Partial *wh*-movement in Shona: A hybrid *wh*-question formation strategy*

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1 Overview

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

(1) a. *Wh*-in-situ: $[[\text{scopal} \ldots [\text{thematic} \ldots [\ldots \ldots \ldots]]]]$

b. Full *wh*-movement: $[[\text{scopal} \ldots [\text{thematic} \ldots [\ldots \ldots \ldots]]]]$

c. Partial *wh*-movement: $[[\text{scopal} \ldots [\text{thematic} \ldots [\ldots \ldots \ldots]]]]$

- **Theoretical question:** Can partial *wh*-movement be reduced to a hybrid of *wh*-in-situ and full *wh*-movement, or is it independently derived?

- **Empirical generalization:** Partial *wh*-movement in Shona ([sna], Bantu S11–15, Zimbabwe) is sensitive to islands below but not above the pronunciation site.

Today, I will demonstrate how this empirical generalization suggests that a composite derivation of partial *wh*-movement is indeed possible.

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(2) **Shona partial *wh*-movement**

a. *Local partial *wh*-movement of an indirect object*

$[[\text{scopal} \ldots [\text{thematic} \ldots [\ldots \ldots \ldots]]]]$

W-ai-fung-a

$[[\text{scopal} \ldots [\text{thematic} \ldots [\ldots \ldots \ldots]]]]$

2sg.sm-pst.hab-think-fv that cor-1a-who

wa-v-aka-teng-er-a

1a.nse-2.sm-pst-buy-appl-fv Ø-rokwe

5-dress

‘Who(m) did you think they bought a dress (for)?’

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b. *Long-distance partial *wh*-movement of an indirect object*

$[[\text{scopal} \ldots [\text{thematic} \ldots [\ldots \ldots \ldots]]]]$

W-ai-fung-a

$[[\text{scopal} \ldots [\text{thematic} \ldots [\ldots \ldots \ldots]]]]$

2sg.sm-pst.hab-think-fv that cor-1a-who

wa-t-aka-fember-a

1a.nse-1pl.sm-pst-guess-fv

v-aka-teng-er-a

2.sm-pst-buy-appl-fv Ø-rokwe

5-dress

‘Who(m) did you think we guessed they bought a dress (for)?’

(2015-01-07-01-TD)

Roadmap:

- §2: Previous approaches to (simple) partial *wh*-movement
- §3: Island sensitivity of Shona partial *wh*-movement
- §4: A composite derivation for Shona partial *wh*-movement

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¹Shona examples appear in the standard orthography, which does not mark tone. The graphemes that depart from IPA usage are given here with their IPA equivalents: <ch> [tʃ], <g> [ɡ], <j> [dʒ], <ng> [ŋɡ], <ny> [ɲ], <sh> [ʃ], <v> [ʋ], <y> [j].

²For the sake of clarity and consistency, I have occasionally adjusted glosses and translations in examples cited from other sources, following the Leipzig Glossing Rules wherever possible. Abbreviations used include: IPL = first person plural, ISG = first person singular, 2SG = second person singular, APPL = applicative, CAUS = causative, COR = copula, FOC = focus, FV = final vowel, HAB = habitual, NSE = non-subject extraction, PFV = perfective, PRS = present, PST = past, SE = subject extraction, SM = subject marker. Bare numerals (and also 1a and 2a) in glosses indicate noun class, encoding both number and gender features.
2 Previous approaches

2.1 Island sensitivity and partial wh-movement

2.1.1 Singaporean Malay

In Singaporean Malay, an island boundary may intervene between an in-situ wh-phrase and its scopal position (3a), but wh-ex-situ is sensitive to islands whether above or below the pronunciation site of the wh-phrase (3b–d).

(3) Island sensitivity in Singaporean Malay (Cole & Hermon 1998)

- **a. Wh-in-situ:**
  \[\begin{array}{|c|}
  \hline
  \text{cp} \quad \cdots \quad \text{island} \quad \cdots \quad \text{cp} \quad \cdots \quad \text{wh} \\
  \hline
  \end{array}\]

- **b. Full wh-movement:**
  \[\begin{array}{|c|}
  \hline
  \text{cp} \quad \text{wh} \quad \cdots \quad \text{cp} \quad \cdots \quad \text{island} \quad \cdots \quad \text{cp} \quad \cdots \quad \text{wh} \\
  \hline
  \end{array}\]

- **c. Partial wh-movement:**
  \[\begin{array}{|c|}
  \hline
  \text{cp} \quad \cdots \quad \text{cp} \quad \text{wh} \quad \cdots \quad \text{island} \quad \cdots \quad \text{cp} \quad \cdots \quad \text{wh} \\
  \hline
  \end{array}\]

- **d. Partial wh-movement:**
  \[\begin{array}{|c|}
  \hline
  \text{cp} \quad \cdots \quad \text{island} \quad \cdots \quad \text{cp} \quad \text{wh} \quad \cdots \quad \text{wh} \\
  \hline
  \end{array}\]

(4) Complex DP island (relative clause)

- **a. Wh-in-situ within a subject relative clause**
  Kamu sayang [island perempuan yang Ali fikir [Singaporean Malay] you love woman that Ali thinks [cp yang telah makan apa]? that already eat what 'What do you love the woman who Ali thinks ate ___?' (Cole & Hermon 1998: 235 (34b))

- **b. Full wh-movement out of a subject relative clause**
  *[cp wh ... cp ... island ... cp ... wh]

- **c. Partial wh-movement out of a subject relative clause**
  *[cp ... cp wh ... island ... cp]

- **d. Partial wh-movement within a subject relative clause**
  *[cp ... island ... cp wh ...]

Cole & Hermon (1998) show further that the higher relation’s island sensitivity extends beyond relative islands to subject islands, adjunct islands, wh-islands, factive islands, and negative islands.

2.1.2 Kîîtharaka

The same pattern is found in Kîîtharaka ([thk], Bantu E54, Kenya).

(5) Island sensitivity in Kîîtharaka (Abels 2012)

- **a. Wh-in-situ:**
  \[\begin{array}{|c|}
  \hline
  \text{cp} \quad \cdots \quad \text{cp} \quad \cdots \quad \text{island} \quad \cdots \quad \text{cp} \quad \cdots \quad \text{wh} \\
  \hline
  \end{array}\]

- **b. Full wh-movement:**
  *[cp wh ... cp ... island ... cp ...]

- **c. Partial wh-movement:**
  *[cp ... cp wh ... island ... cp ...]

- **d. Partial wh-movement:**
  *[cp ... island ... cp wh ...]

'partial wh-movement out of a subject relative clause'

- **c. Partial wh-movement out of a subject relative clause**
  *[cp apa yang Mari fikir [Singaporean Malay] you what that Mari think [cp dia suka [island perempuan yang beli ____]]? he likes woman that buy 'What did Ali tell you that Mary thinks that he likes a woman who bought ___?' (Cole & Hermon 1998: 235 (33))

- **d. Partial wh-movement within a subject relative clause**
  *[Singaporean Malay]

Cole & Hermon (1998) show further that the higher relation’s island sensitivity extends beyond relative islands to subject islands, adjunct islands, wh-islands, factive islands, and negative islands.
(6) Complex DP island (relative clause)  

a. Wh-in-situ within a subject relative clause  

\[ \text{U-ri-thûgan-i-a} \quad [\text{cp \ n-ding-ir-e} \quad \text{[Kîlìtharaka]}] \]  
\[ 2\text{sg.sm-prs-think-CAUS-FV} \quad 1\text{sg.sm-hit-PFV-FV} \]  
\[ \text{[island m-w-ari û-ra a-ug-ir-e [cp ati \ Peter}} \]  
\[ 1\text{-girl} \quad 1\text{-that} \quad 1\text{.sm-say-PFV-FV} \quad \text{that} \quad 1\text{.Peter} \]  
\[ \text{a-gur-ir-e ûû]}?) \]  
\[ 1\text{.sm-marry-PFV-FV who} \]  
‘Who do you think I hit the girl who said that Peter will marry ___?’  
(Abels 2012: 71 (10a))  

b. Full wh-movement out of a subject relative clause  

*\[ \text{N-ûû û-kù-thûgan-i-a} \quad [\text{cp i-n-ding-ir-e} \quad \text{[Kîlìtharaka]}] \]  
\[ 2\text{sg.sm-prs-think-CAUS-FV} \quad \text{FOC-1sg.sm-hit-PFV-FV} \]  
\[ \text{[island m-w-ari û-ra n-a-ug-ir-e [cp ati \ Peter}} \]  
\[ 1\text{-girl} \quad 1\text{-that} \quad \text{FOC-1.sm-say-PFV-FV} \quad \text{that} \quad 1\text{.Peter} \]  
\[ \text{n-a-gur-ir-e ûû]}?) \]  
\[ 1\text{.sm-marry-PFV-FV who} \]  
‘Who do you think I hit the girl who said that Peter will marry ___?’  
(Abels 2012: 71 (10b))  

c. Partial wh-movement out of a subject relative clause  

*\[ \text{U-ri-thûgan-i-a} \quad [\text{cp \ n-ûû \ n-ding-ir-e} \quad \text{[Kîlìtharaka]}] \]  
\[ 2\text{sg.sm-prs-think-CAUS-FV} \quad \text{FOC-who} \quad 1\text{sg.sm-hit-PFV-FV} \]  
\[ \text{[island m-w-ari û-ra a-ug-ir-e [cp ati \ Peter}} \]  
\[ 1\text{-girl} \quad 1\text{-that} \quad \text{FOC-1.sm-say-PFV-FV} \quad \text{that} \quad 1\text{.Peter} \]  
\[ \text{n-a-gur-ir-e ûû]}?) \]  
\[ 1\text{.sm-marry-PFV-FV who} \]  
‘Who do you think I hit the girl who said that Peter will marry ___?’  
(Abels 2012: 71 (10c))  

d. Partial wh-movement within a subject relative clause  

*\[ \text{U-ri-thûgan-i-a} \quad [\text{cp \ n-ding-ir-e} \quad \text{[Kîlìtharaka]}] \]  
\[ 2\text{sg.sm-prs-think-CAUS-FV} \quad 1\text{sg.sm-hit-PFV-FV} \]  
\[ \text{[island m-w-ari û-ra a-ug-ir-e [cp ati \ Peter}} \]  
\[ 1\text{-girl} \quad 1\text{-that} \quad 1\text{.sm-say-PFV-FV} \quad \text{that} \quad \text{FOC-who} \quad 1\text{.Peter} \]  
\[ \text{a-gur-ir-e ûû]}?) \]  
\[ 1\text{.sm-marry-PFV-FV who} \]  
‘Who do you think I hit the girl who said that Peter will marry ___?’  
(Abels 2012: 71 (10d))  

(7) 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.  

2.2 Partial wh-movement is an independent construction  

2.2.1 Covert (LF) movement  

(Saddy 1991 for Indonesian, Cole & Hermon 1998 for Singaporean Malay)  
- Lower relation: overt wh-movement (as in full wh-movement)  
- Higher relation: covert (LF) wh-movement (unlike either wh-in-situ or full wh-movement)  

(8) Cole & Hermon’s (1998) analysis of Singaporean Malay  

<table>
<thead>
<tr>
<th>Analytical Form</th>
<th>Scopal Distribution</th>
<th>Thematic Distribution</th>
<th>Binding</th>
<th>Movement Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Wh-in-situ:</td>
<td></td>
<td></td>
<td>Unselective binding</td>
<td>Overt wh-movement</td>
</tr>
<tr>
<td>b. Full wh-movement:</td>
<td></td>
<td></td>
<td>Overt wh-movement</td>
<td></td>
</tr>
<tr>
<td>c. Partial wh-movement:</td>
<td></td>
<td></td>
<td>Overt wh-movement</td>
<td></td>
</tr>
<tr>
<td>d. Partial wh-movement:</td>
<td></td>
<td></td>
<td>Covert wh-movement</td>
<td></td>
</tr>
</tbody>
</table>
2.2.2 Overt movement of a null operator

(Abels 2012 for Kîîtharaka)

- **Lower relation**: overt focus movement of a null focus operator, pied-piping the wh-phrase (as in full wh-movement)
- **Higher relation**: overt wh-movement of the null focus operator, stranding the wh-phrase (unlike either wh-in-situ or full wh-movement)

(9) Abels’s (2012) analysis of Kîîtharaka

a. In-situ: \[ [\text{CP} \ [\text{Wh}]] \ ... \ [\text{CP} \ ... \ [\text{island} \ ... \ [\text{CP} \ ... \ \text{wh} \ ]]]) \]
   \[ \text{downward agreement} \]
   \[ \text{overt focus movement} \]

b. Full: \( \text{\#}[\text{CP} \ \text{Op-wh} \ ... \ [\text{CP} \ ... \ [\text{island} \ ... \ [\text{CP} \ ... \ \text{Op-wh}]]]) \]
   \[ \text{overt focus movement} \]

c. Partial: \( \text{\#}[\text{CP} \ \text{Op} \ ... \ [\text{CP} \ \text{Op-wh} \ ... \ [\text{island} \ ... \ [\text{CP} \ ... \ \text{Op-wh}]]]) \]
   \[ \text{overt focus movement} \]

d. Partial: \( \text{\#}[\text{CP} \ \text{Op} \ ... \ [\text{CP} \ ... \ [\text{island} \ ... \ [\text{CP} \ \text{Op-wh} \ ... \ \text{Op-wh}]]]) \]

2.3 Partial wh-movement is not an independent construction

2.3.1 Partial wh-movement assimilated to full wh-movement

(Fanselow & Ćavar 2001 and Richards 2001 for Singaporean Malay and Indonesian)

Fanselow & Ćavar (2001) and Richards (2001: §3.2) assimilate partial wh-movement to full wh-movement. In both strategies, the wh-phrase moves overtly to the scopal position; what varies is which copy is pronounced.

2.3.2 Partial wh-movement is a hybrid of wh-in-situ and full wh-movement

This is the analysis presented by Sabel (2000: 441) for Kikuyu and Sabel & Zeller (2006: 280) for Zulu, but no island data are discussed there.

Abels (2012: 155–156) proposes this as the simplest way to model simple partial wh-movement within his theory, but then because of the impossibility of islands above the pronunciation site in Kîîtharaka and Singaporean Malay he introduces the null operator that moves from the pronunciation site to the scopal position.

**Prediction**: Partial wh-movement that is sensitive to islands below but not above the pronunciation site of the wh-phrase.

3 Shona island data

Just as in Singaporean Malay and Kîîtharaka, Shona partial wh-movement out of an island is impossible (10c), like full wh-movement (10b). In contrast to Singaporean Malay and Kîîtharaka, Shona allows partial wh-movement within an island (10d), like wh-in-situ (10a). According to Kandybowicz & Torrence (2014), Krachi (Kwa, Ghana) shows the same pattern.

(10) Island sensitivity in Shona

a. Wh-in-situ: \[ [\text{CP} \ ... \ [\text{CP} \ ... \ [\text{island} \ ... \ \text{wh} \ ]]]) \]
   \[ \text{OK} \]

b. Full wh-movement: \( \text{\#}[\text{CP} \ \text{wh} \ ... \ [\text{CP} \ ... \ [\text{island} \ ... \ ]]]) \]
   \[ \text{OK} \]

c. Partial wh-movement: \( \text{\#}[\text{CP} \ ... \ [\text{CP} \ \text{wh} \ ... \ [\text{island} \ ... \ ]]]) \]
   \[ \text{OK} \]

d. Partial wh-movement: \[ [\text{CP} \ ... \ [\text{CP} \ ... \ [\text{island} \ \text{wh} \ ... \ ]]]) \]
   \[ \text{OK} \]

Below, I illustrate this pattern for adjunct islands, complement clause islands, and relative clause islands.

4
(11) **Adjunct island**

a. **Wh-in-situ within an adverbial clause**

\[
\begin{align*}
\text{W-ai-fung-a} & \quad \text{[\text{cp} kuti v-aka-ker-a ma-purisa]} \\
2\text{SG.SM-PST.HAB-think-FV} & \quad \text{that 2.SM-PST-call-FV 6-police} \\
\text{[\text{island nokuti v-aka-on-a \textit{Ø-ani}] under}] & \quad \text{because 2.SM-PST-see-FV 1a-who} \\
\end{align*}
\]

‘Who(m) did you think they called the police because they saw ___?’

(2014-09-27-01-TD)

d. **Partial wh-movement within an adverbial clause**

\[
\begin{align*}
\text{W-ai-fung-a} & \quad \text{[\text{cp} kuti v-aka-ker-a ma-purisa]} \\
2\text{SG.SM-PST.HAB-think-FV} & \quad \text{that 2.SM-PST-call-FV 6-police} \\
\text{[\text{island nokuti ndi-Ø-ani wa-v-aka-on-a \textit{Ø-ani}] under}] & \quad \text{because cop-1a-who 1a.NSE-2.SM-PST-see-FV} \\
\end{align*}
\]

‘Who(m) did you think they called the police because they saw ___?’

(2014-09-27-01-TD)

(b) **Full wh-movement out of an adverbial clause**

*\textbf{Ndi-Ø-ani*} wa-w-ai-fung-a [\text{cp} kuti cop-1a-who 1a.NSE-2SG.SM-PST.HAB-think-FV that v-aka-ker-a ma-purisa [\text{island nokuti v-aka-on-a \textit{Ø-ani}] under] 2.SM-PST-call-FV 6-police because 2.SM-PST-see-FV]

‘Who(m) did you think they called the police because they saw ___?’

(2014-09-27-01-TD)

c. **Partial wh-movement out of an adverbial clause**

*\textbf{W-ai-fung-a*} [\text{cp} kuti ndi-Ø-ani wa-v-aka-ker-a ma-purisa [\text{island nokuti v-aka-on-a \textit{Ø-ani}] under] 2.SM-PST-call-FV 6-police because 2.SM-PST-see-FV]

‘Who(m) did you think they called the police because they saw ___?’

(2014-09-27-01-TD)

d. **Partial wh-movement within an adverbial clause**

*\textbf{W-ai-fung-a*} [\text{cp} kuti v-aka-ker-a ma-purisa 2SG.SM-PST.HAB-think-FV that 2.SM-PST-call-FV 6-police [\text{island nokuti ndi-Ø-ani wa-v-aka-on-a \textit{Ø-ani}] under] because cop-1a-who 1a.NSE-2.SM-PST-see-FV]

‘Who(m) did you think they called the police because they saw ___?’

(2014-09-27-01-TD)

(12) **Complex DP island (complement clause)**

a. **Wh-in-situ within a DP’s clausal complement**

\[
\begin{align*}
\text{W-aka-nzw-a} & \quad \text{[\text{cp} kuti v-aka-ramb-a \text{[\text{island ny-aya ye-kuti y-aka-rum-a \textit{Ø-ani} pa-Ø-gumbo}] under] 9-sm PST-deny-FV \text{9-story} \text{9.of 9.5SM-PST-bite-FV 1a-who 16-5-leg}]} \\
\end{align*}
\]

‘Who(m) did you hear that they denied the story that it (their dog) bit ___ on the leg?’

(2014-09-27-01-TD)

d. **Partial wh-movement within a DP’s clausal complement**


‘Who(m) did you hear that they denied the story that it (their dog) bit ___ on the leg?’

(2014-09-27-01-TD)

b. **Full wh-movement out of a DP’s clausal complement**

*\textbf{Ndi-Ø-ani*} wa-w-ai-fung-a [\text{cp} kuti cop-1a-who 1a.NSE-2SG.SM-PST.HAB-think-FV that v-aka-ker-a ma-purisa [\text{island nokuti v-aka-on-a \textit{Ø-ani}] under] 2.SM-PST-call-FV 6-police because 2.SM-PST-see-FV]

‘Who(m) did you hear that they denied the story that it (their dog) bit ___ on the leg?’

(2014-09-27-01-TD)

c. **Partial wh-movement out of a DP’s clausal complement**


‘Who(m) did you hear that they denied the story that it (their dog) bit ___ on the leg?’

(2014-09-27-01-TD)
(13) Complex DP island (relative clause)

a. Wh-in-situ within a subject relative clause

\[ \text{U-no-fung-}a \quad [\text{cp} kuti a-no-farir-a \quad [\text{island} \text{ chi-kwata} \quad 2SG.SM-PRS-think-FV \quad \text{that} \quad 1SM-PRS-like-FV \quad \text{7-team} \quad \text{chi-no-bv-a} \quad \text{ku-pi]]} \quad \text{SE.7.SM-PRS-be.from-FV} \quad \text{17-which} \]

‘Where do you think s/he likes the team that is from ____?’

b. Full wh-movement out of a subject relative clause

\[ \text{*Nde-ku-pi} \quad \text{kwa-a-no-farir-a} \quad [\text{island} \text{ chi-kwata} \quad \text{cop-17-which} \quad 17.NSE-2SG.SM-PRS-think-FV \quad \text{7-team} \quad \text{cha-u-no-fung-a} \quad [\text{cp} kuti chi-no-bv-a \quad \text{17.nse-2sg.sm-prs-think-fv} \quad \text{that} \quad 7.SM-PRS-be.from-FV \quad \text{7-team} \quad \text{chi-kwata} \quad \text{chi-no-bv-a} \quad \text{ku-pi]} \quad \text{SE.7.SM-PRS-be.from-FV} \quad \text{17-which} \]

‘Where does s/he like the team that you think is from ____?’

(2014-09-20-01-TD)

c. Partial wh-movement within a subject relative clause

\[ \text{*U-no-fung-}a \quad [\text{cp} kuti \text{nde-ku-pi} \quad \text{kwa-a-no-farir-a} \quad \text{cop-17-which} \quad 17.NSE-1.SM-PRS-like-FV \quad \text{7-team} \quad \text{cha-u-no-fung-a} \quad [\text{island} \text{ chi-kwata} \quad \text{chi-no-bv-a} \quad \text{7-team} \quad \text{chi-kwata} \quad \text{chi-no-bv-a} \quad \text{ku-pi]} \quad \text{SE.7.SM-PRS-be.from-FV} \quad \text{17-which} \]

‘Where do you think s/he likes the team that is from ____?’

(2014-09-20-01-TD)

(14) Complex DP island (relative clause)

a. Wh-in-situ within a subject relative clause

\[ \text{A-no-farir-}a \quad [\text{island} \text{ chi-kwata} \quad \text{cha-u-no-fung-a} \quad [\text{cp} kuti} \quad \text{1.SM-PRS-like-FV} \quad \text{7-team} \quad \text{7.NSE-2SG.SM-PRS-think-FV} \quad \text{that} \quad \text{chi-no-bv-a} \quad \text{ku-pi]} \quad \text{7.SM-PRS-be.from-FV} \quad \text{17-which} \]

‘Where does s/he like the team that you think is from ____?’

(2014-09-20-01-TD)

b. Full wh-movement out of a subject relative clause

\[ \text{*Nde-ku-pi} \quad \text{kwa-a-no-farir-a} \quad [\text{island} \text{ chi-kwata} \quad \text{cop-17-which} \quad 17.NSE-1.SM-PRS-like-FV} \quad \text{7-team} \quad \text{cha-u-no-fung-a} \quad [\text{cp} kuti chi-no-bv-a \quad \text{17.nse-2sg.sm-prs-think-fv} \quad \text{that} \quad 7.SM-PRS-be.from-FV \quad \text{7-team} \quad \text{chi-kwata} \quad \text{chi-no-bv-a} \quad \text{ku-pi]} \quad \text{SE.7.SM-PRS-be.from-FV} \quad \text{17-which} \]

‘Where does s/he like the team that you think is from ____?’

(2014-09-20-01-TD)

c. Partial wh-movement within a subject relative clause

\[ \text{*U-no-fung-}a \quad [\text{cp} kuti \text{nde-ku-pi} \quad \text{kwa-a-no-farir-a} \quad \text{cop-17-which} \quad 17.NSE-1.SM-PRS-like-FV} \quad \text{7-team} \quad \text{cha-u-no-fung-a} \quad [\text{island} \text{ chi-kwata} \quad \text{chi-no-bv-a} \quad \text{7-team} \quad \text{chi-kwata} \quad \text{chi-no-bv-a} \quad \text{ku-pi]} \quad \text{SE.7.SM-PRS-be.from-FV} \quad \text{17-which} \]

‘Where does s/he like the team that you think is from ____?’

(2014-09-20-01-TD)

4 Composite derivation of partial wh-movement

- **Lower relation:** overt focus movement (as in full wh-movement)

- **Higher relation:** unselective binding (Pesetsky 1987) (as in wh-in-situ)
  (Sabel 2000, Sabel & Zeller 2006)

(15) Proposal for Shona

a. Wh-in-situ:

\[ \text{scpal} \quad \text{thematic} \quad \text{unselective binding} \]

b. Full wh-movement:

\[ \text{*scpal} \quad \text{thematic} \quad \text{overt focus movement} \]

c. Partial wh-movement:

\[ \text{*scpal} \quad \text{thematic} \quad \text{overt focus movement} \]

d. Partial wh-movement:

\[ \text{scpal} \quad \text{thematic} \quad \text{overt focus movement} \]

\[ \text{unselective binding} \]
4.1 Lower relation assimilated to full wh-movement

4.1.1 Island sensitivity

As we saw in §3, the lower relation in partial wh-movement is sensitive to islands in exactly the same way as the full wh-movement relation. This follows if both are instances of overt focus movement.

4.1.2 Cleft structure

Shona full wh-movement involves clefting, observable morphologically by the allomorph of the copula ndi- attached to the wh-phrase (16b). Partial wh-movement is similarly impossible without clefting (16c).

(16) Wh-phrases marked with ndi-

a. Wh-in-situ cannot have ndi-

W-ai-fung-a 2sg.sm-pst.hab-think-fv that 1pl.sm-pst-buy-appl-fv

*(ndi)-Ø-ani 0-rokwe]

cop-1a-who 5-dress

‘Who(m) did you think we bought a dress (for)?’ (2014-07-30-01-TD)

b. Full wh-movement requires ndi-

*(ndi)-Ø-ani wa-w-ai-fung-a 1a.nse-2sg.sm-pst.hab-think-fv that 1pl.sm-pst-buy-appl-fv

cop-1a-who 5-dress

‘Who(m) did you think we bought a dress (for)?’ (2014-07-30-01-TD)

c. Partial wh-movement requires ndi-

W-ai-fung-a 2sg.sm-pst.hab-think-fv that cop-1a-who

wa-t-aka-teng-er-a 1pl.sm-pst-buy-appl-fv 5-dress

‘Who(m) did you think we bought a dress (for)?’ (2014-07-30-01-TD)

4.1.3 Extraction marking

When a non-subject like the indirect object ani ‘who’ in (17a–b) is extracted for either full wh-movement or partial wh-movement, the verb in the clause in which the wh-phrase is pronounced must agree with it in φ-features, in addition to bearing φ-agreement with the subject (Zentz 2015).³

(17) Non-subject extraction marking

a. Full wh-movement requires extraction marking in the pronunciation clause

Ndi-Ø-ani *(wa)-w-ai-fung-a [cp kuti cop-1a-who 1a.nse-2sg.sm-pst.hab-think-fv that t-aka-teng-er-a 0-rokwe]

1pl.sm-pst-buy-appl-fv 5-dress

‘Who(m) did you think we bought a dress (for)?’ (2014-07-30-01-TD)

b. Partial wh-movement requires extraction marking in the pronunciation clause

W-ai-fung-a [cp kuti ndi-Ø-ani cop-1a-who *(wa)-t-aka-teng-er-a 0-rokwe]

1a.nse-1pl.sm-pst-buy-appl-fv 5-dress

‘Who(m) did you think we bought a dress (for)?’ (2014-07-30-01-TD)

4.1.4 Reconstruction effects

Ex-situ wh-phrases reconstruct to their base position; this is true for both full wh-movement and partial wh-movement. This suggests that it is the movement of the wh-phrase itself rather than a null operator that is responsible for the island effects associated with clefting (Torrence 2013).

³The location of extraction marking is dependent on the location of the pronunciation site of the wh-phrase. Thus, the extraction marking appears in different clauses for full wh-movement versus partial wh-movement, but the generalization still holds that the pronunciation clause verb must agree with a clefted non-subject wh-phrase.
Reconstruction of a pronoun bound by a subject quantifier

a. Wh-in-situ: Quantifier c-commands pronounced copy of pronoun
\[
\text{U-no-fung-a} \quad [\text{dp \ mw-ana \ w-ese}], \\
\text{2sg.sm-prs-think-fv} \quad \text{that} \quad \text{1-child \ 1-every} \\
a-no-kosh-es-a \quad [\text{dp \ ma-onero \ a-Ø-ani \ e-kuti}] \\
\text{1.sm-prs-be.valued-caus-fv} \quad \text{6-view \ 6.of-1a-who \ 6.of-that} \\
a_{\text{r}}-\text{ka-ngwar-a}]? \\
\text{1.sm-pst-be.smart-fv} \\
\text{Whose opinion that s/he is smart do you think every child, values?} \\
(2014-10-04-02-TD)
\]

b. Full wh-movement: Quantifier does not c-command pronounced copy of pronoun
\[
[\text{dp \ Má}^5\text{-onero \ a-Ø-ani \ e-kuti}] \\
\text{cop.6-view \ 6.of-1a-who \ 6.of-that} \\
a-u-no-fung-a \quad [\text{dp \ mw-ana \ w-ese}], \\
\text{6.nse-2sg.sm-prs-think-fv} \quad \text{that} \quad \text{1-child \ 1-every} \\
a-no-kosh-es-a \quad [\text{dp \ ma-onero \ cop.6-view \ a-Ø-ani \ e-kuti}] \\
\text{1-sm-prs-be.valued-caus-fv} \quad \text{6-of-1a-who \ 6.of-that} \\
a_{\text{r}}-\text{ka-ngwar-a}]? \\
\text{1.sm-pst-be.smart-fv} \\
\text{Whose opinion that s/he is smart do you think every child, values?} \\
(2014-10-04-02-TD)
\]

c. Partial wh-movement: Quantifier does not c-command pronounced copy of pronoun
\[
[\text{dp \ má-onero \ a-Ø-ani \ e-kuti}] \\
\text{cop.6-view \ 6.of-1a-who \ 6.of-that} \\
a-u-no-fung-a \quad [\text{dp \ mw-ana \ w-ese}], \\
\text{6.nse-2sg.sm-prs-think-fv} \quad \text{that} \quad \text{1-child \ 1-every} \\
a-no-kosh-es-a \quad [\text{dp \ ma-onero \ cop.6-view \ a-Ø-ani \ e-kuti}] \\
\text{1-sm-pst-be.smart-fv} \quad \text{6-of-1a-who \ 6.of-that} \\
a_{\text{r}}-\text{ka-ngwar-a}]? \\
\text{1.sm-pst-be.smart-fv} \\
\text{Whose opinion that s/he is smart do you think every child, values?} \\
(2014-10-04-02-TD)
\]

4.2 Higher relation assimilated to wh-in-situ

4.2.1 Lack of island sensitivity

As we saw in §3, the higher relation in partial wh-movement is insensitive to islands in exactly the same way as the wh-in-situ relation. This follows if both are instances of unselective binding (Pesetsky 1987), as commonly assumed for Bantu wh-in-situ (Sabel 2000, Sabel & Zeller 2006, Schneider-Zioga 2007).

4.2.2 Lack of extraction marking

Extraction marking is impossible above the pronunciation site of a partially moved wh-phrase (19b), just as it is with wh-in-situ (19a).

(19) Non-subject extraction marking

a. Wh-in-situ cannot have extraction marking
\[
(*\text{Wa})\text{-w-ai-fung-a} \\
\text{1a.nse-2sg.sm-pst.hab-think-fv} \quad \text{that} \\
\text{cop.6-view \ 6.of-1a-who \ 6.of-that} \\
\text{(*wa)-t-aka-teng-er-a} \quad \text{Ø-ani \ Ø-rokwe}]? \\
\text{1a.nse-1pl.sm-pst-buy-appl-fv \ 1a-who} \quad \text{5-dress} \\
\text{Who(m) did you think we bought a dress (for)?} \\
(2014-07-30-01-TD)
\]

b. Partial wh-movement cannot have extraction marking above the pronunciation site
\[
(*\text{Wa})\text{-w-ai-fung-a} \\
\text{1a.nse-2sg.sm-pst.hab-think-fv} \quad \text{that} \\
\text{cop.6-view \ 6.of-1a-who \ 6.of-that} \\
\text{(*wa)-t-aka-teng-er-a} \quad \text{Ø-ani \ Ø-rokwe}]? \\
\text{1a.nse-1pl.sm-pst-buy-appl-fv \ 1a-who} \quad \text{5-dress} \\
\text{Who(m) did you think we bought a dress (for)?} \\
(2014-07-30-01-TD)
\]

4.3 Lack of intervention effects

Focus elements and negation between the scopal position and pronunciation site do not cause intervention effects (Beck 1996, 2006) for either wh-in-situ or partial wh-movement. This suggests that the semantic relation between these two positions is not Rooth–Hamblin alternative computation (Kotek 2014) but unselective binding.

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*The allomorph of the copula for class 6 is a floating high tone prefix that attaches to the noun class prefix.*
Intervener above adjunct island in Shona long-distance wh-in-situ

a. **Focus: 'only'**

Ø-Taurai **chete** aka-foner-a ma-purisa [island nokuti
1a-Taurai **only** 1a.SM.PST-call-fv 6-police because
aka-on-a **Ø-ani**?]
1a.SM.PST-see-fv 1a-who

'Who(m) did only Taurai call the police because he saw ___?'
(2015-01-17-01-TD)

b. **Focus: 'even'**

Chero Ø-Taurai aka-foner-a ma-purisa [island nokuti
**even** 1a-Taurai 1a.SM.PST-call-fv 6-police because
aka-on-a **Ø-ani**?]
1a.SM.PST-see-fv 1a-who

'Who(m) did even Taurai call the police because he saw ___?'
(2015-01-17-01-TD)

c. **Focus: 'also'**

Ø-Taurai aka-foner-a=**wo** ma-purisa [island nokuti
1a-Taurai 1a.SM.PST-call-fv=**also** 6-police because
aka-on-a **Ø-ani**?]
1a.SM.PST-see-fv 1a-who

'Who(m) did [Taurai also] call the police because he saw ___?'
(2015-01-17-01-TD)

d. **Negation**

Ø-Taurai **ha-an-a** ku-foner-a ma-purisa [island nokuti
1a-Taurai **NEG-AUX-fv** 15-call-fv 6-police because
aka-on-a **Ø-ani**?]
1a.SM.PST-see-fv 1a-who

'Who(m) didn’t Taurai call the police because he saw ___?'
(2015-01-17-01-TD)
5 Conclusion

- Shona allows partial wh-movement within islands, as predicted by several analyses.
- This provides support for a composite derivation of partial wh-movement, where the higher relation can be assimilated to wh-in-situ and the lower relation to full wh-movement.

References


