BARE DIRECT OBJECTS IN TURKISH: PSEUDO-INCORPORATED OR WEAK ARGUMENTS

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1 Introduction*

Turkish bare nouns in object position have either been analyzed as incorporated (Kornfilt, 1995, 2003; Aydemir, 2004) or as pseudo-incorporated nouns (Öztürk, 2005; Kamali, 2015). In this regard, there has been much debate in the literature on whether incorporated or pseudo-incorporated nouns are anaphorically accessible, i.e., whether they can act as antecedents for anaphoric pronouns or not, as in (1) and (2).

(1) Dün filmi seyret-ti-m,
yesterday movie watch-PST-1SG
*on-u / *on-lar-i sen de seyret-meli-sin.
it-ACC it-PL-ACC you too watch-MOD-2SG
‘I did movie-watching yesterday, you should watch *it / *them too.’

Aydemir (2004: 468)

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I provide new empirical evidence from two grammaticality judgment studies showing that bare direct objects in Turkish are anaphorically accessible and thus can act as antecedents for anaphoric pronouns. Results also show that they are less accessible than regular indefinites. The studies also suggest that Turkish bare direct objects do not behave like typical incorporated structures: (i) they do not show blocking effects of pronouns by mismatch in number, and (ii) they can act as antecedents for overt pronouns. In addition, I show that their accessibility depends on the affectedness of the bare noun.

2 Bare direct objects in Turkish

In object position, a Turkish direct object has two different morphosyntactic realizations: it can be preceded by an indefinite article or not. These forms differ in their semantic-pragmatic properties. The form *bir kitap* ‘a book’ in (3a) with the indefinite article is assumed to be a regular, i.e., existential indefinite. The bare form *kitap* ‘book’ in (3b) is characterized as non-referential and analyzed as incorporated or pseudo-incorporated (see von Heusinger & Kornfilt, 2005; Arslan-Kechriotis, 2009; Özge, Özge & von Heusinger, 2016).

(3) a. (Ben) *bir kitap oku-du-m.*
    I  a book  read-PST-1SG
    ‘I read a book.’

b. (Ben) *kitap oku-du-m.*
    I  book  read-PST-1SG
    ‘I was book-reading.’

In recent literature, bare nouns as in (3b) have been analyzed as pseudo-incorporated nouns (Öztürk, 2005; Kamali, 2015). The semantic hallmarks of pseudo-incorporated nouns are the following: (i) they obligatorily take narrow scope, (ii) they evoke a number-neutral interpretation and, (iii) they show reduced discourse transparency in comparison to regular indefinites, as shown in (4).

(4) a. Ali kaç gündür resim yap-iyor-du,
    Ali how.many  day  picture  make-PROG-PST.3SG
    nihayet bugün pro/*on-ıi bitir-di.
    finally  today  pro/ACC  finish-PST.3SG
    ‘Ali was picture-painting for days, finally he finished *it today.’
3 Accessibility of pseudo-incorporated nouns

Several studies on bare nouns or pseudo-incorporated nouns show a cross-linguistic variation with regard to their number-neutral interpretation and their ability to act as antecedents for anaphoric pronouns. For instance, Farkas & de Swart (2003) investigated the accessibility of pseudo-incorporated nouns in Hungarian, see (5). They argue that pseudo-incorporated nouns in Hungarian are number-neutral and that they are “discourse translucent” since they can only be picked up by covert pronouns but not by overt ones. They work within the DRT framework, within which they propose that pseudo-incorporated nouns introduce “uninstantiated thematic arguments” rather than discourse referents.

(5) a. Jánosj betegeti vizsgált a rendelőben.
   János patient.ACC examine.PST the office.in
   ‘János patient-examined in the office.’

b. proT túl sulyosnak találta pro/ ??őtj és beutaltatta
   pro too severe.DAT find.PST pro / he.ACC and intern.CAUS.PST
   pro a korházba.
   pro the hospital.in
   ‘He found him too sick and sent him to hospital.’

Hungarian, Farkas & de Swart (2003: 136)

Based on Farkas & de Swart (2003), Modarresi (2014, 2015) proposes an alternative account for pseudo-incorporated nouns in Persian within the DRT framework. She argues that pseudo-incorporated nouns in Persian introduce number-neutral discourse referents that can act as antecedents for covert and overt pronouns. Modarresi claims that in case that world knowledge evokes an atomic entity or sums, the number-neutral discourse referent can be picked up by overt singular or plural pronouns, as in (6a) and (6b), respectively.

   I cell.phone bought-1SG put-1SG-Ø/-it/them on-EZ-table
   ‘I bought a cell phone. I have put it / *them on the table.’
In contrast to Farkas & de Swart (2003) and Modarresi (2014), Dayal (2011) claims that the number neutrality of pseudo-incorporated nouns depends on the aspectual specification of the predicate. She argues that pseudo-incorporated nouns are not inherently number-neutral but rather are semantically singular. According to Dayal (2011), a number-neutral interpretation is a result of combining pseudo-incorporated nouns with aspectual operators, such as atelic predicates. Consider the examples in (7) and (8).

(7) a. anu-ne apne beTe ke-liye laRkii cun lii.
   Anu self’s son for girl choose COMPL-PFV
   ‘Anu has girl-chosen for her son.’

b. us-ne us-ko ek sone-kaa cen diyaa hai.
   she her one gold necklace give-PFV be-PRS
   ‘She has given her a gold necklace.’

(8) a. anu-ne do saal tak apne beTe ke-liye laRkii dekhii.
   Anu-ERG two year for self’s son for girl see-PFV
   ‘Anu girl-saw for her son for two years.’

b. vo hamesha #us-de / laRkii-de ek hii savaal
   she always #her-INSTR / girl-INSTR one only question
   ask-IMP be-PST
   ‘She always asked #her / the girl the same question.’

In case of a telic reading the pseudo-incorporated noun laRkii ‘girl’ in (7a) can be referred back to by a singular pronoun, as in (7b). On the contrary, in case of an atelic reading, the pseudo-incorporated noun laRkii ‘girl’ in (8a) cannot be picked up by a singular pronoun, as shown in (8b). This is because the activity of looking at the same prospective bride repeatedly during a two-year interval conflicts with world knowledge. According to Dayal (2011) a reading where individuals vary with sub-events of bride-looking is compatible with a definite noun phrase as a continuation for (8a).

In sum, the data from Hungarian, Persian and Hindi show that there are cross-linguistic variations regarding the number interpretation and anaphoric potential of pseudo-incorporated nouns. With respect to Turkish, I predict that (i) bare nouns in Turkish are anaphorically accessible via overt pronouns following Bliss (2004), and (ii) their accessibility also depends on their affectedness. I assume that bare nouns in Turkish are weakly referential arguments that are embedded under events in which affectedness facilitates their accessibility. To investigate the parameters for the accessibility of Turkish bare nouns, I carried out two experimental studies. In
the first experiment, I tested the accessibility of animate bare nouns. In the second experiment, I tested the accessibility of inanimate bare nouns with affectedness as an additional parameter.

4 Affectedness as a parameter for accessibility

The notion of affectedness has frequently been studied in lexical semantics and syntax. Affectedness is understood as a persistent change (or impingement) in an event participant, “where change is standardly understood as a condition ψ obtaining that did not obtain before” (Beavers, 2011: 335). According to this definition, affectedness is assumed to be a matter of degree, as shown in (9).

   b. John wrote a book.
   c. John tore a book apart.

The examples in (9) show that the patient the book is increasingly more affected from (9a) to (9c). Objects that come into existence, as in (9b), are called “effected” rather than “affected” (Fillmore, 1968; Dowty, 1991; Martinez-Vazquez, 1998). According to Dowty (1991), they are typical incremental themes. Objects of verbs of use like *read a book* are generally assumed to be unaffected or low-affected (Martinez-Vazquez, 1998; Beavers, 2011). In the present study, I argue that affectedness is a prominence-lending cue with regard to the anaphoric potential of the bare direct object. If this is the true, I expect that high-affected or effected objects should be more acceptable in contexts with covert pronouns than non-affected or low-affected ones.

5 Experiments

5.1 Experiment 1: Accessibility of bare direct objects in Turkish

*Method and design.* In Experiment 1, I conducted an acceptability judgment task that tested the accessibility of animate bare nouns. The design consisted of four conditions organized in a 2x2 factorial design. I manipulated the type of anaphoric expression (pronoun vs. definite noun phrase) and the number marking of the anaphoric expression (singular vs. plural). The items were composed of two sentences. The first sentence included a bare noun (see (10)) and the second sentence included an anaphoric expression referring back to the bare noun, as illustrated in (10a)-(10d).

(10) Tolga bugün Taksim meydanında hırsız yakaladı.
    Tolga today Taksim Square-LOC thief catch-PST.3SG
    ‘Tolga did thief-catching at the Taksim Square yesterday.’

1 For a full list of the noun-verb combinations that were used, see Appendix.
I constructed a total of 36 critical items. In addition to the critical items, I constructed 24 control sentences, which were partly grammatical and partly incongruent. In these control conditions I varied the number and definiteness of the object, as shown in (11) and (12), respectively.

(11) **Grammatical control condition**
Ozan dün emniyet müdürlüğünde bir suçlu döv-dü.

Ozan yesterday police.department-LOC a offender punch-PST.3SG

On-u yarala-dı.

he-ACC injure-PST.3SG

‘Ozan beat an offender yesterday at the police department. He injured her / him.’

(12) **Incongruent control condition**
Filiz dün huzur evinde hasta-lar-ı besledi.

Filiz yesterday nursing.home patient-PL-ACC feed-PST.3SG

#On-u doyur-du.

he-ACC sate-PST.3SG

‘Filiz fed the patients today in the nursing home. She sated #her / #him.’

Materials were divided into four lists such that each list contained only one condition of one set. The lists were distributed across all participants and items were presented in a pseudo-random order. Participants received a link to the questionnaire made in Google Forms and filled it in online. Detailed instructions were provided right before the questionnaire started. Eighty monolingual native speakers of Turkish (25 men; mean age: 29) were asked to rate how naturally they thought the context sentence and the target sentence were linked to each other on a scale from 1 (kötü ‘badly linked’) to 7 (iyi ‘well linked’). Participants provided informed consent prior to the experiment and were informed that they could end participation at any time.

**Predictions.** Following Farkas & de Swart (2003), the prediction is that pronominal uptake should not be acceptable, since they assume that bare nouns do not introduce discourse referents. Modarresi’s (2014) account predicts that pronominal uptake of a number-neutral discourse referent introduced by a bare noun should be as acceptable as pronominal uptake of a discourse
referent introduced by a regular indefinite. According to Dayal (2011), the prediction is that pronominal uptake of a bare noun should be less acceptable than anaphoric uptake via definite noun phrases, since she assumes that pronouns do not refer to discourse referents introduced by bare nouns, but a pronoun refers to discourse referents introduced by the event and therefore refers indirectly to the bare noun.

Results. Statistics were conducted in R version 1.0.136 using the lme4 package (Bates et al., 2015) to perform linear mixed-effects models (LMM) with the score as outcome variable and anaphoric expression and number marking as predictors. The variability of subjects and items were taken into account by including them as random intercepts. Statistical analyses of the data show that continuations with singular anaphoric expressions were significantly better rated than plural ones \( b = -0.94, SE = 0.22, t = 4.32 \), regardless of the type of anaphoric expression. In addition, continuations with definite noun phrases were marginally better rated than continuations containing pronouns \( b = 0.23, SE = 0.10, t = 2.22 \).

![Figure 1. Mean acceptability ratings for the anaphoric uptake of animate bare nouns.](image)

In sum, the data suggest that bare nouns in Turkish are anaphorically accessible (supporting Bliss, 2004 and Kamali, 2015). With regard to the assumptions in the literature, the results concur with Modarresi’s (2014) account which is evidenced by the fact that critical items containing anaphoric reference to a bare noun are rated almost as acceptable as control items containing regular indefinites.\(^2\)

\(^2\) As can be seen from Figure 1 participants did not use the whole scale, probably due to the fact that the Turkish school grading systems range from 1 (excellent) to 5 (failure).
5.2 Experiment 2: Affectedness of bare direct objects

In order to see whether affectedness of the bare direct object has an influence on the accessibility of bare nouns, I conducted a second experiment in which I tested different verb types.

Method and design. In Experiment 2, I investigated the acceptability of inanimate bare nouns with regard to different verb types. Again, the design consisted of four conditions organized in a 2x2 factorial design. This time, I manipulated the presence (bu ‘this’ + N) vs. absence (covert pronoun) of the anaphoric expression as well as verb type, comparing verbs of use with verbs of creation, as shown in (13) and (14), respectively.

(13) **Context with verbs of use**
   a. Nurten geçen gün ofis-de mektup oku-du.
      Nurten last day office-LOC letter read-PST.3SG
      ‘Nurten did **letter-reading** at the office yesterday.’
   b. pro / Bu mektup üç sayfa-ydı.
      pro this letter three pages-PST
      ‘It / **This letter** was three pages long.’

(14) **Context with verbs of creation**
   a. Ahmet geçen gün çalışma odasında mektup yazdı.
      Ahmet last day office.room-LOC letter write-PST.3SG
      ‘Ahmet did **letter-writing** at the office yesterday.’
   b. pro / Bu mektup üç sayfa-ydı.
      pro this letter three pages-PST
      ‘It / **This letter** was three pages long.’

I constructed 48 critical items. Again, each item consisted of a context sentence and a target sentence. Verb type and pronoun type were crossed (12 items per condition for verbs of use and 12 items per condition for verbs of creation) and all items were distributed onto four lists in a Latin square design. I added 24 control conditions to each list, which were partly grammatical (15), incongruent (16) or ungrammatical (17). The task was the same as in Experiment 1. A total of 160 Turkish native speakers (108 women; mean age: 31) participated in this study. Written informed consent was obtained from all participants.

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Bare direct objects in Turkish: Pseudo-incorporated or weak arguments

(15) **Grammatical control condition**
Deniz günlerce aşk şarkı-ları dinle-di.
Çok üzgün-di.

‘Deniz listened to love songs for days. He was very upset.’

(16) **Incongruent control condition**
Ayşe bugün saatlerce cam-ları sil-di.
#Epeyce yorulmuş-lar-di.

‘Ayşe cleaned the windows for hours today. She got quite tired.’

(17) **Ungrammatical condition**
Bilgi dün davetiye-leri gönder-di.
*Bun-u için epey geç kalmış-tı.

‘Bilgi send out the invitations yesterday. She was very late in this.’

**Predictions.** Based on Farkas & de Swart (2003), the prediction is that continuations with covert pronouns should be less acceptable than continuations with bu + N. According to Modarresi (2014) and Dayal (2011) there should not be a difference in acceptability regarding continuations with covert pronouns and demonstrative noun phrases.

**Results.** Overall mean ratings for critical items and control items are shown in Figure 2. Statistical analyses show that continuations with bu + N are significantly better rated than continuations with a covert pronoun $b = 0.40$, $SE = 0.13$, $t = 2.51$. Moreover, anaphoric uptake of effected objects are significantly better rated than anaphoric uptake of objects in contexts with verbs of use $b = 1.26$, $SE = 0.18$, $t = 6.86$.\(^2\)

\[^2\] I used the same statistical method as in Experiment 1. Anaphoric expression and verb type entered the LMEM analysis as predictors.
As is clearly apparent from Figure 2, both predictors, verb type and anaphoric expression are not mutually dependent. The results also show that continuations with $bu + N$ are rated as acceptable as the grammatical control conditions. The results confirm the predictions of Farkas & de Swart (2003) concerning the lower acceptability ratings of the covert pronoun conditions.

6 Conclusions

In the present study, I investigated the anaphoric potential of bare nouns in Turkish. I presented two acceptability judgment studies, first testing the anaphoric potential of animate bare nouns, and second, testing the anaphoric potential of inanimate bare nouns in different contexts. On the basis of the discussed data, I argue that (i) Turkish bare nouns are anaphorically accessible (supporting Bliss, 2004; Kamali, 2015), and (ii) that the accessibility in contexts with inanimate bare nouns depends on the affectedness of the bare noun. More precisely, I have shown that effected direct objects are more accessible than unaffected ones. In addition, the studies show that continuations with object pronouns and definite noun phrases are more acceptable than continuations with subject pronouns. The findings of the study contribute to the literature of the discourse properties of bare nouns in two points: At the methodological level, I present the first empirical study investigating the discourse properties of Turkish bare nouns. At the theoretical level, my findings reveal that Turkish bare nouns are number-neutral and anaphorically accessible (Modarresi, 2014, 2015). I therefore suggest analyzing bare nouns as weak indefinite arguments rather than incorporated nominals.
References


## Appendix

### Noun-verb combinations

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<tr>
<th>Experiment 1</th>
<th>Experiment 2</th>
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