Forming *wh*-questions in Shona:
A comparative Bantu perspective*

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1 Overview

1.1 *Wh*-question strategies

*Wh*-question formation strategies may be categorized according to whether the *wh*-phrase is pronounced in its *scopal* position, its *canonical* position, or in between:

(1) a. *Wh*-in-situ: \[ [\text{CP} \ldots [\text{CP} \ldots \text{wh} \ldots ]] \]

b. Full *wh*-movement: \[ [\text{CP} \text{wh} \ldots [\text{CP} \ldots \ldots ]] \]

c. Partial *wh*-movement: \[ [\text{CP} \ldots [\text{CP} \text{wh} \ldots \ldots ]] \]

Central theoretical issues:

- The nature of the relations depicted by the lines in (1)
- Whether any of these strategies can be assimilated to another

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1.2 The Bantu language family

- 300–680 languages (Nurse & Philippson 2003)
- L1 speaker counts vary from 50 million (Marten et al. 2007) to 240 million (Nurse & Philippson 2003)
- Covers most of sub-Saharan Africa (from southern Cameroon eastward to southern Kenya and southward to the tip of the continent, with the exception of the Khoisan families in the southwest)
- Subgroup of the Niger-Congo family, which has ~1,500 languages and ~437 million speakers (Lewis et al. 2015)

**Phonology:**

- Lexical and grammatical tone (usually 2 level tones plus contours)
- Inventories typically have 5–7 vowels and many consonants
- Prenasalized and labialized obstruents are common
- Vowel height harmony

**Morphosyntax:**

- Noun class systems encoding number and non–sex-based gender
- Robust *ϕ*-agreement, null subjects
- Typically agglutinative verbal morphology
- SVO with discourse-driven displacement
- Multiple strategies for forming *wh*-questions

**Family-level comparative syntactic work** (Marten et al. 2007):

- Double object constructions (Bresnan & Moshi 1990, Simango 1995)
- Extraction marking (Zentz 2015)
- *Wh*-questions (Zentz 2016)
1.3 Shona wh-questions

Shona, a Bantu language spoken by about 13 million people in Zimbabwe and Mozambique, allows all three of the strategies in (1), or at least so it appears at first glance.

(2) Shona wh-in-situ

a. In-situ wh–indirect object

\[ \text{V-aka-teng-er-a} \quad \text{Ø-ani} \quad \text{Ø-rokwe?} \]

(Shona)

[2.SM-TA-buy-APPL-FV] 1a-who 5-dress³

‘Who(m) did they buy a dress (for)?’ (lit., ‘They bought who(m) a dress?’)  
(2015-08-29-02-TD)

b. Long-distance in-situ wh–indirect object

\[ \text{W-ai-fung-a} \quad \text{[cp kuti]} \quad \text{v-aka-teng-er-a} \quad \text{Ø-ani} \quad \text{Ø-rokwe?} \]

(Shona)


‘Who(m) did you think they bought a dress (for)?’ (lit., ‘They thought that it’s who that they bought a dress (for)?’)  
(2015-01-17-01-TD)

(3) Shona full wh-movement

a. Full movement of a wh–indirect object

\[ \text{Ndi-Ø-ani} \quad \text{wa-v-aka-teng-er-a} \quad \text{Ø-rokwe?} \]

(Shona)


‘Who(m) did they buy a dress (for)?’ (lit., ‘It’s who that they bought a dress (for)?’)  
(2016-02-13-01-TD)

b. Long-distance full movement of a wh–indirect object

\[ \text{Ndi-Ø-ani} \quad \text{wa-w-ai-fung-a} \quad \text{[cp kuti]} \quad \text{v-aka-teng-er-a} \quad \text{Ø-rokwe?} \]

(Shona)


‘Who(m) did you think (lit., ‘It’s who that you thought) they bought a dress (for)?’  
(2015-01-17-01-TD)

(4) Shona partial wh-movement

a. Partial movement of a wh–indirect object

\[ \text{W-ai-fung-a} \quad \text{[cp kuti]} \quad \text{ndi-Ø-ani} \quad \text{wa-v-aka-teng-er-a} \]

(Shona)


‘Who(m) did you think they bought a dress (for)?’ (lit., ‘They thought that it’s who that they bought a dress (for)?’)  
(2015-01-17-01-TD)

b. Long-distance partial movement of a wh–indirect object

\[ \text{W-ai-fung-a} \quad \text{[cp kuti]} \quad \text{ndi-Ø-ani} \quad \text{wa-t-aka-fember-a} \]

(Shona)

[2SG.SM-TA-think-FV] that 1a.NSE-1PL.SM-guess-FV 5-dress

‘Who(m) did you think we guessed they bought a dress (for)?’ (lit., ‘They thought that we guessed that it’s who that they bought a dress (for)?’)  
(2015-01-17-01-TD)
In Zentz 2016, I conducted the first in-depth examination of Shona wh-questions, exploring the derivational relationships among these strategies.

Data collection:
- 50 hours of elicitation in the Yale linguistics department between June 2014 and February 2016
- Consultant Thabani Dhlakama is a biomedical engineer (Yale BS ’13) from Harare, Zimbabwe

Methodological aims:
- Apply morphosyntactic tests rigorously and thoroughly to tease apart alternative analyses
- Compare Shona with other Bantu languages to uncover parameters of microvariation

Goals for this talk:
- Demonstrate that Shona wh-in-situ does not involve movement
- Highlight a previously predicted but undiscovered island sensitivity pattern
- Unify the analysis of Shona full wh-movement and partial wh-movement as cleft-based wh-ex-situ

2 Wh-in-situ

Central theoretical question: How is the relation between the scopal and pronunciation positions of the wh-phrase established?

Current state of affairs: In Bantu languages, wh-in-situ questions are often taken to be derived via a non-movement relation, but alternatives that have been proposed for non-Bantu languages have rarely been considered.

Preview:
- Present 4 properties of Shona wh-in-situ
- Evaluate 5 potential analyses (3 with movement, 2 without movement)
- Unselective binding, a non-movement relation, emerges as the winner for Shona.
- Bantu languages show diversity with respect to wh-in-situ.

2.1 Unselective binding


- No movement involved
- In the semantics, a null operator in the scopal position binds the wh-phrase
- Prediction: In-situ questions should show identical morphosyntax to their declarative counterparts.

The following sections will reveal that this prediction is borne out for Shona wh-in-situ.

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2.2 Disguised movement


- **Overt wh-movement** to the scopal position
- **Overt remnant movement** of the rest of the sentence
- **Prediction**: Wh-phrases will be **sentence-final**, not in their canonical position. Thus this is only **apparent** wh-in-situ.

(6) **Bellunese non-subject wh-in-situ**

a. *Postverbal in-situ wh–direct object*
   A-tu magnà che? [Bellunese]
   'What have you eaten?' (Munaro et al. 2001:149 (4a))

b. *Postverbal in-situ wh–locative adjunct*
   Sé-tu ’ndat andé? [Bellunese]
   'Where have you gone?' (Munaro et al. 2001:149 (4c))

(7) **Bellunese wh-phrases are sentence-final, not in situ**

a. *Declarative word order*
   Al ghe a dat al libro a so fradel. [Bellunese]
   'He gave the book to his brother.' (Poletto & Pollock 2015:139 (9d))

b. *Questioning the direct object with declarative word order in the vP*
   *Ghe ha-lo dat che a so fradel?* [Bellunese]
   'What did he give to his brother?' (Poletto & Pollock 2015:139 (9e))

c. "**In-situ" sentence-final wh–direct object"*
   Ghe ha-lo dat che, a so fradel? [Bellunese]
   'What did he give, to his brother?' (Poletto & Pollock 2015:140 (9f))

(8) **Derivation of (6a), adapted from Poletto & Pollock 2015:138 (8)**

Shona has true wh-in-situ, with wh-phrases appearing in their **canonical positions**, which are not necessarily sentence-final.

(9) **Shona wh-phrases are in situ, not sentence-final**

a. *Declarative word order*
   V-aka-teng-er-a Ø-Thandi Ø-rokwe ku-chi-toro. [Shona]
   'They bought Thandi a dress at the store.' (2016-02-13-01-TD)

b. *In-situ wh–indirect object*
   V-aka-teng-er-a Ø-ani Ø-rokwe ku-chi-toro? [Shona]
   'Who(m) did they buy a dress (for) at the store?' (2016-02-13-01-TD)

c. *In-situ wh–direct object*
   V-aka-teng-er-a Ø-Thandi chi-i ku-chi-toro? [Shona]
   'What did they buy Thandi at the store?' (2016-02-13-01-TD)

d. *In-situ wh–locative adjunct*
   V-aka-teng-er-a Ø-Thandi Ø-rokwe ku-pi? [Shona]
   'Where did they buy Thandi a dress?' (2016-02-13-01-TD)
2.3 Lower copy spell-out

(Fanselow & Ćavar 2001, Reintges 2007a,b, Reintges et al. 2006)

- **Overt wh-movement** to the scopal position
- Pronunciation of a **lower copy**
- **Prediction:** If the language has extraction marking, it will appear even in wh-in-situ.

(10) **Extraction marking with Coptic wh-in-situ**

a. **In-situ wh-subject**

\[
\text{nt-a nim tšpo na-f n-tei-hypomonɛ...?} \quad \text{[Coptic]}
\]
\[
\text{REL-PRF who acquire for-3SG.M OBL-DEM.SG.F-endurance}
\]

‘Who has acquired such an endurance ...?’ (Hilaria 12, 29; ed. Drescher, cited in Reintges et al. 2006:179 (26a))

b. **In-situ wh-direct object**

\[
\text{e-i-na-tše u na-k?} \quad \text{[Coptic]}
\]
\[
\text{REL-FUT-1SG-AUX-say what to-2SG.M}
\]

‘What shall I say to you?’ (Apophth. Patrum no. 28, 5, 25; ed. Chaîne, cited in Reintges et al. 2006:179 (26b))

c. **In-situ wh-object of a preposition**

\[
\text{e-tetən-šine ansa nim?} \quad \text{[Coptic]}
\]
\[
\text{REL.PRS-2PL-search for who}
\]

‘Who(m) are you looking for?’ (John 18:4, cited in Reintges et al. 2006:179 (26c))

(11) **Lack of extraction marking with in-situ wh–non-subjects**

a. **In-situ wh-indirect object**

\[
\text{(*Wa)-v-aka-teng-er-a Œ-ani Œ-rokwe ku-chi-toro?} \quad \text{[Shona]}
\]
\[
\text{1a.NSE-2.SM-TA-buy-APPL-FV 1a-who 5-dress 17-7-store}
\]

‘Who(m) did they buy a dress (for) at the store?’ (2016-02-13-01-TD)

b. **In-situ wh-direct object**

\[
\text{(*Cha)-v-aka-teng-er-a Œ-Thandi chi-i ku-chi-toro?} \quad \text{[Shona]}
\]
\[
\text{7.NSE-2.SM-TA-buy-APPL-FV 1a-Thandi 7-what 17-7-store}
\]

‘What did they buy Thandi at the store?’ (2016-02-13-01-TD)

c. **In-situ wh-locative adjunct**

\[
\text{(*Kwa)-v-aka-teng-er-a Œ-Thandi Œ-rokwe ku-pi?} \quad \text{[Shona]}
\]
\[
\text{17.NSE-2.SM-TA-buy-APPL-FV 1a-Thandi 5-dress 17-which}
\]

‘Where did they buy Thandi a dress?’ (2016-02-13-01-TD)
(12) Island sensitivity in Vietnamese wh-in-situ
   a. In-situ argument wh-phrase within an adjunct island
      *Tấn sẽ thuá cuóc [island vi ai làm hư [Vietnamese]
      Tan fut lose event because who make damage
      xe của anh.ta]?
      ‘Who will Tan lose the race because ___ will damage his car?’ (lit., ’Tan
      will lose the race because who will damage his car?’)
   (Tran 2009:175 (10a))

   b. In-situ adjunct wh-phrase within a relative clause island
      *Tấn sẽ chụp hình [island con hõu dâ đa dõi [Vietnamese]
      Tan fut catch picture clf tiger ASP scare
      ai]?
      who
      ‘Who(m) will Tan take a picture of the tiger that scared ___?’ (lit., ’Tan
      will take a picture of the tiger that scared who(m)?’)
   (Tran 2009:174 (8a))

Shona wh-in-situ is not sensitive to islands, whether relative clause islands, complement clause islands, or adjunct islands.

(13) Lack of island sensitivity in Shona wh-in-situ
   a. In-situ wh-subject within a relative clause island
      U-no-ziv-a [island mu-sikan wa-v-ai-fung-a [Shona]
      2sg.sm-ta-know-fv 1-girl 1.nse.2.sm-ta-think-fv
      [clh kuti Ò-ani aka-sarudz-a]?
      that 1a-who 1a.sm.ta-choose-fv
      ‘Who do you know the girl that they thought who chose?’ (lit., ’You
      know the girl that they thought who chose?’) (2014-11-01-01-TD)

   b. In-situ wh–direct object within a relative clause island
      Va-ri ku-tsvag-a [island mu-rume òka-b-a [Shona]
      2.sm-be 15.look.for-fv 1-man se.1.sm.ta-steal-fv
      chi-i]?
      7-what
      ‘What are they looking for the man who stole ___?’ (lit., ’They are
      looking for the man who stole what?’)
   (2014-12-06-02-TD)

   c. In-situ wh-subject within a complement clause island
      ?Aka-ramb-a [island ny-a ya ye-kuti chi-i [Shona]
      1.sm.ta-deny-fv 9-story 9.of.that 7-what
      ch-aka-rum-a ò-Taurai pa-Ø-gumbo]?
      7.sm.ta-bite-fv
      ‘Who(m) did they (sg.) deny the story that it (their dog) bit ___ on
      the leg?’ (lit., ’They (sg.) denied the story that what bit Taurai on the leg?’)
   (2014-07-22-01-TD)

   d. In-situ wh–direct object within a complement clause island
      Aka-ramb-a [island ny-a ya ye-kuti y-aka-rum-a [Shona]
      Ò-ani pa-Ø-gumbo]?
      1a-who
      16-5-leg
      ‘Who(m) did they (sg.) deny the story that it (their dog) bit who(m) on
      the leg?’ (lit., ’They (sg.) denied the story that it (their dog) bit who(m) on
      the leg?’)
   (2014-09-27-01-TD)

   e. In-situ wh-subject within an adjunct island
      V-aka-feron-a ma-purisa [island nokuti Ò-ani [Shona]
      2.sm.ta-call-fv 6-police because 1a-who
      ò-aka-on-a m-bavha]?
      1a.sm.ta-see-fv 9-thief
      ‘Who did they call the police because ___ saw a thief?’ (lit., ’They called
      the police because who saw a thief?’)
   (2014-11-01-01-TD)
f. **In-situ wh–direct object within an adjunct island**

\[
V \text{-aka-foner-a} \text{ ma-purisa} \quad [\text{island} \text{ nokuti} \quad V \text{-aka-on-a} \quad [\text{Shona}]
\]

2.5 TA-call-FV 6-police because 2.5 TA-see-FV

\[ \emptyset \text{-ani} \]?

1a-who

'Who(m) did they call the police because they saw ___?' (lit., “They called the police because they saw who(m)?”)  
(2014-11-01-01-TD)

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### Table 3: Properties and analyses of Shona wh-in-situ (interim)

<table>
<thead>
<tr>
<th></th>
<th>Unselective Binding</th>
<th>Disguised Movement</th>
<th>Lower Copy Spell-out</th>
<th>Covert Movement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Word order same as declarative</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2. Lack of non-subject extraction marking above in-situ wh-phrases</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>3. Lack of island effects</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

#### 2.5 Computation of alternatives


- **No movement** involved
- In the semantics, wh-phrases introduce **alternatives**, which project up the tree so that the meaning of the question is a set of alternative propositions (possible answers).
- **Prediction:** Interpretation of these alternatives should be blocked by **intervening focus-sensitive operators** (Beck 2006).

#### (14) Intervention effects with Kiitharaka wh-in-situ

a. **Focus marker**

\[ *1-tù-gwatanî-îr-e \quad ûû \ n-a-ij-ir-e? \quad [\text{Kiitharaka}]
\]

\[
\text{NI-1pl.sm-agree-pfv-fv who NI-1.sm-steal-pfv-fv}
\]

'Who did we agree stole?'  
(Muriungi 2011:828 (27))

b. **Focus: ‘even’**

\[ *\text{Kiina} \quad a-gwîmi \ ba-gwatanî-îr-a \quad ûû \ n-a-ij-ir-e? \quad [\text{Kiitharaka}]
\]

\[
\text{even 2-hunter 2.sm-agree-pfv-fv who NI-1.sm-steal-pfv-fv}
\]

'Who did even the hunters agree stole?'  
(Muriungi 2011:828 (31))

c. **Negation**

\[ *\text{Tû-ti-ri-gwatanî-îr-a} \quad ûû \ n-a-ij-ir-e? \quad [\text{Kiitharaka}]
\]

\[
\text{1pl.sm-NEG-rec.pst-agree-pfv-fv who NI-1.sm-steal-pfv-fv}
\]

'Who didn’t we agree stole?'  
(Muriungi 2011:828 (30))

d. **Factive verb**

\[ *\text{Tû-îrir-ir-e} \quad ûû \ n-a-ij-ir-e? \quad [\text{Kiitharaka}]
\]

\[
\text{1pl.sm-regret-pfv-fv who NI-1.sm-steal-pfv-fv}
\]

'Who did we regret stole?'  
(Muriungi 2011:828 (32))

---

#### Shona wh-in-situ is not sensitive to focus interveners.

#### (15) Lack of intervention effects with Shona local wh-in-situ

a. **Focus: ‘only’**

\[ ?(\text{Ndî})-Ø-Rumbi \quad \text{chete aka-vereng-a} \quad Ø-bhuku \text{ ri-pi}? \quad [\text{Shona}]
\]

\[
\text{NI-1a-Rumbi only 1a.sm.ta-read-fv 5-book 5-which}
\]

'Which book did only Rumbi read?'  
(2014-07-29-01-TD)

b. **Focus: ‘also’**

\[ Ø-\text{Tendai aka-vereng-a=wo} \quad Ø-bhuku \text{ ri-pi}? \quad [\text{Shona}]
\]

\[
\text{1a-Tendai 1a.sm.ta-read-fv=also 5-book 5-which}
\]

'Which book did Tendai also read?'  
(2014-07-29-01-TD)
c. Focus: ‘even’

**Chero** Ø-Tendai aka-vereng-a Ø-bhuku ri-pi? [Shona]

**even** 1a-Tendai 1a.sm.ta-read-FV 5-book 5-which

‘Which book did even Tendai read?’ (2014-07-29-01-TD)

d. Negation

Ø-Taurai ha-a-n-a ku-teng-a chi-i? [Shona]

1a-Taurai NEG-1a.sm-be.with-FV 15-buy-FV 7-what

‘What didn’t Taurai buy?’ (2014-10-22-01-TD)

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### Table 4: Properties and analyses of Shona wh-in-situ (final)

<table>
<thead>
<tr>
<th>Property</th>
<th>Unselective Binding</th>
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<td>x</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3. Lack of island effects</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4. Lack of intervention effects</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

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### 2.6 Summary

- Bantu true wh-in-situ requires a non-movement analysis.
  - Shona lacks intervention effects \(\rightarrow\) unselective binding
  - Kîîtharaka and Lubukusu show intervention effects \(\rightarrow\) alternative computation

- A few Bantu languages (e.g., Dzamba (Bokamba 1976)) may have apparent wh-in-situ, amenable to a disguised movement analysis.³

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### 3 Full wh-movement

**Central theoretical question:** Is this truly full wh-movement? In other words, can the wh-phrase be pronounced in its scopal position or is it always pronounced in a lower position, as in wh-in-situ?

**Current state of affairs:** Whether Bantu languages have monoclausal or biclausal wh-ex-situ (and focus-ex-situ more generally) has been debated.⁴

- Abels & Muriungi (2008) argue persuasively that Kîîtharaka has a monoclausal construction in which the wh-phrase moves to its scopal position.

**Preview:**

- Present evidence that Shona full wh-movement patterns with focus-ex-situ
- Argue that Shona full wh-movement (and focus-ex-situ) is a biclausal cleft: copula + cleft phrase + cleft clause (Hartmann & Veenstra 2013)
- Examine two predictions of the cleft analysis

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### (16) Proposal for Shona (interim)

\[
\begin{array}{c}
\text{scopal} \\
[CP \text{Op} & \ldots & \text{wh} & \ldots ] \\
\text{unselective binding}
\end{array}
\]

\[
\begin{array}{c}
\text{canonical} \\
[CP \text{Op} \text{NT} & \text{RelCl} & \text{wh} & \ldots ] \\
\text{unsel. binding overt relativization}
\end{array}
\]

³For languages that have full wh-movement without any kind of copula or focus marker, monoclausal analyses prevail (e.g., Carstens (2005) for Kilega). But whether there is a clause boundary in constructions involving reflexes of Proto-Bantu ni has been particularly contentious.
3.1 Wh-ex-situ as focus-ex-situ

Shona ex-situ wh-phrases must be attached to an allomorph of ni, a reflex of Proto-Bantu ni.

(17) Local wh-ex-situ

a. Ex-situ wh-subject

*[(Ndi)-Ø-ani] __ åka-teng-er-a  Ø-Thandi [Shona]
N1-1a-who se.1a.sm.ta-buy-APPL-FV 1a-Thandi
Ø-rokwe ku-chi-toro?
5-dress 17-7-store
‘Who (lit., It’s who that) bought Thandi a dress at the store?’
(2016-02-13-01-TD)

b. Ex-situ wh–indirect object

*[(Ndi)-Ø-Thandi] wa-v-aka-teng-er-a  __ [Shona]
N1-1a-Thandi 1a.nse.2.sm.ta-buy-APPL-FV
kù-chì-toro.
5-dress 17-7-store
‘Who(m) did they buy (lit., It’s who that they bought) a dress (for) at the store?’
(2016-02-13-01-TD)

c. Ex-situ wh–direct object

{[(Chi)-i/Chi]-ì} cha-v-aka-teng-er-a  Ø-Thandi __ [Shona]
*(Nì)-7-what 7.nse.2.sm.ta-buy-APPL-FV 1a-Thandi
kù-chì-toro.
5-dress 17-7-store
‘What did they buy (lit., It’s what that they bought) Thandi at the store?’
(2016-02-13-01-TD)

d. Ex-situ wh–locative adjunct

*[(Nde)-ku-pì] kwa-v-aka-teng-er-a  Ø-Thandi [Shona]
N1-17-which 17.nse.2.sm.ta-buy-APPL-FV 1a-Thandi
Ø-rokwe __?
5-dress
‘Where did they buy (lit., It’s where that they bought) Thandi a dress?’
(2016-02-13-01-TD)

The same is true of focus-ex-situ, as shown in the answers to the questions in (17).

(18) Local focus-ex-situ

a. Ex-situ wh-subject

*[(Va/Và)-kadzi] __ vāka-teng-er-a  Ø-Thandi [Shona]
*(Nì).2-woman se.2.sm.ta-buy-APPL-FV 1a-Thandi
Ø-rokwe ku-chì-toro.
5-dress 17-7-store
‘It’s THE WOMEN who bought Thandi a dress at the store.’
(2016-02-13-01-TD)

b. Ex-situ wh–indirect object

*[(Ndi)-Ø-Thandi] va-v-aka-teng-er-a  __ [Shona]
N1-1a-Thandi 1a.nse.2.sm.ta-buy-APPL-FV
Ø-rokwe kù-chì-toro.
5-dress 17-7-store
‘It’s THANDI that they bought a dress (for) at the store.’
(2016-02-13-01-TD)

c. Ex-situ wh–direct object

*[(I)-Ø-rokwe] ra-v-aka-teng-er-a  Ø-Thandi __ [Shona]
N1-5-dress 5.nse.2.sm.ta-buy-APPL-FV 1a-Thandi
kù-chì-toro.
17-7-store
‘It’s A DRESS that they bought Thandi at the store.’
(2016-02-13-01-TD)

d. Ex-situ wh–locative adjunct

*[(Kù/Kú)-chi-toro] kwa-v-aka-teng-er-a  Ø-Thandi [Shona]
*(Nì)-17-7-store 17.nse.2.sm.ta-buy-APPL-FV 1a-Thandi
Ø-rokwe __?
5-dress
‘It’s AT THE STORE that they bought Thandi a dress.’
(2016-02-13-01-TD)
### 3.2 Biclausal structure

The structure of these Bantu focus-ex-situ constructions has been the topic of some debate, as shown in Table 5.

<table>
<thead>
<tr>
<th>Language</th>
<th>Biclausal Reference</th>
<th>Monoclausal Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubukusu</td>
<td>Diercks 2010</td>
<td>Wasike 2007</td>
</tr>
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<td>Kinande</td>
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<td>Schneider-Zioga 2007</td>
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<td>Kuria</td>
<td></td>
<td>Landman &amp; Ranero 2014, Ranero 2014</td>
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<td>Lingala</td>
<td>Van der Wal &amp; Maniacky 2015</td>
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<tr>
<td>Kiyoombe</td>
<td>Van der Wal &amp; Maniacky 2015</td>
<td></td>
</tr>
<tr>
<td>N. Sotho</td>
<td>Zerbian 2006</td>
<td></td>
</tr>
<tr>
<td>Basaáá</td>
<td>Hamlouï &amp; Makasso 2015</td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Some prior analyses of Bantu focus-ex-situ

#### 3.2.1 Kiitharaka

In the spirit of Schwarz’s (2003:78–82) argument from topicalization out of focus constructions in Kikuyu, Abels & Muriungi (2008) introduce a new diagnostic for the clause boundary.

If the focus construction were biclausal, then the fronting of the temporal modifier out of the focus construction in (19b) should be just as bad as fronting it out of the relative clause in (20b), contrary to fact.

\[(19) \quad \text{Temporal modifiers may be fronted out of a focus construction}
\]

\[a. \quad \text{Temporal modifier within focus construction}
\]

\[
\begin{align*}
\text{I-mw-amba} & \quad \text{Peter} \quad \text{a-ra-on-ir-e} \\
\text{5-yesterday} & \quad \text{1.Peter} \quad \text{1.PSM-REC.PST-SAY-PVF-FVF}
\end{align*}
\]

\[
[\text{I-goro}].
\]

\[
\text{‘The thief Peter saw yesterday.’} \quad \text{(Abels & Muriungi 2008:725 (99a))}
\]

\[b. \quad \text{Temporal modifier fronted out of focus construction}
\]

\[
\begin{align*}
\text{I-goro} & \quad \text{I-mw-amba} \quad \text{Peter} \\
5-yesterday & \quad \text{1.Peter} \quad \text{a-ra-on-ir-e} \\
\text{1.PSM-REC.PST-SAY-PVF-FVF}
\end{align*}
\]

\[
\text{‘Yesterday the thief Peter saw.’} \quad \text{(Abels & Muriungi 2008:725 (99a))}
\]

\[(20) \quad \text{Temporal modifiers may not be fronted out of a relative clause}
\]

\[a. \quad \text{Temporal modifier within relative clause}
\]

\[
\begin{align*}
\text{Boriisi} & \quad \text{ba-ka-thaik-a} \\
\text{2.police} & \quad \text{2.PRM-RED-ARREST-FVF} \\
\text{[RelCl]} & \quad \text{mw-amba} \quad \text{û-ra} \quad \text{1.thief} \quad \text{1-that}
\end{align*}
\]

\[
\text{Peter} \quad \text{a-ra-on-ir-e} \quad \text{1.Peter} \quad \text{1.PSM-REC.PST-SAY-PVF-FVF} \quad \text{5-yesterday}
\]

\[
\text{‘The police will arrest the thief that Peter saw yesterday.’} \quad \text{(Abels & Muriungi 2008:725 (98a))}
\]

\[b. \quad \text{Temporal modifier fronted out of relative clause}
\]

\[
\begin{align*}
\star \quad \text{I-goro} & \quad \text{boriisi} \quad \text{ba-ka-thaik-a} \\
5-yesterday & \quad \text{2.police} \quad \text{2.PRM-RED-ARREST-FVF} \\
\text{[RelCl]} & \quad \text{mw-amba} \quad \text{û-ra} \quad \text{Peter} \quad \text{a-ra-on-ir-e} \quad \text{1.Peter} \quad \text{1.PSM-REC.PST-SAY-PVF-FVF} \quad \text{5-yesterday}
\end{align*}
\]

\[
\text{‘Yesterday the police will arrest the thief that Peter saw.’} \quad \text{(Abels & Muriungi 2008:725 (98b))}
\]

Because of the contrast between (19b) and (20b), Abels & Muriungi (2008) argue that Kiitharaka focus-ex-situ is monoclausal.
3.2.2 Shona

In Shona, fronting the temporal modifier out of a focus construction is disallowed (21b), just like fronting it out of a relative clause (22b).

(21) Temporal modifiers may not be fronted out of a cleft clause

a. Temporal modifier within cleft clause

\[
\text{I-m-bavha}_i \quad \text{ya-aka-on-a} \quad t_i \quad \underline{\text{nezuro}}. \quad \text{[Shona]}
\]

\[
\text{nt-9-thief} \quad 9.\text{NSE-1.SM.TA-see-FV} \quad \text{yesterday}
\]

‘It’s a thief that s/he saw yesterday.’ (2015-04-14-02-TD)

b. Temporal modifier fronted out of cleft clause

\[
\text{*nezuro} \quad \text{j} \quad \text{yesterday} \quad \text{i-m-bavha}_i \quad \text{ya-aka-on-a} \quad t_i \quad t_j. \quad \text{[Shona]}
\]

‘Yesterday it’s a thief that s/he saw.’ (2015-04-14-02-TD)

(22) Temporal modifiers may not be fronted out of a relative clause

a. Temporal modifier within relative clause

\[
\text{Ma-purisa} \quad \text{a-cha-sung-a} \quad \text{[RelCl m-bavha}_i \quad \text{ya-aka-on-a} \quad \text{[Shona]}
\]

\[
6.\text{police} \quad 6.\text{SM.FUT-arrest-FV} \quad 9-\text{thief} \quad 9.\text{NSE-1.SM.TA-see-FV}
\]

\[
t_i \quad \underline{\text{nezuro}}. \quad \text{yesterday}
\]

‘The police will arrest the thief that s/he saw yesterday.’

(2015-04-14-02-TD)

b. Temporal modifier fronted out of relative clause

\[
\text{*nezuro}_i \quad \text{ma-purisa} \quad \text{a-cha-sung-a} \quad \text{[RelCl m-bavha}_i \quad \text{ya-aka-on-a} \quad \text{[Shona]}
\]

\[
yesterday 6.\text{police} \quad 6.\text{SM.FUT-arrest-FV} \quad 9-\text{thief} \quad 9.\text{NSE-1.SM.TA-see-FV}
\]

\[
t_i \quad \underline{\text{nezuro}} \quad t_i \quad t_j. \quad \text{[Shona]}
\]

‘Yesterday the police will arrest the thief that s/he saw.’

(2015-04-14-02-TD)

Given that Shona temporal modifier fronting is acceptable within a single clause (23b) but not across even a simple declarative clause boundary (24b), the unavailability of (21b) suggests that the focus-ex-situ construction is a biclusal cleft.

(23) Temporal modifiers may be fronted within a single clause

a. No fronting of temporal modifier

\[
\text{Aka-on-a} \quad \underline{\text{m-bavha}} \quad \text{nezuro}. \quad \text{[Shona]}
\]

\[
1.\text{SM.TA-see-FV} \quad 9-\text{thief} \quad \text{yesterday}
\]

‘S/he saw a thief yesterday.’

(2015-04-14-02-TD)

b. Fronting of temporal modifier

\[
\text{nezuro}_i \quad \text{j} \quad \text{yesterday} \quad \text{aka-on-a} \quad \text{m-bavha} \quad t_i. \quad \text{[Shona]}
\]

‘Yesterday s/he saw a thief.’

(2015-04-14-02-TD)

(24) Temporal modifiers may not be fronted across clauses

a. Temporal modifier within embedded clause

\[
\text{Va-cha-ti} \quad \text{[cr aka-on-a} \quad \underline{\text{m-bavha}} \quad \text{nezuro} \]. \quad \text{[Shona]}
\]

\[
2.\text{SM.FUT-say} \quad 1.\text{SM.TA-see-FV} \quad 9-\text{thief} \quad \text{yesterday}
\]

‘They will say s/he saw a thief yesterday.’

(2015-07-31-TD)

b. Temporal modifier fronted out of embedded clause

\[
\text{*nezuro}_i \quad \text{va-cha-ti} \quad \text{[cr aka-on-a} \quad \text{[Shona]}
\]

\[
yesterday 2.\text{SM.FUT-say} \quad 1.\text{SM.TA-see-FV} \quad \text{m-bavha} \quad t_i.
\]

9-\text{thief}

‘Yesterday they will say s/he saw a thief.’

(2015-07-31-TD)
3.3 A prediction of the matrix clause as a copular clause

A cleft analysis of focus-ex-situ predicts that ni should be able to be used as a copula in other constructions. This prediction is borne out in Shona.⁷

(25) Predicational uses of ni

a. Predicational copular sentence, ndi- allomorph
   Ø-Taurai ndi-Ø-mambo. [Shona]
   li-Taurai ni-li-king
   ‘Taurai is the king.’ (2014-09-13-01-TD)

b. Predicational copular sentence, i- allomorph
   Mu-rume u-ya i-m-bavha. [Shona]
   1m-man 1-that ni-9-thief
   ‘That man is a thief.’ (2014-09-13-01-TD)

c. Predicational copular sentence, H̥- allomorph
   Ø-Rumbi mú-biki. [Shona]
   li-Rumbi ni-li-1-cook
   ‘Rumbi is a cook.’ (2014-09-13-02-TD)

(26) Specificational uses of ni

a. Specificational copular sentence, ndi- allomorph
   Mu-tungamir-i wa-va-nhu va-Ø-Judha ndi-Ø-Nashani [Shona]
   1l-lead-nmlz 1.of-2-person 2.of-1a-Judah ni-1a-Nahshon
   mw-anakomana wa-Ø-Aminadhabhi.
   1n-son 1.of-1a-Aminnadab
   ‘The leader of the people of Judah is Nahshon son of Amminadab.’ (Num. 2:3, bsn)

b. Specificational copular sentence, ndi- allomorph
   Mu-mwe à-no-ndi-pupur-ir-a ndi-Ø-Baba [Shona]
   1-other ndi-1a-Father
   ‘The other one who is a witness for me is the Father.’
   (John 8:18, bsn)

³The copula usage of ni is not an argument in itself that focus-ex-situ is a cleft. The copula could simply be homophonous with a focus marker, or as Abels & Muriungi (2008) argue for Kîîtharaka, the copula could be null, in which case the focus marker would simply mark focus. However, the fact that ni is used as a copula is certainly consistent with the claim that Shona focus-ex-situ is clefting.

3.4 A prediction of the cleft clause as a relative clause

The cleft clause is classically analyzed as a relative clause (see Hartmann & Veenstra 2013 and Reeve 2012 for a survey). In many Bantu languages, complementizers or verbs in relative clauses bear extraction marking (Cheng 2006, Henderson 2006, Zentz 2015).

The verb in the Shona cleft clause bears the same morphology it would have in a relative clause: a floating low tone prefix for subject extraction and a φ-agreeing prefix for non-subject extraction. This is corroborating (though not conclusive) evidence for a cleft analysis.

(27) Subject extraction marking

a. Full wh-movement requires extraction marking
   Ndi-Ø-ani {{a/-å-}ka-teng-a Ø-rokwe? [Shona]
   ni-1a-who *(se).1a.sm.ta-buy-fv 5-dress
   ‘Who (lit., It’s who that) bought a dress?’

b. Relative clauses require extraction marking
   Ndi-no-ziv-a [[RelCl mu-sikana {{a/-å-}ka-teng-a [Shona]
   1sg.sm.ta-know-fv 1-girl *(se).1a.sm.ta-buy-appl-fv
   Ø-rokwe? 5-dress
   ‘I know the girl who bought Thandi a dress.’

(28) Non-subject extraction marking

a. Full wh-movement requires extraction marking
   Ndi-Ø-ani *(wa)-v-aka-teng-er-a Ø-rokwe? [Shona]
   ni-1a-who 1a.nse-2.sm.ta-buy-appl-fv 5-dress
   ‘Who(m) did they buy a dress (for)?’ (lit., ‘It’s who that they bought a dress (for)?’) (2016-02-13-01-TD)

b. Relative clauses require extraction marking
   Ndi-no-ziv-a [[RelCl mu-sikana *(wa)-v-aka-teng-er-a [Shona]
   1sg.sm.ta-know-fv 1-girl 1.nse-2.sm.ta-buy-appl-fv
   Ø-rokwe? 5-dress
   ‘I know the girl who they bought a dress (for).’ (2016-02-13-01-TD)
3.5 Summary

- Shona full wh-movement is neither full (the wh-phrase is not pronounced in its scopal position) nor wh-movement in the strict sense (the wh-phrase undergoes relativization).
- Abels & Muriungi’s (2008) clause boundary diagnostic is valid because it points the opposite direction for Shona as in Kiitharaka.

4 Partial wh-movement

Central theoretical question: Do full wh-movement and partial wh-movement require independent derivational mechanisms, or can they receive a unified analysis?

Current state of affairs: Very few analyses of Bantu partial wh-movement:

- Sabel (2000) proposes that Kikuyu partial wh-movement is a hybrid of wh-in-situ and full wh-movement, but island predictions were not tested.
- Sabel & Zeller (2006) propose that Zulu full wh-movement is really partial wh-movement, but island predictions were not tested.
- Abels (2012) entertains the idea of a unified analysis, but he rejects it for Kiitharaka because of island effects.

Proposal for Shona (final)

<table>
<thead>
<tr>
<th>Scopal</th>
<th>Canonical</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. In-situ:</td>
<td></td>
</tr>
<tr>
<td>b. “Full”:</td>
<td></td>
</tr>
<tr>
<td>c. Partial:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scopal</th>
<th>Canonical</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Wh-in-situ:</td>
<td></td>
</tr>
<tr>
<td>b. Full wh-movement:</td>
<td></td>
</tr>
<tr>
<td>c. Partial wh-movement:</td>
<td></td>
</tr>
<tr>
<td>d. Partial wh-movement:</td>
<td></td>
</tr>
</tbody>
</table>

Fanselow’s (2006) Generalization S4:

A wh-phrase that has undergone (partial) wh-movement must not be separated from its scope position by an island for movement.

In work simultaneous with mine, Torrence & Kandybowicz (2015:274) have discovered the same pattern in Krachi, a Niger-Congo language of Ghana. After I began presenting this pattern, Michelle Yuan (pers. comm.) has replicated my results in Kikuyu, showing that the predictions made by Sabel (2000) are borne out there.
The Shona pattern suggests that the higher relation in partial wh-movement is not established via movement, consistent with wh-in-situ, so no special type of movement is required.

Adjunct island

a. Wh-in-situ within an adverbial clause
W-ai-fung-a [cp kuti v-aka-foner-a ma-purisa [Shona] 2sg.sm-ta-think-fv that 2.sg-sm-ta-call-fv 6-police [island nokuti v-aka-on-a Ø-ani]?
because 2.sg-ta-see-fv 1a-who
‘Who(m) did you think they called the police because they saw who(m)?’
(lit., ‘You thought they called the police because who(m) saw who(m)?’) (2014-09-27-01-TD)
b. Full wh-movement out of an adverbial clause
ye-kuti y-aka-rum-a Ø-ani pa-Ø-gumbo]
9.of-that 9.sm-ta-bite-fv 1a-who 16-5-leg
‘Who(m) did you hear that they denied the story that it (their dog) bit who(m) on the leg?’
(lit., ‘You heard that they denied the story that it (their dog) bit who(m) on the leg?’) (2014-09-27-01-TD)
Partial wh-movement out of a DP’s clausal complement

*W-aka-nzw-a [cp kuti ndi-Ø-ani wa-v-aka-ramb-a [Shona] 2sg.sm-ta-hear-fv that ni-1a-who 1a.nse-2.sg-ta-deny-fv
[island ny-a-yi ye-kuti ya-yaka-rum-a pa-Ø-gumbo]?
9-story 9.of-that 9.sg-ta-bite-fv 16-5-leg
‘Who(m) did you hear that (lit., You heard that it’s who that) they denied the story that (their dog) bit ___ on the leg?’
(2014-09-27-01-TD)

Partial wh-movement within a DP’s clausal complement

W-aka-nzw-a [cp kuti v-aka-ramb-a [island ny-a-yi [Shona]
2sg.sm-ta-hear-fv that 2.sg-ta-deny-fv 9-story
ye-kuti ndi-Ø-ani wa-yaka-rum-a pa-Ø-gumbo]?
9.of that ni-1a-who 1a.nse-9.sg-ta-bite-fv 16-5-leg
‘Who(m) did you hear that they denied the story that it (their dog) bit ___ on the leg?’
(lit., ‘You heard that they denied the story that it’s who that it (their dog) bit ___ on the leg?’)
(2014-09-27-01-TD)

Partial wh-movement out of a subject relative clause

U-no-fung-a [cp kuti a-no-farir-a [Shona] 2sg.sg-ta-think-fv that 1.sg-ta-like-fv
[island chi-kwata chi-no-bv-a ku-pi]?
7-team 7.nse-7.sg-ta-be.from-fv 17-which
‘Where do you think they (sg.) like the team that you think is from ___?’
(lit., ‘Where do you think they (sg.) like the team that is from where?’)
(2014-09-20-01-TD)

Partial wh-movement out of a subject relative clause

*U-no-fung-a [cp kuti nde-ku-pi kwa-a-no-farir-a [Shona] 2sg.sg-ta-think-fv that ni-17-which 17.nse-1.sg-ta-like-fv
[island chi-kwata chi-no-bv-a ku-pi]?
7-team 7.nse-7.sg-ta-be.from-fv 17-which
‘Where do you think they (sg.) like the team that is from ___?’
(lit., ‘Where do you think that they (sg.) like the team that is from ___?’)
(2014-09-20-01-TD)

Wh-in-situ within a subject relative clause

[cp kuti chi-no-bv-a ku-pi]?
that 7.sg-ta-be.from-fv 17-which
‘Where do they (sg.) like the team that you think is from ___?’
(lit., ‘They (sg.) like the team that you think is from where?’)
(2014-09-20-01-TD)

Full wh-movement out of a subject relative clause

*Nde-ku-pi kwa-a-no-farir-a [island chi-kwata [Shona] ni-17-which 17.nse-1.sg-ta-like-fv
7-team cha-u-no-fung-a [cp kuti chi-no-bv-a]?
7.nse-2sg.sg-ta-think-fv that 7.sg-ta-be.from-fv 17-which
‘Where do (lit., It’s where that) they (sg.) like the team that you think is from ___?’
(lit., ‘Where do you think that they (sg.) like the team that you think is from ___?’)
(2014-09-20-01-TD)

Partial wh-movement within a subject relative clause

[cp kuti nde-ku-pi kwa-chi-no-bv-a]?
that ni-17-which 17.nse-7.sg-ta-be.from-fv 17-which
‘Where do they (sg.) like the team that you think is from ___?’
(lit., ‘They (sg.) like the team that you think that it’s where that it’s from ___?’)
(2014-09-20-01-TD)
4.2 Cleft structure

Shona full wh-movement and partial wh-movement pattern the same in that they require the copula ni.

(38) Wh-ex-situ requires ni

a. Full wh-movement requires ni

*(Ndī)-ō-ani wa-w-ai-fung-a | [cp kuti] [Shona]

Ndī-1a-who 1a.NSE-2SG.SM-TA-think-FV that
v-aka-teng-er-a  O-rokwe?
2.SG-TA-buy-APPL-FV  5-dress

‘Who(m) did you think they bought a dress (for)?’ (lit., ‘It’s who that you thought they bought a dress (for)’? )

(2016-02-13-01-TD)

b. Partial wh-movement requires ni

W-ai-fung-a | [cp kuti] *(ndī)-ō-ani | [Shona]

2SG.SM-TA-think-FV that Ndī-1a-who
wa-v-aka-teng-er-a  O-rokwe?
1a.NSE-2.SG.TA-buy-APPL-FV  5-dress

‘Who(m) did you think they bought a dress (for)?’ (lit., ‘You thought that it’s who that they bought a dress (for)’?)

(2016-02-13-01-TD)

4.3 Extraction marking

Shona full wh-movement and partial wh-movement pattern the same in that they require extraction marking on the verb immediately below the pronunciation site of the wh-phrase.

(39) Local subject extraction marking

a. Full wh-movement requires extraction marking

Ndī-ō-ani *(a/-a-)ka-teng-a  O-rokwe?  [Shona]

Ndī-1a-who *(SE).1a.SM.TA-buy-FV  5-dress

‘Who (lit., It’s who that) bought a dress?’

b. Partial wh-movement requires extraction marking

W-ai-fung-a | [cp kuti] ndī-ō-ani | [Shona]

2SG.SM-TA-think-FV that Ndī-1a-who
{*(a/-a-)ka-teng-a  O-rokwe?
*(SE).1a.SM.TA-buy-FV  5-dress

‘Who did you think bought a dress?’ (lit., ‘You thought that it’s who that bought a dress?’)

(40) Non-subject extraction marking

a. Full wh-movement requires extraction marking

Ndī-ō-ani *(wa)-w-ai-fung-a | [cp kuti] [Shona]

Ndī-1a-who 1a.NSE-2SG.SM-TA-think-FV that
v-aka-teng-er-a  O-rokwe?
2.SG-TA-buy-APPL-FV  5-dress

‘Who(m) did you think (lit., It’s who that you thought) they bought a dress (for)’?

(2016-02-13-01-TD)

b. Partial wh-movement requires extraction marking

W-ai-fung-a | [cp kuti] ndī-ō-ani | [Shona]

2SG.SM-TA-think-FV that Ndī-1a-who
 *((wa)v-aka-teng-er-a  O-rokwe?)
1a.NSE-2.SG.TA-buy-APPL-FV  5-dress

‘Who(m) did you think we bought a dress (for)?’ (lit., ‘You thought that it’s who(m) that they bought a dress (for)?’)

(2016-02-13-01-TD)
4.4 Reconstruction effects

Shona partial wh-movement and full wh-movement pattern the same in that they both allow reconstruction of a bound pronoun.

(41) Reconstruction of a pronoun bound by a subject quantifier

a. Wh-in-situ: Quantifier c-commands pronounced copy of pronoun

\[
\text{U-no-fung-a} \quad [\text{cp} \text{ kuti} \quad [\text{dp} \text{ mw-ana w-es}e_i]_1 \quad \text{[Shona]} ]
\]

\[
\text{2SG.SM-TA-think-fv} \quad \text{that} \quad \text{1-child} \quad \text{1-every}
\]

\[
\text{a-no-kosh-es-a} \quad [\text{dp} \text{ ma-onero a-Ø-ani e-kuti}]
\]

\[
\text{1.SM-TA-be.valued-CAUS-fv} \quad \text{6-view} \quad \text{6.of-1a-who} \quad \text{6.of-that}
\]

\[
\text{a₁-ka-ngwar-a]}
\]

\[
\text{1.sm-ta-be.smart-fv}
\]

‘Whose opinion that they, (sg.) are smart do you think every child, values?’ (lit., ‘You think that every child, values whose opinion that they, (sg.) are smart?’) (2014-10-04-02-TD)

b. Full wh-movement: Quantifier does not c-command pronounced copy of pronoun

\[
[\text{dp} \text{ Má-onero a-Ø-ani e-kuti} \quad \text{a₁-ka-ngwar-a}] \text{ [Shona]}
\]

\[
\text{6.of-1a-who} \quad \text{6.of-that}
\]

\[
\text{6.view} \quad \text{6.nse-1.sm-ta-be.smart-fv}
\]

\[
\text{a-a-no-kosh-es-a} \quad \text{1.sm-ta-be.smart-fv}
\]

‘Whose opinion that they, (sg.) are smart do you think every child, values?’ (lit., ‘You think that it’s whose opinion that they, (sg.) are smart that every child, values?’) (2014-10-04-02-TD)

c. Partial wh-movement: Quantifier does not c-command pronounced copy of pronoun

\[
\text{U-no-fung-a} \quad [\text{cp} \text{ kuti} \quad [\text{dp} \text{ má-onero a-Ø-ani} \quad [\text{dp} \text{ mw-ana w-es}e_i]_1 \quad \text{[Shona]} ]
\]

\[
\text{2SG.SM-TA-think-fv} \quad \text{that} \quad \text{ni.6-view} \quad \text{6.of-1a-who}
\]

\[
e-kuti \quad \text{a₁-ka-ngwar-a]}
\]

\[
\text{1.SM-TA-be.valued-CAUS-fv} \quad \text{1-child} \quad \text{1-every}
\]

\[
a-a-no-kosh-es-a \quad \text{[dp ma-onero ni.6-view a-Ø-ani e-kuti]}
\]

\[
\text{6.of-1a-who} \quad \text{6.of-that}
\]

\[
\text{6.view} \quad \text{6.nse-1.sm-ta-be.smart-fv}
\]

‘Whose opinion that they, (sg.) are smart do you think every child, values?’ (lit., ‘You think that every child, values whose opinion that they, (sg.) are smart?’) (2014-10-04-02-TD)

We can conclude from the reconstruction effects that the wh-phrase itself is what moves in both full and partial wh-movement, rather than a null operator.

4.5 Summary

- Partial wh-movement does not always require an independent derivational mechanism.
- Shona full wh-movement and partial wh-movement can be unified as cleft-based wh-ex-situ; both are really partial wh-movement in the sense that the wh-phrase is pronounced between its scopal and canonical positions.

5 Conclusion

(42) Proposal for Shona (final)

<table>
<thead>
<tr>
<th>Scopal</th>
<th>Canonical</th>
</tr>
</thead>
<tbody>
<tr>
<td>[CP Op ... [CP ... wh ... ]]}</td>
<td>unselective binding</td>
</tr>
<tr>
<td>[CP Op]</td>
<td>overt relativization</td>
</tr>
<tr>
<td>[CP Op ... [CP ... wh ... ]]}</td>
<td>unselective binding</td>
</tr>
<tr>
<td>[CP Op ... [CP ... wh ... ]]}</td>
<td>overt rel.</td>
</tr>
</tbody>
</table>
Contributions:

- Conducted the most thorough investigation of wh-questions in any Bantu language to date, providing a model for future work
- Proposed a correlation between more restricted wh-in-situ and immediately after the verb (IAV) focus (not discussed today)
- Uncovered a previously predicted island sensitivity pattern
- Highlighted crosslinguistic diversity in wh-question formation, even within Bantu

Future research:

- Semantic and discourse effects of choosing one wh-question formation strategy over another
- Partial wh-movement in languages that use ni-clefts vs. ones that don’t
- Shona wh-questions that use a verbal enclitic =i instead of a full wh-word
- Multiple wh-questions

References


