional principles (by inclusion of TYPE-SHIFTING and/or FUNCTION COMPOSITION); the function composition approach also brings with it the burden of overgeneration (see van Benthem 1984 and von Stechow 1990 for discussion). It should also be noted that the triggering of movement by type mismatch is utilized by a number of researchers in addition to Heim and Kratzer (1997), including Lahiri (1992).

free in the LF of the sentence. Thus, traces left by movement (such as *wh*-traces and NP-traces) will not be free.⁵ This means that any NP that introduces a free variable and does not receive an existential interpretation must move out of the VP by LF (see also Kratzer 1995 for an early discussion of this idea). With respect to existential closure, this condition will therefore affect only NPs which introduce free variables – those of type $\langle e, t \rangle$ and type e . The quantificational NPs ($\langle \langle e, t \rangle, t \rangle$) do not introduce a free variable (the variable introduced by the NP being in effect ‘internally bound’ by the quantificational determiner), and so they are not necessarily affected. We will see below that this condition is a subcase of a more general condition requiring that the relative scope of operators be syntactically fixed (i.e., in terms of c-command).

To sum up so far, the TYPE MISMATCH REPAIR condition and the SCOPING condition can be stated as follows:

- (7) TYPE MISMATCH REPAIR: Type mismatches involving quantificational NP must be syntactically resolved by raising NPs to create a clausal predicate.
- (8) SCOPING: The scope of operators must be syntactically fixed.
SCOPING COROLLARY: Existential Closure binds all free variables within its domain.

These two conditions are commonly collapsed into one under the heading of the rule QR. When considering languages like English, in which both scope and type requirements are apparently not satisfied until the abstract level of LF, it is not clear that anything forces the separation of these two conditions. German, however, does allow the two conditions to be distinguished in that the scoping condition must be satisfied at S-structure (via application of scrambling), while the resolution of type mismatches can be ‘delayed’ until LF (and repaired at LF by the abstract syntactic rule of QR). In order to show this we must examine the behavior of both definite and indefinite NPs of the various semantic types.

⁵ As pointed out by Irene Heim and Angelika Kratzer (personal communications), the behavior of various A-bound elements in object position (such as bound variable pronouns and reflexives) is problematic given this notion of ‘free variable’. In particular, it is predicted that the behavior of bound variable pronouns would differ from that of referential pronouns. While there are differences observable in many languages in the syntactic behavior of referential and bound variable pronouns (see, for example, Montalbetti 1984, Larson and Lujan 1990, and Avrutin 1994), they do not obviously follow from the analysis outlined here. Also perhaps of relevance are the contrasts between ‘simplex expression’ anaphors and ‘SELF’ anaphors noted by Reinhart and Reuland (1993).

2.2. An Illustration of the Type Mismatch Repair and Scoping Conditions: German

To demonstrate that the resolution of type mismatches can be delayed until LF in German, D&J give examples like the following, showing quantificational NPs (QPs) in object position. As the examples given below show, object QPs can, but need not, scramble at S-structure. (The examples are given as embedded clauses in order to abstract away from the effects of verb-second.)

- (9)a. . . . weil ich selten **jedes Cello** spiele.

since I seldom every cello play

since I seldom play every cello.

- b. . . . weil ich **jedes Cello** selten spiele.

since I every cello seldom play

since I play every cello (only) seldom.

The scrambled and unscrambled orders are indicated by the position of the object NP relative to the sentential adverb *selten* 'seldom'. The base position is to the right of the adverb (9a), and when the NP appears to the left of the adverb (as in (9b)) it has been scrambled. Both orders are grammatical, though there is a difference in the relative scope of the QP and the adverb. Recall that QPs in object position create a type mismatch. Since the QP *jedes Cello* 'every cello' is of type $\langle\langle e, t \rangle, t \rangle$ (and cannot directly combine with a transitive verb when in object position), the fact that it can appear in its base position indicates that the type mismatch need not be resolved until LF. The scope of the QP relative to the adverb is fixed at S-structure, however, as indicated by the English translations. In (9a) the QP *jedes Cello* 'every cello' falls within the scope of the adverb *selten* 'seldom', and when the QP is scrambled to the left of *selten* (9b) it takes wide scope with respect to the adverb.

Similar facts hold with respect to the interaction of QP objects with sentential negation:

- (10)a. . . . weil ich nicht **eine einzige Katze** gestreichelt habe.

since I not a single cat petted have

since I have not petted a single cat. (no cats petted)

- (10)b. ... weil ich **eine einzige Katze** nicht gestreichelt habe.
 since I a single cat not petted have
 since there is a single cat that I have not petted.

Here again the QP can remain *in situ* at S-structure, and in this case it will be interpreted as falling within the scope of negation. If it is scrambled, the QP takes scope outside of negation. Thus, these examples provide initial evidence that scope fixing and the type mismatch repair operations should be regarded as separate processes. In German, scrambling fixes relative scope relations at S-structure, while QR repairs type mismatches at the later level of LF.

To demonstrate that the scoping operation also affects the existential closure process, D&J offer instances of NPs which introduce free variables into the semantic representation – those of type $\langle e, t \rangle$ and type e . An example of the former is that of a non-quantificational indefinite (see Section 2.1 above and also Diesing (1992) for motivation of both quantificational and non-quantificational readings of indefinites). These NPs are not forced out of the VP, but the interpretation of the NPs varies with their syntactic position. If they remain within the VP, they will be bound by existential closure and receive an existential interpretation. This is shown below for a bare plural object NP.⁶

- (11)a. ... weil Elly immer **Lieder** singt.
 since Elly always songs sings
 since Elly is always singing songs

- b. ALWAYS_t [time(t)] $\exists_x \text{ song}(x) \wedge \text{sings}(\text{Elly}, x, t)$

Notice that not only does the bare plural NP *Lieder* 'songs' receive an existential interpretation, it also takes narrow scope with respect to the quantificational adverb *immer* 'always'. This is expected, given the claim that relative scope is fixed at S-structure in German.

It is also expected that if the indefinite object is scrambled, it will no longer be able to be bound by the existential closure operation, since it will have moved out of its scope. This prediction is in fact borne out. In the scrambled order, the indefinite object NP is bound by the quantificational adverb:

⁶ Similar effects are seen in scrambling in Dutch (see De Hoop 1992). Dutch scrambling will also be discussed in Section 6 below.

- (12)a. ... weil Elly **Lieder** immer singt.

since Elly songs always sings

since Elly sings all songs.

- b. ALWAYS_x [song(x)] sings(Elly,x)

Thus, the surface position of an $\langle e, t \rangle$ indefinite object is determined only by its scope relative to the existential closure operator. When the object is to be interpreted within the scope of existential closure it remains in the VP, and when the object takes scope over the existential closure operator it scrambles out of VP. Either way, a well-formed interpretation results.

Next we consider the issue of whether the scoping of operators *must* take place at S-structure in German. Here we must look more closely at existential closure to see what happens to variables that cannot felicitously be existentially bound – those introduced by definite noun phrases. Consider now two cases of definite NPs. The first is that of the definite description, such as *the cat*. Following Heim (1982), I assume that definite NPs introduce a free variable. But if we look at the German data, we see that definite descriptions are quite awkward in VP-internal positions. Here I use the grammaticality indication 'M' to indicate markedness in the sense that some contrastive context is required for felicity (see Buring 1993 for a similar claim about the status of these examples, and also Weerman 1989, p. 117, regarding parallel examples from Dutch).⁷ In other words, there is pressure for definite NP objects to scramble in neutral (noncontrastive) contexts.

- (13)a. ^M... weil ich selten **die Katze** streichle.

since I seldom the cat pet

- b. ... weil ich **die Katze** selten streichle.

since I the cat seldom pet

since I seldom pet the cat.

The claim is that these definite NPs receive a referential interpretation which is incompatible with existential binding. This reflects the fact that

⁷ De Hoop (1992) claims that scrambling of definites in Dutch is completely optional, however. While her empirical claims may differ from those made here, a key to an explanation may also lie in the characterization of optionality (an issue which arises in a number of other contexts, such as the analysis of apparently optional processes such as locative inversion in English). See Collins (in press) and Adger (1995) for discussion within the framework of the 'minimalist program'.

binding by existential closure is subject to a NOVELTY CONDITION (Heim 1982). This condition requires that variables bound by existential closure be new to the discourse. In other words, the existence of an entity described by the NP is simply asserted, not presupposed; therefore it cannot have been previously mentioned in the discourse. An NP that is 'discourse-old' cannot be felicitously bound by existential closure.⁸ Thus, the variables introduced by definites (which are old information in that they presuppose their descriptive information) must move out of the scope of the existential closure operator at S-structure (by moving out of the VP), thereby escaping existential binding.

This movement is not completely obligatory. For example, contrastive stress or focus marks new (or unexpected) information and thus permits the definite NPs which carry such stress to remain in place. Certain other conditions can also conspire to make the unscrambled order of a definite object more acceptable. D&J claim that in many cases this is a result of the fact that definite descriptions allow other interpretations in addition to the referential reading. Using the absence of obligatory scrambling again as a diagnostic, it can be shown that definite descriptions allow a quantificational ($\langle\langle e, t \rangle, t \rangle$) interpretation in certain contexts.

(14)a. ... weil ich selten **die kleinste Katze** streichle.

since I seldom the smallest cat pet

since I seldom pet the smallest cat.

b. weil ich nicht **die kleinste Katze** gestreichelt habe

since I not the smallest cat petted have

since I have not petted the smallest cat.

The sentences with unscrambled definite object NPs of the sort given in (14a) are in fact grammatical in neutral contexts on a particular interpretation of the definite object in question. In the case of (14a), the NP *die kleinste Katze* 'the smallest cat' means roughly 'whichever cat is the smallest'. (The reading is most clearly brought out by emphasis on the adjective *kleinste* 'smallest'.) In other words, the speaker may not know which cat is the smallest, but simply avoids petting the smallest cat (because it may

⁸ This contrast can be demonstrated by a few simple examples. Coreference between the two indefinites in (ia) is not possible, since the second NP *a cat* is not new to the discourse. The NOVELTY CONDITION is not satisfied, and a definite is required, as in (ib).

(i)a. #Harry chased a cat_i. A cat_i ran into the street.

b. Harry chased a cat_i. The cat_i ran into the street.

be delicate, or bite more readily, or whatever). NPs of this sort are examples of what Klein (1980) argues to be typical attributive (rather than referential) definite NPs. *The smallest cat* a superlative, therefore one can assume such a smallest cat exists without knowing which cat it is. D&J propose that these attributive definite NPs are actually quantificational (of type $\langle\langle e, t \rangle, t \rangle$), and this enables them to remain in their base (unscrambled) position within the VP. Since they actually do not introduce a bindable variable (unlike the referential definites), there is no problem with them remaining within the scope of existential closure at S-structure.

Finally, we consider the behavior of object pronouns (type *e*). Since pronouns are definite, it is expected that pronouns in German should be unable to remain within VP, as a violation of the Novelty Condition would result.⁹

- (15)a. *... weil ich selten sie streichle.

since I seldom her pet

- b. ... weil ich sie selten streichle

since I her seldom pet

since I seldom pet her.

- (16)a. *... weil ich nicht sie gestreichelt habe.

since I not her petted have

- b. ... weil ich sie nicht gestreichelt habe.

since I her not petted have

since I have not petted her.

The examples above show that although pronouns are simply variables (type *e*), by virtue of their definiteness they cannot be bound by existential closure; they must move out of its scope at S-structure.

To summarize, there are two conditions on LF relevant to the distribution of arguments: relative scope fixing and type mismatch repair. These two conditions interact with the multiple types available for NPs to induce movement both at S-structure and LF in German. In a language which applies the scoping condition at S-structure, this result is highly relevant to the question of determining base word order in the VP, since noun phrase interpretations can serve as diagnostics for VP-internal vs. VP-external position. In particular, the association of VP-internal positioning

⁹ See Jacobs (1992) and Lenerz (1993) for additional discussion of the syntax and semantics of pronouns in German.

with the existential interpretation of indefinite NPs provides a potential diagnostic for the base position of object NPs. With this as background, I turn now to the problem of VP order in Yiddish.

3. THE PUZZLE OF THE YIDDISH VP

As mentioned in the introduction, the underlying word order within the VP in Yiddish has been a subject of some debate, since in addition to VO (or head-initial) order Yiddish permits objects to the left of the verb:

- (17)a. Maks hot geleyent **a bukh** (VO)

Max has read a book

Max has read a book.

- b. Maks hot **dos bukh** geleyent. (OV)

Max has the book read

Max has read the book.

Several proposals have been made regarding this variation. Den Besten and Moed-van Walraven (1986) suggest that the various orders result from the fact that Yiddish verbs can govern both to the left and to the right. Santorini (1993) proposes a dual OV/VO base for Yiddish. Hall (1979) and Geilfuß (1991) posit an OV (head-final) underlying structure for Yiddish and derive all VO orders by extraposition.

This range of proposals suggests that the choice between an OV or VO base is not straightforward. As Santorini (1993) points out, it is difficult to choose between VO underlying (other orders being derived by leftward movement) and OV underlying (with VO orders resulting from extraposition) simply on the basis of surface word orders, since Yiddish shows clear cases of both rightward extraposition and leftward movement.¹⁰

- (18) Hot men derlangt oyfn tish **fish**.

has one served on-the table fish

... So there was fish served. (Santorini (1a), RP 47)

Example (18) shows an object NP extraposed to the right of a locative

¹⁰ A number of the examples in Santorini (1993) come from Hirshbeyn (1910) *Grine Felder* (a play) and Olsvanger (1947) *Royte Pomerantsn* (a collection of anecdotes). In the examples taken from Santorini (1993), I have preserved her source indications of the pages numbers in Hirshbeyn (GF) and the anecdote numbers in Olsvanger (RP). These examples have also been checked with native speaker informants.

PP. This extraposition process applies quite generally. Subjects can also be extraposed (see Prince 1988):

- (19) Durkh a kleyn shtetl hot gedarft durkhforn **der keyser**.
through a small village had must travel-through the emperor
 The emperor had to travel through a small village. (Santorini (2b), RP 90)

Santorini also gives examples of nominal and PP modifiers being extraposed:

- (20)a. Ikh bin alt geven **akhtsn yor**.
I am old be-past. part. eighteen years
 I was eighteen years old.
- b. In shtot hot men gut moyre gehat **farn ber**.
In-the city has one good fear had from-the bear
 In the city they were pretty afraid of the bear. (Santorini (5b), RP 84)

The picture is complicated by the fact that in addition to the rightward extraposition constructions, very clear cases of leftward movement can be found. For example (as noted by Den Besten and Moed-van Walraven 1986 as well as Santorini 1993) pronominal objects tend to be placed leftward in a position following the finite verb (and preceding the subject, if the subject does not occupy the pre-V2 'topic' position):

- (21) Gekumen der yeshuvnik in shtot hot **im** der yid gefirt
came the villager in-the city had him the Jew led
 in shul.
in-the synagogue
 When the villager came to the city, the Jew took him to the synagogue. (Santorini (6b), RP 39)

Other cases of leftward NP movement can also be found; the following example shows an NP shifted leftward out of an infinitival complement:

- (22) Ikh hob **dos bukh** gevolt leynen.
I have the book wanted read
 I wanted to read the book. (Hall 1979, 41b)

Thus, it appears that we have the means for deriving the full range of

surface orders in Yiddish from either OV or VO underlying order.¹¹ In the next section I discuss some arguments that have been made in favor of analyzing Yiddish as OV underlyingly.

4. TYPOLOGICAL ANALOGIES: SOME APPARENT EVIDENCE FOR AN OV BASE

The typical arguments for underlying OV order in Yiddish given in the literature center on identifying typological similarities with SOV languages. Both den Besten and Moed-van Walraven (1986) and Geilfuß (1991) point out that Yiddish exhibits a number of features commonly seen in SOV languages like German and Dutch but not in SVO Germanic languages such as English and Scandinavian. Two such points of similarity are particle-verb combinations and the ordering of passive verb sequences. Below, I consider both of the arguments in turn, and show that they do not necessarily provide evidence for SOV order.

4.1. *Verb-Particle Combinations*

Den Besten and Moed-van Walraven and Geilfuß both observe that in particle verb constructions in Yiddish, the particles precede the verbs, just as they do in OV languages such as German and Dutch.

(23) Maks vet **avekshikn** a briv.

Max will away-send a letter

Max will send away a letter.

This ordering of the particle and verb contrasts with that commonly seen in VO languages, such as English (*send away*).

Upon closer examination, we see that there is reason to believe that the position of the particle does not reflect the head-complement order, but is instead merely a consequence of obligatory incorporation of the prefix into the verb head. There is a subset of the separable prefixes which are 'semantically stable' in that their meanings remain stable (and transparent) regardless of the verb they combine with. These prefixes also

¹¹ This sort of difficulty in determining underlying order in VP is, of course, not unique to Yiddish. Within the domain of Germanic syntax, similar problems arise in the diachronic analysis of Old English (see Pintzuk 1991 for discussion), Middle English (Kroch and Taylor 1994), and Old Icelandic (Sigurðsson 1988, Rognvaldsson 1993). The common factor between Yiddish and these other cases is that all of these languages seem to have undergone or been in the process of undergoing a change from OV to VO.

have phrasal properties; for example, they can be topicalized (see also Santorini 1994 for other examples). These topicalized particles require some kind of contrastive stress, a requirement which does not hold of most other topicalized elements:¹²

- (24)a. Er iz **arayn**gekumen.

he is in-come

He came in.

- b. **Arayn** iz er gekumen.

in is he come

IN, he came. (not OUT)

- (25)a. Er iz **arop**gefaln.

he is down-fallen

He fell down.

- b. **Arop** iz er gefaln.

down is he fallen

DOWN, he fell. (not OVER)

These particles contrast with those which are semantically opaque, and cannot be topicalized:

- (26)a. Dos ayz iz nit **op**gegangen.

the ice is not prt-gone

The ice hasn't thawed.

- b. ***Op** iz dos ayz nit gegangen.

prt is the ice not gone

Thus, the semantically transparent particles show phrasal behavior in that they can be moved to a position normally occupied by phrases. The semantically opaque particles do not show this property.

If the particle-verb order is indeed indicative of OV order (i.e., if the particles occupy the underlying position of phrasal arguments), we would expect the semantically transparent particles like *arayn* 'in' and *arop* 'down' to be modifiable, as phrases are. Modification is in fact possible, but is crucially *not* permitted when the particle appears in the immediate

¹² Conversations with David Braun, Marvin Herzog, and Harry Bochner have been instrumental in clarifying the arguments in this section.

pre-verb position; the modifier can only modify the entire particle + verb combination:

- (27)a. *Er iz glaykh arayngekumen.

he is right in-come

*He has come right in.

- b. *Er iz het aropgefahn.

he is way down-fallen

*He has fallen way down.

To the extent that modification of the particle is allowed (speakers vary on the judgments), it is only possible when the particle and verb are separated:

- (28)a. Er iz gekumen glaykh arayn.

he is come right in

He came right in.

- b. Er iz gefahn het arop.

he is fallen way down

He fell way down.

I therefore conclude that the preverbal particles are not phrasal, but are instead simply instances of a head being incorporated into another head (see Collins and Thráinsson 1993, Gold 1994, and Kratzer 1994 for analyses of particle constructions in Germanic which also involve incorporation) and as such do not necessarily support the claim that Yiddish in OV underlyingly.

Further support for this view is offered by Gold (1994), who shows that the particle + verb combinations behave as single words with respect to stress assignment and affixation. The particle-verb combination *arayngekumen* 'in-come' assigned a primary stress on the second syllable of the particle *arayn* and a secondary stress on the second syllable of the verb *gekumen*. This contrasts with the two primary stresses that are assigned when the verb is modified by an adverb *nekhtn* 'yesterday', or when the particle and the verb are separated:

- (29)a. Ikh bin aráyngékùmen.

I am in-come

I came in.

- (10)b. Ikh bin nékhtn gekúmen.

I am yesterday come

I came yesterday.

- c. Ikh bin gekúmen aráyn.

I am come in

I came in.

Morphological processes also provide evidence for the word-like nature of the particle + verb combinations. For example, the combinations can be productively nominalized by the agentive affix *-er*:

- (30)a. araynbrekhⁿ zikh

in-break self

break into, burglarize

- b. der araynbrekher, di araynbrekherke

the burglar (m.) the burglar (f.)

This evidence further supports the incorporation account of the particle-verb order. Thus, the ordering of the verb and particle is a reflection of morpho-syntactic processes, and as such does not necessarily provide a clue to the underlying order of the verb and its arguments.

4.2. *Passive Verb Sequences*

A second apparent OV property (also discussed by both Den Besten and Moed-van Walraven 1986 and Geilfuß 1991) concerns the following alternation in the ordering of the passive participle and its auxiliary:

- (31)a. Matones zaynen gebrakht gevorn.

gifts are brought been

Gifts have been brought.

- b. Matones zaynen gevorn gebrakht.

gifts are been brought

Gifts have been brought.

Geilfuß analyzes the order of the verbs in (31b) (which is typical of VO languages) as being derived from the order in (31a) (which is typical of OV languages) from the application of leftward finite verb movement in

the manner of verb-second languages in conjunction with rightward verb (projection) raising. In (31a) only finite verb movement applies. A major difficulty with this analysis is the fact (also noted by Geilfuß) that verb raising (which yields the VO order) applies *obligatorily* for all verbs except in the passive and certain copular constructions.¹³ Specifically, the OV-style ordering of verbs does not occur in compound tenses:

- (32)a. Ikh hob **gezungen**.
 I have sung.
 I have sung.
- b. Ikh hob gehat **gezungen**.
 I have had sung
 I had sung.
- c. *Ikh hob **gezungen** gehat. (cf. 31a)
 I have sung had
- d. Ikh vel **zingen**.
 I will sing
 I will sing.
- e. Ikh vel hobn **gezungen**.
 I will have sung
 I will have sung.
- f. Ikh vel **gezungen** hobn. (cf. 31a)
 I will sung have

Notice that in pluperfect and future perfect tenses no alternation of verb order is possible (32b vs. 32c; 32d vs. 32e). The order claimed by Geilfuß to be the base order does not occur.

There is another reason to have doubts about Geilfuß's proposal, and that is that the orders in (31) are not completely interchangeable. The order in (31b) (the VO-like order) is actually somewhat marked in passive and copular constructions (this fact is not noted by either Geilfuß or Den Besten and Moed-van Walraven). The VO order is associated with special emphasis on the main verb (in the case of the passive), or a special adjectival reading (in the case of the copular constructions).

¹³ Rohrbacher (1994) makes a similar observation regarding Geilfuß's argument.

- (33)a. Er iz **alt** geven dray yor. (OV)

he is old been three years

He was three years old.

- b. Er iz geven **alt** dray yor. (VO)

he is been old three years

He was three years OLD.

Sometimes the two orders result in a difference in meaning (David Braun, personal communication):

- (34)a. Fun tsores iz zi **alt** gevorn bemeshekh fun dem

from troubles is she old become during from the

fargangenem khoydesh.

past month

She has aged from her troubles over the last month. (OV – non-chronological)

- b. Zi iz gevorn **alt** nokh di ale yorn.

she is become old after the all years

She has gotten OLD after all these years. (VO – chronological)

In the example above, the OV order yields a non-chronological interpretation for the adjective *alt* 'old', while the VO order allows only an emphatic chronological interpretation.

These suggest that an alternative to the verb-raising analysis may be more appropriate, namely that the OV order is a result of incorporating the passive participle or adjective into the copula or passive auxiliary. In the VO order, the adjective phrase or participle may either be left in its base (VO) position or extraposed (or excorporated) to a position of emphasis, yielding the special interpretation (see Gold 1994 for a similar suggestion). In this way, it may be that the alternation in (31) is simply a remnant of the earlier OV stage of Yiddish (see Taube 1987 for discussion of this possibility) which survives via incorporation, and the VO order in (31b) is in fact basic, rather than derived by verb raising. In any case, the alternation in (31) does not provide overwhelming evidence in favor of the OV base hypothesis.

Most importantly, neither Geilfuß nor any of the other authors mentioned above systematically provide diagnostics for the base order of NP arguments. In what follows I will examine the properties of the various

orders in light of the discussion of the semantics of object movement in Section 2. When looked at in these terms, the OV orders in Yiddish show the semantic properties of constructions derived by leftward movement in other Germanic languages, including German and Icelandic; while NPs in postverbal position show the semantic properties of unmoved arguments. Thus, I argue on the basis of the semantic facts that the underlying order in the Yiddish VP is in fact VO. I also argue that the leftward movement process in Yiddish shows the syntactic properties of scrambling (as seen in German), rather than the characteristics of Scandinavian object shift.

5. PROPERTIES OF OV AND VO ORDERS IN YIDDISH

In this section I examine the syntactic and semantic properties of the various orderings of verb and object(s) in Yiddish. Though Yiddish allows both VO and OV word orders, as shown below, the two orders are not freely interchangeable.

- (35)a. Maks hot geleyent **a bukh**. (VO)

Max has read a book

Max has read a book.

- b. Maks hot **dos bukh** geleyent. (OV)

Max has the book read

Max has read the book.

Various semantic conditions come into play to determine the contexts in which a given word order is possible or appropriate.¹⁴ Since Yiddish displays the verb-second effect in both main and embedded clauses (Diesing 1990, Santorini 1989), in the discussion that follows I will give examples with compound tense forms, or with complex or the so-called separable-prefix verbs, so that the relative positions of the (unmoved) main verb and the object NPs can be clearly seen. I consider the various NP ordering possibilities and also data concerning resultatives.

¹⁴ In addition to the semantic effects discussed here, there are also pragmatic conditions which come into play. My intention here is not to attempt to provide a complete account of the various word order possibilities in Yiddish, but rather to focus on those phenomena which can be characterized in terms of a particular view of the syntax/semantics interface. Nor do I intend this approach to amount to an implicit stand against the possibility of reducing all of the effects considered here to pragmatic factors (along the lines of the program outlined in Vallduví 1992 and von Stechow 1995); instead I leave that as a rather large topic for later research.

5.1. *NP Orders*

One of the semantic conditions on word order that holds in Yiddish is that positioning of an object NP to the left of the verb is associated with definiteness/specificity.

- (36)a. *Maks hot **a bukh** mistome/nekhtn/keyn mol nit geleyent.

Max has a book probably/yesterday/never read

- b. Maks hot **dos bukh** mistome/nekhtn/keyn mol nit geleyent.

Max has the book probably/yesterday/never read

Max has probably/yesterday/never read the book.

Thus, positioning an indefinite to the left of sentential adverbials or negation is ungrammatical, unless the indefinite is somehow old information, rather than being novel. The unmarked position for an existential indefinite NP is the VO order given in (35a). This is comparable to the effect of scrambling an indefinite NP in German seen in the previous section. On the other hand, positioning a definite object to the left of the adverb is not only acceptable, but is in many cases the least marked order (cf. the positioning of German definite object NPs in examples (13a,b) discussed above in Section 2).

If we assume with Diesing (1992) that the existential interpretation of indefinites results from binding by existential closure and that the scope of existential closure is the VP, the status of (36a) can be explained as a case of the Scoping Condition applying at S-structure in Yiddish. The indefinite is positioned outside the scope of existential closure, therefore no existential binding can take place and only the specific interpretation is possible (and this interpretation requires an appropriate context). Similarly, we can explain the pressure to position the definite object to the left. The definite introduces a familiar variable which is incompatible with existential binding, therefore the definite NP must move out of the scope of existential closure. Thus, the leftward positioning of objects is 'marked' in a semantic sense: it requires a definite/specific interpretation. In other words, the sentences in (36) indicate that the Scoping Condition applies at S-structure in Yiddish, as it does in German.

The question of the underlying VP order is not yet resolved, however. There are two potential positions from which the object NPs in (36) could have moved. The issue at stake here is determining whether the orders in (36) are derived from moving the NP from a position to the left of the verb but to the right of the adverb (OV base), or from a position to the right of both the verb and the adverb (VO base):

(37)a. ADV [_{VP} NP V]

b. ADV [_{VP} V NP]

Again, we can utilize the availability of the existential interpretation of indefinites as a diagnostic, with the answer to this question depending on consideration of the semantic effects of placing the object NPs in the two positions. Implicit in the semantic assumptions made in Section 2 is the claim that existential interpretations are associated with VP-internal positions. In other words, the base order of the VP in Yiddish is whichever order (OV or VO) yields an unmarked existential interpretation for an indefinite NP object. Consider first the OV possibility represented by (37a):

(38)a. ^MMaks hot nekhtn **a bukh** geleyent.

Max has yesterday a book read

Max read a BOOK yesterday.

b. ^MMaks hot nekhtn **dos bukh** geleyent.

Max has yesterday the book read

Max read the BOOK yesterday.

As the examples above show, this order has a rather marked status (indicated by the superscript 'M') with *both* definite and indefinite objects. The only interpretation possible in either case is that of contrastive or corrective emphasis: *Max read althe BOOK yesterday*, (not *althe NEWSPAPER*). Thus, this order has a rather different status from that of the same ordering in German. Recall that in German positioning of a definite in this position induces a contrastive interpretation, but for an indefinite NP object it induces an unmarked (non-contrastive), existential interpretation. Since a non-contrastive existential interpretation of the indefinite is not possible in (38a), it appears that the OV order in Yiddish does not correspond to a neutral positioning of the object, and therefore is unlikely to be the base order.

Interestingly, Geilfuß (1991) takes the possibility of stress in examples like those in (38) as an indication that the OV order must be the base order (parallel to German), since in German focused or contrastively stressed phrases cannot be scrambled (see von Stechow and Sternefeld 1988 for discussion); focused phrases only occur in their base positions. What Geilfuß fails to note is that the object NPs in (38) *must* be contrastively stressed; that is, stress is not merely a possibility with this ordering, but a necessity, even for an indefinite NP. This obligatory stress

of even an indefinite object NP in the order given in (38) would not be at all expected if the base order in Yiddish were OV. Thus, the position immediately to the left of the verb (and to the right of negation and sentential adverbs) appears to have properties distinct from those associated with scrambling over sentential adverbs.

This raises the question of what the exact syntactic position of the NP in Adverb-NP-V order is. One possibility is that it is some clause-internal (verb-adjacent) 'focus position' (associated with contrastive emphasis), as is seen in various languages such as Hungarian (Horvath 1986, Farkas 1986, and É. Kiss 1987), the Chadic languages (Tuller 1992), and Basque (Laka and Uriagereka 1987 and Ortiz de Urbina 1989). Further evidence that a focus position may be involved comes from the fact that no more than one constituent can be placed in the position between the adverb and the verb:¹⁵

(39)a. *Nekhtn hot Maks nit **dem yingl dos bukh** gegeben.
yesterday had Max not the boy the book given

b. *Nekhtn hot Maks nit **ken yingl ken bukh** gegeben.
*yesterday had Max not no boy no book given*¹⁶

Placement of two constituents to the position to the left of *both* the adverb and the verb is possible, however:

(40)a. Nekhtn hot Maks **dem yingl dos bukh** nit gegeben.
yesterday had Max the boy the book not given
 Max didn't give the boy the book yesterday.

b. Nekhtn hot Maks **ken yingl ken bukh** nit gegeben.
yesterday had Max no boy no book not given
 Max didn't give a boy a book yesterday.

¹⁵ As is the case for the focus position in languages like Hungarian, placing an AP or PP in the immediate preverbal position also yields a contrastive interpretation:

(i)a. Ikh bin nit **in shtub** arayngegangen.
I not not in-the house in-gone
 I didn't go into the HOUSE. (but into the BARN)

b. Er iz nit **groys** gevaksn.
he is not tall grown
 He hasn't grown TALL. (but THIN)

¹⁶ Note that Yiddish has negative concord; the two instances of negation (*nit* and *ken*) do not constitute a double negation, rather a single, sentential negation results.

The contrast between (39) and (40) would not be at all expected if the base order of Yiddish were OV; the impossibility of placing both objects of a double object verb in the immediate preverbal position effectively rules out the hypothesis of OV order in the base.

Turning now to the properties of the VO order schematized in (37b), we see that an indefinite in the post-verbal position does in fact have the existential interpretation:

- (41) Maks hot geleyent **a bukh**.

Max has read a book

Max has read a book. (unmarked intonation)

Furthermore, a bare plural indefinite NP shows the same position-dependent contrasts in interpretation (quantificational variability) seen above for German in (11) and (12), but in this case the existential binding only arises for the post-verbal position (whereas in German the contrast was between the two preverbal positions, following and preceding the adverb):

- (42)a. Maks hot zeltn geleyent **bikher**.

Max has seldom read books

There were few occasions on which Max read books.

- b. $\text{SELDOM}_t [\text{time}(t)] \exists_x \text{book}(x) \wedge \text{read}(\text{Max}, x, t)$

- (43)a. Maks hot **bikher** zeltn geleyent.

Max has books seldom read

Max read few books.

- b. $\text{SELDOM}_x [\text{book}(x)] \exists_t \text{read}(\text{Max}, x, t)$

The Adverb-NP-V order is also possible, but here (as in examples (38a,b)) only a contrastive interpretation is possible:

- (44) Maks hot zeltn **bikher** geleyent.

Max has seldom books read

Max rarely read books. (Not magazines . . .)

In sum, an unmarked existential interpretation for an indefinite object NP is only available in the postverbal position. Assuming that Yiddish satisfies the Scoping Condition at S-structure, this indicates that only the postverbal position is within the scope of existential closure.

Further evidence that the post-verbal position in Yiddish is associated with existential closure comes from the behavior of pronominal objects.

These cannot appear in the position to the right of the verb, they must be to the left:¹⁷

- (45)a. *Maks hot gekent **undz**.

Max has known us

- b. Maks hot **undz** gekent.

Max has us known

Max knew us.

Assuming that the pronouns originate in a position to the right of the verb, we see that they must 'shift' obligatorily to the left. This movement is not unexpected; it is consistent with the observations concerning German pronominal objects. In the previous section. As is the case for German pronominal objects, the movement of the Yiddish object pronouns is induced by the unselectivity of existential closure. Pronouns, being essentially definite, introduce 'familiar', or variables ('old' information with respect to the discourse), and therefore must move out of their base position to escape inappropriate binding by existential closure in order to satisfy the Novelty Condition on existential binding. Thus, the placement of object pronouns in Yiddish results from application of the Scoping Condition at S-structure.

Finally, there is the case of full NP definite objects in the post-verbal position. Post-verbal positioning of a clearly familiar ('old' information) definite NP is marked (this, of course, is not true of definites which are attributive, or somehow new to the discourse), requiring contrastive stress in the sentence (compare with the indefinite in the corresponding position, as in (41)):¹⁸

¹⁷ As pointed out to me by David Braun, there are some cases where a pronoun can apparently remain *in situ*:

- (i) Maks hot gekent undz in undzere kinder-yorn.
Max has known us in our children-years
 Max knew us way back in our youth.

There seems to be a heaviness factor at stake (which may mean some kind of rightward shift has occurred). Examples of this sort are regarded as marginal-to-unacceptable by some speakers.

¹⁸ One case where a definite NP can appear post-verbally without any markedness is in idioms (David Braun, personal communication):

- (i)a. vayzn dem veg
show the way
 show the way

- (46) ^MMaks hot geleyent **dos bukh**. (Yiddish)
Max has read the book
 Max has read the **BOOK**.

This is comparable to the situation with German definite NPs in the immediate preverbal position:

- (47) ^M... weil ich selten **die Katze** streichle. (German)
since I seldom the cat pet
 ... since I seldom pet the **CAT**.

In other contexts, the right-of-verb positioning of the definite NP seems quite felicitous (more so than in the parallel cases in German). A complicating factor which may be operative in these cases is the possibility of rightward extraposition mentioned above in Section 3, which applies quite felicitously to definite NPs (see example (19) above). Thus, it is not clear in the cases where definite NPs appear to the right of the verb whether they are in base position or have been extraposed. What is clear, however, is that the scrambled order for a definite NP is generally felicitous, in contrast to indefinites.

To summarize the results of this section so far, while Yiddish word order is relatively free, consideration of the semantic properties of NP arguments yields a number of generalizations:

- (48)a. The existential interpretation of an indefinite object: possible only in the post-verbal position (which is the least marked position for an indefinite NP).
 b. Definite NPs in post-verbal position: marked in many contexts; definites occur quite naturally to the left of both the verb and a sentential adverb (unlike indefinites).
 c. The position immediately preceding the verb: induces a special contrastive interpretation for *both* indefinite and definite NPs.

-
- b. khapn di fish far der nets
catch the fish before the net
 put the cart before the horse

In fact, these definites cannot be scrambled. However, it is quite plausible to claim that these NPs do not refer to any presupposed entities, and thus can only be regarded as novel.

Thus, it is unlikely that this position is the underlying position for a direct object.¹⁹

Assuming the analysis proposed by Diesing and Jelinek (1995), the generalizations above (in particular, (a)) support the claim that the underlying order in the VP in Yiddish is VO.

5.2. Resultatives

The hypothesis that the position of an existential indefinite object indicates the base order is given additional support by data concerning resultatives in Yiddish. It has been claimed that resultative predicates are arguments (rather than adjuncts), and therefore occur in theta-assigned positions. As such, resultative interpretations can serve as a diagnostic for underlying order in VP. For example, Mulder and Sybesma (1992) contrast data from Dutch (an OV language) and Chinese (which they argue to be a VO language). In both Chinese and Dutch, PPs can occur on both sides of the verb. Mulder and Sybesma demonstrate that a predicative (resultative) interpretation for a PP results when it occurs on the right of the verb in Chinese, and on the left of the verb in Dutch. When the PP appears to the left of the verb in Chinese, an adjunct interpretation results, and this adjunct interpretation also arises for post-verbal PPs in Dutch.

¹⁹ One fact that I do not yet have an explanation for is that the unmarked position of the QPs *emeiser* 'someone' and *yeder eyner* 'everyone' is to the left of the verb:

(i)a. Ikh hob yedn eynem gezen.

I have everyone seen

I have seen everyone.

b. Ikh hob emetsn gezen.

I have someone seen

I have seen someone.

The property of all the QPs favoring this positioning is that they do not contain a full N-bar structure. QPs which do contain a full N-bar can appear felicitously on either side of the verb:

(ii)a. Ikh hob yedes bukh geleyent.

I have every book read

I read every book.

b. Ikh hob geleyent yedes bukh.

I have read every book

I have read every book.

- (49)a. Ta zai **zhuozi-shang** tiao
he at table-top jump
 He is jumping on the table. (locative adjunct)
 (Chinese; Mulder and Sybesma 1992)
- b. Ta tiao zai **zhuozi-shang**
he jumps at table-top
 He jumped onto the table. (resultative complement)
- (50)a. dat Jan **in de sloot** springt
that Jan in the ditch jumps
 ... that Jan jumps into the ditch. (resultative complement)
 (Dutch; Mulder and Sybesma 1992)
- b. dat Jan springt **in de sloot**
that Jan jumps in the ditch
 ... that Jan is jumping in the ditch. (locative adjunct)

From these data Mulder and Sybesma conclude that Chinese is indeed a VO language.

While it is impossible to replicate the data given above for Dutch and Chinese exactly in Yiddish (the resultative interpretation in examples parallel to (49) and (50) would be most felicitously expressed not by a shift in word order but through the use of a verb + particle combination), a relevant contrast can be seen in Yiddish resultatives. In resultative constructions like *Mir hobn gefarb dos hoyz af royt* 'We have painted the house red', and *Mir hobn oysgeklibn Maksn far prezident* 'We have elected Max president' the NP associated with the result phrase can be placed to the left of the verb, but placing the result phrase itself to the left of the verb always results in a highly marked contrastive interpretation. The purely resultative interpretation is only available when the result phrase appears post-verbally. (In the examples below I indicate this rather marked contrastive interpretation with the superscript 'M'.)

- (51)a. Mir hobn gefarbt dos hoyz af royt. (Yiddish)
we have painted the house on red
 We painted the house red.
- b. Mir hobn dos hoyz gefarbt af royt.
we have the house painted on red

- (51)c. ^MMir hobn af ROYT gefarbt dos hoyz.
 we have on red painted the house
 We painted the house RED. (not BLUE)
- d. ^MMir hobn dos hoyz af ROYT gefarbt.
 we have the house on red painted
- e. ^MMir hobn af ROYT dos HOYZ gefarbt.
 we have on red the house painted

The examples above demonstrate that the unmarked resultative interpretation occurs only when the resultative PP *af royt* 'on red' in the post-verbal position. Leftward placement of the PP yields a contrastive interpretation. A similar generalization holds below:

- (52)a. Mir hobn oysgeklibn Maksn far prezident. (Yiddish)
 we have elected Max for president
 We elected Max president.
- b. Mir hobn Maksn oysgeklibn far prezident.
 we have Max elected for president
- c. ^MMir hobn far PRESIDENT oysgeklibn Maksn.
 we have for president elected Max
 We elected Max PRESIDENT. (not MAYOR)
- d. ^MMir hobn Maksn far PREZIDENT oysgeklibn.
 we have Max for president elected
- e. ^MMir hobn far PREZIDENT MAKSN oysgeklibn.
 we have for president Max elected

These data contrast with PPs which clearly function only as adjuncts (such as locatives) – these PPs can be quite freely placed to the left of the verb, without requiring any contrastive or corrective emphasis.

- (53)a. Maks hot gezungen **af der bine**. (Yiddish)
 Max has sung on the stage.
 Max sang on the stage.

(53)b. Maks hot **af der bine** gezungen.

Max has on the stage sung

Max sang on the stage.

Thus, the data from resultative constructions provide additional support for the VO hypothesis for Yiddish.

In summary, the data presented in this section, in conjunction with arguments concerning the interpretation of NPs and resultative phrases, demonstrate that the underlying order of the Yiddish VP is VO, with the OV orders being derived by leftward movement. The position immediately to the left of the verb (and to the right of VP adverbials and negation) was shown to have a rather special status as a position of contrastive focus, limited to one constituent. This poses a puzzle for recent proposals to derive OV orders (as seen in Dutch and German) from a (universal) VO base via leftward movement of objects to specifiers of inflectional projections above VP (see Kayne 1994, p. 48 and Zwart 1993, Chapter IV, and also Pesetsky 1995, pp. 284–288 for a different variant, not specifically committed to movement of objects). In such a system one might expect that movement to the immediate preverbal position in Yiddish should yield the unmarked interpretation associated with OV order in Dutch and German, rather than the contrastive interpretation that is actually seen. The restriction to a single constituent is also unexpected, since presumably multiple specifiers should be available for ditransitives. The puzzle, then, lies in the fact that when Yiddish NPs move leftward in the overt syntax, they cannot make the short movement that Zwart posits for Dutch (essentially movement to [Spec, Agr_oP]), they must move to a more distant position beyond the adverbials. In other words, scrambled Yiddish object NPs appear to be moving further than [Spec, Agr_oP].²⁰ This suggests that this movement process is rather different from that involved in object shift, which is also claimed to involve movement to [Spec, Agr_oP]. In the next section I examine the nature of the leftward movement process in Yiddish, providing evidence that it is most similar to scrambling in German and is unlikely to involve movement simply to [Spec, Agr_oP].

²⁰ Zwart actually claims that all object NPs (definite and indefinite) move to [Spec, Agr_oP], with resulting differences in the ordering of NPs and adverbials being a result of whether the adverb has adjoined above or below the Agr_oP projection. This still leaves the restrictions on ADV-NP-V order in Yiddish a mystery.

6. THE TYPOLOGY OF OBJECT MOVEMENT: LEFTWARD MOVEMENT IN YIDDISH AS SCRAMBLING

In the previous sections I showed that leftward movement of NPs in both German and Yiddish exhibited certain semantic effects, and proposed an explanation in terms of the Scoping Condition and Type Mismatch Repair conditions which applied to induce movement. In this section I show that the similarity between German and Yiddish extends beyond the semantic effects of leftward movement, and show that the reordering process found in Yiddish shows other properties of the scrambling seen in German. These properties contrast quite sharply with leftward movement processes seen in other Germanic languages, in particular the object shift found in the Scandinavian languages.

6.1. *The Distribution of Leftward Movement in Yiddish*

The most obvious reason for regarding the leftward movement in Yiddish as scrambling is that it shows a rather different distribution from object shift. Specifically, it does not conform to Holmberg's Generalization, which states that object shift only occurs in conjunction with S-structure movement of the main verb. This fact can be seen in virtually all the examples cited above, since they have an auxiliary and thus the main verb does not move. The contrast between (54) and (55c) shows that main verb movement is not a precondition for object NP movement in Yiddish, as it is in Icelandic.

- (54) Maks hot **dos bukh** nekhtn geleyent. (Yiddish)

Max has the book yesterday read

Max read the book yesterday.

- (55)a. Jón keypti ekki **bókina**. (Icelandic: Holmberg 1986)

John bought not book-the

John didn't buy the book.

- b. Jón keypti **bókina** ekki.

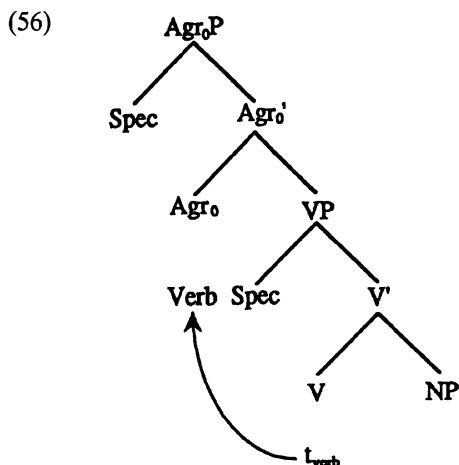
John bought book-the not

John didn't buy the book.

- c. *Jón hefur **bókina** ekki keypt.

John has book-the not bought

Chomsky (1993, pp. 15–19) derives the effects of Holmberg's Generalization from relativized minimality (Rizzi 1990). In the absence of verb movement, shifting an object out of the VP (e.g., to [Spec, Agr_oP], an A-position) triggers a relativized minimality violation, since in moving to [Spec, Agr_oP] the object has to skip the intervening [Spec, VP] (which is also an A-position). Verb movement eliminates relativized minimality violations by extending the domain for movement on the basis of the principle of 'Equidistance'. By virtue of the movement of the verb to Agr_o, [Spec, VP] and [Spec, Agr_oP] become equidistant (e.g., they both stand in the same relationship to the chain {V, t_{verb}} – the Spec-Head relation), and thus skipping over [Spec, VP] no longer 'counts' as a relativized minimality violation.



This principle is analogous to the extension of the government domain of a head via head movement (Baker 1988). See also Jonas and Bobaljik (1993, pp. 68–75), and Section 7 below for detailed discussion of how this principle licenses object shift in Icelandic. The essential point, then, is that object shift in Scandinavian observes relativized minimality (as indicated by the necessity of verb movement), while leftward reordering in Yiddish appears not to.

Zwart (1993) argues that the principle of Equidistance (relativized minimality) is not a universal of grammar, and in particular does not apply to Dutch. Thus, Zwart claims that 'scrambling' in Dutch is in fact movement to [Spec, AgrP] positions in the absence of main verb movement, and as

such is a case of A-movement, just as object shift is.²¹ While it is true that Dutch scrambling does not conform to Holmberg's Generalization any more than scrambling in Yiddish and German does, there are still some differences between Dutch and Scandinavian on the one hand and Yiddish and German on the other which suggest that Zwart's proposal cannot be directly extended to Yiddish and German. First, scrambling in double object constructions in Yiddish does not show relativized minimality effects either (in the examples below I ignore the effects of definiteness on the unscrambled orders, focusing only on the scrambling possibilities); skipping over intervening potential landing sites is possible:

- (57)a. Maks hot nit *gegebn* Rifken dos bukh. (Yiddish)
Max has not given Rebecca the book
 Max has not given Rebecca the book.
- b. Maks hot **Rifken** nit *gegebn* dos bukh (IO moves by itself)
Max has Rebecca not given the book
- c. Maks hot **Rifken** dos bukh nit
Max has Rebecca the book not
gegebn (IO, DO move together)
given
- d. Maks hot **dos bukh** nit *gegebn* Rifken (DO moves by itself)
Max has the book not given Rebecca
- e. Maks hot **dos bukh Rifken** nit
Max has the book Rebecca not
gegebn (DO, IO move together)
given

The crucial examples are given in (d) and (e). In these cases the leftward movement of the direct object will necessarily have to skip over two specifiers: the specifier occupied by the indirect object and the VP-internal subject position [Spec, VP]. Thus relativized minimality effects (with respect to A-positions) are not observed. Not surprisingly, Scandinavian double object shift does show relativized minimality effects (these examples taken from Collins and Thráinsson 1993):

²¹ The possibility that Dutch scrambling is A-movement is also discussed by vanden Wyngaerd (1989).

- (58)a. Ég lána **Maríu** ekki **bækurnar** (IO by itself) (Icelandic)
I lend Mary not the-books
- b. ?Ég lána **Maríu bækurnar** ekki (IO, DO together)
I lend Mary the-books not
- c. *Ég lána **bækurnar** ekki **Maríu** (*DO by itself)
I lend the-books not Mary
- d. *Ég lána **bækurnar Maríu** ekki (*DO, IO together)
I lend the-books Mary not

Collins and Thráinsson (1994) point out that the unacceptability of the order in (58d) is analogous to the paradigm involving only a subject and an object. Relativized minimality prevents the object from moving over the subject. In (59a) there is no violation of relativized minimality – the object NP moves to [Spec, Agr_oP], and the subject is able to move to [Spec, TP] by virtue of verb movement having taken place, due to the Equidistance Principle of Chomsky (1993). However, if the subject moves first (as in (59b)), it must land in [Spec, Agr_oP] (to avoid skipping a landing site), and subsequent movement of the object NP will have to skip both [Spec, VP] and [Spec, Agr_oP], triggering a Relativized Minimality violation.

- (59)a. Í gær las Jón **bækurnar** ekki. (Icelandic)
yesterday read John the-books not
 Yesterday John didn't read the books.
- b. *Í gær las **bækurnar** Jón ekki.
yesterday read the-books John not

The claim that Yiddish NP movement is not object shift is thus further supported by the fact that in Yiddish the movement of an object over the subject as in (59b) is grammatical, in contrast to Icelandic: .

- (60)a. Nekhtn hot Maks **dos bukh** nit geleyent. (Yiddish)
yesterday has Max the book not read
 Yesterday Max didn't read the book.
- b. Nekhtn hot **dos bukh** Maks nit geleyent.
yesterday has the book Max not read
 Yesterday Max didn't read the book.

Thus, object NPs in Yiddish are not only able to move out of the VP over adverbs, but they can also move to a position to the left of both the adverbials and the subject.

Turning now to Dutch, scrambling an object over the subject (as in (60b)) is not possible, in contrast to both Yiddish and German (examples from Vikner 1991, Chapter 4):

- (61)a. *... dat **deze man** Peter nooit voordien gezien heeft.

that this man Peter never before seen has

(Dutch)

- b. ... daß **diesen Mann** Peter nie früher gesehen

that this man Peter never before seen

hat. (German)

has

... that Peter has never seen this man before.

Furthermore, as Sten Vikner has observed (1991, Chapter 4), Dutch also displays relativized minimality effects in double object constructions. Dutch patterns with Icelandic in that scrambling the direct object over the indirect object is not possible. (In the examples that follow I ignore the interpretive/contextual constraints on the NPs, concentrating only on which scrambled orders are possible.)

- (62)a. ?dat Piet echt Marie het boek getoond

that Peter indeed Mary the book shown

heeft. (Dutch; Vikner 1991)

has

... that Peter has indeed shown Mary the book.

- b. dat Piet **Marie** echt het boek getoond

that Peter Mary indeed the book shown

heeft

has (scrambled IO)

- c. dat Piet **Marie het boek** echt getoond

that Peter Mary the book indeed shown

heeft

has (scrambled IO, DO)

- (62)d. *dat Piet **het boek** echt Marie getoond
that Peter the book indeed Mary shown
 heeft
has (*scrambled DO alone)
- e. *dat Piet **het boek Marie** echt getoond
that Peter the book Mary indeed shown
 heeft
has (*scrambled DO, IO)

Such scrambling is in fact possible in German, just as it is in Yiddish.

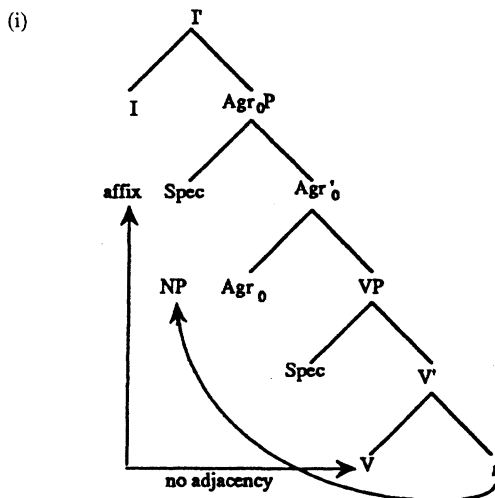
- (63)a. daß Max nicht Rebekka das Buch gegeben hat. (German)
that Max not Rebecca the book given has
 ... that Max has not given Rebecca the book.
- b. daß Max **Rebekka** nicht das Buch gegeben
that Max Rebecca not the book given
 hat
has (scrambled IO)
- c. daß Max **Rebekka das Buch** nicht gegeben
that Max Rebecca the book not given
 hat
has (scrambled IO, DO)
- d. daß Max **das Buch** nicht Rebekka gegeben
that Max the book not Rebecca given
 hat
has (scrambled DO)
- e. daß Max **das Buch Rebekka** nicht gegeben
that Max the book Rebecca not given
 hat
has (scrambled DO, IO)

Thus, it appears that Dutch and Icelandic pattern together in that the leftward movement of objects shows relativized minimality effects with

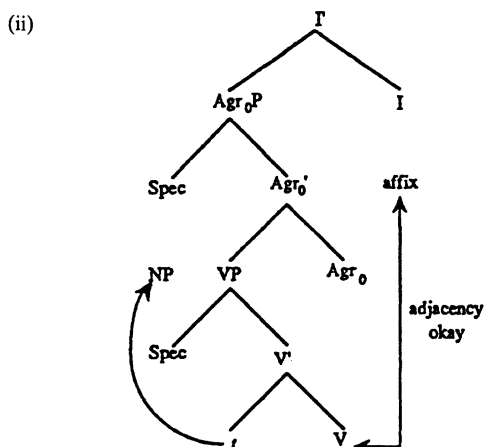
respect to A-positions, while German and Yiddish share the property of not showing these effects.²²

The total absence of relativized minimality effects with respect to A-positions in Yiddish/German suggests that leftward movement in these

²² There is still the puzzle of why object shift in Icelandic obeys Holmberg's Generalization, while Dutch shows no such effects. A detailed examination of this problem is beyond the scope of this paper, but one possibility is that the difference between Icelandic and Dutch might be characterizable in terms of an adjacency requirement on affixation, along the lines of Bobaljik (1994). Bobaljik revises Chomsky's (1992) principle of Equidistance by assuming first that a specifier and the specifier of its complement are always equidistant. Thus, [Spec, Agr_oP] and [Spec, VP] are equidistant. Bobaljik explains the correlation between object shift and verb movement in Scandinavian by the fact that affixation of inflectional heads onto a verb requires structural adjacency, which in VO languages like Icelandic is disrupted by object movement in the absence of verb movement:



Object movement in head-final languages does not disrupt adjacency:



languages has A-bar movement properties rather than purely A-movement properties, and should be distinguished from the movement seen in object shift (see also Fanselow 1987, Holmberg 1986, Webelhuth 1989, among others). The failure to trigger relativized minimality effects would be no surprise if the ultimate landing site of the moved NP is an A-bar position, since the relevant intervening specifiers are all A-specifiers, and thereby should not 'count' as closer possible landing sites for an NP moving to an A-bar position.

6.2. Other A-Bar Properties

Scrambling and object shift are also distinguished with respect to various other diagnostics differentiating A and A-bar movement. Object shift displays primarily A-movement characteristics, while scrambling shows some properties of A-bar movement. From the point of view of the A/A-bar distinction, here again leftward movement in Yiddish patterns with scrambling (see Holmberg 1986 and Webelhuth 1989).²³ For example, the leftward movement process does not only affect NPs; other types of constituents such as PPs can also move:

(64)a. *Maks hot gezungen af der bine.* (Yiddish)

Max has sung on the stage.

Max sang on the stage.

Movement of double objects presumably triggers a relativized minimality effect independently of the adjacency requirement. As Bobaljik demonstrates, this approach is still consistent with some notion of an Equidistance Principle.

²³ Scrambling also displays A-movement properties (in Yiddish as well as Dutch and German), such as clause-boundedness:

(i)a. *... *az Maks hot Avromen_i gezogt az Rifke hot gezen t_i*

that Max has Abraham said that Rebecca has seen

b. *Avromen_i hot Maks gezogt az Rifke hot gezen t_i*

Abraham has Max said that Rebecca has seen

Abraham, Max said Rebecca saw.

The scrambling example in (ia) contrasts with the topicalization (a purely A-bar process) in (ib) in not allowing the NP *Avromen* 'Abraham-Acc' to move out of its (tensed) clause. Note that scrambling out of infinitivals is permitted in both Yiddish and German.

The mixture of A and A-bar properties seen in Yiddish may result from two stages of movement, an initial A-movement stage (perhaps movement to the specifier of some Agr head), followed by an A-bar stage (see Mahajan 1990). What is essential to the points I am making here is only that scrambling has A-bar properties not seen in object shift, however.

- (64)b. Maks hot **af der bine** gezungen.

Max has on the stage sung

Max sang on the stage.

Object shift, on the other hand, is case-driven (the object moves to [Spec, Agr_o] to 'check off' case features, as suggested by Jonas and Bobaljik 1993 and also Collins and Thráinsson 1994), and thus affects only NPs.

Another property that sets Yiddish scrambling apart from Scandinavian object shift is the fact that leftward movement of NPs licenses parasitic gaps in Yiddish:

- (65) Maks hot **dos bukh**_i aroysgevorfn *t_i* on frier

Max has the book out-thrown without earlier

ibertsuleyenen. (Yiddish)

over-reading

Max threw away the book without first reading (it).

This, of course, is a property characteristic of A-bar movement. Object shift in Scandinavian does not license a parasitic gap (Holmberg 1986, p. 173ff.):

- (66)a. **Den artikeln**_i kastade dom *t_i* innan jag hade

that article threw-out they before I had

läst e. (Swedish)

read

That article they threw away before I had read (it).

- b. ***Den artikeln**_i kastades *t_i* innan jag hade läst *e.*

that article was-thrown before I had read

- c. *Jag kastade **den** inte *t_i* innan jag hade läst *e.*

I threw-out it not before I had read

While topicalization (an A-bar process) does license a parasitic gap in Swedish, neither passive (b) nor object shift (c) licenses such a gap. This is expected if object shift, unlike scrambling, is an instance of A-movement (a parasitic gap *e* is licensed by a gap *t* if *t* is a variable (an A-bar trace)

and *t* does not c-command *e*). Note that in contrast to Scandinavian object shift, scrambling in German *does* license parasitic gaps:²⁴

- (67) ?... weil er den Patienten [ohne vorher *e* zu
 since he the patient without beforehand to
 untersuchen *t*] operierte.
 examine operated

... because he operated on the patient without first examining
 (him).

(German; Webelhuth 1989, p. 356)²⁵

Thus, leftward movement in Yiddish displays the A-bar diagnostics associated with scrambling (as seen in German) rather than Scandinavian object shift. This in turn explains the non-applicability of Holmberg's Generalization in Yiddish as well. The relativized minimality violation will only arise with respect to A-movement, since the specifier being 'skipped' is an A-specifier. A phrase moved by A-bar movement can skip an A-specifier without incurring a relativized minimality violation.²⁶

To summarize the results of this section, leftward object movement in Germanic falls into two major types. The Scandinavian languages (and possibly also Dutch) exhibit object movement which is A-movement to Agr_oP positions, and leftward object movement in Yiddish is a result of A-bar scrambling of the type seen also in German. Thus, both types of object movement (A and A-bar) are exemplified by both VO and OV languages. This raises the question of whether there is a way of stating

²⁴ Interestingly, scrambling in Dutch also licenses parasitic gaps:

- (i) ...dat Jan **het boek** [zonder *e* uit te lezen] *t* weglegde. (Dutch)
 that John the book without out to read away-put
 ... that John put the book away without finishing (it).

Zwart (1993) argues that parasitic gaps cannot be taken as a diagnostic of A-bar properties since the data for parasitic gaps licensed by scrambling is not completely parallel with parasitic gaps licensed by *wh*-movement. It is not clear to me why the two cases should be expected to be completely parallel, given that scrambling and *wh*-movement differ in other respects. What is essential is that the clear cases of A-movement (such as passive and raising) do not license parasitic gaps, and that does seem to be the case.

²⁵ For many German speakers, parasitic gaps are in general only marginally acceptable.

²⁶ Below, I distinguish pronominal object shift in Mainland Scandinavian from full NP shift in Icelandic by claiming that the former is an instance of a type of cliticization, or head movement, while the latter involves movement of an XP to a specifier. In this case, the place of pronominal object shift in the A/A-bar dichotomy becomes less clear. If, however, object shift is regarded as case-related regardless of the type of NP involved (the cliticization being the result of an obligatory incorporation in the case of Mainland Scandinavian), the distinction can be maintained.

the difference between scrambling and non-scrambling languages in Germanic in terms of the Scoping Condition. In other words, is scrambling in Germanic simply a process that is forced by the application of the Scoping Condition at S-structure, resulting in NPs scrambling in order to 'get out of the way' of existential closure (i.e., to satisfy the Novelty Condition), or to take scope over some overt operator in the sentence, such as an adverb, negation, or another NP?²⁷ It would not be at all surprising to find a semantic condition on scoping associated with A-bar movement. However, in the next section I will show that this case of 'semantically-driven' movement actually applies more broadly. In particular, I demonstrate that object shift in Scandinavian also shows the features of semantically-driven movement, specifically the application of the Scoping Condition.

7. THE SEMANTICS OF SCANDINAVIAN OBJECT SHIFT

In this section I turn to the issue of cross-linguistic variation in the application of the interpretation conditions, focusing in particular on the Scandinavian data presented earlier. German and Yiddish allow S-structure scrambling of NPs, so the reorderings dictated by the Scope Condition are possible in the overt syntax. In contrast, other languages which do not allow scrambling (such as English) must delay reordering until LF for both the Scoping and Type Mismatch Repair conditions. A tentative hypothesis by which these contrasts may be characterized is simply this: languages satisfy the Scoping Condition at the earliest point they are able to do so (given the movement processes that are permitted). Interestingly, this predicts the possibility of a contrast in the behavior of definite pronouns and definite full NPs, given that a language may well have different movement options for heads (i.e., pronouns) and XPs. Thus it is possible to view Scandinavian object shift as another case where the NP types and the interpretation conditions interact to 'rearrange' arguments.

²⁷ The data discussed here raise questions for the economy metric imposed on movement rules in Fukui (1993). The implication here is that scrambling in Germanic is 'forced' movement in the sense of Fukui (1993); though scrambling is not restricted to a one-to-one relationship between a functional head and its specifier, the other cases of 'forced movement' (English topicalization and *wh*-movement) considered by Fukui are. Furthermore, if scrambling is in fact forced movement, German does not provide supporting evidence for Fukui's Parameter Value Preservation measure.

7.1. *Semantic Effects of Object Shift*

Recent works on Scandinavian syntax, among them Holmberg (1986), Vikner (1991), and Jonas and Bobaljik (1993) have demonstrated that object shift can be described in terms of several factors:

- (68)a. the presence of S-structure verb movement
- b. definiteness of the object NP
- c. whether or not a full NP can move

Conditions (a) and (b) apply in all the Scandinavian languages; (c) distinguishes Mainland Scandinavian from Icelandic. Thus, (68a) captures the generalization that object shift only occurs in verb-second clauses in Mainland Scandinavian (where there is arguably overt V-to-I-to-C movement):

- (69)a. ... at Peter uden tvivl ikke læste
that Peter without doubt not read
den (Danish; Vikner 1991)
it
 that Peter without doubt didn't read it.
- b. Peter læste **den** uden tvivl ikke
Peter read it without doubt not
 Without doubt, Peter didn't read it.
- c. *... at Peter **den** uden tvivl ikke læste.
that Peter it without doubt not read

Mainland Scandinavian is thereby distinguished from Icelandic, which permits both V-to-I verb movement in embedded contexts and V-to-I-to-C movement in matrix clauses, and correspondingly permits object shift in both main and embedded clauses:

- (70)a. Jón keypti ekki **bókina**. (Icelandic; Holmberg 1986)
John bought not book-the
 John didn't buy the book.
- b. Jón keypti **bókina** ekki.
John bought book-the not
 John didn't buy the book.

- (70)c. *Jón hefur **bókina** ekki lesið
John has book-the not read

- d. ...að Jón keypti **hana** ekki
that John bought it not
 that John didn't buy it.

The definiteness condition (68b) on shifted NPs is seen most clearly in Icelandic, which allows shifting of full NPs. Shift of a full NP requires either a definite or quantificational (specific) interpretation for the NP:²⁸

- (71)a. *Hann las **bækur** ekki. (Icelandic)
he read books not

- b. Hann las ekki **bækur**.
he read not books
 He didn't read books.

- c. Hann las **bækurnar** ekki.
he read books-the not
 He didn't read the books.

- d. Ég les **bækur** ekki ...
I read books not ...
 I don't READ books ... (I only BUY them)

This restriction is strikingly similar to the semantic constraints on leftward movement seen in the case of German and Yiddish scrambling. In other words, it appears that binding by existential closure is not possible for an indefinite NP moved leftward by object shift.

In contrast to Icelandic, Mainland Scandinavian does not allow shifting of full NPs:

- (72)a. Hvorfor læste studenterne ikke
Why read students-the not
artikeln? (Danish; Vikner 1991)
articles-the
 Why didn't the students read the articles?

²⁸ Thanks are due to Jóhannes G. Jónsson, Eiríkur Rögnvaldsson, Halldór Sigurðsson, Sigríður Sigurjónsdóttir, and Höskuldur Thráinsson for judgments.

- (72)b. *Hvorfor læste studenterne **artikeln** ikke?

Why read students-the articles-the not

But a semantic contrast similar to that seen with Icelandic full NPs can be seen between definite and indefinite pronouns in object shift contexts.

- (73)a. *Peter læste uden tvivl ikke **den** (Danish; Vikner 1991)

Peter read without doubt not it

- b. Peter læste **den** uden tvivl ikke

Peter read it without doubt not

Without doubt, Peter didn't read it.

Shifting of a definite pronominal object is obligatory, but shifting of an indefinite pronominal object is not (Anders Holmberg, personal communication):

- (74) Nei, jeg har ingen paraply (Norwegian)

no I have no umbrella

men jeg kjøper muligens **en** i morgen.

but I buy possibly one tomorrow.

No, I have no umbrella, but I will possibly buy one tomorrow.

In fact, the indefinite pronoun *cannot* shift, as the following example shows:

- (75) *men jeg kjøper **en** muligens i morgen.

but I buy one probably tomorrow

The fact that the indefinite pronoun does not shift indicates that 'novel' pronouns remain *in situ*. This is consistent with the claim that object shift interacts with the semantic conditions on existential closure.

Finally, with respect to the obligatoriness of object shift, just as in German and Yiddish, the shifting of (unstressed) definite pronominal objects is obligatory, though full NP shift (in Icelandic) appears to be optional:

- (76)a. Hann las þær ekki. (Icelandic; Holmberg 1986)

he read them not

He didn't read them.

- (76)b. *Hann las ekki þær.
 he read not them

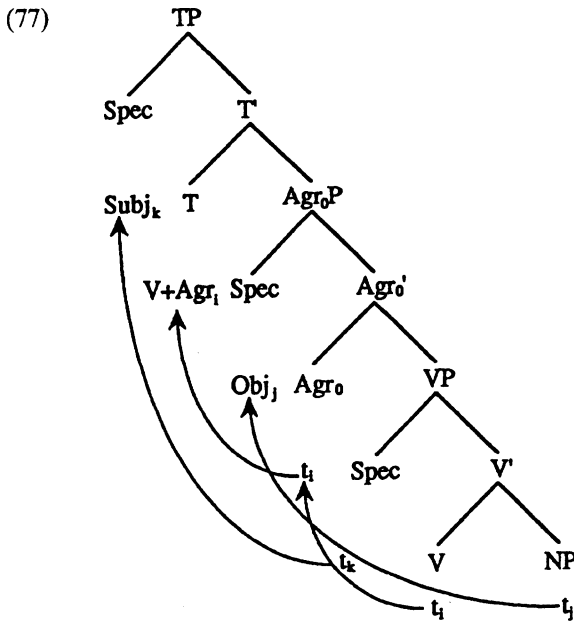
Thus, even the subcase of pronominal object shift exhibits the semantic effects predicted by the Scoping Condition. This supports my claim that NPs move to satisfy scoping requirements when they are able to. In the next section I examine in more detail how the possibility of verb movement enables object movement.

7.2. *The Link Between Verb Movement and Object Movement*

As seen above, the possibility of object shift in Scandinavian is dependent on the presence of S-structure verb movement. Whether or not a full NP can shift is dependent on the availability of an appropriate landing site. My claim is that verb movement actually enables S-structure movement of objects in Scandinavian in two ways. First, shifting of full NPs is permitted via the principle of Equidistance (Chomsky 1993). Assuming Chomsky's system of feature checking, I take the variation in the types of verb movement available at S-structure to be a result of cross-linguistic variation in the 'strength' of morphological features of the verb which must be checked by movement to inflectional positions. Each inflectional head is associated with both verbal (V) and nominal, or case (N) features. Strong features are checked at Spell-Out, and thus trigger S-structure movement. Head movement is a function of checking V features, while NP raising is a result of checking N features. Parametric variation in the strength of different types of features leads to different verb movement patterns. In Icelandic the Tense features are strong; there is verb movement to T in all clauses. In Mainland Scandinavian the Tense features are weak, and the features checked in the matrix C are strong in both types of Scandinavian languages.

In applying the Equidistance Principle to derive the possibility of full NP object shift, I follow Bures (1992) and Jonas and Bobaljik (1993) in assuming that the verb must move to T (I) at S-structure to license movement of an object into the [Spec, AGR_oP] (a VP-external specifier position). This verb movement is required in order to avoid violating the Shortest Move condition (e.g., relativized minimality) either in moving the object NP over the intervening [Spec, VP], or in the subsequent moving of the subject to [Spec, TP]. Avoiding a relativized minimality violation requires two steps. First, movement of the verb to AGR_o expands the domain of local movement by making both [Spec, AGR_oP] and [Spec, VP] equidistant with respect to object movement. Then, further

movement of the verb to T renders [Spec, AGR_oP] and [Spec, TP] equidistant with respect to movement of the subject, enabling the subject to skip over the [Spec, AGR_oP]. Essential to this explanation is that the N (case) features of T be strong, enabling the subject NP to land in [Spec, TP] to check case features, otherwise it would have to skip [Spec, TP], a potential landing site:



Verb movement enables the movement of pronominal objects in a different manner – via a form of cliticization. Pronouns, being heads, can attach to the verb and raise with it out of VP, the verb can then excorporate and move onward (see Diesing and Jelinek 1995, and also Josefsson 1992, 1993 for arguments showing that these pronouns do show many of the characteristics of clitics). I assume that such cliticization is sufficient to check the case features of the pronoun (cf. incorporation as a means of case licensing in Baker 1988). In this case, there is no need for the [Spec, TP] position to be accessible (S-structure verb movement to T is not necessary), since no specifier position is required for the moved object pronoun, though object movement via cliticization does obviously require S-structure verb movement to AGR_o.²⁹

²⁹ Holmberg (1991), Holmberg and Platzack (1992), and Cardinaletti (1994) reject the cliticization analysis of Scandinavian pronouns. They do so primarily on the basis of the fact

Both object shift possibilities are available at S-structure in Icelandic (due to the possibility of S-structure V-to-T movement in embedded clauses), and therefore both full NPs and pronouns can move at S-structure. Only the cliticization option is available at S-structure in Mainland Scandinavian, since there is no S-structure verb movement to T. Thus, [Spec, TP] is not available as an S-structure landing site for the subject NP, and any overt movement of an object NP to [Spec, Agr_oP] will result in a Shortest Move violation when the subject subsequently raises, skipping over [Spec, TP].³⁰ Therefore, only pronouns can shift at S-structure.

Turning now to what *must* shift in Scandinavian, we find that pronouns must move at S-structure if they are able to. I claim that this is a result of the Scoping Condition. Thus, object shift of pronouns is obligatory in both types of Scandinavian languages. Turning to full NPs, it appears that they need not move at S-structure. In German and Yiddish, certain definite NPs can receive a quantificational interpretation, and delay movement to LF, or if indefinite stay *in situ* and receive an existential interpretation. But familiar referential definites in base position are awkward except on the contrastive reading.

At first blush, it appears the object shift of definite NPs differs from German/Yiddish scrambling in that object shift of full NPs appears to be optional in Icelandic. Indeed, sentences like the ones in (78) below are generally regarded in the literature to be of equivalent status.

- (78)a. Jón keypti ekki **bókina**. (Icelandic; Holmberg 1986)
 John bought not book-the
 John didn't buy the book.

that although the Scandinavian pronouns show many of the properties of clitics (they cannot be stressed or conjoined, for example), they do not exhibit *all* of the characteristics of Romance clitics (in particular, a cliticization analysis of Scandinavian pronouns would require the possibility of cliticization to a trace, ruled out for Romance by Kayne 1991). My position is not to dismiss these differences between Scandinavian and Romance as insignificant, but simply to demonstrate that it is worthwhile to explore what there is to be gained by building on the similarities.

³⁰ As Jonas and Bobaljik point out, the fact that the N features of T are strong in all the Germanic languages rules out the possibility of utilizing [Spec, TP] at LF. The N features of T must be checked at S-structure (in non-object shift languages this involves raising of the T head to Agr_s; see Jonas and Bobaljik 1993, pp. 70–71), and once checked, the N features disappear. Thus, even though in Mainland Scandinavian the verb may raise to T at LF, this will still not be sufficient to enable object shift, since [Spec, TP] is not be available.

- (78)b. Jón keypti **bókina** ekki.
John bought book-the not
 John didn't buy the book.

- (79)a. ^M... weil ich selten **die Katze** streichle. (German)
since I seldom the cat pet

- b. ... weil ich **die Katze** selten streichle.
since I the cat seldom pet
 since I seldom pet the cat.

Recall that the acceptability of the German example (79a) improves with contrastive emphasis on the definite NP object. Notice also that the definite NP object in the Icelandic example in (78a) is in phrase-final position, a position difficult to control for stress or emphasis. For example, it is not possible to deaccent the definite NP as a means of ruling out a contrastive (or otherwise novel) interpretation. Therefore, it is useful to examine more data from Icelandic, in which the unshifted definite NP object is not in a phrase-final position.

One such context is that in which there is a sentence-final adverb:³¹

- (80)a. *?Hann las ekki **bókina** oft. (Icelandic)
he read not the-book often.

- b. *?Hann las ekki oft **bókina**.
he read not often the-book

- c. Hann las **bókina** ekki oft.
he read the-book not often

He didn't read the book often.

Here we find that an unshifted definite object NP is awkward. The effect is especially pronounced if the adverb is given contrastive stress (thereby deaccenting the object NP and eliminating the possibility of a contrastive interpretation for the NP). Additionally, the unshifted order improves if an explicitly contrastive NP such as a demonstrative is used:

³¹ Judgments from Eiríkur Rögnvaldsson, Halldór Sigurðsson, and Sigríður Sigurjónsdóttir have been very helpful in examining this question.

- (81)a. Hann las ekki oft þessa bók. (Icelandic)

he read not often this book.

He didn't read THIS book often.

- b. Hann las ekki þessa bók oft.

he read not this book often

He didn't read THIS book often.

Thus, when the effects of phrase-final position are controlled, we see a pattern similar to that seen in German – the unshifted referential definites take a contrastive interpretation.

Another context to consider with regards to the semantic effects of object shift is the contrast between attributive and referential definite NPs. Recall that in German there was a meaning contrast between the scrambled and unscrambled orders. The unscrambled order permitted only the attributive reading (arguably a quantificational, or type $\langle\langle e, t \rangle, t\rangle$ interpretation), while the scrambled definite NP most readily admitted the referential (or type e) interpretation. Interestingly, when a definite NP which permits the attributive reading is used, a similar contrast is seen between shifted and unshifted definite NPs in Icelandic.

- (82)a. Hann les sjaldan lengstu bókina. (Icelandic)

he reads seldom the longest book

He seldom reads the longest book (whichever it is).

- b. Hann les lengstu bókina sjaldan.

he reads the longest book seldom

There is a certain book which is the longest, and he seldom reads that book.

The unshifted definite has the attributive (quantificational) interpretation, while the shifted definite has the referential interpretation. Thus, in this case also the behavior of shifted NPs in Icelandic parallels the behavior of scrambled NPs in German. I conclude, therefore, that the behavior of definite object NPs in Icelandic is not so different from German as it may seem; object shift in Icelandic appears to have the same semantic underpinnings as scrambling in German and Yiddish. Thus, we find the Scope Condition being satisfied as early as possible in the derivation (given the available movement rules) in Scandinavian as well as German and Yiddish.

The parallel between scrambling and object shift with respect to the

Scoping Condition in Germanic raises interesting questions concerning the nature of the A/A-bar distinction in movement. In particular, the Icelandic data show that A-movement is not devoid of operator-like effects.³² The similarity between Yiddish and Icelandic with respect to the scoping effect seen in object movement also cannot be reduced to a property of A-movement alone (with the A-bar properties of scrambling resulting from a subsequent A-bar movement in Yiddish), since there are examples in Yiddish in which the scope order can *only* be a result of A-bar-movement. One such example is that of the object moved over the subject, of the sort discussed above in Section 5:

- (83) Nekhtn hot a **bukh** yeder eyner nit geleyent. (Yiddish)
yesterday has a book everyone not read
 Yesterday everyone didn't read a (certain) book.

In this example the object NP *a buk* 'a book' is clearly in an A-bar position, since it is to the left of the subject, well above any objective case-checking position. In this order, the object NP can only have a specific reading in which it takes scope over the subject NP *yeder eyner* 'everyone', as opposed to the narrow scope interpretation for the object NP (note that movement to [Spec, Agr_oP] would result in a narrow scope reading for the object). If the scope fixing were simply a reflection of (earlier) movement to A-positions, this would be unexpected. Thus, the scope effects seen in scrambling are in fact associated with an A-bar movement, while those seen in object shift are due to A-movement.

8. SEMANTICALLY-DRIVEN MOVEMENT AND ECONOMY³³

In this paper I have argued that breaking the quantifier raising rule into two components, scoping and type mismatch resolution (as proposed by Diesing and Jelinek 1995), explains a number of features common to both scrambling and object shift in Germanic. In particular, the Scoping Condition interacts with the semantic types of NPs to produce a reordering of arguments according to definiteness specificity. Cross-linguistic variation in the level of application of the Scoping Condition (and resulting

³² This is, of course, not a novel observation. As is well known, scope contrasts can also be observed in raising and passive constructions.

³³ Woolford (1995, 1996) presents an optimality-theoretic treatment of related data from Palauan and Bantu. A careful comparison of the minimalist and optimality approaches in this context would clearly be very enlightening, but space considerations do not permit me to attempt it here.

reordering) results from variation in the types of S-structure movement rules available and the 'strength' of morphological features. This approach is rather different from that taken in Chomsky (1993, 1994), where all movement is taken to be driven by the checking of morphological features.

With respect to economy conditions, this approach raises a number of problems. One lies in the nature of the interaction of the semantic conditions and the syntactic movement rules. Recall that in Scandinavian the object movement induced by the Scope Condition 'piggy-backs' on verb movement, which is forced by morphological feature checking (yielding Holmberg's Generalization). Verb movement is then a function of the strength of inflectional features, while object shift is a function of semantic properties, but object shift is crucially dependent on verb movement.

This view of object shift seems inconsistent with the Minimalist Program; in particular, it appears to be a violation of the 'procrastinate' condition:

(84) PROCRASTINATE – delay movement to LF whenever possible

The net effect of this condition is that object NPs should move overtly if and only if they must move. The fact that Scandinavian objects do not *always* move indicates that simply checking of a strong morphological feature cannot be the sole driving factor, contrary to claims made in Chomsky (1993). Indeed, though Chomsky (1993) does distinguish derivations which fail due to uninterpretability, he explicitly argues against movement driven by interpretability concerns – see, for example, his discussion of *there*-sentences (pp. 32–33).³⁴

A second problem is more logistical in nature. How can the scoping distinctions accomplished at S-structure in Germanic (whether by object shift or scrambling) be maintained after LF, when covert raising of objects takes place? In other words, any scope relations established at S-structure should be obliterated by LF when the checking of weak NP features takes place.

Addressing the problems in reverse order, one approach to the first is to extend the 'copy theory' approach to movement proposed in Chomsky (1993) for Wh-movement to movements like object shift and scrambling as well.³⁵ Thus, movement of an object out of the VP (e.g., to [Spec,

³⁴ But see Golan (1993), Reinhart (1993), and Fox (1994) for discussion of how LF movements like QR might be constrained by economy. Adger (1995) also argues for taking interpretive considerations into account in determining the economy of derivations.

³⁵ Hornstein (1995) advocates reanalyzing quantifier raising (QR) within the Minimalist Program as A-movement, an approach which also requires extending the copy theory of movement to A-movement.

Agr_o]) creates a chain (NP_i, t_i), in which the trace is a 'copy' of the moved NP. This copy will be deleted in the PF component in the case of overt movement.

In Scandinavian, interpretation of NPs is determined by a process of 'differential deletion' which deletes *either* the head or the tail of the chain, depending on whether the NP has moved overtly or at LF.³⁶ In the case of an indefinite NP object, which remains in base position at S-structure, the NP moves to [Spec, Agr_o] at LF. In this case, the fact that the movement occurred 'late' in the derivation will cause the deletion mechanism to delete the head of the chain, leaving the copy in the VP-internal position, where it can be bound by existential closure. When the object moves overtly to [Spec, Agr_o] (as in the case of a definite or specific NP), this 'early' movement results in deletion affecting the tail of the chain, leaving nothing within the VP to be bound by existential closure. This rules out the existential interpretation.

We also need to allow for the cases where *all* NP movement is delayed until LF in Scandinavian, namely in sentences in which no overt verb movement takes place. When there is no verb movement (and consequently no object shift), S-structure position dependent contrasts in NP interpretation are not made. One way to implement this is to have the differential deletion mechanism be triggered by overt verb movement. When no overt verb movement takes place, either the head or the tail of a chain may delete (freely), and the well-formedness of the resulting semantic representation will depend on whether or not the relevant semantic conditions are met (i.e., the Novelty Condition, Type Mismatch Repair). In German the differential deletion mechanism is always 'on', so that the S-structure position of an NP is always relevant for interpretation.

A major problem with the approach outlined above is that the nature of LF as the level feeding into semantic representations gets obscured – in effect LF-movement of NPs in languages like German and Yiddish can be semantically vacuous, while overt movement has semantic significance. Chomsky (1995) introduces the idea of LF 'feature raising' which enables NPs which are not overtly moved to remain *in situ* at LF, only the relevant features raise for case-checking. This solves the logistical problem of interpreting the lexical portion of an NP in 'the right place', but still leaves us with the puzzling fact that the semantically-related movement (e.g., the movement of definite NPs) takes place at Spell-Out rather than at LF. Dealing with this aspect of the difficulty brings us back to the first problem raised in this section – the problems raised for the Procrastinate condition,

³⁶ Related proposals have been made by Collins (1994) and Dekydtspotter (1994).

since in effect what is happening is that in some languages Scoping is given a relatively high 'priority' in the derivation.

I return now to the problem of the tension between the effects of the Scoping Condition (an 'earliness' effect; see Pesetsky 1989) and the economy condition Procrastinate. Procrastinate can be alternatively stated as follows:

- (85) PROCRASTINATE: overt movement is more costly than covert movement

Of course, procrastination is not an absolute requirement, otherwise there would never be any cases of overt movement. Overt movement occurs when it is necessary to avoid creating other more costly violations, such as failing to satisfy Full Interpretation (which requires checking of strong features). In other words, various conditions can override Procrastinate. Thus, conditions like strong feature checking and relativized minimality (Shortest Move) induce movement at S-structure in spite of the added cost of overt operations. Chomsky (1994) characterizes this overriding in terms of CONDITIONS ON CONVERGENCE. Economy is a metric which applies to convergent derivations, but strong feature checking and relativized minimality are conditions which must be satisfied for the derivation to converge in the first place. Thus, Procrastinate never leads to strong features being left unchecked or violations of relativized minimality.

The effects of the Scoping Condition can also be described in these terms. For example, in the case of German and Yiddish scrambling, relativized minimality (Shortest Move) is not violated, since scrambling involves A-bar movement, and the relevant intervening specifiers are A-positions. But the Scoping Condition is a condition on Convergence, which leads to the overriding of Procrastinate. This results in scrambling taking place to satisfy the Scoping Condition (whether or not S-structure verb movement takes place). In Scandinavian, Shortest Move is relevant, since A-bar scrambling is not possible. Since Shortest Move is a condition on Convergence, object shift is dependent on verb movement, but the Scoping Condition still overrides Procrastinate to the extent possible without violating Shortest Move.

In summary, while there are some significant differences between the approach taken here and that outlined in the Minimalist Program, the two may not be wholly incompatible. It is clear, however, that more research needs to be done on the relationship between movement and meaning and how the grammar might be structured to reflect that relationship.

9. CONCLUSION

In this paper I examined the relationship between syntax and semantics, focusing on object movement in Germanic. In particular, I introduced a semantically-based view of scrambling in German, based on that presented in Diesing and Jelinek (1995). My initial focus was on Yiddish, a language over which there has been some controversy regarding the underlying order of the VP. I showed that when the semantic properties of different word orders are examined in light of the Diesing and Jelinek proposals, the conclusion that Yiddish is an SVO language emerges. I also showed that the leftward movement seen in Yiddish has the properties of scrambling, rather than object shift, making Yiddish a relative rarity among the Germanic languages as an SVO language with scrambling. Extending the semantic approach, I also showed that Scandinavian object shift, though being a rather different sort of movement from scrambling, exhibits the semantic effects similar to those seen in German/Yiddish scrambling. Finally, I examined some of the implications and problems the view of the syntax-semantics interface and scrambling object shift presented in the paper raises for the Minimalist Program of Chomsky (1993, 1994, 1995).

There are certainly many questions that remain concerning scrambling and object shift, both in terms of the theoretical motivations underlying these cases of movement, as well as their cross-linguistic characteristics and explanations thereof. My hope is that this paper provides both an empirical contribution and a theoretical step forward in the ongoing investigation of these problems.

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