Differential case marking in Turkish wh-object phrases

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Abstract

In Turkish, there are two wh-subject phrases, *kim* 'who' and *ne* 'what', used for humans and animates/inanimates, respectively. There are also two wh-object phrases, again one for humans and one for animates/inanimates. Of these, the one that is used for animates/inanimates has two variants, caseless wh-object phrase *ne* 'what' and accusative case marked wh-object phrase *ne-yi* 'what-ACC'. However, the human wh-object phrase has only one variant, which is accusative case marked, *kim-i* 'who-ACC'. In other words, there is no caseless wh-object phrase used for humans in Turkish. In addition to these wh-objects, Turkish also has D(iscourse)-linked wh-objects, which may have either a human head or a non-human head. This paper aims at describing Turkish wh-object phrases based on their differential case marking features following Aissen's (2003) approach and at identifying the dimensions which govern the case marking of these phrases by focusing on the potential variations between the case marking of wh-objects and that of non-wh objects. In the analysis, the parameters of Turkish differential case marking proposed by von Heusinger & Kornfilt (2005) are followed. The findings of the study indicate that the dimensions of both specificity and animacy are operative in the case marking of Turkish wh-object phrases. However, each dimension appears to influence different category of the wh-object types. The reason for having only case marked human wh-object is the result of animacy, which requires that accusative case suffix *–(y)I* should always be on it. This animacy-based requirement serves to distinguish the human wh-subject *kim* 'who' from the human wh-object *kim-i* 'who-ACC'. Concerning the non-human wh-objects, not animacy but specificity seems to be influential. The case marked form, *ne-yi* 'what-ACC', produces a specific interpretation while the caseless form, *ne* 'what', has an indefinite reading. D-linked wh-objects are also under the influence of specificity, which are obligatorily marked with the accusative case suffix *–(y)I*. These findings suggest that in Turkish DOM operates differently in the wh-objects in contrast to the non-wh-objects in which animacy is not significantly operative.

Keywords: Differential case marking, differential object marking, Turkish, wh-objects, d-linking wh-phrases, animacy, specificity

1. Introduction

Differential case marking can be broadly defined as the marking of some Noun Phrases (NPs) with a case marker under certain conditions (Bossong 1983; Comrie 1989; Aissen 2003; Dalrymple & Nikolaeva 2011). Case marking may be observed either in subject NPs or in object NPs, and the related processes are called differential subject marking (DSM) and differential object marking (DOM), respectively. Although matrix subjects are not

visibly case marked in Turkish, specific objects are marked with accusative case suffix –*(y)I* and non-specific ones are caseless as can be seen in (1a) and (1b), respectively:

(1)

    a.   *Ben*   *kedi-yi*   *gör-dü-m.*

                I. NOM   cat-ACC   see-PST-1SG

                'I saw the cat.'

    b.   *Ben*   *kedi*   *gör-dü-m.*

                I. NOM   cat   see-PST-1SG

                'I saw a cat.'

This paper analyses the case marking of object wh-phrases in Turkish that has so far received little attention. The aims of the study are to uncover the dimensions which govern the case marking of object wh-phrases, and to make a comparison between the object wh-phrases and the non-wh object phrases in terms of their marking with accusative case suffix –*(y)I*. In the analysis, Aissen's (2003) DOM approach is followed. In addition, the observations of von Heusinger & Kornfilt (2005) about DOM in Turkish are also employed to make a comparison between the case marking of object wh-phrases and that of non-wh object phrases.

The paper is organised as follows: Section 2 provides background information about DOM. In Section 3, previous accounts on Turkish differential case marking are given. The case marking of wh-phrases are discussed in Section 4 and Turkish wh-questions are briefly discussed in Section 5. Section 6 presents the analysis of Turkish wh-object phrases in terms of differential case marking dimensions. Section 7 summarises the findings of the study, indicating that both animacy and specificity are influential in the case marking of wh-objects in contrast to the case marking of non-wh objects, which are conditioned by the dimensions of specificity and information structure (von Heusinger & Kornfilt 2005). The analysis suggests that the case marking of wh-elements is not the same as that of non-wh objects and that animacy is very influential in the human wh-objects, while specificity governs the case marking of both the non-human wh-phrases and the D-linked wh-phrases.

2. Differential object marking

DOM can be considered as the subcategorisation of direct object noun phrases based on their semantic features, indicating a relationship between the grammatical function and semantic properties of these structures (Bossong 1983; Aissen 2003). It has been analysed in relation to two dimensions, namely definiteness/specificity and animacy. Of these dimensions, definiteness includes the referentiality set of objects and is visible via overt case marking (de Swart & de Hoop 2007). The other dimension, namely animacy, is described as an inherent feature of nouns, making it the major dimension over definiteness/specificity, which may vary depending on pragmatic environment (Bossong 1983; de Swart & de Hoop 2007). For the dimensions of definiteness and animacy, the following prominence scales were employed by Aissen (2003: 437):

Definiteness scale:
Pronoun > proper noun > definite NP > indefinite specific NP > indefinite non-specific NP

Animacy scale:
Human > animate > inanimate

Aissen (2003) states that the marking of subjects and objects is somewhat different. For subjects, being high on the dimensions of definiteness and specificity is typical, which justifies their non-marking nature. However, being high on both dimensions is not typical for objects and it is why they should be case marked.

On the other hand, DOM is shown to exhibit cross-linguistic variation and therefore, languages may vary in terms of the dimensions, which govern the case marking of objects. For instance, Spanish is said to have a two-dimensional DOM system and both definiteness and animacy are shown to influence the case marking of direct objects (Bleam 2005). Similarly, Mandarin Chinese involves a two-dimensional DOM pattern in which definiteness and animacy have significant effects on Chinese object marking (Yang & van Bergen 2007). There are other languages where only one of these dimensions is operative. For instance, in Persian and Hebrew (Aissen 2003) as well as in Mongolian (Guntsetseg 2010) only definite direct objects are found to be case marked, whereas only animate direct objects are case marked in languages from Romanian, Slavonic and Indo-Aryan groups (Bossong 1983; Deo & Sharma 2007). There are also other languages in which both dimensions are operative, but one of them is generally found to be much more prevalent. For instance, in Hindi and Kannada although definiteness and specificity affect the case marking of direct objects, the major trigger for it is said to be animacy (de Swart & de Hoop 2007). Mirdeghan (2013) also showed that animacy is one of the influential factors in case marking of Urdu and Hindi objects in addition to definiteness.

Dalrymple & Nikolaeva (2011) point out that the dimensions of animacy and definiteness do not comprehensively account for the case marking in the languages where unmarked and marked direct objects can have the same semantic features. Therefore, they suggest that in order to account for such instances more accurately, the information structure role of direct objects should be taken into consideration and that the dimension of information structure is also operative in the case marking of subjects as well as objects. They argue that in Tundra Nenets, a Uralic language, objects are case marked based on their information roles and that topical objects trigger agreement, and non-agreeing objects are non-topical (2011: 134). Valle (2011) gives another example from Kashibo-Kakataibo in which focus is said to be the major trigger of the case marking of objects. Another language in which markedness is found to be a result of information structure or focus is Korean (Kwon & Zribi-Hertz 2008).

Two major functions of case marking are stated to be the identifying function and the distinguishing function (Comrie 1989; de Hoop & Malchukov 2008). The identifying or indexing function is used to encode the internal features of nouns. It is related to the expression of the thematic roles of arguments through the marking of direct objects using

cases, and for instance, accusative case is found to indicate patienthood (de Hoop & Malchukov 2008). If patient-like arguments of transitive clauses are morphologically marked while the others remain unmarked, such a pattern produces a nominative-accusative case alignment. It is further argued by de Hoop & Malchukov (2008) that high prominence arguments are attached case, while low prominence arguments do not receive case.

The other function of case marking, namely distinguishing function, is used to make a distinction between the subjects and the objects of transitive clauses if they have similar features in terms of either referentiality or animacy (Aissen 2003). The related rule, distinguishability rule, was developed by de Hoop & Lamers (2006) and it states that the two arguments of a transitive relation should be distinguishable. This rule depends on the assumption that subjects and objects should be disambiguated in terms of their functions (de Hoop & Narasimhan 2005). Concerning the distinguishability function, de Hoop & Lamers (2006) identified the ways to differentiate subjects from objects or objects from subjects: case marking, agreement, selectional restrictions, precedence and prominence. If either subject or object is case marked, then the potential ambiguity over their functions is eliminated. They also developed a case constraint, which states that the subject is in the nominative case, and the object is in the accusative case (de Hoop & Lamers 2006).

Malchukov (2008) argues that animacy effects in case marking can be correlated with both functions of case marking. However, it is also added that such effects are much more frequently observed in relation to the distinguishing function. He further points out that animacy-related effects in case marking may be either local (if case marking on a direct object occurs due to its high prominence on the animacy scale) or global (if case marking on a direct object changes depending on its relative animacy).

3. Previous studies on differential object marking in Turkish

In Turkish, DOM marker is accusative case suffix *–(y)I*, which shows the specificity of direct objects (Enç, 1991) and it plays a significant role in case marking of object arguments. The following example shows the case marking of a direct object in Turkish:

(2)
Ali   kitab-ı   sev-di.
Ali-NOM   book-ACC   love-PST.3SG
Ali loved the book.'

Turkish has a nominative-accusative case alignment. This process in Turkish was first comprehensively discussed by Comrie (1979) and the parameters of DOM in Turkish were established by von Heusinger & Kornfilt (2005) and Kornfilt (2009). Von Heusinger & Kornfilt (2005) conclude that the referential category of specificity and information structure are the major parameters for Turkish case marking. These two parameters differentiate the marked direct objects and their unmarked counterparts. Animacy, on the other hand, is reported to play only a minor role in the case marking of Turkish direct

objects. This observation was supported by Bamyacı and von Heusinger (2016) in an experiment on a sample of twenty-five native Turkish speakers.[1]

Von Heusinger & Kornfilt (2005) point out that accusative case suffix *–(y)I* marks specific objects only when they occur in the preverbal position as seen in (5a). In addition, if the direct object is the topic of the sentence appearing in the sentence initial position it must be again marked by accusative case suffix as in (5b).

(3)

    a.   *Mehmet*   *kız-ı*   */ kalem-i*   *gör-dü.*
         Mehmet.NOM   girl-ACC   pencil-ACC   see-PST.3SG
         'Mehmet saw the girl/the pencil.'

    b.   *Kız-ı*   */*   *kalem-i*   *Mehmet*   *gör-dü.*
         Girl-ACC   pencil-ACC   Mehmet.NOM   see-PST.3SG
         'Mehmet saw the girl/the pencil.'

Examples in (3) above show that both human and inanimate direct objects in Turkish are subject to the same requirements of DOM patterns. If these direct objects are specific or function as topics, they are marked with the accusative case suffix *–(y)I*. Therefore, the other parameter, animacy, does not seem to have a significant effect on the case marking of Turkish direct objects. In short, the case marking of non-wh objects in Turkish are primarily governed by the dimensions of specificity and topicality. The case marking of direct objects is summarized by von Heusinger & Kornfilt (2005) as follows:

Definiteness scale and accusative case marking in Turkish
proper noun   > definite NP > specific indefinite NP > non-specific indefinite NP
Hasan-ı   *kitab-ı*   *bir*   *kitab-ı*   *bir*   *kitap*
Hasan-ACC   book-ACC   a   book-ACC   a   book
'(the) Hasan'   'the book'   'a (the) book'   'a book'

4. Case marking of wh-phrases
Languages differ in terms of many linguistic properties, including the case marking of wh-elements. In some languages case marking is absent in wh-phrases whereas some languages

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[1] However, here it should be added that in Turkish animacy effects are observed in regard to the overt marking of third person plural agreement on the predicate (Sezer 1980). More specifically, animate subjects trigger overt agreement or the use of plural suffix *–lAr* (as in example (ia)), whereas inanimate subjects trigger invisible agreement on the predicate (as in example (ib)):

(i)   a.   *Çocuk-lar*   *kitap*   *oku-du-lar.*
         Child-PL   book   read-PST-PL
         'Children read a book.'
    b.   *Gazete-ler*   *bu*   *haber-i*   *yaz-dı(-*lar).*
         Newspaper-PL   this   news-ACC   write-PST(-*PL)
         'The newspapers published this news.'

have case marked wh-phrases. The latter group include German, Finnish, Japanese, Korean, Persian, Russian, and Turkish among others.

Caseless wh-phrases and case marked ones are reported to have distinct syntactic characteristics. For instance, although the case marking of wh-phrases is optional in Japanese, caseless and case-marked wh-phrases have distinct scopal relations (Kobayashi 2000). More specifically, when Japanese wh-phrases are case marked, the wide scope reading is not allowed. In addition, only case marked object wh-phrases in Japanese can scramble out of their base-generated position (Ahn & Cho 2007). In Korean the case marking of subject wh-phrases and that of object wh-phrases have different effects, and Korean case marked object wh-phrases produce distinct readings based on their positions in sentences (Ahn & Cho 2007). On the other hand, in Persian the case marking on some wh-phrases is optional, but the appearance of the morpheme *-râ* is said to be obligatory on both *ki* 'who' and *kodum* 'which' (Fatemi 2013).

The case marking of object wh-phrases was studied by Riedel (2009) in three Bantu languages, namely Swahili, Sambaa and Haya. She concluded that there are significant differences among these languages in terms of the availability of the case marking of wh-objects. Both Swahili and Sambaa are found to allow for case marked wh-phrases, while in Haya, it is strictly disallowed. In addition, it was found that there is no parallelism between the case marking of wh-phrases and that of non-wh elements. Because in Haya, non-wh objects are marked but their wh counterparts are not (Riedel 2009).

5. Wh-questions in Turkish
Turkish is described as a wh-in-situ language (Akar 1990). It is argued that preverbal position in Turkish is the most natural or unmarked position for wh-phrases, as shown in (4a). Given that scrambling is allowed in Turkish, wh-phrases may also scramble out of preverbal position, as illustrated in (4b). Akar (1990) called this process the rule of Q(uestion)-scrambling.

(4)
    a.   *Mehmet*   *kim-i*   */ne-yi*   *gör-dü?*
            Mehmet.NOM   who-ACC   what-ACC   see-PST.3SG
            'Who/what did Mehmet see?'

    b.   *Kim-i$_i$ /ne-yi$_i$ Mehmet*   *t$_i$*   *gör-dü?*
            Who-ACC   what-ACC   Mehmet.NOM   see-PST.3SG
            'Who/what did Mehmet see?'

As can be seen in (4a) the wh-phrases, *kim-i* 'who-ACC' and *ne-yi* 'what-ACC', occur in the unmarked position, namely preverbal position. In (4b) these wh-phrases may appear in sentence initial position as a result of Q-scrambling. In other words, these wh-phrases undergo raising to the specifier position of CP, but it occurs at Logical Form (Akar 1990). On the other hand, not all sentential positions are available for wh-phrases in Turkish. In

short, Q-scrambling has a significant constraint in that wh-phrases cannot scramble to postverbal area, as illustrated in (5):[2]

(5)　　*Mehmet　　　　　t_i　　　gör-dü　　　　　　kim-i_i
　　　　Mehmet.NOM　　　　　　　see-PST.3SG　　　who-ACC

　　　　/ne-yi_i?
　　　　what-ACC
　　　　'Who/what did Mehmet see?'

Example (5) clearly indicates that object wh-objects, *kim-i* 'who-ACC' and *ne-yi* 'what-ACC', cannot scramble right to the verb. Given that non-wh (specific) objects may appear in postverbal position, as can be observed in (6), it is clear that the postverbal position cannot accommodate wh-elements in Turkish.

(6)　　Mehmet　　　　　t_i　　　gör-dü　　kız-$ı_i$　　　　/kalem-i_i
　　　　Mehmet.NOM　　　see-PST.3SG　girl-ACC　　pencil-ACC
　　　　'Mehmet saw the girl/the pencil.'

In Turkish there are two subject wh-phrases, one for human subjects and the other one for animate/inanimate subjects, *kim* 'who' and *ne* 'what', respectively. Example (7) shows the use of the subject wh-phrases as follows:

(7)
　　a.　　Kim　　　　gel-di?
　　　　　Who.NOM　　come-PST
　　　　　'Who came?'

　　b.　　Ne　　　　düş-tü?
　　　　　What.NOM　　fall-PST
　　　　　'What fell?'

As can be seen in (7) both subject wh-phrases are marked with a nominative case marker which is not visible like their non-wh counterparts. In (7a), expected answers are those belong to the set of people while in (7b) there is a question of which the potential answers are only non-human entities.

As stated earlier, object wh-argument phrases in Turkish have also two variants. One of them is used for human objects and the other one is used for animate/inanimate objects. Their case marking properties are described and analysed below.

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[2] Q-scrambling has other constraints as well. However, the others are not directly concerned with the object wh-phrases.

6. Differental case marking of Turkish wh-objects

This section presents a description and an analysis of the object wh-phrases in Turkish depending on their case marking. First, animacy effects are examined. It is followed by the analysis of Turkish wh-objects depending on their referentiality features and the analysis of their scrambling options.

6.1. Animacy feature of Turkish wh-objects

The object wh-phrases in Turkish are *kim-i* 'who-ACC' and *ne* 'what'. Of these, wh-phrases *kim-i* 'who-ACC' questions human beings (8a). For animates/inanimates wh-object *ne* 'what' is used (8b).

(8)
    a.   *Sen*   *kim-i*   *gör-dü-n?*
          You.NOM   who-ACC   see-PST-2SG
          'Who did you see?'

    b.   *Sen*   *ne   / ne-yi*   *gör-dü-n?*
          You.NOM   what / what-ACC   see-PST-3SG
          'What did you see?'

Examples in (8) illustrate that the object wh-phrases in Turkish significantly vary. This difference has to do with the distribution of the wh-objects based on the animacy dimension of case marking. Only the animate/inanimate wh-object has two variants: one of them is a bare wh-phrase, *ne* 'what', and the other one is an accusative case marked wh-phrase, *ne-yi* 'what-ACC'. The human wh-object, on the other hand, has only one variant, which is accusative case marked, *kim-i* 'who-ACC'. It can be briefly stated that there is no caseless human wh-object in Turkish. These data in (8) also indicate that in Turkish, the human wh-object have to be obligatorily marked with accusative case –(y)I. When the human wh-object occurs without accusative case marking, the resulting sentence is ungrammatical as can be seen in example (9).

(9)   * *Sen*   *kim*   *gör-dü-n?*
          You.NOM   who   see-PST-3SG
          'Who did you see?'

Based on these case marking options, the distribution of the wh-objects in Turkish can be summarized as follows:

Table 1: Case marking options for Turkish wh-objects

	Human	-Human
-(y)I	*Kim-i* 'who-ACC'	*Ne-yi* 'what-ACC'
Caseless	*	*ne* 'what'

The unavailability of bare human wh-object clearly indicates that the animacy dimension of DOM is operative and influential on wh-objects in Turkish. The use of accusative case marker on the human wh-object is triggered by the animacy or humanness of the wh-phrase, *kim-i* 'who-ACC'. Here, specificity cannot trigger the use of accusative case marker *–(y)I*, because it has no other option than being overtly case marked unlike non-human wh-object *ne* 'what'. Therefore, it is possible to argue that the animacy dimension is so strong in Turkish that whenever a human wh-object appears in the sentence, it should be obligatorily accusative case marked. It also suggests that Turkish human wh-object has high prominence leading to its obligatory case marking.

The same animacy-related effect is not observed on the non-wh objects in Turkish. The following example in (10) illustrates that a human (10a), or an animate (10b), or an inanimate (10c) direct object can be either accusative case marked or caseless:

(10)
    a.   *Mehmet*   *çocuk / çocuğ-u*   *gör-dü.*
           Mehmet.NOM   child   child-ACC   see-PST.3SG
           'Mehmet saw a child / the child.'

    b.   *Mehmet*   *kedi / kedi-yi*   *gör-dü.*
           Mehmet.NOM   cat   cat-ACC   see-PST.3SG
           'Mehmet saw a cat / the cat.'

    c.   *Mehmet*   *araba / araba-yı*   *gör-dü.*
           Mehmet.NOM   car   car-ACC   see-PST.3SG
           'Mehmet saw a car / the car.'

At this point, it should be noted that the bare wh-object *ne* 'what' is used to get the answers for all caseless objects given above. In short, all objects without an accusative case marker, namely *çocuk* 'child', *kedi* 'cat', and *araba* 'car' in (10), can be the answers to the question in (11).

    (11)   *Mehmet*   *ne*   *gör-dü?*
             Mehmet.NOM   what   see-PST.3SG
             'What did Mehmet see?'

Given that the bare wh-object *ne* 'what' is used to get all of answers, which may refer to either human, animate or inanimate indefinite objects, it seems that Turkish does not need to have an indefinite human wh-object. Therefore, it is possible to state that Turkish employs this animacy-related distinction as a way of economy.

The lack of caseless human wh-objects is strongly related to the distinguishing function of DOM. As stated earlier, the human subject wh-phrase, *kim* 'who', does not bear a visible nominative case. If these two human wh-phrases of Turkish appear in the sentence

simultaneously, it is not possible to recognise their functions. Therefore, in order to disambiguate the functions of these wh-phrases, one of the wh-phrases has to be always accusative case marked. It should be the wh-object due to the fact that it refers to humans which is high on the animacy scale. Recall that for objects it is not typical for being high on the case marking dimensions and that those high on these dimensions should always be case marked. It can be briefly stated that Turkish human wh-object strictly follows what is stated for the case marking process by Aissen (2003). The following examples in (12) containing multiple human wh-phrases can be given to account for this observation.

(12)
   a.   *Kim*   *kim-i*   *gör-dü?*
        Who.NOM   who-ACC   see-PST.3SG
        'Who saw whom?'

   b.   **Kim*   *kim*   *gör-dü?*
        Who.NOM   who   see-PST.3SG
        'Who saw whom?'

The sentence in (12a) is grammatical in that the marking of the human wh-object with the accusative case suffix distinguishes it from the human wh-subject phrase *kim* 'who', making their functions clearer. The ungrammatical example in (12b), on the other hand, clearly illustrates that when the accusative case marker –(y)I is absent on the wh-object phrase, it is not possible to recognise the functions of these wh-words, and the absence of the accusative case marker is the reason for ungrammaticality of the sentence. Given that these two human wh-phrases refer to humans and therefore, have the same feature in terms of animacy, they must be distinguished through an overt accusative case suffix.

Another multiple wh-phrase question containing *ne* 'what' can also be given to show that if two caseless wh-phrases occur in the sentence, the resulting sentence is again totally ungrammatical.

(13)
   a.   **Ne*   *ne*   *yap-tı?*
        What.NOM   what   do-PST
        'What did what?'

   b.   *Ne*   *ne-yi*   *yap-tı?*
        What.NOM   what-ACC   do-PST
        'What did what?'

As can be seen above, when the wh-object phrase *ne* 'what' is not case marked, the sentence is grammatical. Example (13b) shows that the case marking of the wh-object phrase disambiguates the functions of these two wh-phrase and recovers the sentence.

6.2. Specificity feature of Turkish wh-objects

Concerning the specificity dimension of case marking, it seems that accusative case marked human wh-object, *kim-i* 'who-ACC', may be either specific or specific indefinite. The non-human wh-objects, on the other hand, may be either specific indefinite or indefinite based on being case marked or being caseless. The distribution of both wh-objects based on the dimension of specificity can be summarized as follows:

Table 2: Distribution of human and non-human Turkish wh-objects based on specificity

	Human wh-object	Non-human wh-object
-(y)I	Specific or specific indefinite *Kim-i* 'who-ACC'	Specific *Ne-yi* 'what-ACC'
Caseless	*	Indefinite *ne* 'what'

It is clearly seen that Turkish does not allow for caseless indefinite human wh-objects. This requirement suggests that whenever an answer is constrained to human objects, the wh-phrase should be specific or specific indefinite. In (14) there is a wh-question containing the human wh-object:

(14)   *Sen   kim-i   gör-dü-n?*
       You.NOM   who-ACC   see-PST-2SG
       'Who did you see?'

If the human wh-phrase *kim-i* 'who-ACC' is used as in (14), the speaker just assumes that the questioned object is a human, but may or may not know whether or not the human object belongs to a contextually defined set. It seems that the human wh-phrase *kim-i* 'who-ACC' does not have a well-established property in terms of referentiality index. It may be due to the fact that it has no pure indefinite variant without accusative case suffix. It seems that because of this ill-formed referentiality index, the accusative case marker *–(y)I* on the human wh-objects is used to mark the humanness of the object questioned, not the specificity of the human object questioned. At this point, it should be emphasized that accusative case marked wh-objects, *kim-i* 'who-ACC' and *ne-yi* 'what-ACC', differ in terms of referentiality. Because the former may be either specific or specific indefinite, but the latter is specific.

(15)   *Sen   ne-yi   gör-dü-n?*
       You.NOM   what-ACC   see-PST-2SG
       'What did you see?'

When the speaker uses the non-human wh-phrase *ne-yi* 'what-ACC' in a question like in (15), it is assumed by the speaker that the questioned object may be human or non-human.

Unlike for the human wh-object *kim-i* 'who-ACC' here the speaker also assumes that the object belongs to a contextually defined set. Therefore, the use of an overt case marker on the non-human wh-object is a result of the fact that the speaker assumes that the object questioned is a member of a pre-established set. The non-human wh-object becomes indefinite when it is not marked with the accusative case suffix *–(y)I* as can be observed in (16):

(16)   *Sen   ne   gör-dü-n?*
          You.NOM   what   see-PST-2SG
          'What did you see?'

When the speaker uses the non-human wh-object *ne* 'what' as in (16), the speaker does not know again if the object questioned is a human or a non-human entity. In addition, the speaker does not have any assumption about the object asked for in terms of its referential set. Therefore, *ne* 'what' is non-referential and lacks a referential index. As discussed above the answers to this question could be a human or a non-human object.

At this point, it is possible to suggest that the human wh-object, *kim-i* 'who-ACC', resembles to D-linked wh-objects. Pesetsky (1997) argues that the latter type of wh-phrases are specific. In Turkish, both human wh-object and D-linked wh-objects should always be marked with an overt accusative case suffix as can be observed in (17):

(17)
    a.   *Mehmet   hangi kitab-ı/   *hangi kitap   oku-du?*
          Mehmet.NOM   which book-ACC   which   book read-PST-3SG
          'Which book did Mehmet read?'

    b.   *Mehmet   hangi kız-ı/   *hangi kız   gör-dü?*
          Mehmet.NOM   which girl-ACC   which girl   see-PST-3SG
          'Which girl did Mehmet see?'

In (17) it is seen that the use of the caseless D-linked wh-objects produces ungrammatical sentences independent of the animacy feature of their heads. Given that both human and non-human D-linked wh-objects should be always marked with the accusative case marker *–(y)I*, it is not possible to argue that animacy is also influential in the case marking of D-linked wh-objects. Because the case marked D-linked wh-objects above may have either a non-human head (17a) or a human head (17b). Thus, it is safe to argue that the obligatory case marking of Turkish D-linked wh-objects has to do with specificity rather than animacy.

The obligatory accusative case marking of the D-linked wh-objects indicates the fact that the answers to these questions are part of the domain of discourse, which is the phenomenon characterised as specificity by Enç (1991:7). Pesetsky (1987) points out that those wh-phrases in the form of *which N*, also called D-linked wh-phrases, are specific. Therefore, D-linked wh-phrases are case marked due to their specificity. In addition, it

could be stated that Turkish D-linked wh-phrases differ from the human wh-object *kim-i* 'who-ACC', which is obligatorily case marked due to its animacy. Both, however, have similar options regarding their positions in the sentences. Based on these data, it is possible to expand the distribution of Turkish wh-objects depending on their specificity features as follows:

Table 3: Distribution of Turkish wh-objects based on specificity

	Human wh-object	Non-human wh-objects	D-linked wh-object
-(y)I	Specific or specific indefinite *Kim-i* 'who-ACC'	Specific *Ney-i* 'what-ACC''	Specific *hangi N(oun)* 'which N'
Caseless	*	Indefinite *Ne* 'what'	*

Table 3 shows that the case marking properties of the human wh-object and the D-linked wh-objects are similar. Because both of them are obligatorily marked with accusative case suffix *–(y)I* and lack caseless forms. They, however, differ in terms of being specific or not. The D-linked wh-objects are always specific and that's why they should be obligatorily marked with an overt accusative case suffix.

The distinguishing factor of case marking also appears to be the reason for the obligatory accusative case marking of the D-linked wh-phrases. Because like other Turkish subjects, the subject D-linked wh-phrases are not attached with a visible nominative case as in (18):

(18)   *Hangi öğrenci   /   hangi tren   gel-di?*
        Which student.NOM   which train.NOM   come-PST-3SG
        'Which student/which train did come?'

As argued for the human object wh-phrase, when the D-linked wh-object phrases are not marked with accusative case suffix *–(y)I,* it is not possible to understand and distinguish the function of these D-linked wh-phrases. As expected when D-linked wh-object does not overtly bear the accusative case ending the resulting sentence is ungrammatical as in (19):

(19)
a.   **Hangi öğrenci   hangi ders   al-dı?*
       Which student.NOM   which course   take-PST.3SG
       'Which student did take which course?'

b.   *Hangi öğrenci   hangi ders-i   al-dı?*
       Which student.NOM   which course-ACC   take-PST.3SG
       'Which student did take which course?'

In (19a), there are two D-linked wh-phrases without case and their grammatical function cannot be understood. Therefore, the resulting sentence is ungrammatical due to the ambiguity over their function. In short, like the human-wh-object *kim-i* 'who-ACC', D-linked wh-objects require obligatory case marking in Turkish. Example in (19b) satisfies this condition and the case marking of the D-linked wh-object *hangi dersi* 'which course-ACC' recover the sentence. In other words, the use of the accusative case suffix *–(y)I* makes it possible to understand the function of these D-linked wh-phrases, and the sentence becomes grammatical.

6.3. Scrambling of Turkish wh-objects

After establishing the effects of animacy and specificity on Turkish wh-objects, now it is possible to focus on the scrambling options of the accusative case marked wh-objects. When they are case marked, the human and non-human wh-objects do not differ in terms of sentential positions they occupy. In other words, as long as they are case marked, they can scramble to sentence initial position out of their base generated position, preverbal position, as can be seen in example (20):

(20)
    a.   *Mehmet*   *kim-i*   */ne-yi*   *gör-dü?*
            Mehmet.NOM   who-ACC   what-ACC   see-PST.3SG
            'Who/what did Mehmet see?'

    b.   *Kim-i$_i$*   */ne-yi$_i$*   *Mehmet* t_i *gör-dü?*
            Who-ACC   what-ACC   Mehmet.NOM   see-PST.3SG
            'Who/what did Mehmet see?'

The examples above show that accusative case marked wh-objects do not differ in terms of their scrambling options. The reason for their ability to scramble to sentence initial position is related to the accusative case suffix *–(y)I*. Like their case marked non-wh counterparts, scrambling is possible for these wh-objects.

Similarly, D-linked wh-objects can also scramble to sentence initial position as can be observed in (21):

(21)   *Hangi kitab-ı$_i$*   *Mehmet* t_i *oku-du?*
        which book-ACC   Mehmet.NOM   read-PST.3SG
        'Which book did Mehmet read?'

Given that D-linked wh-phrases do not have any movement-related restrictions (Boeckx & Grohmann 2004; Shields 2008), it is not surprising that they can move out of their base generated position and can appear in sentence initial position as in (21). Thus, it can be argued that all objects in Turkish, independent of being non-wh words or wh-words, could be fronted as long as they are marked with an overt case marker.

However, when accusative case marker *–(y)I* is absent on the animate/inanimate wh-object, *ne* 'what', there is no scrambling option. As a result it can only appear in its base generated position, namely preverbal position, as illustrated in (22):

(22)
    a.   *Mehmet*   *ne*   *gör-dü?*
            Mehmet.NOM   what   see-PST.3SG
            'What did Mehmet see?'

    b.   * *Ne* $_i$ *Mehmet* t_i *gör-dü?*
            What   Mehmet.NOM   see-PST.3SG
            'What did Mehmet see?'

In this respect, bare wh-phrase behaves like its caseless non-wh objects in that such objects cannot scramble to sentence initial position. This inability of *ne* 'what' to scramble to the sentence initial position is consistent with the view that only specific wh-phrases can scramble (É. Kiss 1993), and that in Turkish only accusative case marked direct objects can be fronted (von Heusinger & Kornfilt 2005). Therefore, bare wh-object *ne* 'what' should always show up in the preverbal position, which is said to be the default position for all wh-phrases in Turkish.

7. Conclusion
This study dealt with the differential case marking of wh-objects in Turkish. The wh-objects analysed are the human wh-object, the non-human wh-objects and the D-linked wh-objects. The analysis suggests that both animacy and specificity play a role in the marking of these wh- phrases.

Animacy has a significant effect on the human wh-objects and requires that the human wh-object, *kim-i* 'who-ACC', should always be marked with accusative case suffix. It functions to distinguish it from the subject human wh-phrase, which is bare. The non-human wh-objects are found to be either case marked or not. D-linked wh-objects are also obligatorily case marked, but the reason for this requirement is not animacy, but specificity.

Specificity also influences the marking of Turkish wh-phrases and it is operative on the non-human wh-objects and D-linked wh-objects. It requires that when the non-human wh-phrases are specific they should be overtly case marked. Similarly, Turkish D-linked wh-objects are always case marked due to their specific nature.

The findings of the study strongly suggest that DOM is operative in Turkish wh-objects. But the dimensions which govern it seem to be different from those operative in the case marking of the non-wh objects. Therefore, it is safe to argue that Turkish has a two-dimensional nature of differential object marking, but the governing dimensions differ in the case marking of direct objects and in the case marking of direct wh-objects.

Based on these findings, it is possible to argue that in order to obtain a clearer and more comprehensive understanding about differential case marking, not only plain subjects and objects, but also their wh-counterparts should be investigated in languages where the latter constructions are case marked. On the other hand, this study is confined to the specificity and animacy dimensions of wh-objects. Their informational roles should be examined in connection with the differential case marking phenomenon.

Abbreviations

1SG	first person singular
2SG	second person singular
3SG	third person singular
ACC	accusative case
NOM	nominative case
PL	plural marking
PST	past tense

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