1 Introduction

This talk is about reason questions in Zulu (S42) that use the word *ngani* “why”, which is used to question negative clauses:

(1) A-wu-khulum-i ngani?
    NEG-2s-speak-fv why
    “Why aren’t you talking?”

In affirmative clauses, *ngani* has a literal meaning: “about/by what”:

(2) Ni-khulum-a nga-ni?
    2p-speak-fv for-what
    “What are you talking about?” NOT “Why are you talking?”

(3) ∗ Ni-(ya-)bhem-a nga-ni?
    2p-dj-smoke-fv for-what
    Intended: “Why do you smoke?”

An apparent orthogony between *Wh* phrases. Consider these two questions:

(4) ✓ Subj V Wh
    a. UThembu u-cul-e nini?
       1.Thembu 2s-sing-perf.cj when
       “When did Thembu sing?”

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b. UThembi a-ka-cul-anga ngani?
   1. Thembi neg-2s-sing-FV why
   "Why didn’t Thembi sing?"

(5) * Subj V Obj Wh
a. * UThembi u-cul-e [ leli culo ] nini?
   1. Thembi 2s-sing-PERF.CJ 5.this 5.song when
   "When did Thembi sing this song?"

b. * UThembi a-ka-cul-anga [ leli culo ] ngani?
   1. Thembi NEG-2s-sing-FV 5.this 5.song why
   "Why didn’t Thembi sing this song?"

Both are thus subject to an IAV focus effect:

(6) **Immediate After the Verb (IAV) Position.** A linear position immediately after the verb in which a focused element has to appear.

There have been attempts to analyse the IAV linear position as a sub-IP structural position:

(7)

```
I'
   V_i^0   FocP
      X
         Foc'
            t_i

= IAV position
```

The sentences in (4) and (5) seem to conform to this analysis:

(8)

```
I'
   V_i^0   FocP
      nini/ngani
         Foc'
            t_i
```

However, this paper will argue that *ngani* "why" requires an analysis radically different from *nini* "when" and all other *Wh* phrases:

(9)

```
CP
   IP
       ... nini ...
       ngani
            why
```

This will lead to the conclusion that:

- The IAV linear position in Zulu does not correspond to a single structural position.
2 The conjoint/disjoint alternation (junctivity)

Zulu has a conjoint/disjoint verb alternation (junctivity).

<table>
<thead>
<tr>
<th></th>
<th>Conjoint</th>
<th>Disjoint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>*bacula ...</td>
<td>*bayacula</td>
</tr>
<tr>
<td></td>
<td>“they sing, they are singing”</td>
<td>“they sing, they are singing”</td>
</tr>
<tr>
<td>Perfect</td>
<td>*bacule ...</td>
<td>*baculile</td>
</tr>
<tr>
<td>(Recent past)</td>
<td>“they sang”</td>
<td>“they sang”</td>
</tr>
</tbody>
</table>

Here are some classic environments for the conjoint and disjoint verb forms:

(11) Classic environments for the *conjoint* verb form

a. Before a non-agreeing object
   
   Ngi-cul-e ingoma.
   1s-sing-perf.cj 9.song
   “I sang a song.”

b. Before a focused adjunct
   
   U-cul-e izolo. #Uculile izolo.
   2s-sing-perf.cj yesterday
   “You sang YESTERDAY.”

(12) Classic environments for the *disjoint* verb form

a. Clause-finally
   
   1s-sing-perf.dj
   “I sang.”

b. Before an agreeing object
   
   1s-9-sing-perf.dj 9.song 9.your
   “I sang your song.”

c. Before an unfocused adjunct
   
   U-cul-ile izolo. #Ucule izolo.
   2s-sing-perf.dj yesterday
   “You sang yesterday.”

Certain negative tenses have a perfect component and display the alternation:

(13) a. A-ngi-gqok-ile. (disjoint)
   
   NEG-1s-wear-perf.dj
   “I’m not dressed.”

b. *Angigqoke. (conjoint)
   “I’m not dressed.”

(14) a. A-ngi-gqok-e sigqoko. (conjoint)
   
   NEG-1s-wear-perf.cj 7.hat
   “I’m not wearing any hat.”

b. *Angigqokile sigqoko. (disjoint)
   “I’m not wearing any hat.”
**Wh phrases and junctivity.** A *Wh* phrase must be preceded by the conjoint form of the verb, as shown in (16):

(15) a. U-bon-e bani? (conjoint)  
    2s-see-perf.cj 1.who  
    “Who did you see?”

b. * U-bon-ile bani? (disjoint)  
    “Who did you see?”

(16) a. U-ngi-bon-e nini? (conjoint)  
    2s-1s-see-perf.cj when  
    “When did you see me?”

b. * U-ngi-bon-ile nini? (disjoint)  
    “When did you see me?”

(17) a. U-bon-e-ni? (conjoint)  
    2s-see-perf.cj-what  
    “What did you see?”

b. * U-bon-ile-ni? (disjoint)  
    “What did you see?”

Unexpectedly, *ngani* does not behave like other *Wh* phrases:

(18) a. * A-wu-gqok-e ngani? (conjoint)  
    neg-2s-wear-perf.cj why  
    “Why aren’t you dressed?”

b. A-wu-gqok-ile ngani? (disjoint)  
    “Why aren’t you dressed?”

This is only a behaviour of *ngani* in its meaning as “why”:

(19) a. U-bhal-e ngani? (conjoint)  
    2s-write-perf.dj for-what  
    “What did you write about?”

b. * U-bhal-ile nga-ni? (disjoint)  
    “What did you write about?”

The contrast is summarised in (20):

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

**Analyses of junctivity.** There are two classes of analyses for the conjoint/disjoint alternation, but they lead to the same conclusion.

1. **Junctivity encodes focus.** The alternation directly encodes focus, is a focus head, etc. (Ndayiragije 1999; Gündemann 1996; van der Wal 2006).

    2s-sing-perf.cj when  
    “When did you sing?”

    neg-2s-sing-perf.dj why  
    “Why haven’t you sung?”
Assume that a postverbal Wh phrase is always IP-internal. Why are two foci grammatical in (22b) but not in (22a):

(22) a. * [IP [ U-cul-ile ]_foc 2s-sing-PERF.DJ ]_foc nini? ]_foc [ IP (disjoint) when
   "When did you sing?"
   b. [IP [ A-wu-cul-ile ]_foc 2s-sing-PERF.DJ ]_foc ngani? ]_foc [ IP (disjoint) why
   "Why haven’t you sung?"

The anomaly can be resolved by assuming that there can only be one focused element within IP. Ngani thus falls outside of IP:

(23) [IP [ A-wu-cul-ile ]_foc 2s-sing-PERF.DJ ]_foc ngani? ]_foc [ IP (disjoint) why
   "Why haven’t you sung?"

2. **Junctivity encodes constituency.** The conjoint form is always non-final within a certain constituent (such as IP). The disjoint form is constituent-final (van der Spuy 1993; Buell 2006).

   "Why haven’t you sung?"

3 **The semantics of negative reason questions**

Differences in extraction possibilities from weak islands have been described in terms of arguments/adjuncts, D-linked/non-D-linked elements, and individuated/non-individuated elements (Szabolcsi 2002):

(25) a. [Which boy]_i didn’t you see t_i?
   b. * [How much maize]_i didn’t you buy t_i?

*How* and *why* are often thought of behaving similarly in this respect:

(26) a. * How_i don’t you think [CP t_i Judy fixed the car? With a wrench.
   b. * Why_i don’t you think [CP t_i Judy fixed the car? Because she wanted to.

But in monoclausal contexts, *why* behaves differently from *how* and from quantity questions like *how much*:

(27) a. * [How much maize]_i didn’t you buy t_i?
   b. * [How]_i didn’t a boy behave t_i?
   c. Why didn’t you sing?

*Why* implies presuppositions different from other adverbial Wh phrases:
(28)  
   a. Q: When didn’t you sing $t_i$?
       A: # But I did sing!
   b. Q: How didn’t you sing $t_i$?
       A: # But I did sing!
   c. Q: Why didn’t you sing?
       A: But I did sing!

These facts are most easily explained by introducing why high in the clause rather than in the thematic domain.

(29)

```
CP  
    why
   IP
    VP
```

Let’s consider a selected infinitive construction (Buell 2007b). Note how in an (affirmative) why question the applicative morpheme and the clitic -ni “why” can attach to the selected infinitive:

(30)  
```
[IP U-fun-a  uku-hamb-a nini? ]
2s-want-FV 15-go-FV- when
```

“When do you want to leave?”

(31)  
```
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?”

Not so with ngani. But if ngani were inside the embedded infinitival phrase, as in (32a), it would fall under the scope of negation:

(32)  
```
   NEG-2s-want-FV 15.leave-FV  why

   NEG-2s-want-FV  why  15.leave-FV
```

“Why don’t you want to leave?”

Conclusion:

- Semantics wants why to be outside the scope of negation.
- Negation is arguably a Neg$^0$ head very high in the Zulu inflectional domain.
- Therefore, semantics forces ngani to be in the complementiser domain.

6
4 Implementing the linear position

The postverbal property. *Ngani* has two linear properties to account for:

- Postverbal property.
- Immediate postverbal property.

Not head movement. *Ngani* is a postverbal element in the complementiser domain, but its postverbal position doesn’t come about by verbal head movement.

(33) A-wu-theng-e ingubo entsha.
    neg-2s-buy-perf.CJ 9.dress  9.new

“You haven’t bought a new dress.”

(34) a. * [CP Awuthengile, [C′ ngani [CP ti [C′ [IP ti ingubo entsha ]]]]]
    neg-2s-buy-perf.DJ why 9.dress  9.new

b. A-wu-yi-theng-ile ngani ] ingubo entsha?
    neg-2s-9buy-perf.DJ why 9.dress  9.new

“Why haven’t you bought a new dress?”

Phrasal movement around *ngani*. The verb must thus be contained in a phrase that precedes *ngani*:

(35) a. *Ngani* in a right-branching specifier

```
          CP
            |
           C'
           |
          ngani

     IP
    /
   /
```

b. Movement of IP around *ngani*

```
            CP
              |
             C'
             |
            ngani
          /
         /
awuculile

```

Multiclausal structures suggest that only the phrasal movement is possible:

(36) a. [CP A-ni-cabang-i [CP ukuthi uThandi u-cul-ile. ]]
    neg-2p-think-FV that 1.Thandi 1-sing-perf.DJ

“You don’t think that Thandi sang.”

b. 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?”
Other clause-final elements. Zulu has two postverbal elocutionary force particles:

(37) a. U-cul-ile yini na?
   2s-sing-perf.dj pol.q q
   “Did you sing?”
b. Uculile yini?
c. Uculile na?
d. Uculile?
e. *Uculile na yini?

Thwala (2004) has convincingly argued that yini is an Int\(^0\) head and na a Force\(^0\) head (Rizzi 1997):

(38)

To account for the linear order, movement of the IP to the left of yini or na is necessary. This is exactly what I am claiming happens with ngani.

Ordering with respect to interrogative na shows that there is still at least one projection higher than the one occupied by ngani:

(39) a. [[ A-wu-khulumi ngani ]\(\_\)CP na? ]\(\_\)ForceP
   neg-2s-speak-fv why q
   “Why aren’t you speaking?”
b. *Awukhulumi na ngani?

Immediately postverbal. We have taken care of the postverbal property, but not of the immediately postverbal property.

(40) a. [[ IP A-wu-yi-theng-ile ngani ingubo entsha? ]\(\_\)IP
   neg-2s-buy-perf.dj why 9.dress 9.new
   “Why haven’t you bought a new dress?”
b. *[IP A-wu-theng-ile/e ingubo entsha ] ngani?  
   neg-2s-buy-perf.dj/cj 9.dress 9.new why
   “Why haven’t you bought a new dress?”
This must be handled by something like a complexity filter (Koopman and Szabolcsi 2000): a head may require an overt specifier to be occupied by something of a maximum order of complexity or weight.

(41)

Any postverbal material within the IP must be moved out before IP moves to the specifier of *ngani*.

5 *Ngani* and the IAV position

Recall that we have defined the IAV position in this way:

(42) Immediate After the Verb (IAV) Position. A linear position immediately after the verb in which a focused element has to appear. (Repeated from (6).)

Neither *ngani* nor arbitrary *Wh* phrases tolerate an object intervening between itself and the verb:

(43) a. *U-theng-e ingubo entsha nini?*
    2s-buy-perf.cj 9.dress  9.new  when
    “When did you buy a new dress?”

b. *A-wu-theng-ile ingubo entsha ngani?*
    neg-2s-buy-perf.dj 9.dress  9.new  why
    “Why haven’t you bought a new dress?” (Repeated from (34c).)

Both *ngani* and arbitrary *Wh* phrases are subject to IAV focus effects.

Two separate analyses for IAV:

- **IAV for arbitrary Wh phrases.** IAV focus effects have been analysed in two ways:
  - Focus corresponds to a sub-IP FocP (Ndaiyiragije 1999; van der Wal 2006).
  - Focus is in an arbitrary VP-internal position. Non-focal material evacuates from the VP (Buell 2007a; Cheng and Downing 2006; Hyman and Polinsky 2007).

What the two approaches have in common: the focused element is in some sub-IP position.
• IAV for ngani. Ngani has been argued to be external to the IP.

The linear IAV position corresponds to at least two positions: one IP-internal and another IP-external.

6 Conclusion

1. If the IAV position is defined in terms of a postverbal focal position (as in (6)), it cannot correspond to a single structural position. In Zulu, it corresponds to at least two structural positions: one inside IP and another in the complementiser domain.

2. Prosody needs to be examined, particularly penultimate lengthening:
   - If there is prosodic evidence for a boundary between the verb and ngani, this would support the analysis that ngani is IP-external.
   - If there is no such prosodic evidence, then this constitutes an interesting mismatch between prosody and syntax.

3. Reason questions should be examined in more SVO Wh-in-situ languages. Consider, for example, Egyptian Arabic:

   (44) ha- truuḫ 'intat,?
       FUT- 3M.go when
       “When will you go?”

   Although leeh “why” is sentence-final in (45b), it doesn’t originate from within the embedded clause, because the sentence is questioning a reason for “not wanting”, and not for “going”:

   (45) a. miš ha- truuḫ leeh,?
       not FUT- 3M.go why
       “Why won’t you go?”
   b. miš 'ayziin- ak [CP tiruuḫ ] leeh?
       not want.pl- you 2M-.go why
       “Why don’t they want you to go?”
A  Glossing conventions

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”. Tense/aspect/negation-related verbal suffixes (of which exactly one appears per verb) are glossed as FV (for “final vowel”), except that the perfect suffixes are glossed as PERF.DJ (disjoint) and PERF.CJ (conjoint) Other abbreviations are APPL “applicative”, NEG “negation”, POL “polarity”, and Q “question”. The nominal augment or pre-prefix, which is a kind of determiner, is not glossed separately.

References


