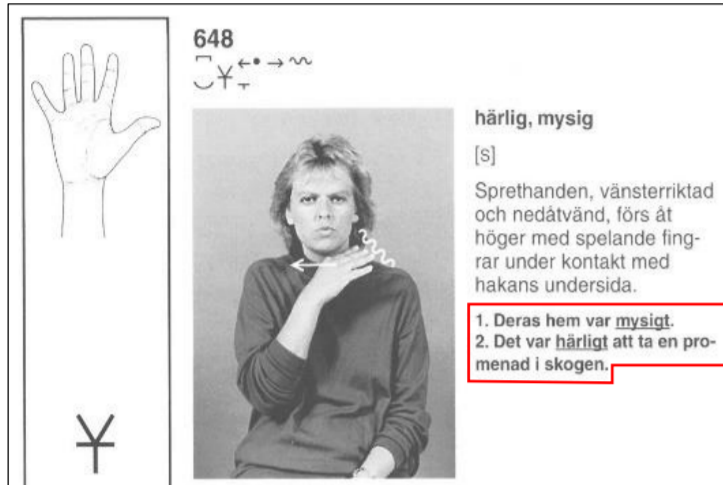# Constructed Sign Sentences in Swedish Sign Language Dictionary

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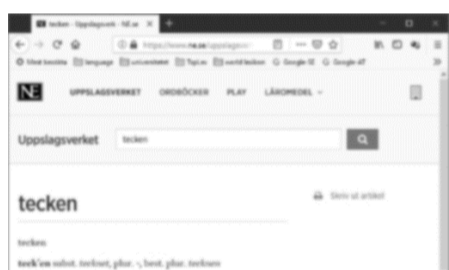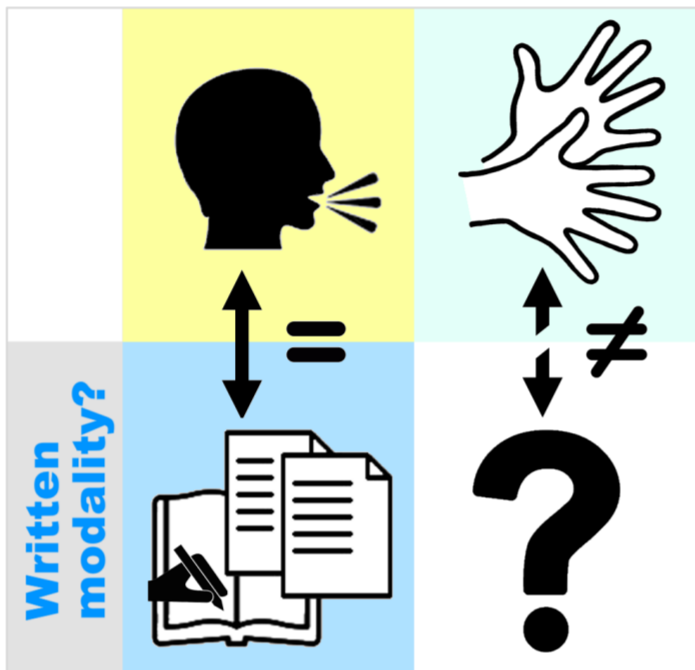
Department of Linguistics

1. Introduction

We are using constructed sign sentences in our Swedish Sign Language Dictionary, Svenskt teckenspråkslexikon (STSL), the main lexical database for SSL since 2008. We want to document our system and create for constructed sign sentences. Since the project STSL started, has just now 18,633 entries and 4,561 sentence examples.

2. Problem formulation

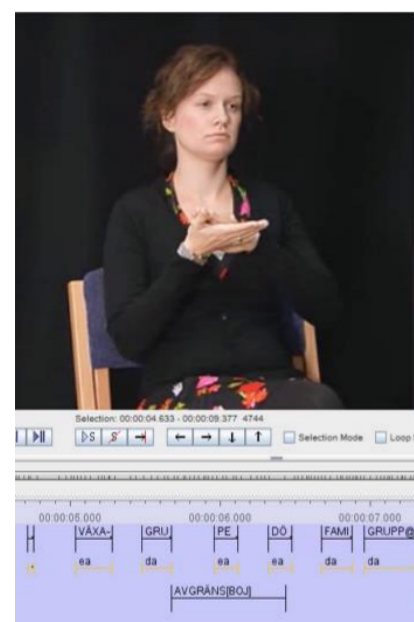Spoken languages have a written form. In sign language it is more complex. →

←How to construct a sign language sentence?

← Content of a constructed sentence. How it looks in the Swedish Sign Language Dictionary.
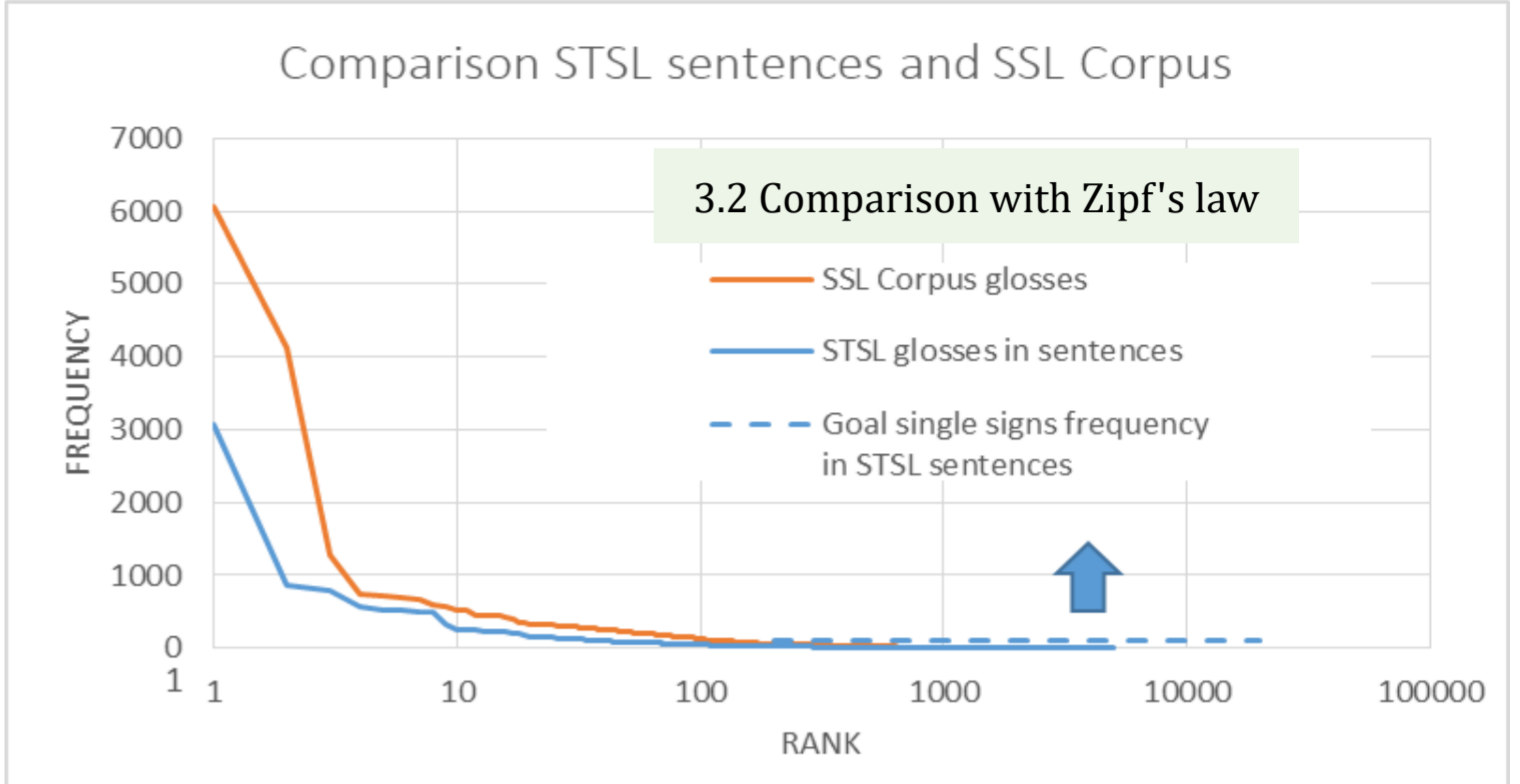
3. Analysis

Corpus (selection):
- More advanced (harder for beginners).
- Signing is too quick
- difficult to follow and understand

Dictionary (sample):
+ "Clear"
+ "Easy to understand"
+ "Simple sentences"

3.1. Corpus and lexicon from student perspective

Comparison STSL sentences and SSL Corpus

3.2 Comparison with Zipf's law

— SSL Corpus glosses
— STSL glosses in sentences
---- Goal single signs frequency in STSL sentences

SSL Corpus glosses (2018-11, 93 000 token, 4 900 types)
STSL glosses in sentences (2019-04, 36 000 token, 5 000 types)
Goal for STSL (min 1 up to 4 per sign post, approx. 18 000 types)

4. Result - production

SYSTER	(4)	POSS-1 SYSTER DÖV PRO-3
		Min syster är döv.
		My sister is deaf.

4.2. Gloss system

DÖV	(4)	PRO-1 DÖV
		Jag är döv.
		I am deaf.

PAPPA	(2)	POSS-1 PAPPA DÖV PRO-3 HA SYSTER
		Min pappa som är döv har syster.
		My dad who is deaf has a sister.

PRO-1	(2)	POSS-1 PAPPA POSS-1 SYSTER PRO-1 DÖV
		Min pappa, min syster och jag är döv.
		My dad, my sister and I are deaf.

POSS-1	(5)	HA*SE POSS-1 SYSTER
		Har du sett min syster?
		Have you seen my sister?

4.1. List of possible criteria

Criteria for the creation of constructed sign sentences and content of examples:
- complete and contextless sentences
- adapted pace and slow motion
- linguistic representativness
- Follows SSL syntax / sentence structure
- neutral informant
- broad domain / subject
- education oriented
- different types of batch
- Maximum 16 signs

SYNS(Vb)	FOSFOR(H)	REGN(55b)	HYFF(J)	TA-MED(5+uppv)	PARAPLY(G+G)
04357	17265	01720	00112	07789	02055

Det ser ut som om det ska regna så ta för säkerhets skull med ett paraply.

SYNS(Vb) FOSFOR(H) REGN(55b) HYFF(J) TA-MED(5+uppv) PARAPLY(G+G)
04357 17265 01720 00112 07789 02055

5. Conclusion

1. Criteria – for high quality of understanding
2. Many single signs can appears in several example sign sentences
3. ID system is a simple solution to link single signs with many examples