Transcription guide lines for Swedish Sign Language discourse

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1 Introduction

These guidelines are meant for transcription of discourse using the annotation tool ELAN (more about the tool can be found at [http://www.lat-mpi.eu/tools/elan/](http://www.lat-mpi.eu/tools/elan/)). Transcription is one part of the larger task of annotation, which also includes tagging and translation. The aim of the guide lines is to be of help to those transcribing sign language discourse as part of the project "Korpus för det svenska teckenspråket" (Corpus for the Swedish Sign Language), 2009–2011, which is financed by the Bank of Sweden Tercentennary Foundation. Transcription can also be done as part of sign language research or by students of sign language.

1.1 About the guide lines

The guide lines aim to ensure that we transcribe in a way that facilitates searching for (and retrieving) relevant data in ELAN. In ELAN transcriptions are linked to video sequences in real time. The search function is not limited to one signed discourse only, it is possible to search multiple files. When you search multiple files, it is essential that the different sign language discourses have been transcribed as consistently as possible.

These guide lines to transcription are based on the conventions described in Bergman, 1982: "Transkription av texter" in Teckenspråkstranskription (FOT-rapport X pp 27–35). The guidelines are also inspired by e.g. Sign language transcription conventions for the ECHO Project (Nonhebel et. al., 2004) and Auslan corpus annotation guidelines (Johnston & de Beuzeville, 2007).

The description of how to transcribe consists of tiers for the hands: Gloss_DH and Gloss_NonDH and their daughter tiers (cf. Fig. 1). There is also one tier for translation, and one for comments (cf. Fig. 2).

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1 These guide lines are an abridged, translated version of Wallin et. al. (2010)
When transcribing, we mainly look at what is happening in the discourse, which signs are used, what the non-dominant hand is doing, what is happening with the eyes, the head, or the body. We do not try to ascertain what functions, e.g. syntactic functions, this may have.

1.2 Where does a sign begin and end?

A discourse consists of a series of signs. Each sign has a beginning and an end. It is the beginning and end of each separate sign that decide the size of the so called cells. We therefore need to identify where each sign begins and ends. The time distance between the beginning and end of a sign can vary from a few to several thousandths of a second. The size of cells will therefore vary accordingly. In a similar way the time distance between the end of one sign and the beginning of the next sign may differ. Sometimes two cells may be close to each other, sometimes there will be more of a distance between them. The movement produced by the hand/s between two signs is called transition movement. This kind of movement should not be transcribed, thus no cells are created for it.

How do we decide where a sign begins and ends? This is mainly seen in the articulation, when the articulator begins and ends the movement. The beginning is when the articulator is in position to begin the articulation, and the sign ends when the articulation has been completed and the articulator begins to move into position to articulate the next sign.

The cell for a sign should consist of the first frame or one frame before the articulator is in position to begin the articulation, lasting to the last frame, or one frame after, the articulation has been completed and the hand is moving towards the position where the next sign begins.

1.3 Two signs in one cell or in two cells?

There are at least two situations when you need to consider how many cells should be created. One concerns whether two signs have merged into one single sign or not. A typical example where two signs have merged is a sign which means to look like. In Swedish Sign Language this is a loan from Swedish: ‘se ut’ (literally see and out): consisting of the signs for see SE and out UT. In the first sign (SE) the articulation is reduced to nothing, and only the placement of the articulator at the nose remains. Articulation for the next sign (UT) starts directly after the articulator for the first sign is in position at the nose, i.e. there is no transition movement. For such instances the two signs are transcribed in one (1) cell and transcribed SE^UT in that cell (cf. Fig. 3). Should, however, the sign SE be produced with articulation forward, the sign is transcribed in a cell of its own, and the next sign (UT) in another cell. Similar combinations are e.g. HAR^INTE (have not) and TV^PROGRAM (TV program).

The other situation concerns loan translations of Swedish compounds, i.e. Swedish words which in turn consist of two or more words, e.g. ‘landsväg’, which is a compound of ‘land’ (country) and ‘väg’ (road) which means main road. This may not always be produced as
one merged sign, but sometimes as two signs with a transition movement between them, i.e. LAND and VÅG. If this is the case, each sign is transcribed in a cell of its own (cf. Fig. 4).

Figure 3: One cell.

Figure 4: Two cells.

2 Tier names for the hands

2.1 Gloss_DH and Gloss_NonDH

Signs are mainly glossed on the tier Gloss_DH, though there are some cases when the tier Gloss_NonDH should be used. DH stands for the dominant hand, and NonDH for the non-dominant hand. For a right handed signer the right hand is the dominant hand and the left hand the non-dominant. For a left handed signer the left hand is the dominant hand and the right hand the non-dominant.

If we begin with a one handed sign like SÅG (see) it is usually produced with the dominant hand, i.e. the right hand for a right handed signer or the left hand for a left handed signer. In both cases SÅG is entered on the tier Gloss_DH (cf. Fig. 5 and 6). The same is

2 Photoillustrations are from one of the following sources: corpus material (Mesch, 2010), ECHO-material (Bergman & Mesch, 2004) or teaching materials from the Department of Linguistics, Stockholm University.

3 There are some signers who are neither predominantly right handed nor left handed. For such signers it is still necessary to decide whether to transcribe them as being right handed or left handed.
true for the two handed sign SITTA (sit) where one hand acts on the other hand, which is thus a manual place of articulation. For such signs the dominant hand usually acts on the other hand, i.e. the right hand of a right handed signer or the left hand of a left handed signer acts. In both cases SITTA is entered on the tier Gloss_DH (cf. Figures 7 and 8)

Figure 5: Right handed signer producing SÅG (see).

Figure 6: Left handed signer producing SÅG (see).

Figure 7: Right handed signer producing SITTA (sit).

Figure 8: Left handed signer producing SITTA (sit).

Signs like AKTIV (active) and FINEMANG (great), which are produced with a double articulator are entered on the tier Gloss_DH (cf. Figures 9 and 10), regardless of whether the signer is right handed or left handed.
Sometimes, a right handed signer may switch dominance, meaning that the signer will produce a sign with his/her left hand, i.e. the non-dominant hand, instead of the dominant right hand. The same is true for a left handed signer, who may switch dominance and use his/her right hand, i.e. the non-dominant hand, instead of the dominant left hand. For such instances, when the signer switches hands, the gloss is entered on the tier Gloss_NonDH (cf. Figures 11 and 12).

For instances where the non-dominant hand acts and the dominant hand “rests”, we still need to create a cell for the dominant hand, and enter 'Ø' as in Figures 11 and 12. We thus always create a cell for the dominant hand, even when it is resting and the non-dominant

* (p-) means 'polysyntetiskt tecken' i.e. polysynthetic sign.
hand acts. For the non-dominant hand, however, cells are only created when it is producing a sign independently.\(^5\)

When both hands produce one sign each, and this movement overlaps, the two signs are transcribed on one tier each, as can be seen in Figures 13 and 14.

![Figure 13: The dominant hand producing PEK-TVÅ (INDEX-TWO) and the non-dominant producing TVÅ-LISTA (TWO-LIST).](image1)

![Figure 14: The dominant hand producing the sign NOLL (ZERO), followed by EN (ONE) and the non-dominant hand producing NOLL (ZERO) followed by EN^TVÅ (ONE^TWO).](image2)

Thus, signs produced with the dominant hand are transcribed on the tier Gloss_DH and signs produced with the non-dominant hand are transcribed on the tier Gloss_NonDH.

### 2.2 DHs_other_hand

The tier DH’s_other_hand is a daughter tier\(^6\) of Gloss_DH. On that tier information regarding the status or function of the other hand is entered. There are two possible values for this tier: manual location (ml) (i.e. place of articulation) and double articulator (da) (see Figure 15).

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\(^5\) This is done to facilitate searching and finding all signs by searching only one tier.

\(^6\) Annotations in a daughter tier are linked to annotations in a parent tier (Bickford, 2005).
When a sign is produced with both hands, and the other hand is a manual location, the gloss of the sign, e.g. SÄKERT (certain) is entered on the parent tier, and 'ml' is entered on the daughter tier. For a two handed sign like BETYDA (mean) where both hands are articulators, the function of the other hand is 'da'.

2.3 NonDHs_other_hand

The tier NonDHs_other_hand is a daughter tier of the tier Gloss_NonDH. It may seem an unnecessary tier as much of this information can be found on the tier DHs_other_hand. There is, however, one instance when an annotation has to be made on this tier. This is when a person reverses the roles of the hands and produces a two-handed sign with a manual place of articulation, and that place of articulation is the signer’s dominant hand (cf. Figure 16).
2.4 Comment_DH and Comment_NonDH

On the tier Comment_DH information that can not be noted on the tier DHs_other_hand can be entered. Two examples of such information are found in Figures 17 and 18.

Should you be unsure regarding your transcription it is wise to note what you are unsure about on the tier Comment_DH. If the uncertainty mainly regards the non-dominant hand, the comment should be entered on the tier Comment_NonDH.

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\[7\] This signer is actually neither right handed nor left handed. For this annotation we have chosen to transcribe as if he were right handed.
3 Other tiers

3.1 The tier for comments

On the tier for comments various kinds of comments that can not be entered on the other tiers can be written. This may be comments regarding how to translate something, as in Figure 19, or a comment that somebody is signing particularly fast, etc.
3.2 The translation tier

On the translation tier a translation into Swedish is entered. The signed discourse is divided into chunks of suitable size and the translation is entered as can be seen in Figure 20.

Figure 20: The translation tier.
4 References


