The nature of complex predicates in Ama

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O. The problem

+ predicates in Ama can be divided into two groups: simple (1) and complex ones (2)

(1) kɛ́r   á   kàmál-ūŋ   nî
     woman   PRT   PN-ACC   hit.PFV
     The woman hit Kamal.

(2) ŋá   nē   wɔ́ŋ   sá   bɔ̄rgɛ̀lɛ̂ì   nyɔ́n   á?
     who GF   1S.POSS watch   robber.?   take.PFV   Q
     Who has stolen my watch?

+ the complex predicate in (2) consists of: an uninflected part (UP) *bɔ̄rgɛ̀lɛ̂ì* and an inflected verb (IV) *nyɔ́n*, the latter one carrying tense, aspect and number inflection
- only both forms together give the meaning of stealing, the semantics of the IV 'to take' is concretized by the UP
- thus, the complex predicate in (2) functions like a monomorphemic verb in a language like German or English (Amberber et al., 2010)
+ several approaches to name these constructions: complex predicate, compound predicate, compound verb construction, all of which have a number of theoretical implications not necessarily followed on here
- the term **complex predicates** involves:
- the notion of multi-headedness (whereby the construction is regarded as being monoclausal) - "Complex predicates can be defined as predicates which are multi-headed; composed of more than one grammatical element (either morphemes or words), each of which contributes part of the information ordinarily associated with a head." (Alsina, Bresnan and Sells 1997: 1)
- the notion of multi-predicate structure - "a complex predicate is the set of all predicates of a given clause, provided there are at least two of them". (Rosen 1997: 175)
- the notion of **composition** - complex predicates may be formed by syntactically independent elements whose argument structures are brought together by a predicate composition mechanism (Alsina 1997), involves argument sharing

+ the term **compound verb construction** (McGregor 2002) would be therefore eventually more felicitous "This [compound verb construction, IF] prototypically involves two verbal elements forming a compound: an inflecting verb (IV) that is inflected for verbal categories such as tense, mood, and aspect, as well as (in many languages) person and number of the subject and/or object; and an uninflecting verb (UV) that takes no inflections, and is largely morphologically invariant." (McGregor 2002: 25)
- does not refer to the above mentioned notions (McGregor 2002: 261ff.)
- often implies a tight concatenation of the elements involved, such that they form a prosodic unit or that nothing may intervene between
- McGregorsees the compound verb construction as host for verb classification systems
+ my use of the term complex predicate here: rather intuitive, accounting for the fact that the predicate consists of more than just the inflected verb, does not deal with similar constructions often related to complex predicates (serial verb constructions, noun incorporation, V-V compounds, etc.)
- as the uninflected element does not constitute a verb by itself, notions as preverb, converb, uninflected verb are avoided
+ work in progress – I will not touch these theoretical notions related to complex or compound predicates, I will rather try to
- give an overview of this kind of predicates in Ama
- exemplifiying the different structures where they occur
- look at the properties of the uninflected part of the predicate
- question whether this could be seen as kind of verb classification
+ the data
- own field data from 2010, 2011 (elicitation, experiments, recorded conversation)
- unpublished manuscripts from Ronald Stevenson: grammar, lexicon
- some published articles (all on the basis of Stevenson's work)[1]
- two fairy tales, recorded and translated by SIL in Khartoum

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[1] The data taken from work by Stevenson, Bender, Stevenson et al. is not marked as such in the text when cited as examples of complex predicates out of context, but labelled accordingly in the Toolbox data base. All context examples are my own field notes.

1. Typological properties of Ama

1.1 General

- Nilo-Saharan, Eastern Sudanic, Nyimang (together with Affiti)
- spoken in Sudan, Kordofan province, in the Mandal hills west of Dilling, belonging to the Nuba mountains
- no dialectal differentiation reported, but several differences in vowel quality, use of particles etc. could be observed
- language seems to be viable, despite Arabic dominance
- number of speakers: given with 70.000 in 1982 (Lewis 2009)

1.2 Basic typological information

+ morphological type: agglutinative
+ phonology
- 7-vowel system, with ʊ and ɪ as variants of u and i with unclear status, centralized ө in some environments – indication for cross-height vowel harmony (see Azeb Amha & Dimmendaal 2006)
- 20 consonantal phonemes: differentiation between dental and alveolar plosives
- three tones (H, M and L, two contour tones), serving the differentiation of lexical and grammatical elements

+ **word order**: SOV, SOVX (X = temporal, locative adjuncts, and others)

(3) ín-ḏū   ká   ládì.
     3S-DS   PCF   walk.IPFV
     She is walking.

(4) wìdɛ́ŋ kàdíŋ é   mús-ō   tám.
     child little PRT banana-ACC eat.IPFV
     A little child is eating banana.

(5) āŋí   nɛ́ŋ   kwáī ā   ìɽóù   múī.
     1S.POSS sibling man   PRT tomorrow leave.IPFV
     {When is your brother leaving?} My brother is leaving tomorrow.

(6) ɛ́   àbá   ḏì-ún   àŋèr   báa kā wɔ̀sōḏ-ái   nɔ́nnō.
     CNJ father big-GEN name   PRT PCF change.PFV-PASS   here
     and my grandfathers name has been changed here.

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(7) àŋí- ḏū   wōnō   wɛ́-ḏī   gírʃɔ
     1P-DS   ?where have.IPFV-P money
     From where we gonna have money?

+ **noun**
- no number marking on the noun, for some nouns exist suppletive forms in plural (Stevenson 1938: 19f.)
- no gender differentiation
- case is marked by means of a case suffix which follows the last modifier in a noun phrase, i.e. case marking is a property of the noun phrase
- no definite or indefinite article, but a system of reference tracking which is not well understood yet
-ḏu = "emphatic demonstrative enclitic", used to indicate change of topic/subject
-ḏɛ = "emphatic demonstrative enclitic", used solely in quoting someones words, or emphasizing the speaker's words, marks in most cases the subject or the imperative verb in quotatives
-ḏa = topic marker

+ **Verb and predicate structure**
- the verbal system is first aspectual differentiated
> different means to distinguish these two aspects: tonal change, vowel change, prefix ṯ(ʊ)- in perfective, different stems
- following this differentiation, the verb can be further marked by tense/mood suffixes (Stevenson 1957: 177ff.) and verb extensions
- a further differentiation can be obtained by the use of sentence particles (*a, ka*)
- number of arguments marked on verb (Stevenson et al. 1992: 29ff.)
> in general: intransitive verbs or transitive verbs not referring to an overt object have subject reference
> when the sentence contains an object, in most forms of the verbal paradigm there is only object reference

- general order of the verb: stem (PFV/IPFV) – number – TAM

(8) ... nɛ́-ḏɛ-rau.
         be-P-PST
     {These men were the chiefs of our village.}

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2. Grammatical properties of Ama complex predicates

2.1 Overview on the structures found

- the Toolbox lexicon (mainly Stevenson's entries, also Bender 2000, completed by
field materials) has around 1.500 entries so far, 550 entries are verbs
- from these 550 verbs around 300 are used exclusively in simple predicates in a
sentence, the rest of 250 (i.e. nearly the half) occur as complex predicates
- around 100 are collocations with the verb 'do/say'
- further 20 other verbs occur with different UPs in this construction as well: 'have' (7),
'take' (7), 'rise' (6), 'walk' (6), 'take away' (5), 'hit' (5), 'beat' (3), 'become' (4), 'be' (4),
'go' (4), 'talk' (4), 'take out' (3), 'send' (3), 'put' (3), 'break' (3), 'speak' (2)
- around 70 verbs only occur with one UP

Summary of inflected verbs occurring in this construction:

generic verb	do/say
verbs of equation, posession, inchoativity	be, become, have
verbs ov movement	rise, walk, go
verbs of speaking	speak, talk
verbs of physical action on patiens	hit, beat, break
verbs of changing place of patiens	take, take out, take away, send, put

Examples:

(9a)   múì/mɔ̀   'to rise, to travel' (IPFV/PFV) (cf. ex. (5))

    fìr   múì/mɔ̀   'to jump'   > ?jumping

    dídídì   múì/mɔ̀   'to skip'   > ?

    tètéŋ   múì/mɔ̀   'to get up'   > téŋ 'up'

    finīau   múì/mɔ̀   'to wake up'   > fini-au ('sleep'+LOC)

(9b) nɔ̀   á   téŋ fìr   múì
    DEM   PRT up jumping rise.IPFV
    This one is jumping up.

(10a)   nyūèn/nyɔ́n 'to take (away), carry' (IPFV/PFV)

    bɔ̀rgɔ̀l-ɛì   nyɔn   'rob, steal'   > robber-?

    dum   nyɔn   'lift (from beneath)'   >?

    dweg   nyɔn   'snatch, seize'   > ?

    dɛʈɛ   nyɔn   'lift (on shoulder)'   > back

    bwɛj-u dɔŋ nyɔn   'lift (on shoulder)'   > shoulder-GEN + on

(10b) yì   á   nɛ́   wɔ̂n   sá   <u>bɔ̀rgɔ̀l-ɛì   nyɔ́n</u>!
    2S PRT GF   1S.POSS watch   robber-?   take.PFV
    YOU stole my watch!

(10c) yì   áŋ   kā télē   ā   <u>nyɔ̂n</u>
    2S 1S.ACC PCF see.PFV 1S take.PFV
    Did you see me when I took it?

2.2 Properties of the uninflected part

+ until now, all collocations of IVs with UP are taken into account
- but: UPs are of different origin and different behaviour
- claim: preverbs are inherently predicational, not derived from other parts of speech,
non-finite (Amberber et al. 2010)

+ nouns:
- nouns occurring in complex predicates often carry case marking (locative, accusative,
comitative)
- collocations with nouns are highly predictable, the semantics of the complex
predicate can be inferred from the meaning of its elements
- more than 100 collocations with nouns in the data

(11)

aŋɛr bou	name + put_on	name
jē īrḍì	hair + send	shave
kwɔrɔŋ tu	field/harvest + plant	cultivate
waḍa jɛg	words + allow	pardon, forgive
ḍījī ʃì	work + do.IPFV	work
bus-au kusuḍo nɛ	belly-LOC +bad +be.IPFV	be angry, sad
bɔŋ-au lua	water-LOC + die.PFV	drown
ʃɛl-ɔ kirɛ	penis-ACC + cut	circumcise
kir-ɛì duf ni	foot-COM +? +hit	kick

+ adverbs

- also a good number

- overall semantics predictable from semantics of its elements

(12)

aran ʈɔr	near +come.PFV	approach
aʃín ʃi	again +do.IPFV	repeat
fɔr ʈai	away +go.PFV	depart, go away
kwɛdr ʃì	strong+ do.IPFV	strengthen
tir laɖi	together +walk.IPFV	accompany
wuɽi laɖi	before +walk.IPFV	precede

+ onomatopoeia

occur only in collocation with the generic verb to do ʃi/ʃe

(13)

ātiʃō ʃì		sneeze
bibiɖi ʃì		shake, quiver
fifi ʃì		whistle
tutufu ʃì		crush
gɔgɔsɔ ʃì		cough

+ Arabic loans

- Arabic loans are integrated into the language by using them as UPs

- more than 25 in the data, but will be more

- mostly together with ʃi/ʃe, only one (uncertain) example with another verb

- most of these loans end in -ɛn – meaning unclear

(14)

dafu ʃì	daf' 'group'	join
ālmɛn ʃì	ila:m 'teaching'	teach
hakumɛn ʃì	mahakim 'court'	judge
safarɛn ʃì	safar 'journey'	go on journey
sisilɛn ʃì	sirr 'secret'	conspire
ɖafa twil	?duxa:n 'smoke' + drink	smoke

+ others

(15)

ei ʃì ~ eì nɛ	yes do/say ~ be	accept, agree

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+ verbal origin?

some UPs are of unclear origin, maybe of verbal origin

(16a)

sul-éì	?running-?PASS	
sūlèi kwùɖù	running + come, arrive	run (here)
sūlèi mūʃɛ̄g	running + fly.IPFV	run
sūlèi wūnɖìlèg	running + go_out	run (there)

(16b) ɛ́   bár   ɖū   súl-áù   ɛ́   gíf-on   wèl-áu   ɖíil   dígdígdíg
      CNJ cow DS run.IPFV-PST   CNJ lion-GEN house-LOC there   ID
      And the cow was running to the house of the lion there.

(17)

fifil ʃe	beat.RED + do.PFV	whistle (in calling cattle)
fi(fi)lan ʃe	beat.RED.? + do.PFV	brandish, whirl
> fil	beat (the feet, in dancing; or the drum)	

(18)

bar ʃi	miss + do.IPFV	destroy, miss, harm (IPFV)
ʈobar ʃe	PFV.miss + do.PFV	destroy, miss, harm (PFV)

> perfective prefix on UP seems to indicate that both parts are verbs

+ adverbs of unclear meaning

(19)

dum nyɔn	? + take_away	lift (from beneath)
dùm ʃì	? + do.IPFV	play (children)
dum ti	? + take	clasp

(20)

fir múì	? + rise	jump
fir a-ʃì	? + caus-do.IPFV	unable to do
>fir	= possession, zizyphus?	

(21)

fwɛl leag	? + ride	float

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+ further collocation of one UP with different IVs

(22)

fīnīau āmū	sleeping.LOC + caus.get_up	wake up (someone)
fīnīau mwì	sleeping.LOC + get_up	wake up
fīnīau ŋɔ̄rùf	sleeping.LOC + snore	snore
fīnīɛ̄ ʈùŋ	sleep.?COM + lie_down	sleep
> fini	sleep (?noun)	

2.3 The syntactic structure of complex predicates

+ complex predicates are often claimed to:

- be monoclausal, with both parts of it sharing the same subject, same tense/aspect features, the same object argument (if any)

(23) wɔ̀ŋ   ʃàntá á   bɔ̀rgɔ̀l-ɛ̂ì   nyɔ̀n-áì
    1S.POSS   bag PRT   thief-COM   take.PFV-PASS
    My bag has been stolen.

(24) nɔ̀   á   wìdéŋ kár   nɛ́   ɛ́   sùlɛ̂ì   mùʃɛ́g.
    DEM PRT child   female GF CNJ running run.IPFV
    This is a girl who is running.

+ form a close unit, with the UP preceding the IV directly, so that nothing can intervene
 - cf. (25) where the IV 'to say/do' harmonizes in vowel quality with the preceding UP (Azeb Amha & Dimmendaal 2006: 335) – evidence for prosodic unit

(25) jèrjèr-ʃɛ́ɛ̄   scatter   ɖùnã̄ŋ-ʃèè   bow, bend
    ID-say   bow-say

- nominalization of the complex predicate maintains the strong link between UP and IV

(26) nɔ̀   á   fìfír   múì-ɖà   wár.
    DEM PRT jump.RED rise.IPFV-INF like.IPFV
    He likes jumping.

- but they don't necessarily form such a close unit – negation and emphasizing particles can take position between both forms

(27) wɔ̀ŋ   shàntá á   bɔ̀rgɔ̀l-ɛ̂ì   há   nyɔ̀n-áì
    1S.POSS   bag   PRT   thief-COM? NEG take.PFV-PASS
    [after looking around] Oh no, my bag was not stolen.

(28) A: ń   ŋáɖà á   ʃī   àʃín?
         mmh, how PRT do.IPFV again
         What is she doing again?

    B: ɛ́   wìdéŋ á   tètéŋ   múì.   fífîr   bá   múì
         CNJ child PRT up.RED rise.IPFV jump.RED PRT rise.IPFV
         oh, the child is getting up, jumping up!

    C: sùlɛ̂ì   bá   mùʃɛ̀g,   fífîr   há   múì.
         running PRT run.IPFV, jumping NEG rise.IPFV
         She is running, she is not jumping up.

- (28C) is evidence for fact that the UP is an important part of the complex predicate, not just a modifier – focusing on the lexical semantics of the whole complex is achieved by marking the UP with *ba*, which occurs normally in term focus constructions, and not by using the PCF marker *ka*
> seems to point to the fact that the components of a complex predicate cannot be questioned or negated separately (cf. also Wolaitta)

+ position of the UP with respect to the main verb – in most instances, the UP directly precedes the IV, or different particles may intervene – but there is at least one case in the data where the UP follows the IV

(29a) dùríŋ   ʈómá nyuên   áɖà   ʈàbá   ʃí   à
     children wood carry.IPFV or   push do.IPFV Q
     Are the boys carrying or pushing the stem?

(29b) àŋí   nyìɛ́   ... ɛ́   lī   tɔ́l-ɖ-ūn
     1P   2P.?DAT   ... and place see.PFV-P-DAT
     èní   wúɽ̄ī   ɖàɖíl   ʃí-dī   ʈàbá
     2P   outside there   do.IPFV-P send
     (discussion on the UN refugees office in Cairo) {they called us and said: Come!}
     We will find a place for you which fits you.

+ related to the notion of complex predicates was the question of argument sharing or valency changing – there is still research needed, whether the argument structure of the IV is affected – for Wolaitta it is claimed, that the argument structure of the verbs is not affected (Azeb Amha & Dimmendaal 2006)

- that seems to be at least not the case for the generic verb 'to do' which is transitive, but in collocations with nouns or onomatopoeia it cannot take another argument, complex predicate appears than as intransitive

3. Ama CVC - verb classifiying system?

3.1 The Australian type

+ verb classification was described by various authors for different Australian languages (McGregor 2002, Schultze-Bernd 2000, 2003, Bowern 2010, among others)
- McGregor bases the kind of verb classification on compound verb constructions, similar to those in Ama; in these systems, there is a closed set of IVs (between 10 and 30) and an open set of UVs which form together compound verb constructions
- the IVs classify the UVs into different categories in terms of valency, Aktionsart and vectorial configuration (McGregor 2002)
- across languages, the IVs occurring in such constructions are almost the same – high-frequency verbs with basic meaning such as: say/do, sit/be, stand, become, go, fall, carry, throw, put, catch/get, give, hit, poke, see
- high degree of grammaticalization of IVs
- meaning of collocations not predictable from meaning of its single parts
- UVs developed out of ideophones historically
- one UV can occur with more than one IV
(30) Nyulnyul: UV = baab 'open'

-JID ('go')	'come open'	atelic, activity progresses over time
-NY ('get')	'open something'	telic, acquire condition by active means
-M ('put')	'cause something to open'	telic, induce thing to enter new state

(McGregor 2002: 112f.)

3.2 Verb classification in Africa?

+ verb classification longtime neglected in Africa, see for instance Aikhenvald who asserts that "there are no verbal classifiers in the languages of Africa or Eurasia or in the Austronesian family" (2000: 171)
- but there seem to be cases of verbal classification, reported from West Africa and North-East Africa
+ **West Africa**: see discussion of Serge Sagna on overt verb classification in Eegima (December 2010)

- similar system might be found in some Gur languages, e.g. in Nawdm where verbal nouns are incorporated into the noun class system of the language according to the singulative/plurality dichotomie of events
- **Yom** – more complex system – the verbal nouns belong to nearly all gender except the one for humans (cf. Fiedler, to appear) – the explanation thus far only concerns phonological constraints, but not the semantics of the verbs

	root verbs	na-verbs	a-, i-, aa-, ii-class verbs	stative verbs
a/ba	-	-	-	-
ŋʊ (/i)	+ (-ʊŋ)	-	-	-
də (/a)	+ (-r)	+ (-r)	-	-
ka/sə	+ (-ɣa)	-	+ (-ŋa)	+ (-sə)
bə (/i)	+ (-pə, -ʊ)	+ (-pə, -ʊ)	-	-
kʊ(/i) ; kʊ(/də)	-	+ (-kʊ)	-	-
i (pl.)	-	+ (-ii)	-	-
mə(/i)	+ (-m)	-	-	-
la	-	-	-	-

Table 1: Distribution of verbal nouns in the Yom noun class system

+ **Wolaitta** (Omotic, Afro-Asiatic - Amha 2010, Amha & Dimmendaal 2006)
- compound verbs in Wolaitta involve two predicative elements: (i) a closed class of inflecting verbs, (ii) an open class of converbs (most productive: 'say', 'do/make')
- Wolaitta has 10 inflected verbs in this construction which are not simply auxiliaries in carrying tense/aspect/mood information, but make a clear lexical-semantic contribution to the complex predicate
- compound verbs = converb + main verb describe a single event, differ from regular converb + main verb chains where the converb is subordinated
- "the syntactically main verb is the semantic modifier of the preceding converb" (Amha & Dimmendaal 2006: 320)
--> verbal compounding of this type is common in Ethiopian Afroasiatic languages as well as Nilo-Saharan languages towards the west of this region (including Ama; Azeb Amha & Dimmendaal 2006: 335; cf. also Güldemann 2005 on Afar)
- compound verbs are affecting the Aktionsart expressed by converbs – indication of classification system?
- certain degree of grammaticalization, with some verbs, there are fix collocations
+ verbal classification in **Gumuz** (Nilo-Saharan, spoken in western Ethiopia /Southeastern Sudan)

- complex predicates that consists in verb + incorporated noun
- incorporated nouns (often body parts) have developed to verb classifiers

4. Summary and conclusion

+ properties of complex predicates in Ama

- nearly half of the verbal lexicon consists of complex predicates, the other half accounts for simple predicates
- UPs used in this construction establish a divers class, consisting of different parts of speech: considerable part of them are nouns and adverbs (ideophones?), Arabic loans, probably also verbal elements
- nominal UPs take case marking – question whether they should be included in the discussion or not, or whether they just represent arguments of the IV
- the IVs found in the construction strongly correlate with those attested in Australian languages
- complex predicates in Ama share subject, tense/aspect features, arguments
- show a strong concatenation, but may be divided by particles
- the whole complex is focused by marking the UP with a focus marker – probably this is also the case with questioning for them
- negation is regularly achieved by placing the neagion marker directly before the IV
- most collocations are predictable, IVs still having their semantics which they have in simple verb constructions, there is no degree of grammaticalization
- a thourough analysis of the semantics of the complex predicates is still pending
- even though there are strong parallels to the systems found in Australian languages, it seems that in Ama there is no real classification, maybe that the system turns into one of verb classification (McGregor, p.c.)
- the same holds true for the similar construction in Wolaitta (and possibly other languages of NE-Africa) – whereby Wolaitta seems to show a stronger grammaticalization of the construction

Abbreviations

ACC	Accusative	IPFV	Imperfective	POSS	Possessive
CNJ	Conjunction	IV	Inflected verb	PROG	Progressive
COM	Comitative	LOC	Locative	PRT	Particle
DAT	Dative	NEG	Negative	PST	Past
DEM	Demonstrative	P	Plural	Q	Question
DS	Different subject	PASS	Passive	S	Singular
GEN	Genitive	PCF	Predicate-	UP	Uninflected part
GF	Generic focus		centered focus	UV	Uninflected verb
ID	Ideophone	PFV	Perfective		
IMP	Imperative	PN	Proper name		

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