Plural marking in Turkish: Additive or associative?

Emrah Görgülü

Simon Fraser University ega5@sfu.ca

In this paper I investigate the syntactic and semantic properties of the additive/regular plural marker and associative plural marker -lAr in Turkish. I propose that they are in fact different from each other in terms of their syntax and semantics although they share the same surface form in the language.

Turkish has a plural marker -lAr which basically attaches to nouns and pluralizes their reference. In addition, -lAr can also give rise to a reading in which pluralized proper names and kinship terms denote either family or company (cf. Sebüktekin (1971) and Göksel and Kerslake (2005)). I argue here that despite their surface resemblance, these two plural markers are distinct both syntactically and semantically in the sense that the former is additive while the latter is associative. When a pluralized noun appears in a genitive construction, the plural marker comes before the possessive suffix. On the other hand, when a proper name appears with the plural in the same construction, the plural marker comes after the possessive suffix. Moreover, the additive plural induces both collective and distributive interpretations whereas the associative plural -lAr gives rise to only the collective reading. Based on these facts, I argue that the additive and associative plural -lAr head different functional categories and are interpreted differently. Following Ritter (1991), I assume that the additive plural is the head of the functional category NUMP. It turns nominal predicates denoting singularities into predicates denoting pluralities. On the other hand, the associative plural heads a different category, namely, GRP (cf. Nakanishi and Ritter (2008)) and gives rise to some sort of a group reading whose reference contains a focal referent and some other individual(s).

1 Introduction

The main objective of this paper is to investigate the syntactic and semantic properties of the additive (i.e. regular) marker and the associative plural marker in Turkish, both of which have the same morphological form *-lAr* in the language. When we consider plural marking, we observe that there are a number of descriptive studies in the literature including Lewis (1967), Sebüktekin (1971) and Göksel and Kerslake (2005), among others, in which the plural marker and its various functions have been investigated. However, there is yet no analysis in

¹ The vowel of the plural suffix is subject to vowel harmony. It can appear as [-ler] or [-lar] depending on the vowel preceding it.

which a formal account has been proposed in order to explain the true nature of the plural marking in the language. In this paper, I aim to analyze its syntactic and semantic properties. An analysis of various contexts with -lAr marking suggests the existence of two plural markers in the language. More specifically, I argue that these two plural markers differ from each other in terms of their syntax and semantics even though they are morphologically identical. Following the convention, I will call the regular plural marker *the additive plural* and the group inducing marker *the associative plural*. I will argue that the former heads a functional category which I call NUM *a la* Ritter (1991). Semantically, this marker denotes sets of pluralities excluding atoms/singularities (c.f. Chierchia 1998, 2003) and gives rise to the ordinary plural reading in those constructions in which it appears. On the other hand, the latter heads a different functional head, namely GRP (c.f. Nakanishi and Ritter 2009). The associative plural marker has a different semantics in that it yields some sort of a group reading rather than ordinary plural interpretation.

The structure of this paper is as follows. In Section 2, I will briefly discuss the properties of nominals in terms number as well as various *functions* of -lAr in the language. In Section 3, I will analyze the additive and associative plural marker in terms of their semantic behavior. An analysis of structures in which these markers appear will lead to the conclusion that these markers give rise to differences in terms of how nouns that they attach to are interpreted. In Section 4, I will introduce my proposal and argue that the different syntactic and semantic behavior of these two identical markers is accounted for assuming that they each head a different functional category and are associated with a different meaning in the structures in which they appear. Section 5 briefly concludes the paper with suggestions for further research.

2 The Issues

2.1 Common nouns and number in Turkish

Bare common nouns in Turkish are often argued to have *general number* or are *number-neutral* (cf. Schroeder 1999). What this means is that a bare noun is not specified for number in the language. This is illustrated in (1a) and (2a) below. On the other hand, when a noun co-occurs with the indefinite article *bir* 'one', which is a numeral in the language, it is obligatorily interpreted as singular, as shown in (1b) and (2b). Finally, when a noun appears with the plural marker - lAr, the reading the noun is assigned is obligatorily plural. This is shown in (1c) and (2c) below.

(1) a. çocuk	b. bir çocuk	c. çocuk- <i>lar</i>
kid/kids	one kid	kid-PL
(2) a. ev house/houses	b. bir ev one house	c. ev <i>-ler</i> house-PL

The examples above show that common nouns in Turkish do not have any number specification in their bare from in the sense that they are *number-neutral*. In contrast to this, when a noun combines with the plural marker, it necessarily refers to pluralities. In this sense, -lAr seems to be the regular plural marker just like the plural suffix -s in English. However, it should be noted that -lAr can give rise to different readings in the constructions in which it appears. The next section discusses these environments and different interpretations that -lAr leads to.

2.2 -lAr and its various functions

The behavior of the marker -lAr is somewhat interesting in the language. When we consider, say, kinship terms such as *teyze* 'aunt' or *abi* 'brother' in genitive constructions, we see that the plural marker appears *before* the possessive suffix. This is illustrated in (3).

(3) a. Teyze-*ler*-im b. Abi-*ler*-im brother-PL-1SG 'My aunts' 'My brothers'

This behavior of the plural marker has been previously noted by others such as Lewis (1967:26), Sebüktekin (1971:98-99) and Göksel and Kerslake (2005:169). What is important here is that the nominal in (3a) refers to a set of individuals and each of them qualifies as aunts. The same is also true for the nominal in (3b) which only refers to individuals who are brothers. That is to say, the nominals above denote a homogeneous set in that sense. What is also interesting is that the same plural marker can also be attached to proper names and gives rise to the regular plural reading. Consider (4).

(4) Ahmet-ler Ahmet-PL 'Ahmets' (two or more people by the same name)

What (4) indicates is that the plural marker can attach to proper names in Turkish and gives rise to the regular plural interpretation. There is also another reading that the proper name in (4) is associated with and it will be discussed in the subsequent sections.

It has also been noted in the literature (cf. Lewis (1967:26), Sebüktekin (1971:98-99) and Göksel and Kerslake (2005:169)) that the same plural marker has a different function in the language. Concretely, -lAr attaches to kinship terms and proper names just like the ones observed in (3) and (4). However, the difference between the two is that the plural marker comes *after* the possessive suffix as in (5) when the noun is a kinship term. More importantly, the reading that these nouns have is quite different from the ones discussed above.

- (5) a. Teyze-m-*ler* aunt-1SG-PL 'My aunt and her family / associates / friends'
 - b. Abi-m-lerbrother-1SG-PL'My brother and his family / associates / friends'
- (6) Ahmet-lerAhmet-PL'Ahmet's family or company or group'

In order to account for the different behavior of the plural marker in the language, namely the difference between (3)/(4) on the one hand, and (5)/(6) on the other, it has previously been suggested that -lAr marking has more than one function in Turkish. For instance, Lewis (1967:26) argues that personal names may be used in the plural like 'the Joneses' to refer to family. Sebüktekin (1971:98-99) notes that one of the functions of the plural morpheme in Turkish is to refer to the home, family, company represented by the nominal. More recently, Göksel and Kerslake (2005:169) state that another function of -lAr attached to the name of a person is to produce an expression referring to the group associated with that person. The same usage can also occur with the expressions of relationship.

As can be noted, the analyses referred to above have showed that -lAr has various functions in the language since it marks nominals as plural as well as a group. However, there is not yet any study that seems to have come up with an analysis in which the plural markers should be considered different from each other in (3) and (5) because of the fact that their syntactic position and their semantic contribution to the meaning of the structure are quite different. It appears that the true nature of -lAr marking in these cases should be investigated and the apparent syntactic and semantic distinctions need to be explicated. Based on new data, I will argue that the different syntactic and semantic behavior of -lAr in each case stems from the fact that they are distinct elements even though they have the same morphological form. Following the convention, I will call the regular plural marker *additive* and the group inducing marker *associative*. In the next section, I will discuss certain differences with respect to the reading they lead to.

3 The distinctions between the additive and associative plural

3.1 Interpretational differences

When we look at the two types of plurality in the language, we see that there are certain distinctions between them. For instance, the additive plural gives rise to both the *collective* and *distributive* reading whereas the associative plural yields

only the *collective* reading. The examples in (7a) and (8a) show the additive plural reading while those in (7b) and (8b) illustrate the associative plural reading. Following Moravcsik (2003), I argue that the associative plural gives rise to some sort of a *group* reading that includes a *focal referent* and his/her *family* or *friends* or *associates*, depending on the context.

(7) a. Teyze-*ler*-im çık-tı.

aunt-PL-1SG leave-PAST

- 'My aunts left.'
- (i) My aunts left together (collective)
- (ii) My aunts left at different times (distributive)
- b. Teyze-m-ler çık-tı.

aunt-1SG-PL leave-PAST

- 'My aunt and her family / friends / associates left.'
- (i) My aunt and her family / friends / associates left together. (collective)
- (ii) *My aunt and her family / friends / associates left at different times. (distributive)
- (8) a. Abi-*ler*-im Ankara-ya git-ti. brother-PL-1SG Ankara-DAT go-PAST
 - 'My brothers went to Ankara.'
 - (i) My brothers went to Ankara together. (collective)
 - (ii) My brothers went to Ankara at different times. (distributive)
 - b. Abi-m-*ler* Ankara-ya git-ti. brother-1SG-PL Ankara-DAT go-PAST

'My brother and his family / friends / associates went to Ankara.'

- (i) My brother and his family / friends / associates went to Ankara together. (collective)
- (ii) *My brother and his family / associates went to Ankara at different times.' (distributive)

The data in (7) and (8) show that both the collective and distributive readings are available with the additive plural. On the other hand, only the collective reading is possible with the associative plural. This is expected given that the associative plural marks a set of individuals as a group.

It was noted in (4) and (6) that when a proper name co-occurs with -lAr, it is ambiguous between the additive and associative plural readings. Interestingly, the additive plural yields both the collective and distributive interpretations whereas the only reading which is available with the associative plural is the collective one. Consider the examples below.

(9) a. Ahmet-ler biz-e gel-di.

Ahmet-PL we-DAT come-PAST

- 'Two or more people named Ahmet came to us.' (Additive Plural)
- (i) Two or more people named Ahmet came to us together. (collective)
- (ii) Two or more people named Ahmet came to us separately. (distributive)
- b. Ahmet-*ler* biz-e gel-di.

Ahmet-PL we-DAT come-PAST

- 'Ahmet and his family / friends / associates came to us.' (Associative Plural)
- (i) Ahmet and his family / friends / associates came to us together. (collective)
- (ii) *Ahmet and his family / friends / associates came to us at different times. (distributive)

The behavior of the noun *Ahmet* in (9) can be captured in a straightforward manner assuming that it combines with the additive plural in (9a) and with the associative plural in (9b). It should also be noted that the associative plural gives rise to a more restricted interpretation in which only the collective reading is available when it combines with kinship terms and proper names. The additive plural does not behave the same way as both the collective and distributive interpretations are available with it. In the next section, I will introduce my proposal and argue that the two types of plural markers are syntactically and semantically distinct.

4 The Proposal

It was shown that the additive and associative plural -lAr exhibit different syntax and semantics in the language. They do not appear in the same syntactic position and their contribution to meaning differ. Based on these facts, I propose that they head different functional categories and their semantic composition is different.

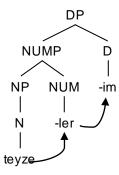
4.1 The Syntax and Semantics of Additive -lAr

It was noted above that the syntactic position of the additive plural is not the same as that of the associative plural in genitive constructions in that the former precedes the possessive marker while the latter follows it. Consider the minimal pair below.

(10) a. Teyze-ler-im aunt-PL-1SG 'My aunts' b. Teyze-m-leraunt-1SG-PL'My aunt and her family / friends / associates'

I take this as evidence that the syntactic position in which the two plurals appear is different from one another. The additive plural and the associative plural each heads a different functional category. The additive plural specifies number (i.e. plural as opposed to singular or number-neutral) and heads the functional category, NUMP, (cf. Ritter 1991) and it is the locus of the number specification. I propose the following for the additive.

(11) Additive plural



The noun *teyze* starts under NP. The intermediate category, NUMP, hosts the additive plural marker which appears as the head of the phrase. Under the additive plural reading, the plural marker is adjacent to the noun and pluralizes the individuals denoted by the nominal. In (11), the noun first moves to NUM and combines with the plural marker. Then it moves up to D along with the plural. Note also that the semantic interpretation that the additive plural is different from that of the associative plural. The meaning of the additive plural in Turkish is shown in (12a).

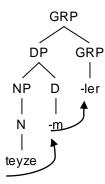
(12) a. [[-lAr]] = For any
$$A \subseteq U$$
, $PL(A) = *A - A$
b. [[teyze-ler]] = {a+b, a+c, b+c, a+b+c}

Following Chierchia (1998, 2003), I propose that (12a) is how the additive plural should be formally represented in the language. (12a) shows that the additive plural denotes sets of pluralities excluding singularities/atoms. (12b) shows that a plural noun like *teyze-ler* refers to pluralities of entities and its denotation does not include sets of singularities. Below I turn to the associative plural and discuss how it is different from the additive plural.

4.2 The Syntax and Semantics of Associative -lAr

As it was noted above the associative plural follows the possessive suffix in genitive constructions and the reading it yields is quite different from the one that the additive plural bears. I argue here that -lAr is not the head of the NUMP in this case. It seems that it must be the head of a different syntactic category with a different semantics. The associative plural gives rise to some sort of a group reading. I propose the following to illustrate the associative.

(13) Associative plural



Based on the descriptive analyses of -lAr being the marker of some sort of a *group* in Turkish (cf. Lewis, (1967), Sebüktekin (1971) and Göksel and Kerslake (2005)) and recent theoretical analyses where associative plurals are argued to share certain properties with plural pronouns (cf. Nakanishi and Ritter (2009) and Kratzer (2009)), I propose that the associative plural in Turkish heads a different functional category, namely, GRP. What is important here is that the associative plural does not pluralize the nominal it is attached to but gives rise to the *group* reading whose reference contains a *focal referent* and some other *individual(s)* associated with the focal referent. Following Nakanishi and Ritter (2009) and Kratzer (2009), I assume that the meaning of the associative plural in Turkish should be represented as in (14).

(14) [[-lAr]] =
$$\lambda x$$
: x is human. group(x)(c)

(14) basically states that the associative plural -lAr attaches to a noun (i.e. either a proper name or a kinship term in Turkish) and gives rise to a group that contains the referent and their associate(s) with respect to some context.

Note also that the meaning of the associative plural in (14) is quite different from the meaning of the additive plural in (12). Assuming that the analysis proposed here is on the right track, the interpretational differences discussed in the previous sections can be accounted for straightforwardly. The associative plural yields only the collective reading since the nominal marked with the associative plural marker refers to a group of entities that behave like a

group. On the other hand, the additive plural induces both the collective and the distributive reading in that the entities denoted by the nominal can refer to a group; however, this is not necessary. In the next section, I will analyze -lAr marked proper names and show how the analysis sketched here accounts for the reason why they can be interpreted differently when they combine with -lAr.

4.3 -lAr marking and proper names

It was shown above that when a proper name combines with -lAr is ambiguous between two readings. In other words, the plural marker yields both the associative and additive plural readings. This is illustrated in (15).

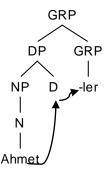
(15) Ahmet-ler

Ahmet-PL

- (i). 'Ahmet and her family / friends / associates' (Associative)
- (ii). 'Ahmets' (two or more people by the same name) (Additive)

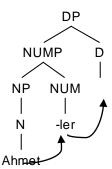
In (15) there is no possessive suffix that would otherwise specify the exact syntactic position of the plural marker in the structure. However, the reason for ambiguity can still be captured assuming that the plural marker is a different in each case. For instance, in (16) the proper name combines with the associative plural marker which in turn yields the group reading.

(16) Associative plural



With the associative plural, the proper name is interpreted as *Ahmet and his family / friends / associates*, depending on the context. I argue that the noun *Ahmet* is under NP. I assume that proper names are inherently referential and the noun first moves to D and then to GRP. The combination of the proper name and the associative -lAr yields the group reading. With the additive, the proper name starts as the head of the NP. It first moves up to the NUM which pluralizes the nominal. Then both move up to D. This is illustrated in (17).

(17) Additive



This analysis provides a straightforward account in which the reason why plural marked proper names are ambiguous is explained in a unified manner.

5 Conclusion

I have argued that there are two -lAr markers in Turkish, namely the additive and associative. The former is the regular plural marker which pluralizes nominals it attaches to. It appears with common nouns, kinship terms and proper names. On the other hand, the latter gives rise to a group reading in the sense that the nominal it appears with is interpreted as referring to a group with a focal referent. The associative plural only appears with kinship terms, proper names.

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