



# **Applying English frames to Swedish: different conditions for multilingual framesets and constructions**

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# Outline

- MLFN pilot project: TED talk annotation for Swedish
- Relations between constructions and frames revisited
- Linking constructions/constructicons across languages



## MLFN pilot project

- Part of the Multilingual FrameNet Infrastructure project, coordinated at ICSI, Berkeley (and FrameNet Brasil)
- Full-text annotation of the "same" text in different languages
  - Strictly adhering to English FrameNet frames
  - Testing their applicability into other languages, carefully noting all problems encountered
  - Using results as guidelines for further development towards a multilingual FrameNet infrastructure
- Text 1: TED talk in English and its translations into other languages
  - Swedish translation unfortunately not very good



# MLFN in Språkbanken (Swedish Language Bank)

- Supporting resources
  - *Korp* (corpus infrastructure), 200+ corpora
  - *Sparv*: automatic annotation of POS, MSD, dependency, lemgram, word sense, etc.
  - The Swedish FrameNet (SweFN, about 1,200 Frames and 40,000 LUs)
  - The SALDO lexicon (and 20+ other lexical resources in *Karp*)
- Pre-processing
  - SweFN and SALDO incorporated
  - pre-annotation in SPARV, could not be imported



## Swedish MLFN annotation so far

- Partially complete, about 90% OK
  - suggested mapping correct: 50%
  - suggested mapping wrong, but correct mapping available: 20%
  - "no match" but correct mapping available: 20%
- Success factors
  - English and Swedish similar
  - Translationese
  - FN frames well suited for cross-linguistic application (?)
- Non mappings (10%)
  - incorrect translations
  - no suitable frame available



# Translationese

- I've been blown away by the whole thing.
- Jag är som bortblåst av det hela.
- And it indicates the whole structure of education is shifting beneath our feet.
- och detta indikerar att utbildnings hela struktur förändras under våra fötter.
- Have you heard of her? Some have [Ø].
- Har ni hört talas om henne? Några har [Ø].

# Missing frames: greetings and tag questions

- Greetings, e.g. ‘how are you?’
  - *Attention\_getting* is close, but doesn’t really fit
  - Possible solution: a new frame, e.g. *Greeting?*
  - Another option: a *Greeting* construction (not always an obvious instantiating LU)
- Tag questions, e.g. ‘isn’t it?’, ‘don’t you think?’, ‘don’t you?’
  - Partially schematic in English (e.g. *be* NEG Pn, *be* Pn, *do* NEG Pn); lexically fixed in Swedish (*eller hur*, *inte sant*).
  - A frame solution less attractive in this case?
  - Would a *Tag\_question* construction be a better solution?



# Relating constructions and frames revisited

- Frames suggested as a means to relate cxns across languages
- However, some cxns evoke frames and some do not
  - No corresponding frame **yet** or not a frame-like meaning?
- What does it mean to ‘evoke’ a frame?
  - LUs like *order*, *command* etc. evoke the Request frame
  - *Imperative* cxns allegedly used to *perform* requests rather than evoke them
- Frames only cover parts of the constructional meaning/function
- Frames are about meaning, cxns about both form and meaning/function





# Relating constructions and frames revisited

- FrameNet frames insufficient to account for cxns and, hence, to relate cxns across languages
  - at least currently and by themselves

Options:

- Other kinds of frames? (cf. Ohara 2018, pragmatic frames)
- Other kinds of cxn-to-frame relations? (cf. Lyngfelt et al. 2018)
- Relating cxns across languages by other means than frames?



# Sorting cxns in the Swedish constructicon

- Grammatical category: VP, N, S, XP, etc.
- Type
  - meaning/function/domain: contrast, comparison, time expression
  - overall structure: coordination, compound
  - construction element: reflexive, verb particle, implicit elements, reduplication
  - morphosyntax: passive, deponent, reciprocal
  - other: genre-specific, L2 relevant, interaction, polarity etc.
  - type system still under construction
- Keywords (cf. CEEs, lexically specific CEs)
- Common words (frequent slot fillers, cf. collostructional elements)
- Frame
- Features may be combined

# Relating cxns/ccns across languages

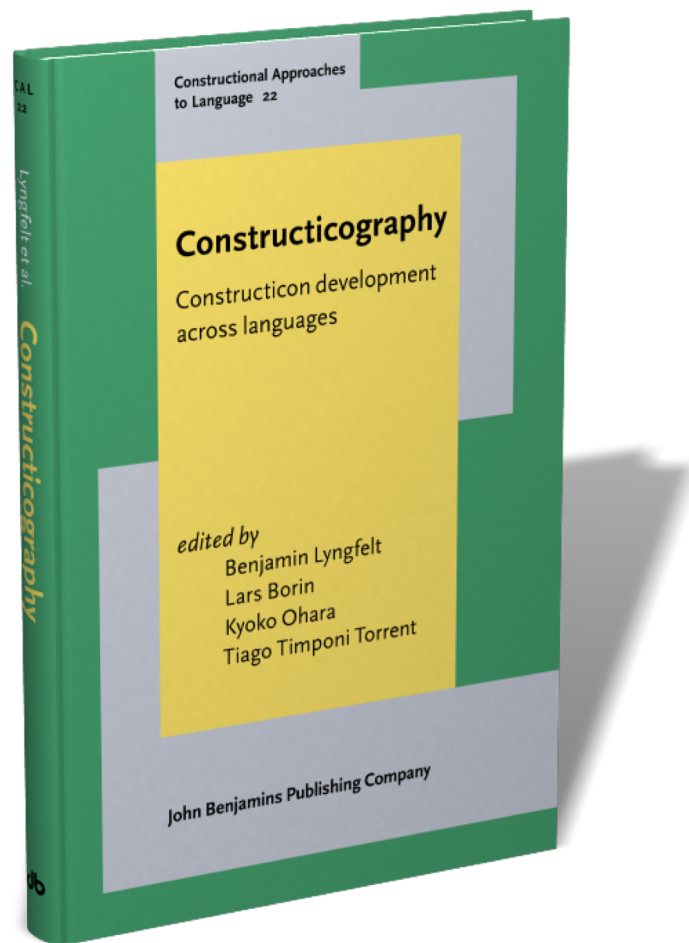
- Linking
  - pairwise matching (cf. Lyngfelt, Torrent et al. 2018)
    - time consuming, not always one-to-one mapping, directionality problem)
  - grouping by property (frame, category, function, other)
    - different properties relevant for different cxns and different purposes
    - depends on cross-linguistically applicable definitions
  - combination of features
    - stronger case when more properties coincide
    - more flexible approach that can be adapted to the relevant situation (either by the system or by the user)
- Representation
  - translation of structures requires common metalanguage
  - Universal Dependencies?

# On grouping constructions by flexible combinations of types/features

- No single feature always relevant
  - Depends on the constructions, as well as the purpose of the user
- Cross-linguistic applicability
  - comparative concepts (in the language typology sense, cf. Croft, Haspelmath)
  - requires collaboration
- Relation to FrameNet
  - types/categories vs. relations (Inheritance etc., cf. FrameGrapher)
  - functional/semantic types  $\approx$  frames (comparison, motion, etc.)?
  - relations like Inheritance can't handle all groupings in a construction, since there's not always a superordinate construction



**Thank you!**



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