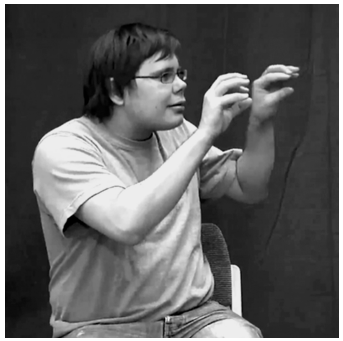
'Högre seminar', Department of Linguistics, Stokcholm University, January 26, 2017

What does *constructed action* tell us about the nature of syntax in sign languages?

Tommi Jantunen, Sign Language Centre, University of Jyväskylä, Finland

Constructed action (CA) – definition

- 'A form of gestural enactment in which the signers and speakers use their hands, face and the other parts of the body to literally show the actions, thoughts or feelings of someone they are referring to in the discourse.'



CORMIER, K., Smith, S. & Zwets, M. (2013). Framing constructed action in British Sign Language narratives. *Journal of Pragmatics* 55:119-139. – **ENFIELD**, N. (2009). *The anatomy of meaning: Speech, gesture, and composite utterances*. Cambridge: Cambridge University Press. – **FERRARA**, L. & Johnston, T. (2014). Elaborating who's what: A study of constructed action and clause structure in Auslan (Australian Sign Language). *Australian Journal of Linguistics* 34:193–215. – **HODGE**, G. & Ferrara, L. (2013). Showing the story: Enactment as performance in Auslan narratives. In L. Gawne & J. Vaughan (eds.), *Selected Papers from the 44th Conference of the Australian Linguistic Society*, 372–397. Melbourne: University of Melbourne. – **JANTUNEN**, T. (2016). Constructed action, the clause and the nature of syntax in Finnish Sign Language. Manuscript submitted for publication, November 2016. – **LADEWIG**, S. (2014). Creating multimodal utterances: The linear integration of gestures into speech. In Müller, Cienki, Fricke, Ladewig, McNeill, & Bressem (eds.), *Body–Language–Communication,* 1662–1677. Berlin: De Gruyter. – **LIDDELL**, S.K. & Metzger, M. (1998). Gesture in sign language discourse. *Journal of Pragmatics* 30:657–697.

Some recent corpus-based findings on CA in SLs

- CA is relatively frequent in SL narratives.
- CA occurs both simultaneously with and sequentially to clauses.
- Within clauses, CA may function as a constitutional unit (e.g. predicate, argument).
- CA can affect the surrounding grammatical structure (e.g. motivate ellipsis).
- CA has been shown to increase the cohesion of discourse.
- CA is not a holistic phenomenon, but has sub-categories based on the number and composition of articulators.

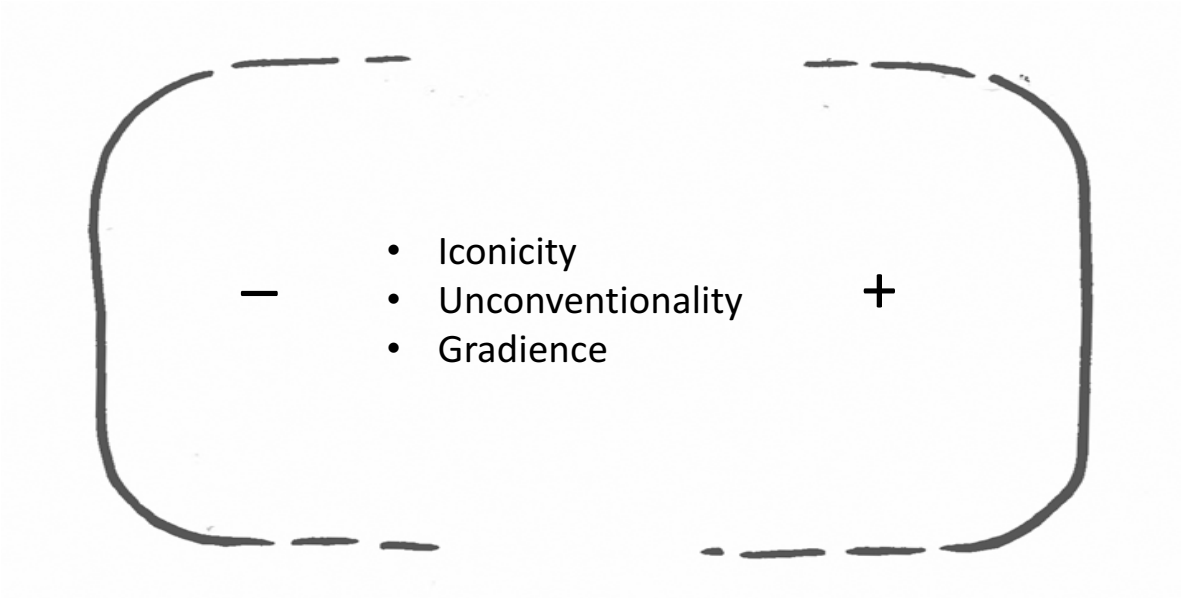
CORMIER, K., Smith, S. & Zwets, M. (2013). Framing constructed action in British Sign Language narratives. *Journal of Pragmatics* 55:119–139. – **CORMIER**, K., Smith, S., & Sevcikova, Z. (2015). Rethinking constructed action. *Sign Language & Linguistics* 18:167–204. – **FERRARA**, L. & Johnston, T. (2014). Elaborating who's what: A study of constructed action and clause structure in Auslan (Australian Sign Language). *Australian Journal of Linguistics* 34:193–215. – **HODGE**, G. & Ferrara, L. (2013). Showing the story: Enactment as performance in Auslan narratives. In L. Gawne & J. Vaughan (eds.), *Selected Papers from the 44th Conference of the Australian Linguistic Society*, 372–397. – **JANTUNEN**, T. (2017). Elliptical phenomena in Finnish Sign Language. To appear in J. van Craenenbroeck & T. Temmerman (eds.), *The Oxford Handbook of Ellipsis*, in preparation for publication with OUP.

Gesture

- Something 'paralinguistic'.
- Holistically expressive manual actions that are direct manifestations of mental images.
- **"...any sort of expression in signing [or in speech] that can't be analysed in discrete, categorial terms."**

KENDON, A. (2008). Some reflections on the relationship between 'gesture' and 'sign'. *Gesture* 8:3, 348–366. – **LIDDELL**, S. K. (2003). *Grammar, gesture, and meaning in ASL*. Cambridge: Cambridge University Press. – **MCNEILL**, D. (1992). *Hand and mind: What gestures reveal about thought*. Chicago: University of Chicago Press. – **OKRENT**, A. (2002). A modality-free notion of gesture and how it can help us with the morpheme vs. gesture question in sign language linguistics (or at least give us some criteria to work with). In Richard P. Meier, Kearsy Cormier & David Quinto-Pozos (eds.), *Modality and structure in signed and spoken languages*, 175-198. Cambridge: Cambridge University Press.

Gesture IN language



KENDON, A. (2004). *Gesture: Visible action as utterance*. Cambridge: Cambridge University Press. – **MCNEILL**, D. (1992). *Hand and mind: What gestures reveal about thought*. Chicago: University of Chicago Press. – **OKRENT**, A. (2002). A modality-free notion of gesture and how it can help us with the morpheme vs. gesture question in sign language linguistics (or at least give us some criteria to work with). In Richard P. Meier, Kearsy Cormier & David Quinto-Pozos (eds.), *Modality and structure in signed and spoken languages*, 175-198. Cambridge: Cambridge University Press.

Kendon's continuum

Dimension 1: relationship to speech
Dimension 2: relationship to linguistic properties, e.g. morphological & syntactic categories
(linguistic properties absent) (linguistic properties present)

Gesticulation – Pantomimes – Emblems – Sign languages

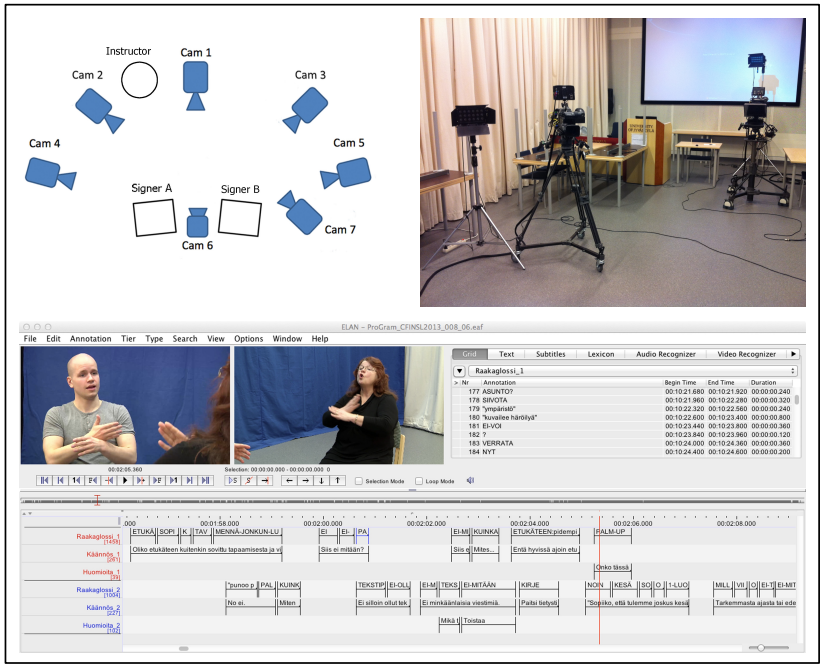
(not conventionalized) (fully conventionalized)
Dimension 3: relationship to conventions
Dimension 4: character of the semiosis

KENDON, A. (2004). *Gesture: Visible action as utterance*. Cambridge: Cambridge University Press. – **MCNEILL**, D. (1992). *Hand and mind: What gestures reveal about thought*. Chicago: University of Chicago Press. – **McNEIL**, D. (2000). *Language and gesture*. Cambridge: Cambridge University Press.

Questions to be addressed in this talk

1. How the internal structure, type of clause-level linkage and nonmanual activity of the (FinSL) clause manifest themselves when signers narrate with CA and without it?
2. How should we conceptualize the syntax of (sign) languages?

Towards the corpus of Finland's sign languages (CFINSL)



Video material

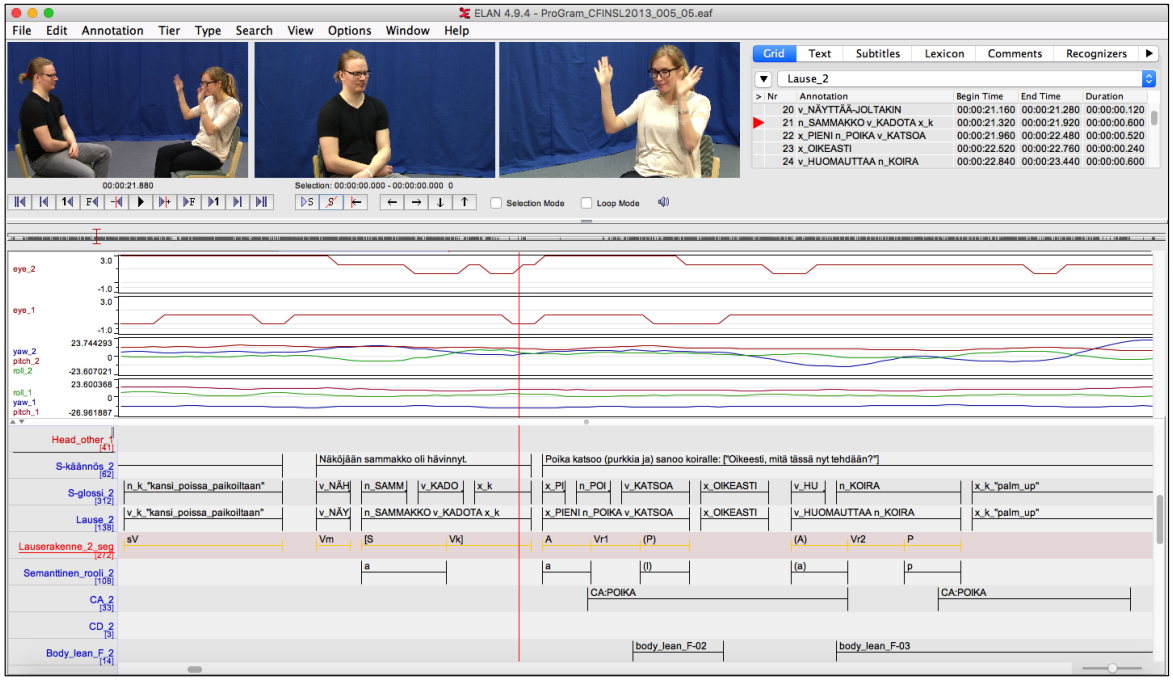
- Recordings @ JyU studio since the beginning of 2013.
- 6 camera-angles, Full HD quality.
- So far recorded 60 signers (ca. 60 hours).
- Each signer participates in 6–7 linguistic tasks.
- The objective is to record data from 100 signers.

Annotation in ELAN

- Signs and Finnish translations.
- So far completed <10%.
- Lemmatization in FinSL Signbank online database.
- The objective is to enable versatile searches.

SALONEN, J., Takkinen, R., Puupponen, A., Nieminen, H. & Pippuri, O. (2016). Creating Corpora of Finland´s Sign Languages. In E. Efthimiou, F. Stavroula-Evita, T. Hanke, J. Hochgesang, J. Kristoffersen & J. Mesch (Eds.), *Proceedings of the 7th Workshop on the Representation and Processing of Sign Languages: Corpus Mining*. Paris: European Language Resources Association (ELRA), pp. 179-184.

Multidimensional annotation and SLMotion processing (ProGram)

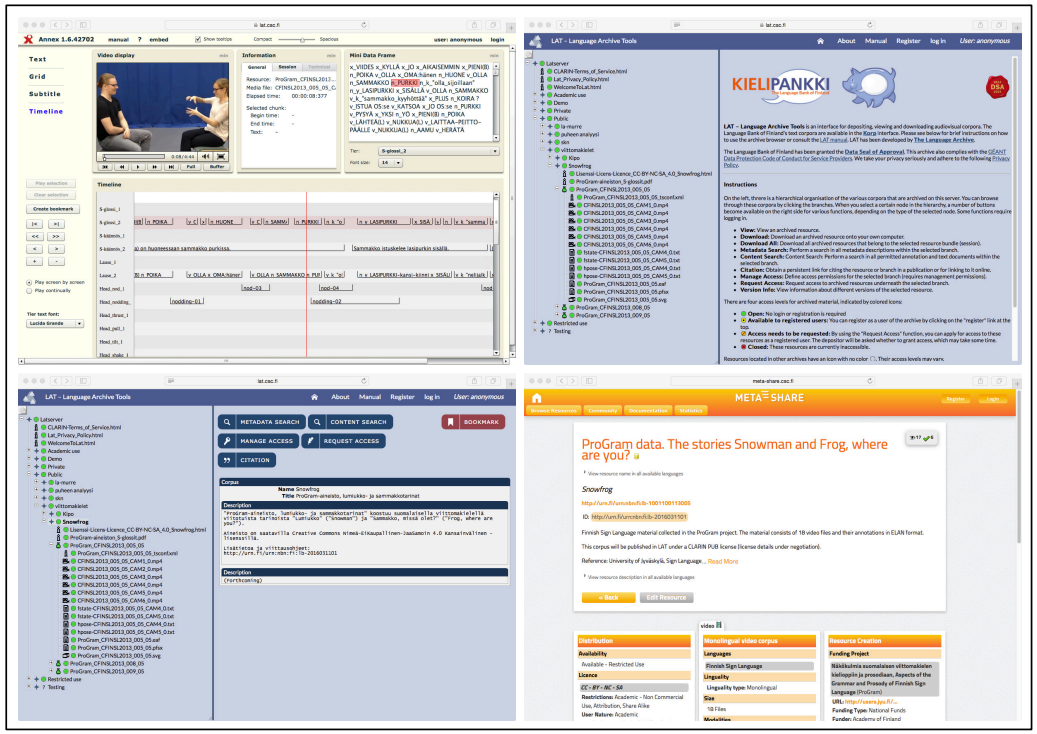


Basic facts

- *Snowman* and *Frog, where are you?*
- Altogether 45 minutes, 12 signers
- ELAN annotation
  - Signs & their categories
  - Sentence-level translations
  - Clauses
  - Clause structure (for 10 signers)
  - Semantic roles (for 10 signers)
  - Constructed action & dialogue (for *Frog, where are you?* only; 6 signers)
  - Head movement types
  - Body movement types
- SLMotion processing
  - Movement of the head
  - Eye aperture
  - Mouth aperture

JANTUNEN, T., Pippuri, O., Wainio, T., Puupponen, A. & Laaksonen, J. (2016). Annotated video corpus of FinSL with Kinect and computer-vision data. In E. Efthimiou, F. Stavroula-Evita, T. Hanke, J. Hochgesang, J. Kristoffersen & J. Mesch (Eds.), *Proceedings of the 7th Workshop on the Representation and Processing of Sign Languages: Corpus Mining*. Paris: European Language Resources Association (ELRA), pp. 93-100. – **KARPPA**, M., Viitaniemi, V., Luzardo, M., Laaksonen, J. & Jantunen, T. (2014). SLMotion - An extensible sign language oriented video analysis tool. In N. Calzolari, K. Choukri, T. Declerck, H. Loftsson, B. Maegaard, J. Mariani, A. Moreno,J. Odijk & S. Piperidis (Eds.), *Proceedings of the Ninth International Conference on Language Resources and Evaluation (LREC'14)*. Paris: European Language Resources Association (ELRA), pp. 1886-1891.

Snowfrog @ FIN-CLARIN's *Kielipankki* (the Language Bank of Finland)



What's included?

- The part of the ProGram data that is fully permitted by research consents.
- Signing from 6 signers (20 minutes).
- All SLMotion data.

What's missing?

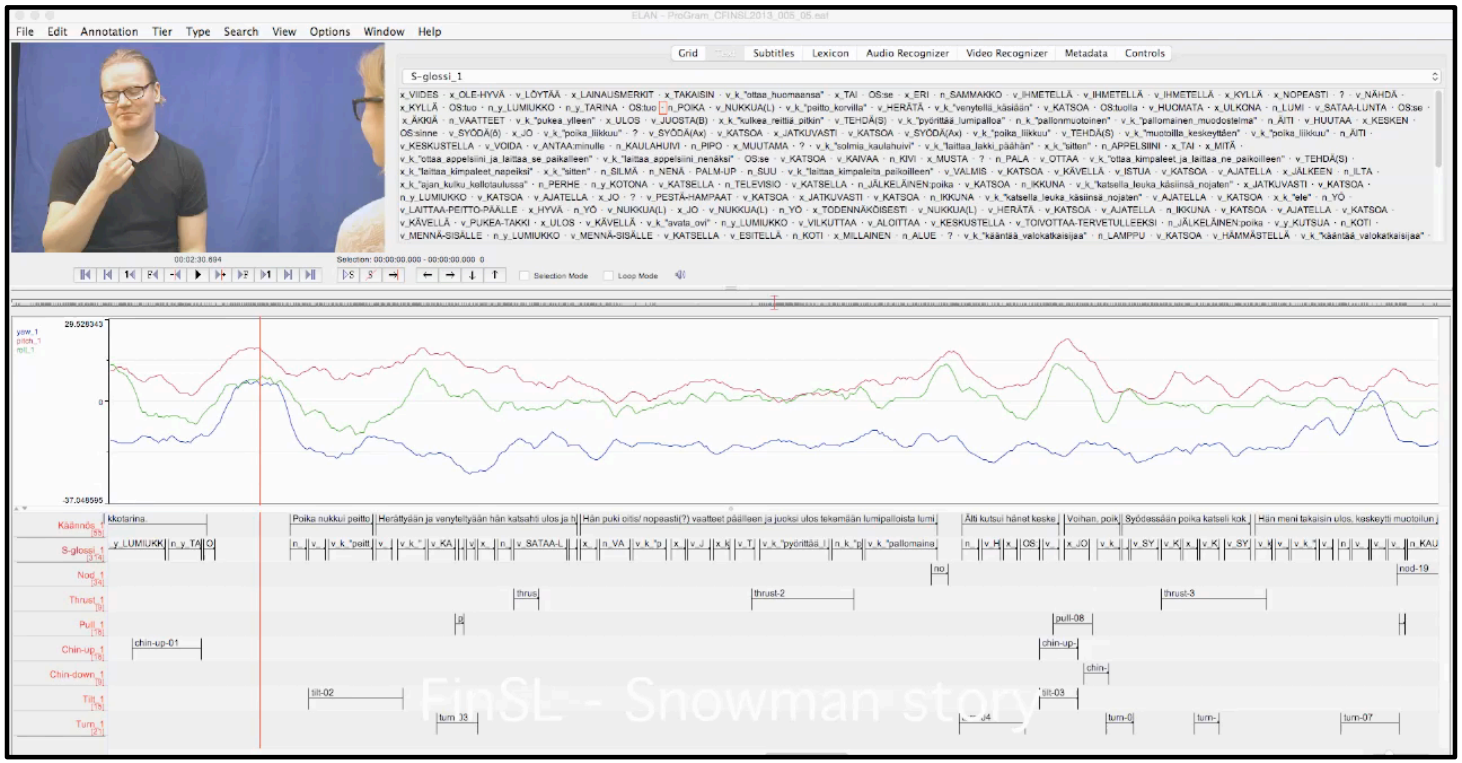
- Detailed annotations for syntactic & semantic structure.
- Constructed action & dialogue.

How to access?

- Publically available, licensed with Creative Commons 4.0 BY-NC-SA.
- Access via *kielipankki.fi*
- Google: **snowfrog**

UNIVERSITY of Jyväskylä, Sign Language Centre: *ProGram data. The stories Snowman and Frog, where are you?* (2016) [video corpus]. FIN-CLARIN [referred to on 20. 1.2017]. Available in Kielipankki, the Language Bank of Finland, at http://urn.fi/urn:nbn:fi:lb-1001100113005.

Multidimensional annotation & SLMotion processing



The ProGram data

- **Total no of signs = 4309 (12 signers)**

  Distribution by the sign type

  – Lexical signs = 3356 tokens
    - No of lexemes = 539
  – Gestural signs = 953 tokens

  Distribution by the main grammatical class

  – Nominals = 1319 tokens
  – Verbals = 1591 tokens
    - Type 1 & 2 verbals = 71%
    - Type 3 verbals = 29%
  – Uncategorized = 1399 tokens

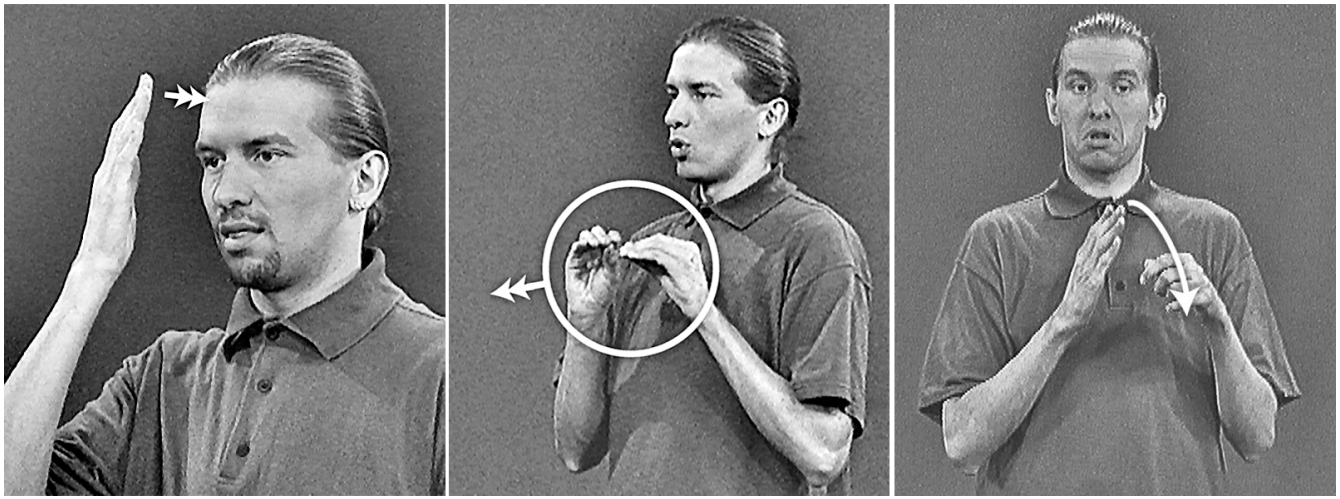
- **Total no of clauses = 1837 (10 signers)**

  – Structurally annotated clauses = 1077 tokens
  – Clauses with a Type 1 & 2 pred. = 712 tokens
    - Intransitive = 46% (syntactically complete = 36%)
    - Transitive = 54% (syntactically complete = 15%)
  – Clauses with a Type 3 predicate = 251 tokens
  – Other clauses = 114 tokens

- **Total no of CA = 239 (6 signers)**

  – Total no of CD = 24 (ca. 9% of CA/CD annotations)

Type 1, Type 2 and Type 3 verbals



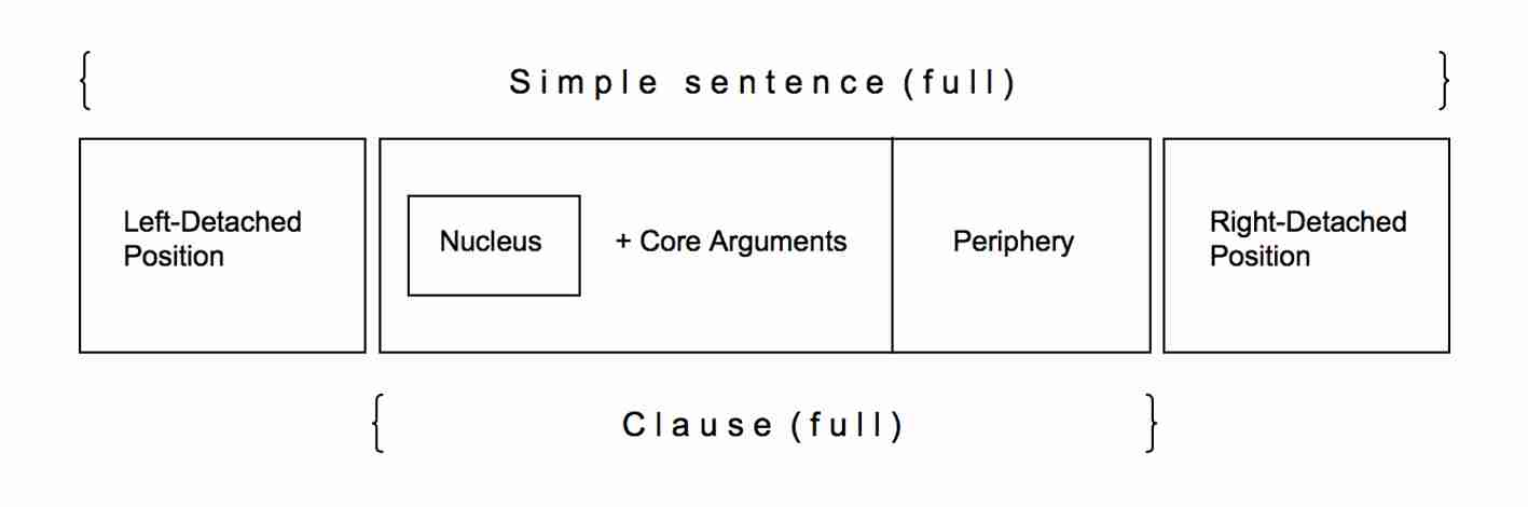
(Cf. plain verbs, indicating verbs and depicting verbs)

JANTUNEN, T. (2010). Suomalaisen viittomakielen pääsanaluokat [The main parts of speech in FinSL]. In T. Jantunen (Ed.) *Näkökulmia viittomaan ja viittomistoon* [Perspectives on sign and lexicon]. Soveltavan kielentutkimuksen teoriaa ja käytäntöä 5 [Theory and practice in applied linguistics 5]. Jyväskylä: Jyväskylän yliopisto [University of Jyväskylä], pp. 57-78. – **LIDDELL**, S. K. (2003). *Grammar, gesture and meaning in ASL*. Cambridge: Cambridge University Press.

The clause–CA sample

- *Frog, where are you?*
- Five native FinSL signers (1 male, 4 female; ages between 20–60 years)
- Combined duration 13 minutes and 18 seconds
- The union of annotations for syntactic structure *and* CA
- 537 structurally annotated (verbal centered) clauses
- 198 instances of CA

The layered structure of the clause in RRG

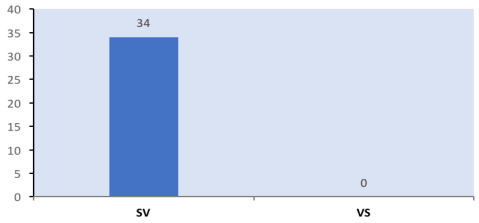


Van Valin, Robert D. & Randy J. LaPolla (1997). *Syntax. Structure, meaning and function*. Cambridge: Cambridge University Press.

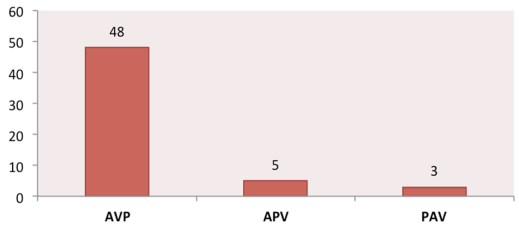
Two types of simple clauses distinguished in the annotation

Structurally sequential clauses (e.g. SV, AVP)

- The predicate is a Type 1 or a Type 2 verbal.
- Constituent orders of syntactically complete intransitive clauses:

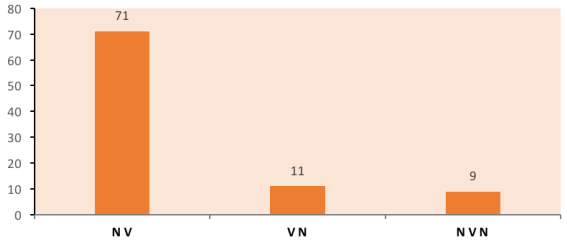


- Constituent orders of syntactically complete transitive clauses:



Structurally simultaneous clauses (e.g. sV, aVp)

- The predicate is a Type 3 verbal.
- The core arguments are fused into the predicate (head-marking).
- The majority (n=139, 63%) forms a simple sentence on its own.
- The position of additional nominal elements in simple sentences:



JANTUNEN, T. (2008). Fixed and free: order of the verbal predicate and its core arguments in declarative transitive clauses in Finnish Sign Language. *SKY Journal of Linguistics* 21(2008), 83-123. – **JANTUNEN**, T. (2016). Constructed action, the clause and the nature of syntax in Finnish Sign Language. Manuscript submitted for publication, November 2016. – **NICHOLS**, J. (1986). Head-marking and dependent-marking grammar. *Language* 62: 56–119. – **VAN VALIN**, R. D. & LaPolla, R. J. (1997). *Syntax: Structure, meaning and function*. Cambridge: Cambridge University Press.

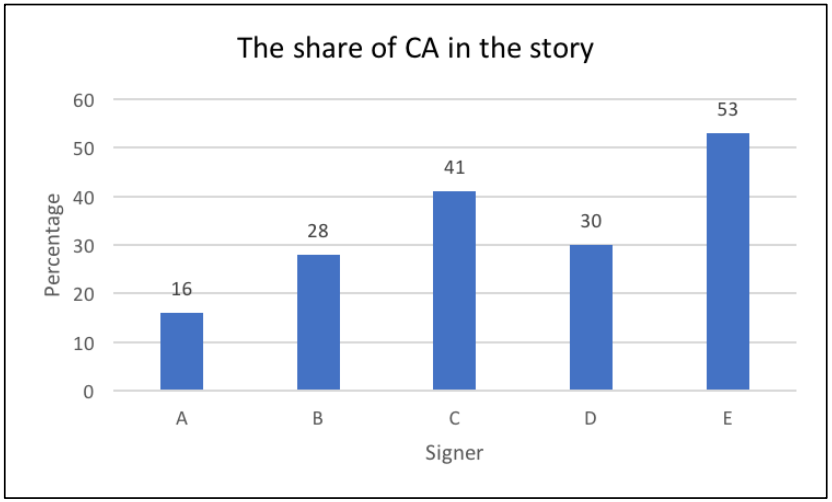
On the annotation of complex predicates and complex sentences

Symbol	Description	Example
v	An auxiliary-like secondary predicate.	BOY **HAVE-TO** EAT 'The boy has to eat.'
V1 V2	Two predicates within a single clause.	BOY **LOOK-AT** SNOWMAN **LOOK-AT** 'The boy looks at the snowman.'
Vr1 Vr2	Predicates of two coordinated clauses.	BOY **GO-HOME** ' SNOWMAN **LEAVE** 'The boy went home an the snowman left.'
Vm	Predicate of a matrix clause.	BOY **KNOW** SNOWMAN HAVE-TO LEAVE 'The boy knows that the snowman has to go.'
Vk	Predicate of a complement clause	BOY KNOW ' SNOWMAN HAVE-TO **LEAVE** 'The boy knows that the snowman has to go.'
ketl	Chain of predicates or clauses.	**LOOK-mom ' EAT ' LOOK-out ' EAT** ...

DIXON, R. M. W. (2006). Complement clauses and complementation strategies in typological perspective. In R. M. W. Dixon & A. Y. Aikhenvald (Eds.), *Complementation: A cross-linguistic typology*, pp. 1–48. Oxford: Oxford University Press. – **DIXON**, R. M. W. (2009). The semantics of clause linking in typological perspective. In R. M. W. Dixon & A. Y. Aikhenvald (Eds.), *Semantics of clause linking: A cross-linguistic typology*, pp. 1–55. Oxford: Oxford University Press. – **GAST**, V. & Holger Diessel (2012). The typology of clause linkage: Status quo, challenges, prospects. In Volker Gast & Holger, Diessel (Eds.), *Clause Linkage in cross-linguistic perspective: Data-driven approaches to cross-clausal syntax*, pp. 1–36. Berlin: Mouton De Gruyter. – **JANTUNEN**, T. (2016). Clausal coordination in Finnish Sign Language. *Studies in Language* 40(1), 204-234.

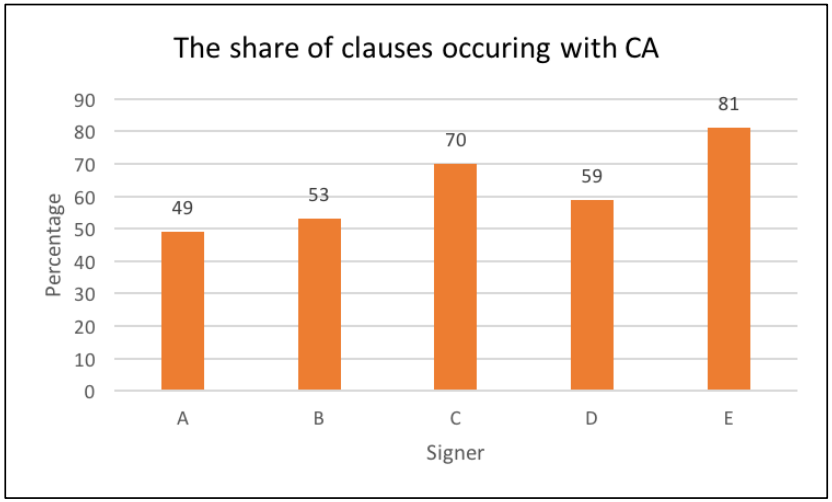
Overview

Fig. 1



The average share of CA in the story is 35% (the average in Auslan is 34%).

Fig. 2



The average share of clauses occuring with CA is 64% (the average in Auslan is 44%).

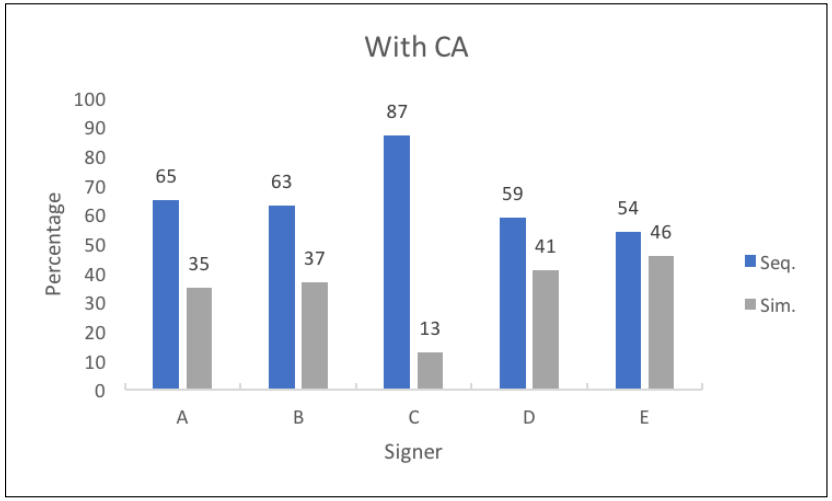
FERRARA, L. & Johnston, T. (2014). Elaborating who's what: A study of constructed action and clause structure in Auslan (Australian Sign Language). *Australian Journal of Linguistics* 34:193–215. – **HODGE**, G. & Ferrara, L. (2013). Showing the story: Enactment as performance in Auslan narratives. In L. Gawne & J. Vaughan (eds.), *Selected Papers from the 44th Conference of the Australian Linguistic Society*, 372–397. Melbourne: University of Melbourne. – **JANTUNEN**, T. (2016). Constructed action, the clause and the nature of syntax in Finnish Sign Language. Manuscript submitted for publication, November 2016.

The internal organization of clauses

Fig. 3

The preferred internal structure of clauses in signing with no CA is a sequential one.

Fig. 4



In signing with CA, clauses with a simultaneous organization occur more frequently.

FERRARA, L. & Johnston, T. (2014). Elaborating who's what: A study of constructed action and clause structure in Auslan (Australian Sign Language). *Australian Journal of Linguistics* 34:193–215. – **HODGE**, G. & Ferrara, L. (2013). Showing the story: Enactment as performance in Auslan narratives. In L. Gawne & J. Vaughan (eds.), *Selected Papers from the 44th Conference of the Australian Linguistic Society*, 372–397. Melbourne: University of Melbourne. – **JANTUNEN**, T. (2016). Constructed action, the clause and the nature of syntax in Finnish Sign Language. Manuscript submitted for publication, November 2016.

The internal organization of clauses

Fig. 5

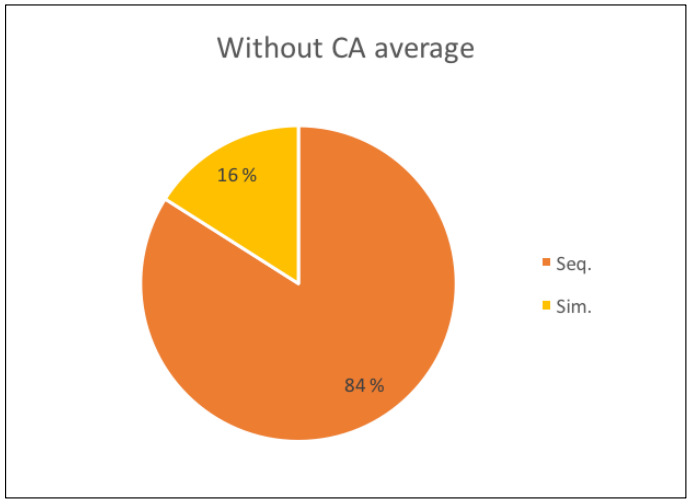
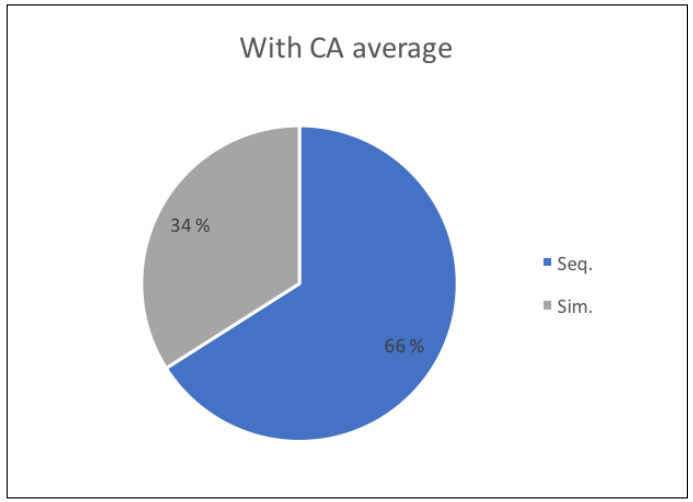


Fig. 6



However, by conventional criteria the difference is considered to be not quite statistically significant (p=0.07).

FERRARA, L. & Johnston, T. (2014). Elaborating who's what: A study of constructed action and clause structure in Auslan (Australian Sign Language). *Australian Journal of Linguistics* 34:193–215. – **HODGE**, G. & Ferrara, L. (2013). Showing the story: Enactment as performance in Auslan narratives. In L. Gawne & J. Vaughan (eds.), *Selected Papers from the 44th Conference of the Australian Linguistic Society*, 372–397. Melbourne: University of Melbourne. – **JANTUNEN**, T. (2016). Constructed action, the clause and the nature of syntax in Finnish Sign Language. Manuscript submitted for publication, November 2016.

Linking of clauses

Fig. 7

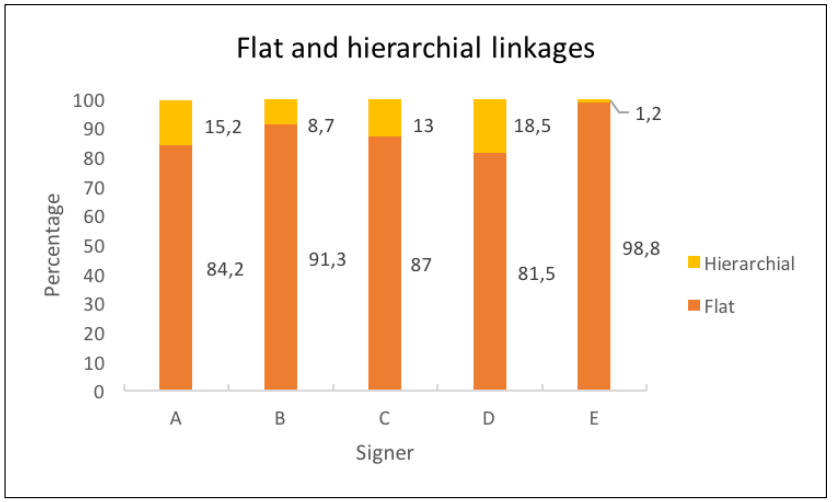
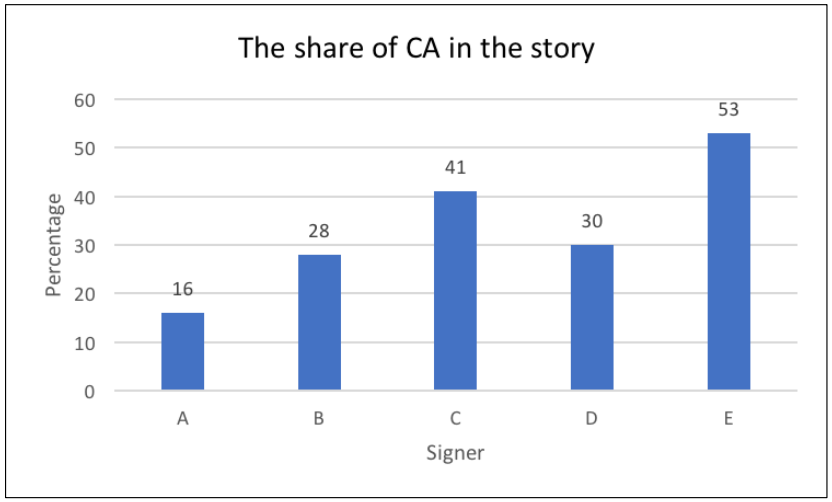


Fig. 1



The flat linkage (i.e. coordination, chaining) of clauses is far more typical than any kinds of hierarchical linkage (i.e. subordination, including simple embedding). The extensive use of CA may favor flat clausal linkage.

JANTUNEN, T. (2016). Clausal coordination in Finnish Sign Language. *Studies in Language* 40(1), 204-234. – **JANTUNEN**, T. (2016). Constructed action, the clause and the nature of syntax in Finnish Sign Language. Manuscript submitted for publication, November 2016.

Two bits of FinSL narrative

Video 1.

All right, this... You know this... I know that I have seen this a few times before... I mean that I have seen this animation in tv or somewhere. I think that it has something to do with this book, propably.

Video 2.

The snowman grabs the boy's hand and they both go upwards and fly in the sky and the snowman and the boy look down and hold hands while they are flying and they arrive at home.

Linking of clauses

Fig. 8

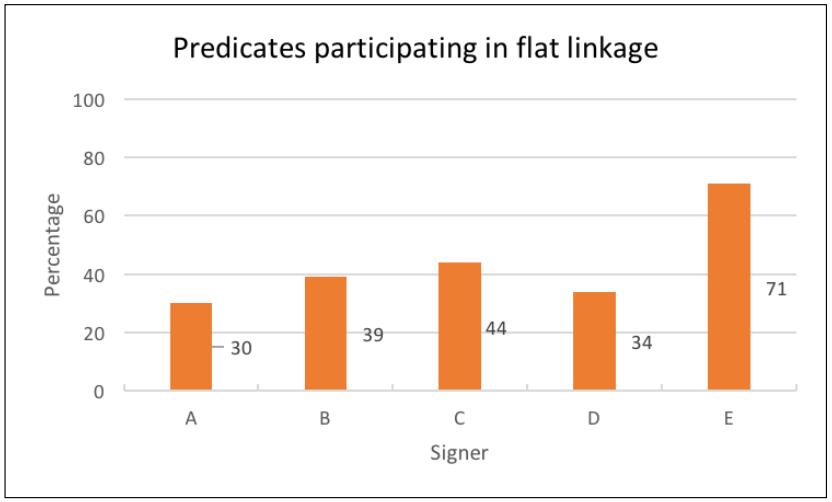
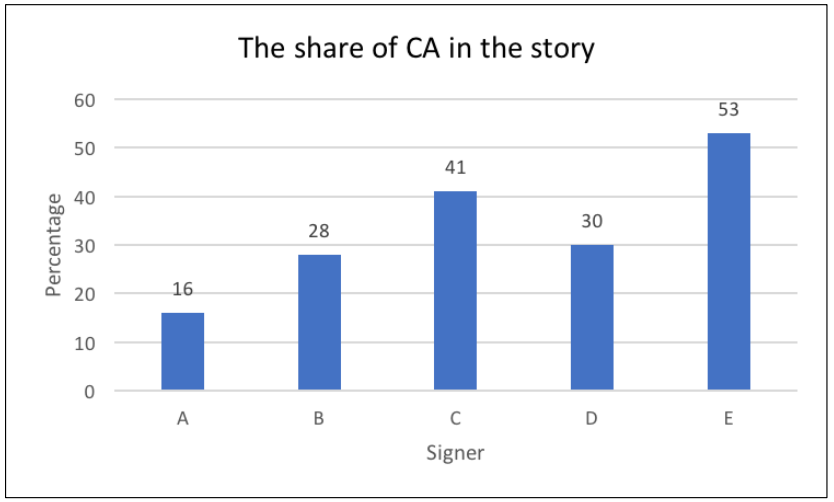


Fig. 1



The more CA there is in the narratives, the higher the percentual share of those predicates (of all predicates) participating in flat (coordinative) clausal linkages (R=0.920).

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Linking of clauses

Fig. 9

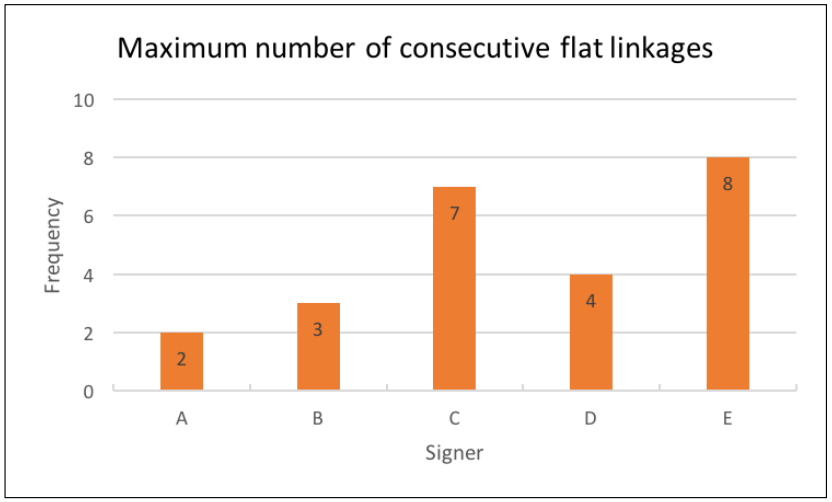
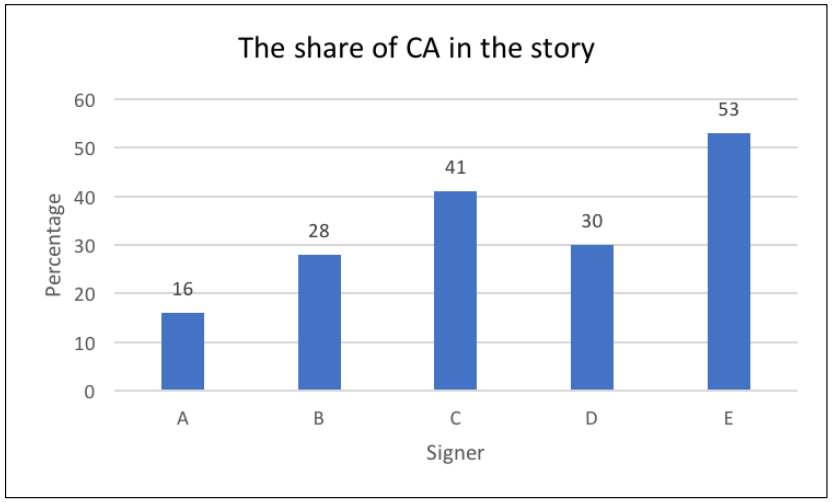


Fig. 1



Stories with a high proportion of CA also allow for a large number of clauses (even seven or eight) to be combined with a flat linkage (R=0.969).

JANTUNEN, T. (2016). Clausal coordination in Finnish Sign Language. *Studies in Language* 40(1), 204-234. – **JANTUNEN**, T. (2016). Constructed action, the clause and the nature of syntax in Finnish Sign Language. Manuscript submitted for publication, November 2016.

Nonmanual activity

Fig. 10

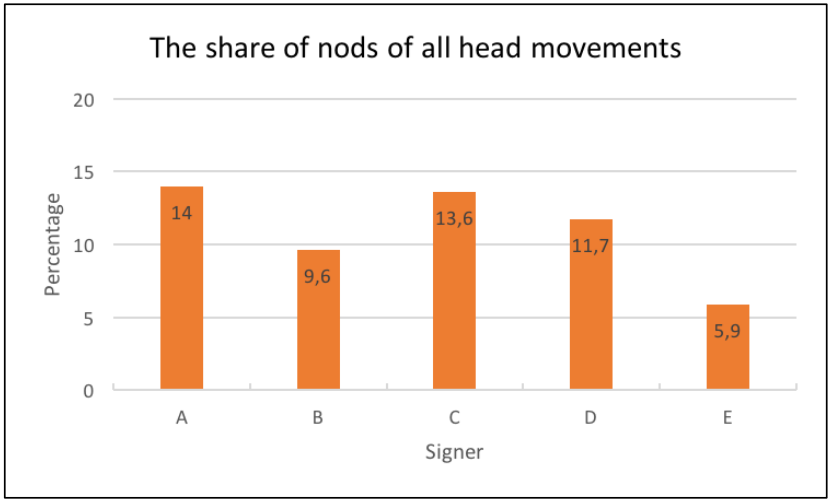
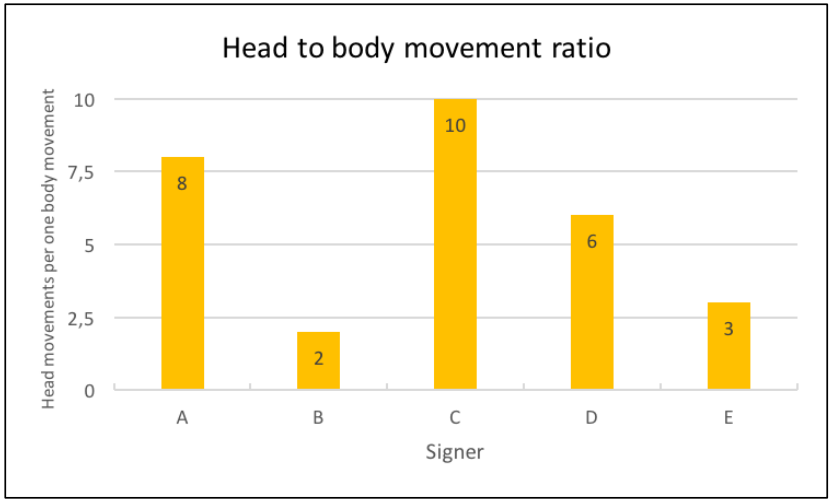


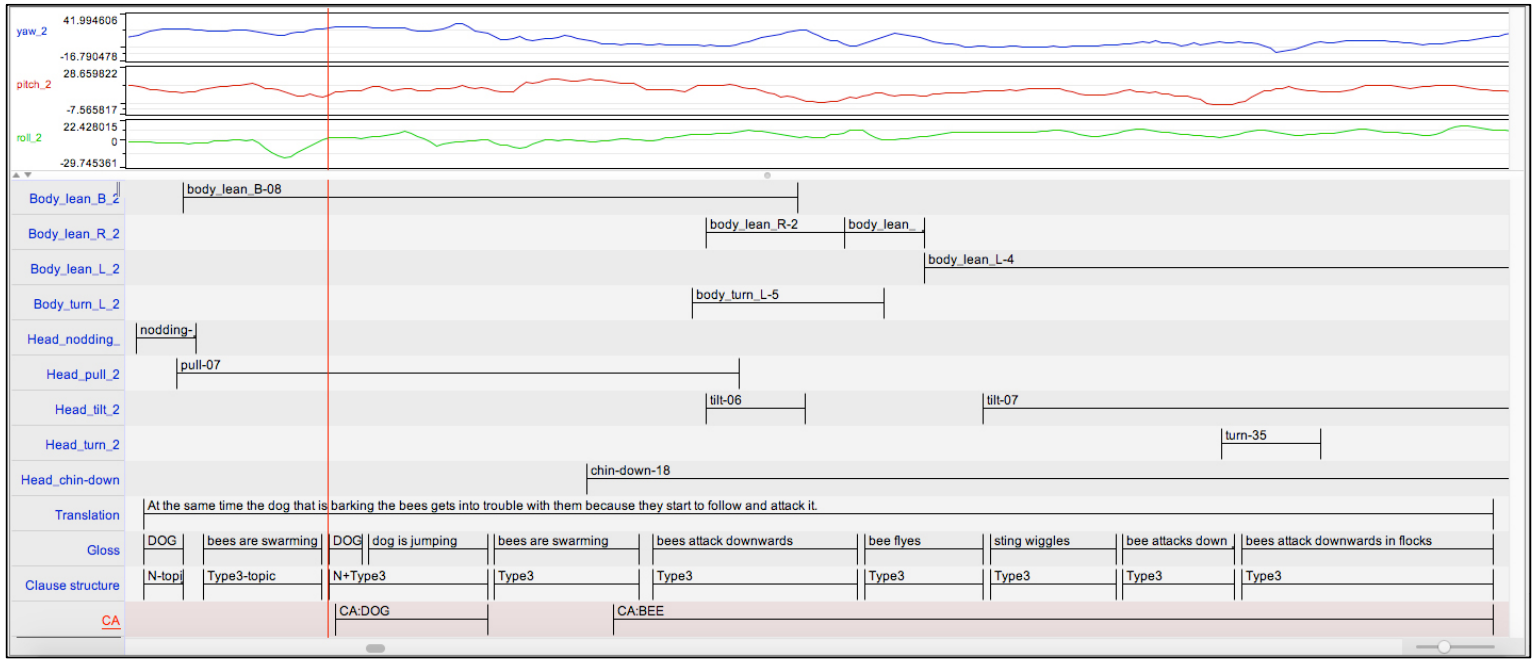
Fig. 11



JANTUNEN, T. (2016). Constructed action, the clause and the nature of syntax in Finnish Sign Language. Manuscript submitted for publication, November 2016. – **PUUPPONEN**, A. (2017). The relationship between the movements and positions of the head and the torso in Finnish Sign Language. To appear in *Sign Language Studies* 18. – **PUUPPONEN**, A., Wainio, T., Burger, B. & Jantunen, T. (2015). Head movements in Finnish Sign Language on the basis of Motion Capture data: A study of the form and function of nods, nodding, head thrusts, and head pulls. *Sign Language & Linguistics* 18:41–89. – **PUUPPONEN**, A., Jantunen, T. & Mesch, J. (2016). The alignment of head nods with syntactic units in Finnish Sign Language and Swedish Sign Language. In *Proc. Speech Prosody 2016* [organized in Boston (USA), 31 May-3 June, 2016], 168– 172.

Nonmanual activity

Fig. 12



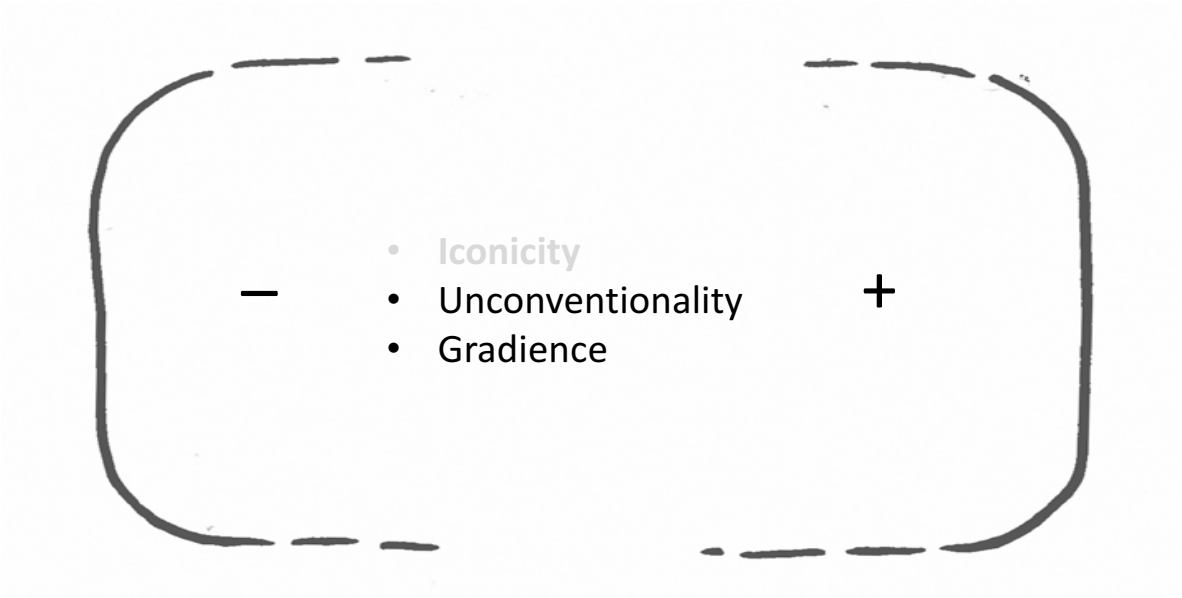
CORMIER, K., Smith, S., & Sevcikova, Z. (2015a). Rethinking constructed action. Sign Language & Linguistics 18:167–204. – **FERRARA**, L. & Johnston, T. (2014). Elaborating who's what: A study of constructed action and clause structure in Auslan (Australian Sign Language). *Australian Journal of Linguistics* 34:193–215. – **HODGE**, G. & Ferrara, L. (2013). Showing the story: Enactment as performance in Auslan narratives. In L. Gawne & J. Vaughan (eds.), *Selected Papers from the 44th Conference of the Australian Linguistic Society*, 372–397. Melbourne: University of Melbourne. – **JANTUNEN**, T. (2016). Constructed action, the clause and the nature of syntax in Finnish Sign Language. Manuscript submitted for publication, November 2016. – **JOHNSTON**, T., & Schembri, A. (2007). Australian Sign Language: An introduction to sign language linguistics. Cambridge: Cambridge University Press.

Towards understanding SL syntax

- The work on gesture, CA and the clause in different (sign) languages suggests the possibility of conceptualizing syntax as a theoretical entity in which "linking norms" are distributed on a continuum between categorical–conventional and gradient–unconventional ends.

ENFIELD, N. (2009). *The anatomy of meaning: Speech, gesture, and composite utterances*. Cambridge: Cambridge University Press. – **FERRARA**, L. & Johnston, T. (2014). Elaborating who's what: A study of constructed action and clause structure in Auslan (Australian Sign Language). *Australian Journal of Linguistics* 34:193–215. **HODGE**, G. (2013). Patterns from a signed language corpus: Clause-like units in Auslan (Australian sign language). Doctoral dissertation. Department of Linguistics, Macquarie University Sydney, Australia. – **JANTUNEN**, T. (2016). Constructed action, the clause and the nature of syntax in Finnish Sign Language. Manuscript submitted for publication, November 2016. – **LADEWIG**, S. (2014). Creating multimodal utterances: The linear integration of gestures into speech. In Müller, Cienki, Fricke, Ladewig, McNeill, & Bressem (eds.), *Body–Language–Communication,* 1662–1677. Berlin: De Gruyter. – **LIDDELL**, S. K. (2003). *Grammar, gesture, and meaning in ASL*. Cambridge: Cambridge University Press.

Gesture IN syntax



OKRENT, A. (2002). A modality-free notion of gesture and how it can help us with the morpheme vs. gesture question in sign language linguistics (or at least give us some criteria to work with). In Richard P. Meier, Kearsy Cormier & David Quinto-Pozos (eds.), *Modality and structure in signed and spoken languages*, 175-198. Cambridge: Cambridge University Press.

Cf. the dimensions of Kendon's continuum

Dimension 1: relationship to speech

Dimension 2: relationship to categories in linguistics

(categories absent) (categories present)

CA – clause

(not conventionalized) (fully conventionalized)

Dimension 3: relationship to conventions

Dimension 4: character of the semiosis

JANTUNEN, T. (2016). Constructed action, the clause and the nature of syntax in Finnish Sign Language. Manuscript submitted for publication, November 2016. – **KENDON**, A. (2004). *Gesture: Visible action as utterance*. Cambridge: Cambridge University Press. – **McNEIL**, D. (2000). *Language and gesture*. Cambridge: Cambridge University Press.

Features of SL syntax discussed in this talk

More conventional–categorical syntax	More unconventional–gradient syntax
• Restricted use of CA	• Extensive use of CA
• Preference for clauses that have a sequential internal organization (e.g. clauses are built with Type 1 and 2 verbals)	• Preference for clauses that have a simultaneous internal organization (e.g. clauses are built with Type 3 verbals)
• Clausal linkage may also be hierarchical (i.e. the linkage involves coordination and subordination)	• Clausal linkage is primarily flat (i.e. the linkage involves coordination and clause chaining)
• Nonmanual activity contributes to the clausal level (e.g. the role of the head is relatively salient)	• Nonmanual activity contributes to the discourse level (e.g. the role of the whole body is relatively salient)

JANTUNEN, T. (2016). Constructed action, the clause and the nature of syntax in Finnish Sign Language. Manuscript submitted for publication, November 2016.

Two bits of FinSL narrative

Video 1.

All right, this... You know this... I know that I have seen this a few times before... I mean that I have seen this animation in tv or somewhere. I think that it has something to do with this book, propably.

Video 2.

The snowman grabs the boy's hand and they both go upwards and fly in the sky and the snowman and the boy look down and hold hands while they are flying and they arrive at home.

'Still water' and 'sparkling water'

- "The ‘de l’eau pétillante/de l’eau plate’ contrast is not limited to the lexical level. VGT [Flemish Sign Language] word order studies [...] for instance, show that there are different ways of indicating the relationship between a verb and its arguments. When there are no clear reasons (e.g. a certain grammatical mechanism) for a different reading, the argument-verb-argument constituent patterning in declarative sentences needs to be interpreted as subject-verb-object [author note: this refers to the 'still water' syntax]; however, especially in spontaneous discourse, only a limited number of clauses consist of a verb and two overtly expressed arguments. The relationship between a verb and its arguments here [i.e. in the 'sparkling water' syntax] is generally indicated by means of mechanisms such as ‘role-taking’ [i.e. CA], the use of space, simultaneity, etc." (pp. 183–184.)

VERMEERBERGEN, M. (2006). Past and current trends in sign language research. *Language & Communication* 26:168–192.

Epilogue – on the role of the clause in SL syntax

- "Together, these observations and findings indicate that an analysis of signed utterances from a clause-level perspective points only to symptoms of grammaticalised clause structure in Auslan. The partly corpus-driven empirical findings presented in this thesis do not provide conclusive evidence of grammaticalised clause structure for all of the data observed in the study corpus. In other words, I am not confident that an analysis of signed utterances from a clause-level perspective unequivocally shows that all observed signed language data can be described as fully grammaticalised clausal structures. This interpretation of the data is based on the empirical findings of the study corpus, as well as review of a wide range of literature on signed languages, spoken languages and face-to- face interaction. It also accords with my experience of using signed, spoken and written languages." (p. 217.)

HODGE, G. (2013). Patterns from a signed language corpus: Clause-like units in Auslan (Australian sign language). Doctoral dissertation. Department of Linguistics, Macquarie University Sydney, Australia.

Thank you!

ProGram project @ http://users.jyu.fi/~tojantun/ProGram

Sign Language Centre @ http://viittomakielenkeskus.jyu.fi

ProGram data, the stories Snowman and Frog, where are you? @ http://lat.csc.fi

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