## **Event relatives in Wolof**

**0.** Context. The derivation of free relatives (FRs) has been argued to involve relativization from a wide array of argument and adjunct positions [1]. To our knowledge, FRs involving event arguments have not been discussed, however. [3] entertain the idea that certain factive constructions in English involve relativization from event argument positions. If relativization from event argument positions is possible, it should not be restricted to factive constructions, more generally, event relatives (headed or free) should be possible.

**1. Goal.** We examine two A'-constructions in Wolof previously described as clausal nominalizations [5], and show that they can be fruitfully analyzed as involving event relativization.

**2. Data. 2.1. Headed relatives: head-complementizer agreement.** In Wolof, the complementizer of headed relatives (RC) agrees with the noun class of the head [6, 7, 8]: in (1a) *téere* ('book') belongs to the *b*-class, and *jigéen* ('woman') in (1b) to the *j*-class. Additionally, the vowel of the complementizer in RC encodes definiteness; compare (1a) and (1c).

(1) a. téeré b-i	Musaa bind	c. téeré b-u	Musaa bind
book CL-C <sub>REL.DEF</sub> Moussa wrote		book CL-C <sub>REL.INDEF</sub> Moussa write	
'the book that Moussa wrote'		'a book that Moussa wrote'	
b. jigéen j-i	ñu gis		
woman CL-C <sub>REL.DEF</sub> 3PL see			
'the woman t	hat they saw'		

**2.2. Free relatives also involve complementizer agreement.** FRs have no overt heads. Yet, the complementizer internal to the FR also takes different forms depending on the features of the element which is by hypothesis extracted from the position of the gap. The sentences in (2) are specificational pseudoclefts [4]. (2a) contains a FR with an object gap, and (2b) a FR with a subject gap. In (2a), the complementizer takes the form that it would take when it agrees with an overt wh-phrase ranging over non-human entities (*l-an* 'what'). In (2b), the complementizer takes the form that it would take when it agrees with an overt wh-phrase ranging over people (*k-an* ('who')) [2, 6, 7]. In both cases, the vowel in the FR complementizer is obligatorily *-i*, which, as discussed above, encodes definiteness in headed relatives.

(2) a. [l-i Musaa bind] téeré la.	b. [k-i bind téeré] Moussa la.
CL-C <sub>FR</sub> Moussa write book C.	CL-C <sub>FR</sub> write book Moussa C
'What Moussa wrote is a book.'	'Who wrote a book is Moussa.'

**2.3. Gapless relatives?** The sentences in (3) and (4) illustrate two related constructions, which [5] calls 'clausal nominalizations.' Anticipating our analysis, we will call these constructions 'event relatives': (3) is an 'unrestricted event relative', and (4) a 'restricted event relative.'

- (3) [l-i Musaa bind téeré bi] bett na=Ø=ma.
  CL-C<sub>FR</sub> Moussa write book the.SG surprise C=3SG=1SG
  'The writing of the book by Moussa surprised me.'
- (4) [bind b-i Musaa bind téeré bi] bett na=0=ma. write CL-C<sub>REL,DEF</sub> Moussa write book the.SG surprise C=3SG=1SG.OBJ 'The writing of the book by Moussa surprised me.'

In both (3) and (4), the predicate *surprise* takes a clausal phrase as subject. In (3), the clausal subject contains a complementizer that shows the agreement pattern of (2a). This pattern corresponds to the agreement with overt non-human and definite expressions. The clausal subject is parallel in form to the examples in (2), with one notable exception: there does not seem be a gap. As indicated

by the translation, which resorts to an *-ing* form in English, the clausal phrase refers to a particular event. The clausal phrase in (4) has the same interpretation as the one in (3), but its form differs from the form of (3) in two ways. First, the example in (4) has the form of a headed relative clause, with the apparent head doubling the main verb. Second, the complementizer form changes: it still shows definiteness marking, but now it exhibits *b*-class agreement, which is the default noun class in Wolof. To summarize: (3) and (4) are parallel in form to either free or headed relatives, but, at the same time, they do not seem to involve relativization from an argument position. How come?

**3.** Analysis. Our take is that, despite appearances, (3) and (4) do involve relativization, from the event argument position. Regular FRs, like those in (2) denote entities. In parallel, we propose that the clausal subjects in (3) and (4) denote events. **3.1. Unrestricted Event Relatives.** In the case of unrestricted event relatives, we assume relativization of a covert wh-definite phrase (THE<sub>*whev*</sub>), of type (vt,v) (5). This expression takes a property of events *P*, presupposes that *P* is true of only one event, and, when this is the case, it yields the only event that *P* is true of. The construction is not gapless: we assume that THE<sub>*whev*</sub> is base generated in the event argument position, from where it moves, to [Spec,CP], to avoid a type mismatch, generating a property of events obtained by abstracting over the event argument, as seen in the LF in (6). In (6), we assume overt representation of event arguments and event abstraction in the object language, we take *bind* ('write') to be of type (v,t), and let THEME and AGENT introduce other arguments (7).

(5)  $\llbracket \text{THE}_{wh_{ev}} \rrbracket = \lambda P_{\langle v,t \rangle} : |P| = 1.\iota e[P(e)]$ 

(6) 
$$[_{CP} \operatorname{THE}_{wh_{ev}} [_{C'} \lambda e_1 e_1 \mathbf{l} \cdot \mathbf{i}_{[+def]} ] [_{AGENTP} \operatorname{Mussa AGENT} [ [ \lambda e. write e_1 ] [THEME book the ]] ]$$

(7) a. 
$$[AGENT] = \lambda P_{vt} \cdot \lambda x \cdot \lambda e \cdot AGENT(x)(e) \& P(e)$$
 b.  $[THEME] = \lambda x \cdot \lambda e \cdot THEME(x)(e)$ 

We take the agreement in the complementizer to be sensitive to the properties of  $THE_{whev}$ : as in FRs, *l*- indicates that the expression does not range over humans, and *-i* reflects its definiteness. As intuited, the CP is predicted to denote the unique event that is a writing of the book by Mussa.

**3.2. Restricted Event Relatives.** We take restricted event relatives to involve a version of  $\text{THE}_{wh_{ev}}$  (THE<sub>2whev</sub>) that takes an extra property of events, as in (8). THE<sub>2whev</sub> takes a property of events Q and a property of events P, it presupposes that P is true of only one event and that that event is a Q-event, and, when these requirements are met, it yields the unique event that P is true of. The derivation of restricted event relative clauses proceeds, otherwise, in parallel to the derivation of unrestricted event relatives: THE<sub>2whev</sub> is base generated in the event argument position and A'-moved to [Spec,CP].

(8)  $\llbracket \text{THE}_{2wh_{ev}} \rrbracket = \lambda Q_{\langle v,t \rangle} \lambda P_{\langle v,t \rangle} : |P| = 1 \& Q(\iota e[P(e)]). \iota e[P(e)]$ (9)  $\llbracket \text{THE}_{2wh_{ev}} \rrbracket = \lambda Q_{\langle v,t \rangle} \lambda P_{\langle v,t \rangle} : |P| = 1 \& Q(\iota e[P(e)]). \iota e[P(e)]$ 

(9) 
$$[_{CP} [THE_{2wh_{ev}} write] [_{C'} \land e_1 e_1 b-1_{[+def]} [_{AGENTP} Mussa AG. [ [  $\land e$ . write  $e_1$  ] [TH. book the ]] ]$$

As before, the complementizer agrees with the moved phrase. The *-i* part on C reflects the definiteness of the moved phrase. The default *b*- class agreement part signifies that the moved phrase is a nominal. We propose that the copied verbal root is nominalized by  $THE_{2whev}$ . Note that this event nominal is different from the nominalized verb in VP nominalizations, which has the form *mbind* (*mbind-um téeré bi* 'the writing of the book'). Our analysis does not, by itself, predict the identity of the main verb and the verb at [Spec,CP]. For it not to overgenerate with structures where the verbs differ, we need to rely on an operation that copies the verb that is the sister of  $THE_{2whev}$  at base. The exact nature of this operation remains to be determined. Nevertheless, the equivalence in interpretation between unrestricted and restricted event relatives is captured: as before, when it denotes something, the clause denotes the unique event that is a writing of the book by Moussa.

## References

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