

Using corpus data for teaching purposes

Johanna Mesch, Anna-Lena Nilsson, Lars Wallin & Joel Bäckström Department of Linguistics, Sign Language Section, Stockholm University

> Sign Linguistics Corpora Network Workshop 4: Exploitation Berlin, December 3, 2010



Introduction

- Exploiting material collected for sign language corpora; use it for
 - lexicographic work
 - research
 - deaf education
 - non-academic training purposes
 - our own teaching purposes

Dec 3, 2010 / Mesch, Nilsson, Wallin & Bäckström



During or after building the corpus?

- Using corpus data for teaching while the corpus is still under construction means students can give feedback on
 - how well suited the glosses are
 - search problems they encounter
 - what type of discourse is best suited for teaching
- It also gives teachers access to teaching materials

Dec 3, 2010 / Mesch, Nilsson, Wallin & Bäckström



Plans from the LREC workshop 2008

- Try to work with annotations and discuss results and problems with students
- Use ELAN for courses in Sign Language for beginners
- Work with a larger corpus
- Expand the use of ELAN beyond research also to Sign Language instruction and learning

Dec 3, 2010 / Mesch, Nilsson, Wallin & Bäckström



Plans from the LREC workshop 2008

- Try to work with annotations and discuss results and problems with students
- Use ELAN for courses in Sign Language for beginners
- Work with a larger corpus
- Expand the use of ELAN beyond research also to Sign Language instruction and learning





OK

ОК

Dec 3, 2010 / Mesch, Nilsson, Wallin & Bäckström



Planning a pedagogical corpus

- We also offer courses in Swedish Sign Language for beginners
- Large need for adapted materials for these courses
- We are now producing materials especially suited for beginners, and are planning to include this material in a "pedagogical corpus".



Support for students

- We will also use the corpus material for students' essays (BA & MA level).
- Using corpus material students will not have to spend a lot of time filming, getting permissions to use the material, annotate and gloss the material, etc.
- They will "only" have to analyze the chosen material in accordance with their research questions.

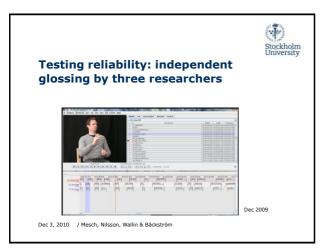
Dec 3, 2010 / Mesch, Nilsson, Wallin & Bäckström

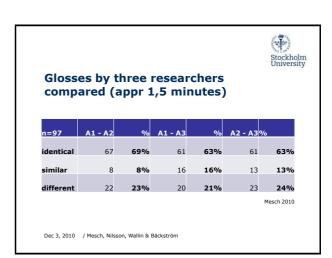


Support for teachers

- Teachers can search the corpus for usage examples of the kind of structure that a particular lecture will present
- Ready made, glossed examples to show as a complement to printed materials
- Film clips given to students for assignments and as parts of exam questions

Dec 3, 2010 / Mesch, Nilsson, Wallin & Bäckström





Stockholm University

Results

- Average different = 22%
- More unified transcription conventions needed for glossing
 - currently preparing glossing conventions
- Will make unified search of annotations in ELAN possible in the corpus





Swedish Sign Language Linguistics

Sign Language I

- Form and meaning of signs
 - Annotate gloss, receive teacher's version
 - Merge tiers to discuss them
- Exams
 - See Sign Language II



Dec 3, 2010 / Mesch, Nilsson, Wallin & Bäckström



Example: NPs

- Studying the structure of noun phrases (NPs) in Swedish Sign Language, students can look for NPs in a film clip, then send in their annotation files
- The teacher merges files, adding his/her own suggestions and comments
- · Discuss in group

Dec 3, 2010 / Mesch, Nilsson, Wallin & Bäckström

Swedish Sign Language Linguistics

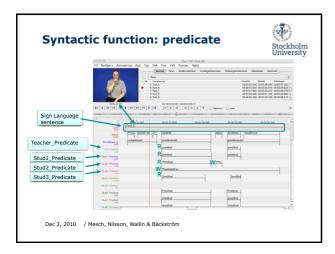


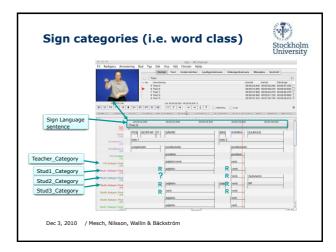
Sign Language II

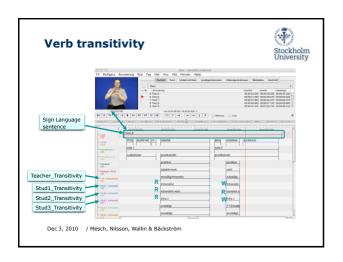
- Sign Language Grammar
- Annotated material, eg. ECHO fable material
 - Expanded set of tiers with sentence markers, sentence types, negation, NP etc.
 - Merge tiers of 5-10 students
- Discuss with students
- Exams
 - Film clips from corpus material (and some other materials)
 - Analyze and answer according to exam questions
 - Reply with Word and/or eaf-files

Dec 3, 2010 / Mesch, Nilsson, Wallin & Bäckström

Structure of sentences Stockholm University The began Annexes for 175 Stockholm University Sign Language sentence Teacher Constituent Stud Constituent







Learners of Swedish Sign Language



- ELAN a good tool for language learning
- They understand vocabulary and grammar better
- Glossed examples in the ordinary corpus material can be shown during lectures
- Specific "pedagogical" corpus materia constructed for them
- Their own production can be marked and commented in ELAN
- Average 25 students for a first semester course.
 Have to plan teaching well tiers for 25 students not a good idea

Dec 3, 2010 / Mesch, Nilsson, Wallin & Bäckström

Learners of Swedish Sign Language



- ELAN a good tool for language learning
- They understand vocabulary and grammar better
- Glossed examples in the ordinary corpus material can be shown during lectures
- Specific "pedagogical" corpus material constructed for them
- Their own production can be marked and commented in ELAN
- Average 25 students for a first semester course.
 Have to plan teaching well tiers for 25 students not a good idea

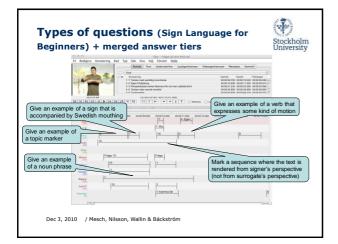
Dec 3, 2010 / Mesch, Nilsson, Wallin & Bäckström

Types of questions (Sign Language for Beginners) + merged answer tiers





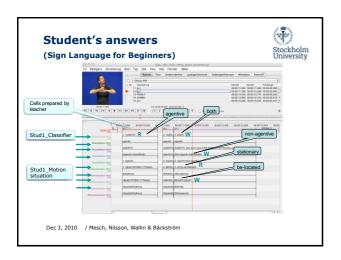
Dec 3, 2010 / Mesch, Nilsson, Wallin & Bäckström



Example: "classifier signs"



- Marked with empty annotation cells
- Students fill in e.g. 'agentive classifier'
- Easy for the teacher to see what students have and have not understood

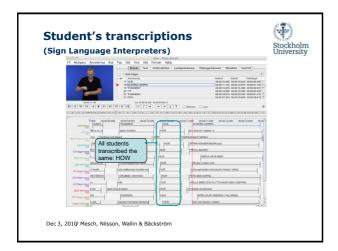


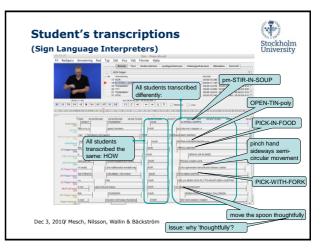


Continuous professional education for interpreters

- Introduction to ELAN
 - can later be used to analyze own interpreting
- Gloss and annotate signed discourse + describe in Word-document
 - different discourse types
 - also dialogue material to analyze feed-back signals
 - interpreted material to compare source and target
- Students send eaf files to teacher merged tiers for discussion

Dec 3, 2010 / Mesch, Nilsson, Wallin & Bäckström







Two main questions

- Selection and nature of glosses for signs
 - pointing signs
 - compounds or not?
 - glossing the non-dominant hand
- The duration of a glossed annotation, i.e. where a sign begins and ends

Dec 3, 2010 / Mesch, Nilsson, Wallin & Bäckström

References



- Bergman, B. & Mesch, J. (2004). ECHO data set for Swedish Sign Language (SSL). Department of Linguistics, Stockholm University.
 [http://www.let.ru.nl/sign-lang/echo/]
 Mesch, J. (2009). Att anwhad ELAN: Bruksanvisning för annotering och studie av teckenspråkstexter. Avdelningen för teckenspråk, Stockholms universitet
- teckenspräkstexter. Avdelningen för teckenspräk, Stockholms universitet Mesch, J. (2010). Vilttomien glossit ja allilliset pituudet: annotionitityöskentelyyn liittyviä kysymyksiä [The glosses and temporal durations of signs questions relating to sign language annotation]. In Jantunen, T. (Ed.) Näkökulmia vilttomason [Perspectives on sign and lexicon. The Centre of Applied Language Studies, in series 'Theory and practice in applied linguistics'. Jyväskylä. University of Jyväskylä. Mesch, J. & Wallin, L. (2008). Use of Sign Language Materials in Teaching. Paper presented at the Third Workshop on the Representation and Processing of Sign Languages, 6th Language Resources and Evaluation Conference (LREC), Marrakech, Morocco, June 1st 2008. www.lrec-conf.org/proceedings/lrec2008/Wallin, L., Mesch, J. & Nilsson, A-L. (2010). Transkriptionskonventioner för

- nanoakeun, muoucu, June 1st zuus. www.irec-cont.org/proceedings/irec2008/ Wallin, L., Mesch, J. & Nilsson, A-L. (2010). Transkriptionskonventioner för teckenspräkstexter. Version 2. Institutionen för lingvistik, Stockholms universitet Wallin, L., Mesch, J. & Nilsson, A-L. (2010). Transcription conventions for signed discourse. Abridged English version. Department of Linguistics, Stockholm University.

