

# Predication Types and Predicate-Internal Arguments in Zulu\*

a draft paper by Leston Buell  
Leiden University Centre for Linguistics  
dr.bulbul@yahoo.com

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## Caveat

This is a draft document. The discussion section is still minimal. There may be incomplete citation of previous work. Please ask the author before citing. Comments are most welcome.

## 1 Introduction

This paper concerns the structure of non-verbal predication in Zulu, in contrast to verbal predication, which has already been the object of previous study. ‘Verbal predication’ will be used to denote clauses whose predicate is headed by a lexical verb, such as *cula* ‘sing’ in (1).

- (1) Izingane zi- cula le ngoma.  
10children 10SM- sing 9this 9song  
‘The children sing this song.’

In addition to verbal predication, Zulu has several types of non-verbal predication, defined as those types of predication headed by some element other than a lexical verb, such as an adjective, particle, or preposition. In the traditional Nguni literature, these predication types are collectively called ‘copulatives’. Non-verbal predicates are exemplified by nominal and adjectival predicates in (2) and (3), respectively.

- (2) Lezi zingane zi- nga- bafana.  
10these 10children 10SM- COP:ART- 2boys  
‘These children are boys.’
- (3) Le ngoma i- nhle.  
9this 9song 9SM- beautiful  
‘This song is beautiful.’

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In the examples seen thus far, the logical subject appears in what can be called preverbal subject position, but this is not the only position in which a logical subject can occur. In verbal clauses (clauses with a predicate headed by a lexical verb), there are also two postverbal positions in which a logical subject can appear. In an expletive subject construction, the logical subject appears immediately following the verb<sup>1</sup> and can be said to be in a predicate-internal position, as in (4).

- (4) Ku- fik- e i- zingane. ]PredP  
 17SM- arrive- PERF.CJ ART- 10children  
 ‘The children/some children have come.’

We will use the terms ‘predicate-internal’ and the vague constituent label PredP as a way of talking about the various types of verbal and non-verbal predication in a uniform fashion. In (4), for example, it might be said that the logical subject *izingane* is *vP*-internal, but other predicate types, such as unaccusative verbs and non-verbal existential predicates, admit the same sort of construction as in (4), even though they could not be said to project a *vP*. The terms ‘predicate-internal’ and PredP are thus useful, because they afford us a way to generalise across predicate types.

Two things must be said about the semantics of such expletive subject constructions like the one in (4). First, the range of verb types which can appear in such a construction is restricted. All speakers allow such constructions with intransitive verbs (both unaccusative and unergative), while others also allow monotransitive verbs as long as the object is non-human. Second, the discourse value of the logical subject in such a construction differs from that in a canonical SV(O) clause. Use of the expletive subject construction generally implies either narrow focus or what some have called ‘presentational focus’ of that subject. Thus, (4) could be felicitously used either to answer a question about who came or to announce that an henceforth unmentioned group of children had come. In contrast, if the group of children was discourse salient and the speaker simply wanted to state that they had come, the SV order would be used.

In addition to the predicate-internal position, the logical subject can stand in what can be termed a dislocated position (van der Spuy 1993). In verbal clauses, a subject is in a dislocated position if the verb bears a subject marker prefix that agrees with it. This is thus the case with *izingane* in (5), because the verb bears a subject marker that agrees with it in noun class 10 features.

- (5) Zi- cul- e le ngoma ]PredP i- zingane.  
 10SM- sing- PERF.CJ 9this 9song ART- 10children  
 ‘The children/some children have come.’

Similar predicate-internal and dislocated positions are also available for objects and adjuncts.

Recent work has tried to characterise these two (classes of) positions. For example, in addition to discussing their prosodic properties, Cheng and Downing (2007) have found that dislocated elements cannot serve as discourse topics, while Buell (2008b) has shown that only a predicate-internal element may be questioned or be modified by a word

<sup>1</sup> A light locative or prepositional phrase can intervene between the verb and the logical subject if the subject is in ‘presentational focus’ rather than contrastive focus (Buell 2008a).

meaning ‘only’. All of this work has been concerned solely with verbal predication, that is, with clauses containing a lexical verb. The purpose of this paper is to extend the coverage of those findings to the several types of non-verbal predication found in Zulu. The central issues to be considered are these:

- Do the arguments of non-verbal predicates have the same predicate-internal and dislocated positions in which they can appear?
- Does an argument in a given position have the same range of interpretations (such as focus and indefiniteness) across all predication types?
- How can syntactic and interpretational anomalies between predication types be accounted for?

Close examination of the various predication types brings a number of interesting issues to the surface.

The remainder of this paper is organised in the following way. Section 2 reviews the relevant properties of verbal predication in Zulu, as well as covering some necessary background information. Section 3 discusses each of the different types of non-verbal predication separately. Issues resulting from comparison between predication types are discussed in section 4. Finally, the paper is concluded in section 5.

## 2 Verbal predication in Zulu

We will first look at the diagnostics for determining whether an element is in a predicate-internal or right-dislocated position. Then we will look at some of the semantic properties of the two positions. Before examining non-verbal predication in Zulu, we will first briefly review some properties of clauses pertinent to the predicate-internal and dislocated positions with predicates headed by a lexical verb. This will allow us to formulate our expectations concerning non-verbal predicates.

### 2.1 Boundary tests

Zulu has a conjoint/disjoint verb alternation (or simply ‘junctivity’), which we will examine shortly. Van der Spuy (1993) showed that this alternation correlated to syntactic constituency: a disjoint verb form was always final within a particular syntactic constituent. Van der Spuy assumed this constituent to be IP, but the exact height and label of the lowest constituent to which junctivity is sensitive is difficult to ascertain. Here we will call this constituent PredP. As a correlate of this generalisation, a conjoint verb form is always non-final within that same constituent. He showed this using three classes of evidence: the distribution of object markers on the verb as they interact with conjoint/disjoint alternation, the prosodic properties of the two different forms, and the ability to insert material after the verb (such as a vocative phrase). Buell (2005) elaborated on this analysis, providing additional types of evidence that fall into the latter classes of evidence. More recent work has also examined the positions linearly following the verb, by characterising them semantically and attempting to establish their structural position. All this work has been exclusively concerned with verbal clauses.

We will now briefly consider three important syntactic diagnostics for determining whether a given element occurs to the right or left of the right-hand VP boundary in Zulu. These tests involve object markers, subject markers, and junctivity. For in-depth discussion of these diagnostics, the reader is referred to van der Spuy (1993) and Buell (2005).

The first test involves object markers, prefixes occurring immediately before the verb stem. In the absence of an overt object, the object marker has the force of an object pronoun. In Zulu, an overt object may or may not co-occur with an object marker, with the difference in structure indicated in (6). If there is no corresponding object marker as in (6a), the object is inside the PredP, but if a co-referential object marker is present, like the noun class 10 object marker *zi-* in (6b), then the object has been dislocated and is situated outside of the PredP.

- (6) a. Umfundisi u- bon- e i- zingane. ]<sub>PredP</sub> (conjoint)  
 1teacher 1SM- see- PERF.CJ ART- 10children
- b. Umfundisi u- zi- bon- ile ]<sub>PredP</sub> i- zingane. (disjoint)  
 1teacher 1SM- 10OM- see- PERF.DJ ART- 10children  
 ‘The teacher saw the children.’

Cooccurrence of an object marker and the lexical noun phrase to which it corresponds is referred to as ‘doubling’. In (6b) then, the lexical noun phrase *izingane* is said to be ‘doubled’ by the object marker *zi-* on the verb.

Arguments to the effect that object marking is a diagnostic for the left boundary of PredP (or other syntactic constituent) boundary include the fact that any type of independently demonstrable dislocation requires an object marker. For example, in a double object construction the usual V IO DO word order cannot be permuted to V DO IO without an object marker agreeing with the indirect object, in effect showing that the indirect object has been dislocated. This is shown in (7), in which the verb lacks an object marker, and (8), in which the object marker is present.

- (7) Object marker absent
- a. U- mama u- nik- e i- zingane a- makhekhe. ]<sub>PredP</sub>  
 ART- 1mother 1SM- give- PERF.CJ ART- 10children ART- 6cakes
- b. \* U- mama u- nik- e a- makhekhe i- zingane.  
 ART- 1mother 1SM- give- PERF.CJ ART- 6cakes ART- 10children  
 ‘Mother gave the children cookies.’
- (8) Object marker present
- a. U- mama u- zi- nik- e a- makhekhe ]<sub>PredP</sub> i- zingane.  
 ART- 1mother 1SM- 10OM- give- PERF.CJ ART- 6cakes ART- 10children
- b. \* U- mama u- zi- nik- e i- zingane a- makhekhe.  
 ART- 1mother 1SM- 10OM- give- PERF.CJ ART- 10children ART- 6cakes  
 ‘Mother gave the children cookies.’

The second test is similar but involves subject markers, which are verbal prefixes usually preceding any tense morphology. Unlike the situation with object markers, a subject marker is always present on the verb. The contrast, then, manifests itself with

the agreement features of the subject marker. If it agrees with the logical subject, then that subject has raised out of the PredP, as in (9b), where the subject occurs in preverbal position, and in (9c), where it has been right-dislocated. If the subject marker bears default class 17 agreement features, as in (9a), then the logical subject is inside the PredP.

- (9) a. Ku- fik- e i- zingane. ]<sub>PredP</sub> (conjoint)  
 17SM- arrive- PERF.CJ ART- 10children  
 ‘The children/some children have come.’
- b. I- zingane [ zi- fik- ile. ] (disjoint)  
 ART- 10children 10SM- arrive- PERF.DJ  
 ‘The children have come.’
- c. Zi- fik- ile ]<sub>PredP</sub> i- zingane. (disjoint)  
 10SM- arrive- PERF.DJ ART- 10children  
 ‘The children have come.’

Arguments to the effect that the agreement features of the subject marker correlate to the position of the subject include the fact that independently demonstrable dislocation of a subject requires an agreeing subject marker.

The final diagnostic involves the conjoint/disjoint verb alternation, which in Zulu is found in the affirmative principal (i.e. matrix clause) present tense and in all tenses employing the perfect *-e/-ile* suffixes, including the recent past tense, as shown in (10). Such alternations, which have been variously argued to encode either focus or constituency, are found in many Bantu languages. Van der Spuy (1993) and Buell (2006) argue that in Zulu it encodes a syntactic boundary.

- (10) The morphology of the conjoint/disjoint alternation

	Conjoint	Disjoint
Present tense	<i>bacula ...</i> ‘they sing’	<i>ba<b>y</b>acula</i> ‘they sing’
Recent past tense	<i>bacule ...</i> ‘they sang’	<i>bacul<b>ile</b></i> ‘they sang’

The generalisation can be made that the element immediately following a conjoint verb form is always VP-internal. The correlate to this generalisation, namely that an element following a disjoint verb form is always VP-external, is also generally true.<sup>2</sup> The correlation can be seen in (6) and (9). In (6a), for example, the element following the verb (the object) is inside the VP, and the verb has the conjoint variant *-e* of the perfect suffix. In contrast, in (6b), the element following the verb (again the object) is outside the VP, and the verb has the disjoint variant *-ile* of the perfect suffix. The conjoint/disjoint alternation is particularly useful in determining the structural position of elements which cannot trigger subject or object agreement, such as adverbs. Arguments to the effect that junctivity can serve as a VP boundary test include the fact that a conjoint verb form cannot appear clause-finally and that elements which cannot be dislocated, such as resumptive pronouns, must be preceded by a conjoint form. Disjoint forms, but not

<sup>2</sup> Some speakers accept disjoint forms on the verb before a non-dislocated object when the focus is on the polarity of the predicate.

conjoint ones, also correspond to a prosodic boundary marked by lengthening of the vowel of the penultimate syllable.

The strongest evidence for use of these three features (object marking, subject marking, and junctivity) as VP boundary tests is the way in which they work together. For example, if a verb has an object marker corresponding to the object immediately following it, the verb must be in its disjoint form, as in (11).<sup>3</sup>

- (11) a. Ngi- m- bon- ile ]<sub>PredP</sub> u- Sipho.  
 1S.SM- 1OM- see- PERF.DJ ART- 1Sipho  
 b. \* Ngi- m- bon- e u- Sipho.  
 1S.SM- 1OM- see- PERF.CJ ART- 1Sipho  
 ‘I saw Sipho.’

Similarly, in a VS sentence, if the subject marker agrees with the subject, the verb must be disjoint, whereas the verb must be conjoint if it bears expletive agreement.

- (12) a. Ku- fik- e i- zingane. ]<sub>PredP</sub>  
 17SM- arrive- PERF.CJ ART- 10children  
 ‘Children/The children have come.’  
 b. \* Ku- fik- ile i- zingane.  
 17SM- arrive- PERF.DJ ART- 10children  
 c. \* Zi- fik- e i- zingane.  
 10SM- arrive- PERF.CJ ART- 10children  
 d. Zi- fik- ile ]<sub>PredP</sub> i- zingane.  
 10SM- arrive- PERF.DJ ART- 10children  
 ‘The children have come.’

## 2.2 Properties of predicate-internal and right-dislocated positions

Buell (2008b) examined the properties of elements in predicate-internal and dislocated positions. The properties examined included various types of focus, indefiniteness, and modification with ‘each’ and ‘even’. Additionally, the scope of negation was considered with respect to ‘all’ and negative polarity items. In order to compare verbal predication with its non-verbal counterparts, we are particularly interested in several types of elements which were found to occur only in the predicate-internal position. These are focused elements, indefinites, ‘each’, bare nouns, and (in negative clauses) ‘even’. We will briefly review some of these.

**Focus.** Several different types of focus were tested, all giving the same result: an item may only be focused in predicate-internal position. This is shown with a questioned *wh* phrase in (13) and by a noun phrase modified by *kuphela* ‘only’ in (14).

- (13) a. U- cul- e iphi i- ngoma?  
 2S.SM- sing- PERF.CF 9which ART- 9song  
 ‘Which song did you sing?’

<sup>3</sup> *Sipho*, which occurs in many of the examples, is a common given name for males.

- b. \* U- (yi-) cul- ile ] iphi i- ngoma?  
 2S.SM- 9OM- sing- PERF.DF 9which ART- 9song
- (14) a. Ngi- bon- e u- Siph o kuphela ].  
 1S.SM- see- PERF.CJ ART- 1Sipho only  
 ‘I saw only Siph o.’
- b. Ngi- (m-) bon- ile ] u- Siph o kuphela.  
 1S.SM- 1OM- see- PERF.CJ ART- 1Sipho only

The judgements on focused itmes are particularly clear and consistent.

**Indefinites.** Indefinite noun phrase cannot generally has been right-dislocated, but this is a rather hard property that is to test for in Zulu. This is due to two factors. First, Zulu was the same article (augment) for both definite and indefinite nouns. And second, because Zulu seems to allow use of definite nouns in some contexts where English requires an indefinite.

- (15) a. Ngi- zo- bhaka a- makhekhe amathathu. ]  
 1S.SM- FUT- bake ART- 6cakes 6three  
 ‘I’m going to bake three cakes.’
- b. \* Ngi- zo- wa- bhaka ] a- makhekhe amathathu.  
 1S.SM- FUT- 6OM- bake ART- 6cakes 6three

Testing for definiteness in Zulu is rather difficult, due to the way in which apparently definite nouns can often be used in contexts where languages like English would use an indefinite article.

**Bare nouns.** A ‘bare noun’ is a noun lacking its usual augment or preprefix, glossed in this article as ART- (for ‘article’). Bare nouns in Zulu behave as negative polarity items, and can appear within the verb phrase of a negative clause headed by a lexical verb.<sup>4</sup> As shown by with the dislocated object *mali* ‘money’ in (16) and the dislocated subject *muntu* ‘person’ in (17), a bare noun cannot be right-dislocated. (And it cannot appear in any position to the left of negation, either.)

- (16) a. A- ngi- fun- i mali. ]  
 NEG- 1S.SM- want- NEG 9money
- b. \* A- ngi- yi- fun- i ] mali.  
 NEG- 1S.SM- 9OM- want- NEG 9money  
 ‘I don’t want any money.’
- (17) a. A- ku- fik- anga muntu. ]  
 NEG- 17SM- arrive- NEG person
- b. A- ka- fik- anga ] muntu.  
 NEG- 1SM- arrive- NEG person  
 ‘Nobody came.’

<sup>4</sup> Bare nouns also have other uses, such as in vocative phrases and after demonstratives. See von Staden (1973) for a detailed description.

The is apparently not because the dislocated position falls article the scope of negative because the quantifier *yonke* ‘all’ can scope under negation in this position, as shown in (18).

- (18) I- zingane a- zi- thand- i a- maswidi ] zonke.  
 ART- 10children NEG- 10SM- love- NEG ART- 6sweets 10all  
 ‘The children don’t all like sweets.’

In verbal clauses, use of a bare noun is never a grammatical requirement, and usually conveys extra emphasis (‘not any at all’), contrariness, or bluntness, as shown in (19). (By altering the intonation, the opposite scope can also often be given.)

- (19) a. A- wu- ngi- nik- anga i- mali.  
 NEG- 2SM- 1S.OM- give- NEG ART- 9money  
 ‘You didn’t give me any money.’  
 b. A- wu- ngi- nik- anga mali.  
 NEG- 2SM- 1S.OM- give- NEG 9money  
 ‘You didn’t give me any money AT ALL.’

In opposition to the term ‘bare nouns’, we will use the term ‘augmented noun’ to refer to a noun phrase which has its usual augments.

**‘Even’.** In an affirmative clause, a phrase modified by *ngisho na* ‘even’ can appear either products internally as right-dislocated position, as shown in (20), and indeed even preverbally.

- (20) a. Ng- bon- e ngisho no- Sipho. ]  
 1S.SM- see- PERF.CJ even with:ART- 1Sipho  
 b. Ng- m- bon- ile ] ngisho no- Sipho.  
 1S.SM- 1OM- see- PERF.DJ even with:ART- 1Sipho  
 ‘I even saw Sipho.’

However, if the clause is negated, the modified phrase loses its ability to be right-dislocated, as shown in (21).

- (21) a. A- ngi- bon- anga ngisho no- Sipho. ]  
 NEG- 1S.SM- see- NEG even with:ART- 1Sipho  
 ‘I didn’t even see Sipho.’  
 b. \* A- ngi- m- bon- anga ] ngisho no- Sipho.  
 NEG- 1S.SM- 1OM- see- NEG even with:ART- 1Sipho

This, in fact, provides evidence that the right-dislocated position falls under negation, because while the dislocated version is ungrammatical, the sentence because grammatical if *ngisho noSipho* appears in preverbal subject position, as in (22).

- (22) Ngisho no- Sipho a- ngi- m- bon- anga.  
 even with:ART- NEG- 1SM- 1OM- see- NEG  
 ‘Even Sipho I didn’t see.’

The most straightforward explanation is that some semantic property of a displaced ‘even’ phrase does not allow it to fall under negation. This results in the ungrammaticality of (21b), while (22) is grammatical because it transparently scopes above negation.

**‘Every’.** In (18), we saw that *yonke*, in association with a plural noun phrase, can be translated with English ‘all’. With singular count nouns, *yonke* means ‘every’ or ‘each’. A noun phrase modified in this way can only appear predicate-internally, as shown in (23).

- (23) a. Ngi- bon- e            wonke u-   mfundi o-            m- azi- yo. ]  
           1SM- see-    PERF.CJ 1all        ART- 1student REL:1SM- 1OM- know- REL  
           ‘I saw every student that you know.’
- b. \* Ngi- m-    bon- ile        ] wonke u-   mfundi o-            m- azi- yo.  
           1SM- 1OM- see-    PERF.DJ 1all        ART- 1student REL:1SM- 1OM- know- REL

Grammaticality judgements with right-dislocation of ‘even’ are rather variable, ranging from outright ungrammaticality to highly degraded to grammatical. When found grammatical, negation scopes over the quantifier.

### 2.3 Noun class 17

But first, we must first briefly digress to clarify the uses of this noun class in the agreement system. Noun class 17 has at least two different functions in Zulu: it is a sort of default class, and it is also the locative class. We have already seen how class 17 is used in expletive subject construction, but in this use it is not entirely clear whether class 17 is default or locative. This is because there two types of analyses for the subject of such constructions, in the very same way that there are two analyses of the English expletive subject *there*. Either it is a true expletive, inserted in situ to fulfill, for example, case or agreement features or an EPP requirement (obligatory subject requirement), or it is a raised locative argument. Given the analytical ambiguity in that case, we will thus give two unambiguous cases which illustrate the two separate functions of this class in Zulu. First, as an example of class 17 as a default, notes in (24) how class 17 can be used for subject agreement when the lexical subject is a conjunction of nouns of different classes.<sup>5</sup> Then, for the class’s locative usage, note in (25) that the class 17 pronoun is used as a resumptive in a locative relative clause.

- (24) I-    zinkuni na-            malahle ku-    phel- ile.  
           ART- 10wood    and:ART- 6coal        17SM- finish- PERF.DJ  
           ‘The firewood and coal is finished.’ (Nyembezi 1970)
- (25) Ngi- sebenza e-            dolebhe- ni, kodwa a-    ngi-    hlal- i    khona.  
           1S.SM- work        LOC:ART- 5town-    LOC but    NEG- 1S.SM- stay- NEG 17PRON  
           ‘I work in the city, but I don’t live there.’

Additional uses of class 17 in Zulu are taken up in the section on nominal predication in 3.2 and the related discussion 4.2.

## 3 Non-verbal predication

As noted, Zulu has several types of predication. The types to be examined in this paper are organised in the following way:

<sup>5</sup> For examples of other types of cases in which class 17 is a default class in Zulu, see Buell (2007).

1. Adjectival predication (exemplified above in (3)). Discussed in section 3.1.
2. Nominal predication (exemplified above in (2)). Discussed in section 3.2.
3. Predication with *-kho(na)*. Two different types of predication use this morpheme in at least parts of their paradigm. The first is locative predication, for equivalents of sentences like *The cat is on the table*, as well as a type of existential predication. Discussed in section 3.3.
4. Predication with *na*. This is used for sentences like *I have a book* and for a second type of existential predication. Discussed in section 3.4.

Before preceeding to discuss each of these, it is perhaps useful to first note that Zulu morphology is sensitive to the distinction between verbal and non-verbal predication, as well as between various types of non-verbal predication.

There are two TAM (tense, aspect, and mood) prefixes whose allomorphy is determined entirely by whether the predicate it modifies is verbal or not. These are the durative *sa-/se-* ('still; no longer') and negative *nga-/nge-* prefixes. Consider the durative forms in (26). The form *sa-* is used with verbs, while the form *se-* occurs with non-verbal predicates. Note that all predication types use the form *se-* except for the verbal types in (26a).

- (26) a. Verb  
*Sisacula* kahle. 'We still sing well.'
- b. Adjectival predicate  
*Sisebancane*. 'We are still little.'
- c. Nominal predicate  
*Sisengabantwana*. 'We are still children.'
- d. Locative predicate  
*Sisekhona*. 'We are still here.'
- e. Possessive predicate  
*Sisenemali*. 'We still have some money.'

This shows that the morphology is sensitive to a verbal/non-verbal dichotomy. However, there are also some distinctions within the non-verbal types. For example, adjectives participate in what can be thought of either as tonal suffixation or as stem selection. One manifestation of this is that a negated adjective ends on a final high tone, as illustrated in (27). This phenomenon resembles the various 'final suffixes' (segmental and/or tonal) found in the verbal paradigm, but it is not found in other predication types, as shown with the *na* possessive clause in (28), in which the tone of the two final syllables is the same in the affirmative and negative forms.<sup>6</sup>

- (27) a. Lèsí síhlàhlà sí- khúlù.  
7this 7plant 7SM- big  
'This plant is big.'

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<sup>6</sup> The differences in the tones preceeding the final two are due to a different underlying tone of this subject marker in affirmative and negative forms and the absence/presence of the augment, which is always underlyingly high-toned.

- b. Lèsí síhlàhlà à- sí- khûlú.  
 7this 7plant NEG- 7SM- big  
 ‘This plant isn’t big.’
- (28) a. Ngì- nè- síbánè.  
 1S.SM- with:ART- 7lamp  
 ‘I have a lamp.’
- b. À- ngí- nà- síbánè.  
 NEG- 1S.SM- with- 7lamp  
 ‘I don’t have a lamp.’

We are now ready to examine each of the different types of non-verbal predication mentioned. In spite of the minor morphological differences just shown, all types of predication in Zulu (verbal and non-verbal) share certain important characteristics: they all manifest subject agreement and they can all occur with a number of TAM prefixes. Furthermore, except in the case of existential constructions, their canonical word order is subject-initial. The zero hypothesis is thus that non-verbal predicates are in essence structurally identical to verbal predicates, modulo differences in valence, argument types, and event structure. (For example, we don’t expect locative predicates to license an agent.) Hypothesising that verbal and non-verbal predication is essentially identical, we expect both a predicate-internal and a right-dislocated position to be available across predicate types. We have just seen two broad classes of correlates with predicate-internal and dislocated positions in Zulu. On the one hand are the morphosyntactic correlations concerning subject and object agreement and junctivity. And on the other hand are the ranges of semantic interpretations possible in the two positions. We can formulate two specific ways in which we expect the predication types to be similar.

First, we can make a hypothesis concerning agreement:

- (29) **The Pronominal Agreement Hypothesis.** In all predication types, a morpheme agreeing in person features (such as a subject or object marker) on the predicate implies that the phrase with which it agrees is not PredP-internal.

This hypothesis does not address junctivity, but no type of non-verbal predicate type in Zulu has an equivalent morphological alternation. The pronominal nature of the agreement has been included to exclude personless gender agreement in adjectives which can coöccur with pronominal-type agreement in a single form.

Second, we expect the range of interpretations in the two positions to be uniform across predication types:

- (30) **Uniformity of Interpretation Hypothesis.** Given two positions, one predicate-internal and the other right-dislocated, the range of interpretations available for each position (i.e., focus, indefinite, etc.) is uniform across predication types.

For example, if the agreement facts tell us that a postverbal logical subject is right-dislocated, we expect that it cannot be modified by ‘only’, because it has been shown that right-dislocated elements cannot be modified in this way in verbal clauses. For ease of exposition, we will henceforth simply refer to the ‘agreement hypothesis’ and the ‘interpretation hypothesis’.

For all predication types except for possession, the term *hemewill* will be used to refer to the argument that is the logical subject. To avoid confusion, the arguments of possessive predication will be called ‘possessor’ and ‘possessum’.

### 3.1 Adjectival predication

We begin with adjectival predication, which is perhaps the least interesting, in that it affords the least PredP-internal possibilities, but which in another sense serves as a good illustration of how the syntactic category of the predicate head (i.e. the predication ‘type’) determines important syntactic characteristics. Furthermore, adjectival predication provides a case where the agreement and interpretation hypotheses coincide.

In the traditional Nguni literature, different subtypes of what here are termed ‘adjectives’ have been treated separately. For example, for our purposes here, there is no relevant difference between agreeing and non-agreeing adjectives, which in the traditional literature were sometimes treated separately and somewhat confusingly called ‘adjectives’ and ‘relatives’, respectively. These two subclasses both have relative morphology when used attributively (with the concomitant subject agreement morphology), but only the ‘agreeing’ type ever has an additional adjectival agreement morpheme immediately preceding the stem. Both types of adjectives are illustrated, attributively in (31) and predicatively in (32).

(31) *-ncane* ‘small’ (agreeing adjective)

- a. Thina si- ba- ncane.  
1P.PRON 1P.SM- 2- small  
‘We are little/young.’
- b. i- mifula e- mi- ncane  
ART- 4rivers REL:4SM- 4- small  
‘the little rivers’

(32) *-lusizi* ‘sad’ (non-agreeing adjective)

- a. Thina si- lusizi.  
1P.PRON 1P.SM- sad  
‘We are sad.’
- b. i- mifula e- lusizi  
ART- 4rivers REL:4SM- sad  
‘the sad rivers’

Like some other Bantu languages, Zulu has very few agreeing adjectives. Although there are considerably more non-agreeing adjectives, most of them derived from nouns, many concepts expressed in English with an adjective are expressed in Zulu with a verb.

Note that an agreeing adjective bears two agreement prefixes. The leftmost one is the familiar subject marker. The one to its right is an adjectival agreement prefix. As is apparent in the first person forms in (31a) and (32a), the subject marker bears person features, while the adjectival prefix encodes only noun class features (gender features). In affirmative third person forms, the subject marker is usually absent, as in (33a), but the underlying presence of a subject marker can be shown, for example, by exhibiting a negative counterpart, as in (33b).

- (33) a. I- zindlovu zi- dala.  
 ART- 10elephants 10- old  
 ‘The elephants are old.’  
 b. I- zindlovu a- zi- zi- dala.  
 ART- 10elephants NEG- 10SM- 10- old  
 ‘The elephants aren’t old.’

The two different agreement morphemes can become separated from each other by a TAM morpheme, such as the durative *se-* prefix already discussed. As seen in these examples, an adjective resembles a verb in that agreement morphology is attached to it directly. This is different from some other Bantu languages, such as Swahili, in which a copular particle is used in adjectival predication just as in nominal predication. Given this resemblance between verbs and adjectives in Zulu, it is surprising that an adjectival clause does not admit an expletive subject construction in the way that a verbal clause does. Consider the three sentences in (34). (To avoid proliferation in the glosses, the adjectival agreement prefix in the stem is glossed only when relevant to discussion.)

- (34) a. I- zindlovu a- zi- zincane.  
 ART- 10elephants NEG- 10SM- 10small  
 ‘Elephants aren’t little.’  
 b. A- zi- zincane ]<sub>PredP</sub> i- zindlovu .  
 NEG- 10SM- 10small ART- 10elephants  
 ‘Elephants aren’t little.’  
 c. \* A- ku- zincane i- zindlovu. ]<sub>PredP</sub>  
 NEG- 17SM- 10small ART- 10elephants  
 d. \* A- ku- kuncane i- zindlovu. ]<sub>PredP</sub>  
 NEG- 17SM- 17small ART- 10elephants

In (34a) and (34b), the subject marker agrees with *izindlovu* ‘elephant’. The sentence in (34a) has canonical word order, with a prepredicative subject. In (34b), the subject marker agrees with the logical subject and the logical subject is dislocated. By application of the agreement hypothesis, the logical subject is dislocated, as indicated by the bracket. In (34c) and (34d), two variants are attempted with an expletive class 17 subject marker. In (34c), the adjectival (i.e. personless) agreement prefix is *zi-*, agreeing with the theme, while in (34d), it is expletive or default class 17 *ku-*.

Given the agreement hypothesis, we assumed that in a sentence like (34b), in which the subject marker agrees with the post-predicative theme, that the theme must be dislocated. We will now see that this assumption is supported by the interpretive properties of the theme, given the interpretation hypothesis. This hypothesis says that the range of interpretations available to a position is uniform across predication types. Does the assumed dislocated position in adjectival clauses allow the same range of interpretations as verbal clauses? Let’s first consider focus. Recall that in a verbal clause a dislocated argument cannot be questioned or modified by ‘only’. Sentences (35a) and (36a) show this to be the case with their counterparts in adjectival clauses. In both cases, the cleft strategy must be resorted to instead.

- (35) a. \* Z- a- zincane ] ziphi i- zinhlobo ze- zilwane?  
 10SM- PST- 10small 10which ART- 10kinds 10OF:ART- 10animals

- b. Yi- ziphi i- zinhlobo ze- zilwane ez- a- zincane?  
 COP 10which ART- 10kinds 10OF:ART- 10animals REL:10SM- PST- 10small  
 ‘What kinds kinds of animals were small?’

- (36) a. \* Z- a- zincane ] lezi zinhlobo kuphela.  
 10SM- PST- 10small 10these 10kinds only  
 b. Yi- lezi zinhlobo kuphela ez- a zincane.  
 COP- 10these 10kinds only REL:10SM- PST- 10small  
 ‘It’s only these kinds that were small.’

Similarly, the dislocated theme cannot be a bare noun, as shown in (37a). This is consistent with the facts concerning verbal predicates.

- (37) a. \* A- zi- ncane ] zindlovu.  
 NEG- 10SM- small 10elephants  
 b. \* A- ku- ncane zindlovu. ]  
 NEG- 10SM- small 10elephants  
 Intended: ‘No elephants at all are little.’

Furthermore, (37b) shows that using a bare noun does not create the possibility of a predicate-internal theme.

Next, consider the fact that modification of the dislocated logical subject with *ngisho na* ‘even’, becomes highly degraded if the predicate is negated, as shown in (38).

- (38) a. Mkhulu ngisho no- Siphho.  
 1big even with:ART- 1Siphho  
 ‘Even Siphho is big.’  
 b. ?? A- ka- mkhulu ngisho no- Siphho.  
 NEG- 1SM- 1big even with:ART- 1Siphho  
 Intended: ‘Not even Siphho is big. Even Siphho isn’t big.’

This is also consistent with the interpretation hypothesis, because in (21b) above it was shown that in verbal clauses, such modification of a dislocated element resulted in ungrammaticality.

Finally, the dislocated logical subject cannot be indefinite, as shown in (39).

- (39) \* Zincane i- zinhlobo ezimbili ze- zindlovu.  
 10small ART- 10kinds 10two 10of:ART- 10elephant  
 Intended: ‘Two kinds of elephant are small.’

It should be made clear that there is no apparent semantic reason that an expletive subject construction shouldn’t be possible with an adjectival predicate. It was mentioned that such constructions must be used (unless recourse is made to a cleft) to express narrow focus of the logical subject. There is nothing more semantically odd about questioning the subject of a verbal predicate than questioning the subject of a verbal one, and in fact Zulu allows such questioning by means of a cleft. What is surprising, then, is that Zulu does not allow questioning of the subject inside PredP in the case of an adjectival predicate, when it allows just that if the predicate is verbal.

In summary, adjectival predication differs from verbal predication in that it does not allow an expletive subject construction; in adjectival clauses, the subject marker always agrees with the logical subject. Application of the various tests for the agreement hypothesis leads us to conclude that a post-adjectival logical subject is right-dislocated.

### 3.2 Nominal predication

Nominal predication in Zulu makes use of a copular particle, which has three main segmental forms: *ng(a)-*, *y(i)-*, and *w(u)-*. In addition to these segmental forms, the copular morpheme can also often be expressed with depression (breathy voice) on the initial syllable of the nominal.<sup>7</sup> Because depression is not indicated in the orthography, only segmental forms of the copula will be used here, even though the segmentless forms, when possible, are preferred in normal speech. Two examples of nominal predication in different tenses are given in (40).

- (40) a. Mina ngi- ngu- mngane wakho.  
 1S.PRON 1S.SM- COP:ART- 1friend 1yours  
 ‘I am your friend.’
- b. Mina ngi- yo- be ngi- ngu- mngane wakho.  
 1S.PRON 1S.SM- FUT- be NGI- COP:ART- 1friend 1yours  
 ‘I will be your friend.’
- c. Mina ng- a- ngi- ngu- mngane wakho.  
 1S.PRON 1S.SM- PAST- 1S.SM- COP:ART- 1friend 1yours  
 ‘I was your friend.’

The future form in (40b), which have an overt form of the auxiliary show that the copular particle is not analogous to English *be*, whose presence can be attributed to a need for a lexical item to support agreement and tense features. That role is fulfilled by the Zulu verb *ba*, which appears in the form *be* in (40b). Rather, the Zulu copula is a particle below the TAM region and peculiar to nominal predication.<sup>8</sup>

The morphological paradigm of the copula in Zulu is very complex. (See Poulos and Msimang, pp. 356-360. Henceforth ‘P&M’.) Just as in adjectival predication, for example, the subject marker is usually absent in principal mood (unsubordinated mood) when the subject is third person. However, the underlying presence of a subject marker is supported by the fact that the subject marker reappears in participial (subordinated) mood, seen in (41b), where the conjunction *uma* ‘if’ requires a clause in participial mood.<sup>9</sup> Note that the class 1 subject marker is *u-* in principle mood but *e-* in participial mood.

- (41) a. Principal mood

<sup>7</sup> The segmental prefixes are all also depressed. P&M spell this with *hh*, the digraph in the standard orthography for a voiced breathy glottal fricative.

<sup>8</sup> As noted by P&M, p. 365, when the predicate can be translated with ‘become’, the copular particle can lack a subject marker, as in the future form in (40b), while in other cases the subject marker must be present, as in the past tense case in (40c). My informant’s dialect does not appear to work this way. In the P&M dialect, (40b) would lack the second subject marker.

<sup>9</sup> Note that participial mood is not the same as a participle. Predicates in participial mood have structures resembling indicative matrix clause predicates in both form and complexity. For example, they both have subject markers and can bear the same range of tense and aspect morphology.

U- Siphó (u-) ngu- thisha.  
 ART- 1Siphó 1SM- COP:ART- 1teacher

‘Siphó is a teacher.’

b. Participial mood

Uma u- Siphó e- ngu- thisha...  
 if ART- 1Siphó 1SM- COP:ART- 1teacher

‘If Siphó is a teacher...’

Nominal predicates have three properties that bear on clause structure which we will now discuss: an unusual agreement pattern, properties of the logical subject, and properties of the predicate nominal.

There are significant dialectal differences in the negative forms of the paradigm. In the dialect described in P&M, the TAM prefixes, including the prefix *si-* unique to these forms, are attached to a bare (i.e., augmentless nominal, as in (42)). Such forms will henceforth be termed ‘synthetic’. In contrast, my informant (a speaker of Durban Zulu) occasionally accepts a similar form without the *si-* morpheme as in (43a), but usually only accepts forms in which the TAM prefixes are attached to a pronoun which agrees with the following predicate nominal, as in (43b). These forms will be called ‘analytic’.

(42) Ka- ku- si- muntu lona, yi- silwane. (synthetic)  
 NEG- 17SM- *si-* 1person 1that COP- 7animal

‘This isn’t a person; it’s an animal.’ (P&M, p. 362, adapted.)

(43) a. À- kù- mùntù lónà. (synthetic)  
 NEG- 17SM- 1person 1that

b. À- kù- yèná ú- múntù lónà. (analytic)  
 NEG- 17SM- 1PRON ART- 1person 1that

‘That’s not a person.’

In addition to the paradigmatic morphological differences between the synthetic forms in (42) and (43a), on the one hand, and the analytic form in (43b), it is worth noting that the predicate nominal in the analytic form has its usual augment, while its synthetic counterpart is a bare noun. This is particularly apparent if the tones are observed. The bare form of ‘person’ is *mùntù*, while the form with the augment is *úmùntù*. The syllable *mù* in the synthetic form in (43a) is low-toned, as expected if it is bare.

**The agreement pattern.** At first glance, nominal predication seems to have the same agreement possibilities as verbal predication; the verb may have a subject marker agreeing with the logical subject or one bearing class 17 features. This is shown in (44).

(44) a. U- Siphó w- a- ye- ngu- mngane wethu.  
 ART- 1Siphó 1SM- PST- 1SM- COP:ART- 1friend 1our

b. U- Siphó kw- a- ku- ngu- mngane wethu.  
 ART- 1Siphó 17SM- PST- 17SM- COP:ART- 1friend 1our

‘Siphó was a out friend.’

Give our agreement hypothesis, the logical subject *uSipho* should be predicate-internal in (44b), but that is obviously not the case, since *uSipho* is in preverbal subject position. The following discussion will examine the properties of the agreeing and class 17 forms. Comparison with verbal clauses shows that this is not agreement with an expletive pronoun. Consider the verbal clauses with expletive agreement in (45).

- (45) a. Ku- fik- e u- Sipho.  
 17SM- arrive- PERF.CJ ART- Sipho  
 b. \* U- Sipho ku- fik- ile.  
 ART- Sipho 17SM- arrive- PERF.DJ  
 ‘Sipho came.’

For expletive agreement, the logical subject must be predicate-internal as in (45a), in which we know that *uSipho* is predicate-internal because the verb is in conjoint form. Crucially, the logical subject cannot appear in clause-initial position, as shown in (45b), but that is exactly the position of the subject in the grammatical nominal-predicate clause in (45b).

Traditional grammars sometimes note without further discussion that class 17 agreement can be used instead of strict subject agreement in nominal predication. This might lead to the conclusion that the class 17 forms are simply a morphological quirk or variant. However, there are several ways in which the two agreement patterns differ syntactically. It will be shown that there are syntactic differences between the two, and that the class 17 form is thus not just a morphological variant of the agreeing forms.

First, consider quantification with plural *yonke* ‘all’. The logical subject may only be quantified if the subject marker agrees with it, regardless of whether the subject is preverbal or right-dislocated, as shown in (46).

- (46) a. Bonke a- bafana b- a- be- nga- bangane bethu.  
 2all ART- 2boys 2SM- PAST- 2SM- COP:ART- 2friends 2our  
 b. Babengabangane bethu bonke abafana.  
 c. \* Bonke a- bafana kw- a- ku- nga- bangane bethu.  
 2all ART- 2boys 17SM- PAST- 17SM- COP:ART- 2friends 2our  
 d. \* Kwakungabangane bethu bonke abafana.  
 ‘All the boys were our friends.’

Additionally, in some contexts a relative clause must use the agreeing pattern, as shown in (47).<sup>10</sup>

- (47) a. Ngi- funa a- bantu aba- nge- wona a- masela.  
 1S.SM- want ART- 2people REL:2SM- COP- 6PRON ART- 6thieves  
 b. \* Ngi- funa a- bantu oku- nge- wona a- masela.  
 1S.SM- want ART- 2people REL:17SM- COP- 6PRON ART- 6thieves  
 ‘I’m looking for people who aren’t thieves.’

And finally, in contrast to the two cases just shown, a cleft construction only allows class 17 agreement on the copula, as shown in (48).

<sup>10</sup>The relative clause in a cleft may use the class 17 subject agreeent pattern.

- (48) a. Uma ku- ngu- Siphophela aw- a- ye- si- siza...  
 if 17SM- COP:ART- 1Siphophela only REL:SM1- PAST- SM1- 2S.OM- help
- b. \* Uma e- ngu- Siphophela aw- a- ye- si- siza...  
 if 1SM- COP:ART- 1Siphophela only REL:SM1- PAST- SM1- 2S.OM- help  
 ‘If it’s just Siphophela who was helping us...’

These differences clearly lead to the conclusion that the two patterns are not just morphological variants of the same structure. The nature of class 17 subject agreement pattern is taken up in section 4.2.

**Properties of the subject.** We will discuss the properties of the right-peripheral logical subject separately for the two agreement patterns.

The status of the right-peripheral subject is straightforward if the subject marker agrees with it. Given the agreement hypothesis now bolstered by the results from adjectival predication, we expect such a subject to be right-dislocated rather than predicate-internal. This is supported by focus data. Observe in (49) that the right-peripheral subject *uSiphophela* cannot be modified with *kuphela* ‘only’, just as was found with verbal and adjectival predication.

- (49) \* W- a- ye- ngu- mngane wami u- Siphophela.  
 1SM- PAST- 1SM- COP:ART- 1friend 1my ART- 1siphophela only  
 Intended: ‘Only Siphophela was my friend.’ *Elicit me.*

The behaviour of focus is supported by data using singular *yonke* ‘every’. Just as shown with verbal predication in (23), while a subject modified with this quantifier can stand in initial position, as in (50a), postposing it as in (50b) results in ungrammaticality.

- (50) a. [ Wonke u- mfana omaziyo ]<sub>DP</sub> W- a- ye- ngu-  
 1all ART- 1boy REL:2S.SM:1OM:know:REL 1SM- PST- 1SM- COP:ART-  
 mngane wethu.  
 1friend 1our
- b. \* Wayengumngane wethu [ wonke ufana omaziyo. ]<sub>DP</sub>  
 ‘Every boy you know was our friend.’

We can conclude then that in the agreeing pattern of nominal predication, a right-peripheral logical subject is always right-dislocated.

We will now turn to the issue of the non-agreeing form. The form in (44b) clearly showed that the theme of a nominal predicate can be predicate-external even when the subject marker is class 17. The question is now whether that is always the case. Consider the sentence in (51).

- (51) A- ku- muntu lona, yi- silwane.  
 NEG- 17SM- 1person 1that COP- 7animal  
 ‘This isn’t a person; it’s an animal.’ (P&M, p. 362, adapted.)

This sentence is now open to two different analyses. Since the logical subject can be predicate-external with this agreement pattern, it might be right-dislocated. But this does not rule out the possibility that it could be predicate-internal, like the predicate-internal subject in a verbal expletive subject construction.

Let's put these putative predicate-internal logical subjects to the test by applying the interpretation hypothesis, first testing for focus. Modifying the logical subject of (51) results in ungrammaticality, as shown in (52), which uses a synthetic negative form.

- (52) \* A- ku- muntu lona kuphela.  
 NEG- 17SM- 1person 1this only  
 Intended: 'Not only this one is a person.'

Furthermore, the two sentences show in (53) that there is an additional syntactic difference between the agreeing form and the class 17 form. While the right-dislocated logical subject of the agreeing form in (53a) may simply be modified with *ngisho na* 'even', sometimes with degraded results, such modification is impossible with the class 17 subject marker in (53b).<sup>11</sup>

- (53) a. ? A- ka- sona i- sitha ngisho no- Siphho.  
 NEG- 1SM- 7PRON ART- 7enemy even with:ART- 1Siphho  
 b. \* A- ku- sona i- sitha ngisho no- Siphho.  
 NEG- 17SM- 7PRON ART- 7enemy even with:ART- 1Siphho  
 'Even Siphho isn't an enemy.'

This is the expected result of *lona* is right-dislocated.

The past affirmative equivalents in (54) show that the ungrammaticality of (53b) is triggered by negation of the predicate.<sup>12</sup>

- (54) a. Kw- a- ku- yi- sitha ngisho no- Siphho.  
 17SM- PAST- 17SM- COP:ART- 7enemy even with:ART- 1Siphho  
 b. W- a- ye- yi- sitha ngisho no- Siphho.  
 1SM- PAST- 1SM- COP:ART- 7enemy even with:ART- 1Siphho  
 'Even Siphho was an enemy.' *Recheck source.*

The right dislocation analysis is further supported by quantification with singular *yonke* 'every', as in (55).

- (55) a. [ Wonke u- mfana omaziyo ]<sub>DP</sub> kw- a- ku- ngu-  
 1all ART- 1boy REL:2S.SM:1OM:know:REL 17SM- PST- 17SM- COP:ART-  
 mngane wethu.  
 1friend 1our  
 b. \* Kwakungumngane wethu [ wonke ufana omaziyo. ]<sub>DP</sub>  
 'Every boy you know was our friend.'

Sentence (55a) shows that the class 17 agreement pattern is compatible with a subject quantified with singular *yonke* 'every' in subject position (unlike its plural counterpart shown above in (46b)). However, such a subject becomes ungrammatical if placed at the end of the clause. This is consistent with both verbal clauses and with the agreeing form

<sup>11</sup>It was noted that grammaticality judgements vary with right dislocation of phrases modified by 'even' in negative verbal clauses. In nominal predicate clauses, though, such dislocations are generally judged worse if the class 17 agreement pattern is used. It is not clear why this should be.

<sup>12</sup>Past tense is used because none of the agreement morphology is obscured in that tense, unlike in present tense.

of nominal predicates, as just shown in (50). Similar results could be shown using bare nouns.

We saw in examples (46) through (120) that there are clear syntactic differences between the agreeing and class 17 agreement patterns of nominal predication. However, application of various modifications lead us to conclude that the logical subject of a nominal predicate is always predicate-external, regardless of the agreement pattern.

**Properties of the predicate nominal.** Now we turn to the second relevant morphological property, which concerns the agreeing morphology of the copula in its free-standing forms. First note that in an affirmative clause, the predicate nominal can be focused, as shown by modification with *kuphela* ‘only’ in (56) and constituent questioning in (57).

(56) Ngu- Siphō kuphela ow- enza lokho.  
 COP:ART- 1Siphō only REL:1SM- do 17that  
 ‘It’s just Siphō who does that.’

(57) Ngu- bani ow- enza lokho?  
 COP:ART- 1who REL:1SM- do 17that  
 ‘Who does that? Who is it that does that?’

But now consider the sentence in (58).

(58) A- ba- wona a- masela.  
 NEG- 2SM- 6PRON ART- 6thieves  
 ‘They’re not thieves.’ (P&M, p. 362, adapted.)

In this form, the subject marker is of the predominantly human plural noun class 2, and it thus agrees with a human plural subject. The substring *wona* has the form of a stressed pronoun, and it agrees with the predicate nominal that follows it. If analogy with clefts for this issue is valid, this substring is truly pronominal in the sense that it carries person features, as can be seen in the cleft in (59), in which the word *akumina* ‘it’s not me’ ends in *mina*, which is also the first person singular pronoun.

(59) A- ku- mina ow- enza lokho.  
 NEG- 17SM- 1s.pron REL:1SM PST:do 17that  
 ‘It wasn’t me who did that. I’m not the one who did that.’

The fact that a short answer to a yes/no nominal predicate question replaces the lexical nominal with the putative pronoun can be interpreted as supporting the idea that it is truly pronominal in nature. This is illustrated in (60), in which the pronoun *lona* in the short answer replaces the lexical DP *isela* ‘thief’ in the question.

(60) U- Siphō yi- sela yini? Yebo, yi- lona.  
 ART- 1Siphō COP:ART- 5thief Q yes COP- 5PRON  
 ‘Is Siphō a thief? Yes, he is.’

Given our agreement hypothesis, *-wona* in (58) could be taken to be analogous to the object marker we can find in verbal clauses. On this analogy, *amasela* ‘thieves’ is dislocated. However, if this is so, then we expect this putatively dislocated element to be subject to

the same semantic constraints seen with verbal and adjectival predicates. However, the actual results are mixed.

Let's consider focus first. As shown in (61a), the 'dislocated' noun *uSipho* can be modified by *kuphela* 'only'. For purposes of comparison, the affirmative counterparts of these sentences are given in (62).

- (61) a. A- ku- yena u- Sipho kuphela o- fik- ile.  
 NEG- 17SM- 1PRON ART- 1Sipho only REL:1SM- arrive- PERF.DJ  
 'It's not just Sipho who came.'
- b. A- ku- mina kuphela engi- fik- ile.  
 NEG- 17SM- 1S.PRON only REL:1S.SM- arrive- PERF.DJ  
 'It's not just me who came.'
- (62) a. Ngu- Sipho kuphela o- fik- ile.  
 COP:ART- 1Sipho only REL:1SM- arrive- PERF.DJ  
 'It's just Sipho who came.'
- b. Yi- mina kuphela engi- fik- ile.  
 COP- 1S.PRON only REL:1S.SM- arrive- PERF.DJ  
 'It's just me who came.'

As already seen with verbal and adjectival clauses, dislocated elements cannot be modified with *kuphela*. This suggests that *uSipho* is predicate-internal, in spite of the fact that the copular word seems to contain an agreeing pronoun. This does not rule out the possibility that *uSipho* in (61a) is not in some sense dislocated, but if it is, then it is to some predicate-internal position not available in the other predicate types we have seen. The first person example in (61b) shows that focus is also possible when nothing follows the pronoun included in the copula word.

Bare nouns give us a different result, but one that is more difficult to interpret. Consider (63), which is the same as (58) except for the fact that *masela* is in its bare form.

- (63) \* A- ba- wona masela.  
 NEG- 2SM- 6PRON 6thieves  
 Intended: 'They're not thieves (at all).'

If *masela* is dislocated, then ungrammaticality is expected, because bare nouns are excluded from dislocated position in verbal clauses. Given the assumption that there are only two classes of left-hand positions for arguments, one predicated-internal and the other right-dislocated, the results of *kuphela* 'only' and of bare nouns are contradictory. The grammaticality of *kuphela* suggests that the doubled predicate nominal is predicate-internal, but the ungrammaticality of the bare form suggests the opposite.

The structure of the negative analytic forms become even more curious when we compare them with orthogonal forms in the affirmative. The unmarked forms in the affirmative are synthetic: the TAM morphology and copular particle are attached directly to the predicate nominal, as in (40) and (41) above. However, it is also possible to produce analytic forms, in which the TAM morphemes attach to what looks like a pronoun, as shown in (64).

- (64) Ngu- yena u- Siphō owenza lokho.  
 COP- 1PRON ART- 1Siphō REL:1SM:do 17that  
 ‘It’s Siphō who does that.’

However, the predicate nominal *uSiphō* in an affirmative clause does not behave the same way as its negative counterpart, as seen in (65).

- (65) a. \* Ngu- yena u- Siphō kuphela ow- enza lokho.  
 COP:ART- 1PRON ART- 1Siphō only REL:1SM- do 17that  
 Intended: ‘It’s just Siphō who does that.’  
 b. A- ku- yena u- Siphō kuphela ow- enza lokho.  
 NEG- 17SM- 1PRON ART- 1Siphō only REL:1SM- do 17that  
 ‘It’s not just Siphō who does that.’

While the predicate nominal following the pronoun in the negative clause in (65b) can be modified by *kuphela* ‘only’, its counterpart in the affirmative clause in (65a) cannot. Further properties of analytic forms in affirmative clauses must be explored. For example, it is not known whether the predicate nominal in such clauses can be non-referential as it can be in negative clauses. *Test me!*

A provisional analysis can be sketched. In affirmative clauses, the predicate nominal following the pronoun is always right-dislocated, consistent with the behaviour of ‘only’. In synthetic forms, the predicate nominal is predicate internal. This is consistent with the behaviour of ‘only’ in affirmative clauses and with the fact that the nominal must be in bare form in negative clauses. The status of the predicate nominal in analytic forms is intermediary; it is outside a domain in which bare nouns are licensed, but inside a domain in which modification by ‘only’ is licensed. Presumably, both this intermediary position and the right-dislocated position are available in these negative clauses.

Here is a summary of the findings concerning nominal predication. This predication type was found to have an unusual agreement pattern. The subject marker can be of class 17, but this agreement was shown not to be expletive agreement of the type found in verbal predication. Rather, it appears that this is agreement with a silent demonstrative. The subject of predication was argued to always be predicate-external, even when class 17 subject agreement would at first glance suggest that it could be predicate-internal. The situation with the predicate nominal was found to be more complicated. It can right-dislocated when the copula word contains a pronoun, while it is predicate-internal when predicate is synthetic. However, it was suggested that the predicate nominal can be in an ‘dislocated’ position in a domain lower than that available to normal right-dislocated items, in a domain higher than that required for the licensing of bare nouns, but lower than that required for the licensing of focus.

### 3.3 Predication with *-kho(na)*

In this section, two different types of predication will be considered. The first can clearly be called ‘locative predication’, as in (66), while the second is a type of existential predication, shown in (67), which we will refer to as ‘existential predication with *kho(na)*’.

- (66) a. U- s- e- dolobhe- ni.  
 1SM- EPEN- LOC:ART- 5town- LOC

‘He’s in town.’

- b. A- ke- kho e- dolobhe- ni.  
NEG- 1SM- LOC.PRED LOC:ART- 5town- LOC  
‘He’s not in town.’

- (67) Ku- khona i- mali eningi lapha.  
17SM- LOC.PRED ART- 9money 9much here  
‘Here is a lot of money here.’

These two predication types are superficially linked by their use of the locative class 17 pronoun *-kho(na)*, although this morpheme is not always present in the case of the locative usage, as seen in the question in (66). Forms in which the TAM morphemes attach directly to the locative phrase will be termed ‘synthetic’, while those in which the locative phrase appears as an independent word will be called ‘analytic’. As for the morpheme *-kho(na)*, the choice between the two forms is morphologically determined. The heavy form *-khona* is used in affirmative forms, while *-kho* used in negative forms as in (66b).

It will be noted that *-khona*, as an independent word, is a class 17 (locative) pronoun. This usage can be seen clearly in the exchange in (68), in which the lexical locative pronoun *eTheku* ‘in Durban’ is substituted with the pronoun *khona* ‘there’ in the response.

- (68) Q: U- hlala e- Theku yini?  
1SM- stay LOC:ART 5Durban Q  
‘Do you live in Durban?’  
A: Cha, ngi- sebenza khona kuphela.  
no 1S.SM- work 17PRON only  
‘No, I only work there.’

Another way that independent *khona* behaves like a pronoun is as a resumptive in locative relativisation, as shown in the cleft in (69b).

- (69) a. Ngi- sebenza ku- lesi sikole.  
1S.SM- work LOC- 7this 7school  
‘I work at this school.’  
b. Lesi yi- sikole lapho ngi- sebenza khona.  
7this COP:ART- 7school there 1S.SM- work there  
‘This is the school where I work.’

It is thus tempting to believe that the morphologically dependent forms *-kho* and *-khona* in (66b) and (67) are also simply locative pronouns. While it seems obvious that dependent *khona* is historically related to the independent pronoun *khona*, it will be shown that the behaviour of dependent *-kho(na)* does not resemble that of a pronoun in either locative or existential clauses. Dependent *-kho(na)* will thus be glossed as LOC.PRED for ‘locative predicate particle’.

We shall now examine the two types of predication using *-kho(na)*, beginning with the locative usage.

### 3.3.1 Locative predication

In locative predication, as in verbal and adjectival predication, there is no overt morpheme intervening between the TAM prefixes and the ‘head’ of the predicate, in this case, the locative adverb or prepositional phrase. Locative expressions derived from noun phrases are often vowel-initial, and in this case an epenthetic *s* separates these two parts of the predicate word. An example of this predication type are given in (70):

- (70) A- bafana ba- s- e- sikole- ni.  
 ART- 2boys 2SM- EPEN- LOC:ART- 7school- LOC  
 ‘The boys are at school.’

The *s* is taken to be epenthetic, rather than a locative predicate particle, for example, analogous to the copula in nominal predication, because the same segment also appears after *na* ‘and’ in conjunctions, as in (71).

- (71) lapha na- s- e- sikole- ni  
 here and- EPEN- LOC:ART- 7school- LOC  
 ‘here and at school’

While TAM morphology is attached directly to the locative phrase in affirmative forms, this is not possible in negative forms. Instead, a form with *kho* precedes the locative phrase, as in (72).

- (72) A- bafana a- ba- kho e- sikole- ni.  
 ART- 2boys NEG- 2SM- LOC.PRED LOC:ART- 7school- LOC  
 ‘The boys aren’t at school.’

We will now see that locative predication does not allow an expletive subject construction with a predicate-internal logical subject. This is shown easily enough with simple clauses such as (73).

- (73) \* Ku- se- dolobhe- ni u- Sipho.  
 17SM- LOC:ART- town- LOC ART- 1Sipho  
 Intended: ‘Sipho’s in town.’

Affirmative locative constructions are thus simply ungrammatical with class 17 subject agreement.<sup>13</sup> That was also the case with adjectival predication. And similarly, although class 17 subject agreement was possible with nominal predication, that was argued not to be expletive agreement. Thus, in contrast to verbal predication, none of the three types of non-verbal predication seen so far allow an expletive subject construction with a predicate-internal theme.

It should by now be entirely unsurprising that a right-peripheral theme is possible with the requisite subject agreement and that this theme behaves like other right-dislocated elements. This is shown, for example, by the fact that it can’t be modified by *kuphela* ‘only’, as in (74).

<sup>13</sup> While this agreement pattern is possible in negative clauses, those seem to actually be existential clauses, as discussed in section 3.3.2.

- (74) \* U- se- dolobhe- ni u- Siphó kuphela.  
 1SM- LOC:ART- 5town- LOC ART- 1Siphó only  
 Intended: ‘Only Siphó’s in town.’

This contrasts with the locative phrase, which can be modified with *kuphela*, as shown in (75).

- (75) I- zitolo zi- ku- leli dolobha kuphela.  
 ART- 10shops 10SM- LOC- 5this 5shop only  
 ‘The shops are only in this town.’

Now let’s consider the properties of the locative phrase in negative clauses. As seen above in (66b), these clauses include the dependent morpheme *-kho*. Let’s suppose that this is a class 17 pronoun. We saw in (63) that pronominalisation of a predicate nominal could not be bare in form. We would thus expect the same consequence if a predicative locative were pronominalised. However, (76) shows that the (lexicalised) bare noun *ndawo* ‘nowhere’ can appear after a form with *-kho*.

- (76) A- ke- kho ndawo.  
 NEG- 1SM- LOC.PRED 9place  
 ‘He isn’t anywhere.’

Since a bare noun is allowed to follow *-kho*, it is not surprising that a locative phrase following *-kho* can also be modified by *kuphela* ‘only’, as shown in (77).

- (77) I- zitolo a- zi- kho ku- leli dolobha kuphela.  
 ART- 10shops NEG- 10SM- LOC.PRED LOC- 5this 5shop only  
 ‘The shops aren’t only in this town.’

This puts our tentative assumption that *-kho* is a pronoun on shaky ground.

The assumption collapses when we try to use *-kho* to substitute a lexical locative phrase, rather than just double it, as we were putatively doing in (76) and (77). This is attempted in the second reply in the exchange in (78).

- (78) Q: U- Siphó u- se- dolobhe- ni yini?  
 ART- 1Siphó 1SM- LOC:ART- 5town- LOC Q  
 ‘Is Siphó in town?’
- A1: Yebo, u- se- dolobhe- ni.  
 yes 1SM- LOC:ART- 5town- LOC  
 ‘Yes, he is (in town).’
- A2: % Yebo, u- khona.  
 yes 1SM- LOC.PRED  
 Can only mean: ‘Yes, he is present/here/available.’

This kind of substitution is the most prototypical use of pronouns. Furthermore, we saw in (69) and (68) that independent *khona* has typical pronominal properties. On the basis of all these facts, we will consider morphologically dependent *-kho* in locative clauses to be a predicative particle rather than a locative pronoun.

We now turn to the second type of predication that uses dependent *-kho(na)*.

### 3.3.2 Existential predication with *-kho(na)*

Existential predication with *-kho(na)* is exemplified in (79).

- (79) a. Ku- khona i- mali eningi e- lahlekile.  
 17SM- LOC.PRED ART- 9money 9much REL:9SM- lost:DJ  
 ‘There is a lot of money lost.’
- b. A- ku- kho mali eningi e- lahlekile.  
 NEG- 17SM- LOC.PRED 9money 9much REL:9SM- lost:DJ  
 ‘There isn’t a lot of money lost.’

These forms have two unusual properties. The first is that the predication word (i.e., *kukhona* in (79a)) seems at least superficially to have two separate morphemes bearing class 17 features: the subject marker and the predicative particle *-kho(na)*. We saw in section 2.3 that class 17 has both locative and default uses, as well as an expletive use whose nature is debatable. Further, we saw that an additional usage is available in nominal predication. Here we will assume that *-kho(na)* is a predicative particle used in both locative and existential predication, that it lacks pronominal characteristics, and that its apparent class 17 features are not indicative of either grammatical agreement or coreference. In contrast, the class 17 subject marker in the forms in (79) are taken to be another instance of the same expletive subject agreement found in verbal clauses. These characteristics of both morphemes can be illustrated by comparing the following two exchanges, the first of which is based on an existential predicate, while the second is based on a verbal one.

- (80) Q: Ku- khona i- mali eningi yini e- lahlekile?  
 17SM- LOC.PRED ART- 9money 9much rel:9sm- Q lost:DJ  
 ‘Is there a lot of money lost?’
- A: Yebo, i- khona.  
 yes 9SM- LOC.PRED  
 ‘Yes, there is.’
- (81) Q: Ku- fik- e u- Siphopho yini?  
 17SM- arrive- PERF.CJ ART- 1Siphopho Q  
 ‘Did Siphopho come?’
- A: Yebo, u- fik- ile.  
 yes 1SM- arrive PERF.DJ  
 ‘Yes, he did.’

First we observe that in both the existential clause and the verbal one, the class 17 subject marker in the question is replaced by the subject marker correlating to the logical subject. On these grounds, the nature of the class 17 subject marker in the two predicate types seems to be the same. Second, we see in the response in (80) that *-kho(na)* can serve as a self-standing predicate, with no other material inside PredP, in the same way that the verb is a complete predicate in (81). Used in this way (that is, in contrast to the negative locative forms such as in (66b)), *-kho(na)* seem to mean something like ‘be present’. And, in fact, my informant often uses the word ‘present’ when asked to explain in English the difference between a minimal pair of locative and existential clauses as in (82).

- (82) a. U- Siphó u- se- dolobh- eni.  
 ART- 1Siphó 1SM- LOC:ART- 5town- LOC  
 ‘Siphó’s in town.’
- b. U- Siphó u- khona e- dolobh- eni.  
 ART- 1Siphó 1SM- LOC.PRED LOC:ART- 5town- LOC  
 ‘Siphó is present in town.’ (Informant’s translation.)

A second interesting property of predication with *-kho(na)* concerns negation. In the normal indefinite interpretation, the noun following a negative form of *-kho* must be in its bare form. This fact is illustrated in (83).

- (83) a. A- ku- kho mali eningi.  
 NEG- 17SM- LOC.PRED 9money 9much  
 ‘There isn’t a lot of money.’
- b. \*A- ku- kho i- mali eningi.  
 NEG- 17SM- LOC.PRED ART- 9money 9much

This appears to be a semantic requirement rather than a morphological dependency between the negative predicate form and the following noun, because a noun modified by *ngisho neyodwa* ‘even one’ is grammatical in such a clause, as shown in (84). Note that a noun modified with this phrase appears with its usual augment.

- (84) A- ku- kho ngisho neli- lodwa i- randi.  
 NEG- 17SM- LOC.PRED even with:REL:SM5 5one ART- 5rand  
 ‘There isn’t even one rand.’

This is the same as the situation synthetic negative nominal predicates, as in (42) above, as well as with predication with *na*, discussed below in section 3.4.

Unlike the other non-verbal predication types seen thus far, existential predication with *-kho* allows an expletive subject (expressed with a class 17 subject marker). This puts us in a position to consider the properties of predicate-internal and right-dislocated arguments. Consider the two sentences in (85).

- (85) a. Kú- khóná i- mithi eminingi ]<sub>PredP</sub> lapha.  
 17SM- LOC.PRED ART- 4medicines 4much here
- b. Í- khònà ]<sub>PredP</sub> i- mithi eminingi lapha.  
 4SM- LOC.PRED ART- 4medicines 4much here  
 ‘There are a lot of medicines here.’

Following our agreement hypothesis, we will assume that the constituency in (85) is as indicated by the brackets, exactly paralleling the facts with the logical subject of a verb clause. Thus, ‘many medicines’ is inside PredP in (85a), because the subject marker bears expletive class 17 features. In (85b), on the other hand, the subject marker agrees with the theme, indicating that the post-predicative theme is PredP-external.

Before even considering the semantic properties of these two positions, our assumption is corroborated by prosodic facts. Note that in the expletive subject case in (85a), the predicate word *kúkhóná* ends on a high tone, while the agreeing form *íkhònà* in (85b)

ends on a low tone.<sup>14</sup> This difference in tone is best explained by a difference in prosodic boundary at the right edge of which the final high of this word can undergo lowering. Such a prosodic boundary is independently motivated if it coincides with a syntactic boundary, as suggested on analogy with verbal clauses. In other words, the underlying final high of *ikhona* in (85b) can be lowered because *ikhona* occurs at the right edge of a prosodic boundary. This is a likely place for such a boundary to occur if *ikhona* is the last word inside PredP and if material following it is hence dislocated, in the way indicated by the bracket. In contrast, in (85a) it is the theme *imithi eminingi* ‘many medicines’ which is the final element within PredP and the final high of *kukhona* does not undergo lowering.

*Wh*-questioning provides syntactic evidence for assuming the structure in (85). As shown in (86), the theme in this predicate type can only be questioned if the subject marker bears class 17 features.

- (86) a. Ku- khona ziphi i- zinhlobo ze- mithi ]<sub>PredP</sub> lapha?  
 17SM- LOC.PRED 10which ART- 10kinds 10of:ART- 4medicines here
- b. \* Zi- khona ]<sub>PredP</sub> ziphi i- zinhlobo ze- mithi lapha?  
 10SM- LOC.PRED 10which ART- 10kinds 10of:ART- 4medicines here  
 ‘What kinds of medicines are there here?’

The fact that such questioning is not possible with an agreeing subject marker as in (86b) is fully expected if the constituency is as indicated, because a right-dislocated phrase cannot be questioned in a verbal clause, either. Modification with *kuphela* ‘only’ produces the same pattern, as expected, as shown in (87).

- (87) a. Ku- khona i- jusi kuphela. ]<sub>PredP</sub>  
 17SM- LOC.PRED ART- 5juice only
- b. \* Li- khona ]<sub>PredP</sub> i- jusi kuphela.  
 5SM- LOC.PRED ART- 5juice only  
 ‘There’s only juice.’

At first glance, one could entertain the possibility that predication with *kho(na)* exhibits something analogous to the conjoint/disjoint alternation seen in verbs. The shorter/lighter form *kho* could be taken to be conjoint, while the longer/heavier form *khona* could be taken to be disjoint. However, the form in (87a) shows that this is not the case. In a verbal clause, modifying an argument with ‘only’ would require a conjoint form, while in (87a) we have *khona*, which we were supposing to be analogous to a disjoint form. The unworkability of this hypothesis is also seen above in (85), where the same allomorph *khona* is used whether the theme is predicate-internal or right-dislocated.

In summary of predication with *kho(na)*, we saw that a predicate-internal position for the theme is available for existential predication, in a way that resembles that of a theme in verbal expletive subject constructions. Furthermore, it was shown that such a position is not available with locative predication.

<sup>14</sup>I am grateful to Meritta Xaba for pointing this difference out.

### 3.4 Predication with *na*

Many Bantu languages have a single morpheme which is used to mean ‘with’ (comitative), which is used for coordination, and which serves as the basis for possessive predication. In Zulu, this morpheme is *na*, which is illustrated in each of these uses in (88), (89), and (90).

(88) Ngi- cul- e        na- lo   mfana.  
1S.SM- sing- PERF.CJ with- 1that 1boy  
‘I sang with this boy.’

(89) Mina na- lo   mfana a- si-   cul- anga nge-   zikhathi ezahlukenene.  
1S.PRON with- 1this 1boy   NEG- 1P.SM- sing- NEG   at:ART- 8times   8different  
‘This boy and I sang at different times.’

(90) U-   mfana u-   na-        marandi ayikhulu.  
ART- 1boy   1SM- with:ART- 6rand   6hundred  
‘The boy has a hundred rand.’

This section is concerned with predicative uses of *na*, as in (90). However, this type of construction actually has two distinct uses. It can be used for what is here straightforwardly called ‘possessive predication’, but with an expletive class 17 subject marker as in (90), it has an existential interpretation, as in (91).

(91) Ku-   na-        marandi ayikhulu.  
17SM- with:ART- 6rand   6hundred  
‘There are a hundred rand.’

We will discuss these two uses separately, starting with possession.

#### 3.4.1 Possessive predication

This type of non-verbal predication clearly has two arguments: a possessor and a possessum. If possessive *na* is thought of as a preposition, as is reasonable, the possessum can be taken to be its complement. This way of thinking is supported by the identical way in which the complement of both possessive and comitative is pronominalised or resumed under extraction, namely with a pronominal clitic. Such pronominalisation is illustrated in (92), while resumption under extraction is shown in (93) with relative clauses.

(92) a. Ngi- khuluma na- yo.  
1S.SM- talk        with- 9PRON  
‘I’m talking with him.’ (Speaking of *indoda* ‘the man’.)

b. Ngi- na- yo.  
1S.SM with- 9PRON  
‘I have it.’ (Speaking of *incwadi* ‘the book’.)

(93) a. i-   ndoda engi-        khuluma na- yo  
ART- 9man   REL:1S.SM- talk        with 9PRON  
‘the man who I’m talking with’

- b. i- ncwadi engi- na- yo  
 ART- 9book REL:1S.SM- with- 9PRON  
 ‘the book that I have’

The idea that *na* in these constructions is a preposition is further supported by the fact that the construction can give the interpretation ‘to be with’ rather than ‘to have’ if the complement of *na* is a definite human noun, as in the affirmative form in (94a).<sup>15</sup>

- (94) a. Ngi- no- gogo.  
 1S.SM- with:ART- 1grandmother  
 ‘I’m with grandmother.’  
 % ‘I have a grandmother.’
- b. A- ngi- na- gogo.  
 NEG- 1S.SM- with- 1grandmother  
 ‘I don’t have any grandmother.’  
 % ‘I’m not with grandmother.’

Let’s now consider the properties of the two arguments of possessive clauses, starting with the possessor. Like the logical subject other other predicate types, the possessor can stand to the right of the predicate, as in (95).

- (95) U- ne- ncwadi lo mfana.  
 1SM- with:ART- 9book 1this 1boy  
 ‘This boy has a book.’

According to the agreement hypothesis, the possessor is right-dislocated, because the subject marker agrees with it. Let’s now see if the interpretation hypothesis confirms this. The question in (96) and the sentence in (97), in which the possessor is modified by ‘only’, show that the possessor cannot be focused, just as is the case with dislocated arguments of verbal and adjectival predication.

- (96) \* U- ne- ncwadi bani?  
 1SM- with:ART- 9book 1who  
 Intended: ‘Who has a book?’
- (97) \* U- ne- ncwadi lo mfana kuphela.  
 1SM- with:ART- 9book 1this 1boy only  
 Intended: ‘Only this boy has a book.’

<sup>15</sup>If the complement of *na* is a proper name, a negative clause is simply ungrammatical whether the name is bare, augmented, or doubled by a pronominal clitic, as shown here:

- (1) a. \* AnginaSipho. (bare noun)  
 b. \* AnginoSipho. (augmented noun)  
 c. \* Anginaye uSipho. (augmented noun with pronominal clitic double)  
 Intended: ‘I’m not with Sipho./I don’t have (a) Sipho.’

Let's take this as sufficient evidence to conclude that the possessor is dislocated if the subject marker agrees with it.

We would now like to know if the possessor can also appear predicate-internally. This is attempted in two ways in (98)

- (98) a. \* Ku- no- Sipho i- ncwadi.  
 17SM- with:ART- 1Sipho ART- 9book  
 b. \* Ku- ne- ncwadi u- Sipho.  
 17SM- with:ART- 9book ART- 1Sipho  
 Intended: 'Sipho has a book.'

Thus, like other non-verbal predication types other than existentials, possessive predication does not allow a predicate-internal logical subject.

The fact that possession with *na* is a two-place predicate also leads us to ask what parallels hold between it and transitive verbs. In section 2, we saw that objects are pronominalised with an object marker (a prefix or proclitic on the verb stem) and that object marking can be used as a diagnostic for the structural position of the object.

By comparison of properties of object marking and possessum cliticisation (doubling of the possessum with a pronominal enclitic), we will now see that the two phenomena serve as diagnostics for the same structures. This is shown with questioning in (99). The possessum cannot be questioned if it is pronominalised by the enclitic *-zo*.

- (99) a. U- na ziphi i- zinhlobo ze- mithi lapha?  
 2S.SM- with 10which ART- 10kinds 10of:ART- 4medicines here  
 'What kinds of medicines do you have here?'  
 b. \* U- na- zo ]<sub>PredP</sub> ziphi i- zinhlobo ze- mithi lapha?  
 2S.SM- with- 10PRON 10which ART- 10kinds 10of:ART- 4medicines here

The same result is shown for *kuphela* 'only' in (100).<sup>16</sup>

- (100) a. Ngi- ne- khofi kuphela.  
 1S.SM- with:ART- 5coffee only  
 b. \* Ngi- na- lo i- khofi kuphela.  
 1S.SM- with- 5PRON ART- 5coffee only  
 'I only have coffee.' *Elicit me.*

Morphologically, a pronominalised form as in (100) resembles certain nominal predication forms we saw above. In those cases, we saw that there was a difference in behaviour between affirmative and negative clauses. Specifically, a predicate nominal following its pronominal double could not be bare in form, but it could (unexpectedly) be modified by *kuphela* 'only'. This pattern is only partially reproduced with possessive predication. While the possessum following its pronominal double cannot be bare, as shown in (101), it also cannot be modified by *kuphela*, as shown in (102).

- (101) \* A- ngi- na- lo khofi.  
 NEG- 1S.SM- with- 5PRON 5coffee  
 Intended: 'I don't have any coffee.' *Elicit me.*

<sup>16</sup>The ungrammatical synthetic counterpart of (102) is irrelevant, because bare nouns cannot be modified by *kuphela* 'only' in any context.

- (102) \* A- ngi- na- lo i- khofi kuphela.  
 NEG- 1S.SM- with- 5PRON ART- 5coffee only  
 ‘I don’t only have coffee.’ *Elicit me.*

The possessum following the pronominal double (as in (101)) thus seems to be truly right-dislocated.

It was noted that, it is not a bare noun *per se* that is required in negative synthetic nominal predicates, because these predicate forms also license a noun phrase modified by *ngisho na* ‘even’. This is not the case with possessive predication, as shown in (103a), predicative *na* cannot be followed by *ngisho neyodwa*. *This needs rethinking. These are perhaps two different types of modifiers: ‘even’ and ‘not even one’.*

- (103) a. \* A- ngi- na ngisho nelilodwa i- randi.  
 NEG- 1S.SM- with even with:5one ART- 1rand  
 b. A- ngi- na- lo ngisho nelilodwa i- randi.  
 NEG- 1S.SM- with- 5PRON even with:5one ART- 1rand  
 ‘I don’t have even a single rand.’

However, the fact that *na* cannot be followed by *ngisho*, can be attributed to the fact that *na*, even in its use as a conjunction (‘and’) can only combined with certain types of noun phrases. For example, a noun phrase starting with *yonke* ‘all’ must be preceded by a pronominal double, and cannot be immediately preceded by *na*, as shown in (104).

- (104) a. Mina na- bo bonke a bangane bami si- ya- jabula.  
 me and- 2PRON 2all ART- 2friends 2my 1P.SM- PRES.DJ- be.happy  
 b. \* Mina na- bonke a bangane bami si- ya- jabula.  
 me and- 2all ART- 2friends 2my 1P.SM- PRES.DJ- be.happy  
 ‘All my friends and I are happy.’

Similarly, Internet searches yielded no hits for Zulu pages with *ngisho* immediately preceded by *na*.

### 3.4.2 Existential predication with *na*

Existential predication with *na* has the same morphological form as possession with *na*, just discussed. The only difference is that in the case of existential predication, the subject marker does not agree with a true possessor referent as in the case of possession. Rather, it bears expletive or (generic) locative class 17 features, just like the *vP*-internal subject cases we saw in section 2. This predication type is illustrated in (105).

- (105) Ku- ne- mali eningi e- lahlekile. ]<sub>PredP</sub>  
 17SM- with:ART- 9money 9much REL:9SM- lost:DJ  
 ‘There’s a lot of money that has been lost.’

Recall that we take class 17 subject agreement to indicate that no argument has raised from within the VP to spec-IP (the preverbal subject position where subject agreement is triggered on the subject marker). Under this assumption, the theme of (105) (‘a lot of money’) is PredP-internal. Further, it was shown that PredP-internal arguments can be focused, while right dislocated ones cannot. As in the case of possession with *na*,

this is corroborated by the facts concerning the questioning of the theme as in (106) or modifying it with ‘only’ as in (107).

(106) Ku- na- ziphi i- zihlobo ze- zihlahla lapha?  
 17SM- with- 10which ART- 10types 17of:ART- 10plants here  
 ‘What kinds of trees are there here?’

(107) Ku- ne- zihlahla kuphela lapha.  
 17SM- with:ART- 10plants only here  
 ‘There are only trees here.’

We saw that in negative existential *-kho(na)* predication, the theme must be a bare noun. This was also true of synthetic negative forms of nominal predication, which were the forms in which the theme was not pronominalised. Existential predication with *na* also has this restriction, as shown in (108).

(108) a. A- ku- na- mali eningi e- lahlekile. ]<sub>PredP</sub>  
 NEG- 17SM- with- 9money 9much REL:9SM- lost:DJ  
 b. \* A- ku- ne- mali eningi e- lahlekile. ]<sub>PredP</sub>  
 NEG- 17SM- with:ART- 9money 9much REL:9SM- lost:DJ  
 ‘There isn’t much money that has been lost.’

As in the case of existential predication with *kho(na)*, this is a semantic restriction rather than a morphological dependency, as a noun modified by *ngisho na* ‘even’ can also appear in this configuration, as in (109).<sup>17</sup>

(109) A- ku- na- ngisho nelilodwa i- randi.  
 NEG- 17SM- with- EVEN with:5one ART- 5rand  
 ‘There isn’t a single rand.’

Arguably, this restriction is related to a need for an indefinite theme with an existential predicate. This idea is supported by an interesting difference between the possession and existential predication types using *na*. Namely, while the possessum in the possession construction can be represented with an enclitic, no such cliticisation is possible with the existential contraction. This contrast is illustrated in (110).

(110) a. A- ngi- na- yo i- mali eningi.  
 NEG- 1S.SM- with- 9PRON ART- 9money 9much  
 ‘I don’t have a lot of money.’  
 b. \* A- ku- na- yo i- mali eningi.  
 NEG- 17SM- with- 9PRON ART- 9money 9much  
 Intended: ‘There isn’t a lot of money.’

This is still puzzling, though. Possession does not admit an augmented noun in a negative clause without doubling with a clitic. Yet that construction still allows the clitic. This problem is discussed in section 4.5.

The fact that the theme cannot be pronominalised also holds for short answers. Consider the dialogue in (111).

<sup>17</sup> *This contradicts the possession data. For possession you couldn’t have ngisho without pronominalisation. I need more data on both predication types.*

- (111) Q: Ku- ne- mali eningi yini e- lahlekile?  
 17SM- with:ART- 9money 9much Q REL:9SM- lost:DJ  
 ‘Is there a lot of money lost?’
- A1: \* Yebo, ku- na- yo.  
 yes 17SM- with- 9PRON
- A2: Yebo, i- khona.  
 yes 9SM- LOC.PRED  
 ‘Yes, there is.’

In the attempted response in (111A1), the theme of the question has simply been replaced with the pronominal clitic *-yo*, resulting in ungrammaticality. The grammatical response in (111A2) resorts to a completely different existential predication strategy, namely, the *-kho(na)* strategy, in which the theme (here silent) is in subject position, as evidenced by the agreement features of the subject marker.

### 3.4.3 Summary of predication with *na*

To generalise over the two types at hand, we need a way to refer to the arguments’ relation to *na*. The argument following *na* can simply be called the ‘complement of *na*’. This would correspond to the possessum of possessive predication and the theme of existential predication. Analogously, the possessor can be called the ‘subject of *na*’. It is not clear whether existential *na* also has a subject. It could well be that its subject is a silent class 17 argument that raises to spec-IP, triggering class 17 subject agreement, but it is equally plausible that *na* in this case has only its theme complement and that an expletive pronoun is introduced in spec-IP (rather than moved there from below) triggering the observed agreement.

The complement of *na* was shown amenable to doubling or pronominalisation with a pronominal enclitic only if the predicate was possessive. In negative clauses, a non-pronominalised complement of *na* must be bare in form, just like all other non-verbal predicate types that license a predicate-internal noun phrase. When pronominalised, the complement of *na* appears to be right-dislocated, because it cannot be modified by ‘only’. As for the subject of *na*, which is only observable in possessive constructions, it can never occur predicate-internally. In this respect, *na* predication patterns with adjectival, nominal and locative predication, and not with verbal or existential *-kho(na)* predication.

## 4 Discussion

Having looked at all of the predication types, we are now able to examine several issues that arise from comparison between them. This discussion is organised into sections addressing the following issues:

- 4.1 All predicate types allow right-dislocation with common syntactic/semantic characteristics. Pronominalised predicate nominals share some properties of dislocated objects, but not all of them.
- 4.2 Only nominal predication has a non-expletive class 17 agreement.

- 4.3 Only verbal and existential clauses allow expletive subject constructions.
- 4.4 Only non-verbal predication types require a predicate-internal noun phrase in a negative clause to be bare in form without pronominalisation.
- 4.5 Of predicate types that allow pronominalisation of a non-subject with a pronominal enclitic, only existential *na* predication disallows such pronominalisation in negative clauses.

## 4.1 Right-dislocation across predicate types

With the exception of existential predication with *na*, all predication types were shown to allow right dislocation of the logical subject. That is, all these predication types allow the logical subject to appear in the right periphery of the clause when the subject marker agrees with it, and that dislocated element obeys the same semantic restrictions, such as the inability to be questioned or to be focused with *kuphela* ‘only’. Additionally, nominal predication allows right dislocation of the logical subject when the subject marker bears non-expletive class 17 agreement.

However, the situation with arguments other than the logical subject is more complicated. Recall that in verbal clauses, an object marker requires dislocation of the noun phrase it corresponds to, as shown in (112), repeated from (11).

- (112) a. Ngi- m- bon- ile ]<sub>PredP</sub> u- Sipho.  
 1S.SM- 1OM- see- PERF.DJ ART- 1Sipho
- b. \* Ngi- m- bon- e u- Sipho.  
 1S.SM- 1OM- see- PERF.CJ ART- 1Sipho
- ‘I saw Sipho.’

Sentence (11b) is ungrammatical because the verb is conjoint although it has an object marker corresponding to an immediately postverbal object. The structure of this sentence as indicated by the morphology is incoherent, because the conjoint form of the verb is only grammatical when the element immediately following the verb is PredP-internal, while the object marker indicates that the object is dislocated.

In nominal and possessive predication, a non-subject seems in some sense to be pronominalised by a pronoun or pronominal clitic. With nominal predication, we saw this in the short answer in (60) repeated here as (113).

- (113) U- Sipho yi- sela yini? Yebo, yi- lona.  
 ART- 1Sipho COP:ART- 5thief Q yes COP- 5PRON
- ‘Is Sipho a thief? Yes, he is.’

In this example, the pronoun *lona* seems to replace the lexical noun phrase *isela* ‘thief’ in the question, thus behaving like a pronoun. Similarly, the possessum in a possessive clause can be pronominalised by a pronominal clitic, as shown in (114), in which the possessum *incwadi* ‘book’ in the question is replaced by the agreeing clitic *-yo* in the short answer.

- (114) U- ne- ncwadi yini? Yebo, ngi- na- yo.  
 2S.SM- with:ART- 9book Q yes 1S.SM- with- 9PRON
- ‘Do you have a book? Yes, I do.’

The pronoun *lona* in (113) and the enclitic *-yo* in (114) belong to the same paradigm. The suffix *-na* of the independent pronoun (not glossed separately here) is added to provide prosodic weight in certain pronominal forms. There are circumstances, such as after the preposition *ku-*, where either the light or heavy form may be used, and in some other cases the Nguni languages differ in their choice between the two forms.

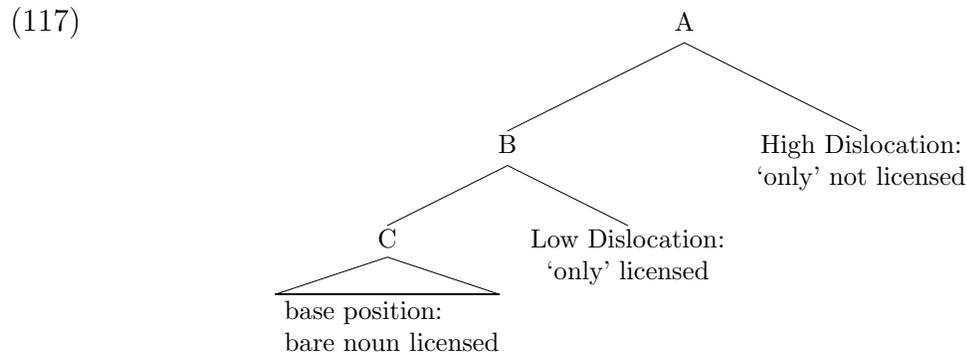
Given our agreement hypothesis, we expect a right-peripheral noun phrase corresponding to one of these pronouns or enclitics to be right-dislocated. This was shown in (100) and (102) to indeed be the case in possessive clauses, but an unusual pattern emerged with predicate nominals. Focusing the predicate nominal with *kuphela* ‘only’ with pronominalisation was shown in (65), repeated here as (115), to be grammatical in negative clauses but not in affirmative ones.

- (115) a. \* Ngu- yena u- Siph o kuphela ow- enza lokho.  
 COP:ART- 1PRON ART- 1Siph o only REL:1SM- do 17that  
 ‘It’s just Siph o who does that.’
- b. A- ku- yena u- Siph o kuphela ow- enza lokho.  
 NEG- 17SM- 1PRON ART- 1Siph o only REL:1SM- do 17that  
 ‘It’s not just Siph o who does that.’

However, this does not mean that the pronoun in negative clauses has no syntactic effect, because a bare noun is not licensed when this pronoun is present, in contradistinction to the synthetic variant, as shown in (116).

- (116) a. A- ku- muntu.  
 NEG- 17SM- 1person
- b. \* A- ku- yena muntu.  
 NEG- 17SM- 1PRON 1person  
 ‘It’s not a person.’

This pattern suggests that there are in fact two different dislocation domains, as in the following tree.



Under this conception, bare nouns are only licensed in the C domain. Except for predicate nominals in negative clauses, a right-dislocated element can never be focused with ‘only’. In all those cases, then, the dislocation is always to the High Dislocation position, which is outside the domain of B. Only in the case of pronominalisation under negation can a predicate nominal ever be dislocated to the Low Dislocation position, in which ‘only’ can be licensed.

The idea that there are two different dislocation positions with different semantic properties is not particularly unusual. However, the fact that the Low Dislocation position is only available in a negative nominal predicate makes it suspicious. Consider the possessive clause in (118), repeated from (102).

- (118) \* A- ngi- na- lo i- khofi kuphela.  
NEG- 1S.SM- with- 5PRON ART- 5coffee only  
 ‘I don’t only have coffee.’ *Elicit me.*

This clause uses a pronominal clitic, just as the nominal predicate in (65b) uses what looks like a pronoun, and the post-predicative noun phrase in both is modified by *kuphela* ‘only’, yet only the nominal predicate is grammatical. In terms of the analysis in (117), only nominal predication has access to the Low Dislocation position. Furthermore, if object markers are considered to be the equivalent to pronominal clitics in verbal clauses, then negative nominal predicates stand apart again, because we have seen that a doubled object in a verbal clause cannot be modified by *kuphela*.

The only alternative to the analysis to (117) would be to assume that there are only two positions for an argument: the base position and a single right-dislocation position. Then we must somehow explain why modification with *kuphela* in the right-dislocation position is allowed only in negative nominal predicate clauses. Let’s suppose that Zulu exceptionally allows modification of a right-dislocated element with *kuphela* if there is simply no other way to express the intended proposition in the languages. The point of comparison is negative possessive predicates. Neither the bare noun or clitic-doubled possessive can be modified by *kuphela*, as shown in (119a) and (119b). The intended proposition is thus expressed with a cleft, as in (119c).

- (119) a. \* A- ngi- na- jusi kuphela.  
NEG- 1S.SM- with- 5juice only  
 Intended: ‘I only have juice.’
- b. \* A- ngi- na- lo i- jusi kuphela.  
NEG- 1S.SM- with- 5PRON ART- 5juice only  
 Intended: ‘I only have juice.’
- c. A- ku- lona i- jusi kuphela engi- na- lo.  
NEG- 17SM- 5PRON ART- 5juice only REL:1S.SM- with- 5PRON  
 ‘It’s only juice that I have.’

Note that a cleft is dependent on nominal predication. This makes it impossible to test this idea on nominal predicates: the paraphrase which one might use to express the grammatically problematic proposition is itself also a nominal predicate.

## 4.2 Non-expletive class 17 agreement

It was shown that the class 17 agreement pattern in nominal predicate clauses like (44b) is distinct from both expletive agreement and strict class agreement, we are left with the question of what it actually is. It turns out that no type of predication other than nonnominal allows this agreement pattern, a fact which is illustrated for four predication types in (120):

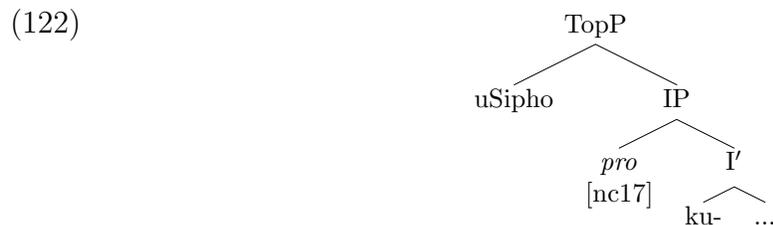
- (120) a. U- Siphō kw- a- ku- ngu- mngane wami. (nominal predicate)  
 17SM- PAST- 17SM- COP- 1friend 1my  
 ‘Siphō was my friend.’
- b. \* U- Siphō kw- a- ku- mdala. (adjectival predicate)  
 ART- 1Siphō 17SM- PAST- 17SM- 1old  
 Intended: ‘Siphō was old.’
- c. \* U- Siphō ku- se- dolobhe- ni. (locative predicate)  
 ART- 1Siphō 17SM- LOC:ART- 5town- LOC  
 Intended: ‘Siphō is in town.’
- d. \* U- Siphō ku- fik- ile. (verbal predicate)  
 ART- 1Siphō 17SM- arrive- PERF.DJ  
 Intended: ‘Siphō has arrived.’

This pattern finds immediate parallels in non-related languages, such as French, as shown in (121).

- (121) a. Elle / C’ est mon amie, Marie. (nominal predicate)  
 she this is my friend Marie  
 ‘Marie is my friend.’
- b. Elle / \*C’ est sympathique, Marie. (adjectival predicate)  
 she this is nice Marie  
 Intended: ‘Marie is nice.’
- c. Elle / \*Ce / \*Ça m’ a beaucoup aidé, Marie. (verbal predicate)  
 she this that me has much helped Marie  
 Intended: ‘Marie helped me a lot.’

Although the pronoun *elle* ‘she’, which agrees in phi features with the dislocated element *Marie* is licit with all three predication types shown, the gender-neutral pronoun *ce* can only be used in co-reference to *Marie* in a nominal predicate. Given this similar behaviour, I propose that class 17 subject agreement in the case of nominal predicates is agreement with a silent semantically weak demonstrative similar to French *ce*.

What of the structure of clauses like (120a), with non-expletive class 17 subject agreement? If the subject marker agrees with a silent pronoun, then the overt lexical ‘logical subject’ must be in a position higher than canonical subject position. The most plausible analysis is that it is in some kind of topic position, as in (122).



If *uSiphō* in the class 17 pattern is in a topic position, then the ungrammaticality of quantifying the logical subject with *yonke* will have to be attributed to restrictions on what the silent pronoun can be linked to, in just the same way that it was suggested that this pronoun cannot be linked with a right-dislocated element, for some reason. The

ungrammaticality cannot be due to a property to topics per se, because, as shown by the unquantified left-dislocated object in (123), topics may be quantified with *yonke*.

- (123) Zonke i- zincwadi zami ngi- zi- fund- ile.  
 10all ART- 10books 10my 1S.SM- 10OM- read- PREF.DJ  
 ‘All of my books I have read.’

Note that this says nothing about where the logical subject of the agreeing pattern. Whether such a subject is in a topic position or canonical subject position is an issue which must be argued independently.<sup>18</sup>

In connection with the idea that the class 17 subject marker in this case is agreement with some sort of semantically weak demonstrative, two other uses of class 17 in Zulu should be mentioned. The first of these is, in fact, related to demonstratives. The class 17 forms *lokhu* ‘this’ and *lokho* ‘that’ are used to refer to situations and to objects whose names have not yet been established in discourse and hence do not yet have a particular noun class associated with them. These uses are demonstrated in (124) and (125), respectively:

- (124) U- Thandi u- na- manga. A- ngi- ku- thand- i lokho.  
 ART- 1Thandi 1SM- with:ART- 5lies NEG- 1S.SM- 17OM- love- NEG 17that  
 ‘Thandi lies. I don’t like that.’

- (125) Yi- ni lokho? Ngu- khiye wami.  
 COP- what 17that COP:ART- 3key 3my  
 ‘What’s that? It’s my key.’ *Elicit me.*

The second use is as the noun class for *konke* ‘everything’, shown in (126), which again refers to situations and object of indeterminate noun class.

- (126) S- enza konke oku- se- mandle- ni ethu.  
 1P.SM- do 17all REL:17SM- LOC:ART- 6power- LOC 6our  
 ‘We’re doing everything in our power.’

The indeterminate nature of all these uses seems to support the analysis proposed of a semantically weak silent demonstrative.

A third use of class 17 must also be discussed. As shown by Nyembezi (1970), class 17 can be used as subject agreement for conjoined noun phrases of unlike noun class, as in (127).

- (127) I- zinkuni na- malahle ku- phel- ile.  
 ART- 10firewood and:ART- 6coal 17SM- finish- PERF.DJ  
 ‘The firewood and coal is finished.’ (Nyembezi 1970)

Comparison with (45b) above should be enough to assure the reader that this agreement pattern is available only for these conjoined subjects. The question is now whether this phenomenon is simply another manifestation of the class 17 agreement seen in nominal

<sup>18</sup>If the subject marker is an I<sup>0</sup> or AgrS<sup>0</sup> head, then it is not clear what the canonical subject position in fact is. This is because a negation prefix, presumably a Neg<sup>0</sup> head, can intervene between the lexical subject and the subject marker.

predication. We saw two differences in the behaviour of the subject in the agreeing and class 17 subject marker patterns. Only in the agreeing pattern can the subject be quantified by *yonke* ‘all’ or be right-dislocated. These must now be tested for with conjoined subjects, as in (128) and (129).

(128) \* Zonke i- zinkuni na- wo wonke amalahle ku- phel- ile.  
 10all ART- 10firewood with- 6PRON ART- 6coal 17SM- finish- PERF.DJ  
 ‘All the firewood and all the coal is finished.’  
*Elicit me. I am speculating that it’s ungrammatical.*

(129) \* Ku- phel- ile i- zinkuni na- malahle.  
 ART- 10firewood and:ART- 6coal 17SM- finish- PERF.DJ  
 ‘The firewood and coal is finished.’  
*Elicit me. I am speculating that it’s ungrammatical.*

If (128) and (129) are found to be ungrammatical, as expected, then there is strong evidence that the class 17 subject marker of nominal predication and of conjoined subjects are simply manifestations of the same phenomenon. This stands in opposition to an alternative analysis in which a conjunction of unlike-gendered noun phrases forms a constituent whose noun class is 17.

### 4.3 Expletive subject agreement

It was shown above in (4), repeated here as (130), that verbal clauses can take the form of an expletive subject construction.

(130) Ku- fik- e i- zingane. ]<sub>PredP</sub>  
 17SM- arrive- PERF.CJ ART- 10children  
 ‘The children/some children have come.’

In such a construction, the subject marker has class 17 features, while the logical subject appears inside PredP. In section 3, we tested each type of non-verbal predication to see whether it also allowed such a construction. The results for all predication types can be summarised as follows:

- **Verbal** predication *does* allow expletive subject constructions. For some speakers, this is limited to clauses with intransitive verbs (unaccusative and unergative). Other speakers also allow it with monotransitive verbs.
- **Adjectival** predication *does not* allow expletive subject constructions.
- **Nominal** predication *does not* allow expletive subject constructions, if the class 17 agreement found with both overt preverbal subjects and right dislocation is taken to be something other than expletive subject constructions.
- **Locative** predication *does not* allow expletive subject constructions, if considered separately from existential predication with *kho(na)*.
- **Existential** *kho(na)* predication *does* allow expletive subject constructions.

- **Possessive** predication *does not* allow expletive subject constructions, if considered separately from existential predication with *na*.
- **Existential *na*** predication *does* allow existential subject agreement.

As can be seen, the picture is a bit messy, because determining whether a given predication type allows expletive subject agreement depends on whether two types should be grouped together (in the case of the two predication types that use *na* and of the locative and existential *kho(na)*) or whether the class 17 subject agreement found constitutes expletive agreement (in the case of nominal predication). If the analyses presented here are correct, then expletive subject constructions are allowed in verbal and existential predicates and are disallowed in all others.

Adjectival predication constitutes the one crystal-clear analytically neutral case; it cannot be interpreted in any way as allowing expletive agreement. This makes it useful for comparison with verbal predication, which does allow it. We will thus begin our discussion with adjectives.

It was noted that many concepts expressed with an adjective in English are expressed with a verb in Zulu. It might therefore be enlightening to compare such a verb with a true adjective like *-ncane* ‘small’. Now note that an adjective-like verb but not a true adjective can be used to form an expletive subject construction with a questioned predicate-internal logical subject:<sup>19</sup>

- (131) a. \* Ku- ncane o- bani ku- lo mndeni? (adjective)  
           17SM- small ART- 2who in- 3this 3family  
           ‘Who’s small in this family?’
- b. Ku- hlakaniph- e o- bani ] ku- lo mndeni? (verb)  
           17SM- be.clever- PERF.CJ ART- 2who in- 3this 3family  
           ‘Who’s clever in this family?’

We can entertain various hypotheses to explain why such a difference should exist between verbal and adjectival clauses. Three of these are discussed here: categorial selection, event structure, and morphological integrity.

**Category.** The easiest account is to make availability of expletive subject agreement dependent on the categorial label of the predicate. The grammar is simply said to have access to a list of categories that allow the construction. However, this account is stipulative rather than explanatory. Furthermore, there is no support of this solution in the morphology. While we saw that the morphology makes a two-way distinction between verbal and non-verbal predicates, there is no morphological alternation regulated by whether a predicate allows expletive subject agreement or not.

The categorial solution pairs nicely with the idea that Bantu languages have a dedicated low focus position between the TAM region and the theta domain. If we assume that this is a projection headed by *Foc*<sup>0</sup>, the distribution can be captured by saying that expletive subject constructions obligatorily use the spec-*FocP* position for the first DP in the predicate (i.e., the first object in a verbal clause and the theme in an existential

<sup>19</sup>It is not clear whether the prepositional phrase *kulo mndeni* in (131b) is inside or outside *PredP*. What is important is that *obani* is predicate-internal.

clause) and the  $\text{Foc}^0$  only selects for certain categories of complements, such as VP, *vP*, and CopP (for ‘copula’).<sup>20</sup> However, the idea of a low FocP projection in Zulu and other Bantu languages has been refuted *add refs*.

**Event structure or aspect.** A more principled explanation may lie in the event structure or aspectual properties of the predicate. Perhaps the relevant difference between verbs and adjectives is that only the former entails an event.

There are at least two problems with this account. The first has to do with the premise that all verbs entail an event. Adjective-like verbs in Zulu are often perfective in form, exhibiting the *-e/-ile* (conjoint/disjoint) perfect suffix. However, it is not clear whether they also display any sort of perfective semantics. Consider the sentence in (132).

- (132) I- zingulube zi- ngcol- ile.  
 ART- 10pigs 10SM- get.dirty- PERF.DF  
 ‘Pigs/The pigs are dirty.’

While perfect(ive) in form, this statement can be used as a generalisation about all pigs. This usage is not intuitive if it is assumed that the suffix implies a perfect(ive) semantics. This problem does not appear to be insurmountable, however, if clauses like (132) can be interpreted as states in which an inchoative event has occurred, e.g. ‘Pigs are always in a state of having gotten dirty.’

The second problem with the event structure solution is that both types of existential predication (with *kho(na)* and with *na*) do use existential subject agreement, even though they would not be said to entail any sort of event. We would thus be forced to license expletive subject agreement in two different ways: with an event and by existentiality. The fact that existential constructions and ‘presentational focus’ inversion constructions share properties in many unrelated languages makes this solution somewhat unpalatable.

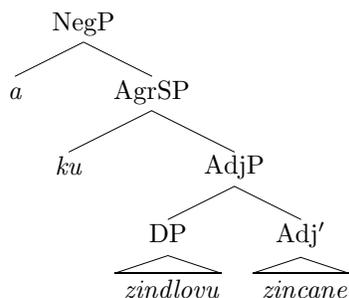
**Morphological integrity.** Let’s assume that the problem with adjectives has to do with word order. We have seen that forms such as (133a) are ungrammatical.

- (133) a. \* A- ku- zincane i- zindlovu.  
 NEG- 17SM- 10small ART- 10elephants  
 b. \* A- ku- zindlovu zincane.  
 NEG- 17SM- 10elephants 10small  
 Intended: ‘Elephants are little.’

But perhaps the fact that the TAM prefixes attach to the adjective simply give the illusion that the resulting word constitutes a syntactic head. However, if the head actually remains in its base position and the theme remains in its specifier, the relevant form to consider is (133b), in which the theme intervenes between the TAM prefixes and the adjectival stem. The structure for (133b) would be as in (134).

<sup>20</sup>There is the additional problem of why, in the case of verbal predicates, the object marker projection is transparent to this selection process.

(134)



The ungrammaticality could then be attributed to the morphological requirements of the TAM morphemes. Namely, they must attach to a predicate-like stem: a verb, adjective, *na*, etc. The difference, then, between verbs and non-verbal predicates is that only a verb syntactically moves to a position above the insertion point of its subject. For verbs, this movement is already necessary to get the verb to precede its logical subject in an expletive subject constructions as above in (4).

However, there is a problematic case for this solution, namely existential predication with *kho(na)*. We saw that the theme of this type of predicate behaves like a subject, because it raises to subject position in answer to an expletive subject question, as illustrated in (80). Given that *kho(na)* precedes this predicate-internal logical subject in the expletive subject construction, we must assume that *kho(na)* undergoes the same syntactic raising as a verb does. While not implausible, this is not supported by the morphology. It would be very satisfying to attribute the morphological sensitivity to the verbal/non-verbal nature of the predicate to the proposed structural difference between them. However, existential predication with *kho(na)* patterns with other non-verbal predicates in this respect rather than with verbs. Furthermore, it should raise eyebrows that verbs and adjectives participate in the same sort of suffixation if they are fundamentally different in structure.

#### 4.4 Bare nouns

Bare nouns have an interesting distribution which in a certain sense violates our uniformity of interpretation hypothesis. The relevant aspects of the distribution can be summarised as follow:

- Bare nouns may only be licensed predicate-internally, in negative clauses. A noun may never be bare in form if it is doubled by an object marker, a pronominal enclitic, or a pronoun.
- In verbal clauses, a bare noun may be licensed, but it is never a grammatical requirement to use one. That is, there is no grammatical configuration in which an augmented (non-bare) noun phrase cannot be used while a bare noun phrase can.
- In negative non-verbal clauses, a bare noun is obligatory if it is not doubled by a pronominal clitic (in the case of predication with *na*) or a pronoun (in the case of nominal predicates).

This pattern violates the interpretation hypothesis, because we expect analogous syntactic positions across predicate types to support the same range of noun types. It is

therefore unexpected that a non-pronominalised noun phrase be able to appear in augmented form in negative verbal clauses, but not in non-verbal ones. Since noun phrases modified with *ngisho neyodwa* ‘not even one’ was shown to pattern with bare nouns, the difference is clearly not due to a morphological dependency between the negative non-verbal predicates and the bare forms. It is not clear how this difference between verbal and non-verbal predicates should be explained.

#### 4.5 Restrictions on pronominalisation

It was shown in (110) (repeated here as (135)) and in (111) that the complement of *na* can be pronominalised if the construction is possessive, but not if it is existential.

- (135) a. A- ngi- na- yo i- mali eningi.  
 NEG- 1S.SM- with- 9PRON ART- 9money 9much  
 ‘I don’t have a lot of money.’
- b. \*A- ku- na- yo i- mali eningi.  
 NEG- 17SM- with- 9PRON ART- 9money 9much  
 Intended: ‘There isn’t a lot of money.’

There are two ways in which this might be explained.

First, let’s suppose that an existential predicate has a special need for an indefinite theme, a property which possession lacks. If pronominal enclitics in Zulu were always definite, this would then account for the restriction. However, if the data in (136) is correct, pronominal clitics seem to indeed be able to pronominalise indefinite noun phrases:

- (136) Q: U- ne- sibalo esikhulu sa- bangane yini?  
 2S.SM- with:ART- 7number 7big 7of:ART- 2friends Q  
 ‘Do you have a large number of friends?’
- A: Cha, a- ngi- na- so.  
 no NEG- with- 7PRON  
 ‘No, I don’t.’ *Don’t cite this data. I haven’t elicited it yet!*

The second possibility is that the restriction is related to the behaviour of expletive subjects in verbal clauses. Some speakers allow these constructions with monotransitive verbs, as in (137b), as long as the object is non-human. However, no speakers allow pronominalisation or doubling of that object with an object marker, as in the ungrammatical (137a).

- (137) a. Kw- a- pheka u- Siph o i- zambane.  
 17SM- PAST- cook ART- 1Siph o ART- 5potato
- b. \*Kw- a- li- ph ek- e u- Siph o ( i- zambane. )  
 17SM- PAST- cook 5OM- cook ART- 1Siph o ART- 5potato  
 ‘Siph o cooked a potato.’

## 5 Conclusion

It was shown that verbal and non-verbal clauses share a number of important properties, such as the availability of a right-dislocated position and the ability to license bare nouns predicate-internally. However, close examination revealed interesting differences, as well, not only between verbal and non-verbal predicates, but also between the various non-verbal types. Some of these issues are of particular interest to the Bantu specialist, such as the discover of syntactic distinctions between agreeing and class 17 subject forms of nominal predicates. Other issues constitute more general syntactic problems, such as the suggestion that there are actually two distinguishable degrees of right dislocation, the question of why certain predicate types are incompatible with expletive subject constructions, and the puzzle of why augmented noun phrases are not licensed in the same way predicate-internally in verbal and non-verbal clauses.

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