

Asking *Why* in Zulu*

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About This Draft Document

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Why questions (especially the type known as reason questions) have been shown in many languages to have interesting properties which set them apart from other constituent questions. As an example, consider constituent questions in Spanish. While Spanish allows the subject to precede the verb in declarative sentences, in a non-subject constituent question, the verb must precede the subject, as shown in (1):

- (1) a. ¿ Cuándo canta Juan?
when sing.PRES.3S Juan
b. * ¿ Cuándo Juan canta?
when Juan sing.PRES.3S
“When does Juan sing?”

However, this restriction does not hold in a reason question, as shown in (2):

- (2) a. ¿ Por qué canta Juan?
for what sing.PRES.3S Juan
b. * ¿ Por qué Juan canta?
for what Juan sing.PRES.3S
“Why does Juan sing?”

Furthermore, some languages have multiple *why* questioning strategies, each of which displays distinctive syntactic behavior. For example, English can form roughly equivalent reason questions using either *why* or *how come*, but while *why* requires subject verb inversion, *how come* does not allow this word order:

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- (3) a. i. Why did John sing?
 ii. * Why John sang?
 b. i. * How come did John sing?
 ii. How come John sang.

This paper will consider *why* questions in Zulu, a Bantu language (S42) spoken primarily in South Africa, which has three different strategies for asking why, shown in (4):¹

- (4) a. Purpose applicative question
 U-cul-el-a-ni?
 2S-sing-APPL-FV-what
 “Why are you singing? What are you singing for?”
 b. Clefted non-applicative question
 Y-in’ indaba u-nga-cul-i?
 COP-what 9.story 2S-NEG-sing-FV
 “Why aren’t you singing? Why is it that you’re not singing?”
 c. Postverbal *ngani* “why”
 A-wu-cul-i ngani?
 NEG-2S-sing-FV FOR-what
 “Why aren’t you singing?”

The question word can sometimes be *in situ* (in a low syntactic position, following the verb), as in (4a) and (4c) or in a high *ex situ* position in what is arguably a cleft, as in (4b). It can utilize an applicative verb form with a clitic meaning “what” as in (4a), or it can use a non-applicative verb form with a polymorphemic word or phrase meaning “why”, as in (4b) and (4c). Furthermore, there are differences in strategies available depending on whether the clause in which the *why* phrase is interpreted as affirmative or negative. There can be differences in what kind of *why* is expressed. It will be argued that applicative questions like those in (4a) are best characterised as purpose questions, while the non-applicative cleft questions like those in (4b) are reason questions. This paper will discuss the different reason and purpose questioning strategies available in Zulu, providing a description of them and examining them some of the syntactic, morphosyntactic, and semantic issues they give rise to.

Wh-question strategies in Zulu. Before delving into reason and purpose questions specifically, it will be useful to first have a glimpse at how more typical *wh*-questions are formed in Zulu. Let’s consider questions involving “what” and “when”. “What” is expressed as the word *ini*, or more typically as the clitic *-ni*, while “when” is expressed as the word *nini*. These are both allowed to occur *in situ*, following the verb:

¹ In the glosses, the following conventions are used. Third person subject and object markers appear with a noun class number, such as 2- for “noun class 2 subject or object marker”. First and second person markers appear with both person and number, such as 2S- for “second person singular subject or object marker”. All tense/aspect/negation-related verbal suffixes (of which exactly one appears per verb) are glossed as FV (for “final vowel”). Other abbreviations are APPL “applicative”, CJ “conjoint”, COP “copula”, DJ “disjoint”, LOC “locative”, MDL “middle”, NEG “negation”, PRO “pronoun”, PST “past”, Q “question”, RECI “reciprocal”, and REL “relative”. The nominal augment or pre-prefix, which is a kind of determiner, is not glossed separately.

- (5) a. U-cul-a-ni? U-cul-a ini?
 2S-sing-FV-what 2S-sing-FV what
 “What are you singing?”
 b. U-zo-phek-a nini?
 2S-FUT-cook-FV when
 “When will you cook?”

Alternatively, the *Wh* word or phrase can appear *ex situ* in a cleft:

- (6) a. Y-ini o-yi-cul-a-yo?
 COP-what REL:2S-9.OBJ sing-FV-REL
 “What are you singing?”
 b. K-o-b-e ku-yi-nini lapho u-phek-a khona?
 17-FUT-be-FV 17-COP-when there 2-cook-FV there
 “When will it ever be that you cook?”

The cleft question in (6a) contains a relative clause marked by a relational subject prefix *o-* and the relative suffix *-yo*.² while the relative clause in (6b) uses the temporal/locative relative pronoun *lapho* and a verb in participial mood as required by such relatives.³

As for *why* questions in Zulu more specifically, these are most sensibly divided into two types: purpose applicatives (as above in (4a)) and non-applicative strategies (as in (4b) and (4c)). Both types of strategies have some interesting properties, which we will examine here, starting with the applicative strategy.

1 Purpose applicatives

About This Section

The major change intended for this section is that a stronger claim will be made to the effect that applicative why questions are purpose questions rather than reason questions. It will also be shown that analogous statements with applicatives can be ambiguous between purpose and reason.

The applicative is a device common in Bantu languages with which an additional argument is added to the basic argument structure of the verb by the addition of a suffix to the verb stem. Among the most common types of arguments which can be added by the use of an applicative suffix in Bantu languages are beneficiary, locative, motive, and manner. On the basis of differentiating syntactic and morphological properties, the types of applicatives in Zulu are benefactive, locative, and purpose.⁴ The applicative suffix has the form *-el* in Zulu, regardless of the type of applicative it encodes, as shown in (7):⁵

² The distribution of *-yo* is limited and complex. See Doke (1973) §773 and Buell (2006) for discussion.

³ “Participial mood” in the Nguni languages designates not participles, but rather a tensed mood used in certain types of dependent clauses. The non-dependent counterpart of participial mood is called “principal mood”. Principal and participial can alternately thought of as the submoods comprising indicative mood.

⁴ This small number of applicative types is posited under the assumption that all other supposed types of applicatives can be subsumed under one of these three. For example, it is assumed that malefactive behaves in a manner syntactically identical to benefactive. *Is this in Plessis and Visser (1992)?*

⁵ *Was: Ungithandela ubuhle bami.*

- (7) a. Benefactive applicative
 Ngi-cul-el-a uMama.
 1S-sing-APPL-FV 1.mother
 “I’m singing for Mother.”
- b. Locative applicative
 Ngi-dl-el-a e-sitshe-ni.
 1S-eat-APPL-FV LOC-7.plate-LOC
 “I’m eating from a plate.”
- c. Purpose applicative
 Ngi-cul-el-a imali.
 1S-sing-APPL-FV 9.money
 “I sing for money.”

Purpose or reason? This section will show that the applicative can encode either reason or purpose. However, much like the situation with English *for*, reasons seem to be restricted and might be lexicalised. Previous work on applicative *why* questions as in (4a) have assumed that they are reason questions (Buell 2007b). Here it will be argued that while sometimes an applicative argument appears to be a reason, questions of type in (4a) are best described as purpose questions, akin to English *what for* questions.

The first indication that applicative *why* questions are purpose questions that when speakers are asked to differentiate between non-applicative clefts like in (4b) and applicative questions like in (4a), they will often translate the non-applicative question with a causative, as in (4b):

- (8) a. U-cul-el-a-ni?
 2S-sing-APPL-FV-what
 “Why do you sing? What are you singing for?”
- b. Yi-ngani u-cul-a?
 COP-why 2S-sing-FV
 “Why do you sing? What makes you sing?”

This fact is explained if a reason, expressed as a non-applicative, is thought of as an outside circumstance that brings a situation into being, whereas a purpose, expressed by an applicative, does not involve outside causation.

Purpose applicative questions are typically answered with a purpose clause starting with *ngoba* “because”, as in (9b), but an answer using a reason applicative is also often possible, with the reason in the form of a noun phrase following the verb (or in the form of an object marker), as in (9c):⁶

- (9) a. U-m-thand-el-a-ni uThembi?
 2S-1-love-APPL-FV-what 1.Thembi
 “Why do you like Thembi?”

⁶ *What you really want to do is check out purpose answers: ukuze, ukuba, ukuthi+subjunctive, infinitive. Then these also need to be checked for the non-applicative strategy.*

You want to explore the possibility that reasons are lexically determined. So, you want to change the examples here to a verb that isn’t predisposed to take a reason.

- b. Ngi-ya-m-thand-a ngoba u-qotho.
 1S-DJ-1-love-FV because 1-honest
 “I like because she’s honest.”
- c. Ngi-m-thand-el-a ubuqotho bakhe.
 1S-1-love-APPL-FV 14.honesty 14.her
 “I like for her honesty.”

To make this section complete, you need to test more contrasts. All of the following have yet to be solicited:

1. With an arbitrary unergative verb, can we get DP complement to be either a purpose or a reason?
 Ucululani? (Ngiculela) usizi lwami/injabulo yami.
 Usebenzelani? (Ngisebenzela) inswelakalo yami/iholo lami.
2. Can we get short answer purpose clauses?
 Ukuze... Ukuba...
3. If we can get short answer purpose clauses, are there preferences for them as responses to applicative questions? Are there preferences for ngoba clauses as responses to cleft questions and to ngani?

Further indications that these questions are best characterised as purpose questions that will be explored in the discussion that follows are the low syntactic position in which the applicative appears, certain semantic restrictions, and similarities to English *what for* questions. But first we will briefly examine reason and purpose applicative arguments in declaratives and the types of complements that these applicatives can take. A noun phrase following a reason applicative can also be overtly headed by a noun meaning “reason”, as in (10):⁷

- (10) Ngi-cul-el-a isizathu e-sihle.
 1S-sing-APPL-FV 7.reason REL-7.good
 “I sing for a good reason.”

A tensed clause starting with the factive complementizer *ukuthi* “that” can also serve as a complement to a reason applicative, as in (11), but only with a small number of verbs, such as *jabula* “to be glad” and *khala* “to cry”:⁸

- (11) a. Ngi-jabul-el-a ukuthi u-fik-ile.
 1S-be.happy-APPL-FV that 2S-arrive-FV
 “I’m glad you came.”
- b. Ngi-ya-ku-jabul-el-a ukuthi u-thol-e umphumelelo.
 1S-DJ-17-be.happy-APPL-FV that 2S-find-FV 3.success
 “I’m glad you passed (the test).” (lit. “I’m glad for it that you passed.”)

⁷ What is “purpose” in Zulu?

⁸ This can be explained if the reason applicative is actually purpose. Then we can say that *jabula* can subcategorise for a reason, which can take an *ukuthi* non-purposive clause.

Sentence (11b) shows that such a reason clause can also undergo object cliticization (that is, replacement by or cooccurrence with an agreeing object marker on the verb, in this case the noun class 17 object marker *ku-*). But in contrast to (11b), the example in (12) employing *hleka* “to laugh” shows that not all verbs allow a tensed clause as a reason applicative complement, even when the verb seems semantically close to the verbs that do allow for this construction:

- (12) * Ngi-hlek-el-a ukuthi u-buz-a lokho.
 1S-laugh-APPL-FV that 2S-ask-FV 17.that
 Intended: “I’m laughing because you’re asking that.”

As a final way in which the Zulu reason applicative question resembles the English *what for* construction, consider the fact that the ability for *for* to express reason is severely restricted to a small number of verbs:

- (13) a. i. What did you love him for?
 ii. I love him for his ability to listen.
 b. i. What did you sing for?
 ii. * I sang for my sorrow. (reason)
 iii. I sang for my supper. (purpose)

This fact finds its parallel in the fact that only a small number of Zulu verbs allow clausal reasons as complement to an applicative verb, as explained.

Infinitives are deemed to be bad complements for reason applicatives, though judgements sometimes vary, as with the example in (14), which informants uniformly found to be ungrammatical, but which is sometimes encountered in pedagogical materials for learners of Zulu:

- (14) * Ngi-jabul-el-a uku-kw-azi.
 1S-be.happy-APPL-FV 15-2S-know
 “I’m happy to meet (know) you.”

In summary, then, Zulu purpose applicatives are morphologically similar to other types of applicatives in the language. They allow two kinds of complements: a noun phrase or (for a very small number of verbs) a tensed clause headed by the complementizer *ukuthi* “that”. Either type of complement may be substituted by or coincide with an object marker.⁹

Situating the reason applicative in the structure. As summarized and developed in Stepanov and Tsai (2006), there is reason to believe that reason *why* (as opposed to purpose *why*) is sometimes introduced in the clause’s thematic domain (“low *why*”), while at other times it is introduced in the complementizer field (“high *why*”).¹⁰ One of the simpler types of evidence supporting the idea that *why*, unlike most other types of

⁹ *Hilda*: What for does not behave like other Wh phrases with respect to sluicing. For some reason, he didn’t sing. Guess what *(for). *You should find this in Merchant (2000)* The syntax of silence. *Paper on swiping*: I don’t know what with. *Something about Schweikert*. (*Ask.*)

¹⁰ *What exactly to they say? Do they really say that reasons can be low?*

Wh phrases, can be introduced in the complementizer domain will be briefly discussed here, namely the fact in some languages reason *why* is often restricted from appearing in an *in situ* position in a way that other *Wh* phrases are not. For example, in spoken French, *Wh* phrases such as *quoi* “what” and *qui* “who” freely occur in *in situ* position, as in (15), but *pourquoi* “why” cannot do so, as shown in (16) (except as the separate words *pour quoi*, yielding a purpose interpretation):¹¹

- (15) a. Tu as chanté quoi?
 you have sung what
 b. Qu’_i est-ce que tu as chanté t_i?
 what is-that that you have sung
 “What did you sing?”
- (16) a. * Tu as chanté pourquoi?
 you have sung why
 b. Pourquoi est-ce que tu as chanté?
 why is-that that you have sung
 “Why did you sing?”

The explanation for this anomaly is straightforward (Rizzi 1990). *Quoi/qu’* “what” is introduced in the thematic domain (that is, in the verb phrase), where it appears *in situ* in (15a). It can also appear at the left edge of the clause as in (15b) by moving out of the thematic domain (as indicated by the trace). As for *pourquoi* “why”, it cannot appear “*in situ*” inside the verb phrase as in (16a) because, in fact, *pourquoi* cannot be introduced inside the verb phrase. The fact that *pourquoi* can occur at the left edge of the clause as in (16b) is due not to moving *pourquoi* from inside the verb phrase, but rather by introducing it directly in the complementizer field, that is, in the left periphery of the clause. While other views on the French case have been expressed (Aoun 1986; Koster 1987), there are a growing number of languages for which it is argued that *why* is sometimes merged in the left periphery: Korean, Japanese, and Chinese (Lin 1992; Ko 2005; Ko 2006), English *how come* (Collins 1991), Italian (Rizzi 1999), Spanish (Kim 2006)..

In a similar vein, in Spanish a clear syntactic contrast between reason *why* (*por qué*) and purpose *why* (*para qué*) is seen. It was shown in (2) that *por qué* (reason *why*) does not require the usual subject/verb inversion required by constituent questions. In this respect, *para qué* (purpose *why*) patterns with non-reason questions, resulting in the following contrast:

- (17) a. ¿ Por qué Juan canta?
 for what Juan sing.PRES.3S
 “Why is Juan singing?” (reason)
 b. * ¿ Para qué Juan canta?
 for what Juan sing.PRES.3S
 “Why is Juan singing?” (purpose)

¹¹ For info on *P*-stranding with what for, look at Schweikert (2005).

This fact has been attributed to a difference in derivation, whereby *para qué* has moved from inside the verb phrase, while *por qué* is base-generated in its left-peripheral surface position.

Because of the question of whether Zulu applicative why questions encode reason or purpose, it is important to establish where the applicative is situated in the syntactic structure. Because a purpose applicative question consists of two distinct and non-adjacent morphological elements (the applicative suffix and the clitic *-ni* “what”), the question of where, broadly speaking, the reason applicative is introduced in the syntactic structure breaks down into two questions: Where is the applicative head introduced? And, where is the clitic *-ni* introduced?

To answer the first question, we appeal to morphology. The reason applicative morpheme *-el* appears between the verb stem and the final suffix in the same way that all other “verb extension” morphemes do: causative, stative, passive, and other types of applicatives.¹² Under a model in which there is a close correspondence between lowness in the syntactic structure and closeness to the verb stem, as according to the Mirror Principle (Baker 1985), we should assume that the reason applicative morpheme *-el* is introduced in a subinflectional position, just like other applicative morphemes (Ngonyani 1996).

As for the second question, there are several reasons to believe that the *Wh* clitic *-ni* “what” employed in a reason applicative question is also introduced below the inflectional domain. First, for all other valence-increasing verbal suffixes such as the causative and other types of applicative, the suffix is standardly assumed to be a syntactic head which licenses its argument in a very local relation, such as a specifier/head relation (Ngonyani 1996). It is only consistent, then, that the reason applicative head’s argument be licensed in the same local fashion, including when that argument is the *Wh* clitic *-ni*.

At this point, the concept of conjunctivity must be introduced. A small number of tenses in Zulu have two distinct forms, called “conjunct” and “disjunct” (also “conjunct/disjunct” or, in the Nguni literature, “short/long”) (Creissels 1996). These are the present tense of the principal mood and all tenses using the perfect final suffix pair *-ile/-e*). The examples here in (18) and (19) employ forms in the affirmative present principal mood, in which the disjunct form is distinguished by the prefix *ya-*, which is lacking in the conjunct form, as in *ngicula* (conjunct), *ngiyacula* (disjunct) “I am singing”. Classic environments for the conjunct form of the verb are before an undoubled object (an object which does not have a corresponding object marker appearing on the verb), as in (18a), and before a *Wh* phrase, as in (18b):

- (18) a. Ngi-cul-a ingoma.
 1s-sing-FV 9.song
 “I’m singing a song.”
 b. U-cul-a nini?
 2s-sing-FV when
 “When do you sing?”

¹²The final suffix is the suffix, often consisting of a single vowel, appearing final on the verb (preceding any clitics) which is sensitive to tense, aspect, mood, and polarity. In Zulu, some final suffixes have associated tonal patterns. There are interdependencies between the verbal prefixes and the final suffix. In this paper, the final suffix is glossed as FV, for “final vowel”, a traditional if inaccurate term.

Classic environments for the disjoint verb form are the clause-final position, as in (19a), and before a doubled object, as in (19b):

- (19) a. Ngi-ya-cul-a.
 1S-DJ-sing-FV
 “I am singing.”
 b. Ngi-ya-yi-cul-a ingoma yakho.
 1S-DJ-9-sing-FV 9.song 9.your
 “I’m singing your song.”

Two types of analyses exist for conjoint/disjoint alternations. The first type claims a direct relation to focus (saying, for example, that the disjoint verb form occurs when the verb is in focus) (Hyman and Watters 1984; Creissels 1996; Güldemann 1996). The second type claims that the alternation reflects constituency (the disjoint form occurs at the end of a particular syntactic constituent, such as IP) (Buell 2006; van der Spuy 1993). Now note that the *-ni* of a reason question is always preceded by a conjoint verb form. Disjoint verb forms result in ungrammaticality, as shown in (20):

- (20) a. U-cul-el-a-ni? (conjoint)
 2S-sing-APPL-FV what
 b. * U-ya-cul-el-a-ni? (disjoint)
 2S-DJ-sing-APPL-FV what
 “Why are you singing?”

Under an analysis in which the conjoint/disjoint alternation is driven by the verb’s position within a particular constituent, *-ni* must be below the inflectional domain, meaning that the reason applicative is a type of low *why*. (The focus analysis of the conjoint/disjoint alternation does not speak to this issue.) The issue of conjunctivity will also be relevant below in the discussion of (non-applicative) *in situ* negative reason questions.

A final argument for assuming that *-ni* is introduced below IP involves reconstruction effects with respect to negation. The *-ni* of an applicative reason question can be extracted from the verb clause to form a clefted question construction, as in (21b):

- (21) a. Wena u-wa-bhak-el-a-ni amakhekhe?
 you 2S-6-bake-APPL-FV-what 6.cakes
 b. Y-ini_i wena o-yi-bhak-el-a t_i amakhekhe?
 COP-what you REL:2S-9-bake-APPL-FV 6.cakes
 “Why are you baking cakes?”

But the question in (22a) shows that *-ni* “what” of a reason question cannot appear *in situ* in a negative clause:¹³

- (22) a. * Wena a-wu-bhak-el-i-ni amakhekhe?
 you NEG-2S-bake-APPL-FV-what 6.cakes
 b. * Y-ini_i wena o-nga-yi-bhak-el-i t_i amakhekhe?
 COP-what you REL:2S-NEG-9-bake-APPL-FV 6.cakes
 Intended: “Why aren’t you baking cakes?”

¹³ This has to be rechecked removing *wena* from the clefted version.

Now note in (22b) that the clefted version of the same question is also ungrammatical. This is unexpected if the *-ni* in this question is introduced in this left-peripheral position. But the ungrammaticality of (22b) and (22a) can be accounted for in a uniform way if the left-peripheral position of *-ni* in (22b) is derived with movement of *-ni* out of the verb phrase internal position in (22a).¹⁴

It has been argued here that both pieces of the purpose applicative question (the applicative suffix *-el* and the clitic *-ni*) are introduced below the inflectional domain of the clause, and thus constitutes a type of low *why*, and thus, on analogy with evidence from other languages, making it more likely to be purpose *why*. This much established, it would be desirable more precisely pinpoint where the applicative morpheme sits in the structure. Specifically, we would like to know whether the purpose applicative is situated above or below where an agent is merged. Assuming that an agent is introduced as the specifier of a functional projection called *vP*¹⁵ which takes as its complement a lexical verb phrase (potentially embedded in projections such as causative or applicative phrases), the choice is between the following two structures:

- (23) a. [_{vP} Agent [_{v'} [_{AppIP} Purpose [_{AppI'} *-el* [_{vP} V]]]]]
 b. [_{AppIP} Purpose [_{AppI'} *-el* [_{vP} Agent [_{v'} [_{vP} V]]]]]

Although it may seem intuitive that the agent is always the highest argument in the thematic domain, it has been argued that the locative applicative can be merged above the agent in Bantu languages (Buell 2005). So, it cannot be taken for granted that the purpose applicative is lower than *vP*. Object marking as in (23a) could constitute an argument that the purpose applicative is indeed below *vP*, though. Recall that a purpose applicative question can take the form of a cleft question, with a class 9 object marker appearing on the verb “doubling” for the purpose *-ni* “what” extracted from its clause-internal position, as just seen in (21) and (22). If it is assumed that only a true object is amenable to object marking, and furthermore that a true object must be introduced below *vP*, then the clitic *-ni* in (21b) must necessarily be introduced below *vP* (that is, that in the thematic domain, a true object is below the logical subject), along with the applicative head *-el* in whose specifier it is thematically licensed.¹⁶

Semantic and syntactic restrictions on purpose applicatives. We will now consider some of the semantic and syntactic restrictions on purpose applicatives and establish a number of parallels between the Zulu applicative purpose question and English *what for* questions. Besides the obvious similarity that the questions in both languages can be paraphrased with another word meaning “why”, there are several reasons for claiming a similarity between these two constructions. First, both constructions use a word meaning “what”. Second, the argument added in the various Bantu applicative constructions most often corresponds to a prepositional phrase in English, such as the use of English *for* to translate the benefactive applicative in (7a) above. Thus, it is intuitive to think that the Zulu verbal applicative suffix *-el* in combination with *-ni* “what” corresponds to the

¹⁴ *This argument will be stronger with an example of a non-question reason applicative in a negative clause. I don't have any of these elicited yet.*

¹⁵ *Reference?*

¹⁶ *However, this type of argument leads to unforeseen complications. If we use object marking as a diagnostic for being under vP, then we expect object marking to be unavailable with unaccusatives. Test hlala, ya.*

English prepositional phrase *for what*. And third, in the same way that the English *what* is moved out of the verb phrase, leaving the preposition stranded, as in (24)¹⁷, Zulu *-ni* can be moved out of the verb phrase in a cleft construction, as seen above in (21b).

(24) What_{*i*} are you singing for *t_i*?

If these similarities between Zulu applicative reason questions and English *what for* questions are taken to mean that these constructions are somehow equivalent, we should expect to find similar semantic and syntactic restrictions on these constructions in the two languages.

First we will see that the Zulu purpose applicative question has similar restrictions. Consider the various Zulu purpose questions in (25), which exemplify an active intentional verb, a passive, a weather verb, a classic unaccusative, and a non-intentional intransitive, all of which yield grammatical reason applicative questions:

- (25) a. U-cul-el-a-ni?
 2S-sing-APPL-FV-what
 “Why are you singing?”
- b. U-khet-el-w-e-ni?
 2S-choose-APPL-PSV-FV-what
 “Why were you chosen?”
- c. Li-neth-el-a-ni?
 5-rain-APPL-FV-what
 “Why is it raining?”
- d. Yena u-fik-el-e-ni?
 1.PRO 1-arrive-APPL-FV-what
 “Why did he come?”
- e. U-godol-el-a-ni?
 2S-feel.cold-APPL-FV-what
 “Why do you feel cold?”
- f. Si-vul-ek-el-e-ni isicabha?
 7-open-MDL-APPL-FV-what 7.door
 “Why did the door open?”

¹⁷ “For what” is, of course, a common way of constructing a word meaning “why” crosslinguistically. Take, for example, Spanish *por qué* and Classical Arabic *li-maadhaa*. However, sometimes such apparently bimorphemic words behave as if they were monomorphemic, as in the case of the Dutch word *waarom* “lit. around what; why”, which can be split, stranding the preposition *om* only with the literal interpretation “around what”, and not with the interpretation “why”, as shown here in (a).

- a. i. Waar- om vraagt hij?
 what- around ask.3S he
 “What is he asking for?” OR “Why is he asking?”
- ii. Waar_{*i*} vraagt hij om *t_i*?
 what ask.3S he around
 “What is he asking for?” BUT NOT “Why is he asking?”

See Ko (2006) on the syntax of bimorphemic and monomorphemic words for “why” in Korean, Japanese, and Mandarin Chinese.

The purpose applicative is thus compatible with a large number of verb types. However, there are some verbs cannot be used to form reason applicative questions. One such case is *bonakala* “to seem; to be visible” (*bon-* “to see”, *-akal* “-able”), which results in ungrammaticality when a reason applicative question is attempted, as shown in (26a):¹⁸

- (26) a. * Ku-bonakal-el-a-ni ukuthi u-y-isilima?
 17-seem-APPL-FV-what that 2S-COP-7.idiot
 b. Yi-ngani ku-bonakal-a ukuthi u-y-isilima?
 COP-why 17-seem-FV that 2S-COP-7.idiot
 “Why does it seem like he’s an idiot?”

The question in (26b) shows that this ungrammaticality is not due to some inherent incompatibility of reasons and *bonakala*. We will now compare this Zulu distribution to *what for* questions in English.

A quick examination of the questions in (27) shows that a wide range of verbal predicates are compatible with English *what for* questions just like the Zulu purpose applicative questions:

- (27) a. What did you do that for?
 b. What was this type chosen for?
 c. What did you come early for?
 d. What’s it raining for now?
 e. What are you so angry for?
 f. What did the lights go on for this time?

Sentences (27a) and (27b) show that *what for* is compatible with agentive verbs. (27c) is a classic unaccusative, while (27d) is a weather verb with a weather *it* subject. (27e) uses an adjectival predicate, and (27f) has a verb indicating a change of state with a theme subject. While not all *what for* questions seem natural in English if the verb is non-intentional, they are good in at least some cases or contexts. However, the examples in (28) suggest that predicates which do not take at least one non-propositional argument, such as *seem*, are not compatible with this construction:

- (28) a. * What does it seem like that for?
 b. Why does it seem like that?

Such predicates are not inherently incompatible with reasons *per se*, as seen by comparing them to their grammatical counterparts employing *why*: The fact that Zulu *bonakala* is incompatible with a reason applicative in the same way that its English equivalent

¹⁸Whatever can be said about the ungrammaticality of reason questions with *bonakala* is complicated by the fact that the semantically similar verb *bukeka* “to seem” (*buk-* “to watch”, *-ek* (middle suffix)) yields grammatical or only slightly degraded reason applicative questions, as shown in (18):

- i. ? Ku-bukek-el-a-ni sengathi itshe li-ya-nyakaz-a?
 17-seem-APPL-FV-what as.if 5.stone 5-DJ-move-FV
 “Why does it seem as if the stone moved?”

seem is incompatible with the *what for* construction suggests that the constructions are equivalent.

The distribution of English *what for*, including the ungrammatical examples in (28), seems to lie in the fact that it is essentially an expression of purpose rather than reason. An intentional being must be viewed as having some degree of control over the situation which is being questioned about. Consider the following contrast:

- (29) a. * What are you poor for? Because I've been unemployed for two years.
b. What is this character poor for? So I can make her seem more vulnerable.

What makes (29a) ungrammatical, or perhaps merely infelicitous, is the fact that being poor is not conceived of as a property over which one has direct control. Compare this now with (29b), in the context of a screenwriter who is being asked why he has written his characters to have particular attributes. Suddenly the predicate *be poor* becomes grammatical in a *what for* question, because an intentional participant (the screenwriter) is has direct control over whether his character is rich or poor. The claim that English *what for* encodes purpose rather than reason, is strengthened by the fact that it is compatible with an infinitival purpose, but not with a reason introduced with *because*:

- (30) a. What are you my mother for, if not to raise me?
b. * What are you my mother for, if not because you gave birth to me?

Intentional participants also play a role in the Zulu purpose applicative questions, as can be seen in (31):

- (31) * U-hluph-ek-el-a-ni?
2S-afflict-MDL-APPL-FV-what
Intended: "Why are you afflicted? Why are you poor?"

One informant's impression concerning (31) was that the addressee is being poor intentionally. This suggests that reason applicatives essentially express purpose rather than reason. This conclusion can also be used to explain the ungrammaticality of (32):

- (32) * Lolu hlobo lu-dl-ek-el-a-ni?
11.this 11.kind 11-eat-MDL-APPL-FV-what
Intended: "Why is this kind (of fruit) edible?"

In this case, it is very unnatural to think of a kind of fruit of having control (or of anyone else having control) over whether it is edible or not.

It is interesting to note that the intentional participant is not present in the structure in (29a), at least not overtly so. This is made clearer by the following two examples, in which the grammatical subject is patently unintentional:

- (33) a. What's the mayonnaise out for?
I was making a sandwich./So I could make a sandwich.
b. What's the heat on so high for?
Because I felt cold.

Furthermore, the examples in (33) do not seem amenable to an analysis as a middle, where the inanimate subject is endowed with metaphorical intentionality (*The door insisted on opening*). Unlike a door opening of its own “will”, a jar of mayonnaise cannot remove itself from the fridge of its own accord. While an intentional participant with power of control is must conceptualised, it need not be present in the clause itself. Unfortunately, it is impossible to construct Zulu equivalents of sentences like those in (33) due to the fact that the applicative requires a verbal predicate.

Assuming that both English *what for* and Zulu applicative reason questions require the presence of an intentional controlling participant, certain cases must be now explained in which the presence of a controlling participant is not so obvious. For example, to explain the grammaticality of (27e) and (25e), we have to assume that it is conventional to assume that one has some degree of control over one’s own emotions. For (27f) and (25f), it must be assumed that it is conventional to personify objects such as doors and lights to the extent that they can control their normal range of behaviors. (In this vein, consider *stubborn stains* and *friendly interfaces*.) The weather must also be endowed with intentionality to explain (27d) and (25c), but this is not such a stretch, considering that in English, it can be said that *it’s trying to rain*. If these conferrals of intentionality and control are tenable, then it can be concluded that English *what for* questions and Zulu applicative reason questions are both purpose questions, requiring a (potentially silent) controlling intentional participant.

Having discussed semantic restrictions on Zulu purpose applicative questions, we now turn to the syntactic restrictions, and specifically to negative islands, starting with the Zulu questions in (34):

- (34) a. * A-wu-cul-el-i-ni?
 NEG-2S-sing-APPL-FV-what
 b. * Y-ini o-nga-yi-cul-el-i?
 COP-what REL:2S-NEG-9-sing-APPL-FV
 c. A-wu-cul-i ngani?
 NEG-2S-sing-FV why
 “Why aren’t you singing?”

In (34a), we see that a reason applicative question cannot be formed by leaving the *Wh* clitic *-ni* in situ, attached to the verb. Now, the ungrammaticality of (34a) cannot be due to the ungrammaticality of a *Wh* phrase appearing *in situ* in a negative clause, as shown by (35), in which the *Wh*-phrase *bani* “who” appears in such a configuration:

- (35) A-ng-az-i ukuthi wena a-wu-bon-anga bani.
 NEG-1S-know-FV that you NEG-2S-see-FV who
 “I don’t know who you didn’t see.”

The ungrammaticality of (34a) could, however, be put to a morphological ban on cliticizing *Wh* clitics on negative verb forms, as shown by the attempts to perform such cliticization in (36):

- (36) a. * A-ng-az-i ukuthi wena a-wu-cul-angani.
 NEG-1S-know-FV that you NEG-2S-sing-FV-what
 “I don’t know what you didn’t sing.”

- b. * A-ng-az-i ukuthi wena a-wu-cul-anga-phi.
 NEG-1S-know-FV that you NEG-2S-sing-FV-where
 “I don’t know where you didn’t sing.”

Indeed, speakers usually have trouble figuring out how to pronounce any written forms in which a *Wh* clitic is attached to any verb form ending in the negative final suffixes *-i* or *-anga*. But we see in (34b) that ungrammaticality persists even if the *Wh* phrase is moved outside the scope of negation in a cleft. It is possible that this ungrammaticality is related to D-linking, since reason questions are usually open questions rather than questions asking for a choice out of a discourse-determined set of reasons, but other non-D-linked *Wh* phrases are often deemed fully grammatical when extracted out of a negative clause, as shown in (37): *You have to explain D-linking here*.

- (37) a. Y-ini o-nga-yi-bon-anga?
 COP-what REL:2S-NEG-9-see-FV
 “What didn’t you see?”
 b. Ubani o-nga-m-bon-anga?
 COP.1.who REL:2S-NEG-1-see-FV
 “Who didn’t you see?”

It is thus not clear whether the ungrammaticality of (34b) is due to the speaker’s inability to imagine a context in which the reason asked for comes out of a discourse-determined set in contrast to the argument questions in (37), or whether there is some other property peculiar to reason applicative questions that makes them incompatible with negative clauses.

The most likely explanation for the contrast between the ungrammatical reason question in (34b) and the grammatical ones in (37) is probably semantic. Consider the semantic contrast between the questioned temporal modifier and the questioned reason in English.¹⁹

- (38) a. When didn’t you sing?
 Well, I sang today, but I didn’t sing yesterday.
 b. Why didn’t you sing?
 i. # Well, I sang because I was in a good mood, but I didn’t sing because I needed the money. (reason)
 ii. # Well, I sang to please the host, but I didn’t sing to show off. (purpose)

While *why* in English can be interpreted as either a purpose or a reason, it cannot be used to ask a question which leaves open the possibility that some singing events took place, in striking contrast to *when*. This is perhaps made clearer with the following paraphrases:

- (39) a. When didn’t you sing?
 Of the occasions relevant to discourse, there were occasions in which you sang, but I am asking you about when you might have sung but didn’t.

¹⁹ Hilda: Szabolcsi and Zwarts. Go to Anna’s webpage and look for an overview on weak islands.

- b. Why didn't you sing?
 There are no occasions relevant to discourse in which you sang, and I am asking you either the reason why that is or the purpose for which you refrained from singing.

The same sort of contrast between *when* and *why* is also seen in (40):

- (40) a. When does he sing?
 He sings so often that you might as well ask when he *doesn't* sing!
 b. Why does he sing?
 * He sings for so many reasons that you might as well ask why he *doesn't* sing!

In (40a), *when* sets up the possibility of multiple times at which singing may or may not occur, which can be identified by listing either the times at which singing does occur or when it doesn't. In contrast, *why* in (40b) does not set up the possibility of reasons or purposes for which saying might occur, which can be identified in the same way.

We now turn to English *what for* questions, which again pattern like Zulu purpose applicative questions. Note that the *what for* construction in English is not possible in a negative clause, while *why*, in contrast, can indeed be used to question negative clauses, as shown in (41):

- (41) a. * What didn't he sing for?
 b. Why didn't he sing?

The questions in (42) show that the ungrammaticality of (41a) cannot be due to preposition stranding:

- (42) a. ? Who didn't he sing for?
 b. Which person didn't he sing for?

This is thus more likely related to D-linking (discourse-linking). That is, the degraded nature of (42a) is due to the fact that, out of context, *who* is naturally interpreted as an open question rather than as a choice to be made from a specific group of people already established in the discourse.

Transparency effects. The question was addressed above as to where the purpose applicative question is introduced within a single clause.²⁰ We now turn to the behaviour of this applicative in multiclausal structures, specifically, the question as to which clause *why* originates in and is interpreted in. Consider the English question in (43a):

- (43) a. Why do you think the baby is crying?
 b. Look! The baby is crying! Why_{*i*} do you think [_{*CP*} it is crying *t_i*?
 c. It is obvious to everyone else that the baby is laughing. Why do you think *t_i* [_{*CP*} it is crying?

²⁰ An earlier version of this section has appeared in Buell (2007b).

This question is ambiguous in terms of which clause *why* is interpreted in, in the way made clear with the two contexts given in (43b) and (43c). The question in (43b) is asking for the reason that the baby is crying, the proposition expressed by the lower clause. *Why* is thus said to be interpreted in the lower clause in this case, which is represented by coindexing a trace in the lower clause with *why* on the left edge of the multiclausal question.²¹ Conversely, in (43c), the speaker is not enquiring about the reason for the crying, but rather about the reason for a certain way of thinking, which is expressed in the higher clause. We will now see that the purpose applicative in Zulu does not admit the kind of ambiguity seen in (43a). We begin with structures that are most clearly biclausal, like (44):

- (44) Ngi-(ya-) cabang-a ukuthi uThandi u-ya-khal-a.
 1S- DJ- think-FV that 1.Thandi 1-DJ-cry-FV
 “I think that Thandi is crying.”

The reason for either of the two clauses can be questioned. First, suppose that the speaker thinks that Thandi is not crying, but laughing. He can then ask the addressee her reason for thinking otherwise, as in (45a). Alternatively, suppose that the speaker and the addressee both perceive that Thandi is crying and that the speaker enquires about the reason for the crying. Such a question is found in (45b).

- (45) a. U-cabang-el-a-ni ukuthi uThandi u-ya-khal-a?
 2S-think-APPL-FV-what that 1.Thandi 1-DJ-cry-FV
 “Why_{*i*} do you think *t_i* [Thandi’s crying?]”
 b. U-cabang-a ukuthi uThandi u-khal-el-a-ni?
 2S-think-FV that 1.Thandi 1-cry-APPL-FV-what
 “Why_{*i*} do you think [Thandi’s crying *t_i*] ?”

The two Zulu questions are unambiguous, unlike their English *why* question translations. The reason is interpreted in the clause in which the applicative affix appears. It is the applicative that determines the interpretation, rather than the placement of *-ni* “why”, as demonstrated by the fact that these interpretations are preserved under clefting, where *-ni* appears at the left edge of the question and an agreeing class 9 object marker appears on the verb in the relevant clause, as in (46):

- (46) a. Y-ini o-yi-cabang-el-a-ni ukuthi uThandi u-ya-khal-a?
 COP-what REL:2S-9-think-APPL-FV-what that 1.Thandi 2S-DJ-cry-FV
 “Why_{*i*} is it that you think *t_i* Thandi’s crying?”
 b. Y-ini o-cabang-a ukuthi uThandi u-ya-yi-khal-el-a?
 COP-what REL:2S-think-FV that 1.Thandi 1-DJ-9-cry-APPL-FV
 “Why_{*i*} is it that you think Thandi’s crying *t_i* ?”

In both the *in situ* and clefted versions of these sentences, there is a clear difference in meaning which is unambiguously encoded by the choice of clause in which the applicative morphology appears.

²¹ While it may be the case that English *why* in (43) is introduced the the left periphery of the clause in which it is interpreted, a trace will be put in the verb phrase for ease of exposition.

Now we will consider infinitival complements, where a different pattern emerges. Note how in English a sentence-final adverb or prepositional phrase can modify either *want* or its complement clause:

- (47) a. I wanted [to graduate with honours.]
 b. * I wanted [with honours]_i [to graduate *t_i*.]
 c. I wanted to graduate very badly.
 d. I wanted very badly to graduate.

In (47a), the prepositional phrase *with honours* modifies the verb *graduate* in the infinitival complement, while in (47c) the adverb *badly* modifies the higher verb *want* (or, more accurately, the phrase *want to graduate*). Note that while *very badly* may follow either *want* or *want to graduate*, *with honours* can only follow *graduate*: it is not allowed to move up into the selecting clause. The sentences in (48) show that a reason clause can modify either *want* or its complement (and hence fall under the scope of *want*):

- (48) a. I want to be praised by my peers because (as you know) they have found my ideas useful. *reason* > *want*
 b. I want to be praised by future generations because (*as you know) they have found my ideas useful. *want* > *reason*

In an analogous reason question, though, the reading where *why* or *what for* modifies *want* is by far the most natural one. Accordingly, the question in (49) is interpreted as asking about a reason for wanting to do something rather than a reason for being praised, as shown by the infelicitousness of a response where the reason falls under the scope of *want*:

- (49) Q: Why do you want to be praised?
 A: ?# Because future generations have found my ideas useful.

We will now see that while Zulu sometimes allows the purpose applicative to appear in either the higher clause or in the embedded infinitival clause, this choice does not correspond to a difference in interpretation. Consider the Zulu sentence in (50), in which the verb *funa* “want” takes an infinitival complement (which appears with noun class 15 morphology, as do infinitives in most Bantu languages):

- (50) Ngi-fun-a uku-zi-bon-a
 1S-want-FV 15-11-see-FV
 “I want to see them.”

Consider the potential availability of two different readings, it is perhaps not surprising that the purpose applicative can attach either to *funa* or to the verb in its infinitival complement, as in (51):

- (51) a. U-fun-el-a-ni uku-zi-bon-a? *purpose* > *want*
 2S-want-APPL-FV-what 15-11-see-FV
 b. U-fun-a uku-zi-bon-el-a-ni? *purpose* > *want*
 2S-want-FV 15-11-see-APPL-FV what
 “Why do you want to see them?”

What is surprising, though, is that this alternation does *not* reflect an interpretive distinction. In both (51a) and (51b), the reason scopes over WANT, yielding a question which asks the reason for wanting rather than a reason for seeing.²² Thus, the observed alternation does not correspond to the potential semantic distinction just illustrated in English in (48). Rather, both variants have the interpretation which was shown in (49) to be the one available for *want*+infinitive constructions, while we would expect only (51a) to have this interpretation. Attachment of the applicative to the verb heading the complement clause with this interpretation is puzzling. It is a commonplace affair in syntax for an element to appear in a position higher than where it is interpreted, a situation which typically results from the element moving from the position in which it is interpreted to a higher one, but here the *Wh* phrase and the applicative morpheme thematically licensing it appear in a position not higher but lower than where they are interpreted.

Like other Bantu languages in Southern Africa, Zulu has a large number of auxiliary verbs conveying notions such as “to often do something”, “to do something again”, and “to almost do something”. These auxiliaries are frequently defective, in the sense that they occur only in a limited number of tenses. Some of these verbs take infinitival complements, while others take subjunctive or tensed participial complements. Some of these auxiliary verbs are compatible with reason questions, as with the verbs *vamise* “to usually do something” and *phonsa* “to almost do”, shown in (52) and (53):

- (52) a. Ngi-vamis-el-e-ni uku-vuk-a ekuseni kakhulu?
 1S-usually-APPL-FV-what 15-wake.up-FV in.the.morning very
 b. Ngi-vamis-e uku-vuk-el-a-ni ekuseni kakhulu?
 1S-usually-FV 15-wake.up-APPL-FV-what in.the.morning very
 “Why do I usually get up early?”
- (53) a. Ba-phons-el-e-ni uku-limal-a?
 2-almost.do-APPL-FV-what 15-get.hurt-FV
 b. Ba-phons-e uku-limal-el-a-ni?
 2-almost.do-FV 15-get.hurt-APPL-FV-what
 “Why did they almost hurt themselves?”

Informants varied on the question of whether the purpose applicative should appear on the auxiliary verb or the lexical verb in such cases. For example, one speaker preferred the purpose applicative to appear on the aspectual verb as in (52b), while another found that version ungrammatical and only accepted (52a). But all informants accepted the applicative on the infinitival complement of *funa* “want”, as in (51b).

Not all verbs taking an infinitival complement allow for a reason question in the complement clause, however, such as is the case with *zama* “try”:

- (54) a. U-zo-zam-el-a-ni uku-cul-a?
 2S-FUT-try-APPL-FV-what 15-sing-FV

²²Two speakers judged both versions to be grammatical and to have the same interpretation and deemed (51b) to be better or more natural. Examples of purpose applicative in an infinitival complement clause such as this also occur in pedagogical textbooks for learners of Zulu, such as *Lesi sishosha sifuna ukumbonelani uNdabazabantu...?* “Why does this cripple want to see the Bantu Commissioner...?” in Nyembezi (1970), p. 49.

- b. * U-zo-zam-a uku-cul-el-a-ni?
 2S-FUT-try-FV 1S-sing-APPL-FV-what
 “Why will you try to sing?”

Other than the auxiliary verbs of the sort exemplified in (52) and (53), the only verb taking an infinitival complement found so far allowing attachment of the purpose applicative to an infinitival complement is *funa* “want”. The ability to have the applicative in the lower verb seems to be more dependent on the higher verb being a sort of auxiliary than on the verb’s ability to take an infinitival complement, as shown by the fact that *phinde* “to do again”, which here takes a complement in the past subjunctive, also exhibits this variation:

- (55) a. Ni-phind-el-e-ni n-a-y-a lapho?
 2P-do.again-APPL-FV-what 2P-PST-go-FV there
 b. Ni-phind-e n-a-y-el-a-ni lapho?
 2P-do.again-FV 2P-PST-go-APPL-FV-what there
 “Why did you go there again?”

And to further complicate the picture, not all auxiliary verbs taking infinitival complements allow for the applicative in the lower verb (at least with the informants asked), as is the case with *mane* “to simply do something”:

- (56) a. Ni-man-el-e-ni ni-khulum-e nje ni-nga-cabang-anga?
 2P-simply.do-APPL-FV-what 2P-speak-FV just 2P-NEG-think-FV
 b. * Ni-man-e ni-khulum-el-e-ni nje ni-nga-cabang-anga?
 2P-simply.do-FV 2P-speak-APPL-FV-what just 2P-NEG-think-FV
 “Why do you simply talk without thinking?”

Attachment of the purpose applicative to the complement clause of *funa*, as in (11b), is well-attested, with examples occurring even in Nyembezi’s (1970) textbook of Zulu, Nyembezi being an authority on standard Zulu. Some of my speakers noted that in this case, attachment to the complement verb was in fact more natural. With respect to the auxiliary verbs, speakers varied somewhat with respect to which verb followed which pattern, but all of them accepted attachment of the applicative to the complement verb in at least some cases. All informants rejected attachment to the complement of *zama* “try”.

Our description of purpose applicatives in infinitival complement structures can be concluded by saying that in constructions where a verb selects a tensed clause, the applicative suffix and *Wh* clitic *-ni* appear in the clause in which they are interpreted, but with infinitival complements the picture is more complicated. With some embedding verbs, such as *funa* “want” and certain aspectual auxiliary verbs, the purpose applicative morpheme can appear either on the higher verb or, unexpectedly (considering its interpretation), on the verb heading the complement clause.

Let’s first consider the most clear-cut biclausal cases, those in which the selected clause is finite, as above in (45). Because these clauses have an overt complementizer and are finite, it is clear that the lower clause is a full CP. We observed that in a reason question the applicative morpheme *-el* and the concomitant clitic *-ni* “what” can appear in either clause, as schematised in (57):

- (57) a. $[_{CP} \dots [_{AppIP} -ni [_{AppI'} -el \dots [_{CP} \dots$
 b. $[_{CP} \dots [_{CP} \dots [_{AppIP} -ni [_{AppI'} -el \dots$

We also saw that the interpretation of the reason is different in these two cases. If the reason appears in the lower clause, as in (57a), the verb in the upper clause is excluded from the scope of the reason. Conversely, if the reason is in the upper clause, the scope of the reason includes the verb in the upper clause.

Now consider *zama* “try”, which takes an infinitival complement. This verb was shown in (54b) not to allow the reason to appear in the lower clause. In the case where the reason would modify the verb in the upper clause, this can be explained by assuming that *zama* selects a CP, making this case identical to the selected tensed clause constructions schematised in (57). But why shouldn’t it be possible to attach the reason within the lower clause with the reason falling within the scope of TRY? Note that English does not seem to allow extraction of *why* across a clause selected by *try*:

- (58) a. *Why_i did they try [to punish you t_i] ?
 b. [What offences]_i did they try [to punish you for t_i] ?

While the question in (58a) is grammatical, it cannot have the interpretation indicated (the one analogous to (58b)); it can only ask for a reason for trying. I would suggest that the ungrammaticality of (54b) is due to the same reason; for whatever reason, reasons do not like to be extracted over a clause boundary selected by TRY. Thus, just as with tensed clause complements, the reason must be interpreted in the clause in which it appears, and the fact that it cannot appear or be interpreted in the lower clause (as schematised in (57b)) is due to an independent reason. Due to that fact, only (57b) is possible.

Now we turn to cases like *funa* “want”, as in (51). The first case, where the reason appears attached to *funa* itself, can be handled just like the selected tensed clauses and like *zama* “try”. The reason appears and is interpreted in the higher of two complete clauses, as in (57a). But it is the second case which is problematic, where the reason appears attached to the selected infinitive while it contains WANT within its scope. Two analytical options would seem to be available. The first would be to allow both the applicative head and the clitic to move downwards into the complement clause, requiring two instances of a process prohibited under current syntactic assumptions. The second is to assume that the two clauses in some sense constitute a single domain, so that the applicative merged in the thematic domain of the lower verb can take scope over the higher verb. In other words, an apparently biclausal structure is behaving as a single clause with respect to reason modification. Such phenomena are sometimes called “transparency effects”, because the clause boundary (if there actually is one) between the verbs can be said to be transparent or invisible, and the domain within which these transparency effects occur is sometimes called “a restructuring domain” (Rizzi 1978). I will here use “restructuring domain” merely as a convenient term to denote the environment in which phenomena such as clitic climbing and the low attachment of a purpose applicative occur, rather than as suggestive of a particular analysis.

The most classic restructuring phenomenon is clitic climbing, in which the clitic (such as a direct object clitic) licensed by an infinitive complement verb attaches to the higher verb, as illustrated for Italian in (59):

- (59) a. Vorrei [finir-lo.]
 want.COND.1S finish.INF-it
- b. Lo_i vorrei [finire t_i .]
 it want.COND.1S finish.INF
 “I would like to finish it.”

In both sentences, the clitic *lo* is licensed by the verb *finire* in the complement clause, but in (59b) it has “climbed” into the higher clause. In the literature on Romance languages, the properties of restructuring domains are compared to those of canonical biclausal structures by considering pairs of sentences differing only in whether climbing has occurred.

My proposal here is that low attachment of purpose applicative morphology in cases like (10b) in Zulu indicates a restructuring domain similar to the one in (59b) in Romance. With respect to how transparency manifests itself, clitic climbing and purpose applications show different directionality: in the former, the clitic appears higher than expected, while in the latter, the applicative head and *Wh* clitic appear lower than expected. Unfortunately, no Bantu languages (to my knowledge) exhibit clitic climbing, as shown here for Zulu, with a climbing object marker (thought by many to be a clitic) in (60) and a *Wh* clitic in (61):

- (60) a. Ngi-fun-a uku-yi-cul-a.
 1S-want-FV 15-9-sing-FV
- b. * Ngi-yi-fun-a uku-cul-a.
 1S-9-want-FV 15-sing-FV
 “I want to sing it.”
- (61) a. U-fun-a uku-cul-a-ni?
 2S-want-FV 15-sing-FV-what
- b. * U-fun-a-ni uku-cul-a?
 2S-want-FV-what 15-sing-FV
 “What do you want to sing?”

Zulu thus lacks the tool so useful in Romance for controlling for restructuring domains. The arguments for my proposal are thus limited to these: the need for an explanation for the unexpectedly low attachment of the applicative morpheme and the *Wh* clitic in Zulu (which we have already seen), the fact that the semantic class of selecting verbs is similar in Zulu and Romance, the similarity to restrictions on adverbial modification in Romance, and facts concerning floating quantifiers. These will now be examined.

The types of verbs which show transparency effects in Romance languages include aspectual verbs such as *seguire* “continue” and desideratives like *volere* “want”, which is the same range of verbs as in Zulu. The Zulu aspectual verbs found to show transparency effects are all purely auxiliary verbs (that is, they cannot be used as main verbs).

We will now consider adverbial modification. Although Bantu languages are not usually thought of as exhibiting restructuring phenomena, the purpose applicative pattern bears a strong affinity to temporal modification under clitic climbing in Italian.²³ In an infinitive complement construction, if the clitic does not climb (indicating that the clauses

²³I am grateful to Johan Rooryck for pointing this similarity out to me.

are visible, that is, that they always have the structure in (64b). We will now consider two phenomena which may be taken as evidence against this strong view.

Quantifier stranding in Zulu provides one phenomenon which shows a syntactic difference between high and low attachment of the purpose applicative while varying for placement of purpose applicative morphology. When the reason is attached in the upper clause, the quantifier *-onke* ‘‘all’’ can follow the upper verb, as in (65a), while no such quantifier can intervene when the reason is attached to the lower verb, as in (65b):

- (65) a. ? [_{CP} Ba-fun-el-a-ni bonke [_{CP} uku-hamb-a?]]
 2-want-APPL-FV-what 2.all 15-leave-FV
- b. * [_{CP} Ba-fun-a bonke uku-hamb-el-a-ni?]
 2-want-FV 2.all 15-leave-APPL-FV-what
- ‘‘Why do they all want to leave?’’

This difference can be explained if we assume, as in (64), that (65a) is biclausal and (65b) monoclausal. In the monoclausal structure in (65b), there is no structural position available to host the quantifier between the higher verb and the position to which the lexical verb moves, in which lexical *funa* has merged and the functional position below IP to which the verb moves.²⁵

Now let’s compare the behaviour of purpose applicatives to that of benefactive and locative applicatives. In contrast with the situation with purpose applicatives, attachment to the higher verb is not available to the benefactive and locative. These applicatives have to attach to the complement verb, as shown in (66b) and (66c):

- (66) a. U-fun-el-a-ni ukucula?
 2S-want-APPL-FV-what 15.sing
 ‘‘Why do you want to sing?’’
- b. * U-fun-el-a-phi ukudweba?
 2S-want-APPL-FV-where 15.draw
 Intended: ‘‘Where do you want to draw?’’
- c. * U-fun-el-a bani ukucula?
 2S-want-APPL-FV 1.who 15.sing
 Intended: ‘‘Who do you want to sing for?’’

Under the analysis given for purpose applicatives, why shouldn’t the benefactive and locative applicatives display the same variability as their purpose counterpart? To understand this, we must look at interpretive differences between reason questions and other adjunct questions. Consider the English questions in (67) and (68):

- (67) a. Why do you want to sing?
 b. What do you want to sing for?
- (68) a. Who do you want to sing for?
 b. What do you want to draw on?

²⁵ Some verb movement is independently necessary to account for certain word orders (Buell 2005).

In the reason questions in (67), the most natural interpretation (perhaps the only one) is the one in which the reason modifies *want* rather than *sing*. In contrast, in the benefactive and locative questions in (68), the *Wh* phrase cannot modify *want*. Accordingly, the questions in (68) are not asking about the person for whom or location at which a desire occurs. Given the interpretation of locative and benefactive questions, then, we would expect the Zulu locative and benefactive applicatives to attach to the complement verb rather than the selecting verb when the two clauses constitute two domains. The question now is why these types of applicatives cannot attach to the higher clause when the clauses constitute a single domain. This can be answered by assuming that an applicative must attach to the lowest verb in the clause. Just as there was no structural room for attachment of a quantifier between the two verbs in (65b), there is no place to attach an applicative benefactive or locative modifier between them in (66b) and (66c).

This explanation is consistent with the one given for the variability with purpose applicatives. Recall that a purpose question in an infinitival complement construction is interpreted as modifying the higher verb. When the construction is realised biclausally, the applicative appears on the higher verb, which is the verb it semantically modifies, but when the reason attaches to the lower verb in a monoclausal structure, the interpretation of the reason still includes the higher verb in its scope. It seems that an applicative simply must attach to the lowest verb in a clause, which is not entirely surprising in that applicatives are thematic affixes (since they introduce arguments) and restructuring verbs are taken in some analyses to lack arguments. Given this generalization, locative and benefactive applicatives will always attach to the complement verb. If the construction is realised as biclausal, the applicative will attach to the complement verb because that is the one it semantically modifies. But if the construction is realised as monoclausal, the applicative will still attach to the complement, because it must attach to the lowest verb in the clause.

Here it has been argued that Zulu reason questions in which the purpose applicative suffix and the *Wh* clitic appear attached to the infinitival complement belong to the same class of infinitival complement structures that in Romance languages exhibit clitic climbing. An analysis was pursued in which structures showing the phenomenon are monoclausal. Furthermore, I have argued that “restructuring” verbs in Zulu are best analysed as taking full clausal complements in the absence of this phenomenon. Relating this Zulu phenomenon to transparency effects in Romance opens up a range of new questions to be explored in both Bantu and Romance languages, because we expect similar issues to arise in the two language families. As just one example, the Zulu pattern makes us suspect that, in Romance too, reasons in restructuring domains originate low in the clause even if they semantically modify the higher verb. Furthermore, Bantu languages offer a new field of data on which predictions about restructuring can be tested. It is hoped that more indicators of restructuring domains can be found in Bantu languages which allow a wider range of testing than applicative reason questions.²⁶

Suffix and clitic as a unit. Because every Zulu verb ends in a “final suffix”, which follows all derivational suffixes and precedes any objects, whether these are realised as independent words or enclitics, the purpose applicative question is always a discontinuous

²⁶ *In a note, I have that I should also show that nini doesn't behave the same way. What did I mean?*

entity: applicative *-el* and the clitic *-ni* are never strictly adjacent. However, in this section we will see that there are two ways in which the applicative affix and the clitic *-ni* behave as a unit in that they display morphophonological peculiarities when used together to form a purpose questions.

First we will consider the contrast between using the applicative and the clitic *-ni* together (to form a purpose question) and independently (where the clitic saturates a non-applicative argument). Recall that Zulu has two ways of saying “what”: the independent word form *ini* and the clitic form *-ni*. The clitic is by far the more usual form, the independent word form being primarily used to indicate some sort of emphasis:

- (69) a. U-cul-a-ni?
 2S-sing-FV-what
 “What are you singing?”
 b. U-cul-a ini?
 2S-sing-FV what
 “What are you singing? You’re singing WHAT?”

Now consider the three questions in (70). Each of these employs the applicative form of *thwal* “to carry”. Because *thwala* takes one direct object and the applicative forms adds an additional object, there is a potential for ambiguity in these questions. Either *ikhehla* “old man” and the accompanying class 5 object marker on the verb are the direct object (the thing carried) and *-ni* and the applicative constitute a purpose questions, or *-ni* is the direct object and *ikhehla* and the object marker are the benefactive applicative object. Unexpectedly, however, the three questions (or at least the first two) are not ambiguous, due to morphosyntactic ideosyncrasies of the purpose applicative question. Unlike other types of DP arguments, the *what* of an applicative purpose question must use the clitic form *-ni*:²⁷

- (70) a. UThandi ú- lì- thwàl- èl- è *îní*, ikhehla?
 1.Thandi 1- 5- carry- APPL- FV what 5.old.man
 “*What* is Thandi carrying for the old man?”
 Direct object question. The old man is a beneficiary.
 b. UThandi ú- lì- thwàl- èl- è- *ní*, ikhehla?
 1.Thandi 1- 5- carry- APPL- FV- what 5.old.man
 “*Why* is Thandi carrying the old man?”
 Purpose question. The old man is the direct object.
 c. UThandi ú- lì- thwàl- èl- ê- *ní*, ikhehla?
 1.Thandi 1- 5- carry- APPL- FV- what 5.old.man
 “*What* is Thandi carrying for the old man?”
 Direct object question. The old man is a beneficiary.

Note that in terms of segments, (70b) and (70c) are identical, but that they differ in the tone of the final suffix of the verb. Informants presented with this written question (with no tones marked) and given clear contexts pronounced the string with identical tones (essentially that of (70c)) for the two interpretations. However, when the question

²⁷I am grateful to Nhlanhla Thwala for these examples and his observation on both the tone and restrictions on the non-clitic form *ini*.

was pronounced as in (70c), it was recognized as clearly having the purpose applicative interpretation.²⁸

We will now consider the second way in which the purpose applicative question behaves ideosyncratically: a morphosyntactic problem concerning the simultaneous use of the passive and purpose applicative suffixes.²⁹ As with the benefactive and locative applicatives, the *-el* suffix normally precedes the passive suffix *-w*:

- (71) a. UThembi w-a-banj-el-w-a icala lakhe.
 1.Thembi 1-PST-arrest-APPL-PSV-FV 5.crime 5.her
 b. * UThembi w-a-banj-w-el-a icala lakhe.
 1.Thembi 1-PST-arrest-PSV-APPL-FV 5.crime 5.her
 “Thembi was arrested for her crime.”

What is surprising, then, is that some (but not all) speakers often allow the inverted order *-el-w* in passive purpose applicative questions:³⁰

- (72) a. W-a-banj-el-w-a-ni?
 1-PST-arrest-APPL-PSV-FV-what
 b. W-a-banj-w-el-a-ni?
 1-PST-arrest-PSV-APPL-FV-what
 “What was she arrested for?”

The examples in (71) and (72) use the same verb *bamba* “arrest” (passive *banjwa*), yet the inverted *-el-w* morpheme order which is ungrammatical in the statement in (71b) is grammatical in the reason question in (72b). The inverted order is dependent on the clitic *-ni* “what”, as shown by the fact that the *-w-el* order is grammatical when the clitic is in situ, appearing encliticized to the verb, but ungrammatical when the clitic appears in the left periphery in a clefted equivalent, as shown in (73):

- (73) a. Y-ini ow-a-yi-banj-el-w-a?
 COP-what REL:1-PST-9-arrest-APPL-PSV-FV
 b. * Y-ini ow-a-yi-banj-w-el-a?
 COP-what REL:1-PST-9-arrest-PSV-APPL-FV
 “What is it she was arrested for?”

Speakers’ judgements on the acceptability of the *-w-el* order varied according to the verb used. For example, while this order was found grammatical with the verbs *bamba* “to carry” and *susa* “to remove”, it was deemed ungrammatical with *shaya* “to hit” and *khetha* “to choose”. Conversely, with the verb *dina* “to annoy”, the inverted *-w-el* order was deemed grammatical while the otherwise more prevalent *-el-w* order was deemed ungrammatical. Derivational suffix ordering is a complex issue in Zulu, especially when the passive suffix *-w* is involved, but the fact that the passive is allowed to precede

²⁸ My memory of this unrecorded session with Thembi is a bit vaguer than implied here.

²⁹ This section would be more interesting if you were also able to discuss locative applicatives with *-phi*.

³⁰ The fact that palatalisation of *mb* to *nj* under the influence of *w* occurs in (72a) should not be taken as evidence that at an underlying level the passive morpheme is adjacent to the root. Palatalisation in Zulu does not require adjacency between *w* and the root, as seen more transparently in the causative of the same root *bamba* “hold”: *bambisa* “cause to hold”, *banjiswa* “be caused to hold”.

the applicative (72b), where the applicative suffix and *-ni* occur in the same clause, in contrast with (71 b) and (73b), where they do not, provides an interesting way in which *-el* and *-ni* seem to behave in as a morphological unit when they also form a semantic and syntactic unit as a purpose applicative.

2 Non-applicative clefts

About This Section

This section is not yet complete. I would appreciate being asked before citing any claims made in this section.

The non-applicative clefted reason questions can use one of three different words or phrases for *why*, namely *ngani*, *in' indaba*, or *ini*. These are illustrated (74):

- (74) a. Yi-nga-ni w-enz-a lokho?
 COP-FOR-what 2S-do-FV 17.that
 “Why are you doing that?”
- b. Y-in' indaba w-enz-a lokho?
 COP-what 9.story 2S-do-FV 17.that
 “Why do you that? What makes you do that?”
- c. Y-ini uSipho e-ng-enz-anga lutho?
 COP-what 1.Sipho 1-NEG-do-FV nothing
 “Why Sipho didn't do anything?”

The form *ngani* contained in *yingani* “why is it” will also be discussed below in a non-clefted construction involving only negative clauses, but (74a) shows that in this cleft construction, *ngani* can be used to question an affirmative clause. The phrase *yin' indaba* of (74b) could literally be translated “What's the story?” As mentioned earlier, informants occasionally pointed out that the question contains a “story” and thus asks for the circumstances that resulted in the situation described in the lower clause. For this reason these questions are best characterised as reason questions, in contrast to the purpose applicative questions. As for the *yini* of (74c), in other contexts this phrase also has the literal meaning of “What is it?” Clefted non-applicative reason questions are most felicitously answered with responses in which the reason clause is the complement of a copula:^{31 32}

- (75) Q: Y-in' indaba e-cul-a?
 COP-what 9.story 1-sing-FV
 “Why is he singing? What's making him sing?”
- A: Yi-ngoba e-phoqelek-ile.
 COP-because 1S-be.forced-FV
 “Because he's forced to.”

³¹ *Ngoba* “because” can be follow with a verb in either principal or participial mood. No difference in usage could be determined.

³² *Elicit these forms.*

Two issues will be discussed with respect to these cleft questions. First, it will be shown that they constitute a type of cleft not often discussed in the Bantu literature, namely those which don't contain a relative clause. And second, it will be shown that they admit an interpretive ambiguity unlike that encountered with purpose applicatives.

A different type of cleft. Questions of the type in (74) have both cleft-like and non-cleft-like properties. They are cleft-like in that they begin with a copula, immediately followed by a phrase which can be called the focus of the sentence. Where the construction differs from a classic cleft is in the phrase that follows the focus.³³ In a classic cleft, the focus is followed by a relative clause, which can be headed, as in (76a), or headless, as in (76b):

- (76) a. Yi-le ngoma engi-yi-cul-a-yo.
 COP-9.this 9.song REL:1S-9-sing-FV-REL
 "It's this song that I'm singing."
 b. Y-ini o-yi-cul-a-yo?
 COP-what REL:2S-9-sing-FV-REL
 "What are you singing?"

But the clefts in (76) do not seem to contain relative clauses. For the sake of comparison, let's consider three different types of tensed relative clauses in Zulu:

- (77) a. ingoma uSipho a-nga-yi-cul-i
 9.song 1.Sipho REL:1-NEG-9-sing-FV
 "the song that Sipho's not singing"
 b. indawo lapho uSipho e-nga-cul-i khona
 9.place there 1.Sipho 1-NEG-sing-FV 17.PRON
 "they place where Sipho's not singing"
 c. ingoma embhali wa-yo a-ka-cul-i
 9.song 9.REL:1.author 1.of-9.it NEG-1-sing-FV
 "the song whose author isn't singing" *This is almost certainly the wrong mood.*

The type in (77a), which relativizes a noun phrase (the object, in this case), the verb appears with relational morphology, here consisting of a relative prefix (fused with the subject prefix) and relative mood.³⁴ The type in (77b) is a locative relative, which uses the pronoun *lapho* instead of the relative prefix, and the verb is participial in form. The

³³ *You need terminology for this.*

³⁴ It is arguable that relative mood is indistinct from participial mood. Relative mood differs from participial mood in the following ways. First, the relative form uses the relative prefix /a:-/, either prefixed to the subject marker or fused with it (Khumalo 1992). The attested form of the subject marker with this fused or prefixed subject marker is not always the form predicted if it is assumed that the subject marker in the relative form is identical to that of the participial verb. For example, the participial subject prefix for noun class 2 is *be-*, while the relative forms use *aba-* rather than the predicted form **abe-*. Second, in certain contexts the relative form takes the relative enclitic /-yó/. The attested tonal pattern of the final suffix *-ile* with this clitic is HL ([-iléyò]), which is not the predicted pattern if the suffix *-ile* has the same FL (underlyingly perhaps HH) pattern in the relative form as it does in the participial. Since both of these differences could be described in terms of a suppletive portmanteau morpheme replacing the two adjacent relational and verbal morphemes, it is impossible to say for certain whether this type of Zulu relative embeds a participial verb, or whether there are distinct participial and relative moods.

type in (77c) is encountered in grammars, but is rejected by many modern speakers, as noted by Zeller (2004). In this form, the relative morphology appears as a prefix on the subject of the clause, and the verb appears in principal mood, rather than participial. *Are you sure? If this is relative mood, you have two differences: mood and the relative proclitic.*

In addition to the fact that the phrases following the focus do not resemble relative clauses in their formal characteristics, they also do not behave like relative clauses in a distributional sense. For example, it might appear that *indaba* and the following participial phrase in (76b) form a headed relative clause, but it is in fact not possible to use such a “phrase” as an argument, as shown in (78), where it has been attempted to use such a phrase as a subject:

- (78) * Indaba uSipho e-nga-ngi-nik-anga imali a-yi-balulekile.
 9.story 1.Sipho 1-NEG-1S-give-FV 9.money NEG-9-important
 Intended: “Why Sipho didn’t give me the money isn’t important.”

In addition to these morphological and distributional properties, reason questions of the type in (74) exhibit interesting sequence of tense properties when the copular clause is put into a different tense.³⁵ In both sentences in (79), the copular clause has been put into the remote past tense. The tense of the participial clause is dependent on the tense of the copular clause, as shown by the fact that the participial clause cannot also appear in that tense. Instead, it must appear in the present tense:

- (79) a. ? Kw-a-ku-yi-ngani uThembi e-cul-a? (present participial)
 17-PST-17-COP-why 1.Thembi 1-sing-FV
 b. * Kw-a-ku-yi-ngani uThembi a-cul-a? (remote past participial)
 17-PST-17-COP-why 1.Thembi 1.SBJ.PST-sing-FV
 “Why was it that Thembi sang?”

Let’s compare this with temporal cleft questions, which can have either a relative clause or a participial one, as in (80) and (81), respectively:

- (80) a. Kw-a-ku-yi-nini ni-si-vakashel-a?
 17-PST-17-COP-when 2P-1P-visit-FV
nisivakashela (present participial)
 “When did you visit us?”
 b. * Kw-a-ku-yi-nini n-a-si-vakashel-a?
 17-PST-17-COP-when 2P-PST-1P-visit-FV
nisivakashela (remote past participial)
 “When did you visit us?”

This issue might be answered in Dole. If (77c) is not principal, and if it takes -nga- in negative forms, but ba- as the class 2 subject marker, then relative mood is demonstrably distinct. However, this could not be shown for dialects without this type of relative.

³⁵ Observing differences in the tense dependency in (80) required considering clefts in which the copular clause appears in a non-present tense. The one speaker on whom it was tested considered reason questions degraded (in contrast with the temporal question in (80)). However, the tense dependency is clear, because the speaker found a clear contrast between present and past tenses in the lower clause.

- (81) Kw-a-ku-yi-nini lapho n-a-si-vakashel-a khona?
 17-PST-17-COP-when there 2P-PST-1P-visit-FV 17.PRON
nasivakashela (remote past principal)
 “When was it that you visited us?”

Question (81) is a classic cleft (because *lapho nasivakashela* is a relative clause), while (80a) seems to be of the same type seen in the reason questions in (74). There is a difference in tenses between the two versions. In the classic cleft version in (81), both the copular phrase and the postfocal phrase are in past tense, but the tense of the phrase *nasivakashela* in (80a) is in the present participial, and use of the past tense is ungrammatical in this case, as shown in (80b). The tense of the participial clause is thus relative to that of the copular clause. This contrasts with the temporal cleft question with a relative clause in (81), which allows the remote past tense. The tense in the relative clause is thus not dependent on the tense of the copular clause in the way that the participial clause is.

Given these tense properties, the participial phrase in (80a) resembles a depictive, as in (82), in which the matrix verb is in a past tense (specifically, the recent past) and the depictive is in the present participial tense:

- (82) Ngi-ku-bon-ile u-cul-a.
 1S-2S-see-FV 2S-sing-FV
 “I saw you singing.”

Clefted reason questions thus open up two issues which have yet to be adequately described or analysed: sequence of tense phenomena with participial clauses and the structure of clefts that employ participial clauses rather than relative clauses.³⁶

Clause of interpretation. Recall that in the case of the purpose applicative question with a selected tensed clause, as in (45), the clause in which the reason is construed is determined by which clause the applicative morphology appears in. Let’s now consider possible construals of a reason question of the cleft-like variety, as in (83):

- (83) Yi-ngani u-cabang-a ukuthi u-ya-khal-a?
 COP-FOR-what 2S-think-FV that 1-DJ-cry-FV
 “Why do you think she’s crying?”

Speakers found this question felicitous in contexts where either the upper clause or the lower clause is questioned:

- (84) a. Bon-a-ke! UThandi u-ya-khal-a! Yingani...?
 look-FV-well 1.Thandi 1-DJ-cry-FV
 “Look! Thandi’s crying! Why do you think she’s crying?”
 b. Uma a-wu-m-bon-anga uThandi namhlanje, yingani ...?
 if NEG-2S-1-see-FV 1.Thandi today
 “If you didn’t see Thandi today, why do you think she’s crying?”

³⁶ You need to see when you can get ngoba and participial non-present: ngoba ungaculanga.

It would be night to show lack of sequence of tense phenomena in factic complements, but you need to figure out exactly what kind of example to show.

The cleft-like non-applicative reason question is thus ambiguous in a way that the purpose applicative question is not. This ambiguity might suggest a movement analysis for this type of question. That is, the lower clause construal might be best explained if the question phrase *ngani* “why” has moved from the lower clause, as in (85a):

- (85) Yi- [ngani]_i u-cabang-a ukuthi *t_i* u-ya-khal-a ?
 COP- FOR-what 2S-think-FV that 1-DJ-cry-FV

This argument is fairly weak, because one might want to claim that only *ini* has moved.

This sort of analysis faces two problems, though, namely constituency of the “moved” portion and lack of resumption. But such an analysis becomes problematic when we try to apply it to cleft questions using *yin’ indaba*, as in (86), because *-n’ indaba* does not appear to be a syntactic constituent, as the string *-n’ indaba* would need to be for it to be able to move in this way.³⁷

- (86) Y- [in’ indaba]_i u-cabang-a ukuthi *t_i* u-ya-khal-a ?
 COP- what 9.story 2S-think-FV that 1-DJ-cry-FV
 “Why do you think she’s crying?”

First note that a *Wh* phrase can never appear in clause-initial position. When it appear in the left periphery it is always preceded by a copular element:

- (87) a. Y-ini o-yi-cul-a-yo?
 COP-what REL:2S-sing-FV-REL
 “What are you singing?”
 b. * Ini u-(ya-)cul-a?
 what 2S-DJ-sing-FV

Here you want to say that if we’re going to derive (86) with the movement shown, you’re deriving the surface form from an underlying form that never surfaces.

- *First establish that non-relative clefts don’t have resumption, making it unlikely that they’re derived by movement from within VP. Do this with ngani. To do this you need to check nini...khona.*

- *Kwayinini nisivakashela khona.*
- *Kwayinini nicabanga ukuthi nisivakashela/nasivakashela.*

It doesn’t matter that you find a sentence where you can get the upper clause reading. The question is only whether lower clause construals are possible.

- *Then entertain the possibility that the Wh phrase is in the left periphery of the lower clause:*
 - *How is the interpretation of nini in multiclausal structures? You may not be able to find the right sentences.*
This leads to a bigger questions: Might it be that certain non-reason adjuncts can also be merged in the left periphery?

³⁷ *You need to confirm that yin’ indaba works the same way as yingani.*

- Is there no way to tell if those clefts are derived by movement? In any case, there’s no resumption, and there’s no embedded cleft.

Hilda: You need to look at Munaro and Pollock (2005). And also the Poletto and Pollock paper.

3 Postverbal *ngani*

About This Section

This section is getting very close to its intended final form. Readers are free to cite anything in this section.

We now turn to the last why question strategy, which employs the same word *ngani* (“why”, but also literally *nga-ni* “for/by/about what”) just seen in non-applicative cleft questions in (74), but in this case it appears in an immediately postverbal position, unlike the clefted construction that uses this item. This strategy can only be used to question a negative clause, as shown in (88). In the negative question in (88a), *ngani* has the interpretation of “why”, but in the affirmative question in (88b), only the interpretation of “what about” is possible:

- (88) a. A-wu-khulum-i ngani?
NEG-2S-speak-FV why
 “Why aren’t you talking?”
- b. Ni-khulum-a nga-ni?
2P-speak-FV about-what
 “What are you talking about?” NOT “Why are you talking?”

We might naïvely attribute the fact that *ngani* cannot be used to mean *why* in (88b) to ambiguity, but *ngani* cannot be used with this meaning even when no ambiguity is possible, as shown with a verb like *bhema* “to smoke”, which cannot take a complement meaning “about something”:

- (89) * Ni-(ya-)bhem-a nga-ni/ngani?
2P-DJ-smoke-FV about-what/why
 Intended: “Why do you smoke?”

It was argued in section 1 that applicative why questions express purpose rather than reason. In contrast to that type of question, *ngani* clearly encodes reason rather than purpose, as can be seen in the following contrast with a purpose applicative:

- (90) a. * U-gul-el-a-ni pho?
2S-be.sick-APPL-FV-what so
 (“I only eat healthy food.”) “So why are you sick?”
- b. A-wu-gul-i ngani pho?
NEG-2S-sick-FV why so
 (“I just ate some rotten meat.”) “So why aren’t you sick?”

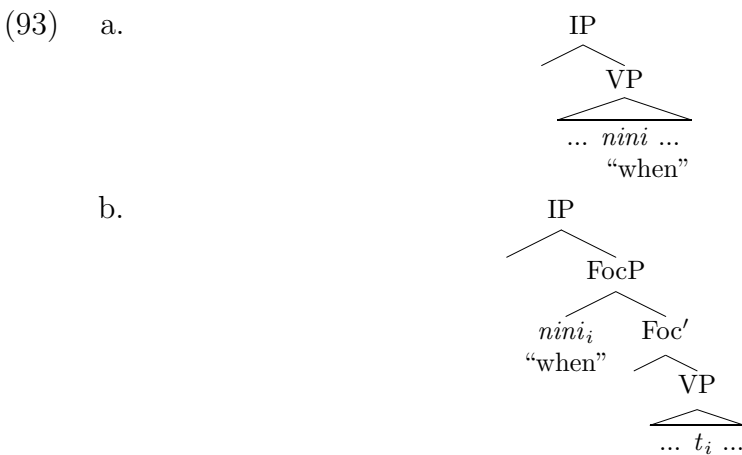
The predicate “be sick” is not amenable to a purpose applicative question because it involves no intentional participant. The fact that *ngani* can be used to question this predicate in (90b) is best explained by assuming that *ngani* encodes reason, which does not require any intentional participant.

Embedded clauses employing *ngani* are licensed whether the embedded clause is a selected question (as in (91a)) or not (as in (91b)):

- (91) a. Ngi-zo-ba-buz-a ukuthi uThembi a-ka-khulum-anga ngani.
 1S-FUT-2-ask-FV that 1.Thembi NEG-1-speak-FV why
 “I will ask them why Thembi didn’t speak.”
- b. Ni-cabang-a ukuthi uThembi a-ka-khulum-anga ngani?
 2P-think-FV that 1.Thembi NEG-1-speak-FV why
 “Why do you think that Thembi didn’t speak?”

The sections that follow consider the structural height of *ngani* and how it comes to appear in postverbal position. *In situ* postverbal *Wh* phrases are the norm in Zulu. These phrases, like *nini* “when” in (92) are generally assumed to sit inside the verb phrase, as in (93a), or, at the very highest, in a focus projection below the inflectional domain, as in (93b):

- (92) U-cul-e nini?]_{VP/IP}
 2S-sing-PERF.CJ when
 “When did you sing?”



The zero hypothesis is therefore that *ngani* in a question like (88a) also occupies a VP-internal or other subinflectional position. The following sections challenge this hypothesis and discuss both the structural height of *ngani* and the way in which it comes to appear in postverbal position. Specifically, it will be argued that while *in situ Wh* phrases like *nini* “when” in Zulu are generally inside IP, *ngani* is outside of IP, in the complementiser domain, as pictured in (94):



This analysis will be found to concur with conclusions drawn concerning words meaning “why” in other languages, such as Italian *perchè* (Rizzi 1999), Korean *way*, Japanese *naze*, and Mandarin *weishenme* (Ko 2005; Lin 1992). While the result for Zulu *ngani* is the same as for these words for “why” in other languages, Zulu provides the unique case of a language in which *why* appears in a strictly postverbal position.

The remainder of this section is organised as follows. In subsection 3.1, junctivity (conjoint/disjoint) facts will be presented as morphosyntactic evidence that *ngani*, at variance with other *Wh* phrases, occupies a position outside the verb phrase. In subsection 3.2, the interaction between WHY and negation is discussed, showing that the interaction is best explained by assuming that WHY does not fall under the scope of negation at any point in the derivation. In subsection 3.3, it is suggested that reason WHY is universally introduced outside the scope of negation, even though some languages may allow introduction of WHY in a subinflectional position in affirmative clauses. The argument is developed that the precise position that *ngani* occupies is Int', IntP being a projection in an articulated complementiser domain. Recent analyses of WHY Italian and Korean, as well as an analysis of Nguni elocutionary force particles, are argued to support the analysis proposed. In subsection 3.4, the implications of this analysis are brought to bear on the notion of the IAV (Immediate After the Verb) position, concluding that the analysis of *ngani* weakens the claim that IAV linear position should be reduced to a unique structural IAV position, such as a low focus position. Subsection 3.5 sums up the conclusions and gives an example of a language where further testing can be done to determine whether a postverbal WHY questioning a negative clause is not, in fact, in the complementiser domain.

3.1 *Ngani* and junctivity

Recall that Zulu has a conjoint/disjoint verb alternation and that a *Wh* phrase must be preceded by the conjoint form of the verb, as shown in (95):

- (95) a. U-bon-e bani? (conjoint)
 2S-see-PERF.CJ 1.who
 b. * U-bon-ile bani? (disjoint)
 2S-see-PERF.DJ 1.who
 “Who did you see?”

We will now see that *ngani* “why” behaves differently in this respect. Showing this is complicated by the fact that *ngani* occurs only in negative clauses, an environment which is problematic for other *Wh* phrases. There is one group of negative tenses in Zulu that exhibits the conjoint/disjoint alternation, namely those in which the verb ends in the perfect *-e/-ile* suffixes. To see that the conjoint/disjoint alternation is active in these negative tenses, consider the sentences in (96) and (97), which employ the negative perfect tense:³⁸

- (96) a. A-ngi-gqok-ile. (disjoint)
 NEG-1S-wear-PERF.DJ

³⁸Speakers varied somewhat on (97). Some of them accepted a bare noun after a disjoint negative form, and others found it ungrammatical. However, all of them agreed on the distribution of conjoint and disjoint forms before *ngani* as presented in (98).

b. * A-*ngi-gqok-e*. (conjoint)

NEG-1S-wear-PERF.CJ

“I’m not dressed.”

(97) a. A-*ngi-gqok-e sigqoko*. (conjoint)

NEG-1S-wear-PERF.CJ 7.hat

b. * A-*ngi-gqok-ile sigqoko*. (disjoint)

NEG-1S-wear-PERF.DJ 7.hat

“I’m not wearing any hat.”

In (96) we see that only the disjoint form can appear in clause-final position, while in (97) we see that only the conjoint form can be followed by an undoubled object (in this case, a bare or augmentless noun, which behaves as a negative polarity item). These are classic disjoint and conjoint environments, respectively. Now note that postverbal *ngani* “why” must be preceded by the disjoint form of these tenses:

(98) a. A-*wu-gqok-ile ngani?* (disjoint)

NEG-2S-wear-PERF.DJ why

b. * A-*wu-gqok-e ngani?* (conjoint)

NEG-2S-wear-PERF.CJ why

“Why aren’t you dressed?”

The behaviour of *ngani* in its meaning of “what about” in affirmative clauses is just the opposite, the verb which precedes it needs to appear in conjoint form:

(99) a. * U-*bhal-ile nga-ni?* (disjoint)

2S-write-PERF.DJ about-what

b. U-*bhal-e ngani?* (conjoint)

2S-write-PERF.CJ about-what

“What did you write about?”

The contrast is summarised in (100):

(100) *Ngani*, in its meaning as “why”, must be preceded by a disjoint verb form. All other *Wh* phrases (henceforth “arbitrary *Wh* phrases”) must be preceded by a conjoint verb form.

This difference between *ngani* and other types of *Wh* phrases raises questions about the comparative height of *ngani* and other *Wh* phrases.

There are two classes of analyses for the conjoint/disjoint alternation: focus-encoding and constituency-encoding. We shall now consider what these two analyses have to say about questions with *ngani*, starting with the focus-encoding account, under which the alternation directly encodes focus. This type of account can be formulated in two ways: either in terms of Verb Focus, under which the disjoint form encodes focus on the verb, or in terms of Postverbal Term Focus, under which a conjoint verb form indicates that the item following the verb is in focus. We will begin with the former formulation.

It is important to first understand that under such a Verb Focus analysis, the alternation can only be understood as encoding focus within a particular domain. Consider the *Wh in situ* questions in (101) and the clefted questions in (102):

- (101) a. [U-bon-e bani?]_{IP} (conjoint)
 2S-see-PERF.CJ 1.who
 b. * [U-bon-ile bani?]_{IP} (disjoint)
 2S-see-PERF.DJ 1.who
 “Who did you see?”
- (102) a. * Ngu-bani_i [_{CP} [_{IP} o-m-bon-e _{t_i}]_{IP}]_{CP} (conjoint)
 COP-1.who REL:2S-1-see-PERF.CJ
 b. Ngu-bani_i [_{CP} [_{IP} o-m-bon-ile _{t_i}]_{IP}]_{CP} (disjoint)
 COP-1.who REL:2S-1-see-PERF.DJ
 “Who did you see? Who is it that you saw?”

The two pairs of questions are asking essentially the same thing, but the junctivity facts (and, by hypothesis, also the focus facts) for the two strategies are different, and this difference is explained by saying that every domain, which we will assume is IP, needs a focus. The pair in (101) has one domain of focus, while that in (102) has two. In (101a) the focus is *bani* “who”, and the ungrammaticality of (101b) is explained by saying that the IP can only have one focus, rendering the focused disjoint form ungrammatical. In (102), the inherently focused *Wh* phrase *bani* is in a different IP, leaving the verb alone in an embedded IP. This embedded IP needs a focus, as shown by the ungrammaticality of (102b), in which the verb bears the unfocused conjoint form. In that sentence the verb is thus not focused, and the sentence is ungrammatical because the IP also lacks an overt element after the verb which could itself be focused.

Now let’s compare arbitrary *Wh* phrases with *ngani* by considering the pair of questions in (103):

- (103) a. U-cul-e nini? (conjoint)
 2S-sing-PERF.CJ when
 “When did you sing?”
 b. A-wu-cul-ile ngani? (disjoint)
 NEG-2S-sing-PERF.DJ why
 “Why haven’t you sung?”

Under the focus-encoding analysis, the verb in (103a) is in the conjoint form because it is the *Wh* phrase *nini* “when” which is in focus rather than the verb. As for (103b), there seem to be two things in focus: *ngani*, because as a *Wh* phrase it is necessarily in focus, and the verb, because the disjoint form indicates that it’s the verb which is in focus. Making the default assumption that all postverbal *Wh* phrases are inside IP, we have a striking contrast:

- (104) a. * [_{IP} [U-cul-ile]_{foc} [nini?]_{foc}]_{IP} (disjoint)
 2S-sing-PERF.DJ when
 “When did you sing?”
 b. [_{IP} [A-wu-cul-ile]_{foc} [ngani?]_{foc}]_{IP} (disjoint)
 NEG-2S-sing-PERF.DJ why
 “Why haven’t you sung?”

English *why*. Using a variety of arguments, Stepanov and Tsai (2006) argue that English *why* is always introduced in the complementiser domain. Such a position necessarily places *why* outside the scope of verbal negation. Here we consider only certain issues not discussed in that paper which directly concern the interaction between *why* and negation, starting with extraction from negative islands.

There are important differences between *why* and other *Wh* phrases concerning their ability to be extracted from weak islands. We will discuss these differences here specifically in terms of negative islands, since this is the type of weak island most relevant to a discussion of *ngani*. Certain differences in extraction possibilities from weak islands for two different types of *Wh* phrases have been described in terms of arguments versus adjuncts, D-linked (“discourse-linked”) versus non-D-linked elements, and, as we shall do here, following Szabolcsi (2002), individuated versus non-individuated elements. These two types of *Wh* phrases can be illustrated with English *which* and *how much*. Note in (106) that both of these types of phrases can be used to form a simple affirmative question:

- (106) a. [Which boy]_{*i*} did you see *t_i*?
 b. [How much maize]_{*i*} did you buy *t_i*?

Once the clause is negated, though, we see that the *which* phrase yields a grammatical question while the *how much* phrase does not:

- (107) a. [Which boy]_{*i*} didn’t you see *t_i*?
 b. * [How much maize]_{*i*} didn’t you buy *t_i*?

It is thus difficult to move the *how much* phrase across the negative element *not*. The two different types of *Wh* phrases in (106) and (107) can be characterised in terms of individuation. *Which boy* is grammatical in (107a), because it can be interpreted as asking for one out of a set of possible boys. Conversely, *how much maize* is ungrammatical in (107b) because, unlike *which*, *how much* cannot be interpreted as asking for one out of a set of different quantities (or such an interpretation is very difficult to get). Extraction from a negative island (movement of a *Wh* phrase over a negative element) yields a grammatical question only if the *Wh* phrase can be interpreted as ranging over a set of individuated elements.

How and *why* are often thought of behaving similarly with respect to extraction. Note that, at variance with individuable *Wh* phrases, both *how* and *why* result in ungrammaticality when moved over the negative element in the upper clause in (108) in contrast to their affirmative counterparts in (109):³⁹

- (108) a. What_{*i*} don’t you think [_{CP} *t_i* Judy fixed the car with?] A wrench.
 b. What_{*i*} don’t you think [_{CP} *t_i* Judy fixed?] The car.
 c. * How_{*i*} don’t you think [_{CP} *t_i* Judy fixed the car?] With a wrench.
 d. * Why_{*i*} don’t you think [_{CP} *t_i* Judy fixed the car?] Because she was forced to.

³⁹See Hegarty (1991) for more details. Traces indicating the base position of the *Wh* phrases have been omitted. Cyclic movement is assumed, meaning that a trace of the *Wh* phrase is left in the complementiser region of the embedded CP.

- (109) a. What_i do you think [_{CP} *t_i* Judy fixed the car with?] A wrench.
 b. What_i do you think [_{CP} *t_i* Judy fixed?] The car.
 c. How_i do you think [_{CP} *t_i* Judy fixed the car?] With a wrench.
 d. Why_i do you think [_{CP} *t_i* Judy fixed the car?] Because she was forced to.

This might lead us to think that *how* and *why*'s similar behaviour stems from an inability of these *Wh* phrases to range over a set of individuated items, but in monoclausal contexts, *why* behaves differently both from *how* and from quantity questions like *how much*:

- (110) a. * [How much maize]_i didn't a boy buy *t_i*?
 b. * [How]_i didn't a boy sing *t_i*?
 c. Why didn't a boy sing?

There is thus an additional way in which *how* and *why* differ from each other.⁴⁰ An obvious possibility is that *why* can simply be inserted in the complementiser domain, unlike other *Wh* phrases. The reason for the different grammaticality judgements in (110), then, can be said to stem from the fact that in (110a) and (110b) there is a trace of the *Wh* phrase within the scope of negation, while there is no such trace in (110c).

Why interacts with negation in another interesting way, in addition to the one displayed in (110). First consider the following question and answer pairs in which the *Wh* question is affirmative:

- (111) a. Q: When_i did you sing *t_i*?
 A: But I didn't sing!
 b. Q: How_i did you sing *t_i*?
 A: But I didn't sing!
 c. Q: Why did you sing?
 A: But I didn't sing!

No contrast is detected between *why* and the two other *Wh* phrases. The answers show that in each case, the question seems to presuppose that a singing event took place. Now consider the counterparts to (111), where the polarity has been switched in both the question and the answer:

- (112) a. Q: When_i didn't you sing *t_i*?
 A: # But I did sing!
 b. Q: How_i didn't you sing *t_i*?
 A: # But I did sing!
 c. Q: Why didn't you sing?
 A: But I did sing!

⁴⁰ Consider also (113b), which shows that it is actually possible to force a reading of *how* that ranges over a set of manners.

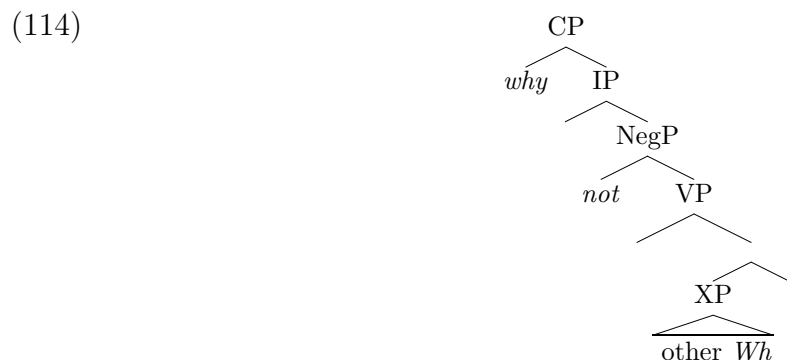
Other types of differences between Mandarin *weishenme* "why" and *zenmeyang* "how" are discussed in Lin (1992). Two kinds of HOW and WHY are discussed at length from a crosslinguistic perspective in Tsai (1999).

The questions in (112a) and (112b), with the adjuncts *when* and *how*, do not allow a presupposition that no discourse-relevant singing event took place, but seem rather to presuppose that some potential singing event went unrealised. In contrast, the *why* question in (112c) does allow for a presupposition that no singing event took place. In a similar vein, consider the question and answer pairs in (113):

- (113) a. Q: When_i didn't you sing t_i?
 A: Well, I sang on Monday, but not on Tuesday.
- b. Q: How_i didn't you sing t_i?
 A: Well, I sang *piano*, *mezzopiano*, and *fortissimo*, but not *mezzoforte*.
- c. Q: Why didn't you sing?
 A: # Well, I sang because the host asked me to, but not because I think my voice is so good.

In the answers, two members of the set of singing events are made explicit: the first of them a realised event and the second of them an unrealised potential event. The felicity judgements show that *why* does not allow such a set of events, unlike *how* and *when*. When questioning a negative proposition, *why* does not allow presupposition of a set of realised and unrealised events, rather it presupposes that no event took place.

As with the pattern in (110), these facts are most easily explained by introducing English *why* in the complementiser domain rather than in the thematic domain, as in (114), at least when *why* modifies a negative clause, as proposed by Stepanov and Tsai (2006) and as will be proposed here for Zulu *ngani*:



Such a structure can explain the issue in (112) and (113). Note that in the *why* questions in (112c) and (113c), applying the analysis in (114), *why* c-commands the entire proposition *you didn't sing*. This is not the case in the analogous questions with *when* and *how* after *when* or *how* move (overtly or covertly) to CP. In these cases, the proposition also contains a trace or a copy of *when* or *how*. If the availability of the set of realised and unrealised events is related to the trace of the *Wh* phrase inside the proposition, then we expect exactly the pattern we observe in (112) and (113).

Sambaa. We now turn to Sambaa (also called Shambala), a Bantu language (G23) spoken in Tanzania. In the following section, it will be shown that WHY in Italian and Korean are best analysed as being introduced in the complementiser domain, and thus outside the scope of verbal negation. This, and the fact that this is also what is being argued for here for Zulu *ngani*, might lead us to suppose that perhaps reason WHY is

universally introduced in the complementiser field and thus outside the scope of verbal negation. But we will now see that Sambiaa serves as a candidate for a language in which one form of WHY (namely the enclitic *-i*) is introduced in a subinflectional position, allowing us to examine the interaction of WHY and negation in a different way.

Examples (115) and (116), show that the verbal enclitic *-i* can mean either “why” or “what”, depending on the context. On the intuition that the clitic’s basic meaning is “what”, it will be glossed as such.⁴¹

(115) U-ghul-*iyē-i*?]_{IP} (conjoint)
 2S-buy-PERF-what
 “What did you buy?”

(116) U-kem-*a-i*?]_{IP} (conjoint)
 2S-cry-PRES.CJ-what
 “Why are you crying?”

The enclitic is essentially in free variation with the independent word form *mbwai*, which will not be used in the examples here.

It is not entirely clear whether *-i* in its meaning as “why” expresses reason or purpose. The fact that it cannot be used to modify the non-intentional verb *onekana* “seem, appear” suggests that it expresses purpose:

(117) a. Kwai *i-onekan-a* sa via ni iwe je-shey-*a*?
 why 9-seem-PRES.CJ if how COP 5.stone 5.REL-descend-FV
 b. * I-onekana-*i* sa via ni iwe je-shey-*a*?
 9-seem-PRES.CJ-what if how COP 5.stone 5.REL-descend-FV
 “Why does it seem like it’s the stone that is rolling down?”

However, unlike the Zulu purpose applicative in (90a), it was found compatible with the predicate BE SICK, as shown in (118), which forces us to leave open the possibility that it expresses reason:

(118) Ushe, u-hum-*a-i* iviaha?
 well 2S-be.sick-CJ-what now
 (“I only eat healthy food.”) “Then why are you sick now?”

The distribution of conjoint and disjoint verb forms in Sambiaa shows much greater flexibility than in Zulu. Three generalisations can be made about the distribution in Sambiaa. The first is that a conjoint form is required before a *Wh* phrase, as shown with the “what” interpretation of *-i* in (119). The other two generalisations are that a disjoint form is required clause-finally and that there is a slight preference for a conjoint form before other types of focused items (such as an object restricted by *du* “only”). The enclitic *-i* must appear after a conjoint verb form just like any other *Wh* phrase, as shown in (120):

(119) a. A-on-*a-i*? (conjoint)
 1-see-FV-what

⁴¹ This data was collected partially by and partially in conjunction with Sambiaa specialist Kristina Riedel.

- b. * A-a-on-a-i? (disjoint)
 1-PRES.DJ-see-FV-what
 “What does he see?”
- (120) a. U-chi-ghul-iy-e-i? (conjoint)
 2S-7-buy-PERF.CJ-what
- b. * U-za-chi-ghul-a-i? (disjoint)
 2S-PERF.DJ-7-buy-FV-what
 “Why did you buy it?”

These facts suggest that *-i* is IP-internal, whether it is interpreted as “what” or “why”. Given the possibility that *-i* encodes reason rather than purpose, Sambia provides a candidate of a language in which reason WHY is introduced in a subinflectional position in affirmative contexts.

Now note that *-i* cannot be used to question a negative clause, as attempted in (121a):

- (121) a. * Nku-vin-a-i?
 2S.NEG.PRES-dance-FV-what
- b. Kwai nku-vin-a?
 why 2S.NEG.PRES-dance-FV
 “Why don’t you dance?”

To question the reason for a negative clause a different strategy (with clause-initial *kwai* “why”) has to be resorted to, illustrated in (121b), in which WHY is clause-initial, and hence outside the scope of negation. WHY thus arguably needs to be outside the scope of negation even in a language in which it is arguably introduced in a subinflectional position.

Zulu control structures. Returning to Zulu, let’s consider a subject control construction. Note how in an (affirmative) purpose question the applicative morpheme and the clitic *-ni* “why” can attach to the selected infinitive in a subject control construction with *funa* “want”, as in (122b). On the basis of the fact that in both cases the question asks for a reason for wanting rather than a reason for going, a structure like (122b) is argued in Buell (2007b) to constitute a restructuring domain.

- (122) a. [_{IP} U-fun-el-a-ni [_{IP} uku-hamb-a]]
 2S-want-APPL-FV-what 15-go-FV
- b. [_{IP} U-fun-a uku-hamb-el-a-ni?]
 2S-want-FV 15-go-APPL-FV-what
 “Why do you want to leave?”

Given the possibility of (122b) with a purpose applicative question, one might expect that *ngani* would also have the option of appearing after the embedded infinitive in the same way, but (123a) shows that this is not the case.

- (123) a. * [_{IP} A-wu-fun-i [ukuhamb-a ngani?]]
 NEG-2S-want-FV 15.leave-FV why

- b. [_{IP} A-wu-fun-i] ngani [_{IP} ukuhamb-a?]
 NEG-2S-want-FV why 15.leave-FV
 “Why don’t you want to leave?”

This fact is easily accounted for in the analysis proposed here. In (123a), *ngani* is lower than the negative verb and thus falls under its scope, while the proposal here is that WHY cannot fall under the scope of negation.

The complementiser domain as an escape from negation. We have just seen that WHY behaves differently from other *Wh* phrases in a variety of languages, in a way which can be accounted for by introducing WHY outside the scope of negation. The question now is what positions are available to introduce WHY in outside the domain of verbal negation. Or, put another way, how high does WHY need to be introduced to be above verbal negation? In Zulu, the answer is that it must be introduced very high indeed. Note that in most main clause tenses in Zulu, the first prefix on the verb is a negative marker:

- (124) a. a-ngi-cul-i
 NEG-1S-sing-FV
 “I don’t sing, I’m not singing” (negative present tense)
 b. a-ngi-cul-anga
 NEG-1S-sing-FV
 “I didn’t sing” (negative past tense)

In accordance with the Mirror Principle (Baker 1985), this means that the negative prefix in these tenses corresponds to a syntactic head higher than the head corresponding to the subject marker.⁴² This places negation at the top, or very close to the top, of the inflectional domain, which we are loosely calling IP. No positions have been proposed to exist at the top of IP in which *Wh* elements can be introduced or moved to. (Except, of course, a questioned subject or something questioned within the subject.) This leaves the complementiser domain as the only region within the clause in which WHY could be introduced and escape the scope of negation. In the following section we will see that introduction of WHY in the complementiser domain is precisely what has been proposed for some other languages, and it will be argued that Zulu *ngani* is an Int⁰ head in that domain.

3.3 WHY as a complementiser-domain element

This section will discuss analyses of Italian and Korean in which WHY is introduced directly into the complementiser field. These analyses lend support to the proposal that *ngani*, as well, appears in, and is introduced in, the complementiser domain. Then we will consider how *ngani* comes to appear in postverbal position and examine similarities between *ngani* and two other complementiser domain elements.

⁴²The idea that the Bantu word-initial negative morpheme corresponds to a syntactic head above other components of the verb word is exploited by both Henderson (2004) and Ngonyani (2001) to explain the morphology of Swahili negative synthetic relative clauses.

3.3.1 Italian *perchè* and Korean *way*

Italian. First we will consider Italian *perchè* “why”, which is argued by Rizzi (1999) to be introduced in the complementiser domain on the basis of facts concerning its cooccurrence with right-peripheral focused elements. Observe that a *Wh* phrase cannot cooccur with a focused phrase in the left periphery:⁴³

- (125) a. * A chi QUESTO hanno detto (non qualcos’ altro)?
 to who this have said (not something else)
 “To whom THIS they said (not something else)?”
 b. * QUESTO a chi hanno detto (non qualcos’ altro)?
 this to who have said (not something else)

This is explained in terms of competition for the spec-FocP position in overt syntax: both the *Wh* phrase and the focused phrase need to occupy this position. Curiously, though, *perchè* does not adhere to this cooccurrence restriction. *Perchè* is allowed to precede the focused phrase (but not to follow it), as shown in (126) in a monoclausal question:

- (126) a. Perchè QUESTO avremmo dovuto dirgli, non qualcos’ altro?
 why this will.have should say.him, not something else
 “Why THIS we should have said to him, not something else?”
 b. * QUESTO perchè avremmo dovuto dirgli, non qualcos’ altro?
 this why will.have should say.him, not something else

Rizzi argues that this is because *perchè* is introduced in a projection higher than the FocP whose specifier is occupied by the focused phrase. He calls this projection IntP (for “interogative”). The configuration for (126a) is schematised here:

- (127) [_{IntP} *perchè* [_{Int'} [_{FocP} *questo* [_{Foc'} [_{IP} ...]]]]]

The claim that *perchè* is introduced directly into spec-IntP, rather than moving from somewhere in the verb phrase, stems from *perchè*’s behaviour in multiclausal questions. Although *perchè* can also precede a focused phrase in such a question, it cannot have the interpretation where the reason modifies the embedded clause, as in (128b). It can only modify the upper clause, as in (128a):

- (128) a. Perché A GIANNI ha detto che si dimetterà (non a Piero)?
 why to gianni has said that himself will.resign not to Piero
 “Why_i did he tell GIANNI (not Piero) t_i that he will resign?”
 b. * Perché A GIANNI ha detto che si dimetterà (non a Piero)?
 why to gianni has said that himself will.resign not to Piero
 “Why_i did he tell GIANNI (not Piero) that he will resign t_i?”

This is explained by saying that when *perchè* moves to a higher clause, it moves to the matrix FocP rather than to a matrix IntP. The contrast between *perchè* modifying the matrix clause and it modifying the embedded clause is schematised in (129):

⁴³Data in (125), (126), and (128) is from Rizzi (1999). Translations and glosses have been slightly modified. Data in (129) is from Ivano Caponigro, p.c.

- (129) a. *Perchè* modifies the matrix clause
 [IntP *Perchè* [IP *ha detto* [ForceP *che si dimetterá*]]]?
 why has said that himself will.resign
 “Why did he said [that he would resign?]” (\approx “Why did he say that?”)
- b. *Perchè* modifies the embedded clause
 [FocP *Perchè_i* [IP *ha detto* [ForceP *che* [IntP *t_i* [IP *si dimetterá...*]]]]]
 why has said that himself will.resign
 “Why did he said [that *t_i* he would resign?]” (\approx “Why will he resign,
 according to what you said?”)

The fact that *perchè* in an embedded clause moves to the matrix FocP renders it subject to the same competition with the focused phrase for the spec-FocP as we saw in (125), where an arbitrary *Wh* phrase clashes with *perchè* in a monoclausal question.

Korean. We will now consider *way* “why” in Korean, an SOV language which provides a typologically different language where syntactic facts are again best accounted for if WHY is introduced in the complementiser domain, as argued by Ko (2005). In this case, the argumentation relies on differences in cooccurrence restrictions with scope bearing elements (henceforth SBE), which include negative polarity items like *amwuto* “anyone”.

Let’s first consider an arbitrary *Wh* phrase. There is an intervention effect in Korean whereby a *Wh* phrase may not appear to the left of an SBE. This is shown with the *Wh* phrase *mues-ul* “what” and the SBE *amwuto* “anyone” in (130):

- (130) a. * *Amwuto mwues-ul ilk-ci-anh-ass-ni?*
 anyone what-ACC read-*ci*-not-PAST-Q
- b. *Mwues-ul_i amwuto t_i ilk-ci-anh-ass-ni?*
 what-ACC anyone read-*ci*-not-PAST-Q
 “What did no one read?”

Building on Beck and Kim (1997), Ko gives this intervention effect the following analysis. A *Wh* phrase moves to a specifier of C^0 , either overtly or covertly, as is widely assumed. The intervention effect, seen in (130a), then, consists of the inability of a *Wh* phrase to cross over an SBE covertly on its way to CP. Example (130b), though, shows that the *Wh* phrase can undergo such a move if it does so overtly.

By now it will probably not surprise the reader that *way* is not subject to this restriction in monoclausal questions. *Way* may appear to either side of the SBE *amwuto*, as shown in (131):

- (131) a. *Amwuto way ku chayk-ul ilk-ci-anh-ass-ni?*
 anyone why that book-ACC read-*ci*-not-PAST-Q
 “Why did no one read that book?”
- b. *Way amwuto ku chayk-ul ilk-ci-anh-ass-ni?*
 why anyone that book-ACC read-*ci*-not-PAST-Q

However, this fact cannot be explained away by saying that *way* is merely an exception to the intervention effect, because the effect reappears in biclausal questions if the SBE is in the matrix clause and *way* is in the embedded clause, as in (132):

- (132) * Amwuto [John-i way saimha-yess-ta-ko] malha-ci-anh-ass-ni?
 anyone John-NOM why resign-PAST-DEC-C say-*ci*-not-PAST-C
 “What is the reason *x* such that no one said that John resigned for *x*?”

This puzzle is solved by assuming that *way*, unlike arbitrary *Wh* phrases, does not move to CP but is first introduced there. To see how this works, let’s first consider the two distinct analyses needed for the cases in (130b) and (131b), in which the *Wh* phrase precedes the SBE. These are schematised in (133):

- (133) a. [_{CP} WHAT_{*i*} [_{C'} [_{IP} ANYONE *t_i* VERB]]]
 b. [_{CP} *way* [_{C'} [_{IP} ANYONE OBJ VERB]]]

In (133a) the arbitrary *Wh* phrase has moved overtly from the IP, crossing the SBE ANYONE. (Recall that it is only when such a move is made covertly that it results in an intervention effect.) In (133b) no crossing occurs, overtly or otherwise, because *way* is first introduced into the structure in the CP already above and to the left of the SBE. Now let’s consider cases (130a) and (131a), where the SBE precedes the *Wh* phrase. These are schematised in (134):

- (134) a. * [_{CP} [_{C'} [_{IP} ANYONE WHAT VERB]]]
 b. [ANYONE [_{CP} *way* [_{CP} [_{C'} [_{IP} ANYONE OBJ VERB]]]]]

(134a) is ungrammatical because WHAT will still need to move to CP overtly, but to do so, it must cross the SBE ANYONE, incurring the intervention effect. In contrast, (134b) is grammatical because *way* does not need to move to CP, by virtue of having been introduced there. ANYONE comes to precede *way* by means of A’ scrambling of the former.

Now we can see why the intervention effect came back to haunt us in the biclausal question in (132). Although *way* is introduced in the CP of the lower clause, it will still need to move to the CP in the matrix clause covertly, crossing the SBE in the matrix clause.

Italian *perchè* and Korean *way* provide evidence that the introduction of WHY in the complementiser domain is needed in typologically and genetically diverse languages. Further evidence could be seen in Ko’s application of the same analysis for Japanese, and in similar analyses of Mandarin (Ko 2005; Lin 1992). These languages thus lend support to the proposal here that Zulu *ngani* is in the complementiser domain.

3.3.2 Sharpening the analysis of *ngani*

Assuming that *ngani* occupies a complementiser-domain position, we will first consider how it comes to appear in a postverbal position. Then it will be argued that it heads an IntP projection.

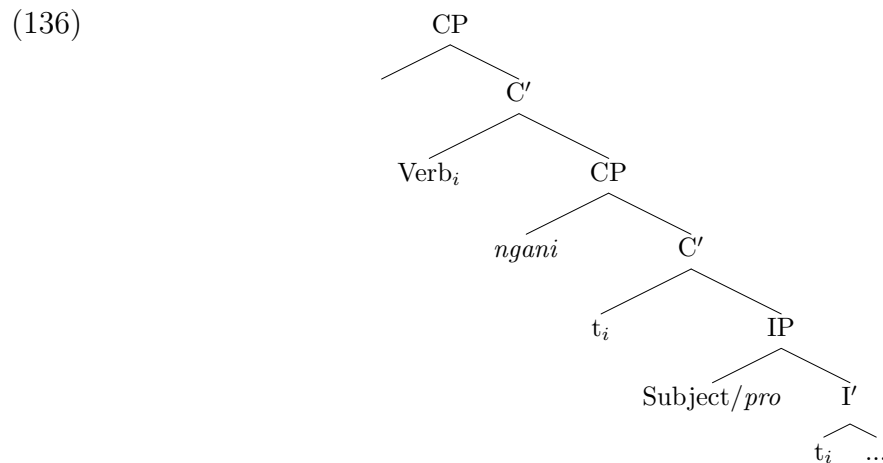
Not head movement. If we can assume that *ngani* is a phrase in the complementiser domain, head movement of the verb over *ngani* initially looks appealing, due to *ngani*’s relatively strict requirement for the immediate postverbal position. In this respect, *ngani*’s behaviour with aspectual verbs is particularly striking. Recall that in (52) it was shown that the aspectual verb *vamise* “to do often” can form a restructuring

domain, in the same way described for *funa* “want” in (122), allowing the purpose applicative to appear in its complement. If the two verbs in this restructuring domain are thought of as a unit (as in the original sense of “restructuring” (Rizzi 1978)), we might expect the two verbs to be able to move as a unit to precede *ngani*, but as shown in (135), this is not possible. Only *vamise* itself (in its infrequent disjoint form *vamisile*) is allowed to precede *ngani*:

- (135) a. A-wu-vamis-ile ngani ukucula? (disjoint)
 NEG-2S-do.often-PERF.DJ why 15.sing-FV
- b. * A-wu-vamis-e ukucul-a ngani? (conjoint)
 NEG-2S-do.often-PERF.CJ 15.sing-FV why
- c. * A-wu-vamis-e ngani ukucul-a? (conjoint)
 NEG-2S-do.often-PERF.CJ why 15.sing-FV
 “Why don’t you sing often?”

This fact would be easily accounted for if the auxiliary verb (with its subject marker) and its infinitival complement were separate heads. Only the higher head would be able to move to precede *ngani*.

To implement head movement, we would need to make two assumptions. First, a Zulu conjugated verb form must be a head (to make it capable of head movement), and second, there must be a head position for it to move to. If *ngani* is a phrase in the complementiser domain, then there must be an additional complementiser-related projection above the specifier occupied by *ngani*, as would be compatible with the “exploded C” conception of Rizzi (1997), in which the complementiser domain is composed of projection of a number of distinct heads rather than of the projection of a single C^0 head. Under such assumptions, the verb simply head-moves stepwise to precede *ngani*, as in (136):



Unfortunately, however, head movement makes the wrong predictions for word order, as will now be shown. Consider a clause with an undoubled direct object, as in (137):

- (137) A-wu-theng-e ingubo entsha.
 NEG-2S-buy-PERF.CJ 9.dress 9.new
 “You haven’t bought a new dress.”

Under the head movement account, we would expect to be able to introduce *ngani* above this clause and perform head movement on the verb to produce a reason question, but the

result is ungrammatical, regardless of whether the verb is conjoint or disjoint, as shown in (138):

(138) * [_{CP} Awutheng(il)e_i [_{C'} ngani [_{CP} t_i [_{C'} [_{IP} t_i ingubo entsha]]]]]

To question the statement in (137), the direct object must be extraposed and doubled with an object marker on the verb, as in (139):

(139) A-wu-yi-theng-ile ngani] ingubo entsha?
 NEG-2S-9-buy-PERF.DJ why 9.dress 9.new
 “Why haven’t you bought a new dress?”

Even if these incorrect predictions about word order and object marking did not by themselves make the head movement account untenable, there are additional reasons weighing against a head movement account. First, though it was shown that WHY does not like to appear in the scope of negation, if *ngani* is inside the verb phrase as in (104b) and the verb is negative, *ngani* does fall under the scope of negation. In (105), in contrast, *ngani* can be structurally higher than any of the negative heads incorporated in the verb, depending on the syntactic structure assumed. Second, the first essential assumption we had to make in this account was that the Zulu verb word is a head. But recent work on morphosyntax (Julien 2003), inspired by directionality constraints imposed on phrasal syntax (Kayne 1994), has argued that Bantu conjugated verb forms, with their prefixal subject markers, cannot be heads (see Buell (2005) for Zulu specifically). Under these assumptions, head movement of the conjugated auxiliary verb over *ngani* is not a possible analysis. It is necessarily a phrase that moves. Third, the head movement analysis cannot account for the fact that certain light elements, such as *khona* “(anaphoric) there” are marginally permitted to intervene between the verb and *ngani*, as in (140b):⁴⁴

(140) a. A-wu-y-i ngani khona?
 NEG-2S-go-FV why there
 b. ? Awuyi khona ngani?
 NEG-2S-go-FV there why
 (“I don’t go to Durban.”) “Why don’t you go there?”

And finally, the head movement account does not leave us with any clear way to account for the junctivity facts presented in the previous section.

The verb in a phrase. If head movement is not tenable for accounting for *ngani*’s postverbal position, two options remain. Consider again the case in (103b), repeated here as (141):

⁴⁴This also holds for arbitrary *Wh* phrases, such as *nini* “when”:

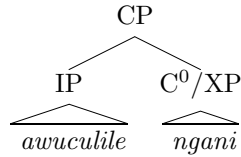
1. (a) U-y-a nini khona?
 2S-go-FV when there
 - (b) ? U-y-a khona nini?
 2S-go-FV there when
- (“I go to Durban.”) “When do you go there?”

See Buell (2007a) for more details on the IAV position for arbitrary *Wh* phrases in Zulu.

- (141) A-wu-cul-ile ngani? (disjoint)
 NEG-2S-sing-PERF.DJ why
 “Why haven’t you sung?”

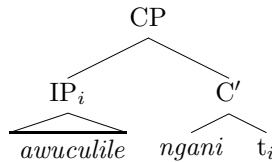
In the first possibility, *ngani* is a right-branching node (either a C^0 head or a phrase of some other category) in the complementiser domain, so that *ngani* follows the verb, but is out of the verb’s scope.⁴⁵ This view is shown in (142):

- (142) *Ngani* in a right-branching node



Alternatively, *ngani* could be either a left-branching head or specifier in the complementiser domain while the verb moves around *ngani* inside a phrase:

- (143) IP movement around *ngani*



It is beyond the scope of this paper to discuss in detail the relative merits of right-branching analyses as in (142) versus those of phrasal movement analyses (which often ultimately require remnant movement) like in (143). Let it suffice to say that there has been a tendency in recent years to reanalyse right-branching structures like those in (142) as left-branching structures with movement as in (143).⁴⁶

Other complementiser-domain elements. While placement of a right-peripheral element in the complementiser domain might seem unnatural in a “left-headed” language, this is in fact independently needed for Zulu. Zulu has two question particles which appear clause-finally. *Na* can be used with any type of question (that is, both *Wh* and polarity questions), while *yini* is used exclusively in polarity questions. *Na* and *yini* may cooccur in the same clause, but only in the order *yini na*. A *Wh* question is given in (144), while polarity questions are illustrated in (145):

- (144) U-cul-a-ni (na)?
 2S-sing-FV-what Q
 “What are you singing?”

- (145) a. U-ya-cul-a yini na?
 2S-DJ-sing-FV POL.Q Q

⁴⁵It is obvious that *ngani* does not have the distribution of a complementiser, and in biclausal structures it can cooccur with a tautoclausal complementiser such as *ukuthi* “that”, as in (160). C^0 is taken here to be some type of complementiser-domain head of a category distinct from what we normally think of as a complementiser, as is also true of the elocutionary particles *yini* and *na* discussed on page 50.

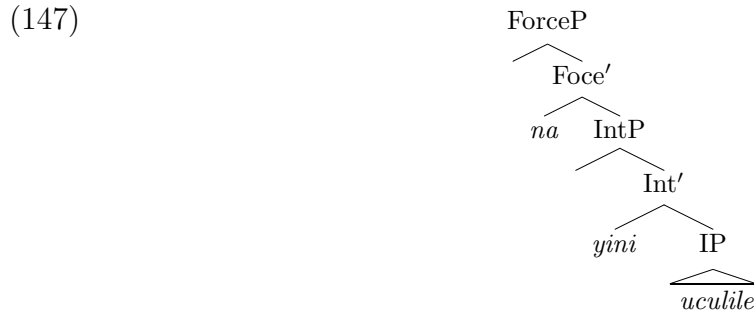
⁴⁶*References?*

- b. Uyacula na?
- c. Uyacula yini?
- d. Uyacula?
- e. * Uyacula na yini?
“Are you singing?”

The fact that *yini* and *na* form an integral part of the clause’s structure and are not merely parenthetical elements is demonstrated by the fact that at least one of them must be present in a selected polarity question, as shown in (146):

- (146) a. Ngi-ya-ku-buz-a ukuthi uThandi u-cul-ile yini na.
1S-DJ-2S-ask-FV that 1.Thandi 1-sing-PERF.DJ POL.Q Q
- b. Ngiyakubuza ukuthi uThandi uculile yini.
- c. Ngiyakubuza ukuthi uThandi uculile na.
- d. * Ngiyakubuza ukuthi uThandi uculile.
“I’m asking you whether Thandi sang.”

Thwala (2004) has convincingly argued that, in closely related Swati, *yini* is an Int⁰ (Interrogative) head and *na* a Force⁰ head, which are two of the heads in the articulated complementiser domain proposed by Rizzi (1997), as schematised in (147):



To account for the linear order, either these two elements are both right-branching nodes, or they are left-branching nodes which the IP moves around (like the tree in (147)). These are precisely the two options presented for *ngani* in (142) and (143). Thwala argues for the movement of IP. To account for the relative ordering of *yini* and *na* (as *yini na*, and not **na yini*), the IP must first move to the specifier of *yini*, then the IntP moves to the specifier of *na*. The analysis presented here, then, is completely parallel to one independently needed in the same language. The possibility of similar analyses for *yini* and *na*, on the one hand, and *ngani*, on the other, is further strengthened by two other properties they share. The first is their ability to appear sentence-medially between two clauses when the matrix clause is a question which is shown in (148) and (149):

- (148) a. A-ni-cabang-i na ukuthi uThandi u-cul-ile?
NEG-2P-think-FV Q that 1.Thandi 1-sing-PERF.DJ
- b. A-ni-cabang-i yini ukuthi uThandi u-cul-ile?
NEG-2P-think-FV POL.Q that 1.Thandi 1-sing-PERF.DJ
- c. “Don’t you think that Thandi sang?”

- (149) A-ni-cabang-i ngani ukuthi uThandi u-cul-ile?
 NEG-2P-think-FV why that 1.Thandi 1-sing-PERF.DJ
 “Why don’t you think that Thandi sang?”

And the second property is that a verb immediately preceding either *yini* or *na* must be in disjoint form, as shown in (150), just as already shown for *ngani* in (98):

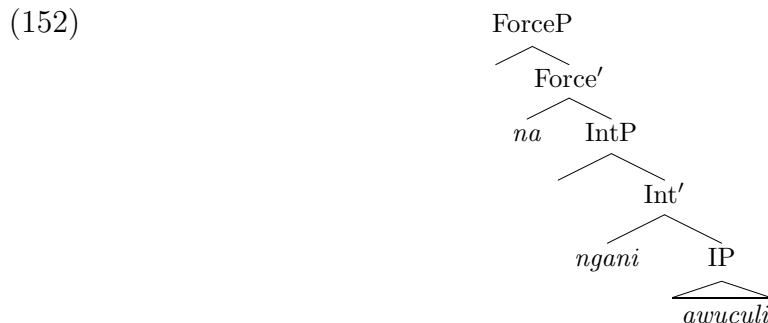
- (150) a. U-cul-ile]_{IP} na?
 2S-sing-PERF.DJ Q
 b. * U-cul-e na?]_{IP}
 2S-sing-PERF.CJ Q
 c. U-cul-ile]_{IP} yini?
 2S-sing-PERF.DJ POL.Q
 d. * U-cul-e yini?]_{IP}
 2S-sing-PERF.CJ POL.Q
 “Did you sing?”

This distribution is natural if, as argued elsewhere, a conjoint form cannot be used if the verb is the final element in IP and if *yini*, *na*, and *ngani* are all in the complementiser domain.

Now we can address the question of precisely which specific complementiser domain projection *ngani* heads. Note that *ngani* and *na* cooccur with a fixed ordering, as shown in (151):

- (151) a. A-wu-cul-i ngani na?
 NEG-2S-sing-FV why Q
 b. * Awuculi na ngani?
 “Why aren’t you singing?”

This can be captured in the same way as the relative ordering of *na* and *yini*, by assuming that *ngani* is a head below the Force⁰ head *na*, as in (152):



Note that Rizzi’s (1999) cartographic view of the complementiser field has the IntP projection straddled by ForceP and FocP, and that *perchè* (Italian “why”) occupies the specifier of a phonetically empty Int⁰, as in this partial bracketed structure:

- (153) [_{ForceP} [_{IntP} WHY [_{Int'} Int⁰ [_{FocP} ... [_{IP} ...

This analysis of Italian can be fitted to the Zulu facts if we assume that *ngani* is the Int⁰ head rather than a phrase in the specifier of a silent Int⁰. This modification is necessary because if we adhere strictly to the hierarchy in (153), with no additional intermediary projection, there will be no specifier available for the IP to move to so that it can precede *ngani*. This analysis is also compatible with Thwala’s analysis of the elocutionary particles, because while *ngani* can cooccur with the Force⁰ particle *na*, as shown in (151), it cannot cooccur with *yini*, as shown in (154):

- (154) a. A-wu-khulum-i ngani?
NEG-2S-speak-FV why
 b. * A-wu-khulum-i ngani yini?
 c. * A-wu-khulum-i yini ngani?
 “Why aren’t you talking?”

This cooccurrence restriction is natural if both *ngani* and *yini* are Int⁰ heads and there is only one IntP projection.

The objection might be raised that it is unintuitive to think that *ngani* is a head, because in affirmative contexts it has the transparent meaning of “what about”, as shown in (88b), and in that case *nga-ni* clearly seems to be a phrase, specifically, a PP. However, something very similar must also be said about *yini*, for it also has the transparent clausal usage meaning “what is it?”, as illustrated in (155):⁴⁷

- (155) a. Yi-ni o-yi-cul-a-yo?
COP-what REL:2S-9-sing-FV-REL
 “What is it that you’re singing?”
 b. Yi-ni lokho?
COP-what 17.that
 “What’s that?”

Yini thus has a phrasal usage and a head usage with different meanings, and the same claim must be made about *ngani*. If both *yini* and *ngani* are Int⁰ heads, as claimed here, it is also interesting that they both developed from phrases containing the enclitic *-ni* “what”.

Having argued for the position in which *ngani* is introduced and the way it comes to appear clause-finally, we will now turn our attention to its immediately postverbal property and the consequences for the analysis of postverbal focus in Bantu languages.

3.4 *Ngani* and the IAV position

For a number of Bantu languages, it has been claimed that the position immediately following the verb is a focus position, in the sense that a focused element must occupy that position. Consider the following evidence from Zulu:

- (156) U-theng-e ingubo entsha izolo.
2S-buy-PERF.CJ 9.dress 9.new yesterday
 “You bought a new dress yesterday.”

⁴⁷This usage seems to be the basis for the cleft reason strategy discussed in the previous section.

- (157) a. * U-theng-e ingubo entsha nini?]_{IP}
 2S-buy-PERF.CJ 9.dress 9.new when
 b. U-yi-theng-e nini]_{IP} ingubo entsha?
 2S-buy-PERF.CJ when 9.dress 9.new
 “When did you buy a new dress?”

In (156) we see that the declarative order is S V O Adv. However, it is not possible to question the temporal adverb in this order, as in (157a). Instead, the intervening indirect object must be extraposed, with concomitant obligatory object marking on the verb (here *yi-*), so that the questioned constituent can immediately follow the verb, as in (157b). A growing body of literature on Bantu languages has been investigating the nature of this immediate postverbal position, which has come to be called by the abbreviation “IAV” (“Immediate After the Verb”, Watters (1979)). Facts like those in (157) have led some to conclude that the IAV linear position in these Bantu languages corresponds to the specifier of a sub-IP focus projection (henceforth “low FocP”), similar to that first proposed for Italian by Belletti (2002) (Aboh 2006; van der Wal 2006).⁴⁸

It is generally accepted that in Bantu languages an *in situ Wh* phrase occupies some IP-internal position. The point of contention is whether (in languages with IAV focus effects) the *Wh* phrase remains *in situ* or whether it moves to a slightly higher focal position still below the inflectional domain. The immediately postverbal property for arbitrary *Wh* phrases, then, can be explained in two ways, depending on which of these views is adopted. If the *Wh* phrase is assumed to move to a focus position, then this property comes for free if there is simply no other position between the verb and the focal position in which other elements could occur. Conversely, if the *Wh* phrase is assumed to remain *in situ*, other potential pre-*Wh* elements must evacuate the verb phrase, leaving the *Wh* element itself in the immediately postverbal position.

Now note that *ngani* has the same “immediately postverbal property” as arbitrary *Wh* phrases:

- (158) a. * A-wu-theng-e ingubo entsha ngani?
 NEG-2S-buy-PERF.CJ 9.dress 9.new why
 b. A-wu-yi-theng-ile ngani ingubo entsha?
 NEG-2S-buy-PERF.DJ why 9.dress 9.new
 “Why didn’t you buy a new dress?”

The same property is observed in multiclausal structures. Consider the questions in (159) in which the upper clause is headed by a negative verb:

- (159) a. A-ni-cabang-i ngani ukuthi uThandi u-cul-ile?
 NEG-2P-think-FV why that 1.Thandi 1-sing-PERF.DJ
 b. * A-ni-cabang-i ukuthi uThandi u-cul-ile ngani?
 NEG-2P-think-FV that 1.Thandi 1-sing-PERF.DJ why
 “Why don’t you think that Thandi sang?” (i.e. “Why don’t you think so?”)

⁴⁸See Buell (2007a) for a discussion of the IAV position in Zulu and arguments against interpreting the position as a low focus position. In addition to those cited as arguing a focus projection to account for IAV focus effects in Bantu, Ndayiragije (1999) similarly argues for a focus position to account for a right-peripheral focus position which interacts with the conjoint/disjoint alternation in the same way.

We see that *ngani* is only licit when it immediately follows the verb. Two separate analyses seem to result in the ungrammaticality of (159b). If the lower clause and *ngani* are inside the relevant constituent, then the verb is separated from *ngani* by that clause, a situation which was already found to be bad with intervening objects. Alternatively, the lower clause could be viewed of as outside the relevant clause (“shifted”), but then *ngani* also necessarily lies outside that same clause, resulting in ungrammaticality. For this word order to yield a grammatical result, it must be the lower clause, rather than the higher one, which is negative, as in (160):

- (160) Ni-cabang-a ukuthi uThandi a-ka-cul-anga ngani?
 2P-think-FV that 1.Thandi NEG-1-sing-FV why
 “Why_i do you think that _{-i} Thandi didn’t sing?” (i.e. “In your opinion, why didn’t Thandi sing?”)

It has already been argued that *ngani* has to be outside the verb phrase, using evidence involving the conjoint/disjoint alternation, as well as crosslinguistic evidence concerning WHY and the scope of negation. If we take this property to define the IAV position, we are faced with the surprising conclusion that the IAV linear position cannot be associated with a single structural position, because sometimes the IAV position is outside the verb phrase (in the case of *ngani*), while at other times it is inside (in the case of all other *Wh* phrases). The claim that the IAV linear position corresponds to multiple structural positions is the same conclusion as the one reached in Hyman and Polinsky (2006) for Aghem.

Because both types of analyses for arbitrary *Wh* phrases leave the *Wh* phrase inside the IP, it should be obvious that the immediately postverbal property must be accounted for in a different way for *ngani*, which has been argued to sit outside of IP. Two different implementations of this were presented in (142) and (143). In (142), *ngani* is on a right-branching node in the complementiser domain, while (143) is a uniformly left-branching structure in which the IP (which contains the verb) has moved up to precede *ngani*. Both of these analyses directly account for the fact that *ngani* appears somewhere to the right of the verb, that it is clause-final. That is, both analyses capture the postverbal property of *ngani*, the fact that *ngani* appears *somewhere* to the right of the verb. However, they do not in themselves capture the *immediately* postverbal property, the fact that nothing may intervene between the verb and *ngani*.

Under the movement analysis, the immediately postverbal property can be accounted for using a complexity filter (Koopman and Szabolcsi 2000; Buell and Sy 2005). The idea is that a head can specify the maximum degree of complexity or heaviness of its (overt) specifier. In the case at hand, it would need to be assumed that *ngani* is a head requiring an overt specifier of a minimum degree of complexity. While it needs to host an IP in its specifier, that specifier must be minimally complex. It cannot contain any overt elements lower than the verb. This is illustrated in (161):

3.5 Conclusions concerning *ngani*

In the foregoing discussion, several interesting conclusions were made. The first is that *ngani* is best analysed as introduced in the complementiser domain rather than under the inflectional domain. This was shown to be consistent with the two popular analyses proposed for the conjoint/disjoint alternation which provided morphosyntactic evidence for this analysis. More specifically, it was claimed that *ngani* is an Int⁰ head, lending support for both Rizzi's (1999) specific decomposition of the complementiser domain and Thwala's (2004) analysis of Nguni elocutionary force particles.

The account of phrasal movement of IP to the specifier of Int⁰ also converged with Thwala's account for word orders with elocutionary force particles, but *ngani*'s immediately postverbal property required the additional apparatus of complexity filters, demonstrating the utility of such filters.

Furthermore, the analysis of *ngani* was shown to weaken the analysis of the IAV linear position as a structural position, because this supra-inflectional focused item shares the same immediately postverbal property with other focused elements clearly below inflection.

A tentative proposal was made that while WHY may be introduced in the verb phrase in affirmative clauses in some languages, as in Sambiaa, it may be that WHY is universally introduced in the complementiser domain if the clause is negative. Evaluation of such a proposal requires examining a number of languages with SVO word order and *Wh in situ*, in which WHY occurs in some postverbal position. Egyptian Arabic is an example of such a language.

Egyptian Arabic, a Semitic language, has overwhelmingly SVO word order (unlike Standard/Classical Arabic, in which the unmarked word order is VSO). Non-subject questions are typically formed with the *Wh* phrase *in situ* (Wahba 1984) as shown in (163a) with the temporal adjunct question word *'imta* "when":

- (163) a. ḥa-truuḥ il-madrasa 'imta?]_{IP}
 FUT-2S.go the-school when
 "When will you go to school?"
 b. ḥ-aruuḥ il-madrasa bukra.
 FUT-1S.go the-school tomorrow
 "I'll go to school tomorrow."

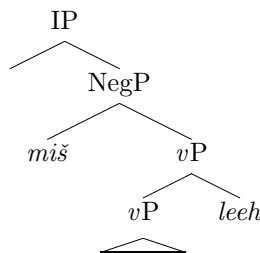
The standard assumption would be that *'imta* in (163a) is in a sub-IP position. Now consider the reason question in (164a):

- (164) a. miš ḥa- truuḥ il-madrasa leeh_i?
 not FUT- 2M.go the-school why
 "Why won't you go to school?"
 b. miš 'ayz-iin- ak [_{CP} tiruuḥ il-madrasa] leeh?
 not PL.want- you 2M.go the-school why
 "Why don't they want you to go to school?"

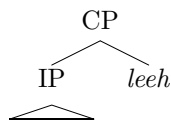
The word *leeh* "why" would seem amenable to the same IP-internal analysis as *'imta* "when" in (163a) But now note that *leeh* also appears in sentence-final position in the biclausal structure in (164b). This is unexpected considering the interpretation. The

question asks for a reason for wanting rather than for going. Furthermore, the two clauses have different subjects, so this is clearly not a restructuring environment. For these reasons, *leeh* cannot be inside the lower clause. It is therefore either somewhere below *miš* “not” but above the embedded CP node (such as an adjunct to the matrix VP), as in (165a), or it is above *miš* (such as in the matrix complementiser domain), as in (165b):

(165) a.



b.



According to the proposal made here, the analysis in (165b) is the only one possible, with *leeh* outside the scope of negation. It remains to be seen whether the alternative analysis in (165a) can be positively ruled out.

It is hoped that further research will be conducted on languages like Egyptian Arabic to test the proposal.

4 Conclusion

A variety of issues were explored concerning Zulu why questions. A few of these issues seem rather narrowly related to Zulu and closely related languages, while others bear directly on questions of broad syntactic interest.

Issue of the first type included the ways shown in which the applicative suffix *-el* and the clitic *-ni* “what” behave idiosyncratically as purpose questions. Additionally, non-applicative clefted reason questions were shown to exhibit sequence of tense phenomena as yet not fully described. Furthermore, these questions exhibit a type of cleft whose structure has yet to be analysed.

Issues of more general syntactic import were numerous. The Zulu applicative purpose question was shown to have a number of properties in common with English *what for* questions, including the need for an inflectional controlling participant. As is the case with English *for*, the distinction between purpose and reason arguments in non-interrogative contexts proved more complicated.

Applicative purpose questions were shown to exhibit transparency effects, making them relevant for the wider cross-linguistic discussion of “restructuring” contexts. This opens up the possibility of finding other transparency phenomena in other Bantu languages, and also suggests that purpose- and reason-related transparency phenomena remain to be discussed in Romance languages (such as the one exhibited in Spanish), in which transparency is easier to detect due to clitic climbing.

Portverbal *ngani* was argued to be generated in a high, left-peripheral position, in spite of its strictly immediate postverbal surface position. This suggests similar analyses for other languages in which *why* can appear in postverbal position.

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