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## On Object Positions, Specificity, and Scrambling in Persian\*

### 1. Introduction

Specific and nonspecific objects in Persian, a verb-final Indo-Iranian language, exhibit syntactic, morphological as well as semantic asymmetries. The specific DP, definite or indefinite, is always followed by the particle *râ*, while its nonspecific counterpart lacks this element.<sup>1</sup> Furthermore, nonspecific objects are adjacent to the verb in a neutral word order, while specific objects precede the indirect object. The examples in (1) and (2) display this distinction.<sup>2</sup>

- (1) a. Kimea aghlab barâ mâ she'r mi-xun-e  
K often for us poem hab-read-3sg  
'It is often the case that Kimea reads poetry for us.'
- b. Kimea aghlab barâ mâ ye she'r az Hafez mi-xun-e  
K often for us a poem from Hafez hab-read-3sg  
'It is often the case that Kimea reads a poem by Hafez for us.'
- (2) a. Kimea aghlab hame-ye she'r-â-ye tâza-sh-ro barâ mâ mi-xun-e  
K often all-Ez poem-pl-Ez fresh-her-râ for us hab-read-3sg  
'It is often the case that Kimea reads all her new poems for us.'

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<sup>1</sup>. The particle *râ* appears as *o* and *ro* in the colloquial language, and marks an object DP for specificity (Karimi 1990, 1996).

- b. Kimea aghlab ye she'r az Hafez-ro barâ mâ mi-xun-e  
 K often a poem by Hafez-râ for us hab-read-3sg

'It is often the case that Kimea reads a (particular) poem by Hafez for us.'

The nonspecific object is adjacent to the verb in (1a) and (1b). This element can be separated from the verb only in a very limited fashion, by representing contrastive focus. This is shown in (3).

- (3) Kimea aghlab (ye) ketâb-e dâstân barâ bachche-hâ mi-xun-e  
 K often (a) book-Ez story for child-pl hab-read-3sg

'Kimea often reads (a) STORY-BOOK for children (rather than a poetry book).'

The specific object may precede the adverb as in (4), or appear in sentence initial position, as in (5). In these cases, it receives topic or contrastive focus interpretation depending on the stress it carries.

- (4) Kimea in ketâb-e dâstân-ro aghlab [<sub>VP</sub> barâ bachche-hâ mi-xun-e]  
 K this book-Ez story-râ often for child-pl hab-read-3sg

'Kimea reads THIS STORY BOOK often for children.' or

'As for this story book, Kimea often reads (it) for the children.'

- (5) in ketâb-e dâstân-ro Kimea aghlab [<sub>VP</sub> barâ bachche-hâ mi-xun-e]  
 this book-Ez story -râ K often for child-pl hab-read-3sg

'Kimea reads THIS STORY BOOK often for children.' or

'As for this story book, Kimea reads (it) often for children.'

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<sup>2</sup>. Abbreviations: sg = singular, pl = plural, hab = habitual, part = particle, ind = indefinite, neg = negation, subj = subjunctive, Ez = Ezafe Particle. The *Ezafe construction* involves a DP consisting of an element with the feature [+N] such as N or A, its modifier(s), an optional possessive DP, and the Ezafe particle e that is structurally utilized as a link between the head and its modifiers (and the possessive DP). See Samiian (1983), Karimi and Brame (1986), and

The appearance of specific object in a higher position than its nonspecific counterpart (cf. (2)) could be argued to represent a syntactic phenomenon widely discussed in the literature as *object shift* (Holmberg 1986, Vanden Wyngaerd 1989, among others), or a movement into a functional position triggered by Case and specificity (Mahajan 1992, Kim 1992, Browning and E. Karimi 1994, among others). Some authors have considered the presence of this element in a position preceding an adverb (cf. (4) and (5)) as a movement triggered by semantic motivations (Diesing 1992 and 1997, and Diesing and Jelinek 1995, among others). The majority of previous analyses base-generate the direct object adjacent to the verb, and move the specific DP into a higher position mainly for the purpose of Case assignment.

In this chapter I offer an alternative analysis for the surface positions of objects by analyzing different properties of Persian object DPs. I propose that nonspecific objects and the verb receive a unified meaning based on their structural position. This proposal is presented within a version of the framework of Distributive Morphology (Halle and Marantz 1993). Based on the syntactic and morphological characteristics of specific and nonspecific objects in Persian, and their semantic relationship with the verb, I suggest two distinct base-positions for them within the VP. This proposal accounts for the asymmetry between the two types of objects with respect to a number of syntactic and semantic relations, including binding, anti-Weak Crossover effects, and scope reading. I further suggest a third object position. In other words, I argue that the specific object is either in an A-position (specifier of VP) or an A'- position at Spellout. My analysis shows that (a) the movement of the specific object into a derived position is an instance of scrambling, (b) scrambling itself is a reflection of discourse information such topic and focus, (c) this movement places the object DP in the specifier position of a functional head representing

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Ghomeshi (1997) for analysis.

a discourse function, and (d) scrambling may have semantic consequences when quantified elements are involved. Crucially, the analysis in this chapter is an attempt to clarify the peculiarities of all those cases in which a DP binds an anaphor and licenses a parasitic gap simultaneously. Thus it obviates the need to posit the existence of a functional head (AGRo) and a landing site with dual syntactic properties. Finally, the discussion in this chapter provides an explanation as to why scrambling is available to specific objects, but is highly limited with respect to their nonspecific counterparts.

The organization of this chapter is as follows: Section 2 provides a discussion of specificity. The morphological, semantic, and syntactic asymmetries between the two types of objects are discussed in section 3, where an explanation is offered to account for the properties of nonspecific objects. The proposal regarding the existence of two distinct base-positions for the two types of objects is also outlined in this section. Section 4 examines the distribution of objects inside and outside the VP, and proposes a third position for these elements. Arguments in favor of the proposals outlined in sections 3 and 4 are presented in section 5. Section 6 includes a summary of this chapter and provides concluding remarks.

## **2. Specificity**

An important factor underlying the analysis in this chapter is *specificity* and its interaction with word order. Authors have taken either a semantic or a pragmatic approach towards this phenomenon in the literature. Kripke (1977), for example, takes specificity as a matter of pragmatics, while Donnellan (1966) and Diesing (1992), among others, consider it a semantic notion. Since specificity is closely related to quantificational property of elements and word order variations, I follow those who consider it a semantic notion. The discussions in the following sections support this position.

The first question to answer is this: What elements are specific? In general, definite DPs are considered specific, while indefinite DPs can be ambiguous with respect to this notion, as suggested by Baker (1966), Abbott (1976), Karttunen (1976), and Enç (1991), among others. The following example illustrates this ambiguity.

- (6) Mary was looking for a pencil.  
She found one. (nonspecific)  
She found it. (specific)

Several factors can help to disambiguate an indefinite DP. Certain verbs are among these factors, as indicated by the following examples, borrowed from Karttunen (1976: 368).

- (7) John tried to find *a piano*. (but he didn't succeed in finding one.)  
(8) John tried to lift *a piano*. (but he didn't succeed in lifting it.)

The noun phrase *a piano* receives a nonspecific reading in (7) and a specific reading in (8) due to the predicates *try to find* and *try to lift*, respectively.

In what follows, I first discuss Enç's definition of specificity, and provide a revised version of her definition to account for the data in Persian. This discussion is followed by an analysis of the interaction between specificity and scope.

## 2.1 Enç's Definition of Specificity

The definition of specificity has been discussed by different authors who have each taken a distinct position with respect to the function of this term. Enç (1991) defines specificity in terms of *strong antecedent* and *weak antecedent*. She states that a *definite* DP requires a *strong antecedent*. That is, there is an *identity* relation between this type of DP and its previously

established discourse referent. Therefore, definite DPs are always specific.<sup>3</sup> Proper names, pronouns, and noun phrases modified by a demonstrative or a definite article are definite, and thus specific. An indefinite DP is specific if it denotes an inclusion relation to previously established discourse. In this case, it represents a *weak antecedent*. A nonspecific DP lacks an antecedent in the discourse altogether.<sup>4</sup> The following contrast, representing Turkish, illustrates the distinction between a specific indefinite, denoting a partitive interpretation, and a nonspecific indefinite, lacking an antecedent.

- (9) a. Odam-a            birkac cocuk girdi  
           my-room-Dat several child entered  
           'Several children entered my room.'
- b. iki kiz-i        taniyordum  
           two girl-Acc I knew  
           'I knew two girls.'     (two girls of that specific group)
- c. iki kiz        taniyordum  
           two girl I knew  
           'I knew two girls.'     (two girls not included in that group) (Enç 1991:6)

According to Enç, certain indefinites such as partitives and universal quantifiers are predicted to

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<sup>3</sup>. Rapoport (1995) suggests that attributive definites are nonspecific, as in (i) and (ii):

- (i) I consider John the man for the job.  
 (ii) The man who murdered Smith is insane.

The nonspecific interpretation of the noun phrase in (ii), for example, is that the speaker is asserting that whoever murdered Smith is insane, without necessarily having a particular individual in mind.

<sup>4</sup>. In the recent literature, the tendency is to utilize the term DP for specific noun phrases, and NP for nonspecific ones. I will not make this distinction in this chapter.

be specific.<sup>5</sup> In sum, specific noun phrases, definite or indefinite, have one feature in common:

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They are linked to previously established discourse. It is only the type of linking that distinguishes between definites and specific indefinites. As for nonspecific DPs, they cannot be linked to the previous discourse, and hence denote novelty of reference.

There are some problems with regard to Enç's definition of specific indefinites. First, although an indefinite DP with a partitive reading is always specific, *inclusion* is not a necessary property of specific indefinites. For example, both object DPs in (10) and (11) are followed by the specificity marker *râ*, and hence are specific. However, the indefinite object DP in (10) receives a partitive interpretation while the one in (11) does not.

(10) Kimea se - tâ ketâb-ro na-xund-e  
 K three part book -râ neg-read-3sg

'Kimea has not read three (specific) books.'

(11) man emruz se tâ bachcha-ro did-am ke bâ ham da'vâ  
 I today three part child-râ saw-1sg that with each other argue  
 mi-kard-an  
 hab-did-3sg

'Today I saw three children that were arguing with each other.'

The DP *se tâ ketâb* 'three books' in (10) receives a partitive reading. Therefore, this sentence can be paraphrased as *Kimea se tâ az ketâb-â ro na-xund-e* 'Kimea has not read three of the books'. The DP *se tâ bachche* 'three children' in (11), on the other hand, does not denote inclusion: these children are specified and distinguished in the discourse by the appositive relative clause *that were arguing with each other*. Therefore, the sentence will be incomplete without this clause, as in (12).

(12) \*man emruz se - tâ bachcha-ro did-am

I today three part child-râ saw-1sg

These data indicate that specific indefinites do not necessarily receive a partitive interpretation.

The second problem with Enç's definition of specificity has to do with nonspecific indefinites. According to her, all nonspecific DPs lack any kind of link to discourse. The following data, borrowed from Karttunen (1976: 369), contradicts this conclusion.<sup>6</sup>

(13) John wants to catch *a fish*. \*Do you see the fish from here?

(14) John managed to find *an apartment*. The apartment has a balcony.

The italic noun phrases in (13) and (14) are nonspecific indefinites. However, *a fish* in (13) has absolutely no referent, and therefore cannot be referred to by a definite DP. The noun phrase *an apartment* in (14), on the other hand, has established some sort of referent: it exists. Therefore, it can be referred to by a definite DP. In summary, nonspecific DPs can be [+/- Existential].

Persian clearly shows this distinction: the nonspecific DP with no referent appears as a bare DP (a DP that lacks a determiner) in the object position, while the nonspecific DP that denotes existence appears as a DP modified by a numeral in that position. None of these noun phrases is followed by the specificity marker *râ*. The Persian counterparts of (13) and (14), presented in (15) and (16), respectively, exhibit this contrast.

(15) Kimea tunest mâhi be-gir-e \*un xeyli châgh-e

K managed fish subj-catch-3sg it very fat-be3sg

'Kimea managed to catch fish.' 'It is very fat.'

(16) Kimea tunest ye âpârtêmân peydâ kon-e un xeyli ghashang-e

K managed an apartment find do-3sg it very pretty-be3sg

'Kimea managed to find an apartment.' 'It is very pretty.' (Karimi 1999b)

The bare DP in (15) is nonspecific without any kind of discourse referent. The indefinite DP in

(16), although nonspecific, denotes existence. Let us call the first type of nonspecific DPs *kind-level*, and the second type *existential*. Enç's definition of nonspecific DPs is compatible only with the kind-level DPs in (13) and (15), but not with the existential ones in (14) and (16).

The distinction between these two types of nonspecific DPs with respect to *existence* is further supported by their interaction with the operator *negation*. This element forces a nonspecific reading that lacks any kind of referent (cf. Karttunen 1976), as in the following examples.

(17) Bill is not a linguist.

(18) Bill did not write a letter.

The noun phrases *a linguist* and *a letter* lack existence. This fact is supported by the awkwardness of the following example, taken from Abbott (1995):

(19) ?Sue couldn't find *a pencil that would work*. It was on the floor.

The kind-level DPs in (17) and (18) can only correspond to bare DPs in nominal predicate and object positions in Persian, as in (20) and (21), respectively.

(20) Bill zabânsheân nist  
Bill linguist is not  
'Bill is not a linguist.'

(21) Bill nâme na-nevesht  
B letter neg-wrote  
'Bill did not write a letter.'

An indefinite DP, which implies existence, cannot replace them, as in (22) and (23).

(22) \*Bill ye zabânsheân nist  
B a linguist is not

(23) \*Bill ye nâme na-nevesht

B a letter neg-wrote

The sentences in (22) and (23) become grammatical in a context where the numeral receives contrastive stress. The sentence in (24) reveals this issue with respect to (23).

(24) Bill YE nâme na-nevesht, DO tâ nevesht

Bill one letter neg-wrote, two part wrote

'Bill did not write ONE letter, he wrote TWO.'

It seems to be the case that nonspecific DPs that denote existence can be in the scope of negation only when they are contrastively stressed. This restriction does not hold for kind-level nonspecific DPs, as evidenced by the grammaticality of (20) and (21).<sup>7</sup>

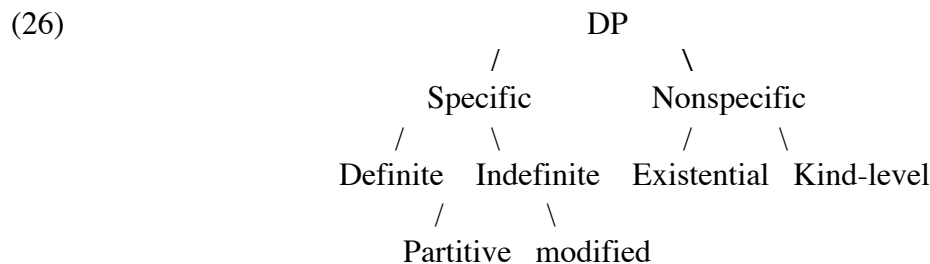
Note that Persian lacks a definite determiner equivalent to *the* in English. Thus the bare object DP becomes definite only when it is followed by *râ*, as in the following example.<sup>8</sup>

(25) Kimea ketâb-ro xund

K book-râ read

'Kimea read the book.'

The following diagram summarizes the definition of specificity discussed in this section.



In English-type languages, nonspecific indefinite DPs denote both kind-level or existential interpretation. In Persian-type languages, nonspecific indefinites are existential while bare DPs are Kind-level.<sup>9</sup>

## 2.2 Specificity and Scope

Having discussed different types of specific and nonspecific DPs, I now turn to the relationship between specificity and scope. There is some disagreement among authors regarding the scope property of specific elements. Fodor and Sag (1982), for example, suggest that a specific NP correlates with a scope operator: An NP is considered specific when it has wide scope over an operator (see also Partee (1972) and Karttunen (1976) on this issue). Diesing (1992) suggests that specific (=presuppositional) DPs have quantificational force, and are subject to Quantifier Raising. Ioup (1977) and Enç (1991), on the other hand, argue that the scope relationship is not the right criterion to distinguish specific NPs from their nonspecific counterparts. The reason is that there are cases in which the specific NP has narrow scope with respect to other operators. This suggestion seems to be borne out by the following Persian examples: The quantifier *har* 'every' forces a distributive reading in the following contexts although the DP+râ in (28b) receives a specific reading.

- (27) a. har dâneshtju-i chan-tâ she'r bâyard be-xun-e?  
every student-ind how many-part poem must subj-read-3sg  
'How many poems does every student have to read?'
- b. har dâneshtju-i ye she'r bâyard be-xun-e har > DP  
every student-ind one poem must subj-read-3sg  
'Every student has to read one poem.'
- (28) a. har dâneshtju-i chan-tâ az in she'r-â-ro bâyard be-xun-e?  
every student-ind how many-part of this poem-pl-râ must subj-read-3sg  
'How many of these poems does every student have to read?'
- b. har dâneshtju-i ye she'r-ro bâyard be-xun-e har > DP+râ

every student one poem-râ must subj-read-3sg

'Every student has to read one poem (out of a specific set).'

In (27b), each one of the students reads a different poem, and the poems are not specifically chosen (any poem, randomly). The quantifier *har* 'every' in (28b) still receives a wide scope over the specific object, forcing a distributive reading. The difference between the two answers in (27) and (28) is that the DP+râ in the latter is selected from a set of poems: *Each student reads a particular poem from a specifically chosen set of poems* (e.g. the 13th century poetry), but each one of them reads a different one nevertheless.

One of the major affects of scrambling in Persian is determining the scope of quantified elements by creating scope ambiguity (Karimi, forthcoming). Thus the scrambled version of (28b) gives us (29) in which the dislocated specific object receives a primary wide scope reading, although a narrow scope reading is still available in this case.

(29) ye she'r-ro<sub>i</sub> har dâneshtu-i t<sub>i</sub> bâjad be-xun-e                    DP+râ > har ; har > DP+râ  
          ↑ \_\_\_\_\_ |  
          Primary reading: 'There is one poem such that every student has to read that poem.'

The sentence in (29) indicates that specific DPs have quantificational force, although they do not necessarily receive a wide scope reading when they interact with other quantificational elements. In Persian, scrambling provides the wide scope reading for specific DPs in these cases.

Another piece of evidence supporting the claim that specific DPs have a quantificational force comes from the fact that specific objects may take wide scope with respect to negation while nonspecific objects never do. Consider the following example.

(30) Joe didn't invite a professor.

This sentence has two readings, as discussed by Heim and Kratzer (1998:216).

(31) a. He did not invite any professor

- b. There was one professor he failed to invite.

The ambiguity of (30) disappears in Persian since the specific direct object is followed by *râ*.

Thus (32a) and (32b) correspond to (31a) and (31b), respectively.

(32) a. un ostâd da'vat na-kard  
 he professor invitation neg-did  
 'He didn't invite any professor.'

- b. un ye ostâd-ro da'vat na-kard  
 he one professor-râ invitation neg-did  
 'There was one professor he failed to invite.'

The discussion in this section indicates that specific DPs are quantificational, and therefore, they may enter into a scope interaction with other quantified elements.

### 3. Specific versus Nonspecific Objects

As suggested in the introduction, there are syntactic, semantic, and morphological asymmetries between specific and nonspecific objects in Persian. These differences are discussed in section 3.1. The rule of Syntactic Word Formation (SWF) which accounts for the close syntactic and semantic relationship between the nonspecific object and the verb is presented in 3.2. In 3.3, Two Object Position Hypothesis (TOPH) is proposed.

#### 3.1 Asymmetries

First, the nonspecific object and its specific counterpart exhibit distinct semantic relationship with respect to the verb. The nonspecific object (kind-level or existential) is part of the *event*, rather than the *participant in the event*. That is, it creates an abstract semantic unit with the verb describing the event or the state. Therefore it is part of the description of the predicate. The following examples exhibit this property.<sup>10</sup>

- (33) a. Kimea barâ bachche-hâ (ye) ketâb xund  
 K for child-pl (a) book read  
 'Kimea read books/a book for the children.'  
 (Kimea's action toward the children was '(a) book reading')
- b. Kimea har shab (ye) sib mi-xor-e  
 K every night (an) apple hab-eat-3  
 'Kimea eats apples every night.'  
 (Kimea does '(an) apple eating' every night.)

The sentences in 'a' and 'b' are, respectively, the most natural answers to questions like: *What did Kimea do for the children?* and *What does Kimea do every night?*

In contrast, the specific object followed by the specificity marker *râ* is a *particular individual* that undergoes the event described by the verb. The sentences in (34a) and (34b) are, therefore, the most natural answers to questions like *Which book did Kimea read for the students?* and *What did Kimea do about the house?*, respectively.

- (34) a. Kimea român-e jadid-e Daneshvar - o barâ shâgerd-â xund  
 K novel-Ez new-Ez Daneshvar - râ for student-pl read  
 'Kimea read Daneshvar's new novel for the students.'
- b. Kimea belaxare un xuna - ro xarid  
 K finally un house-râ bought  
 'Kimea finally bought that house.'

Second, adverbial modifiers are utilized as diagnostic tools for the event expressed by the predicate (cf. Dowty 1979, among others). As Ghomeshi and Massam (1994) show, the DP+râ is compatible with adverbials denoting accomplishment (such as *in an hour* ), while the bare

object is compatible with adverbials denoting a process (such as *for an hour*).

(35) a. (man) sib-râ dar do daghighe xord-am

I apple-râ in two minutes ate-1sg

'I ate the apple in two minutes.'

b. \*(man) dar do daghighe sib xord-am

I in two minutes apple ate-1sg

'I ate apples in two minutes.'

(36) a. \*(man) sib-râ barâye yek sâ'at xord-am

I apple-râ for one hour ate-1sg

'I ate the apple for an hour.'

b. (man) barâye yek sâ'at sib xord-am

I for one hour apple ate-1sg

'I ate apples for one hour.' (Ghomeshi & Massam 1994:190-1)

As the contrast between (a) and (b) in (35) and (36) shows, the DP+râ is only compatible with the frame adverbial *dar do daghighe* 'in two minutes,' which denotes accomplishment, while the bare DP is only compatible with the durative adverbial *barâye yek sâ'at* 'for an hour,' which indicates the duration of the event.

The third piece of evidence indicating the asymmetry between the nonspecific and specific object comes from the similarities between the former and the nonverbal element of a complex verb. Persian exhibits a growing set of complex verbs consisting of a *light verb* and a nonverbal element (Mohammad and Karimi 1992, among others). Although those constructions are different from predicates consisting of a nonspecific object and a real verb, they share a number of similarities.<sup>11</sup> For example, the nonverbal element of the complex verb is generated in a position adjacent to the light verb, and constitutes a semantic unit with it, as in (37).

- (37) a. Kimea be râdio [<sub>complex V</sub> gush dâd]  
 K to radio ear gave  
 'Kimea listened to the radio.'
- b. Kimea in otâgh-ro be mehmun [<sub>complex V</sub> extesâs dâd]  
 K this room-râ to guest allocation gave  
 'Kimea allocated this room to the guest.' (Mohammad and Karimi, 1992:202)

Furthermore, the nonverbal element and the nominalized light verb can constitute a compound noun. The same fact is true of the nonspecific object and the verb: The italicized elements are instances of nominalized complex verbs in (38) and nonspecific objects plus nominalized verbs in (39).<sup>12</sup>

- (38) a. *da'vat* *kardan-e* Kimea kâr-e dorost-i na-bud  
 invitation doing-Ez K work-Ez right-ind neg-was  
 'Inviting Kimea was not the right thing to do.'
- b. *gush dâdan* be in harf-â xeyli hosele mi-xâd  
 ear giving to this chat-pl much patience hab-want  
 'Listening to these chats requires a lot of patience.'
- (39) a. *ghazâ poxtan* barâ Kimea kâr-e saxt-i y-e  
 food cooking for K job-Ez difficult-ind-is  
 'Cooking is a difficult task for Kimea.'
- b. Kimea *ketâb xundan-ro* be *ghazâ poxtan* tarjih mi-d-e  
 K book reading-râ to food cooking prefer hab-give-3sg  
 'Kimea prefers (book) reading to cooking.'

Moreover, the nonverbal element of a complex verb, being part of the semantic

description of the verb, can never follow it, as in (40).

- (40) \*Kimea mehmun-â-ro kard da'vat.  
K guest - pl-râ did invitation

The same restriction holds for nonspecific objects, but not their specific counterparts, as the data in (41) and (42) indicate.

- (41) a. Sepide emruz hayât-o tamiz kard  
S today court-yard-râ clean did  
'Sepide cleaned the court-yard today.'
- b. Sepide emruz hayât tamiz kard  
'Sepide cleaned court-yards today.'
- c. Sepide emruz tamiz kard hayât-o  
'Sepide DID clean the court-yard today.'
- d. \*Sepide emruz tamiz kard hayât
- (42) a. man mi-xâ-m deraxt-e kâj-o be-kâr-am  
I hab-want-1sg tree-Ez pine-râ subj-plant-1sg  
'I want to plant the pine tree.'
- b. man mi-xâ-m deraxt-e kâj be-kâr-am  
'I want to plant pine trees.'
- c. man mi-xâ-m be-kâr - am deraxt-e kâj-o  
'I want to PLANT the pine tree.'
- d. \*man mi-xâ-m be - kâr-am deraxt-e kâj

The specificity marker *râ* follows the direct object in (a) and is absent in (b). Both sentences are perfectly well-formed. The presence and absence of *râ* seems to be responsible for the contrast

between the sentences in (c) and (d), where the object follows the verb.

Fourth, binding relations clearly indicate an asymmetry between the specific and nonspecific object: The nonspecific object is unable to bind an anaphor.

- (43) a. man se-tâ bachche-hâ-ro be hamdige mo'arrefi kard-am  
 I three-part child-pl-râ to each other introduction did-1sg  
 'I introduced the three children to each other.'
- b. \*man se-tâ bachche be hamdige mo'arrefi kard-am

Note that the word order is not responsible for the ill-formedness of (43b) since the nonspecific object may scramble away from the verb when contrastively focused, as in (44).

- (44) man se-tâ dânesjju be dust-am mo'arrefi kard-am  
 I three-part student to friend-my introduction did-1sg  
 'I introduced three STUDENTS to my friend.' (not Professors)

Fifth, as we saw in the previous section, the specific object takes scope over a quantified element when scrambled into a higher position. This is illustrated by the contrast between (28b) and (29), repeated below in (45) and (46):

- (45) har dânesjju-i ye she'r-ro bâyad be-xun-e har > DP+râ  
 every student one poem-râ must subj-read-3sg  
 'Every student has to read one poem (out of a specific set).'
- (46) ye she'r-ro<sub>i</sub> har dânesjju-i t<sub>i</sub> bâyad be-xun-e DP+râ > har ; har > DP+râ  
 ↑ \_\_\_\_\_ |  
 Primary reading: 'There is one poem such that every student has to read that poem.'

The same situation does not hold with respect to the nonspecific object, as in (47).

- (47) ye she'r<sub>i</sub> har dânesjju-i t<sub>i</sub> bâyad be-xun-e har > DP  
 ↑ \_\_\_\_\_ |

The only difference between the sentence in (47) and its non-scrambled version (cf. 27b) is that

the nonspecific DP in the former receives a heavy stress and a contrastive reading.

Sixth, an additional piece of evidence indicating that the specific and nonspecific objects are syntactically different comes from the fact that they cannot appear together in a coordinate construction.

- (48) a. man diruz in aks-ro va un ketâb-ro xarid-am  
I yesterday this picture-râ and that book-râ bought-1sg  
'Yesterday I bought this picture and that book.'
- b. man diruz aks va ketâb xarid-am  
I yesterday picture and book bought-1sg  
'Yesterday I bought pictures and books.'
- c. \*man diruz in aks-ro va ketâb xarid-am  
I yesterday this picture-râ and book bought-1sg

Coordination of two specific or two nonspecific objects is allowed, as in (48a) and (48b), respectively. Coordination of a combination of the two renders the sentence ungrammatical, as in (48c).

Finally, and crucially, the most neutral surface position of the nonspecific object is the one adjacent to the verb, as in (49a) (see also (1)), while the most neutral position of the specific object is the VP-initial position, as in (49b) (see also (2)).

- (49) a. Ramin barâ Kimea pirhan xarid  
R for K shirt bought  
'Ramin bought shirts for Kimea.'
- b. Ramin pirhan-ro barâ Kimea xarid  
R shirt-râ for K bought

'Ramin bought the shirt for Kimea.'

As discussed thus far, there are semantic, morphological, and syntactic asymmetries between the specific and nonspecific objects. A summary of these differences is stated below.<sup>13</sup>

1. *Semantic asymmetries:*

- a. Nonspecific objects are part of the description of the predicate; specific objects are not.
- b. Nonspecific objects are compatible with adverbs denoting process; specific objects are compatible with adverbs denoting accomplishment.
- c. Specific objects enter scope interaction when scrambled; nonspecific objects do not.

2. *Syntactic asymmetries:*

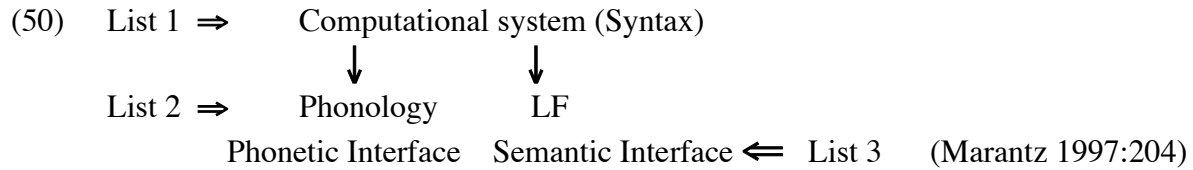
- a. Specific objects can bind the indirect object; nonspecific objects cannot.
- b. Nonspecific objects have to precede the verb and be adjacent to it; specific objects are not subject to this restriction.
- c. Specific and nonspecific objects cannot appear together in a coordination construction.

3. *Morphological asymmetries:*

Nonspecific objects allow a process of lexicalization (compounding) with the verb; specific objects do not.

### **3.2 Syntactic Word Formation (SWF)**

In order to account for the special relation between the verb and its nonspecific object, I adopt a version of the Distributed Morphology (DM) (Halle and Marantz 1993) developed by Marantz (1997). In this framework, three different lists are recognized, as in (50):



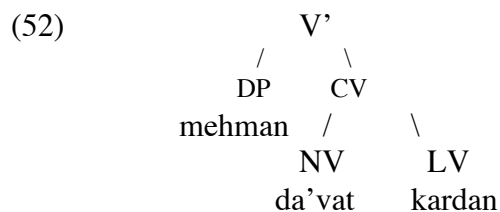
List 1 contains the narrow lexicon that syntax operates on. List 2 consists of the vocabulary that determines the connection between terminal nodes from the syntax and their phonological realization. List 3 is called the *Encyclopedia*, and consists of complex elements denoting *special* meanings. It is the last list that is of interest to this study.

The Encyclopedia is the locus of semantic knowledge. The idea is that *special* sound and *special* meaning do not coincide inside the word, and thus Encyclopedic knowledge is not part of the computational system at the point of numeration where lexical information is mapped onto syntax.<sup>14</sup> The claim is that the domain of the Encyclopedic knowledge is the *phrase* rather than the *word*. I call the process that creates this Encyclopedic domain as *Syntactic Word Formation* (SWF), and suggest V' to be the structural domain where the Encyclopedic knowledge consisting of the special meaning of the verb and its modifiers is obtained. This is stated in (51).

(51) The Domain of Syntactic Word Formation (SWF)

V' is the domain of SWF that operates on DP-V, and provides the Encyclopedic knowledge.

Returning to Persian nonspecific objects, we saw that their semantic, syntactic, and morphological properties suggest the existence of a special bond between them and the verb they appear with. Semantically, the verb and its nonspecific object provide a special meaning that cannot be produced directly by the lexicon, and is obtained in syntax within the domain of SWF. Within this domain, the special meaning of complex elements builds up in a binary format between elements that enter a sisterhood relation.<sup>15</sup> Consider the following configuration, where CV stands for *Complex Verb* consisting of a light verb and a non-verbal element.



The light verb (LV) *kardan* ‘to do’ is syntactically, and thus semantically, closer to the nonverbal element (NV) *da’vat* ‘invitation’ than the nonspecific object *mehman* ‘guest’. Therefore, LV combines with the NV and provides not only the semantic concept *to invite*, but also the special event and argument structure of the whole CV. The next syntactic word formation, and thus semantic fusion, applies between the complex verb and its sister, the nonspecific object, creating one single syntactic and semantic unit.<sup>16</sup> This operation saturates one argument position, and the result has the effect of [N+Ving] interpretation, as indicated by the examples in (33). SWF also accounts for the compounding facts, as well as the binding and adjacency constraints (see below). Furthermore, it explains as to why the nonspecific object is part of the *event*, and therefore, cannot be a *participant in the event*.

### 3.3 Two Object Position Hypothesis (TOPH)

The specific object, as the argument of the verb that undergoes the event expressed by the verb, must occupy a higher position than V’ in order to escape SWF. The phrase structures in (53) exhibit the differences between the specific and nonspecific objects.<sup>17</sup>

(53) Two Object Position Hypothesis (TOPH)<sup>18</sup>

- a.  $[_{VP} DP_{[+Specific]} [_V PP V ]]$
- b.  $[_{VP} [_V PP [_V DP_{[-Specific]} V ]]$

The phrase structure rules (PSRs) in (53) are compatible with the syntactic, semantic, and morphological asymmetries between the two types of object.<sup>19</sup> They also explain a number of asymmetries between these two elements as discussed below.<sup>20</sup>

## 4. Scrambling and the Third Object Position

As mentioned before, the appearance of object in a higher position, traditionally known as *object shift*, has in general been attributed to morphological Case (Holmberg 1986) and/or

specificity (Mahajan 1992, Diesing and Jelinek 1995). Considering Persian, Browning and E. Karimi (1994:69) suggest that the specific DP moves into a VP-external position where its Case is licensed by an inflectional head, and is realized as *râ*. In what follows, I show that what we know as object shift is divided into two categories: specific object DPs in the specifier position of VP (cf. 53a), and object DPs in a derived position created by scrambling. This movement generally applies in this language to satisfy discourse functional considerations such as topicalization or contrastive focus. The type of object shift triggered by scrambling has a semantic effect as well since it may alter the scope relation of quantificational elements involved. A similar situation has been observed with respect to scrambling in other languages such as German and Yiddish (Diesing 1997) (see also Miyagawa (this volume)). The fact that scrambling is not available to nonspecific objects in a number of languages, or applies to them in a very restricted fashion, follows from the syntactic properties of scrambling and semantic properties of nonspecific objects: Nonspecific objects lack certain semantic properties that are required for the application of this movement.

#### 4.1 Distribution of Objects

Definite objects may remain in their base-position, as evidenced by the following examples.

(54) Kimea porsid [<sub>CP</sub> ke Sepide diruz [<sub>VP</sub> ketâb-ro kojâ gozâsht ]]

K asked that S yesterday book-râ where put-3sg

'Kimea asked where did Sepide put the book yesterday.'

(55) Kimea porsid [<sub>CP</sub> ke Sepide diruz [<sub>VP</sub> ketâb-ro be ki dâd ]]

Kimea asked that S yesterday book-râ to whom gave

'Kimea asked to whom Sepide gave the book yesterday.'

The specific object follows the adverb in both sentences. This fact suggests that the object is in

its base-position, the specifier of VP.

Before going any further, a note on adverb positions is needed in order to explain the data in this section: Adverbs have been assumed to mark the VP-boundary in many languages (Jackendoff 1972, Holmberg 1986, Webelhuth 1992, among others). Similarly, Cinque (1999) shows that sentence adverbials precede VP adverbs in a VP-external position. He further suggests that these elements appear in a fixed order with respect to each other universally. He argues, however, that adverbs may also appear VP- internally in certain cases.<sup>21</sup> In these cases, they do not have to follow the rigid order they are subject to in the pre-VP position. VP-internal adverbs, however, do not seem to exist in Persian since their order is always fixed. Consider first the following adverbial orders:

- (56) a. ehtemâlan (probably) > shâyad (perhaps)  
\*shâyad > ehtemâlan
- b. xoshbaxtâne (luckily) > bedun-e shak (undoubtedly)  
\*bedun-e shak > xoshbaxtâneh

Examples are provided in (57):

- (57) a. Kimea xoshbaxtâne bedun-e shak in kâr-ro mi-kon-e  
K luckily without-Ez doubt this job-râ hab-do-3sg  
'Kimea will luckily undoubtedly do this job.'
- b. \* Kimea bedun-e shak xoshbaxtâne in kâr-ro mi-kon-e

The same rigid order has to be obeyed even when the adverbs follow the specific direct object.

The following examples illustrate this observation.

- (58) a. Kimea in kâr-ro xoshbaxtâne bedun-e shak mi-kon-e  
'As for this job, Kimea will luckily undoubtedly do (it).'

- b. \*Kimea in kâr-ro bedun-e shak xoshbaxtâne mi-kon-e

The rigid adverbial order must be obeyed even in the post-object position, as the ill-formedness of (58b) indicates.<sup>22</sup> If Cinque’s analysis is on the right track, the contrast in (58) indicates that the adverbs are in the VP-external positions in these examples. Thus this fact supports the claim that the specific objects in (54) and (55) must be in their base-position inside the VP. It also suggests that in cases where the adverb follows the specific direct object, the latter must be in a VP-external position. Note that the object might intervene between the two adverbs, as in (59). A violation of adverbial order will render the sentence ungrammatical, as illustrated by (59b).

- (59) a. Kimea xoshbaxtâne in kâr-ro bedun-e shak mi-kon-e  
 K luckily this work-râ undoubtedly hab-do-3sg
- b. \*Kimea bedun-e shak in kâr-ro xoshbaxtâne mi-kon-e  
 K undoubtedly this work-râ luckily hab-do-3sg

In (59), the specific direct object has scrambled into a position between the two adverbs. The adverbial order has to be observed in this case as well.<sup>23</sup> Once again, this contrast supports the claim that the objects in (54) and (55) are in their base-position inside the VP. Furthermore, it suggest that the objects in (60) and (61), where they precedes the adverbs, must be in VP-external positions. The object receives a topic interpretation in these cases in the absence of a contrastive stress.

- (60) Kimea porsid [<sub>CP</sub> ke [ketâb-ro]<sub>i</sub> diruz [<sub>VP</sub> Sepide [<sub>VP</sub> t<sub>i</sub> kojâ gozâsht]  
 K asked that book-râ yesterday S where put-3sg  
 Lit. Kimea asked, as for the book, where did Sepide put (it) yesterday.

- (61) Kimea porsid [<sub>CP</sub> ke [ketâb- ro]<sub>i</sub> diruz [<sub>VP</sub> Sepide [<sub>VP</sub> t<sub>i</sub> be ki dâd  
 K asked that book -râ yesterday S to whom gave ]]

Lit. 'Kimea asked, as for the book, to whom did Sepide give (it)yesterday.'

Note that unlike typical Discourse Configurational languages such as Hungarian (Kiss (this volume)), contrastively focused or topicalized elements may appear in different positions in Persian. See section 4.2 on this issue.

Superlative definites may also stay in-situ, as in (62).

- (62) Kimea hamishe [<sub>VP</sub>behtarin mo'allem-ro barâ bachche-hâ entexâb mi-kon-e]  
 K always best teacher-râ for child-pl choice hab-do-3sg  
 'Kimea always chooses the best teacher for the children.'

The superlative DP *behtarin mo'allem* 'the best teacher' is still in its base-position in (62). Scrambling into a derived position is also possible, as in (63). The interpretation of the sentence changes, however, as its English translation reveals.

- (63) Kimea [behtarin mo'allem-ro]<sub>i</sub> hamishe [<sub>VP</sub> t<sub>i</sub> barâ bachche-hâ entexâb mi-kon-e  
 ↑\_\_\_\_\_↓

'When it comes to choosing teachers for children, Kimea always chooses the best one.'

The sentence in (63) is not as natural as the one in (62). Diesing (1997) suggests that superlatives denote some sort of novelty. This novel interpretation might be responsible for the more natural reading of (62) where the specific object is still within the VP, the domain of novel interpretation (Heim 1982).

Specific objects, including universal quantifiers, are always followed by the specificity marker *râ* when in the object position, as we saw in section 2. They may stay in situ by Spellout, as in (2a&b), repeated below in (64) and (65).

- (64) Kimea aghlab [<sub>VP</sub>hame-ye she'r-â-ye tâza-sh-ro barâ mâ mi-xun-e ]  
 K often all-Ez poem-pl-Ez fresh-her-râ for us hab-read-3sg  
 'It is often the case that Kimea reads all her new poems for us.'

- (65) Kimea aghlab [<sub>VP</sub> ye she'r az Hafez-ro barâ mâ mi-xun-e ]]  
 K often a poem by Hafez-râ for us hab-read-3sg  
 'It is often the case that Kimea reads a (particular) poem by Hafez for us.'

We saw in section 2 that scrambling creates new scope relationship in this language when quantified elements are involved. This is shown by the contrast in (66).

- (66) a. yeknafar har ketâb-i-ro mi-xun-e DP > har  
 someone every book-ind-râ hab-read-3sg  
 'There is someone who reads every book.'
- b. har-ketâb-i-ro yeknafar t<sub>i</sub> mi-xun-e har > DP ; DP > har  
 ↑\_\_\_\_\_↓  
 Primary reading: 'As for each book, there is a (different) person who reads it.'

The contrasts in (67) provides further support for the claim advanced in sections 2 and 3: the extracted object takes scope over the adverb in the 'b' example.

- (67) a. Kimea hichvaght [<sub>VP</sub> har film-i-ro do bâr ne-mi-bin-e ]]  
 K never each film-ind-râ two times neg-hab-see-3sg  
 'Kimea never sees each movie twice.' (She only sees them once.)
- b. Kimea [har film-i-ro]<sub>k</sub> hichvaght [<sub>VP</sub> t<sub>k</sub> do bâr ne-mi-bin-e  
 ↑\_\_\_\_\_↓  
 Primary reading: 'It is never the case that Kimea sees each movie twice.'  
 (She sees only some of them twice.)

The sentence in (67b) has a weak secondary reading: the one presented for (67a).<sup>24</sup>

The examples in (54), (55), (62), (64), (65), and (67a) show that a specific DP can remain in-situ inside the VP by Spellout. If this is the case, the appearance of the specific object in a derived position in (60), (61), (63), and (67b) cannot be due to Case, contrary to previous

assumptions (cf. Browning and E. Karimi 1994). That is, if Accusative Case were responsible for the movement of specific object in Persian, this element had to always appear in a derived position at Spellout since Case checking cannot be both overt and covert in the same language.

We have seen thus far that the scrambled specific object DP receives either a topic interpretation or a contrastive focus interpretation (if heavily stressed). In contrast, nonspecific objects undergo scrambling in this language only if contrastively focused:

- (68) Kimea [(ye) ketâb]<sub>i</sub> barâ-sh t<sub>i</sub> xarid  
           ↑\_\_\_\_\_↓  
       K      (a) book for-her bought  
       ‘Kimea bought a BOOK for her.’

Since the nonspecific object either lacks existence (cf. kind-level) or is existential (cf. indefinite), it does not have the required ingredients to be topicalized: It either lacks any kind of discourse referent or, if existential, it cannot denote old information since it asserts novelty. Therefore, it cannot be topicalized. The awkwardness of the following sentence attests this fact.

- (69) ??pirhan<sub>i</sub> Ramin goft Kimea barâ dust-esh t<sub>i</sub> xarid  
           ↑\_\_\_\_\_↓  
       shirt R      said K      for friend-her bought  
       ‘As for shirts, Ramin said Kimea bought (them) for her friend.’

The nonspecific object can scramble only if contrasted, as mentioned before. In that case, it is individuated (see Kiss (this volume)), and is placed within a discourse background. The novelty of contrasted nonspecific object, together with its discourse-linked property, allows this element to scramble (see also Dayal (this volume)).

The discussion in this section has the following implications. First, the Persian data show that object movement is not due to Case in this language, but is an instance of scrambling, a general movement in this language that is triggered by discourse functional factors (see section

4.2.)

Second, the semantic properties of nonspecific objects predict their limitation with respect to scrambling: (a) They cannot be topicalized due to the fact that they either lack existence or cannot carry old information, and (b) They can move only in languages in which contrastive focus may trigger movement.

Third, The analysis thus far suggests that the surface position of specific objects in Persian are partially explained by the structure in (53a), and partially by the rule of scrambling. Finally, if Persian specific objects can in fact remain in-situ at Spellout, and if their movement out of their base-position is motivated by discourse functional factors rather than Case, there is no need to stipulate a functional head (such as AGRo) in order to check the Accusative Case of the object. Thus the notion *object shift* takes on a new meaning since it is divided now into two categories (base-generated and scrambled), and is unrelated to Case.<sup>25</sup>

#### **4.2 Landing Site of Scrambled Objects**

The idea that overt movement is a way to present the discourse information goes back to Jackendoff (1972), and has been discussed in literature since (Rochmont 1986, Vallduvi 1992, Neelman 1994, Kiss 1995, Bailyn 1995, among others). Furthermore, it has been argued that movement representing discourse information is triggered by features such as Focus (or Topic) (Rizzi 1997, Miyagawa 1997, Karimi 1999c, among others. See also Bailyn (this volume) and Kiss (this volume)).

Following these authors, I suggest that discourse functions are represented by features that trigger movement in Persian. Thus the landing site of a scrambled object is the specifier of a functional head that represents a functional feature such as Top(ic) or Foc(us). These features are general properties of scrambling in Persian, and are not restricted to objects (Karimi

(forthcoming)). The following configuration illustrates this issue:

$$(70) \quad \underset{\uparrow}{[}_{FP} \text{XP}_i [ \quad F [_{YP} \dots t_i \dots ] ] ] }$$

In (70), F represents a functional head such as Foc or Top. This feature must be matched with a corresponding F' that is carried by an XP (Chomsky 1998). Therefore, it triggers the movement of an XP, including the object DP, into the specifier position of the FP.

Persian, unlike Hungarian, allows Topic and Focus to appear in different positions: They can surface in sentence initial positions (cf. (5)), or in a TP internal position (cf. (4). See also the data in section 4.1).

Allowing specific features to represent discourse functions is supported by the fact that focus and topic are morphologically realized in some languages. Topic, for example is represented by the affix *wa* in Japanese. In Yaqui, the suffix *-su* marks focus (Jelinek and Escalante 1991), and Navajo has a particle that marks focus (Barss, Hale, Perkins, and Speas 1991). In the absence of an overt morphological element, it is conceivable to assume the existence of features representing these discourse functions.<sup>26</sup>

In the next section, I discuss supporting evidence in favor of the existence of two distinct object positions (TOPH) inside the VP, an additional position outside of VP, and the Syntactic Word Formation rule (SWF), proposed in previous sections.

## 5. Supporting Evidence

In what follows, arguments are presented supporting the Two Object Position Hypothesis stated in (53), the rule of Syntactic Word Formation, and the third object position created by scrambling.

### 5.1 Support for SWF and TOPH

Syntactic Word Formation accounts for the distinctions between specific and nonspecific

objects with respect to scope, apparent anti-Crossover effects, and object-verb order. These issues are discussed in 5.1.1, 5.1.2, and 5.1.3, respectively. SWF, together with TOPH in (53), explain the contrast between the two types of objects with respect to binding relations in double object constructions. This subject is addressed in 5.1.4.

### 5.1.1 Scope

SWF explains why the nonspecific object cannot take scope over negation.

- (71) Kimea (YE) ketâb na-xarid  
 K (a) book neg-bought  
 ‘Kimea did not buy (ONE) book/books.’

This sentence has the interpretation in (72a), but not the one in (72b):<sup>27</sup>

- (72) a. It is not the case that Kimea bought one book/books.  
 b. \*There is a book/are books such that Kimea bought it/them.

The rule of SWF accounts for the semantic fusion between the verb and its nonspecific object, a process that blocks scope over negation by the nonspecific object.

Furthermore, we saw in section 3 that the nonspecific object cannot take scope over a quantifier, even when it is scrambled into a higher position. This is not true in the case of its specific counterpart, as shown in that section. Lack of wide scope reading in the case of nonspecific objects is explained if these elements are syntactically and semantically part of the verbal description due to SWF.

### 5.1.2 Anti-Weak-Crossover Effect and Binding

SWF accounts for apparent Weak-Crossover (WCO) violations. Consider the following contrast:

- (73) a. Kimea<sub>i</sub> [ye dâneshtju]<sub>k</sub> be hamshâgerdi-hâ-sh<sub>i/\*k</sub> t mo’arrefi kard  
 K a student to classmate-pl-her introduction did

'Kimea introduced one student to her classmates.'

b. Kimea<sub>i</sub> ye dâneshtu-ro<sub>k</sub> be hamshâgerdi-hâ-sh<sub>i/k</sub> mo'arrefi kard

The sentence in (73a) is well-formed only if the pronominal affix is coindexed with the subject. In (73b), the pronominal affix can be coindexed with either the subject or the specific object. The fact that coindexation between the scrambled nonspecific object and the affix is not available seems to suggest an instance of WCO violation. However, the sentence in (74) shows that WCO does not explain the ungrammatical reading of (73a).

(74) Kimea<sub>i</sub>-ro mâdar-esh<sub>i</sub> t<sub>i</sub> dust dâr-e  
 ↑ \_\_\_\_\_ ↓  
 'As for Kimea, her mother loves (her).'

If WCO were responsible for the ungrammatical reading of (73a), the sentence in (74) should be ruled out on the same basis. The fact that this sentence is well-formed suggests that the ungrammatical reading of (73a) must be due to the fact that nonspecific objects are part of the predicate, and therefore cannot enter the binding relation.

There seems to be a piece of counter evidence regarding the claim that nonspecific objects cannot bind an anaphoric element. Let us reexamine the contrast between the kind-level and existential nonspecifics discussed in section 2. The examples provided in that section are repeated below in (75) and (76).

(75)	Kimea tunest	<i>mâhi</i>	be-gir-e		*un xeyli châgh-e
	K	managed	fish	subj-catch-3sg	it very fat-be3sg
		'Kimea managed to catch fish.'			'It is very fat.'
(76)	Kimea tunest	<i>ye âpârtêmân</i>	peydâ	kon-e	un xeyli ghashang-e
	K	managed	an apartment	find do-3sg	it very pretty-be3sg
		'Kimea managed to find an apartment.'			'It is very pretty.'

While the kind-level nonspecific DP cannot be the antecedent of a pronoun, its existential counterpart can. However, if the ungrammatical reading of (73a) and the second clause in (75) is due to the claim that the object is part of the verbal unit in these examples, the grammaticality of (76) becomes a problem, since words are islands and therefore lack transparency. That is, a portion of a complex word cannot independently bind a pronoun as attested by the ill-formedness of *\*John is a car dealer. It is brown.*

The problem disappears, however, if we assume that the existential nonspecific DP lacks transparency only within its own clause where the process of SWF takes place. That is, the semantic interpretation of these elements apply within the cycle where SWF applies, and not beyond that cycle. This seems to be borne out, as evidenced by the ungrammatical reading of (73a). In this example, the existential nonspecific object fails to bind the pronominal affix within its own clause due to SWF.

### 5.1.3 \*V-O<sub>[-specific]</sub> Order

Finally, SWF explains why the nonspecific object cannot follow the verb, although this restriction does not hold for the specific object, as the contrasts in (41c&d) and (42c&d) indicate. These data are repeated below in (77) and (78).

(77) a. Sepide emruz tamiz kard hayât-o  
           S       today   clean did   courtyard-râ  
           'Sepide did clean the court-yard today.'

b. \*Sepide emruz tamiz kard hayât

(78) a. man mi-xâ-m       be-kâr-am       deraxt-e kâj-o  
           I   hab-want-1sg subj-plant-1sg tree-Ez   pine-râ  
           'I want to PLANT the pine tree.'

b. \*man mi-xâ-m be - kâr-am deraxt-e kâj

If the nonspecific object is interpreted as a semantic part of the predicate, the ill-formedness of (b) sentences in (77) and (78) is explained since the object has to remain in its lexical domain. The implication of this proposal is that the verb can move to a higher node independent of the specific direct object, while this movement is not possible independent of the nonspecific object: The latter has to move with the verb in order to be interpreted as part of the predicate.<sup>28</sup> This seems to be justified as indicated by the following examples.

(79) a. Kimea be bachche-hâ ghazâ dâd

K to child-pl food gave

'Kimea gave food to children.'

b. Kimea [ghazâ dâd]<sub>i</sub> be bachche-hâ t<sub>i</sub> ]

'Kimea FED the children.'

c. \*Kimea [dâd]<sub>i</sub> be bachche-hâ ghazâ t<sub>i</sub> ]

The nonspecific object and the verb have moved together in (79b). The ill-formedness of (79c) shows that the verb cannot move independent of the nonspecific object.<sup>29</sup>

We have seen, however, that the nonspecific object *can* in fact be separated from the verb if contrasted, as in (3), repeated below in (80).

(80) Kimea aghlab (ye) ketâb-e dâstân<sub>i</sub> barâ bachche-hâ t<sub>i</sub> mi-xun-e  
 ↑ \_\_\_\_\_ |

Kimea often (a) book-Ez story for child-pl hab-read-3sg

'Kimea often reads (a) STORY-BOOK for children (rather than a poetry book).'

Contrastively focused nonspecific objects may move into a higher position. The nonspecific object in these cases receives a heavy stress.

(81) Pirhan<sub>i</sub> Râmin barâ Kimea t<sub>i</sub> xarid

↑-----|  
 shirt R for K bought

'SHIRTS Ramin bought for Kimea (not dresses).'

A sentence containing a scrambled nonspecific object becomes awkward if the object is not contrastively stressed (cf. 69).

In sum, the nonspecific object can be separated from the verb only if it is contrasted with another nominal DP that could narrow the semantic scope of the verb and provide a new special meaning. We also saw that scrambling does not provide wide scope for the nonspecific object. This fact clearly implies that the nonspecific object is interpreted in its base position when scrambled. Therefore, the copy fulfills its semantic portion of the predicate when it is extracted.

The question that immediately emerges is this: What prevents the same rule to apply to the verb? That is, why does the copy of the nonspecific object, but not the copy of the verb, serve to provide the semantic interpretation of the predicate. If this were the case, (79c) would be grammatical.

This asymmetry might have to do with another language specific property of Persian: It could be argued that the nonspecific object is unable to follow the verb because (a) it is separated from the verb only when focused, and (b) focal elements can only appear in the preverbal position in this language, as evidenced by the following data.

- (82) a. \*Ramin barâ Kimea xarid *Pirhan-ro*  
           R for K bought SHIRT-râ
- b. \*Ramin goft ke Sasan barâ Kimea xarid *Pirhan-ro*  
           R said that S for K bought SHIRT-râ

Note that WH-phrases are barred from the postverbal position as well. These elements are focal, bearing new information.

- (83) a. \*Ramin barâ Kimea xarid chi / chi-ro  
           R for K bought what / what-râ
- b. \*Ramin goft ke Sasan barâ Kimea xarid *chi/chi-ro*  
           R said that S for K bought what/what-râ

The sentences in (82) and (83) suggest that focus, representing new information, can only appear in the preverbal position in this language. Thus the nonspecific object cannot appear in the postverbal position since its separation from the verb must be correlated with contrast, and a contrastive element cannot appear in the postverbal position.<sup>30, 31</sup>

#### 5.1.4 Binding in Double Object Constructions

The syntax of Persian specific direct object and the indirect object is in some respect the mirror image of English double object constructions as discussed by Barss and Lasnik (1986). That is, there is evidence indicating that the indirect object has to be in the domain of the specific direct object in Persian. This is supported by the following examples.<sup>32</sup>

- (84) man [se-tâ bachche-hâ-ro]<sub>i</sub> be hamdige<sub>i</sub> mo'arrefi kard-am  
       I three-part child-pl-râ to each other introduction did-1sg  
       'I introduced the three children to each other.'

- (85) \*Kimea be bachche-hâ<sub>i</sub> hamdiga<sub>i</sub>-ro mo'arrefi kard  
       Kimea to child-pl each other râ introduction did

Let us discuss (85) first. It could be argued that the ungrammaticality of this sentence is due to the fact that the indirect object is within a prepositional phrase, and hence cannot c-command the direct object. However, similar facts are observed in German, a language which allows binding of the indirect object by the direct object, as in (86).

- (86) dass wir die Gäste<sub>i</sub> einander<sub>i</sub> vorgestellt haben.

that we the guests-Acc each other-Dat introduced have

'That we have introduced the guests to each other.' (Müller and Sternefeld 1994: 351)

German does not allow the direct object to be bound by the indirect object, although the latter is not embedded within a prepositional phrase in this language.<sup>33</sup>

(87) \*dass wir den Gästen<sub>i</sub> einander<sub>j</sub> vorgestellt haben.

that we the guests-Dat each other-Acc introduced have

(Müller & Sternefeld 1994: 352)

Now I turn to the sentence in (84). It has been argued in the literature that the direct object is base-generated adjacent to the verb, and moves to the specifier of AGRo for the purpose of Case assignment. Therefore, it cannot undergo reconstruction (Mahajan 1990 for Hindi, Moltmann 1991 for German, among others). This analysis suggests that the structure of (84) is the one in (88).

(88) man [<sub>AGRoP</sub> [se-tâ bachche-hâ ro]<sub>i</sub> [<sub>VP</sub> be hamdige t<sub>i</sub> mo'arrefi kard-am]]

For Mahajan and Moltmann, the object trace within the VP is an NP-trace since its antecedent is in an A-position (cf. the specifier position of AGRo), and therefore reconstruction is not allowed to that position. Regarding the Persian object, Browning and E. Karimi (1994) argue along the same lines.

Assuming TOPH in (53a), in which the specific object is in the specifier position of VP, the binding relations in (84) and (85) (and also (86) and (87)) will be accounted for in a simple way. That is, the specific direct object cannot be in the domain of the indirect object in its base-position, and hence the latter cannot bind the former.

## 5.2 Support for the Third Object Position

The discussion in this section provides support not only for SWF and TOPH, but also for the

third object position created by scrambling. In this regard, parasitic gap constructions are discussed in 5.2.1, followed by an examination of the combination of binding relations and parasitic gap constructions in 5.2.2.

### 5.2.1 Parasitic Gap Constructions

SWF and TOPH in (53) explain why parasitic gaps are licensed by specific objects but not by their nonspecific counterparts. Consider the following contrasts.

- (89) a. Kimea [<sub>DP</sub> in ketâb-ro]<sub>i</sub> [<sub>CP</sub> ghablaz inke pro e<sub>i</sub> be-xun-e] be man dâd  
 K this book-râ before that subj-read-3sg to me gave  
 ‘Kimea gave me this book before reading (it).’
- b. \*Kimea [<sub>DP</sub> ketâb]<sub>i</sub> [<sub>CP</sub> ghablaz inke pro e<sub>i</sub> be-xun-e] be man dâd
- (90) a. Kimea [<sub>DP</sub> ye kêregar-ro]<sub>i</sub> [<sub>CP</sub> ghablaz inke pro e<sub>i</sub> estexdâm be-kon-e]  
 K a worker-râ before that hiring subj-do-3sg  
 be kêr vâdâsht  
 to work forced  
 ‘Kimea forced a (specific) worker to work before hiring (her).’
- b. \*Kimea [<sub>DP</sub> ye kêregar]<sub>i</sub> [<sub>CP</sub> ghablaz inke pro e<sub>i</sub> estexdâm  
 be-kon-e] be kêr vâdâsht (Karimi 1999b:704)

Similar to adverbs, adjunct clauses such as those in (89) and (90) represent the VP-boundary in Persian. This is due to their syntactic and semantic similarities with adverbs: they appear in the same position, and have scope over the VP. Thus the objects in (89) and (90) are in a VP-external position. Since parasitic gaps can only be licensed by a DP in an A’-position (Chomsky 1982, among others), the objects in these examples should be able to license them. As these examples show, only the specific object can license the gap, but not its nonspecific counterpart.

The solution to this puzzle is that the gap is specific by virtue of being a *pro*, and therefore, it can only be licensed by an argument that is structurally and semantically comparable with it, as I have argued for in Karimi (1999b). Thus SWF and TOPH account for the contrast in (89) and (90).

### 5.2.2 Binding and Parasitic Gap Constructions

Based on German data, Weibelhuth (1992) suggests a position with a *dual* property for the scrambled object: A position that exhibits A/A' properties simultaneously:

- (91) Peter hat jeden<sub>i</sub> Gast [ohne e<sub>i</sub> anzuschauen] seinem<sub>i</sub> Nachbarn t<sub>i</sub> vorgestellt  
 Peter has every guest without looking at his neighbor introduced  
 'Peter has every guest, without looking (at him), to his neighbor introduced.'

*Jeden Gast* 'every guest' in (91) binds the pronoun (the property of an A-position), and licenses a parasitic gap (the property of an A'-position). Thus the object in this sentence has to be in a position with mixed properties. Consider now the Persian example in (92).

- (92) Kim [bachche-hâ-ro]<sub>i</sub> [<sub>CP</sub> qhablaz-inke [<sub>TP</sub> pro e<sub>i</sub> be kelâs be-frest-e]]  
 K child-pl-râ before that to class subj-send-3sg  
 [<sub>VP</sub> t<sub>i</sub> be hamdige<sub>i</sub> mo'arrefi kard]  
 to each other introduction did

'Kim introduced the children to each other before sending (them) to class.'

Given the phrase structure rule in (53a), the reciprocal in (92) is bound by the copy of the object in an A-position, while the gap is licensed by the scrambled object in an A'-position. This is shown in (93).

- (93) Kim [bachche-hâ-ro]<sub>i</sub> [<sub>CP</sub> qhablaz-inke [<sub>TP</sub> pro e<sub>i</sub> be kelâs be-frest-e]]  
 |  
 [<sub>VP</sub> t<sub>i</sub> be hamdige<sub>i</sub> mo'arrefi kard]

|\_\_\_\_\_|

Thus TOPH, together with scrambling that creates the third object position, account for the sentence in (92) and similar cases.

The following data, taken from German (Deprez, (1994:128), provide support for the analysis advanced in this section.

- (94) a. weil Maria *jeden Gast*<sub>i</sub> [ohne seinem Partner  $e_i$  vorzustellen ] allein lässt.  
'Because Maria leaves each guest alone without introducing (him) to his partner.'
- b. weil Maria *jede Frau* [ohne ihrem Partner vorzustellen] allein lässt  
'Because Maria leaves each woman alone without introducing (her) to her partner.'

Given the phrase structure in (53a) and the rule of scrambling, the structures of (94a&b) are those in (95a&b).

- (95) a. weil Maria *jeden Gast*<sub>i</sub> [ohne  $e_i$  *seinem*<sub>i</sub> *Partner* vorzustellen][<sub>VP</sub> t<sub>i</sub> allein lässt]  
|\_\_\_\_\_| |\_\_\_\_\_|
- b. weil Maria *jede Frau*<sub>i</sub> [ohne  $e_i$  *ihrem*<sub>i</sub> *Partner*<sub>i</sub> vorzustellen][<sub>VP</sub> t<sub>i</sub> allein lässt]  
|\_\_\_\_\_| |\_\_\_\_\_|

The gap is licensed by the object in an A'-position in both sentences. Furthermore, the pronoun is c-commanded by the gap in an A-position.

The proposals advanced in this chapter regarding the existence of three distinct object positions in scrambling languages such as Persian account for the peculiarity observed by Webelhuth without the need to assume a landing site with dual syntactic properties. Furthermore, these proposals seem to have the potential to be extended to other scrambling languages as well, as in the case of German in (91) and (94).

## 6. Conclusion

In this chapter, I have first examined the syntactic, semantic, and morphological asymmetries between specific and nonspecific direct objects in Persian. A summary of this discussion appears in the following chart:

(96) Summary of Asymmetries

	Nonspecific	Specific
Frame Adverbial	No	Yes
Durative Adverbial	Yes	No
Compounding	Yes	No
Binding of IO	No	Yes
Scope over Neg	No	Yes
Scope over Q	No	Yes
Licensing Parasitic Gap	No	Yes

These properties give rise to the proposal regarding the existence of two object positions (TOPH) for specific and nonspecific objects in this and similar languages. They also explain why scrambling applies freely with respect to the specific object, but is restricted in the case of its nonspecific counterpart. That is, only a contrastive reading that maintains the novelty of the nonspecific object and places it within a discourse background allows it to scramble.

Furthermore, TOPH, together with the rule of Syntactic Word Formation (SWF) proposed in this chapter account for the syntactic asymmetries between the two types of objects with respect to scope identification, binding, apparent anti-Weak- Crossover effects, and parasitic gap constructions in a simple and elegant fashion.

Additionally, a third object position, created by scrambling, was proposed. It was shown

that scrambling, triggered by discourse functional features such as topic and contrastive focus, extracts the object DP from its base-position and places it in the specifier position of a functional projection representing one of the two discourse functions. It is also argued that the proposal regarding the existence of the two distinct positions for specific objects accounts for cases in which the same DP binds an anaphor and licenses a parasitic gap simultaneously. This proposal has the potential to account for similar facts in other scrambling languages (such as German).<sup>34</sup>

Finally, if the analysis advanced in this chapter is on the right track, there is no need to stipulate a position with mixed properties for scrambled objects (Webelhuth 1992, Deprez 1994), or to assume the existence of a functional head (such as AGRo) in order to block the reconstruction process of the object into its base position.

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