

An argument for true c-selection in clausal complementation
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Based on a case study of clause selection in Ndebele (Bantu), this paper argues that clausal complementation involves true category selection (*strict subcategorization*, Chomsky 1965; *c-selection*, Pesetsky 1982). While many co-occurrence restrictions between the matrix predicate and its complement follow from their semantics, all those that resist a semantic account are fully local (no long distance selection) and target only category features (here, v and D, but not mood- or finiteness-related features.)

1. Data There are four types of clause-like complements in Ndebele, which differ in size and their outermost category: *Small Subjunctives* are vPs, while the other three clause types are nominalized (DPs).

- (1) a. Ng-za-mane (*ukuthi) [_{vP} ng-pheke.] *Small SBJV*
 1sg-FUT-simply.do (*COMP) 1sg-cook.SBJV
 ‘I will simply cook’
- b. Ng-a-jayela (*ukuthi) [_{DP} u- [_{TP} ku-pheka.]] *Infinitive*
 1sg-PST-usually.do (*COMP) D- DEF.AGR-cook
 ‘I used to cook’
- c. Ng-a-jayela [_{DP} u- [_{CP} kuthi [_{TP} ngi-pheke.]]] *SBJV Clause*
 1sg-PST-usually.do D- COMP 1sg-cook.SBJV
 ‘I used to cook’
- d. Ngi-cabanga [_{DP} u- [_{CP} kuthi [_{TP} ba-a-pheka.]]] *IND Clause*
 1sg-think D- COMP 2-PST-cook
 ‘I think that they cooked’

The complement types in (1b,c,d) behave like DPs according to the following diagnostics: case-licensing, object marking, dislocation, coordination and ellipsis. Small Subjunctives do not show DP properties and they differ from the other three clause types in not being able to express viewpoint aspect and higher functional categories. Infinitives and Subjunctive Clauses are smaller than Indicative Clauses: They disallow certain left-peripheral material and they lack independent tense specification (allowing only future orientation or simultaneous interpretation of the embedded event). Except for the Infinitive, all are finite. The summary below additionally gives possible denotations for each clause type, using the classification proposed in Ramchand & Svenonius 2014: E(vents), S(ituations) and P(ropositions). I formalize mood and finiteness contrasts using binary features but different implementations are in principle possible.

Table 1.

Clause type:	<i>Small SBJV</i>	<i>Infinitive</i>	<i>SBJV Clause</i>	<i>IND Clause</i>
Syntax:	vP	DP	DP	DP
	+FIN	−FIN	+FIN	+FIN
	+SBJV	−SBJV	+SBJV	−SBJV
Semantics:	Event	Event or Situation		Proposition

Most clause-embedding verbs in Ndebele can combine with more than one complement type. However, there are only 5 groupings of clause types that verbs select for (out of 15 logically possible combinations):

Table 2.

Attested selectional profiles of embedding verbs	# of verbs (total 34)
Type 1. Small SBJV only	6
Type 2. IND Clause only	5
Type 3. Infinitive and SBJV Clause	12
Type 4. Small SBJV, Infinitive and SBJV clause	2
Type 5. Infinitive, SBJV Clause and IND Clause	9

All other combinations of clause types are not attested in selection (e.g. there are no verbs that select only for Subjunctive Clauses). I argue below that in order to derive the 5 verb types, selection must be sensitive to both the semantics and the category of the complement clause.

2. Against a fully semantic account. Event-denoting complements in Ndebele can be coded in three ways: as a Small SBJV, Infinitive and SBJV Clause (2). The impossibility of a future-oriented adverb diagnoses obligatorily simultaneous interpretation of the embedded event, and thus an Event-denoting complement.

- (2) a. Ng-a-phinda ng-a-phéka (#kusasa). *Small SBJV, Event*
 1sg-PST-do.again 1sg-PST-cook.SBJV tomorrow
- b. Ng-a-phinda u- ku-pheka (#kusasa). *Infinitive, Event*
 1sg-PST-do.again D- DEF.AGR-cook tomorrow
- c. Ng-a-phinda u- kuthi ngi-pheke (#kusasa). *SBJV clause, Event*
 1sg-PST-do.again D- COMP 1sg-cook.SBJV tomorrow
 ‘I cooked again (#tomorrow)’

If clause selection targets only semantic types, we predict that all Event-selecting predicates should be able to combine with the three clause types in (2). The existence of Type 1 verbs, which select only Small Subjunctives, falsifies this prediction. The natural class of Small Subjunctives is defined syntactically (vP).

3. Against a fully syntactic account. On the other hand, a fully syntactic account fails to predict Type 3 predicates, which select for Infinitives and Subjunctive Clauses, as these two clause types do not form a natural class syntactically (see Table 1). A Type 3 predicate would have to be an instance of accidental selectional optionality between two distinct clause types. This is highly unlikely given that over a third of all verbs are of this type. The only way to define Type 3 as a natural class is by making reference to both semantic and syntactic features of the complement: Type 3 verbs select for DPs that can denote Events or Situations. An alternative view might posit a syntactic feature that underlies the Situation denotation. I reject this alternative for two reasons: i) there is no morphological or syntactic evidence for such a feature, rendering this analysis a de facto semantic one, and ii) this alternative would not account for the existence of Type 3 predicates that only select for Event-denoting complements (e.g. ‘usually do’ in (1b-c)).

4. The correct generalizations. The five types of predicate follow as natural classes if clause selection is semantic (E, S, P) and syntactic (c-selection, here for vP or DP). Out of the 11 logically possible combinations of semantic type and syntactic category, 5 are either redundant for language internal reasons (in blue) or ruled out by the assumption that a given denotation requires a certain amount of structure (in red). Following Wurmbrand & Lohninger (2020), I assume that Events must be minimally vPs, Situations must be minimally TPs, and Propositions – CPs. All the possible combinations are instantiated:

1.	vP E	Vacuous: vP can only express Events
2.	vP S	Impossible: S requires minimally a TP
3.	vP P	Impossible: P requires minimally a CP
4.	DP E	Type 3: the Event variant (e.g. <i>jayela</i> ‘do usually’)
5.	DP S	=10 (all S-denoting clauses are nominalized in Ndebele)
6.	DP P	=11 (all P-denoting clauses are nominalized in Ndebele)
7.	vP	Type 1 (e.g. <i>kaze</i> ‘never do’)
8.	DP	Type 5 (e.g. <i>vuma</i> ‘agree’)
9.	E	Type 4 (e.g. <i>phinda</i> ‘do again’)
10.	S	Type 3: the Situation variant (e.g. <i>funa</i> ‘want’)
11.	P	Type 2 (e.g. <i>khohlwa</i> ‘believe’)

4. Conclusions. Interestingly, ±FIN and ±SBJV features are not select for. For instance, there are no verbs selecting for Small Subjunctives and Subjunctive Clauses to the exclusion of everything else (this would be accomplished by selection for +SBJV complements). Similarly, no verb selects just for Infinitives (selection for –FIN) and no verb selects for finite complements only (+FIN). Thus, while both semantic types and syntactic features must be referenced in Ndebele clausal complementation, the latter turns out to be true c-selection: a fully local requirement for a category feature.