Size matters: clause structure and selective opacity in Swahili relatives

§1. Overview. This paper provides novel data from Swahili (Bantu) consultants showing that relative clauses display two degrees of clause-boundedness. Such facts support an irreducible role for structural positions in our theories of locality. In particular, a version of the *Williams Cycle* (e.g. Williams 2003): the higher the landing site is in the functional sequence, the more potentially unbounded the movement. **§2. Theoretical background.** A clause that is transparent for one type of movement but not another is *selectively opaque* for movement. English finite complements are, for example, transparent to wh-movement but block raising. Approaches to selective opacity typically implement two intuitions at once: **A.** The Content Intuition: *blocking of movement depends on the featural content motivating the dependency* **B.** The Position Intuition: *blocking movement depends on the structural relationship between the base position and landing sites.* The necessity of the Position Intuition has recently been contested. Halpert (2019) trivialises the role of position in Zulu selective opacity effects, reducing it to the distribution of movement-triggering features (and interveners) in the clausal spine. This goes in a similar direction to van Urk (2015)'s fully-featural A/Ā-distinction. Swahili relatives problematise such attempts to eliminate reference to position.

§3. Three kinds of relative. Restrictive relative clauses (RCs) in Swahili come in three basic types, shown below in (1). All three types: i) display a relative marker (REL) ii) can have subjects or non-subjects as heads iii) show evidence for a movement dependency, in terms of island and reconstruction effects. *Prima facie*, they are distinguished by the presence/absence of the complementiser *amba*, and by differences in verbal in morphosyntax partly concerning the placement of REL (e.g. Ashton 1944; Barrett-Keach 1980; Vitale 1981). RCs without *amba* have a comparatively restricted word order, and verbs in these clauses have a comparatively restricted set of inflectional options.

(1) a. Ni-li-nunua [$_{\text{Head}}$ **kisu**] [$_{\text{RC}}$ amba-cho Jini a-li-ki-vunja **t**] *amba*
1SG-PST-buy 7knife COMP-7REL 1Jini 1-PST-7-break
'I bought the knife that Jini broke.'

b. Ni-li-nunua [$_{\text{Head}}$ **kisu**] [$_{\text{RC}}$ (*Jini) a-li-cho-ki-vunja Jini **t**] Type 1 *amba*-less
1SG-PST-buy 7knife 1-PST-7REL-7-break 1Jini
'I bought the knife Jini broke.'

c. Ni-li-nunua [$_{\text{Head}}$ **kisu**] [$_{\text{RC}}$ (*Jini) a-ki-vunja-cho Jini **t**] Type 2 *amba*-less
1SG-PST-buy 7knife 1-7-break-7REL 1Jini
'I bought the knife Jini breaks.'

§4. Restrictions on long-distance movement. The core data concern cases where the base position of the RC is contained within a complement clause. Such cases have received little attention in previous literature. Once prolepsis and resumptive pronouns are factored out, it becomes apparent RC type affects the availability of long-distance movement. This is shown below in (2) with complement clauses featuring the complementiser *kwamba*: only amba RCs can have a gap contained in such complements. Note that *kwamba* is optional and its absence does not improve (2bc). *Kwamba*-complements are thus selectively opaque to movement forming RCs.

(2) a. **Mtu** [amba-ye ni-na-amini [kwamba **t** a-na-fanya kazi zaidi]] ni Musa.
1person COMP-1REL 1SG-PRS-believe COMP 1-PRS-do work more COP 1Musa
'The person who I believe works the most is Musa.' amba ✓

b.* **Mtu** [ni-na-ye-amini [kwamba **t** a-na-fanya kazi zaidi]] ni Musa.
1person 1SG-PRS-1REL-believe COMP 1-PRS-do work more COP 1Musa
Intended: 'The person I believe works the most is Musa.' Type 1 amba-less ✗

c.* **Mtu** [ni-amini-ye [kwamba **t** a-na-fanya kazi zaidi]] ni Musa.
1person 1SG-believe-1REL COMP 1-PRS-do work more COP 1Musa
Intended: 'The person I believe works the most is Musa.' Type 2 amba-less ✗

Change the kind of complement clause and *amba*-less RCs becomes possible. The transparency of different complements is summarised below in (3), alongside details of matrix selection and morphosyntactic differences. What emerges are *three profiles of transparency to movement forming RCs*. Infinitive complements (3iii) are transparent to all RC types, subjunctive complements (3ii) just to *amba* and Type 1 *amba*-less RCs and COMP-complements (3i) only to *amba* RCs.

(3)

Complement	Form	Matrix Predicate Type	Transparent to
i) COMP	[(COMP) AGR-INFL-V]	Attitude Report	Amba
ii) SBJN	[(*COMP) AGR-V-*e*]	ECM/Object Control	Amba, Type 1
iii) INF	[(*COMP) *ku*-V]	Raising/Subject Control	Amba, Type 1 + 2

§5. Analysis: i) Relative clauses are formed by movement to one of three positions in the clausal spine (4). Movement to lower than Spec CP is associated with a smaller clause structure, by virtue of the locality of predication. The smaller clause structures are the source of word order restrictions and impoverished verbal morphosyntax in amba-less RCs. **ii)** Complement clauses, like relatives, come in three degrees of structural richness. If we use a fairly coarse-grained clause structure, one could say that each type of relative has a complement clause counterpart (5).

(4) **Relative Clauses**

a. $[_{CP}$ **DP** *amba* $[_{TP}$ $[_{FP}$ $[_{VoiceP}$ …**t** …]]]] [1a]

b. $[_{TP}$ **DP** $[_{FP}$ $[_{VoiceP}$ …**t** …]]] [1b]

c. $[_{FP}$ **DP** $[_{VoiceP}$ …**t** …]] [1c]

(5) **Complement Clauses**

a. $[_{CP}$ *kwamba* $[_{TP}$ $[_{FP}$ $[_{VoiceP}$ …]]]] [COMP]

b. $[_{TP}$ $[_{FP}$ $[_{VoiceP}$ …]]] [SBJN]

c. $[_{FP}$ $[_{VoiceP}$ …]] [INF]

iii) Movement is subject to the constraint in (6), a version of the *Williams Cycle*. The effect of (6) is to ensure that cross-clausal movement cannot land any lower in the functional sequence than the highest functional projection in the complement clause. Movement out of CP-complements, for example, cannot form *amba*-less RCs precisely because the requirement movement (to TP or FP) is lower in the fseq than CP. Likewise, m

(6) **Generalised Ban on Improper Movement (GBOIM)** (Williams 2003, 2011; Poole 2022)
Movement to [Spec, XP] cannot proceed from [Spec, YP] or across YP, where Y is higher than X in the functional sequence.

The GBOIM, or a version of it adequate for (3), can be derived by different approaches to the Williams Cycle. Under the Level Embedding approach (e.g. Williams 2003, 2011; Poole 2022) (6) stems from the timing of clausal embedding relative to movement. Under the Horizons approach (e.g. Keine 2020) the source of (6) is a condition on Agree, tied to location of probe in the clausal spine. Both approaches instantiate the POSITION INTUITION, but do not rely on classic A/Ā-positions.

Selected references E. Ashton 1944. *Swahili Grammar*; C. Barrett-Keach. 1980. *The syntax and interpretation of the relative clause struction in Swahili*; C. Halpert. 2019. Raising, unphased. *LI*; S. Keine. 2018. Case vs. positions in Locality of A-movement. *Glossa*; 2020. *Probes and their Horizons*. MIT Press; E. Poole. 2022. Improper case. NLLT; C. van Urk. 2015. *A uniform syntax for phrasal movement.* MIT; A. Vitale. 1981. *Swahili Syntax*. Foris; E. Williams. 2003. *Representation Theory*; 2011. *Regimes of derivation in syntax and morphology.*