Overview. In wh-in-situ, a wh-phrase is pronounced in a lower position than where it takes interrogative scope. This paper addresses the nature of the relation between these two positions in Shona (Bantu, Zimbabwe). Bantu wh-in-situ questions are often assumed to be derived via a non-movement relation (Carstens 2005 for Kilega, Diercks 2010 for Lubukusu, Muriungi 2003 for Kĩtharaka, Sabel 2000 for Kikuyu and Duala, Sabel & Zeller 2006 for Zulu, Schneider-Zioga 2007 for Kinande), but alternatives proposed for non-Bantu languages have rarely been considered. Here, I evaluate five potential analyses of Shona wh-in-situ (three with movement, two without) and show that unselective binding, a non-movement relation, emerges as the winner.

Unselective binding (Pesetsky 1987). Several analyses of wh-in-situ, including Cole & Hermon (1994, 1998) for Malay and Sabel & Zeller (2006) for Zulu, argue that in the semantics, a null operator in the scopal position binds the wh-phrase. Because no movement is involved, this predicts that in-situ questions should show identical morphosyntax to their declarative counterparts, which is true in Shona (cf. (1a) and (1b)).

Unselective binding

(1) a. **Declarative word order for Shona**
   
   V-akatengera Ø-Thandi Ø-rokwe ku-chi-toro.
   2.sm-bought 1a-Thandi 5-dress 17-7-store
   'They bought Thandi a dress at the store.'

   (1) b. **Wh-in-situ (unmarked strategy for non-subject wh-questions)**
   
   (*'Cha*)-v-akatengera Ø-Thandi chi-i ku-chi-toro?
   7.NSE-2.sm-bought 1a-Thandi 7-what 17-7-store
   'They bought Thandi what at the store?'

   Disguised movement. Many analyses of Romance wh-in-situ (Munaro et al. 2001, Poletto & Pollock 2004a,b, 2009, 2015, Uribe-Etxebarria 2002) involve overt wh-movement to the scopal position, followed by overt remnant movement of the rest of the sentence around the wh-phrase. This predicts the ‘apparent’ wh-in-situ of Bellunese (2) and other varieties: wh-phrases must be sentence-final. However, Shona has true wh-in-situ, with wh-phrases appearing in the same position they would in the corresponding declarative, which is not necessarily sentence-final (1).

(2) a. **Declarative word order for Bellunese**
   
   Al ghe a dat al libro a so fradel.
   3sg.m to.him has given the book to his brother
   'He gave the book to his brother.'

   (2) b. **“In-situ” wh-phrases cannot stay vP-internal in Bellunese**
   
   Ghe ha-lo dat che a so fradel?
   to.him has-3sg.m given what to his brother
   'He gave what to his brother?' (Poletto & Pollock 2015)

   Lower copy spell-out. Reintges et al. (2006) and Reintges (2007a,b) argue that Coptic wh-in-situ involves overt wh-movement to the scopal position, with pronunciation of a lower copy of the wh-phrase. This predicts that if a language has extraction marking, it will appear even in wh-in-situ (3). Shona has extraction marking (a verbal prefix that agrees in φ-features with an extracted non-subject), but this marking cannot appear in wh-in-situ (1b).

(3) **Extraction marking (rel) with wh-in-situ in Coptic**
   
   e-i-na-tše u na-k?
   REL.FUT-1SG-AUX-say what to-2SG.M
   'I shall say what to you?' (Reintges et al. 2006:179)

   Covert movement. LF wh-movement to the scopal position (Huang 1982) predicts that wh-in-situ will show sensitivity to island boundaries between the base and scopal positions (leaving aside argument/adjunct asymmetries), as in Vietnamese (4a) (Tran 2009:174). However, Shona wh-in-situ is insensitive to islands, whether relative clause (4b), complement clause, or adjunct islands.

(4) a. *Tán sè chup hính [island con hó dâ dọa ai]?* b. Va-ri ku-tsvaga [island mu-rume àka-ba chi-i]?  
   Tan fut catch picture CLF tiger ASP scare who
   'Tan will take a picture of the tiger that scared who(m)_CF?
   'They are looking for the man who stole what?'

   Computation of alternatives. Building on Hamblin 1973 and Rooth 1985, several recent proposals (Cable 2010, Kotek & Erlewine forthcoming) suggest that some wh-in-situ involves no movement. In the semantics, wh-phrases introduce alternatives, which project up the tree so that the meaning of the question is a set of possible answers. The interpretation of these alternatives should be blocked by intervening focus-sensitive operators (Beck 2006). However, Shona wh-in-situ is insensitive to these:

(5) a. Ø-Rumbi chete akaverenga Ø-bhuku ri-pi?
   1a-Rumbi only 1a.SM.read 5-book 5-which
   'Only Rumbi read which book?'

   (5) b. Chero Ø-Tendai akaverenga Ø-bhuku ri-pi?
   even 1a-Tendai 1a.SM.read 5-book 5-which
   'Even Rumbi read which book?'

   Conclusion. As summarized below, this paper systematically examines the relation between the scopal and pronunciation positions of the wh-phrase in Shona wh-in-situ, showing that it requires a non-movement analysis such as unselective binding. This affirms the traditional Bantuist view and highlights the diversity of superficially similar wh-in-situ patterns across the world’s languages.

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