Modality effects in nominal possessive constructions:
The 'his genitive' in signed and spoken languages

Kearsy Cormier & Jordan Fenlon
Deafness Cognition and Language (DCAL) Research Centre,
University College London
k.cormier@ucl.ac.uk   j.fenlon@ucl.ac.uk

DCAL

UCL   E·S·R·C ECONOMIC AND RESEARCH COUNCIL

Overview

- Background
  - Nominal possession in spoken languages
  - Signed languages and spoken creoles
  - Possession in signed languages
- 'His genitive' in signed and spoken languages
- Lexical vs morphological marking of possession in signed and spoken languages

---

Nominal possession in spoken languages

- Nichols & Bickel (2005)
  - Possessor is marked via affix (84% of 235 surveyed languages): head marked (1), dependent marked (2), or double marked
  - (1) Fijian (Austronesian)

a	*mata-i*	*Jone*
ART	eye-POSS	John

    'John's eye'
  - (2) Chechen (Nakh-Daghestnian)

loem-an	*k'orni*
lion-GEN	baby.animal

    'lion cub', 'lion's cub' (lit. 'of-lion cub')

Nominal possession in spoken languages

- Nichols & Bickel (2005)
  - 'Other' marking (0.03% of 235 languages) - all examples given via cliticisation
  - Free (or floating) marking: marker positioned with regard to phrase boundaries (in 3, '=' is clitic boundary; '=n' is possessive marker and always attaches to first constituent in clause)
  - (3) Chamorro (Austronesian)
    I=lepblo=n   estudiante
    ART=book=LINK   student
    'the student's book'
  - Headward-migrated dependent marking: fully inflected dependent (in 4, a pronoun) cliticises to head
  - (4) Bororo (Macro-Ge)
    barae   eno   moto
    Brazilians   3PL.GEN   land
    'Brazil' (lit. 'Brazilians' land')

Nominal possession in spoken languages

- Nichols & Bickel (2005)
  - No marking on possessor (14% of 235 languages)
  - Juxtaposition as in (5)
  - (5) Asmat (Asmat-Kamoro)
    Warsé   ci
    Warse   canoe
    'Warse's canoe' (lit. 'Warse canoe')
  - Lexical rather than affixal marking, as in (6) and (7)

(6) Tiwi (isolate, N. Australia)	(7) Amele (Trans-New Guinea)
jərəkəpai ŋara tuwaɹa	*Naus na jo*
crocodile he tail	Naus of house
'the crocodile's tail'	'Naus's house'

'His genitive'

- Possessor + free possessive marker + possessum (PR POSS PM)
- Common in Germanic languages
- Occurred briefly in Middle English (Janda 1980, Allen 2002)

- (8) Middle English (Ascham 1545, cited in Allen 2002)
  …not borrowed of other men his lippes
  'not borrowed from other men's lips'

'His genitive' in Germanic

- Still common in colloquial Dutch, German, Norwegian (Weerman & de Wit 1999, Krause 1999, Delsing 1998)

  (9) Dutch (Weerman & de Wit 1999)
  de man met die gekke bril   *z'n caravan*
  the man with those funny glasses   his caravan
  'the man with those funny glasses' caravan'

- …alongside more standard genitive case marker or possessive affix

  (10) Dutch (Weerman & de Wit 1999)
  buurvrouws huis
  neighbor-S house
  'our neighbor's house'

'His genitive' in creoles

- 'His genitive' standard for expressing possession in Afrikaans (Oosthuizen & Waher 1994) and Atlantic creoles (Holm 1990)

  (11) Sranan Creole English
  konu ala en moni
  'all the king's money'

  (12) Mauritian Creole French
  mo frer so madam
  'my brother's wife'

  (13) Papiamentu Creole Spanish
  mi tatá su buki
  'my father's book'

Nominal possession in spoken languages summary

- Nominal possession marking via separate words - e.g. personal pronouns, prepositions/postpositions in relatively few spoken languages (Nichols & Bickel 2005)
- Nominal possession marking via possessive pronoun ('his genitive') - occurs colloquially in some Germanic languages, standard in some creoles
- Nominal possession in signed languages?

Background about signed languages

- Phonology
  - Phonological parameters of a lexical sign in a signed language such as British Sign Language (BSL) and American Sign Language (ASL)
    - Handshape
    - Movement
    - Location
  - Minimal pairs
    - (14)   BSL: NAME & AFTERNOON (location)
    - (15)   BSL: DEAF & HEARING (handshape)
- Morphology
  - Sequential vs simultaneous: simultaneous preferred
  - e.g. aspect marking involves change of movement parameter rather than affixation
    - (16a)   BSL: LOOK-AT
    - (16b)   BSL: LOOK-AT-FOR-LONG-TIME

Sign language pronouns

- Singular personal pronoun
  - Pointing sign (extended index handshape) which points to referent or location associated with referent, as in Figure 1
    - (17)   BSL: PRO LIKE CAR
      He likes cars

Fig. 1: BSL PRO

- Singular possessive pronoun
  - Points similarly to singular personal pronoun, but uses different handshape (flat handshape with palm oriented toward referent in ASL, fist handshape with palm oriented toward referent in BSL as in Figure 2)

Fig. 2: BSL POSS

Pronominal possession in BSL

- Possessive pronoun precedes (18) or follows (19) possessum

(18)   POSS BOOK

(19)   BOOK POSS

          'his/her book'

Nominal possession in BSL

- Either via juxtaposition (20) or possessor + possessive pronoun + possessum (PR POSS PM, as in (21))
- (20) BOY BOOK
- (21) BOY POSS BOOK
  'the boy's book'   'His' genitive

Sign languages as creoles

- Fischer (1978)
- Argued for creole status of ASL
  - Lexicon
  - Morphosyntax
  - Acquisition
  - Sociolinguistic context

Lexicon and morphosyntax

- Constant influx of new vocabulary from dominant language
- Content words used for grammatical purposes
  - HAVE used to indicate existence
    - (22) *HAVE* TEACHER THERE? (ASL)
      "Is there a teacher there?"
    - (23) *Have* plenty tourist Big Island-side (Hawaiian Creole English)
      "There are a lot of tourists on the Big Island"
- Little tense marking on verbs, but rich aspectual system
  - (24) WAIT-LONG-TIME, but adverbs e.g. BEFORE, YESTERDAY, IN-FUTURE for tense (ASL)
  - (25) Verbs inflect for aspect but not tense, e.g. HCE *bambai* 'in the future'
- Conditional clauses
  - (26) YOU WANT BECOME DOCTOR, BETTER STUDY HARD (ASL)
    "If you want to become a doctor, you should study hard"
  - (27) You like come one doctor, you gotta study hard (HCE)
    "If you want to become a doctor, you should study hard"

Language acquisition and sociolinguistic context

- 90-95% of deaf children are born to hearing (usually non-signing) families
  - Like first generation speakers of a creole, first generation native signers (i.e. deaf of hearing) receive input from linguistically heterogeneous sources, many of whom (e.g. parents, teachers) are not native users of the langua
- Grammar of a creole cannot be traced to one language
  - ASL: French Sign Language mixed with different home sign systems (Goldin-Meadow & Mylander 1983) and or sign language used on Martha's Vineyard (Groce 1985).
  - HCE: English but also Hawaiian, Japanese, Chinese, Korean, Tagalog, Portugese.
- Current social situations, like other creole situations (e.g. Hawaiian Creole English)
  - Viewed as "inferior" by speakers of prestige language
  - Used as marker of solidarity among minority group
  - Lack of standardization
  - ASL is recreolised every generation
    - 90-95% of deaf children acquire language from a highly varied set of sources

Sign languages, creoles & the 'his genitive'

- In terms of grammar, lexicon, acquisition and current social factors, sign languages such as ASL fit the description of a creole
- Use of 'his genitive' - another morphosyntactic property shared by signed languages and spoken creoles
- Grammaticisation of 'his genitive' to possessive clitic/affix in spoken languages
  - This could happen in later stages in creoles
  - What about signed languages?

Grammaticisation

- Affixation
- Two types of cliticisation:
  - Assimilation
  - Coalescence
- Prosodic linking

Affixation

- Australian and American Sign Languages (Auslan and ASL) both demonstrate use of a possessive suffix based on the letter 'S' from the respective fingerspelling systems (Johnston & Schembri 2007, Pichler et al. 2006)
- Also reported for BSL although not in widespread use
- Movement of 'S' is modified slightly in both languages - see Figure 3 for Auslan

MOTHER   -'S

Fig. 3. Auslan "mother's"

- Borrowing from English and a result of language contact
- Commonly used in expressing kinship relationships
- However - sequential affixation in signed languages is generally considered to be rare

Assimilation

- The handshape of a pronoun can assimilate to that of a neighbouring sign (Corina & Sandler 1993, Johnston & Schembri 2007, Lucas et al. 2001)
- In Israeli Sign Language (ISL), assimilation has been described as cliticisation and has been observed with personal, possessive and deictic pronouns (Sandler & Lillo-Martin 2006)

(28)   BSL: POSS-1 MOTHER 'my mother'

POSS-1   MOTHER

(29)   ISL: PRO-1 READ 'I read'

PRO-1   READ
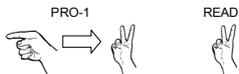
- Handshape assimilation can be either progressive or regressive (function sign to lexical sign but not strictly in one direction)
- Non-structure preserving (e.g. orientation does not assimilate) which suggests it is a post-lexical process

Coalescence

- In ISL, a second process is described where pronouns can cliticise to a host sign (Sandler & Lillo-Martin 2006)
  - Two signs reduce to a single syllable (lexical sign + function sign)
  - Non-structure preserving (violates symmetry condition, whereby both hands in two-handed sign should have same handshape)

(30)   ISL: right: SHOP PRO-non1
                  left: SHOP_____

- Coalescence only occurs when the functional item is in prosodically weak position at the end of a phrase (and follows the host lexical sign)

7

Prosodic linking: mouth spreading

- Mouthings can spread beyond a specified sign; this is described as prosodic linking (Boyes Braem 2001, Sandler 1999)
- In a study of three sign languages (BSL, Sign Language of the Netherlands, and Swedish Sign Language), mouthings generally spread rightwards and were from a lexical sign onto a function sign (Crasborn et al. 2004)

(31) BSL: _____wolf
WOLF DET
'that wolf'

- Also some examples of leftwards spreading in SSL as in:

(32) SSL: _____får
poss. FÅR
POSS SHEEP
'his sheep'

- Although mouthings can spread beyond a specified sign, spreading does not always occur together with manual spreading of features (i.e., assimilation, coalescence)

Conclusions

- The fate of the 'his genitive' in spoken creoles?
- Even if spoken creoles do eventually sideline the 'his genitive' as Germanic has - this is probably less likely for signed languages
- 'His genitive' unlikely to be lost via grammaticisation in signed languages
- Possible modality effect
- Prosodic linking via cliticisation (e.g. assimilation/coalesence) occurs in signed languages within possessive NPs – but phonological rather than morphological process
  - Occurs with other constituents as well, not only possessive constructions
- Consistent with notion of signed languages as creoles with recreolisation with every generation

---

References

Allen, Cynthia L. 2002. The early English 'his genitives' from a Germanic perspective. In P. Collins and M. Amberber (eds.), *Proceedings of the 2002 Conference of the Australian Linguistics Society*.

Aronoff, Mark, Irit Meir, & Wendy Sandler. 2005. The paradox of sign language morphology. *Language* 81, 301-344.

Boyes Barem, Penny. 2001. Functions of the mouthings in the signing of deaf early and late learners of Swiss German Sign Language (DSGS). In P. Boyes Braem & R. Sutton Spence (eds.), *The hands are the head of the mouth: the mouth as articulators in sign languages* (87-98). Hamburg: Signum Press.

Corina, David, P. & Wendy Sandler. 1993. On the nature of phonological structure in sign language. *Phonology* 10:2, 165-207.

Crasbon, Onno, Els van der Kooij, Dafydd Waters, Bencie Woll & Johanna Mesch. 2008. Frequency distribution and spreading behavior of different types of mouth actions in three sign languages. *Sign Language & Linguistics 11:1, 45-67.*

Delsing, L-O 1998. Possession in Germanic. In A Alexiadou & C Wilder (eds.), *Possessors, Predicates and Movement in the Determiner Phrase*. John Benjamins Amsterdam and Philadelphia: 87-108

Fischer, Susan D. 1978. Sign language and creoles. In P. Siple, (ed.),*Understanding language through sign language research*, 309-331. New York: Academic Press.

References

Goldin-Meadow, Susan, & Carol Mylander. 1983. Gestural communication in deaf children: noneffect of parental input on language development. *Science,* 221, 372-373.

Groce, Nora, E. 1985. *Everyone here spoke sign langauge: Hereditary deafness on Martha's Vineyard.* Cambridge ,MA: Harvard Unviersity Press.

Holm, John. 1990. Features in the noun phrase common to the Atlantic creoles. *Linguistics* 28, 867-881

Johnston, Trevor, & Adam Schembri. 2007. *Australian Sign Language: An Introduction to Sign Language Linguistics.* Cambridge: Cambridge University Press.

Krause, Cornelia. 1999. Two notes on pronominal possessors in German. *MIT Working Papers in Lingustics,* 33, 191-217.

Lucas, Ceil, Robert Bailey, & Clayton Valli. 2001. *Sociolinguistic variation in American Sign Language.* Washington DC: Gallaudet University Press.

Meier, Richard. P. & Elissa L. Newport. 1990. Out of the hands of babes: On a possible sign advantage in language acquisition. *Language,* 66(1), 1-23.

References

Mitchell, Ross E., & Michael Karchmer. 2004. Chasing the mythical ten percent: Parental hearing status of deaf and hard of hearing students in the United States. *Sign Language Studies* 4, 138-163.Oosthuizen, J. & H. Waher. 1994. On the syntax of the se-construction in Afrikaans. *Stellenbosch Papers in Linguistics* 28:21-43.

Nichols, Johanna, & Balthasar Bickel. 2005. Locus marking in possessive noun phrases. In Haspelmath et al. *World Atlas of Language Structures,* 102-105.

Pichler, Deborah Chen, Katharina Schalber, Julie Hochgesang, Marina Milkovic, Ronnie B. Wilbur, Martina Vulje, & Ljubica Pribanic. 2008. Possession and existence in three sign languages. In R. M. d. Quadros, (ed.), *Sign Languages: Spinning and Unraveling the Past, Present and Future. TISLR9, Forty-five Papers and Three Posters from the 9th Theoretical Issues in Sign Language Research Conference,* 440-458. Petrópolis/RJ. Brazil: Editora Arara Azul.

Sandler, Wendy & Diane Lillo-Martin. 2006. *Sign Language and Linguistic Universals.* Cambridge University Press.

Weerman F & P de Wit, 1999. The decline of the genitive in Dutch. *Linguistics* 37: 1155-1192.