The interaction of syntax and discourse in word order: data from Turkish

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Abstract

Some recent studies have pointed out that certain grammatical phenomena are not eligible to be analyzed within a strictly formal-syntactic framework, and that surface forms can best be analyzed as resulting from the interaction of syntax and pragmatics. This paper will advocate a similar view by arguing that it is necessary to postulate two distinct but interacting levels of representation in order to accommodate word order variation in Turkish: a "phrase structure" (PS) at the formal-syntactic level and an "information structure" (IS) at the pragmatic level. It will evaluate data primarily concerning quantifier scope and binding to show that 'fronting' of the object has a pragmatic as well as a semantic import, whereas 'postposing' of the sentence-initial arguments is pragmatically contentful but semantically vacuous. It will argue that although object fronting lands itself to a syntactic movement analysis, attempts to associate semantically vacuous alternations like postposing with formal-syntactic operations either call for unmotivated modifications to the generativist assumptions, or necessitate extensions to the framework, which leads to the weakening of the theory.

1. Scope and claim

Although it is commonly acknowledged that alternative constituent orders in a language reflect alternative discursive distributions, functionally- and formally-oriented frameworks have different assumptions about how central discourse is to the grammatical system, and about whether it is necessary to posit a level of pragmatic relations distinct from the level of formal-syntactic (or, semantic) relations. Functionalist studies explicitly recognize discursive aspects of word order variation. Various frameworks make use of structured representations of discourse entities, commonly termed as 'information structures', which are taken to be

relevant to the linear order of sentence constituents (e.g. Prince 1981, Vallduví 1992, Lambrecht 1995).

Within the generativist tradition, discourse functions such as 'topic' or 'focus' are frequently relegated to extra-syntactic modules and regarded as being external to the 'core grammar,' although it has sometimes been acknowledged that they may have a role in the determination of the surface forms by inducing 'stylistic movements' or 'PF-movements' (e.g. Ross 1967, Koike 1997, Kidwai 1999). Nevertheless, the dominant practice in generativist research has been to associate linear order with formal-syntax, either explicitly or implicitly. Kayne (1994) takes the strong position and, without essential reference to discursive factors, maintains that the hierarchical structure completely determines the surface order of constituents. A similar trend, the discourse-configurational approach, associates discourse functions with specific positions in the hierarchical structure (e.g. Rizzi 1997, Kiss 1998).

Nevertheless, a number of recent studies have pointed to challenges posed by certain grammatical phenomena for strictly formal-syntactic approaches. Park (1995), from within the Role and Reference Grammar framework, argues that pragmatic case (as opposed to semantic case) in Korean is motivated by information structure. Alexopoulou (1999) presents empirical data that challenge the isomorphic view of syntax and discourse. Clamons et al. (1999) maintain that topic agreement in Oromo cannot be accounted for by a formal-syntactic analysis without unmotivated modifications to the theory. Choi (2001) points to the problems of A- vs. A'-movement approaches to German scrambling and proposes an optimality-theoretic analysis that introduces the competition between discourse and syntax. The common claim in these studies is that surface forms can best be analyzed as resulting from the interaction of syntax and pragmatics.

This paper will attempt to show that post-verbal constituents in Turkish pose similar problems for strictly-formal frameworks. Using data primarily regarding quantifier scope and binding, it will argue that, for sentences with pre-verbal (unmarked) focus, the SOV-OSV alternation ('object fronting') has a pragmatic as well as a formal-syntactic import, whereas the SOV-OVS and OSV-SVO alternations ('postposing' of the initial subject and initial object respectively) are only pragmatically motivated. In other words, it will argue that, while object fronting is semantically contentful, postposing is semantically vacuous and exclusively discourse-sensitive.

Object fronting will be shown to land itself to a minimalist treatment (Chomsky 1993, 1995). It will be analyzed as reflecting the movement of the object to the specifier of a functional projection high above AgrSP, the trigger of the movement being the attraction of a [D] feature (EPP-feature) on the object. On the other hand, a generativist analysis of postposing as a syntactic movement will be shown to be both technically problematic and theoretically ungrounded. It will be argued that a principled treatment of semantically vacuous order alternations calls for extensions to the formal framework. The outlines of such an extension to the minimalist framework (Chomsky 1993, 1995), will be drawn, one which recognizes the IS as a level of representation and refers to the notion of interpretability at the PF level. Nevertheless, it will be observed that such extensions often weaken the generativist framework.

2. Word order variation in the generativist framework

In the earlier periods of the generativist tradition, 'free word order' phenomena was conceived as 'stylistic reordering', accomplished outside the domain of the core grammar. Chomsky (1965), while not denying the importance of word order alternations for general linguistics, proposes that they should be separated from the competence grammar. Ross (1967) proposes a model that distinguishes core grammar (or syntax) from stylistic rules. He claims that both 'free word order' and 'strict word order' languages have the same kind of grammar with the same types of transformations and rules. For languages with free word order, what is responsible for order variation is a distinct 'stylistic component', and free word order results from the application of a rule called 'scrambling'.

One of the critical turns in the investigation of 'free word order' languages is Hale's (1978, 1983) works on Warlpiri. His works introduced the configurational vs. non-configurational distinction. The claim was that non-configurational languages do not conform to the predictions of the Projection Principle and the X-bar theory. Such languages had a 'flat' structure, in which constituents are inserted in any order.

However, admitting that the most basic components of the syntactic theory are not valid for a considerable subset of world's languages was obviously not a desirable option for the GB framework. Consequently, many attempts have been made to show that the principles behind syntactic structures of 'free word order' languages are basically the same with those in 'rigid word order' languages (e.g. Saito and Hoji 1983). What was responsible from scrambling was a type of movement different than argument movement observed in rigid word order languages.

The relevant distinction here is between A- and A'-movement. A-movement is the type of movement whose target is a position where Case is assigned/checked, the prototypical example being subject raising to [Spec, IP] in English. Although A'-movement was initially negatively defined as non-A-movement, its typical example is the *wh*-movement (operator movement) to [Spec, Comp] in English.

Since it is not possible to make an *a priori* categorization of movement types involved in scrambling in different languages, many studies are conducted with reference to the acknowledged properties of A- and A'-movement, observing which of those are displayed by the movement under investigation. Two widely accepted criteria for the diagnosis of a movement type as to A vs. A'dichotomy are related to binding:

• Movement to an A-position changes the existing binding possibilities for lexical anaphors, movement to an A'-position does not. In other words, A-movement does not allow 'reconstruction', whereas A'-movement does.

Reconstruction is the 'moving back' of displaced ph rases to their original positions at the level of representation where binding (and relative scope) relations hold (e.g. Saito and Fukui 1998). Operations that do not allow reconstruction are sometimes characterized as 'semantically vacuous', and does that allow reconstruction as 'semantically contentful'.

• Movement to an A-position does not create weak crossover effects, movement to an A'position does. Webelhuth (1995:66) describes the typical weak crossover configuration as follows: 'an expression in an A' position c -commands both its trace and a variable and there is no c - command between the latter two expressions." Weak crossover configurations are degraded in grammaticality.

Scrambling, although commonly associated with A'-movement operations, has often been noted to behave non-uniformly with respect to these diagnostics, both across and within languages. Mahajan (1990) observes that Hindi local scrambling does not always create weak crossover effects, and concludes that the scrambled element sometimes lands to an A-position from which A-binding is possible. Koopman and Sportiche (1991), after their analyses on English, French, Arabic, Yiddish, Malayo-Polynesian, and Kilega, show that the same structural positions display A- or A'-properties in different languages.

The mixed behavior of scrambling with respect to binding is also demonstrated, among others, by Saito (1992) and Miyagawa (1997) for Japanese, by Webelhuth (1992, 1995) and Bayer and Kornfilt (1994) for German. Choi (2001) shows that not only scrambling, but also wh-movement and topicalization in German display a mixed behavior with respect to reconstruction and weak crossover. He declines the implications of the dichotomy and proposes an optimality theoretic analysis that introduces the competition of syntax and discourse in determining surface forms.

Whether or not A vs. A' distinction provides a sufficient framework to deal with scrambling, studies that employed the implications of this dichotomy at least indicated that word order variation is not eligible to be linked to a single type of operation.

Discussions on scrambling took a new turn with the rise of the minimalist thinking (e.g. Chomsky 1993, 1995). In the minimalist framework, movement is subject to economy conditions: A constituent will not move unless forced by the need to check formal features on a head, which in turn is necessary for the derivation to converge (a principle usually known as 'Last Resort'). Hence, the basic question is whether or not a word order alternation can be studied as resulting from a movement operation that conforms to Last Resort (subsumed under Attract/Move in Chomsky 1995). And if yes, which feature checking requirements motivate such a movement? Typical A-movements like subject raising and object shift are motivated by the need to check Case and Agreement features. Typical A'-movements, such as wh-movement in English, also conform to Last Resort, since they are assumed to be driven by the need to check operator features. However word order alternations lack an obvious trigger. Besides, scrambling is not 'obligatory' in the sense that 'unscrambled' sentences are already convergent. This latter problem is frequently referred to as 'the problem of optionality', and constitutes the core of one of the yet unsettled debates in the minimalist framework.

There are at least four main approaches to the problem of optionality. The first is to acknowledge certain or all instances of scrambling as truly optional movements, hence admit Last Resort violations in the computational system (e.g. Poole 1996, Saito and Fukui 1998). The second is to insist on the relevance of Last Resort and maintain that scrambling is motivated by some feature-checking requirements (e.g. Miyagawa 1997, 2002, Müller 1998). A third camp maintains that scrambled constituents are base generated (directly merged) into their surface positions (e.g. Fanselow 2001, Boskovic and Takahashi 1998), hence that scrambling does not involve movement at all. Lastly, some propose that what is responsible

from scrambling are extra-syntactic mechanisms, chiefly PF-movement (e.g. Koike 1997, Kidwai 1999).

3. Data and analyses

I will first attempt to show that different alternations have different syntactic and discursive implications, in conformity with the view that scrambling does not involve a uniform mechanism. I will demonstrate that object fronting topicalizes the object and is semantically contentful (in that it does not allow reconstruction), whereas postposing discursively suppresses (backgrounds) the sentence-initial element and is semantically vacuous.

The most frequent order in declarative sentences in Turkish is the verb final construction where the initial position is occupied by a nominative noun phrase (SOV), but constituents can surface at any position, creating grammatical sentences with different discursive distributions. One important point to note is that Turkish also uses prosody to express discursive differences (e.g. İşsever 2000). This necessitates that a study that deals with both the formal-syntactic and discursive aspects of surface forms be specific about significant prosodic differences. Hence I will distinguish surface forms not only by word order, but also by the locality of the accent.

To keep the exposition simple and the information structure fixed, I will deal with surface forms with nuclear accent on the pre-verbal position, which is the normal (unmarked) focus position in Turkish. To represent the accent, I will use an acute accent sign in word order designations (i.e, 'the SOV form'), and small capital letters in sample sentences:

(1) (The data set)

- a. Adam ELMA-YI ye-di (SÓV) man.NOM apple-ACC eat-PAST *The man ate the apple*
- b. Elma-yı ADAM ye-di (OŚV) apple-ACC man.NOM ate
- c. ELMAYI yedi adam (ÓVS)
- d. ADAM yedi elmayı (ŚVO)

Taking the canonical SOV order as the reference, I will use the term 'postposing" to refer to the alternation from SÓV to ÓVS, and 'bbject fronting" to refer to that from SÓV to OSV. In the following section, I will also argue that OSV-SVO and SÓV-ÓVS alternations reflect similar mechanisms, and use the term postposing for both alternations (postposing of the subject for the former, and of the object for the latter).

3.1 Information structures for the data

The following simplified description of discursive properties of the data set basically adopts Lambrecht's (1995) framework, in which the information structure (or, the 'focus structure') is the grammatical device that encodes a pragmatic assertion. The pragmatic assertion consists of a pragmatic presupposition and a focus. The topic, which expresses the referent that the pragmatic assertion is about, is part of the presupposition.

Topics may differ as to their activation states of their referents in the minds of the speaker and hearer. As also noted by Van Valin and Lapolla (1997:204), languages make use of different morphosyntactic means for coding varying degrees of accessibility of topics. For the Turkish data, I will distinguish three realizations of topicality: Sentence initial regular topics, sentence final *backgrounds* and dropped *zero topics*¹. Zero topics encode highest accessibility, and regular topics encode the lowest accessibility.

All of the following are acceptable answers to the given question where the subject is presupposed (although the high degree of accessibility of the subject favors a dropped subject):

- (2) Q) Adam ne yedi? (What did the man eat?) man what ate
 - A) a. Adam ELMAYI yedi (SÓV) man apple -ACC ate
 b. ELMAYI yedi adam (ÓVS)

 - c. ELMAYI yedi (ÓV)

The topical subject is the form of a sentence initial regular topic in (2a), a post-verbal background in (2b), and a dropped, zero topic in (2c).

Below are acceptable answers to a question in which the object and the verb are given.

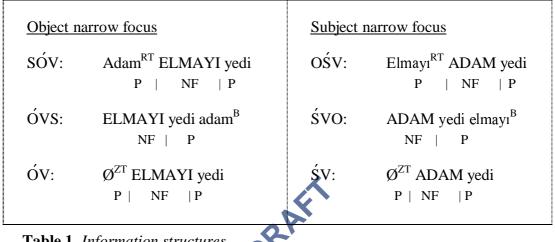
- (3) Q) Elmayı kim yedi? (*Who ate the apple?*) apple-ACC who ate
 - A) a. Elmayı ADAM yedi (OSV) appl e-ACC man ate
 - b. ADAM yedi elmayı (ŚVO)
 - c. ADAM yedi (ŚV)

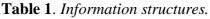
(3a) exhibits the topical object as a sentence initial regular topic. In (3b), the topical object is postposed to become a background, and in (3c) it is dropped. What we see is that postposing and dropping of the initial element also applies to the OSV form.

¹ From the framework of Givón (1994), postposing can be seen as an operation that promotes topicality compared to the sentence initial topic construction, and dropping as one that promotes topicality further.

In all the examples above, the accent is on the pre-verbal position, which is the unmarked (normal) focus position in Turkish. The focus in these examples consists of a single constituent, which amounts to a 'harrow focus' in Lambrecht's framework. Sentence focus is only possible with the SOV order, but broad focus is possible with both SOV and OSV orders (with S and O presupposed, respectively). Although quantifier scope and binding behaviour is seems to be uniform for narrow and broad focus assignment (in either SOV or OSV orders), for expository reasons, data here is limited to narrow focus constructions.

Table 1 shows the focus structure designations for the data in (2) and (3). (P stands for presupposition; NF, narrow focus; RT, regular topic; B, background; and ZT, zero topic.)





This exposition emphasizes two points. First, the pragmatic function of object fronting can be identified as "topicalization" and that of postposing as "backgrounding". Second, postposing is similar to dropping, in that it is sensitive to elements of information structure rather than to formal (grammatical) relations: It operates on the sentence-initial topical element, independent of whether this element is a subject or an object.

3.2 Formal-syntactic properties of the data

Once information structures for the surface forms under investigation are designated, we will look at the formal-syntactic consequences of fronting and postposing.

Quantifier scope and binding, together with case and agreement, have always been central concepts in formal-syntax, since they are assumed to provide direct empirical indications of a hierarchical structure by revealing c-command relations between constituents of a sentence. Bittner (1994) conceives s-structure (which roughly corresponds to the syntactic object at Spell-Out in the minimalist framework) as 'the syntactic level which determines structural Case assignment, agreement and syntactic binding relations." (Bittner, 1994:2). She further supposes that the s-structure is the default Logical Form (LF), from which alternative LFs can be derived.

Kural (1997) expresses the relevance of c-command for relative scope readings as follows:

QP1 takes scope over QP2 only if QP1 c-commands QP2 at the relevant (syntactic) level; where scope is established. (Kural 1997:504)

In virtually all formulations of binding theory, c-command is the common condition on binding. This condition is often embedded in the definition of binding:

A binds B iff

- a. A c-commands B, and
- b. A and B are coindexed

Certain discursive distributions can be strongly associated with certain phrase structures. Many syntactic operations, including raising, passivization or clefting constructions, are known to accompany alternative topic-focus distributions (e.g., Sornicola, 1996). Together with this possibility, the universal tendency for topics to be sentence-initial elements (e.g. Li and Thompson, 1976:465) might lead to the generalization that co-reference and quantifier scope relations are determined by the distribution of discursive functions or by the linear order of constituents. Nevertheless, relegating binding and scope to non-syntactic mechanisms like discursive distributions or linear order would undermine one of the empirical rationales for assuming a level of phrase structure, possibly leading to a non-configurational view of syntax². Whether or not such a view is plausible, this study will retain the formalist assumption that binding and relative scope assignment depend on c-command relations.

Since scrambling does not create differences in case and agreement, I will rely on relative quantifier scope and binding tests to judge about formal-syntactic differences between surface forms. Sentences that display differences with respect to these diagnostics will be taken as being semantically different, hence as entailing different phrase structures.

Some notes about binding in Turkish

Binding data in this section include *pro* rather than overt pronouns. The reason is that the *Avoid Pronoun Principle* (first proposed in Chomsky (1981)) seems to hold for Turkish. Kornfilt (1984) explains this principle as follows:

... overt pronouns cannot be too close to their antecedent. Where the overt pronoun is the only choice for a pronominal, the constraint can be overridden; however, in positions where an empty category pronominal *is* possible, it is the latter that must occur. (Kornfilt, 1984:24)

Turkish is commonly assumed to have two reflexive anaphors, *kendi* and *kendisi*. There are a number of controversies about the binding requirements of these two anaphors. It has frequently been noted that the 'well behaved' anaphor in Turkish is the reflexive *kendi* (and its person inflections), and that *kendisi* frequently acts like a pronoun (Kornfilt, 1984:73; Sezer, 1991:202-204; Uzun, 2000: 259-261). *Kendi* and *kendisi* are interchangeable in most contexts:

 $^{^{2}}$ See Göksel (1997) for an alternative treatment that acknowledges a direct relation between linear order and interpretation.

(4) Ahmet_i kendine_i/kendisine_i dikkat eder
 Ahmet self-DAT takes -care
 Ahmet takes care of himself

However *kendisi*, unlike *kendi*, can also be used interchangeably with the pronoun *o* (examples from Uzun 2000:260-261):

- (5) a. Ben Ayşe'yei kendisindeni/j/ondani/j söz ettim
 I Ayşe-DAT self-ABL/she-ABL mentioned
 I mentioned to Ayşe about her
 - b. Ali_i [kendisinin_{i/j}/onun_{i/j} en iyi öğrenci olduğu]-nu iddia ediyor Ali [self-GEN/he-GEN most good student be -VN-POSS]-ACC claims Ali claims that he is the best student

Since *kendisi* does not conform to the locality condition for binding of anaphors, I will take *kendi* as the 'genuine' lexical reflexive and analyze *kendisi* as a morphologically complex expression, as revealed its place in the nominal subject agreement paradigm:

kendi-m (self-1SG) kendi-n (self-2SG)

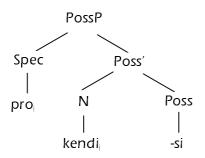
kendi-si (self-3SG)

kendi-miz (self-1PL)

kendi-niz (self-2PL)

kendi-leri (self-3PL)

Hence, I will analyze *kendisi* as PossP with a silent pronoun (*pro*) at the [Spec, PossP] position:



With the above structural analysis, the binding of *kendisi* will be expected to conform to Principle B of the binding theory, since *pro* is a pronominal. The binding of *kendi* within the complex expression conforms to Principle A, since it is now bound by *pro* within its local domain.

Another important point is related to a specific behavior of bare (lexical) anaphors. As Miyagawa (1997:4) illustrates with a Japanese example, when an operator or an argument



crosses its antecedent anaphor to the left of it, and if the anaphor is bare (not embedded in a larger DP), we obtain a degraded grammaticality:

(6) ???[John-to Mary]-o_i otagai_i-ga t_i mita
[John and Mary] -ACC_i each other_i-NOM t_i saw
John and Mary, each other saw

The degraded status of the resulting derivation is neither due to the violation of Principle A, nor due to a weak crossover configuration (since the anaphor c-commands the trace). Miyagawa notes that if the movement is A'-movement, [John and Mary] cannot bind the anaphor from an A'-position. If it is A-movement, the anaphor will locally c-command the trace of its antecedent, which violates Rizzi's (1986) Chain Condition. Miyagawa argues that the second is the case, since A-binding is possible when the anaphor is embedded in a larger DP (therefore avoiding c-command between the anaphor and the trace):

(7) [John-to Mary]-o_i otagai_i-no sensei-ga t_i mita
 [John and Mary]-ACC_i each other_i-GEN teachers-NOM t_i saw
 John and Mary, each other's teachers saw

Coming back to Turkish, if the OSV form entails a different PS than the SOV form (as scope data suggests), it will follow that the object has moved to a position from which it c-commands the subject. Then, for an OSV sentence where the object binds a bare anaphor in the subject position, a violation of Chain Condition will be expected. The following example with *kendi* and supports this prediction:

(8) *Adamı_i kendi_i gördü man-ACC self.NOM saw

We also expect that the violation will be remedied if we embed the anaphor in a larger DP, and we see that this expectation is also met:

 (9) Adamı_i [kendi_i komşusu] gördü man-ACC [self neighbor].NOM saw
 Lit. The man, his own neighbor saw him

Miyagawa (1997) uses examples like (9) to argue that A-binding is possible by a fronted object. However, at least for Turkish, the binding of the lexical anaphor does not seem to be local in (9), since the local domain of the bare anaphor is the PossP "kendi komşusu". This PossP can also display a long distance binding behavior, as exemplified in the following sentence in which the antecedent is clause-external:

(10) Ahmet'i [Mustafa [kendii komşusunun] gör-düğ-ü-nü] söyledi AhmetACC Mustafa self neighbor.POSS.NOM.GEN seeVN-POSS-ACC said Mustafa said that his own neighbor saw Ahmet In addition, an overt pronoun is also possible at that position (with some markedness, apparently due to the violation of Avoid Pronoun Principle; see page 9):

 (11) Adamı [onuni kendii komşusu] gördü man-ACC [his self neighbor].NOM saw
 Lit. The man, his own neighbor saw him

Then, it is reasonable to assume that *kendi komşusu* involves a silent pronominal at [Spec, PossP] position:

(12) Adamı [proi kendi komşusu] gördü

In that case, coreference with the object will not involve more than the binding of *pro*. Yet, for some of the binding tests below, an embedded anaphor will be included in order to force a reading where the subject and the object are coreferential. Such data will still be used to reveal the c-command relation between the subject and the object, since *pro* is a pronominal whose binding is expected to conform to Principle B of the binding theory, which also necessitates that the antecedent c-commands the bindee if binding is within some syntactic domain.

Scope and binding data

Data for which scope and binding behavior will be investigated is repeated below:

(13)	DK.
SÓV:	Adam ^{RT} ELMAYI yedi (Canonical order – narrow focus construction) P NF P
OŚV:	Elmayı ^{RT} ADAM yedi (Object fronting) P NF P
ÓVS:	ELMAYI yedi adam ^B (Postposing from SÓV) NF P
ŚVO:	ADAM yedi elmayı ^B (Postposing from OSV) NF P

(P: presupposition, NF: narrow focus, RT: regular topic; B: background; ZT: zero topic.)

Although sentences are presented here with their information structures, the quantifier scope and binding data in this section are intended to reveal the formal-syntactic facts about surface forms, it is assumed that binding and scope interactions depend on c-command relations, c-command being the core notion of the formal-syntax. The reason why surface forms are associated with certain information structures has to do with the assumption that every surface form simultaneously encodes both a phrase structure and an information structure: 'Just as there are no sentences without morphosyntactic and phonological structure, there are no sentences without information structure'' (Lambre cht 1995:16). The aim in

sticking to a definite information structure for a surface form is to avoid underspecification that may induce unwanted ambiguities.

Object fronting: SOV to OSV

It was observed in section 3.1 that object fronting topicalizes the object and puts the subject in focus. Here, the formal-syntactic significance of this alternation will be assessed. If these alternative forms involve differences in quantifier scope readings and in binding, we will judge that they involve different phrase structures.

Below are relative scope designations for the SOV form³:

- (14) a. Herkes ÜÇ KİŞİYİ gördü (Everyone saw three people)
 - ∀ > 3
 3 > ∀
 b. Üç kişi HERKESİ gördü (*Three people saw everyone*)
 3 > ∀

In (14a), the universal quantifier *herkes* can take wide scope over the numerically quantified expression *üç kişi*. The alternative reading can be obtained by usual quantifier raising (e.g. May 1977). (14b) implies a single logical form where the numerically quantified subject takes wide scope over the universally quantified object.

As to binding, the subject can bind a bare reflexive object in the SÓV form, as expected from Principle A of the binding theory.

(15) Adam_i KENDİNİ_i gördü man.NOM self -ACC saw The man saw himself

In conformity with the Principle B, subjects can also bind pronominal PossP objects with or without an embedded reflexive:

- (16) Adam_i [pro_i KOMŞUSUNU] gördü man.NOM neighbor -POSS-ACC saw The man saw his neighbor
- (17) Adam_i [pro_i KENDİ_i KOMŞUSUNU] gördü man.NOM self neighbor-POSS-ACC saw *The man saw his own neighbor*

³ For scope data, a stressed numeric quantifier \ddot{u}_{c} ('three') is used in order to avoid an ambiguity that would arise with *bir*, which could be interpreted either as an existential quantifer ('a'), or a numeric quantifier ('one').

But the object cannot bind a subject in the form of a bare anaphor:

(18) *Kendi_i ADAMI_i gördü self.NOM man-ACC saw

Binding by the object is marginally possible with a subject entailing a *pro*, although such expressions with pre-verbal focus are very unusual for most native speakers. (The reason for including an embedded anaphor is to force a reading where the object is coreferential with the subject.)

(19) ???[proi kendii komşusu] ADAMIi gördü self neighbor-POSS.NOM man-ACC saw Lit. His own neighbor saw the man

The fact that some speakers find such sentences marginally plausible might be stemming from the differences in the interpretation of syntactic versus discursive binding of *pro*. For the latter, the acceptability can be linked to a 'sloppy' interpretation of the expression, as an answer to a question like "*Kendi kom şusu kim i gördü*?" (lit. *Whose own neighbor saw who*?")⁴.

Let us now turn to the OSV form. The following pair exemplifies the quantifier scope interactions between the object and the subject.

(20) a. Herkesi ÜÇ KİŞİ gördü everyone three people saw $\forall > 3$ $3 > \forall$

> b. Üç kişiyi HERKES gördü three people everyone saw
> 3 > ∀

Comparing (20) with (14), we see that the OSV form displays an asymmetric scope pattern compared to the SOV form, which implies that the c-command relation between the subject and the object is reversed.

As to the binding behavior of OSV, the first observation is that the object cannot bind a subject in the form of a bare anaphor:

(21) *Adamı_i KENDİ_i gördü man-ACC self.NOM saw

⁴ Gardent (1997:188) states that "Although sloppy interpretation is usually accounted for by theories of ellipsis, it often arises in non-elliptical contexts." She also stresses that sentences may have a sloppy interpretation only, as the result of blocking of the other possible readings by the interaction with quantification or with binding.

This restriction is presumably due to the violation of Rizzi's Chain Condition (see page 10), since the object can be a syntactic binder for an embedded *pro* in the subject position without any markedness:

(22) Adamı_i [pro_i KOMŞUSU] gördü man-ACC neighbor-POSS.NOM saw Lit. The man, his neighbor saw him

Although binding here is not local, coindexing with *pro* suggests that the object ccommands the subject, since the bindee has an antecedent within a syntactic domain. As expected, binding is also possible with an anaphor embedded in a PossP:

(23) Adamı_i [pro_i KENDİ_i KOMŞUSU] gördü man-ACC self neighbor-POSS.NOM saw Lit. The man, his own neighbor saw him

In parallel to this observation, binding of a bare anaphor by the subject is quite unusual with the OSV form:

(24) ??Kendini_i ADAM_i gördü self-ACC man.NOM saw The man saw himself

A similar awkwardness is observed when the object is pronominal (the bare anaphor *kendi* is again included in order to force a coreferential reading):

(25) ??[pro_i kendi_i komşusunu] ADAM_i gördü self neighbor-POSS-ACC man.NOM saw The man saw his own neighbor

With the intonational pattern required by the narrow focus (with accent on the pre-verbal constituent), (24) and (25) are plausible only when the anaphoric expressions are part of a discursive context, for instance, as answers to questions like "*Kendini kim gördü?*" ("*Who saw hinself?*") and "*Komşusunu kim gördü?*" ("*Who saw his neighbor?*"). This suggests that coreference in these sentences involves sloppy identity, as was also assumed to be the case for the SÓV data in (19). The reason why (19) seems to be more unusual then (25) might be because a possible question for the latter expression seems more plausible than one for the former.

We see that SOV and OSV allow different binding possibilities between the subject and object. Just like scope data, binding data also suggest that object fronting reverses the c-command relation between the subject and the object. The object c-commands the subject in the OSV form.

Postposing: SÓV to ÓVS and OŚV to ŚVO

In section 3.1, the OVS and SVO forms were identified as the postposed counterparts of SOV and OSV respectively, involving the backgrounding of the initial topical argument. The question here is whether postposing yields a difference in scope and binding readings.

Below are relative quantifier scope interactions for the ÓVS form⁵:

(26) a. ÜÇ KİŞİYİ gördü herkes three people saw everyone ∀ > 3 3 > ∀
b. HERKESİ gördü üç kişi everyone saw three people 3 > ∀

In the ÓVS form, the subject can bind an object in the form of a lexical anaphor or a PossPs. The object cannot bind a subject lexical anaphor, and can marginally bind a PossP subject:

- (27) a. KENDİNİ_i gördü adam_i self-ACC saw man.NOM *The man saw himself*b. * ADAMI_i gördü kendi_i man.ACC saw self.NOM
 c. [pro i KOMŞUSUNU] gördü adam_i neighbor -POSS-ACC saw man.NOM *The man saw his neighbor*d. [pro i KENDİ_i KOMŞUSUNU] gördü adam_i
 - a. [pro_i KENDI_i KOMŞUSUNU] gordu adam_i self neighbor-POSS-ACC saw man.NOM *The man saw his own neighbor*
 - e. !! ADAMI_i gördü [pro_i kendi_i komşusu] man -ACC saw self neighbor.POSS.NOM *Lit. The man, his own neighbor saw*

What we see is a strict parallelism between the scope and binding behaviors of the SOV and ÓVS forms; the subject c-commands the object in both. Postposing of the subject seems

⁵ Putting accent on the verb would result in a different surface form (OVS), which may behave differently with respect to scope and binding. Temürcü (2001) shows that the placement of the accent results in different results as to binding and scope. This emphasizes the importance of distinguishing surface forms with respect to significant intonational differences in addition to word order.

to be an exclusively discourse sensitive operation which does not affect the scope relation between the arguments.

The alternation between the OŚV and ŚVO was also analyzed as involving postposing, motivated by the same factor as in the SÓV-ÓVS alternation, namely backgrounding of the topical element. If postposing is an exclusively discourse-driven alternation, we expect ŚVO to behave just like OŚV in quantifier scope and binding tests. We see that this expectation is met:

(28) a. \ddot{U} Ç KİŞİ gördü herkesi three people saw everyone $\forall > 3$ $3 > \forall$

b. HERKES gördü üç kişiyi
 everyone saw three people
 3 > ∀

(29) a. *KENDİ_i gördü adamı_i

b. [pro i KOMŞUSU] gördü adamı

- c. [proi KENDI KOMŞUSU] gördü adamı
- d. !ADAM_i gördü kendini_i (Sloppy)
- e. !ADAM_i gördü [pro_i kendi_i komşusunu] (Sloppy)

We conclude that the OSV and SVO forms are two discursive variants of the same syntactic structure, in which the object moved to a position from which it c-commands the subject.

<u>Summary</u>

SÓV and its postposed counterpert ÓVS display similar binding and quantifier scope behaviors with respect to the subject and the object. The subject c-commands the object in both forms. The scope and binding behavior of OSV and its postposed counterpart SVO is also uniform, and different from the former group. The object c-commands the subject in these forms.

OSV involves not only a discursive but also a formal-syntactic deviation from SOV, and OVS differs from SOV (and SVO from OSV) only with respect to the information structure. In other words, although both object fronting and postposing have discursive import, the former is semantically contentful, while the latter is semantically vacuous.

I will now attempt to show that object fronting can be treated as a formal-syntactic operation without ad-hoc modifications to the generativist framework, using the assumptions of the Minimalist Program (basically as it appears in Chomsky 1993, 1995). In particular, I

will analyze fronting as reflecting the movement of the object from its Case position to the specifier of a functional projection that dominates IP. In contrast, I will argue in section 5 that attempts to analyze postposing as an operation in the syntactic component face serious difficulties.

4. Object fronting as a formal-syntactic operation

In this section, the OSV order (with pre-verbal focus) will be analyzed as resulting from the syntactic movement of the definite object across the subject:

(33) Elmayı_i adam t yedi apple-ACC man.NOM ate *The man ate the apple*

The following treatment shares Chomsky's (1995) assumption that order is irrelevant at the derivation from lexicon to LF:

There is no clear evidence that order plays a role at LF or in the computation from N to LF. Let us assume that it does not. Then ordering is part of the phonological component, a proposal that has been put forth over the years in various forms. (Chomsky, 1995:334)

Although labeled trees are drawn in a head-final manner in the analyses, this is no more than a notational convenience, since the head parameter is taken to be relevant for linearization, which is accomplished within the phonological component.

Binding data in section 3.2 showed that object fronting creates new binding possibilities and does not allow reconstruction. We also see that it does not induce a weak crossover effect:

 (34) a. *pro_i arkadaşı herkesi_i gördü frien d-POSS.NOM everyone-ACC saw
 b. Herkesi_i pro_i arkadaşı t_i gördü

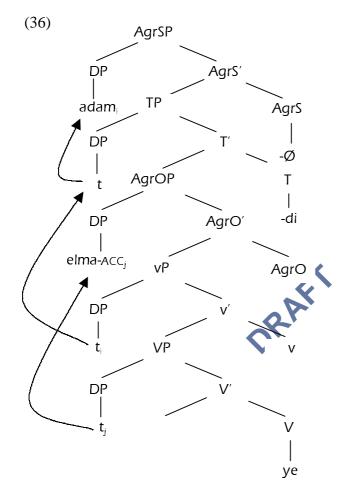
everyone - ACC friend - POSS.NOM saw Lit. Everyone, his friend saw

The absence of reconstruction and of weak crossover are important A-properties. On the other hand, the object's crossing the IP boundary and landing to a non-Case position suggest that object fronting shares some properties of typical A'-movements.

From the minimalist perspective though, the primary issue is to determine the driving force of this displacement, since movement must be triggered by the need to check some uninterpretable feature on a head. Object fronting can not be motivated by Case checking requirements, since the accusative Case of the object has already been checked at the foot of the chain. Temürcü (2001) identifies the driving force of the movement as the requirement to check a [D] feature (the EPP-feature) associated with the object. Below is a summary of this analysis.

First, for a transitive sentence with the canonical SOV order (35), the derivation in (36) is proposed.

(35) Adam elma-yı yedi man.NOM apple-ACC ate *The man ate the apple*



The agglutinative morphology of the verbal inflection reveals a split I, consisting of a TP and an AgrSP. The derivation also incorporates a Larsonian VP-shell as adopted in Hale and Keyser (1993) and Chomsky (1995). The upper projection is headed by a light verb v. The external argument (or the logical subject) is generated at the specifier of this vP, and internal arguments (logical objects) are generated inside the lower VP. The analysis merges arguments along the lines of Baker's (1996) UTAH. Agents merge into specifier of the vP, themes into the specifier of the VP, goals, paths, and locations into the complement of the VP.

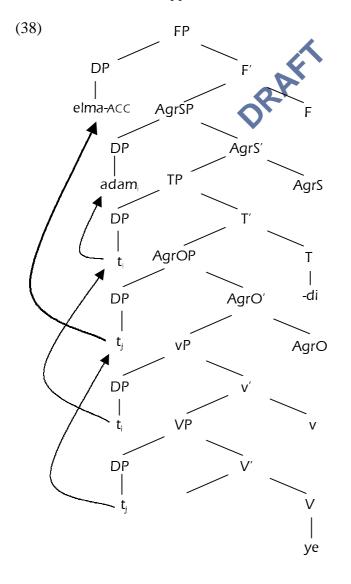
The object moves to [Spec, AgrOP] and its Accusative Case is checked against the functional head AgrO. [Spec, TP] attracts the subject to check its strong $\langle +NOM \rangle$ feature. The subject then raises to [Spec, AgrSP] for the need to check the strong Agreement feature of the functional head AgrS. These movements are rendered possible by the step-wise movement of the verb to higher functional heads. First, the verb raises and adjoins to AgrO. Both [Spec, AgrOP] and [Spec, VP] are hence rendered in the minimal domain of the resulting chain (V, t_v). This makes the two targets equidistant from the base position of the

direct object. Similarly, the movement of the subject past [Spec, AgrOP] is made possible by the raising of the complex head in AgrO (which includes the verb) to T, and further raising of the complex in T to AgrS. These assumptions recapitulate the well-known generalization of Holmberg (1986), which states that overt object shift is dependent on verb movement to T.

Although Chomsky (1995) dispenses with Agr projections and adopts a multiple-Spec light verb analysis in which the light verb not only assigns the external theta role (Agent) but also checks the object's Case features, I retain Agr projections primarily not to lose the implications of Holmberg's generalization, which has received strong empirical support from overt object shift studies in Scandinavian and Germanic languages.

Haegeman (1996), analyzing the distribution of lexical DPs and clitics in West Flemish, concludes that the language has clauses that contain functional projections above AgrSP. Adopting her proposal for a functional projection that dominates AgrSP, I will suggest the derivation in (38) for the sentence in (37).

(37) Elma-y₁ adam t yedi apple-ACC man.NOM ate *The man a te the apple*



What can be the driving force of the movement of the object past AgrSP? The Extended Projection Principle (EPP) (Chomsky 1981, 1986) states that all lexical information must be projected into syntax and that clauses must have subjects. Chomsky (1995) expresses the 'subject requirement' by the attraction of a constituent by a functional category with a strong categorial [D] feature (or, EPP-feature). This feature is located on T in tensed clauses, and can attract either a subject or an expletive to [Spec, TP].

Turkish subjects were analyzed above as raising to [Spec, TP] for the need to check the strong <+NOM> feature, subsequently raising to [Spec, AgrSP] for Agreement checking. If we assume that T in Turkish is also associated with a strong EPP-feature as it is in English, we will have a cue for understanding the predicative behavior of FP.

It should be noted that this analysis necessitates the step-wise movement of the verb up to F to induce equidistance for the movement of the object to [Spec, FP]. The movement of the verb to T is warranted by overt object shift. Object's movement from [Spec, AgrOP] to [Spec, FP] skips a filled A-position ([Spec, AgrSP]), which will only be allowed if the complex head in T to adjoins to AgrS, and the newly formed complex in AgrS to F.

With this picture in mind, let us assume that the object (and not the subject) comes from the lexicon with a strong EPP-feature, which must be eliminated before Spell-Out. The EPP-feature in T will not be erased as the result of checking against the subject, and T, as a sublabel of FP, will trigger the movement of the object from [Spec, AgrOP] to [Spec, AgrS] and have its EPP-feature erased.

Miyagawa (2002) analyzes the Japanese OSV in a similar way, as involving the EPPdriven movement of the object, rendered possible by V's movement to T. His proposal differs from the one brought here is that he assumes that the object just moves from its base position to [Spec, TP]. This is similar to subject's movement to the same target to yield the SOV order: In both cases, the argument with an EPP-feature moves to [Spec, TP] and the other argument stays in situ (in its vP-internal base position). This option does not seem to be favorable for Turkish, since it would deprive us of the possibility to analyze non-referential (incorporated) objects and subjects as staying vP-internally, in contrast to referential objects that undergo object shift and referential subjects that undergo subject raising (Temürcü 2001).

4. Problems of analyzing postposing as a syntactic movement

Technical difficulties

As far as minimalist assumptions are concerned, the basic technical difficulty of analyzing postposing as a syntactic movement operation stems from the requirement that every movement must be triggered by the need to check a formal feature on a head:

Movement is subject to economy conditions in the sense that phrases move only when necessary. This basic insight is spelt out in Chomsky 1995 in a specific way that I will call *strict minimalism*: α moves only if it is attracted

by a head β , and β attracts α only if this implies the checking of an uninterpretable feature f of β . (Fanselow, 2001:406)

The post-verbal position in Turkish is acknowledged to be the locus for elements backgrounded in discourse. Then, one can attempt to link rightward movement to the need to check 'pragmatic operator features' of nominal arguments. However, Fanselow (2001) argues that 'the checking of pragmatic operator features' cannot explain 'why pairs of *adjuncts* obey similar ordering constraints'' Fanselow (2001:410). He gives the following German example to show that the relative ordering of adverbs is sensitive to pragmatic conditions similar to those that regulate the ordering of nominal arguments:

(30) a. Er hat heute im Park gearbeited he has today in-the park worked *He has worked in the park today*

b. Er hat im Park heute gearbeited

Fanselow notes that one cannot analyze (30a) as being base generated and (30b) as involving scrambling, since adjuncts do not scramble. Adverbs in Turkish can also be backgrounded to appear post verbally:

(31) Ahmet ev-e geldi dün Ahmet home-DAT came yesterday *Yesterday, Ahmet came home*

Then it will not be convincing to motivate a rightward-movement by the need to check pragmatic operator features.

If postposing lacks a trigger, one can associate it with formal-syntax only by acknowledging it as an 'optional' movement. Poole (1996) proposes that phenomena like 'stylistic fronting' in Icelandic or 'semantically vacuous A'-movement' in Japanese involve optional movements. Saito (1989, 1992) also argues that Japanese scrambling involves semantically vacuous optional movements. Saito and Fukui (1998) show that scrambling and English heavy-NP shift involve reconstruction, and conclude that they 'are not motivated by any sort of feature checking and hence are indeed optional." (Saito and Fukui 1998:440). As was mentioned in section 2, the problems with the idea of optionality in syntax are well known. Müller (1999) states that, "... given economy constraints that block unforced movement (cf. Chomsky 1995), scrambling cannot strictly speaking be an optional movement operation; rather, a trigger must be identified that forces scrambling." (Müller 1999:777-778).

Even if we consent to admit certain syntactic operations as optional, or come up with a triggering feature, attempts to derive post-verbal constituents via syntactic movement mechanisms still face a number of difficulties.

Kural (1997) analyses backgrounded constituents as undergoing rightward movement to a position right-adjoined to CP. Similarly, Kornfilt (1998) argues that sentences with post-verbal constituents can best be analyzed as resulting form rightward movement and proposes

that the landing site is adjoined to a non-argument maximal projection. Nevertheless, rightward movement accounts often lack principled motivations. The acknowledgement of rightward movement makes it difficult to arrive at a universal characterization of landing sites and movement types, hence complicates the universal grammar by calling for further parameterization. For example, the ability of post-verbal constituents to A-bind pre-verbal ones in Turkish, as seen in the following example would necessitate that we postulate a distinct position in the phrase structure with A-properties:

(32) Kendini_i öldürdü adam_i self-ACC killed man.NOM The man killed himself

A second proposal for deriving post-verbal constituents in verb final languages is 'base generation" to the right (e.g. Bayer 1997). This solution escapes from the problem of optionality, because it does not involve any movement at all. However, similar to rightward movement accounts, base generation accounts often face difficulties that require substantial modifications to the theoretical framework. For example, both Boskovic and Takahashi's (1998) proposal for LF-lowering and Fanselow's (2001) proposal that links word order flexibility to the strength of checking features bring modifications to the theta-role assignment mechanism.

Another common approach is to stick to Kayne's (1994) Linear Correspondence Axiom (LCA), which assumes a strict correspondence between c-command relations and linear order. LCA also postulates that all movement is leftward. Under LCA, sentences with post-verbal constituents are obtained by the tertward movement of all the material except the 'extraposed'' constituent (e.g. Mahajan 1997 for Hindi). Kural (1997) exposes the c hallenge posed by Turkish for a Kaynean analysis. Evaluating data from the constructions where post-verbal quantifiers take wide scope over pre-verbal ones, Kural argues that deriving such constructions from SVO, as Kayne (1994) suggests, proves to be extremely complicated, if not incongruous.

Empirical/conceptual difficulties

In addition to these technical difficulties, the parallels between the discourse-conditioned dropping (pro-drop) phenomena and postposing bring further challenges for a strictly-formal treatment for the latter. In section 3.1, it was shown that dropping and postposing are motivated by similar factors: both involve the promotion of topicality with respect to the unmarked form where the initial element is the regular topic. If we assume some lexical features responsible for postposing in syntax, we will expect that these features are also involved in dropping. This would suggest a syntactic operation that results in a phonological deletion, which is incongruous. If dropping is exclusively discourse conditioned, so will be postposing.

Indeed, regardless of whether we can reach a consistent formal framework to 'generate' all the orders, the assumption that semantically vacuous order alternations are related to the formal-syntactic operations lacks a solid theoretical ground. There is no a priori reason to assume that a phrase structure encodes more than scope-sensitive aspects of grammar, including Case/Agreement, binding, and quantifier scope interactions. Leaving aside the advantage of empirical simplicity that such an assumption would bring (which is fully exploited by Kayne 1994), there is no reason to assume that precedence and dominance relations are not distinct. There exists a tradition in generative syntax that separates precedence relations from dominance relations (e.g., Speas 1990, Hittingbotham 1985, among others). The phrase structure encodes dominance relations, in contrast to precedence relations that pertain to the surface form. The hallmark of dominance is c-command, which is relevant for relative scope effects and for binding. Hence, quantifier scope and binding provide the chief empirical symptoms of the phrase structure, along with morphological case and agreement⁶. With these assumptions, word order alternations that do not involve any difference in scope, binding and case/agreement will be handled in 'extra-syntactic' mechanisms. As Fanselow (2001) also points out, this possibility is left open by Chomsky (1995): 'It may be a mistake to try to integrate them [i.e., rules such as scrambling] within the same framework of principles'' (Chomsky, 1995:325).

Choi (2001) uses an optimality-theoretic analysis to capture for the intearction of syntax and discourse in German scrambling. Although a similar a treatment seems promising to account for an interaction of syntax of discourse in Turkish, I will not pursue it further here. I will expand on a second alternative, one which involves an extension to the minimalist framework by invoking discourse-driven extra-syntactic 'PF-movements'.

Extending the formal framework

Accounts of 'scrambling" that make use of PF -movements display an important difference from the approaches outlined above. These accounts are not 'strictly-syntactic", since PFmovement is assumed to take place after Spell-Out, within the phonological component. In that respect, such proposals represent an 'extension" to the formal -syntactic framework, rather than modifications to it.

Such extensions often prove to be fruitful in coping with scope- and binding-related problems, by relegating semantically vacuous movements to extra-syntactic mechanisms. Koike (1997) proposes a leftward PF-movement mechanism for Japanese scrambling. Kidwai (1999) explores a similar option for focus-driven scrambling in positional focus languages. Kidwai suggests that scrambling in positional focus languages is the result of a PF-movement, motivated by the need to check the PF-interpretable [+FOCUS] feature on the focal elements under adjacency to the verb. She postulates an additional interface to the phonological component, the Domain Discourse, which interprets the presupposition-assertion structures resulting from PF operations.

For postposing in Turkish, I will draw the outlines of a similar extension that relegates semantically vacuous alternations to extra-syntactic mechanisms. I will then point to some implications of this extensions for the generativist framework in general.

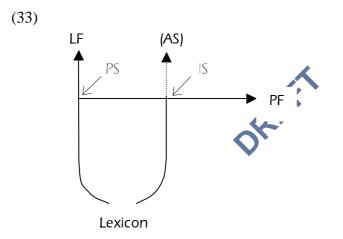
⁶ The strict correlation of case and agreement with the formal-syntactic structure has been recently questioned (e.g. Park (1995) for 'pragmatic case' in Korean, Clamons et al. (1998) for pragmatic agreement in Oromo).

5.2 Outlines of a tentative extension to the minimalist framework

Chomsky (1995) states that operations that produce a logical form (λ) from N may be different then post-Spell-Out operations within the phonological component:

" Σ [the structure formed at Spell-Out] itself is then mapped to π by operations unlike those of the N $\rightarrow \lambda$ computation." (Chomsky, 1995:229).

Temürcü (2001) introduces of IS as a level of representation that feeds the phonological component after Spell-Out, allowing a basic distinction between PS-movement and IS-driven movement (PF-movement), the former consiting of semantically contentful, the latter of semantically vacuous operations. The assumption is that the phonological component is fed not only by the syntactic structure formed at Spell-Out, but also by the output of what one might call a *discursive component*. The discursive component is conceived as that module of the language faculty concerned with the pragmatic relations between the elements of a sentence. It is assumed to produce information structures (ISs) as structured representations of pragmatic relations:



The numeration selected from the lexicon feeds both the syntactic and discursive components. Lexical items carry, in addition to syntactic features, pragmatic features that are delivered to the discursive component. AS (the Assertion Structure, possibly identical to IS) is conceived as the representation at the interface of discursive component with pragmatics.

Under this extended architecture, surface forms of linguistic expressions (PF) will be sensitive to the outputs of both the syntactic and the discursive components (or, to both the PS and the IS). The constraints on admissible combinations of different PSs and ISs can be accounted for by the interpretability requirements at PF. Just as certain categories of lexical items are eligible to appear at certain positions in the phrase structures (imposed by interpretability requirements at LF and PF), there will be restrictions for the compatibility of certain ISs with certain PSs.

The primary advantage of such an extension is that it excludes movements that seemingly violate the principle of Last Resort from the syntactic component, treating them as resulting from operations within the phonological component, motivated by IS differences. The introduction of IS-driven movements hence eliminates 'optional' movements from the syntactic component.

The admission of purely discourse-driven word order alternations also avoids operations and assumptions that imply cross-linguistic variation in the syntactic component (such as admitting the head-parameter into the syntactic component, or sensitivity of quantifier scope and binding to linearity). In that respect, one can notice an interesting similarity with the seemingly orthogonal approach of Kayne (1994), who aims to provide a universal characterization of syntax by positing a universal ordering for Specs, Heads and Complements. The proposed extension can contribute to the same goal by totally excluding linear order form the syntactic component, hence relegating a source of cross-linguistic variation to the interaction between discursive and phonological components.

Nevertheless, this extension also brings a number of unwelcome consequences for the generativist framework. It is easy to see that the above proposal departs from the basic minimalist assumption that there be no levels of representation other than LF and PF. It not only introduces IS as a new level of representation, but also treats the syntactic structure formed at Spell-Out (which corresponds to the S-structure in the Government and Binding framework) as a representation that feeds the phonological component, referring to it as PS. Secondly, the internal structures discursive and the phonological components are not easy to specify in formal terms, nor it is clear how to formulate the interpretability requirements at PF. Most importantly, the explicit recognition of pragmatic motivation in word order denies the fundamental assumption of generativism that formal-syntax is the central component of the grammar and that discourse is extranous to the language faculty, effectively weakening the theoretical framework.

6. Results and conclusion



For data with pre-verbal (unmarked) focus, it was shown that object fronting (which topicalizes the object) is semantically contentful, whereas postposing (which discursuvely backgrounds the sentence-initial argument) is semantically vacuous. Object fronting was analyzed as an EPP-triggered syntactic movement. Postposing on the other hand, was maintained to be best seen as an exclusively discourse-driven alternation.

It was argued that semantically vacuous operations like postposing in Turkish necessitateseither unmotivated modifications or substantial extensions to the generativist framework, which either damage or weaken the theory, in line with the view that certain grammatical phenomena necessitate a reference to a level of pragmatic relations distinct form a level of formal-syntactic relations.

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