

## Wh-Island Constraint in Turkish

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*(Received 24 February 2017; accepted 12 August 2017)*

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**ABSTRACT:** The paper proposes that wh-island constraint does not hold in Turkish, at least for the constructions that contain more than one wh-phrase. The grammatically problematic constructions that have been uttered as wh-island violations in previous studies are claimed to be weak Complex DP Island violations. The DP that c-commands the lower CP constitutes a weak DP island for the upper movement of the elements. Data obtained by akır (2016a) support this assertion since the findings of that study show that interpretation of wh-adjuncts within lower CPs are problematic even when there are not any intervening island structures. Another novel assertion proposed in the study is on the scope problem of the wh-constructions that contain multiple wh-adjuncts in their lower CPs. When there is more than one wh-adjunct within the embedded CP, either of them cannot take wide scope individually. The reason for this situation has been explained to be the absorption process. Once the operators of the wh-adjuncts are absorbed in lower spec CP position, they are forced to act together in the rest of the derivation. This process fits to the minimalist understanding of economy: if one operator can do the job, using two operators becomes costly.

**Keywords:** generative syntax, wh-island constraint, Turkish

### Türkçede Ne-Adası Kısıtlaması

**ÖZ:** Bu çalışmada, Ne-Adası Kısıtlamasının Türkçedeki işlevselliğini incelemek üzere bu dildeki çoklu ne-yapılarına odaklanılmaktadır. Çoklu ne-öbeği içeren yapılar bağlamında, bu dilde Ne-Adası Kısıtlamasının işlevsel olmadığı savunulmaktadır. Özsoy (1996), Arslan (1999) ve Görgülü (2006) tarafından ne-adası ihlalleri olarak dile getirilen durumların aslında Zayıf Karmaşık Belirleyici Öbeği ihlalleri olduğu savunulmaktadır. Alt tümleyici öbeğine k-buyuran belirleyici öbeğinin, tümcecik içerisindeki öğelerin üst budaklara yükselmesine sorun teşkil eden zayıf bir BÖ adası oluşturduğu öne sürülmektedir. akır (2016a) tarafından elde edilen veriler bu iddiayı desteklemektedir. Bahsi geçen bu çalışmaya göre, herhangi bir ada yapısının mevcut olmadığı durumlarda bile alt TUMÖ içinde bulunan ne-eklentilerinin okumaları sorunludur. Mevcut çalışmanın ortaya attığı bir diğer yeni sav ise alt tümleyici öbeklerinde birden fazla ne-eklentisi içeren ne-yapılarının aç sorununu üzerinedir. Alt TUMÖ içerisinde birden fazla ne-eklentisinin bulunduğu durumlarda, bunlardan herhangi biri tek başına tüm tümceyi kapsayacak şekilde geniş aç alamamaktadır. Bu absorpsiyon işleminin Aoun

<http://dx.doi.org/10.18492/dad.295018>

*Dilbilim Araştırmaları Dergisi*, 2017/2, 73-91.

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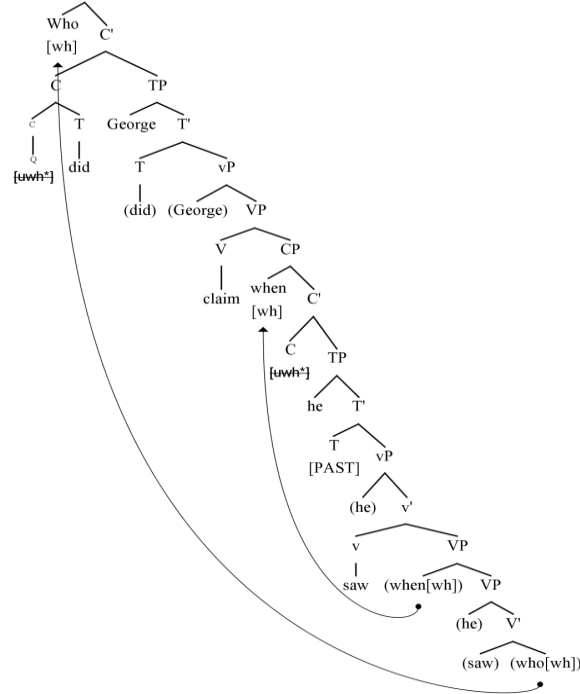
ve Li (1993) ün ima ettiđi gibi seimlik bir iřlem olmadıđı, aksine Minimalist ekonomi anlayıřına uygun olarak zorunlu bir iřlem olduđu savunulmaktadır. ünkü bir iřleticinin yapabileceđi iř iin iki iřletici kullanmak masraflı olacaktır.

*Anahtar Sözcükler:* üretici sözdizim, ne-adası kısıtı, Türke

## 1 Introduction

Ross (1967) proposed that there are many syntactic structures out of which it is not possible to move. Such structures are traditionally called “islands”. Complex NP Constraint, Sentential Subject Constraint, and Coordinate Structure Constraint are some of the island structures defined by him. In the following years, the number of the island constraints was extended through the works of the scholars such as Kiparsky and Kiparsky (1970), Chomsky (1973), Ross (1984), Schafer (1995). Wh-island Constraint is one of the island structures proposed by Chomsky (1973). According to this constraint, wh-elements cannot cross a CP which has already been filled with another wh-element. That is to say, wh-extraction is prohibited out of another wh-clause. For instance;

(1) \*Who did George claim when he saw?



In this derivation, there are two *wh*-expressions both of which originate within the lower CP. One of these *wh*-words, ‘when’, moves to the spec position of the lower CP and fills this node. The other *wh*-word, ‘who’, has to move directly to the spec CP position of the matrix clause because the lower spec CP position has already been occupied. Since this movement is not done cyclically, it violates the Wh-Island Constraint. In other words, the *wh*-word that occupies the lower spec CP position acts as a barrier for the movement of the other *wh*-phrase.

The Minimalist Program, which disregards ‘barriers’ account of Government and Binding Theory, introduces ‘Phase Impenetrability Condition’ (PIC hereafter) to explain Wh-Island Constraint violations. According to PIC, in phase  $\alpha$  with head H, the domain of H is not accessible to operations outside  $\alpha$ ; only H and its edge are accessible to such operations. Hence, in (1) above, the embedded C attracts the closest *wh*-phrase, ‘when’, to move to the lower spec CP position. When some *wh*-phrase has been moved to the specifier of an embedded C, then it will be impossible to move the more deeply embedded *wh*-phrase any higher. Therefore, the other *wh*-phrase, ‘who’, cannot move any higher in the derivation. The matrix C cannot attract it since it is not in the specifier position of the lower CP phase. The Wh-island Constraint holds firmly in overt *wh*-movement languages such as English which have strong uninterpretable *wh*-feature [*uwh*\*] in their matrix CPs.

### 1.1 *Wh*-phrases in Turkish

Before analyzing the functionality of Wh-Island Constraint in Turkish, it is necessary to examine the behaviors of single and multiple *wh*-phrases within simplex and complex sentences.

The uninterpretable *wh*-feature [*uwh*] is weak in Turkish; therefore the *wh*-elements do not have to move to spec CP positions overtly to form *wh*-questions. That is to say, *wh*-phrases remain in situ both in main and embedded clauses (Akar, 1990; Uzun, 2000; Kornfilt, 2003; 2008 and many others). In accordance with the selectional restrictions of the main verb, the *wh*-elements within embedded clauses can have wide or narrow scope. For instance, in the examples below, the *wh*-elements can have both narrow and wide scope when the matrix verb is *söyle-* ‘say’, while they can only have wide scope with the matrix verb *san-* ‘think’:

- (2) Kenan [Arda-nın kim-i ara-dıĝ-ı-nı] söyle-di? / .  
 Kenan Arda-GEN who-ACC phone-NOM-POSS-ACC say-PAST  
 (i) Who did Kenan say that Arda phoned?  
 (ii) Kenan said who Arda phoned.

- (3) Kenan [Arda-nın kim-i ara-dıđ-ı-nı] san-ıyor? / \*.  
 Kenan Arda-GEN who-ACC phone-NOM-POSS-ACC think-PAST  
 (i) Who does Kenan think that Arda phoned?  
 (ii) \*Kenan thinks who Arda phoned.

When there is more than one wh-phrase in the embedded clause, in accordance with the selectional restrictions of the main verbs, they can have both narrow and wide scope; or while one of them has narrow scope the other one can have wide scope:

- (4) Burcu [kim-in ne-yi al-dıđ-ı-nı] söyle-di?/.  
 Burcu who-GEN what-ACC stole-NOM-POSS-ACC say-PAST

Both the declarative and interrogative readings of the sentence above are grammatical in Turkish. The following sentences can be possible responses for its interrogative readings:

- (4i) Burcu [Serap-in kolye-yi al-dıđ-ı-nı] söyle-di.  
 Burcu Serap-GEN necklace-ACC steal-NOM-POSS-ACC say-PAST  
 ‘Burcu said that Serap stole the necklace.’  
 (4ii) Burcu [kim-in kolye-yi al-dıđ-ı-nı] söyle-di.  
 Burcu who-GEN necklace-ACC steal-NOM-POSS-ACC say-PAST  
 ‘Burcu said who stole the necklace.’  
 (4iii) Burcu [Serap-in ne-yi al-dıđ-ı-nı] söyle-di.  
 Burcu Serap-GEN what-ACC steal-NOM-POSS-ACC say-PAST  
 ‘Burcu said what Serap stole.’

On the other hand, when the matrix verb is *san-* “think”, the non-question reading of the sentence is not grammatical. Besides, only the interrogative reading in which both wh-phrases have wide scope is grammatical, not the ones in which one has wide the other has narrow scope:

- (5) Burcu [kim-in ne-yi al-dıđ-ı-nı] san-ıyor? / \*.  
 Burcu who-GEN what-ACC steal-NOM-POSS-ACC think-PROG  
 (5i) Burcu [Serap-in kolye-yi al-dıđ-ı-nı] san-ıyor.  
 Burcu Serap-GEN necklace-ACC steal-NOM-POSS-ACC think-PROG  
 ‘Burcu thinks that Serap stole the necklace.’  
 (5ii) \*Burcu [kim-in kolye-yi al-dıđ-ı-nı] san-ıyor.  
 Burcu who-GEN necklace-ACC steal-NOM-POSS-ACC think-PROG  
 ‘Burcu thinks who stole the necklace.’  
 (5iii) \*Burcu [Serap-in ne-yi al-dıđ-ı-nı] san-ıyor.  
 Burcu Serap-GEN what-ACC steal-NOM-POSS-ACC think-PROG  
 ‘Burcu thinks what Serap stole.’

(5ii) and (5iii) cannot be possible responses for the interrogative sentence above due to the selectional restrictions of the matrix verb.

Therefore, there are two groups of verbs in Turkish in terms of their selectional restrictions. The first group allows all possible readings while the second group allows only interrogative reading in which both wh-phrases have wide scope. The verbs *söyle-* “say” *merak et-* “wonder”, *bil-* “know”, *öğren-* “learn”, *tahmin et-* “guess” are in the first group, while the verbs *san-* “think”, *iddia et-* “claim”, *düşün-* “think” are in the second group. In the present study, the first group will be focused on to examine the functionality of the Wh-Island Constraint in Turkish since this constraint is claimed to hold when one of the wh-phrases crosses the other one.

### 1.2. Studies on Wh-island Constraint in Turkish

Though the Wh-island Constraint has not been analyzed exhaustively in Turkish, there are a few studies focusing on this constraint. For instance, as Özsoy (1996) claims, while it is possible to extract either or both wh-arguments from the complement clauses, the extraction of wh-adjuncts in such structures are problematic, especially when a VP external wh-adjunct crosses another wh-phrase.

Similarly, according to Arslan (1999: 62), the adjuncts & argument asymmetry that is observed in other island constraints (Complex NP Island Constraint, Adjuncts Island Constraint, and Sentential Subject Constraint) is valid for the Wh-Island Constraint as well. That is to say, according to her, while argument wh-phrases do not form islands for each other, the adjunct wh-phrases cannot be interpreted within the structures in which another wh-phrase exists. She provides the following examples:

- (6) Tolga [kim-in ne al-dıĝ-ı-nı] bil-iyor  
 Tolga who-GEN what buy-NOM-POSS-ACC know-PROG  
 i. What<sub>i</sub> does Tolga know who bought t<sub>i</sub>?  
 ii. Who<sub>j</sub> does Tolga know t<sub>j</sub> bought what?  
 iii. Tolga knows who bought what.
- (7) Tolga [Ayşe-nin ne-yi nasıl pişir-diĝ-i-ni] bil-iyor  
 Tolga Ayşe-GEN what-ACC how cook-NOM-POSS-ACC know-PROG  
 i. What<sub>i</sub> does Tolga know Ayşe cooked t<sub>i</sub> how?  
 ii. ?How<sub>j</sub> does Tolga know Ayşe cooked what t<sub>j</sub>?  
 iii. Tolga knows what<sub>i</sub> Ayşe cooked t<sub>i</sub> how.

As she asserts, while both of the wh-phrases in (6) can have wide scope over the entire clause individually, only the argument wh-word *neyi* “what-ACC” can do it in (7). In (7ii), though the interpretation of the wh-adjunct *nasıl* “how”

in wide scope is not totally ungrammatical, it is not fully grammatical either. According to Arslan (1999), the reason for this problem is the violation of the Wh-Island Constraint.

Görgülü (2006: 74) puts forward a similar assertion. According to him, any of the wh-arguments can take matrix scope without yielding ungrammaticality. However, when the wh-phrase in the embedded CP is an adjunct, it cannot take scope over the entire clause. He provides the following examples:

- (8) Cem [kim-in ne-yi satın al-dıđ-ı-nı] sor-du  
 Cem who-GEN what-ACC buy-NOM-POSS-ACC ask-PAST  
 (i) “What does Cem ask who bought?”  
 (ii) “Who does Cem ask bought what?”  
 (iii) “Cem asked who bought what.”
- (9) Cem [kim-in ne zaman gel-diđ-i-ni] sor-du  
 Cem who-GEN when come-NOM-POSS-ACC ask-PAST  
 (i) “Cem asked who came when.”  
 (ii) “Who does Cem ask came when?”  
 (iii) ?? “When does Cem ask who came?”
- (10) Cem [ne zaman nereye git-tiđ-im-i] sor-du  
 Cem when where go-NOM-POSS-ACC ask-PAST  
 (i) “Cem asked where I went when.”  
 (ii) ?? “When did Cem ask I went?”  
 (iii) ?? “Where did Cem ask I went when?”

According to him, as the interpretations above illustrate, only the non-interrogative reading is available for the wh-adjuncts. They cannot have wide scope to form interrogative sentences since the movement of their operators to matrix scope CP position violates the Wh-Island Constraint.

## 2 The Proposal

The present study proposes that Wh-Island Constraint does not hold in Turkish, at least for the constructions that contain more than one wh-phrase. The problematic structures that have been asserted to be the violation of this constraint in the previous studies are, in fact, weak Complex DP Island Constraint violations. As akır (2016a) asserts, the interpretation of wh-adjuncts in lower CPs is problematic even when there are not any intervening islands. In such structures, the movement of the wh-adjuncts to the upper nodes still contains a weak island violation since the embedded CPs are claimed to be

dominated by a DP<sup>1</sup> (or an NP) in Turkish (Kornfilt, 2001: 191; Gürel, 2003: 134). Before moving ahead, the grammaticality of (11) and (12) below must be analyzed with caution:

- (11) Murat [bu sabah kim-i gör-düğ-ü-nü] söyle-di?  
 Murat this morning who-ACC see-NOM-POSS-ACC say-PAST  
 ‘Who<sub>i</sub> did Murat say [that he saw t<sub>i</sub> this morning]?’
- (12) <sup>?</sup>Burcu [Ahmet-in toplantı-ya neden katıl-dığ-ı-nı] söyle-di?  
 Burcu Ahmet-GEN meeting-DAT why attend-NOM-POSS-ACC say-PAST  
 ‘Why<sub>i</sub> did Burcu say [that Ahmet attended to the meeting t<sub>i</sub>]?’

According to the data obtained by Çakır (2016a), while (11) does not yield any ungrammaticality, (12) is relatively less acceptable even if there are not any intervening island structures. The reason for this difference stems from the asymmetry between wh-arguments and wh-adjuncts in Turkish.

The GB-based explanation for this asymmetry comes from Aoun and Li (1993). According to them, the wh-arguments in-situ do not need a local antecedent in the minimal clause in which they occur. They can be directly bound by the wh-operators that originate in the matrix CPs. On the other hand, the wh-adjuncts are in need of antecedent government since they are not lexically-governed. Therefore, their operators originate within the lower CP and then moves to the matrix spec CP position.

It is true that the GB-based terms such as ‘lexical government’ and ‘ECP’ have been abandoned in Minimalist Program. With respect to the issue of locality, some of the prominent approaches in minimalism are Minimal Link Condition (Chomsky, 1995), Phase Impenetrability Condition (Chomsky, 2001), Criterial Freezing (Rizzi, 2006), Late Adjunction Hypothesis (Stepanov, 2007). With varying degrees of success, these new approaches could provide minimalist accounts for the issues such as superiority or condition on extraction domain. However, they do not provide any refinement for the asymmetry observed in the movement of wh-adjuncts and wh-arguments out of adjuncts /subjects. That is to say, while the approaches such as Criterial Freezing<sup>2</sup> and Late Adjunction Hypothesis can provide minimalist explanations for the subject condition and adjunct condition (in general for CED), they do not provide any explanation for the asymmetry observed in the movement of different types of wh-words (argument or adjunct) out of such structures. In

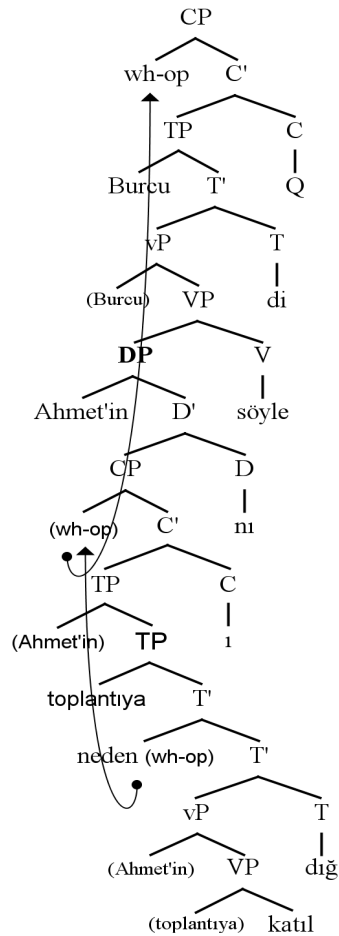
<sup>1</sup> The presence of a DP projection in Turkish is under discussion. While Arslan (2006) is in favor of the existence of a DP in Turkish, Öztürk (2005) stands against it. See the related works for more information on this issue.

<sup>2</sup> Criterial Freezing has been discussed for relativization and islands in Turkish in previous studies. See Öztürk (2008) and Meral (2010) for more information on this issue.

languages such as Turkish, while the movement of arguments out of island structures does not yield any ungrammaticality, the movement of adjuncts out of such structures results in ungrammaticality. This difference indicates that adjuncts and arguments are handled differently in such languages. ECP, the GB-based approach to locality, can explain this asymmetry successfully. Hence, in this paper, these terms will continue to be used while providing syntactic explanations for Turkish syntax.

Hence, since arguments are lexically-governed, the operator of the wh-argument *kimi* “*who-ACC*” in (11) merges to the derivation directly in the matrix spec CP position and binds the wh-word in-situ. On the other hand, the wh-operator in (12) originates within the lower CP and moves to the matrix spec CP position cyclically for checking purposes. This movement, however, causes weak Complex DP-Constraint violation, since the embedded CP is c-commanded by a DP that does not contain a lexical noun, but a morpheme. The relevant morpheme in  $D^0$  is proposed to be an amalgam of definiteness and accusative case. The derivation in (12i) below demonstrates this violation:

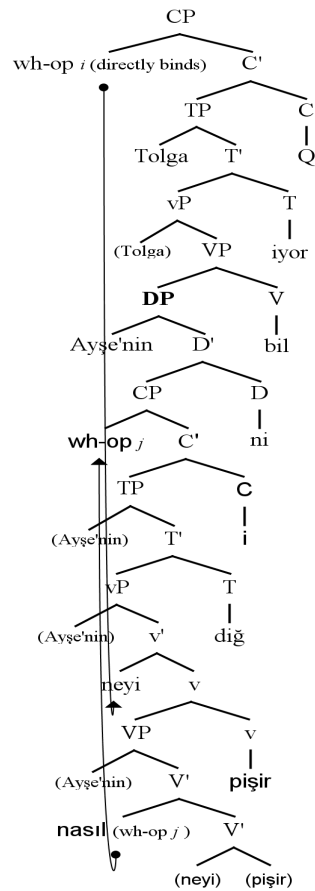
(12i)





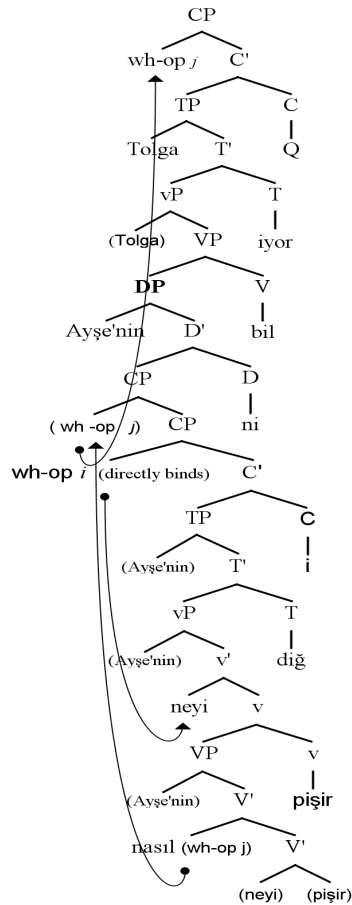
In this derivation, the wh-adjunct *neden* “why” crosses the DP that c-commands the lower CP. Since the DP does not contain a lexical noun, but just a morpheme, this violation can be regarded as weak Complex DP Violation. Hence, the sentences (6-10) above proposed by Arslan (1999) and Görgülü (2006) can be analyzed from this perspective. Both scholars assert that the wh-arguments can have wide scope in these interrogative sentences while the adjunct wh-phrases can only take narrow scope. It should also be noted that neither of them put forward that the wh-adjuncts in wide scope are totally ungrammatical. The sentences containing wh-adjuncts have been claimed to be grammatically less acceptable compared to the ones that contain wh-arguments. Thus, the case in (6-10) is rather similar to that of (11) and (12) with one certain difference: there are two wh-elements in those sentences rather than just one. (7i) and (7ii) are repeated below as (13i) and (13ii) respectively. The tree diagrams for these interpretations are also demonstrated:

- (13) Tolga [Ayşe-nin ne-yi nasıl pişir-diğ-i-ni] bil-iyor  
 Tolga Ayşe-GEN what-ACC how cook-NOM-POSS-ACC know-PROG  
 (13i) What<sub>i</sub> does Tolga know Ayşe cooked t<sub>i</sub> how?



In this derivation, the operator of the wh-argument *neyi* “*what-ACC*” merges to the derivation directly in the matrix CP and then binds the wh-word in-situ. The other wh-phrase, namely, the wh-adjunct *nasıl* “*how*” occupies the lower spec CP position as it takes narrow scope. The derivation does not yield any ungrammaticality since the operator of *nasıl* “*how*” does not cross the DP that c-commands the lower CP. On the other hand, in (13ii):

- (13) Tolga [Ayşe-nin ne-yi nasıl pişir-diğ-i-ni] bil-iyor  
 Tolga Ayşe-GEN what-ACC how cook-NOM-POSS-ACC know-PROG  
 (13ii) ?How<sub>j</sub> does Tolga know Ayşe cooked what t<sub>j</sub> ?



In this derivation, the operator of the wh-argument *neyi* “*what-ACC*” merges to the derivation in the lower CP position, and binds the wh-word in-situ which

has narrow scope. Since the wh-adjunct *nasıl* “how” has wide scope in this interpretation, its operator moves from its base position to the lower spec CP position first; and then to the matrix spec CP position for checking purposes. While the operator of the wh-adjunct *nasıl* “how” moves from lower CP to matrix CP, it crosses the DP c-commanding the lower CP.

As the present study proposes, the reason for the ungrammaticality in (13ii) should not be viewed as the violation of Wh-Island Constraint, but the violation of the weak Complex DP Island Constraint. It is argued here that this interpretation is ill-formed not due to the existence of another wh-element, but for the DP c-commanding the lower CP. As Çakır (2016a) asserts, the structures such as (13ii) would be grammatically ill-formed even when they contained only the wh-adjuncts. Moreover, multiple spec positions are available for different wh-phrases that originate within the embedded CP. In a language such as Turkish in which multiple wh-phrases can move to matrix spec CP position together, it is rather plausible to assume that these wh-words do not pose islands for one another.

In the present study, the following claims are asserted for the scopes of the multiple wh-phrases that originate within embedded clauses in Turkish.

### 2.1 The case of two wh-arguments in embedded CP

When both of the wh-phrases in the embedded clause are arguments, all wide and narrow scope options become available. The following sentence and its interpretations exemplify this case:

- (14) Kemal [kim-in ne-yi kaybet-tiğ-i-ni] söyle-di/?  
 Kemal who-GEN what-ACC lose-NOM-POSS-ACC say-PAST
- (14i) Kemal said who lost what. (Both of them have narrow scope)  
 [CP2 [TP Kemal [vP[DP [CP1 Qui(j) [TP kimin(i) [vP neyi(j) kaybet]tiğ]i]ni] söyle]di]]
- (14ii) Who did Kemal say what lost? (Both of them have wide scope)  
 [CP2 Qui(j) [TP Kemal [vP[DP [CP1 [ TP kimin(i) [vP neyi(j) kaybet]tiğ]i]ni]s öyle]di]]
- (14iii) Who did Kemal say lost what? (*Who* has wide scope, *what* has narrow scope)  
 [CP2 Qui [TP Kemal [vP[DP [CP1Quj [ TP kimin(i) [vP neyi(j) kaybet]tiğ]i]ni] söyle]di]]
- (14iv) What did Kemal say who lost? (*What* has wide scope, *who* has narrow scope)  
 [CP2 Quj [TP Kemal [vP[DP [CP1Qui [ TP kimin(i) [vP neyi(j) kaybet]tiğ]i]ni] söyle]di]]

As exemplified in (14), all four possible scope options are available for the case of two *wh*-arguments in lower CP. As Aoun and Li (1993: 221) assert, the *wh*-elements of the same type undergo absorption<sup>3</sup> in which distinct *wh*-elements end up co-indexed with the same *Qu*-operator in the derivation. Hence, when both of these *wh*-words have wide or narrow scope, they undergo absorption. That is, one *wh*-operator functions for both of the *wh*-phrases in situ. The structures in question are assumed to be operator-variable chains and two *wh*-elements are bound by the same operator.

It is also possible that one of the operators can be merged to the derivation in the embedded spec CP position while the other one is merged in the matrix spec CP position. As they merge to the derivation in different nodes, they do not come together in any of the CP positions to get absorbed. Hence, absorption process does not work for them. While one of them has wide scope, the other one can have narrow scope.

## 2.2 The case of *wh*-phrases of different types in embedded CP

When different types of *wh*-phrases originate within the lower CP, the *wh*-argument can have both wide and narrow scopes without having any problems. The *wh*-adjunct, on the other hand, becomes grammatically ill-formed; yet not totally unacceptable, when it takes wide scope. As it has been stated previously in this paper, the reason for this situation has been explained to be the violation of weak Complex DP Island Constraint. The following sentence and its interpretations exemplify this case:

- (15) Murat [kim-in neden öldür-ül-düğ-ü-nü] biliyor./?  
Murat who-GEN why kill-PASS-NOM-POSS-ACC know-PROG
- (15i) Murat knows who was killed why. (Both of them have narrow scope)  
[CP2 [TP Murat [vP[DP [CP1Qui Quj [TP kimin(i) neden(j) [vP öldürül]düg]ü]nü] bil]iyor]]
- (15ii) <sup>?</sup>Who does Murat know why was killed? (Both of them have wide scope)  
[CP2 Qui Quj [TP Murat [vP[DP [CP1 [TP kimin(i) neden(j) [vP öldürül]düg]ü]nü]bil]iyor]]
- (15iii) Who does Murat know was killed why? (*Who* has wide scope, *why* has narrow scope)  
[CP2 Qui [TP Murat [vP[DP [CP1Quj [ TP kimin(i) neden(j) [vP öldürül]düg]ü]nü]bil]iyor]]

<sup>3</sup> The absorption mechanism was previously introduced by Higginbotham and May (1981). According to them, absorption is a semantic operation which builds binary quantifiers from ordered pair of unary quantifiers.

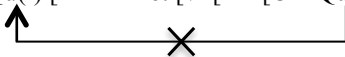
- (15iv) ? Why does Murat know who was killed? (*Why* has wide scope, *who* has narrow scope)  
 [CP2 Qui [TP Murat [vP[DP [CP1Qui [ TP kimin(i) neden(j) [vP öldürül]düg]ü]nü]bil]iyor]]

In these interpretations, the operator of the wh-argument *kimin* “*who-GEN*” can be directly merged to the lower or upper spec CP positions, while the operator of wh-adjunct *neden* “*why*” has to move to these nodes from its base position. Therefore, the wide scope interpretations for the wh-adjunct *neden* “*why*” is relatively less acceptable as illustrated in (15ii) and (15iv).

Following Aoun and Li (1993: 221), it should be noted that these two operators cannot be absorbed since they are of different types. As they assert, wh-elements such as *who* and *what* quantify over individuals, whereas an element such as *why* quantifies over predicates. Therefore, wh-phrases of different types cannot be absorbed. Though their grammatical acceptability varies, it is still possible that one of them can have wide scope while the other one has narrow scope.

### 3.3 The case of two wh-adjuncts in embedded CP

When both of the wh-phrases in the embedded clause are adjuncts, the case is remarkably different from the ones explained above. In this case, the operators of the wh-adjuncts are forced to act together. That is to say, they must take either wide or narrow scope together. When one of them has wide scope, the other one cannot take narrow scope. (16) below and its four different interpretations exemplify this case:

- (16) Ahmet Engin-in neden nasıl yaralan-dığ-ı-nı öğren-di?  
 Ahmet Engin-GEN why how get-wounded-NOM-POSS-ACC learn-PAST
- (16i) Ahmet learnt Engin got wounded how and why. (Both of them have narrow scope)  
 [CP2 [TP Ahmet [vP[DP [CP1Qui(j) [TP Engin'in neden(j) [vP nasıl(i) yaralan]dığ]ı]nı] öğren]di]]
- (16ii) ?How did Ahmet learn why Engin got wounded? (Both of them have wide scope)  
 [CP2 Qui(j) [TP Ahmet [vP[DP [CP1 [TP Engin'in neden(j) [vP nasıl(i) yaralan]dığ]ı]nı] öğren]di]]
- (16iii) \*How did Ahmet learn Engin got wounded why? (*How* has wide scope, *why* has narrow scope)  
 [CP2 Qu(i) [TP Ahmet [vP[DP [CP1Qui(j) [TP Engin'in neden(j)[vP nasıl(i) yaralan]dığ]ı]nı] öğren]di]]
- 

- (16iv) \*Why did Ahmet learn Engin got wounded how? (*Why* has wide scope, *how* has narrow scope)  
 [CP2 Qu(j) [TP Ahmet [vP[DP [CP1Qui(j) [TP Engin'in neden(j)[vP  
 nasıl(i) yaralan[dıđ]ı]nı]öğren]di]]
- 

In (16i), both of the wh-phrases have narrow scope, which does not yield any ungrammaticality. (16ii) contains aforementioned weak Complex DP Island violation. This interpretation is not fine, but not totally ungrammatical either.

However, (16iii) and (16iv) are totally ungrammatical. It is not possible for either wh-adjunct to take wide scope individually while the other one has narrow scope. The reason for this ungrammaticality is not the violation of Wh-Island Constraint as proposed by Görgülü (2006). It cannot be just the weak Complex DP Island violation that has been uttered so far, either. This ungrammaticality stems from the absorption process that wh-phrases of the same type are subject to in multiple wh-constructions. In the present paper, this absorption process is proposed to be compulsory, not optional as Aoun and Li (1993) imply. It is an obligatory process which is consistent with the minimalist understanding of economy: if one operator can do the job, there is no need for another one. That is to say, using one operator is more economical than using two distinct operators.

Hence, in (16iii) and (16iv) above, the wh-operators undergo absorption when they move to the lower CP. Once they are absorbed, they have to stay in the lower CP together or they can move to the matrix CP together. While one of them moves to upper CP, the other one cannot stay in the lower CP alone. That is why these interpretations given above are grammatically unacceptable.

It is true that the absorption process works for wh-arguments as well. When there are two wh-arguments in the derivation, their operators are also absorbed. However, there is a sharp difference between wh-arguments and wh-adjuncts. The operators of the wh-arguments can be directly generated in the spec CP positions. The operator of the narrow scoped wh-argument can be generated in the lower CP while the operator of the wide scoped wh-argument can be directly generated in the matrix CP. Therefore, they never meet in a CP position to get absorbed. The wh-adjuncts, on the other hand, do not have this freedom. After being absorbed in the lower CP, they have to act together.

Support for the absorption problem mentioned above comes from Arslan (1999), Melnick (2012) and Çakır (2016b). These scholars claim that grammatical acceptability of the wh-questions increases considerably when the wh-adverbials such as *neden*, *niçin*, *niye* “why” are replaced with which-NP constructions such as *hangi sebeple* “for what reason” or *hangi amaçla* “with what purpose” in the structures which are subject to island constraints. For instance:

- (17) \*Seval Ahmet-e niçin kızdık-tan sonra telefon-u kapat-tı?  
 Seval Ahmet-DAT why get angry-ABL after phone-ACC hang up-PAST  
 ‘#Why did Seval hang up the phone after she got angry with Ahmet?’
- (18) Seval Ahmet-e hangi sebep-le kızdık-tan sonra telefon-u kapat-tı?  
 Seval Ahmet-DAT which reason-with get angry-ABL after phone-ACC hang  
 up-PAST  
 ‘For what reason did Seval hang up the phone after she got angry with  
 Ahmet?’

(17) and (18) above are subject to Adjunct Island Constraint. According to the data obtained by Çakır (2016b), (17) is ill-formed while (18) is fine. Çakır (2016b) explains this difference by claiming that only the operators of the wh-elements that have a nominal element in their structure can license the embedded C with the [+wh] feature, not that of one-word wh-adverbials (See Çakır 2016b for more information on this issue). That is to say, while wh-adverbials are subject to island constraints in Turkish, which-NP constructions do not yield a similar degree of ungrammaticality. Hence, by making analogy, it is rather plausible to assume that the interpretations (16iii) and (16iv) given above may become grammatical when the wh-adverbials in (16) are replaced by which-NP constructions. The revised forms of (16) and its four possible interpretations are given below as (19):

- (19) Ahmet Engin-in hangi sebep-le hangi şekil-de yaralan-dığ-ı-nı öğren-di?  
 Ahmet Engin-GEN which reason-with which way-LOC get-wounded-NOM-  
 POSS-ACC learn-PAST
- (19i) Ahmet learnt Engin got wounded in what way and for what reason.  
 (Both of them have narrow scope)
- (19ii) In what way and for what reason did Ahmet learn Engin got wounded?  
 (Both of them have wide scope)
- (19iii) \*In what way did Ahmet learn Engin got wounded for what reason?  
 (*Hangi şekilde* “in what way” has wide scope, *hangi sebeple* “for what  
 reason” has narrow scope)
- (19iv) \*For what reason did Ahmet learn Engin got wounded in what way?  
 (*Hangi sebeple* “for what reason” has wide scope, *hangi şekilde* “in  
 what way” has narrow scope)

There is no difference between (16) and (19) in terms of the grammaticality of their interpretations. In these interrogative sentences, while narrow and wide scope interpretations for both wh-phrases are grammatical, either of the wh-adjuncts cannot take wide scope individually while the other one has narrow scope. This situation shows that the ungrammaticality in (16iii), (16iv), (19iii) and (19iv) do not stem from island violations. If that was the case, the

interpretations of (19) could have been better compared to that of (16). Therefore, as proposed in this study, the ungrammatical cases in (16) and (19) above stem from another source: the absorption process. The operators of the wh-adjuncts are absorbed in the lower CP and they are forced to act together in the rest of the derivation. Either of them is not allowed to take wide scope individually.

### 3 Concluding Remarks and Further Studies

In this paper, the structures containing multiple wh-elements have been focused on to analyze the functionality of the Wh-Island Constraint. The island phenomenon has been discussed in other A' constructions such as relativization and topicalization, etc. as well. Yet, the scope of the study comprises only the wh-questions. The paper proposes that wh-island constraint does not hold in Turkish, at least for the constructions that contain multiple wh-phrases. Since multiple spec positions are available for wh-phrases in Turkish, it is rather plausible to assume that these wh-words do not pose islands for one another. The grammatically problematic constructions that have been uttered as wh-island violations by Özsoy (1996), Arslan (1999) and Görgülü (2006) have been claimed to be violations of weak Complex DP Island Constraint. As it has been asserted in the paper, while the operators of wh-adjuncts move from lower CP to upper CP, they cross the DP that c-commands the lower CP, and this node constitutes a weak DP island for the upper movement of the elements. Data obtained by Çakır (2016a) support this assertion since the findings of that study show that interpretation of wh-adjuncts within the lower CPs are problematic even when there are not any intervening island structures.

However, there seems to remain a problem with the proposal of the study that needs to be answered in further studies. To generalize the assertion of the study, an XP cannot cross a DP boundary. Otherwise, it makes a structure degraded. However, in overt scrambling cases, a phrase can move from a complement clause to the edge of the main clause:

- (20) Uğur-<sub>i</sub> [CP Ecem [DP [ CP Tolga-nın \_\_\_\_<sub>i</sub> ara-dığ-ı-nı]] bil-iyor]  
 Uğur-ACC Ecem Tolga-GEN phone-NOM-POSS-ACC know-PROG  
 'Ecem knows that Tolga phoned Uğur'

Under the present analysis, the sentence above should also be partially ungrammatical since the DP boundary is crossed by the upper movement of a phrase; yet, the sentence does not seem to yield any ungrammaticality. The different behaviours of operators and phrases remain as a problem that should be solved in further studies. Leaning on the Phase Theory of Chomsky (2001), one possible explanation for this difference might be that the DP that c-commands the lower CP acts as an escape hatch for the upper movement of the



nominal phrases with [- wh] feature. In Phase Theory, DPs are assumed to be phases as well as CPs and vPs (Adger, 2003, and many others). Therefore, in (20) above), Phase Impenetrability Condition (hence, the weak DP Island Constraint) is not violated since the phrase *Uğur'u* “*Uğur-ACC*” adjoins to the the spec CP position of the DP phase during its movement from the complement clause to the edge of the main clause. Wh-words and operators, on the other hand, cannot use this node as an escape hatch. Yet, this assertion needs empirical support and further studies are needed on this issue.

Another novel assertion proposed in the study is on the scope problem of the wh-constructions that contain multiple wh-adjuncts in their lower CPs. When there is more than one wh-adjunct within the embedded CP, they cannot take wide scope individually. They should take either wide or narrow scope together. The reason for this situation has been explained to be the absorption process. Once the operators of the wh-adjuncts are absorbed in lower spec CP position, they are forced to act together in the rest of the derivation. As it is asserted in the paper, this absorption process is not optional as Aoun and Li (1993) imply. It is a compulsory process that fits to the minimalist understanding of economy: if one operator can do the job, there is no need for another. They should be absorbed for economy considerations.

The scope of the present study has been restricted to the functionality of Wh-island Constraint on the structures that contain multiple wh-constructions. Beside them, there is (y)İp mAdİğİ (whether /if) construction in Turkish which is considered to show weak wh-island effect. Although this construction is remarkably different from the whether /if construction in English, this weak Wh-Island Constraint appears to hold in Turkish (Özsoy 1996; İşsever, 2009). The sentences that contain this construction have been kept out of the present study. Yet, they should be analyzed deeply in further studies. They may provide fruitful data on the nature of wh-constructions and island phenomena in Turkish. Besides, the status of Wh-Island Constraint should be re-analyzed in other wh-in-situ languages with respect to the claims mentioned in this article.

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