

An Investigation into the Behavior of Persian Multiple Interrogatives with Respect to the Superiority Effect

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ABSTRACT: The goal of this study is to investigate the behavior of Persian multiple interrogatives with respect to the Superiority Effect (SE). Regarding the fact that this investigation and the suggested analysis adopts Chomsky's (1995, 2000, 2001b) Minimalist Program (MP), the paper reviews and criticizes some studies concerning Persian (multiple) wh-movement and the effect of superiority on this type of movement. Contrary to Bošković's (1999) idea that focused languages do not exhibit the SE, it is shown that multiple wh-questions in Persian, a focus language, exhibit SEs. On the other hand, it is argued that Kahnemuyipour's (2001) argument fails to work because it does not posit some types of Persian multiple interrogatives as instances of Superiority Violation (SUV). It is also argued that Kahnemuyipour's proposal cannot account for the sentences in which there is a wh-element in the subject position and thus in order to solve the problem, a syntactic license for SUVs in Persian is postulated.

Key words: Multiple interrogatives, Superiority Effect, Focus language, wh-movement, wh-phrase, Minimalist Program.

INTRODUCTION

The phenomenon of superiority in interrogatives has been explored since Chomsky (1973). The empirical generalization is that in a language like English, where only one wh-phrase is fronted in a multiple question, it is the 'superior' wh-phrase (i.e. the one that asymmetrically C-commands other wh-phrases) that is fronted. For example, compare the unacceptability of (1b), where the lower wh-phrase what has moved over the higher wh-phrase who, with (1a), where what remains in situ.

- a. Who bought what?
- b. ??What_i did who buy t_i?

Chomsky (1973) postulates the Superiority Condition (SC), given in (2), basically tracking the generalization above.

No rule can involve X, Y in the structure...X... [...Z...WYV...] where the rule applies ambiguously to Z and Y, and Z is superior to Y. The category A is superior to the category B if every major category dominating A dominates B as well but not conversely. (Chomsky, 1973)

To capture the Superiority Effect (SE), in the Minimalist Program (MP) where the interrogative complementizer C₀ attracts a wh-phrase to check its [+WH] feature, an economy condition like Minimal Link Condition (MLC) has been proposed. Chomsky (1995) formulates MLC as in (3). It is noteworthy that 'closeness' is understood here in terms of asymmetric C-command.

K attracts α only if there is no β , β closer to K than α , such that K attracts β (Chomsky, 1995).

MLC correctly rules out (1b) due to the fact that the object wh-phrase what which is not the closest wh-phrase to C₀ cannot be attracted by C₀. However, there are facts concerning Persian multiple interrogatives that MLC alone does not seem to be able to capture. Considering the importance of syntactic constructions and the universal principles underlying them on the one hand, and those parameters (i.e., dimensions or aspects) of grammar which are subject to language-particular variation (and hence vary from one language to another) on the other hand, studying the behavior of Persian multiple interrogatives with respect to the SE and the phenomena related to it is what the researcher intends to investigate.

METHOD

Considering data collection procedure, it is worth noting that although the use of this type of interrogative is unavoidable, this structure is not so common in the daily conversation of Persian native speakers. Consequently, collecting natural data was rather impractical. As a matter of fact, the data for the study have been collected from two sources. The primary source of data has been articles about Persian published in different linguistics journals. As such, it may be assumed that the examples enjoy enough credibility. On the other hand, since the researcher is a native speaker of Persian (the official language in Iran), he has also made up some of the examples himself and has checked them with native speakers of Persian to ensure their credibility. It has been attempted to indicate sources of the examples properly throughout the paper; otherwise, the examples are the ones concocted by the researcher for the purpose of analysis.

As mentioned before, the aim of the present study is to consider the behavior of Persian multiple interrogatives with respect to the SE which is said to be a condition on wh-movements. It is believed that Persian belongs to the focus fronting language type. Therefore, as a prerequisite, a brief discussion of the controversies over the nature of wh-movement occurring in Persian wh-questions is presented. Having discussed wh-movement in Persian, we turn to the topic of the study and consider the SE based on its latest developments in the MP and its effect on the Persian multiple interrogatives. Finally, the concept of Superiority Violation (SUV) and the behavior of Persian multiple interrogatives in this regard are discussed. Instances of multiple interrogatives used as the corpus of the study are analyzed based on the approach adopted. The analysis of the sentences will be accompanied by tree diagrams which may represent different syntactic operations (merge, movement and deletion) operating throughout the derivation of the sentences.

Persian: A wh-movement language or a wh-in-situ language?

Dabir-Moghaddam (1991) states that in some languages such as Chinese, Japanese and Persian, as opposed to English, the wh-phrase is not moved in the syntactic component, i.e. between D-structure and S-structure; rather it remains in situ. For instance, consider the following example in which the wh-phrase has apparently remained in situ:

Šomâ ketâb râ be ki dâd-i?
 You book OM to who give.PS.2SG.
 Whom did you give the book to?

Following Haug (1982), he believes that the wh-phrase *ki* 'who' must remain in situ in the syntactic component of (4): it must not be moved overtly. He states that *ki* must undergo covert movement to function as an operator binding a variable.

Now one may ask how we can account for wh-questions such as (5b) when they are compared to questions such as (5a) in which the wh-phrase has remained in situ:

- (5)
- a. Postči nâma-ro be ki dâd?
 Postman letter. OM to who give.PS.3SG.
 Who did the postman give the letter to?
- b. Postči be ki nâma-ro dâd?
 Postman to who letter. OM give.PS.3SG.
 Who was it that the postman gave the letter to?

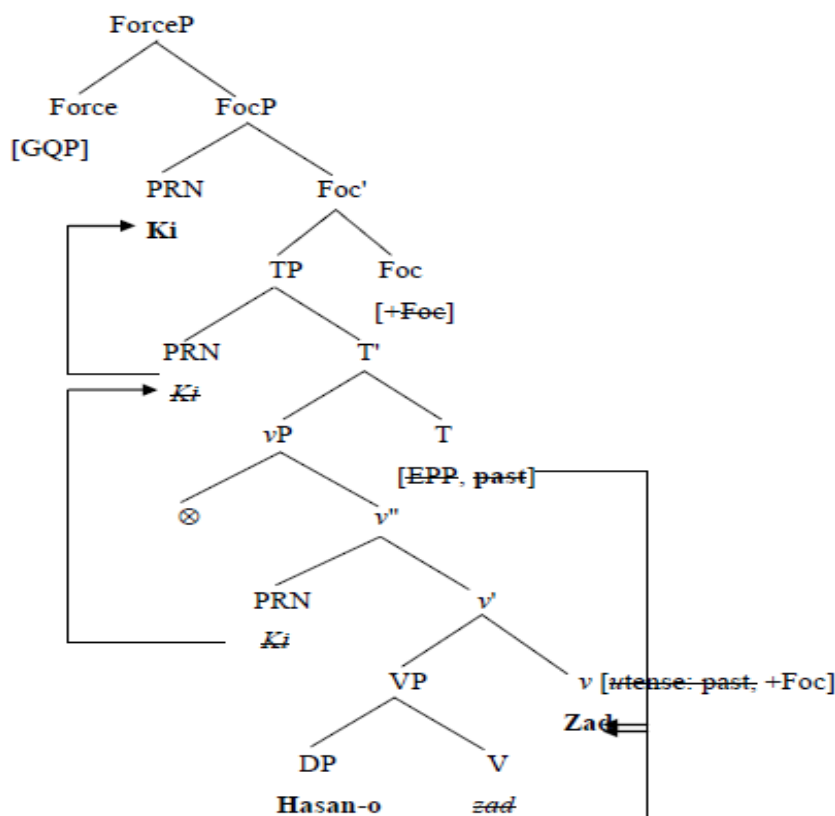
As it is clear, the wh-phrase *be ki* has remained in situ in (5a) whereas it has moved in (5b). Following Dabir-Moghaddam (1991), apparently we encounter a problem justifying the movement of *be ki* in (5b). If Persian is a wh-in-situ language, as it is assumed by Dabir-Moghaddam (1991), (5b) must be ungrammatical since the wh-phrase *be ki* has moved from its original position. However, as the sentence is not ungrammatical we may suppose that Persian is a wh-movement language. On the other hand, in wh-movement languages, like English, the wh-phrase must be moved to SpecCP which is a clause-initial position, whereas in (5a-b) wh-phrases have not been moved to SpecCP. Considering grammatical wh-questions such as (5b), the question that arises is whether we should posit another type of language besides wh-in-situ and wh-movement languages or not.

Lotfi (2003) believes that Persian is a wh-in-situ language with a basic SOV sentential word order. This means the morpho-syntactic requirements of a wh-phrase--whatever they are--are satisfied without a need for the phrase itself to move overtly from the position in which it is base-generated. Nevertheless, it is quite possible (and not very infrequent) to front one or more wh-phrases for the sake of focusing or other discourse related reasons. Therefore, he believes that Persian may exhibit both syntactic wh-movement and wh-in-situ phenomena simultaneously. That is, one can expect an Optional Movement in Persian. However, Megerdooian and Ganjavi (2001) argue against optional movement in Persian. They believe that it is not possible to apply an optional movement strategy to Persian wh-question formation and provide various types

of evidence from distributional properties of the two constructions showing that wh-in situ and overt wh-extraction are two distinct processes.

A radically different point of view in this regard has been proposed by Kahnemuyipour (2001). He believes that Persian is neither a wh-movement language nor a wh-in-situ one; rather, Persian should be classified as a focused wh-movement language. Following Bošković (1998), he argues that wh-phrases are inherently focused. Therefore, in a focus fronting wh-question language such as Persian which contains a [QGP] feature in its SpecForceP, a wh-phrase must be moved to a SpecFocP. It is assumed that this SpecFoc may be a TP-internal or TP-external position. Kahnemuyipour (2001) states that this TP-internal focus position is SpecvP. According to him, transitive light verb v contains a [+Foc] feature triggering the movement of the wh-phrase to SpecvP. This proposal causes no problem for an interrogative clause with a wh-element in the object position. However, it falls short of accounting for an interrogative clause containing a subject wh-element originating in the external position of v, e.g. *ki Hasan-o zad?*

(6)

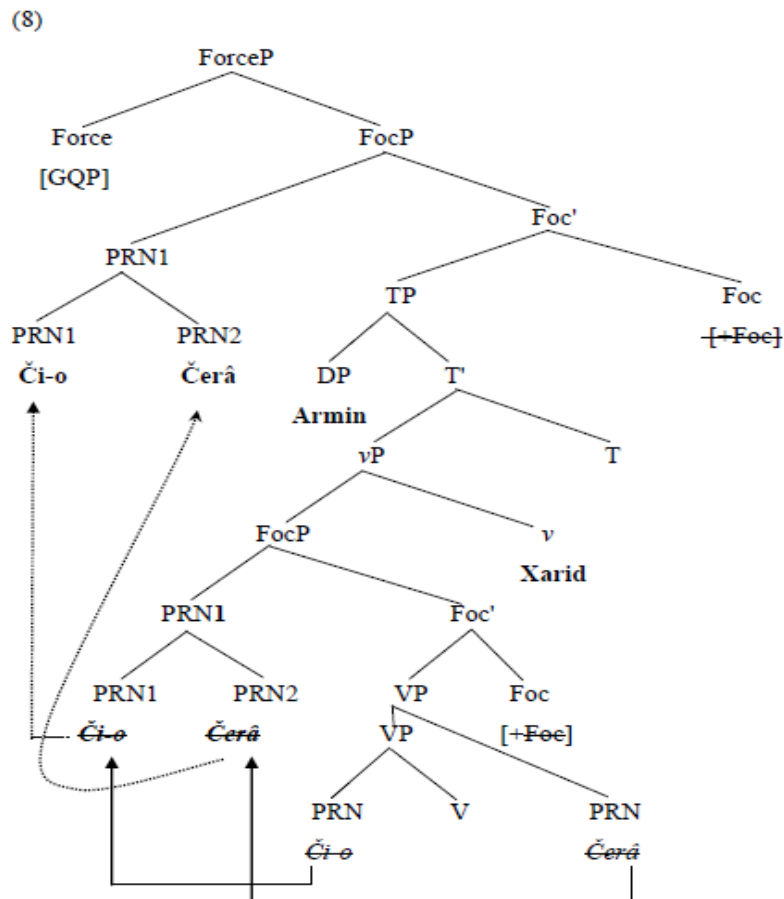


In this type of interrogative, v which contains a [+Foc] feature serves as a probe searching for an active goal that it c-commands, i.e. a wh-phrase. Considering the fact that the wh-element serves as the external argument of the transitive light verb, v fails to find an appropriate goal to attract it and, consequently, fails to satisfy its [+Foc] feature. Therefore, this [+Foc] feature remains unchecked and the derivation crashes.

In response to the researcher's criticism about the claim that SpecvP is not an appropriate position for focus movement of wh-phrases, Kahnemuyipour (personal communication) stated we should posit a new TP-internal focus position lower than v. He believes that we can posit a focus phrase lower than v just as Rizzi (1997) posits a focus phrase based on his split CP hypothesis. Considering the following multiple interrogatives, i.e. interrogatives containing more than one wh-phrase, therefore, one can draw the following tree diagram for (7c):

(7)

- a. *Ârmin Či-o Čerâ xarid?*
Armin What-OM why buy.PS.3SG.
Why did Armin buy what?
- b. *Či-o Ârmin Čerâ xarid?*
- c. *Či-o Čerâ Ârmin xarid?*
(Lotfi, 2003, p. 162)



As can be seen, the wh-phrases Či-o and Čerâ have been moved to the TP-internal focus position to check the [+Foc] feature of the Foc phrase. Adopting this idea that Persian has free word order, Kahnemuyipour (2001) continues to say that these two wh-phrases can optionally move to the TP-external focus position, too. Therefore, the result would be a derivation like (7c).

One problem

Regarding Kahnemuyipour's idea that the wh-phrases in (7c) can optionally move to the TP-external focus position, one can argue that they also check the [+Foc] feature of the TP-external focus position. However, there is still another problem. If there is an optional type of movement in the sense of those occurring in (7c) on the one hand, and there is a TP-external [+Foc] feature needs to be checked on the other hand, how can one account for sentences such as (7a), repeated here as (8)?

a. Ārmin Či- o Čerâ xarid?

As can be seen, the two wh-phrases have been moved to the TP- internal focus position to check its [+Foc] feature. Nevertheless, what about the [+Foc] feature in the TP-external focus position? These wh-phrases are not optionally moved to the TP-external focus position and the TP-external focus feature is remained unchecked. Therefore, the derivation must crash. However, (9) is still grammatical.

It seems that Kahnemuyipour has not taken this problem into account. In a series of articles, Bošković (1997, 1998, 2000) argues that in Serbo-Croatian, an apparent multiple wh-fronting language, all of the wh-phrases undergo focus fronting. He believes that in wh-movement languages the strong feature that triggers movement is in target, whereas in focus movement the strong feature is in the wh-phrase. Therefore, all wh-phrases must undergo focus movement.

Following this idea, let's conclude that in a wh-movement language such as English in which the strong feature that triggers movement is in target, the [+Foc] feature needs to be checked by an appropriate goal. However, using Chomsky's Strength metaphor, we can say that in a focus movement language like Persian in which the strong feature is in the wh-phrase, the [Foc] feature carried by the head Foc is weak and it does not need to be checked by a goal. Consequently, all wh-phrases must undergo focus movement in focus languages since they contain [+Foc].

More generally, we can suppose that the first movements of all wh-phrases to a focus position in a focus language, as in (7a-c), are obligatory to check their strong focus feature but their further movements, as in (7b-c) are optional.

Contrary to Bošković's idea that a focus fronting language can follow Chomsky's (1995) account of Icelandic Multiple Subject Constructions, henceforth IMSC, based on which the same head can attract a particular feature F more than once, the appropriate generalization would appear to be that in a focus language such as Persian in which it is believed that a strong Foc feature is in the wh-phrase and not in the head Foc, the wh-phrases should undergo a kind of movement and not attraction to locate in the SpecFoc. Consequently, following Huang's (1982) approach to multiple adjunctions, one can say that in a multiple interrogatives such as (9) all wh-phrases can be moved to the TP-internal SpecFoc to check their strong Foc features.

Let's consider the nature of Persian multiple interrogatives containing more than two wh-phrases such as (10a-b):

(10)

a. Ki kojâ Či did?

Who where what see.PS.3SG.

Who saw what where?

b. Ki kei Či- o Čerâ dur andâxt?

Who when what-OM why discard.PS.3SG.

Why did who discard what when?

It seems that the above examples pose no problem to the argument of focused wh-movement in Persian. The wh-word ki in (10a-b) originating in the SpecvP is moved to the SpecFoc in the TP-external position. Adopting Huang's (1982) approach to multiple adjunctions, we can say that in (10a) wh-elements kojâ and Či are multiply adjoined to the SpecFoc in the TP-internal position. In (10b) there are three wh-words in the TP-internal position. Therefore, it is crystal clear that kei, Či-o and Čerâ are also multiply adjoined to the SpecFoc in the TP-internal position.

As it was discussed above, focus movement operation moves the highest wh-phrase first and then adjoins additional wh-phrases. Thus, violation of this rule results in ill-formed sentences such as (11a-f):

(11)

a. *Ali kojâ kei raft?

b.* Ali Či kojâ xarid?

c.* Ali Čerâ Či-o xarid?

d. *Čerâ Či-o Ali xarid?

e. *Či Ki kojâ did?

f. *Ki Čerâ kei Či-o dur andâxt?

Close examination of these ill-formed sentences makes us conclude that there must be a constraint on the movement of wh-phrases in interrogative sentences. Now consider the following English multiple wh-questions:

(12)

a. Who bought what?

b.* What did who buy?

It seems that there is a similar constraint on the movement of wh-phrases in English multiple wh-questions, too. Accordingly, one comes to the conclusion that there should be a syntactic condition posed on the movement of wh-phrases in the languages of the world, i.e. Superiority Condition.

Bošković (1999), as cited in Kahnemuyipour (2001), believes that multiple interrogatives in focus languages do not exhibit the SE. He attempts to account for why focus movement is exempt from the Superiority Condition (SC) but wh-movement is not. His account is confirmed by Serbo-Croatian data. For example, the Serbo-Croatian short-distance matrix questions in (13) exhibit no SEs. Based on the SC, one would expect only (13b) to be grammatical.

(13)

a. Ko je koga video?

Who is whom seen

Who saw whom?

b. koga je ko video?

(Kahnemuyipour 2001, p. 54)

In what follows, we will look at some examples taken from Persian, which is a focus language, to see whether they exhibit the SE. Consider the following examples:

(14)

a. Ali kojâ Či xord?

Ali where what eat.PS.3SG.

Where did Ali eat what?

b. *Ali Či kojâ xord?

(15)

a. Mohsen kei kojâ xābid?

Mohsen when where sleep.PS.3SG.

When did Mohsen sleep where?

b. *Mohsen kojâ kei xâbid?

As can be seen, both focus positions, TP-internal and TP-external positions, are legitimate place for their c-commanding wh-phrases. Adopting this idea, one can say that this is in line with Bošković's (1999) claim since he believes in the movement of all wh-phrases even by a [+Foc] feature. However, the problem posed by Bošković's claim is that wh-phrases can cross each other to move to a focus position, i.e. they do not exhibit the SE. On the other hand, as illustrated in examples (14)-(15), multiple interrogatives in Persian, as a focus movement language, exhibit the SE, i.e. wh-phrases cannot cross each other and if they do the resulting derivation will crash. Therefore, it seems that we should pose a constraint i.e. SE on the movement of wh-phrases in Persian to avoid the derivation of ill-formed sentences such as (14b) and (15b). However, that's not all. Regarding the following examples, it seems that the SE is not respected here.

(16)

a. Mohsen key kio did?

Mohsen when who-OM see.PS.3SG.

When did Mohsen see whom?

b. Mohsen kio key did?

As can be seen, the Persian natural order is observed in (16a). That is, the wh-adjunct key has been moved to the SpecFoc before the wh-phrase kio. Nevertheless, in (16b) kio has been moved to the SpecFoc first, i.e. it crossed the wh-adjunct key and the result is still a grammatical sentence. It seems that the SE is violated in (16b). In the next part we will discuss this phenomenon.

Superiority violations and Persian multiple interrogatives

In the above discussion of the nature of the SE and the behavior of Persian multiple interrogatives in this respect, it was noticed that Persian multiple wh-questions exhibit the SE. We showed it in examples (14a) and (15a), repeated here as (17):

(17)

a. Ali kojâ Ći xord?

Ali where what eat.PS.3SG.

Where did Ali eat what?

b. Mohsen kei kojâ xâbid?

Mohsen when where sleep.PS.3SG.

When did Mohsen sleep where?

The wh-phrase kojâ is moved to the SpecFoc in the TP-internal position of (17a) first, and then wh-phrase Ći is moved. By the same token, in (17b), kei is moved before kojâ. The movement is in line with the principle of Superiority posed by Chomsky (1973). However, consider the following examples:

(18)

a. Ali kojâ Ći xarid?

Ali where what buy.PS.3SG.

What did Ali buy where?

b. *Ali Ći kojâ xarid?

c. Ali Ći-o kojâ xarid?

(19)

a. Ki Ći xarid?

Who what buy.PS.3SG.

Who bought what?

b.* Ći ki xarid?

c. Ći-o ki xarid?

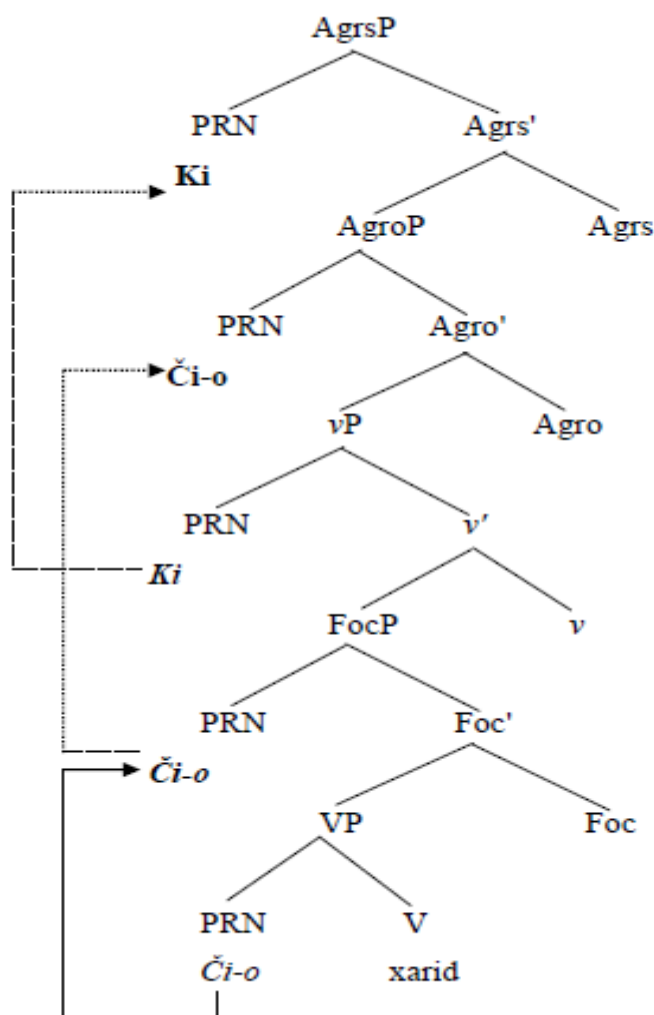
As can be seen, in (18b) and (19b), the SE is not respected. That is, the lower wh-phrases have moved over the higher wh-phrases and, thus, the resulting derivations are ungrammatical. But how can we account for (18c) and (19c) in which the lower wh-phrases have moved over the higher ones, yet the resulting derivations are grammatical?

Considering the examples in (18), it is generally assumed that wh-adjuncts are generated in a position higher than the complement position of V (the VP-adjoined position). Therefore, the SC predicts that sentences with wh-adjuncts higher than wh-arguments are grammatical, i.e. (18a) is grammatical, but (18b) is not. However, in (18c), the wh-argument Ći-o is placed higher than the wh-adjunct kojâ and the result is not ungrammatical. How can we account for this contradiction? Indeed, one might take examples such as (18c) as cases of Superiority Violations (henceforth SUVs).

On the other hand, Kahnemuyipour (2001) believes that the SE is respected in (18c). He argues that in (18c) *kojâ* is moved to the SpecFoc in the TP-internal position first and then *Či-o* is moved. Considering the Split-Infl hypothesis of Pollock (1989), IP can be split into different maximal projections, i.e. TP, AgrsP and AgroP. Adopting this hypothesis, Kahnemuyipour (2001) continues to say that the object has to move further up to the SpecAgroP position and the form with the *wh*-argument above the *wh*-adjunct is grammatical and thus the SE is respected. He says if this argument is on the right track, the exact position of the focused element proves to be of crucial importance with respect to superiority. Persian, with the focused element above the TP-internal focus position, exhibits apparent SE due to further movement of the elements to check other syntactic features. Therefore, there is no violation of the SE. In (18c) the subsequent movement of *Či-o* to SpecAgroP is for the sake of checking other syntactic features. Indeed, Kahnemuyipour rejects the idea that the *wh*-phrase *Či-o* is moved first and thus the result is a violation of the SE. If we assume that he is right in the case of (18c), how can he account for cases such as (19) in which a *wh*-phrase is placed in the subject position?

Considering the focus movement of the focused elements and adopting Kahnemuyipour's (2001) idea for further movement of the *wh*-object to the SpecAgroP, there are two problems. First, one can assume that *Či-o* is obligatorily moved to the TP-internal SpecFoc position first and then is moved to the SpecAgroP to check other syntactic features. On the other hand, assuming Bošković's (1999) asymmetry, one can say that the *wh*-phrase *ki* can also move to the SpecAgrsP (or SpecTP) to check the (EPP) feature. One can follow these steps of derivation in the following tree:

(20)



Now if we assume that (19c) exhibits the SE on the one hand, and all *wh*-phrases are inherently focused in a focus language on the other hand, we can say when *Či-o* is obligatorily moved to the TP-internal focus position the other *wh*-phrase, i.e. *ki* must also obligatorily move to a focus position, i.e. TP-external SpecFoc. Considering these two problems, however, the resulting derivation would be something different from (19c).

Regarding the obligatory movements of wh-phrases to a focus position, it is worth noting that all wh-phrases must undergo obligatory movements in a systematic order. That is, the highest wh-phrase must move to the SpecFoc first and then the next highest one and etc. Therefore, if a wh-phrase in the object position moves before a wh-adjunct or a wh-adjunct moves before a wh-phrase in subject position the derivation will crash and the result will be an ungrammatical sentence.

Now if we believe that Či-o is moved to the SpecFoc before ki and the resulting derivation is still grammatical, as it is, we should conclude that contrary to Kahnemuyipour's idea, (19c) violates the SC and, hence, does not exhibit the SE. Consequently, it seems that his argument is not applicable to Persian multiple interrogatives in which a wh-object has crossed another wh-phrase. That is, it shows some sort of inconsistency: accounting for the grammaticality of (18a-b) and (19a-b) but failing to account for the ungrammaticality of (18c) and (19c) which are actually instances of SUV.

Accordingly, it seems that Kahnemuyipour's (2001) approach to sentences such as those in (18c) and (19c) is inadequate because of not positing them as instances SUVs. Thus, we have to adopt another approach to show that (18c) and (19c) are instances of SUVs.

A comparison between the examples in (18c) and (19c) and the following examples reveals a similarity between the two sets:

(21)

- a. ki kei Či xarid?
Ali when what buy.PS.3SG.
Who bought what where?
- b. *ki Či kei xarid?
- c. ki Či-o kei xarid?

(22)

- a. Ali kojâ Či xord?
Ali where what eat.PS.3SG.
What did Ali eat where?
- b. *Ali Či kojâ xord?
- c. Ali Či -o kojâ xord?
- d. Či -o kojâ Ali xord?

As can be seen, in all the grammatical examples in which a wh-argument in the object position has preceded a wh-adjunct or another wh-argument, especially in the subject position, there is a suffix attached to the wh-argument in the complement position of V. This suffix is known as an Object Marker (OM) in the sense of Kahnemuyipour (2001), Lotfi (2003) and Ganjavi (2007).

It is noteworthy that, OM entails some consequences for the displacement of the respective argument. Firstly, it facilitates scrambling of the object argument to which it is attached. Secondly, moving wh-object-NPs bearing OM over a wh-subject (or a wh-adjunct) in a multiple wh-question is not forbidden.

It should also be noted that we do not consider the case of scrambling here. We take the canonical form (the natural order) of the Persian wh-questions into account. Thus, we discuss the case of wh-movement in Persian as the focused movement and not as a case of scrambling.

Adopting Lotfi's (2003) idea, therefore, we may assume that once the OM râ is attached to a wh-object, the wh-object can move over another wh-phrase, no matter whether it is an adjunct or an argument, to locate in the focus position. Thus, the resulting derivation, just like the examples shown in (18c), (19c), (21c) and (22c), would violate the SE; yet, they remain grammatical. To resolve the problem and account for the grammaticality of such sentences a syntactic license for the SUVs in (18c), (19c), (21c) and (22c) is presented below.

(23)

A syntactic license for SUVs in Persian

The SE may be violated in Persian interrogatives if and only if:

- (i) A wh-object crosses other wh-phrases, and
- (ii) Its case requirements are satisfied by râ.

Having adopted (23), we can account for the SUVs represented in (18c), (19c), (21c) and (22c). As can be seen, in each example a wh-object to which an OM is attached has crossed another wh-phrase and thus the resulting sentences are perfect instances of SUVs in Persian as a focus language.

Considering (23), for instance, one can correctly state that (24) exhibits the SE. Since the wh-adjunct Čerâ (not a wh-object) has crossed another wh-phrase, it does not violate the SE and thus, the result is ungrammatical.

(24)

- * Ali Čerâ Či- o dur andâxt?
Ali why what-OM discard.PS.3SG
Why did Ali discard what?

Regarding the behavior of non-binary multiple questions, Pesetsky (2000) believes that in a question with three or more wh-phrases, wh₁ (the highest wh-phrase) should undergo wh-feature movement as the first instance of wh-movement (satisfying AC), with two of the lower wh-phrases undergoing phrasal movement. Of these instances of phrasal movement, the first will be overt in English, and the rest will be covert. In other words, questions with three or more wh-phrases should show no SE and thus should exhibit instances of SUV. In fact, this is the case represented in example (25).

(25)

No Superiority Effect with three or more wh-phrases.

- a. *What did who give ___ to Mary? [detectable SE]
 - b. What did who give ___ to whom? [No detectable SE]
- (Pesetsky, 2000, p. 59)

Now let us consider Persian non-binary multiple questions to see whether they exhibit the SE or they are cases of SUVs. Consider the following examples:

(26)

a. Ki kojâ Ći xarid?

Who where what buy.PS.3SG.

Who bought what where?

- b. *Ki Ći kojâ xarid?
- c. *Ći ki kojâ xarid?
- d. *Ki Ći Ćerâ xarid?
- e. *Ći ki Ćerâ xarid?
- f. *Kojâ Ći ki xarid?

As can be seen, (26) shows that Persian interrogatives with more than two wh-phrases exhibit the SE. That is, SC is inviolable in these examples. But what about the examples in (27):

(27)

- a. Ki Ći-o kojâ xarid?
- b. Ći-o ki kojâ xarid?
- c. Ki Ći-o Ćerâ xarid?
- d. Ći-o ki Ćerâ xarid?

Again as you see, the wh-object Ći-o has been moved over a wh-adjunct and a wh-subject, and yet the result is grammatical. Adopting Pesetsky's (2000) idea, we can say that these Persian non-binary multiple questions do not display the SE. However, their syntactic nature is rather different from multiple interrogatives in a wh-movement language like English. It seems that they have the same behavior to Persian binary multiple questions mentioned in (18c), (19c), (21c) and (22c). Following our proposed syntactic license in (23), we can conclude that examples in (27) are instances of SUV. In other words, since the wh-phrase Ći-o is a wh-object and its case requirement is satisfied by râ, it can cross wh-adjuncts and wh-subjects freely.

Now let us discuss a more challenging example. Consider (28) below:

(28)

*Ći-o kojâ Ki gozâšt?

What-OM where who put.PS.3SG.

Who put what where?

As can be seen in (8), the wh-phrases Ći-o and kojâ originate in the VP position. Regarding the fact that they are inherently focused, they should move to the TP-internal focus position. As can be seen, the wh-phrase Ći-o which satisfies the requirements in (23) (i-ii) can violate the SE and move to the SpecFoc before kojâ. On the other hand, it is assumed that all wh-phrases in the TP-internal focus position can optionally move to the TP-external focus position. Again, Ći-o can violate the SE and cross the wh-subject ki to go to the SpecFoc. But a question arises: Why is (28) ungrammatical? If we consider the position of the wh-adjunct kojâ which is above the wh-subject ki, we see that kojâ has crossed ki in spite of the fact that it does not satisfy the requirements in (23) (i-ii). Accordingly, it can be said that in the movement of kojâ over ki, the SE has not been respected and the resulting derivation is ungrammatical. In other words, (28) actually exhibits the SE.

Concluding Remarks

We noticed that Lotfi (2003) believes that Persian is a wh-in-situ language with a basic SOV sentential word order. This means the morpho-syntactic requirements of a wh-phrase—whatever they are—are satisfied without a need for the phrase itself to move overtly from the position in which it is base-generated. On the other hand, Megerdooian and Ganjavi (2001) argue against optional movement in Persian. They believe that it is not possible to apply an optional movement strategy to Persian wh-question formation. According to them, evidence from the distributional properties of the two constructions shows that wh-in situ and overt wh-extraction are two distinct processes.

It was also explained that according to Kahnemuyipour (2001) Persian is neither a wh-movement nor a wh-in-situ language. Rather, it should be classified as a focused wh-movement language in which a wh-phrase must be moved to a SpecFocP. It is also assumed that this SpecFoc may be a TP-internal or a TP-external position.

Regarding the notion of the SE, Bošković (1999) believes that multiple interrogatives in focused wh-movement languages do not exhibit the SE. He provides an account for why focus movement is exempt from Superiority but wh-movement is not. This expectation is confirmed by Serbo-Croatian data. Based on examples such as those in (11), (14) and (15), however, we showed that Persian wh-questions exhibit SE, and that they are counterexamples to Bošković's generalization.

It is worth noting that it does not mean that Persian multiple interrogatives do not violate the SE. We showed that examples such as those in (18c)-(19c) are instances of SUVs. On the other hand, it was explicated that Kahnemuyipour's (2001) argument for not positing these sentences as instances of SUVs fails to work. We said that he believes (18c) exhibits the SE. He argues that the position of Či-o before kojâ is due to its further movement to check other syntactic features in AgroP. However, we showed if there is a wh-element in the subject position as in (19), his account for not positing (19c) as a case of SUV fails to work. Thus, it seems that his argument is not applicable to those Persian multiple interrogatives in which a wh-object has crossed a wh-subject.

To solve this problem, we postulated a syntactic license for SUVs in (23) and argued that (18c), (19c), (21c) and (22c) are grammatical instances of SUVs since they are subject to (23). We have also shown that sentences such as those in (26) and (28) are ungrammatical since they display SE and they are not subject to (23). Therefore, we can conclude that Persian multiple wh-questions exhibit the SE except those which are subject to (23).

It was also mentioned that Pesetsky (2000) believes that English non-binary multiple questions do not exhibit the SE. However, similar to our approach towards Persian binary multiple questions, we argued that Persian non-binary multiple questions also exhibit SE except those which are subject to the syntactic license presented in (23).

REFERENCES

- Bošković Z. 1998. Multiple wh-fronting and economy of derivation. In *Proceedings of the West Coast Conference on Formal Linguistics* 16, 49-63. Stanford, Calif.: CSLI Publications.
- Bošković Z. 1999. On multiple feature-checking: Multiple wh-fronting and multiple head movement. In *working minimalism*, (eds). Samuel Epstein and Norbert Hornstein, 159-187. Cambridge, Mass: MIT Press.
- Bošković Z. 1997. Superiority effects with multiple wh-fronting in Serbo-Croatian. *Lingua* 102: 1-20.
- Chomsky N. 1973. Conditions on transformations. In *a festschrift for Morris Halle*, (eds). Stephen R. Anderson and Paul Kiparsky. 232-286. New York: Holt, Rinehart and Winston.
- Chomsky N. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.
- Chomsky N. 2001b. Derivation by phase. In *Ken Hale: A Life in Language*, (ed). M. Kenstowicz Cambridge: MIT Press.
- Chomsky N. 1977. On wh-movement. In P. W. Culicover, T. Wasow, and A. Akmajian (eds). *Formal Syntax*. New York: Academic Press: 71-132.
- Chomsky N. 2000. *Minimalist Inquiries*. In *Step by Step: Essays on Minimalism in Honor of Howard Lasnik*, (eds). R. Martin, D. Michaels and J. Cambridge: MIT Press 89-156.
- Chomsky N. 2001a. *Beyond Explanatory Adequacy*, unpublished manuscript, MIT.
- Dabir-Moghaddam M. 1991. *Theoretical Linguistics, Emergence and Developments of Generative Grammar*. Tehran: Soxan Press.
- Ganjavi Sh. 2007. *Direct Object in Persian*. Doctoral Dissertation. University of Southern California.
- Huang CTJ. 1982. Move WH in a language without wh-movement. *The Linguistic Review* 1: 369-416.
- Kahnemuyipour A. 2001. On wh-questions in Persian. *Canadian Journal of Linguistics* 46 (1/2):41-62.
- Lofti AR. 2003. Persian wh-riddles. In Boeckx, C & Grohmann, K. K. (eds). *Multiple Wh-Fronting*. Amsterdam: Benjamins 161-186.
- Megerdooimian K, Ganjavi Sh. 2001. *Against optional wh-movement*. Ms. University of Southern California.
- Pesetsky D. 2000. *Phrasal Movement and Its Kin*. Cambridge, MA: MIT Press.
- Pollock JY. 1989. Verbal movement, universal grammar and the structure of IP. *Linguistic Inquiry* 20:365-424.
- Rizzi L. 1997. The fine structure of the left periphery. In L. Haegeman (ed). *Elements of Grammar*, Kluwer, Dordrecht 281-337.