Hitay Yükseker
University of Toronto, Queen's University, York University

TURKISH POSSESSIVE COMPOUNDS *

ABSTRACT

In this paper, I propose an analysis to account for the syntactic and semantic properties of possessive compounds in Turkish. These constructions have lexical heads that are affixed with the third person singular possessive marker. Unlike syntactic possessive constructions, the non-heads of the possessive compounds do not carry genitive case. I propose two functional projections, a Poss(essive) P(hrase) and a Genitive P(hrase). I show that the syntactic properties of the possessive compounds are a consequence of the interaction between these projections, and the semantic properties of these constructions is a reflex of the semantics of "third person".

1. Introduction: In this paper, I examine Turkish possessive compounds which have lexical heads that are affixed with the third person singular possessive marker. These compounds and syntactic possessives share the property of having lexical heads to which the possessive marker is attached. The difference between possessive compounds and syntactic possessives is the presence of the genitive marker on the non-head of the syntactic possessives. Examples of possessive compounds and syntactic possessives are shown in (1) and (2) below. The data in (1a) and (2a) also show that in the absence of the possessive marker the structures are interpreted as attributive-head, i.e. root, compounds. In the examples in (1) below, the head is a non-derived noun, <u>kutu</u> 'box' and in (2) the head is a deverbal nominal, <u>kapak</u> 'lid':

(1)   a.   Root Compound: b.   Possessive Compound:
           oyuncak kutu   oyuncak kutu-su
           toy   box   toy   box-poss
           'a box which is a toy'   'a box in whichtoys are stored'
           *'a box in which toys are stored'   *'a box which is a toy'
      c.   Syntactic Possessive:
           oyuncağ-ın   kutu-su
           toy-3sggen   box-poss
           'the box in which a particular toy is stored'

(2)   a.   Root Compound:
           silindir   kapa-k
           cylinder close-instr
           'a lid shaped as a cylinder'
           *'a lid designed to be used with cylinder shaped containers'b.

b.   Possessive Compound:
        silindir   kapa-ğ-ı
        cylinder   close-instr-poss
        'a lid designed to be used with cylinder shaped containers'
        *'a lid shaped as a cylinder'
c.   Syntactic Possessive:
        silindir-in   kapa-ğ-ı
        cylinder-3sggen   close-instr-poss
        'the lid of the cylinder shaped container'

The structural difference between the possessive compounds in (1b) and (2b) and the syntactic possessives in (1c) and (2c) have a semantic reflex. The possessive compounds are non-referential and non-specific, i.e. generic and the syntactic possessives are referential and specific.

There are some additional facts that need to be considered. These are shown in (3) and (4). (3) shows an ambiguous string, which can either be an example of the interaction between a syntactic possessive and a possessive compound or an example of the interaction between a syntactic possessive and a root compound. In either interaction, the genitive marked nominal has to precede the generic non-head as in (3a). The opposite ordering in (3b) is unacceptable:

(3)   a.   Hitay-ın   oyuncak   kutu-su
                  -3sggen   toy   box-poss
               (i) 'Hitay's box in which toys are stored'
               (ii)'Hitay's toy which is a box'
       b.   *oyuncak   Hitay-ın   kutu-su
               toy   -3sggen   box-poss
               (i) 'Hitay's box in which toys are stored'
               (ii) 'Hitay's toy which is a box'

The data in (4) show the effects of subject pro-drop in syntactic possessives. (4a) shows that a first person singular marked possessive marker allows the subject pro to drop without any syntactic/semantic consequence. In other words, the structure will always be interpreted as a syntactic possessive. On the other hand, (4b) and (4c) show that, if the possessive marker is third person singular, dropping the subject pronoun will yield only the possessive compound interpretation. Genitive marked third person singular pronoun has to be present for the structure to be interpreted as a syntactic possessive:

(4)   a.   (ben-im)   oyuncak   kutu-m
               (I-1sggen)   toy   box-1poss
               (i) 'my box in which toys are stored'
               (ii) 'my toy which is a box'
               (iii) *'a box in which toys are stored'

b. oyuncak   kutu-su
    toy   box-poss
    (i)   *'his/her box in which toys are stored'
    (ii) *'his/her toy which is a box'
    (iii) 'a box in which toys are stored'
c. on-un   oyuncak   kutu-su
    3sg-gen   toy   box-poss
    (i)   'his/her box in which toys are stored'
    (ii) 'his/her toy which is a box'
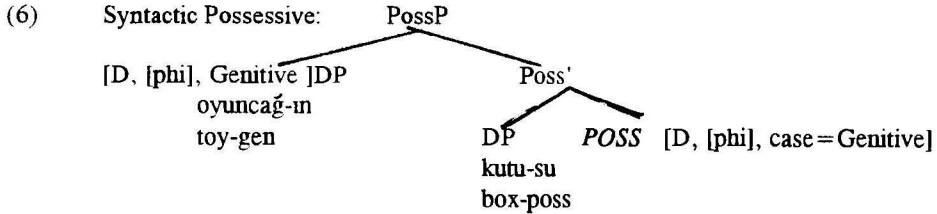   (iii) *'a box in which toys are stored'

The purpose of this paper is to answer the questions in (5):

(5)   a.   What is the structure of syntactic possessives?
       b.   What is the structure of possessive compounds?
       c.   How do we account for the relative ordering shown in (3)?
       d.   What is the cause of the ambiguity in (3a)?
       e.   What does the pro-drop phenomenon shown in (4) have to say about
       the structure and derivation of possessive compounds and syntactic possessives?
       f.   Are possessive compounds syntactic or lexical?

2. Analysis: The analysis is based on the principle of morphology which allows to have both abstract and concrete versions of a given morpheme (Chomsky 1993). The analysis also assumes that the concrete versions of the morphemes attach to their lexical heads in the morphology component of the grammar and words enter syntax fully inflected. The analysis also assumes feature checking as outlined in the Minimalist Program (Chomsky 1995).
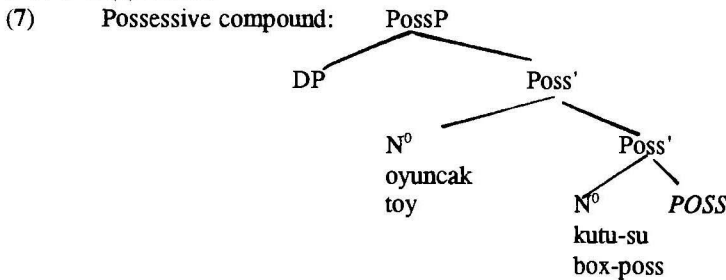
2.1. Syntactic Possessives and Possessive Compounds: I propose that in order to understand the properties of possessive compounds, we need to formulate an account of syntactic possessives. The proposed structure of syntactic possessives is shown in (6). The head of the structure is the abstract morpheme, *POSS* , which selects a DP complement. This abstract morpheme is [+N] and it also has a [D] feature, [ ] and case features. The [+N] feature of the abstract head is checked by the concrete morpheme which has the same feature. The lexical possessive morpheme is attached to the lexical head in the morphology component of the grammar. This lexical head undergoes head movement to check the [+N] category feature of the abstract head. The abstract head projects a Poss(essive) P(hrase) whose specifier position is where the [D], [phi] and [Case] features of the head are checked in a [spec-head] relation. The structure is derived by lexical insertion, i.e merge. The spec of PossP is for the genitive case to be checked. Along with Legate and Smallwood (1997), I assume that structural case and morphological case are distinct. Therefore, any nominal with any case can be picked up during enumeration to fill the [spec,PossP] position. But unless the nominal that merges to that position has the

155

genitive morpheme the cases of the position and the nominal that fills that position will clash, case feature checking will fail, and the derivation will crash. Therefore, only genitive marked nominals will occur [spec,PossP].

(6)   Syntactic Possessive: PossP

[D, [phi], Genitive]DP   Poss'
            oyuncağ-ın
            toy-gen   DP   *POSS*   [D, [phi], case = Genitive]
                                  kutu-su
                                  box-poss

            'the box in which a particular toy is stored'

Now consider the derivation of possessive compounds. The generic interpretation of the string should follow from the structure of the possessive compound. We might suggest that the structure results from the abstract head POSS selecting either a DP (as in (6) above) or an N^0 as complement, and that another N^0 may head adjoin to Poss' as shown in (7) below:

(7)   Possessive compound: PossP

            DP   Poss'

                    N^0 Poss'
                    oyuncak
                    toy N^0 *POSS*
                               kutu-su
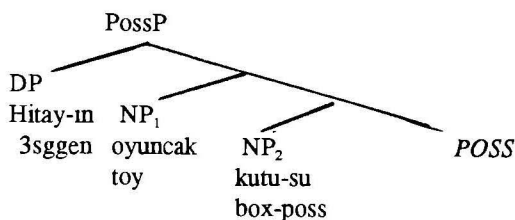   box-poss

            'a box in which toys are stored'

The problem with this proposal is that the structure above is not permissible. Since neither nominal in (7) projects further, according to Bare Phrase Structure Principles (Chomsky 1994) their category must be maximal.

Let us consider another possibility. In possessive compounds the non-head is in a thematic relation with the lexical head. Ediskun (1985) refers to this type of relation as an abstract relation of possession which does not have any reference to reality at the moment of speaking, i.e non-referential and non-specific. From (1c) and (3), we know that the lexical head can also be in a referential and specific possession relation with the non-head. These referential and non-referential possession possibilities can be structurally represented as the abstract *POSS* morpheme projecting two specifiers, one referential and specific possession (DP) and one non-referential and nonspecific possession (NP_1) as shown in (8) below. The structure that will result is the interaction between a syntactic possessive (DP specifier) and a possessive compound (NP specifier), i.e. the representation of (3).

(8)

```
                        PossP
              _____/‾‾_____
            DP        NP₁
         Hitay-ın    _/‾\_
         3sggen    oyuncak   NP₂
                    toy     _/‾_____
                          kutu-su        POSS
                          box-poss
```

'Hitay's box in which toys are stored'

One major criticism of the structure in (8) is that the relative positions of the specifiers, though providing a grammatical string (shown in (3)) do not follow from any independent principle. In order to address this issue, I propose to develop a classification of Turkish nominal phrases. Consider the different types of nominal phrases occurring in direct object position, as exemplified in (9). (9a) has a [determiner+N] direct object and this direct object has an overt case marker. In (9b) we have a [number+N] direct object. This direct object does not have an overt case marker. In (9c) we have an [N] direct object. This direct object does not carry an overt case marker either:

(9) a. Hitay- Ø   bu   kitab-ı   oku-du- Ø
         Hitay-nom   this   book-acc   read-pa-3sg
         'Hitay read this book'

     b. Hitay- Ø   iki   kitap- Ø   oku-du- Ø
         Hitay-nom   two   book-acc   read-pa-3sg
         'Hitay read two books'

     c. Hitay- Ø   kitap   oku-du- Ø
         Hitay-nom   book   read-pa-3sg
         'Hitay did book reading'

I propose that the direct object in (9a) is referential and specific; the one in (9b) is referential and non-specific; and the one in (9c) is non-referential and non-specific, i.e. generic. As (10) shows, it is not necessary to have an overt determiner for a nominal phrase to be referential and specific. The semantic information is encoded in the portmanteau case marker:

(10)   Hitay- Ø   kitab-ı   oku-du- Ø
             Hitay-nom   book-acc   read-pa-3sg
             'Hitay read the book.'

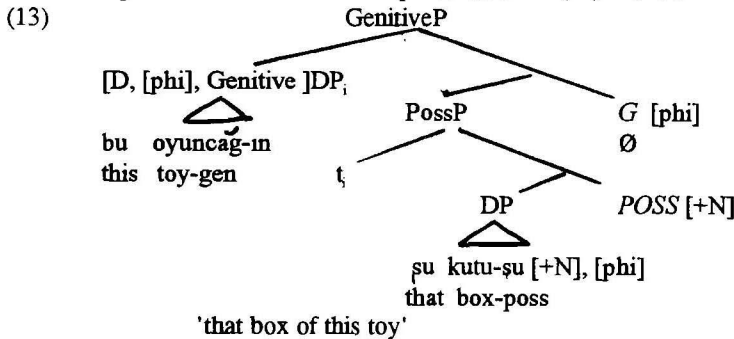(11) summarizes the semantic properties of nominal phrases in Turkish:

(11) DP   NumberP   NP
      referential   referential   non-referential
      specific   non-specific   non-specific, i.e. generic

Now let us reconsider the structure of syntactic possessives. (12) shows that both the genitive and possessive markers are affixed to N's of DP's. Turkish has three demonstrative pronouns describing the closeness of the object in question to the speaker:

bu 'this'; şu 'that'; o 'yonder'. (12) is an utterance which would be used in the context when a specific toy has two boxes, and we are referring to the one which is in some distance from the speaker:

(12)　　　　　bu　　　oyuncağ-ın　　su　　kutu-su
　　　　　　　this　　toy-3sggen　　that　　box-poss
　　　　　　　'that box of this toy'

　　To account for the derivation of the syntactic possessives, I propose to separate theta assignment (possession theta role) and the checking features (of case and referentiality & specificity). There are two functional projections: a PossP and a Genitive P(hrase). The possession theta role is assigned to [spec, PossP] and referentiality and specificity and genitive case are checked in [spec, GenitiveP]. That is to say, there is an abstract head *POSS* which bears the feature [+N] and takes a DP complement, and projects a specifier to which the possession theta role is assigned. The PossP is the complement of an abstract head *G*(enitive) which is phonologically null in all instances. The [spec, GenitiveP] is referential and specific ([D]), along with having the features [Genitive Case] and [phi]. The referential and specific DP in [spec, PossP] moves to [spec, GenitiveP] to check the strong referentiality and specificity features. The lexical possessive morpheme undergoes head movement to check the [+N] feature of the abstract *POSS*. The same lexical head, which also carries [phi] features, moves to the abstract *G* head. The [phi] features of [spec GenitiveP] are checked via spec-head relation. [Spec, PossP] is merely a thematic position. The structural representation of (12) is shown in (13):

(13)　　　　　　　　　　　　　　　GenitiveP

[D, [phi], Genitive]DP$_i$

　　　　　　　　　　　　　　　　PossP　　　　　　　G [phi]

bu　oyuncağ-ın　　　　　　　　　　　　　　　　　Ø
this　toy-gen　　　　t$_i$

　　　　　　　　　　　　　　　DP　　　POSS [+N]

　　　　　　　　　şu　kutu-şu [+N], [phi]
　　　　　　　　　that　box-poss

　　　'that box of this toy'

Recall the ambiguous structure shown in (3), which is repeated below as (14):

158

(14)   Hitay-ın   oyuncak   kutu-su
            -3sggen   toy   box-poss
            a.'Hitay's box in which toys are stored'
            b. 'Hitay's toy which is a box'

For the time being let us put aside the ambiguity issue and address the interaction
between syntactic possessive and the possessive compound, which is mainly the ordering
of the genitive marked nominal phrase and the generic nominal phrase. The string in (14)
has one possessive head, and one referential and specific possessor (Hitay-in 'Hitay's')
and one generic possessor (oyuncak 'toy'); and one lexical head kutu 'box'. To account
for these facts, I proposed two specifiers for one functional head. Recall that the relative
ordering of the constituents in (8) was not motivated. Consider the following examples
which show that if the complement of the abstract *POSS* is referential and specific (DP),
the specifier of PossP also has to be referential and specific (DP, see (15a&b)). On the
other hand, if the complement of abstract *POSS* is non-referential and nonspecific (NP),
the specifier can be either non-referential and nonspecific (NP see (15c)) or referential
and specific (DP see (15d)) or both (15e):

(15)   a.   bu   oyuncağ-ın   şu   kutu-su
              this   toy-3sggen   that   box-poss
              'this toy's that box'
        b.   *oyuncak   şu   kutu-su
               toy   that   box-poss
               'toy that box'
        c.   oyuncak   kutu-su
              toy   box-poss
              'a box in which toys are stored'
        d.   oyuncag-in   kutu-su
              toy-3sggen   box-poss
              'the box in which a particular toy is stored'
        e.   Hitay-ın   oyuncak   kutu-su
              -3sggen   toy   box-poss
              (i) 'Hitay's box in which toys are stored'
              (ii) 'Hitay's toy which is a box'

The facts shown in (15a) and (15b) cannot be accounted for structurally. The only
possible explanation, then, is a semantic one. It seems that a referential and specific
possessed can only have a referential and specific possessor, a form of semantic
incompatibility (Ghomeshi & Massam 1994; Yükseker 1995). On the other hand a
generic possessed can have either a specific and referential possessor or a generic
possessor.

Now let us turn to the structural representation of the interaction between a syntactic
possessive and a possessive compound. There are two possible derivations. These are

shown in (16). In both structures two specifier positions are created. One for non-referential and nonspecific possession (NP), and one for referential and specific possession (DP). (16a) and (16b) show different orders of merge. In (16a) first an NP merges and then a DP. In (16b) the order is reversed. Either one can represent the derivation of the string in (14). In (16a), as already proposed, DP moves to [spec, GenitiveP] to check referentiality and specificity. In (16b) even if the NP is closer to the specifier position of the GenitiveP, and even if it moves to [spec, GenitiveP], it does not have the appropriate features to check the features of referentiality and specificity of the specifier position, causing the derivation to crash. Therefore, in (16b) given that the DP is the only constituent which has the appropriate features of referentiality and specificity to check the features of the head G , it is the constituent to move to [spec,GenitiveP]. Therefore, the observed ordering facts follow from the principles and the mechanisms of the theory.
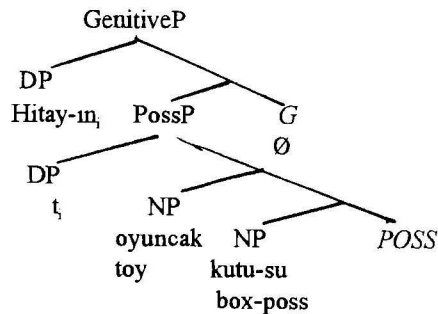
(16)   a.

'Hitay's box in which toys are stored'

b.

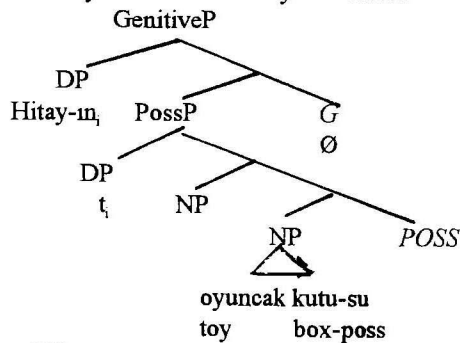'Hitay's box in which toys are stored'
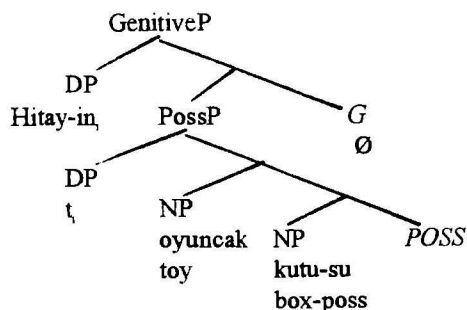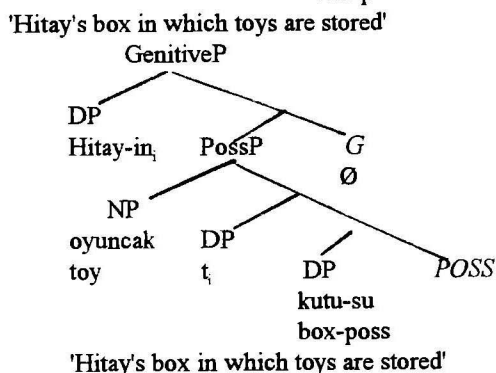
Before I address the last question listed in (5), I account for the ambiguity found in the string (3), which is repeated as (14) above. The representations in (17) below provide the two structures that account for the ambiguous string. In (17a) we see an example of the interaction between a syntactic possessive and a possessive compound. In (17b) we see a syntactic possessive and a root compound interaction.

(17) a.

GenitiveP
- DP: Hitay-ın$_i$
- PossP
  - DP: t$_i$
  - NP
    - oyuncak / toy
    - NP: kutu-su / box-poss
    - POSS
- G: Ø

'Hitay's box in which toys are stored'

b.

GenitiveP
- DP: Hitay-ın$_i$
- PossP
  - DP: t$_i$
  - NP
    - NP: oyuncak kutu-su / toy box-poss
    - POSS
- G: Ø

'Hitay's box which is a toy'

The ambiguity represented in (17) is an expected consequence of the model proposed in this paper, which also assumes that root compounds are created in the morphology.

To conclude, I have shown that the structural and semantic properties of syntactic possessives and possessive compounds can be accounted for by proposing two functional projections, a PossP and a GenitiveP. I also separated the assignment of the possession thematic role, and checking of the [case], [D] and [phi] features, and assigned each function to the domain of a different projection.

Now I turn to the subject pro-drop properties of syntactic possessives and possessive compounds.

2.2. Pro-drop; syntactic possessives and possessive compounds: Recall the strings in (4), which are repeated below :

161

(18)   a.   (ben-im)   oyuncak   kutu-m

              (I-1sggen)   toy   box-1poss

              (i)   'my box in which toys are stored'

              (ii) 'my toy which is a box'

              (iii) *'a box in which toys are stored'

       b.   oyuncak   kutu-su

              toy   box-poss

              (i)   *'his/her box in which toys are stored'

              (ii) *'his/her toy which is a box'

              (iii) 'a box in which toys are stored'

       c.   on-un   oyuncak   kutu-su

              3sg-gen   toy   box-poss

              (i)   'his/her box in which toys are stored'

              (ii) 'his/her toy which is a box'

              (iii) *'a box in which toys are stored'

Given the analysis provided in the previous section, (18a) is ambiguous as we expect it to be. But (18a) can never be interpreted as generic in the absence of an overt pronoun in [spec, GenitiveP]. On the other hand, in the absence of an overt third person genitive pronoun the construction can only be interpreted as generic as shown by the variation in (18b) and (18c). I propose that this is due to the semantic difference between the first and second person subjects on the one hand and third person subjects on the other. This difference between number and person has been recognized by different researchers over the years although the effects of the distinction vary from language to language. For instance, in Athapaskan this difference is expressed in number and person marking for the first and second persons, and only number for the third person (Rice and Saxon 1994). For Labrador Inuttut the choice of indicative vs participial mood is determined by the person agreement markers, where the first and the second persons pattern together, and third person has a different behaviour (Johns 1993). In Turkish this difference is semantic, i.e. referentiality and specificity. The first and the second persons are referential and specific, the third person is generic. This distinction is limited to person morphemes only. The same is not true for pronouns. It appears that the pragmatics of pronouns require them to be referential. Therefore, in the absence of an overt referential and specific genitive 3rd person (singular) subject pronoun which is needed to check the referentiality and specificity features of [spec, GenitiveP], a structure with the third person possessive marker will be interpreted as generic. Words are usually considered to be generic (Di Sciullo and Williams 1987). Therefore, generic third person singular syntactic possessives are interpreted as words. Compounds are words that have complex internal structures. Therefore, syntactic possessives with 3rd. person singular heads without overt possessor subjects are interpreted (possessive) compounds. That is to say, Turkish possessive compounds are not lexically derived, but they are one type of

syntactic possessive which are interpreted as generic due to the lack of a referential and specific subjects. Thus they are syntactic.

3. Conclusion: The analysis provided in this paper clearly shows that Turkish possessive compounds are syntactic, and not lexical. Syntactically, Turkish possessive compounds are projections of two distinct functional heads, *POSS* and *G*. At the same time, semantically, Turkish distinguishes between referential and specific person markers (1st and 2nd) and generic person marker (3rd). Syntactic possessives which lack a referential and specific third person subjects have generic interpretation. The "word, i.e. compound" status of these syntactic possessives is a consequence of the semantics of genericity which is also a semantic property of words.

References:

Chomsky, Noam. 1993. 'A Minimalist Program for Linguistic Theory'. In K. Hale and S. J. Keyser (eds)*The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger* ,. pp. 1-52. Cambridge, Mass. The MIT Press.

Chomsky, Noam. 1994. 'Bare Phrase Structure'. *MIT Occational Papers in Linguistics 5.* Department of Linguistics and Philosophy, MIT.

Chomsky, Noam. 1995. *The Minimalist Program.* Cambridge, Mass. The MIT Press.

Di Sciullio Anna-Marie, & Edwin Williams. 1987. *On the Definition of Word* Linguistic Inquiry Monograph #14. Cambridge, Mass. The MIT Press.

Ediskun, Haydar. 1985. *Türk Dilbilgisi* . Remzi Kitabevi, Istanbul.

Ghomeshi, Jila and Diane Massam. 1994. 'Lexical/Syntactic Relations without Projection'. *Linguistic Analysis.* vol. 24. pp 175-217.

Johns, Alana. 1993. 'Symmetry in Labrador Inuttut'. *Papers on Case and Agreement. MIT Working Papers in Linguistics.* vol. 18. pp. 43-57.

Legate, Julie Anne and Carolyn Smallwood. 1997. 'The Case Filter Meets the Minimalist Program: Evidence for Strong Case Features'. Paper presented at OLF 1997, University of Ottawa, March 1997.

Rice, Keren and Leslie Saxon. 1994. 'The Subject Position in Athapaskan Languages'. In H. Harley and C. Phillips (eds) *The Morphology-Syntax Connection*. MIT Working Papers in Linguistics, volume 22,173-196.

Yükseker, Hitay. 1995. 'How Many -ler/lar's are there in Turkish?'. In Päivi Koskinen, (ed) *Proceedings of the 1995 Annual Conference of Canadian Linguistics Association. Toronto Working Papers in Linguistics*, University of Toronto, pp. 639-650.

Hitay Yükseker
hy2@qsilver.queensu.ca
yukseker@yorku.ca