

# Categorial decomposition in HaG

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DELPH-IN Meeting, Paris, 6 July 2010

# Genitive marking

- Hausa genitives are marked by
  - either a **bound** form genitive linker *-n* (default) and *-r* (feminine singular)  
Attachment to the “non-genitive” head
  - or a **free** form *na* (default) and *ta* (feminine singular)  
Attachment to the “genitive” dependent
- Multiple functions of the genitive linker
  - Possessives (bound/free)
  - Pre-nominal adjectives (bound)
  - Object-taking gerunds (bound)
  - “Genitive” prepositions (bound)

# Outline

- 1 Major functions of the Hausa genitive linker
  - Possessives
  - Strong verbal nouns
  - Prenominal adjectives
- 2 Arguments against cliticisation
- 3 Analysis
  - Strong verbal nouns
  - Possessives
  - Adjectives

# Possessives I

- Possessive can be expressed by either free or bound markers
- Free genitive markers are realised on the dependent possessor NP
- Bound genitive markers are realised on the head noun (possessum)
- Both markers show agreement with the head noun

(1) a. rìgā **ta** Audù  
gown.f L.f Audu.m  
'Audu's gown'

b. rìga-**r** Audù  
gown.f-L.f Audu.m  
'Audu's gown'

(2) a. littāfì **na** Kànde  
book.m L.m Kande.f  
'Kande's book'

b. littāfi-**n** Kànde  
book.m-L.m Kande.f  
'Kande's book'

## Possessives II

- Bound marker requires strict adjacency of head and possessor
- Possessor marked with *nalta* can be separated from head noun

- (3) a. littāfi-**n** Audù bisà Sarkī  
book.m-L.m Audu about Emir  
'Audu's book about the Emir'
- b. \* littāfi-**n** bisà Sarkī Audù  
book.m-L.m about Emir Audu
- (4) a. littāfi **na** Audù bisà Sarkī  
book.m L.m Audu about Emir  
'Audu's book about the Emir'
- b. littāfi<sup>̀</sup> bisà Sarkī **na** Audù  
book.m about Emir L.m Audu  
'Audu's book about the Emir'

## Possessives III

- Free genitive marker can feature in headless possessive constructions
- Bound genitive marker cannot

- (5) a. Nā karàntà **na** Kànde  
1.sg.completive read L.m Kànde  
'I read Kande's.'
- b. \* Nā karàntà **-n** Kànde  
1.sg.completive read L.m Kànde

## Strong verbal nouns I

- Gerundive forms are used in the continuative aspect
- Non-gerundive forms are used for all other Tense/Aspect/Mood categories
- Gerunds are subdivided into weak (verb-like) and strong (nominal) verbal nouns
- Presence of an in situ direct object obligatorily requires the presence of a linker on strong verbal nouns

- (6) a.    Yā                            dīnkà rìgā.  
          3.m.sg.completive sew    gown  
          ‘He has sewn the gown.’
- b.    Yanà                            dīnkì-**n** rìgā.  
          3.m.sg.continulative sew    gown  
          ‘He is/was sewing the gown.’

## Strong verbal nouns II

- Pronominal objects of verbs and weak verbal nouns are taken from the direct object paradigm (polar tone)
- Pronominal objects of strong verbal nouns use the genitive pronoun set (low tone)

(7) a.    Yā                            tàmbàyē -shì        / \*-sà        .  
          3.m.sg.completive ask        -him.acc   -him.gen  
          ‘He asked him.’

      b.    Yanà                            tàmbayà-r -sà        / \*-shi.  
          3.m.sg.continulative ask.f-L.f   -him.gen   -him.acc  
          ‘He is/was asking him.’



## Strong verbal nouns III

- Presence of the linker restricted to in situ objects
- No genitive marking for fronted (extracted) objects
- Marking conditions parallel to length alternations on verbs

- (8) a. Yanà dīnkì-**n**  
3.m.s.cont sew  
rīgā.  
gown  
'He is sewing the gown.'
- b. Rīgā cè yakè  
gown FOC 3.m.s.cont  
dīnkì.  
sew  
'The gown he is sewing.'

- (9) a. Yā dīnkà rīgā  
3.s.m.cmpl sew gown  
'He has sewn the gown.'
- b. Rīgā cè ya  
gown FOC 3.s.m.cmpl  
dīnkà  
sew  
'The gown he has sewn.'

## Prenominal adjectives I

- Hausa attributive “adjectives” can be realised pre- and post-nominally
- Attributive adjectives do not have inherent gender, but agree in gender and number
- Pre-nominal adjectives obligatorily take a linker
- Post-nominal adjectives do not

(10) a.    rìgā    bakā  
         gown.f black.f  
         ‘black gown’

      b.    baƙa-r    rìgā  
         black.f-L.f gown.f  
         ‘black gown’

(11) a.    gidā    bakī  
         house.m black.m  
         ‘black house’

      b.    baƙi-n    gidā  
         black.m-L.m house.m  
         ‘black house’

## Prenominal adjectives II

- Pre-nominal adjectives can only be formed using the *bound* linker  
i.e., use of the free linker is illicit

- (12) a. \* bakā ta rìgā  
black.f L.f gown.f  
'black gown'
- b. # bakī na gidā  
black.m L.m house.m  
'black house'

## Arguments against cliticisation

- Tuller (1986) suggests that the bound linker is a clitic variant of the free linker
- Several arguments suggest that a (surface) cliticisation approach is unmaintainable
  - Free linker is illicit in a range of constructions where the bound linker is required (strong-verbal nouns, pre-nominal adjectives)

- (13) a. Yanà dīnkì -n/\*na rīgā  
1.s.cont sew L.m gown  
'He is sewing the gown.'
- b. kàrama -r/\*ta mōtā  
small L.f car  
'small car'

- Bound and free linker observe different “agreement” constraints
- Bound pronominal possessives cannot be derived from free ones by fully regular phonological processes

## Different morphological constraints I

- Choice of free form linker (*na* vs. *ta*) solely depends on morphosyntactic agreement features
  - Bound feminine singular *-r* is further restricted to /a/-final feminine singular hosts
- ⇒ Hypothesised underlying free form *na* cannot be licensed by the constraints of the grammar

(14) a. màtā ta Bellò  
mother L.f Bello  
'Bello's mother'

b. màta-r Bellò  
mother-L.f Bello  
'Bello's mother'

(15) a. gwamnati ta Ingilà  
government L.f England  
'England's government'

b. gwamnatin Ingilà  
government-L England  
'England's government'

## Different morphological constraints II

- Constraints on the distribution of the bound linker are not entirely phonological:  
/a/-final masculine hosts still take the linker *-n*, typical for masculine hosts

(16) a. mātā ta Bellò  
mother L.f Bello  
'Bello's mother'

b. māta-r Bellò  
mother-L.f Bello  
'Bello's mother'

(17) a. bēra na Audù  
rat L.m Audu  
'Audu's rat'

b. bēra-n Audù  
rat-L.m Audu  
'Audu's rat'

# Phonology I

- Bound form of genitive pronouns cannot be derived from free form by regular phonological rules of the language  
 e.g. *nāmù*  $\mapsto$  *-nmù*
- Exceptional shape of first singular forms suggest that reduction cannot be related to surface-phonological rules

Paradigm of free possessive pronouns

	masc/plural		fem. singular	
	sg	pl	sg	pl
1	nāwā	nāmù	tāwā	tāmù
2m	nākà	nākù	tākà	tākù
2f	nākì		tākì	
3m	nāsà/nāshì	nāsù	tāsà	tāsù
3f	nātà		tātà	

Paradigm of bound genitive pronouns

	masc/plural		fem. singular	
	sg	pl	sg	pl
1	-nā	-nmù	-tā	-rmù
2m	-nkà	-nkù	-rkà	-rkù
2f	-nkì		-rki	
3m	-nsà/-nshì	-nsù	-rsà/-rshì	-rsù
3f	-ntà		-rsà	

## Phonology II

- First person genitive pronouns trigger exceptional vowel lengthening on the host

- (18) a. àku  
parrot  
'parrot'
- b. \* àkū  
parrot
- (19) a. àkū-nā  
parrot-my  
'my parrot'
- b. \* àku-nā  
parrot-my



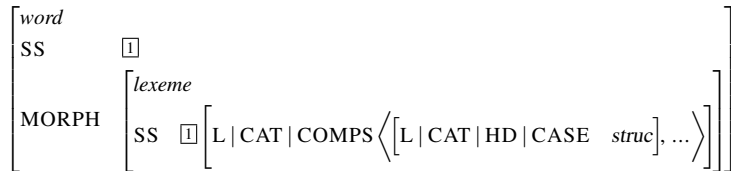
# Analysis

- Genitive linker involves semantically heterogeneous constructions
  - argument-taking heads (strong verbal nouns)
  - modifiers (pre-nominal adjectives)
  - heads taking nominal modifiers
- Distribution of genitive linker in extraction contexts identical to direct object marking of verbs (Crysmann, 2005)
- Unified account of Hausa genitive constructions
  - assumes a divergence between the syntactic and semantic heads
  - treats the genitive marker as the nominal exponent of direct object marking

# Direct object marking I

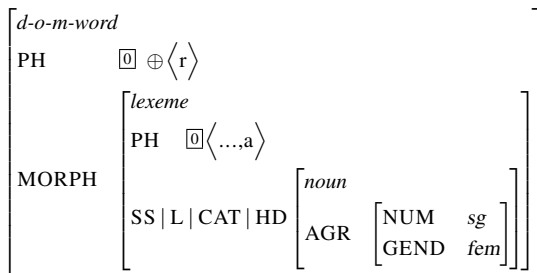
- Distinguish lexical signs (*word*) with respect to direct object marking
- Direct object marking constrained to words with a structural direct object on their COMPS valence list
- Constraint generalises across syntactic categories (e.g., nouns and verbs)

*d-o-m-word* →



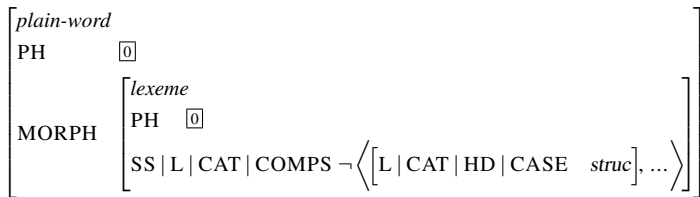
## Direct object marking II

- Inflectional lexeme-to-word rule introduces exponent of direct object marking
- Choice of exponent is category-specific



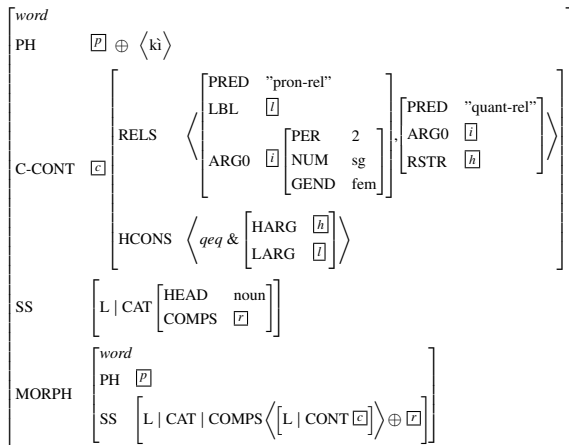
## Direct object marking III

- Absence of direct object marking restricted to words without a direct object on their COMPS list



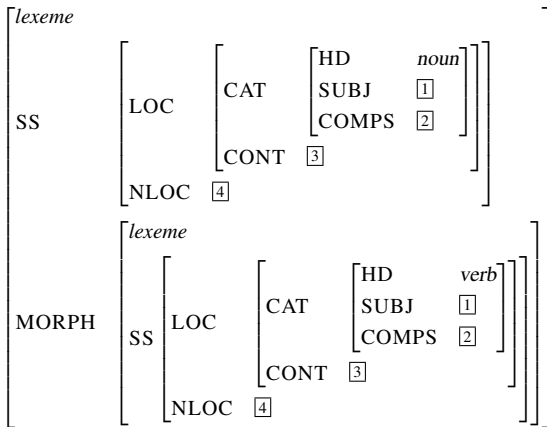
## Direct object marking IV

- Genitive pronouns are the morphological realisation of a noun's direct object valence



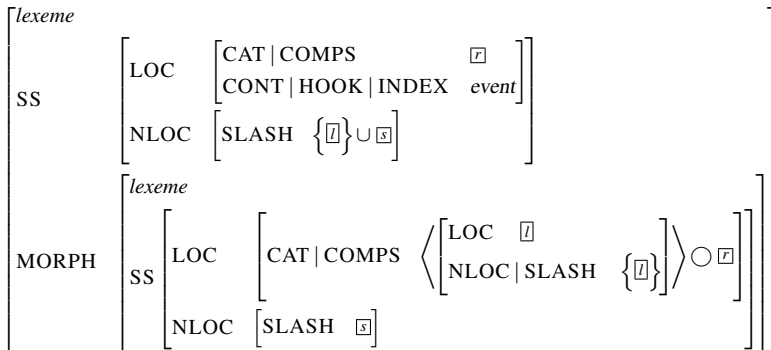
# Strong verbal nouns I

- Strong verbal nouns are derived by a conversion rule
- Basic category change accounts for exponence of direct object marking and pronominal affixes
- Semantics and valency are preserved



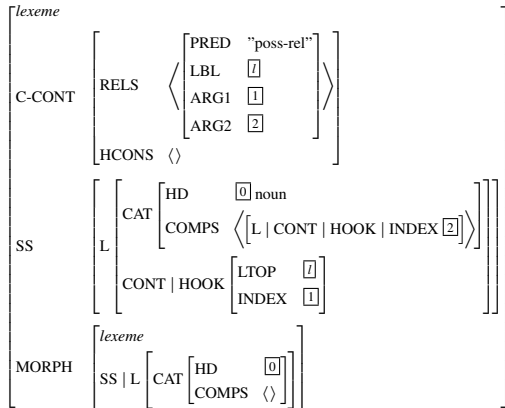
## Strong verbal nouns II

- Complement extraction performed by trace-less lexical rule approach (Pollard and Sag, 1994)
- Removal of valency from COMPS accounts for the absence of direct object marking



# Possessives

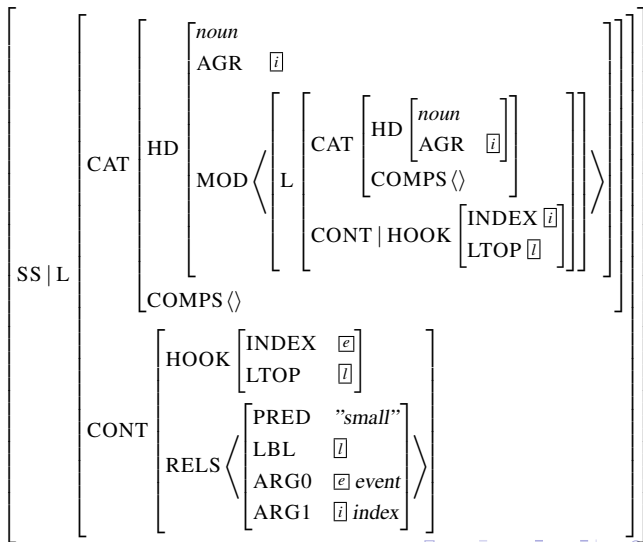
- Bound linker is not an exponent of possessive marking
- Possessive semantics are introduced by the rule that adds a valency for the possessor argument





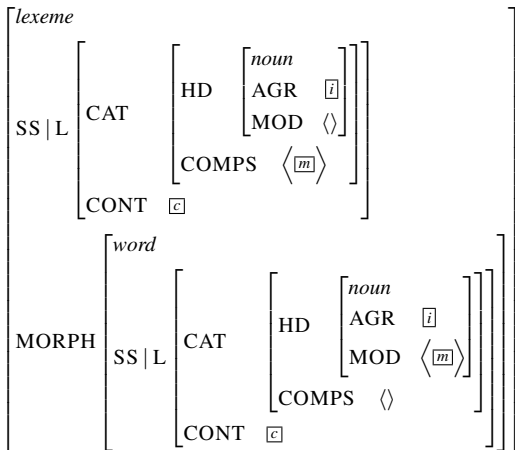
# Adjectives I

- Adjectives are adjuncts of basic category noun
- Modifier semantics are specified lexically (Copestake et al., 2005)



## Adjectives II

- Selectional requirement shifted from the feature MOD into COMPS
- Reversal of head-argument relation aligns well with the general head-initial word order (head-complement, head-adjunct)
- Modifier semantics remain unaffected



## Conclusion

- Unified account of Hausa genitives builds on systematic distinction between syntactic and semantic heads
- Present analysis of the genitive linker connects the syntax of nominal complementation to a well-established property of the language
- Reversal of head-argument relations brings pre-nominal adjectives in line with head-initial word order in Hausa
- Decomposition approach extended to “genitive prepositions” (Crysmann, 2010)
- Shi ke nan, kurunkus.

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