## Three Signs, One Common Trait: 'All'

A study on universal quantifiers in Turkish Sign Language Burcu Saral

In this study, I present my observations regarding three signs in Turkish Sign Language (TİD) that express universal quantification: (i) ALL\_1 is a straightforward universal quantifier; (ii) The function of ALL\_2 is less straightforward. I argue that it is a complex sign including the universal quantifier 'all' and a demonstrative plural pronoun, resulting in the meaning 'all these/those'; and (iii) ALL^SAME involves incorporation of ALL 2 and SAME.

**ALL\_1:** This is a two-handed sign. The dominant hand (DH) has the thumb finger-handshape and the non-dominant hand (NDH) has the flat-handshape. The DH moves on the palm of the NDH with a sweeping movement, as in Figure 1 below.

Figure 1. ALL\_1

<u>Distribution</u>: It can occur with both countable and uncountable nouns (1a), can occur after the noun it quantifies over (1a and 1b), can be used as a pronominal (2) and can take narrow scope with respect to negation, (4).

- (1) a. SOUP ALL\_1 EAT.
  'I ate all the soup.'

  b. STUDENT MANY(pl.) ALL\_1 COME.NOT.
  'Not all students came.'
- (2) ALL\_1 GLASSES (WEAR) NOT. SOMETIMES GLASSES HAVE. SOMETIMES GLASSES HAVE.NOT.

'Not all wear glasses. Some have glasses. Some does not have glasses.'

**ALL\_2:** This is a one-handed sign. The sign is articulated with the 5-handshape and an arc movement. The orientation of the hand is downwards, as shown in Figure 2 below.



Figure 2. ALL\_2

<u>Distribution:</u> Similar to ALL\_1, ALL\_2 can also come after the noun it quantifies over, (4), and can function as a pronominal.

However, it differs from ALL\_1 in many other respects. First, even though ALL\_1 is usually signed in central space, ALL\_2 frequently is signed pointing to the loci of the entities it quantifies over. Second, it can occur with <u>only</u> countable nouns, (2). Moreover, while when ALL\_1 is accompanied by mouthing, it is always the mouthing of the Turkish word meaning 'all', ALL\_2's mouthing changes between the mouthing of the Turkish word meaning 'all' and the mouthing of the Turkish plural suffix. However, since when signers are asked to translate ALL\_2 to Turkish, they translate it as *hepsi* 'all', I glossed it as ALL\_2. The mouthing and translation issues raise the question of what the true nature of ALL\_2. This complex sign contains the following morphemes:

- 1. A universal quantifier 'all':
  - a. ALL\_2 interacts with negation scopally as in the example below: STUDENT ALL\_2 COME NOT. UNIVERSITY ALL\_2 COME. HIGH SCHOOL ALL 2 COME NOT.

'Not all of the students came. University students came. High school students didn't come.'

If this were a simple plural marker, this utterance would be unacceptable.

2. (Demonstrative) Plural pronoun:

- a. ALL\_2 cannot cooccur with uncountable nouns as stated in the example below:
  - \*SOUP ALL 2 EAT.
  - 'I ate all the soup'

If this were a simple universal quantifier, this utterance would be acceptable.

- b. ALL\_2 cannot cooccur with 3rd person plural pronoun.
  - \*IX3<sub>pl</sub> ALL 2 LIST EXIST.

Intended meaning: 'All those are in the list'

If this were a simple universal quantifier, occurring with 3rd person plural pronoun would be acceptable.

ALL^SAME: This is one handed sign and involves incorporation. The handshape of the sign SAME and the movement of the sign ALL\_2 whose movement has an agreement with the entities' locations in the signing space are simultaneously combined. This is used when the entities quantified over have some features that they share are physically situated with respect to each other in a certain order such as in a line or forming a circle. As it is an incorporation, it is related with the semantic of 'same' and 'all' and gives the meaning 'All those are the same.'. For instance, when a signer is describing a picture where the entities are situated in a linear order and sharing some features, he/she signs ALL^SAME by moving it in a straight line and if the entities are situated in a circular order and sharing some features, then ALL^SAME is signed with a circular movement as in the example below:



'All women wear white dress, all those are the same...'

I show in this study that TİD has at least three ways of expressing universal quantification. ALL\_1 is a straightforward universal quantifier. However, ALL\_2 shows that a pointing sign can also include a universal quantifier meaning, which is through being a complex sign. Up to now, incorporation examples are related with numerals. However, ALL^SAME shows that a predicative adjective and a universal quantifier can form incorporation.