1 Introduction

A well-known observation: answers to wh-questions are prosodically prominent in English (Selkirk 1995, Jackendoff 1972, Rochemont 1986, a.m.o.)

(1) Q: Who bought a book about bats?  
A: Mary bought a book about bats.

Selkirk (1995):554

In this talk, I will explore similar prominence in San Martín Peras Mixtec (SMPM), a tonal language.¹

(2) a. Ná tàshĩ Mariana ntà’ã Bernardo  
what give.comp M. hand B.  
‘What did Mariana give Bernardo?’

b. Chichi[tàshĩ=ñá ntà’ã=rà]  
avocado give.comp=3sg.f hand=3sg.m  
‘She gave him an avocado.’

I will argue that answers to wh-questions (2b) display asymmetric prominence compared to answers to other types of questions.

— Word final high tones are raised in pitch but other tones are unaffected.

— Answers to wh-questions do not display other correlates of prominence, such as lengthening.

I’ll argue that SMPM’s properties speak to an ongoing debate about the grammatical representation of answers to wh-questions.

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¹Here and throughout, a grave accent (˘) marks low tones, an acute accent (´) marks high tones, a caron (̃) marks rising tone, a circumflex (̄) marks falling tones, and mid tones are unmarked. Pitch raising is represented with an arrow (↑). The following abbreviations are used in the glosses: comp=Completive, cop=Copula, f=Feminine, m=Masculine, sg=Singular.
— **NON-GIVEN HYPOTHESIS:** The answer is prominent because it is not given.

  - Given (i.e. entailed by the context) constituents **resist prominence** (Schwarzchild, 1999, a.m.o.).
  - **The non-given constituent receives default phrasal prominence** (Kratzer and Selkirk, 2018; Kabagema-Bilan et al., 2011; Umbach, 2009; Féry, 2007).
  - **Wh-question answers are not represented formally in the grammar.** (Kratzer and Selkirk, 2018; Schwarzchild, 1999).

(3) Q: Who bought a book about bats?  
A: [GIVEN] MARY [bought a book about bats].

— **FOCUS HYPOTHESIS:** The answer is a type of focus, which is **marked with a morphosyntactic feature** (e.g. [foc]). This feature may:

  - **Directly** trigger prominence at PF (Selkirk, 1995; Féry and Samek-Lodovici, 2006; Zubizarreta, 1998; Samek-Lodovici, 2005);
  - Be **aligned to a prosodic boundary**, which is a **inherently prominent position** (Büring, 2013; Féry, 2013; Truckenbrodt, 1999, a.o.).

(4) Q: Who bought a book about bats?  

In English, it can be hard to tell these two hypotheses apart, but today I will use the pattern in SMPM to argue in favor of the **FOCUS HYPOTHESIS**.

| The claims: (1) Answers to wh-questions in SMPM are a type of focus. |
| (2) They are marked with a feature in the grammar which directly triggers prosodic prominence. |

| The ingredients: |
| 1. Answers to wh-questions are **realized with prosodic prominence**. |
| 2. The effect is **not caused by default prominence**. |
| 3. The answer is **not aligned to a prosodic boundary**. |

I will argue that these facts support the **FOCUS HYPOTHESIS**—an account based solely on givenness struggles to account for the empirical generalizations.

**ROADMAP**

— §2: I provide some relevant background on SMPM.
— §3: I detail the empirical generalization of wh-question answer prominence in the language.
— §4: I argue that this prominence is not default phrasal prominence.
— §5: I argue that answers are not aligned to a \( iP \) boundary.
— §6 concludes and presents future directions.
— §A: Some syntactic difference between answers to broad focus and wh-questions.
2 Background

San Martín Peras Mixtec (iso: JMX) is an Oto-Manguean language spoken in western Oaxaca, Mexico, near the coast of Guerrero.

Additionally, it is spoken by a sizable diaspora population throughout California.

— All data in this talk come from a single native speaker who lives and works in Watsonville, California.

SMPM is a VSO language, like other Mixtec languages (Macaulay 2005, Ostrove 2018). Answers to wh-questions are fronted to a preverbal position.

\( (5) \)

a. \( \text{Ná tāshī Ana ntā'ā Juan} \)
    \( \text{what give.comp A. hand J.} \)
    ‘What did Ana give Juan?’

b. \( \text{Shì'ǐ tāshī=ñā ntā'ā=rā} \)
    \( \text{mushroom give.comp=3SG.F hand=3SG.M} \)
    ‘She gave him a mushroom.’

SMPM also allows fronting of constituents when responding to a broad focus (i.e. all new) triggering question.

\( (6) \)

a. \( \text{Ná kù bitsu} \)
    \( \text{what cop.comp today} \)
    ‘What happened today?’

b. \( \text{Shì'ǐ tāshī Ana ntā'ā Juan} \)
    \( \text{mushroom give.comp A. hand J.} \)
    ‘Ana gave a mushroom to Juan.’

This allows for a direct comparison of prosody, without influence from declination (DiCanio et al., 2018, cf.).

SMPM is tonal, like all other Oto-Manguean languages (DiCanio and Bennett, to appear).

— It has 5 tones—low, mid, high, falling and rising (Peters, 2017).

— Here I will not be discussing falling tones, which occur less frequently in the language.

— All rising tones I consider are word final, which are mostly restricted to that position (Peters, 2017).
Below, I give time-normalized plot of all target tones in initial position (Figure 1) and final position (Figure 2) across a variety of sentence contexts.

— Each vowel was isolated in Praat, and 10 pitch measurements were taken at equal points across the whole vowel in Equivalent Rectangular Bandwidth (ERB).²

— Colored lines represent the mean time-normalized contour across the entire vowel (excluding the last measurement where there is a clear effect of tonal co-articulation).

— Gray bars represent a 95% confidence interval around the mean.

![Figure 1: Word Initial Tones](image1.png) ![Figure 2: Word Final Tones](image2.png)

### 3 Answers to Wh-Questions are Prosodically Prominent

#### 3.1 Methodology

— 36 target words were elicited 8 times as answers to wh-questions and as answers to a broad focus triggering question over the course of 10 elicitation sessions (n=576).

  — All words are bisyllabic roots.³
  — All words the direct object in a ditransitive construction (as in 5 and 6).
  — Elicited using pictures and the questions in (7a) and (8a).

---

²ERB is a psychoacoustic measurement scale that linearly plots the way pitch is perceived (Moore and Glasberg, 1983). That is, a difference of 1 ERB will be perceived as the same interval at any pitch. This is not the case with Hertz, where differences are perceived logarithmically (e.g. the difference between 220Hz and 440Hz on the one hand, and 440Hz and 880Hz on the other are heard as the same interval.)

³Roots in Mixtec are minimally bisyllabic or bimoraic (Pike, 1948; Macaulay and Salmons, 1995, a.o.)
3.2 Results

The results of this systematic elicitation point to an asymmetry across tone types.

Word-final high tones are significantly raised when they are answers to wh-questions, when compared to broad focus contexts (Figure 5).\(^4\)

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\(^4\)P-values are the results of T-tests where the alternative hypothesis is that the difference in means is greater than 0.02 ERB, the Just Noticeable Difference threshold. N-values represent the total number of syllables in each context. Differences are averages of pitch values across the syllable.
This difference is roughly half the distance between each of the level tones (cf. Figures 1 and 2).

\[
\begin{array}{c|ccc}
\text{Tone} & \text{High} & \text{Mid} & \text{Low} \\
\hline
\text{Mean pitch (in ERB)} & 6.10 & 5.57 & 5.17 \\
\text{Difference} & & 0.53 & 0.4 \\
\end{array}
\]

This difference is well above the Just Noticeable Difference (JND) threshold of \(\approx 0.02\) ERB (Pulkki and Karjalainen 2015).

Unlike other tone languages which show pitch range expansion (e.g. Mandarin, Xu 1999), low tones do not lower in pitch when they are part of an answer to a wh-question.

Similarly, mid tones are not affected when they are an answer to a wh-question.
Rising tones also show no significant difference.

Ex: ya ‘ǎ (‘chile’)

![Figure 10: Rising Tones](image)

Figure 10: Rising Tones  
n=191, n.s.  
Difference=0.05 ERB

In addition to pitch, vowel duration is often a correlate of prosodic prominence (Ladd 2008, Gussenhoven 2004, Jun 2005).

In SMPM, **there is no significant difference in duration between the question contexts** (Figure 11).

![Figure 11: Syllable Duration across Tone Types](image)

These results suggest that wh-answer prominence is realized asymmetrically across tone type in SMPM.

- Only **high tones in final position are realized at a higher pitch** when they are answers to wh-questions.
- There is **no difference in duration** across contexts.
4 Against Default Prominence

I argued in the previous section that SMPM realizes prominence on answers to wh-questions as raising of final high tones.

(10) Wh-question
   a. Ná tàshī Mariana ntà’ā Bernardo
      what give.comp M. hand B.
      ‘What did Mariana give Bernardo?’
   b. Chichí tàshī=ñá ntà’ā=rà
      avocado give.comp=3sg.f hand=3sg.m
      ‘She gave him a AVOCADO.’

(11) Broad Focus Question
   a. Ná kù bitsi
      what cop.comp today
      ‘What happened today?’
   b. Chichí tàshī Mariana ntà’ā Bernardo
      avocado give.comp M. hand B.
      ‘Mariana gave Bernardo an avocado.’

Recall from §1, there are two ways of thinking about this prominence:

− NON-GIVEN HYPOTHESIS: The answer is prominent because it is not given—given constituents resist prominence.

− FOCUS HYPOTHESIS: The answer is a type of focus, which is marked with a morphosyntactic feature.

In English, default prominence in neutral contexts falls on the head of the rightmost constituent (12a), it is infelicitous for it to fall elsewhere (12b) (Chomsky and Halle, 1968; Bresnan, 1971).

(12) What happened?
   a. My grandma made BROCCOLI.
   b. #My grandMA made broccoli.

However, constituents that are entailed by the context (i.e. GIVEn) resist prominence (Schwarzschild, 1999; Féry and Samek-Lodovici, 2006)

Pitch accents cannot fall within the given constituent (13a), and instead fall on the new information (13b).

(13) Who made the broccoli?
   a. #My grandma [made the BROCCOLI]GIVEn
   b. My GRANDMA [made the broccoli]GIVEn

When the non-given constituent is a phrase, the pitch accent falls on the word with default phrasal prominence (14a) (Jackendoff 1972, Chomsky 1971).

(14) Who made the broccoli?
   a. My grandma from NORWAY [made the broccoli]GIVEn
   b. #MY GRANDMA from Norway [made the broccoli]GIVEn

In order to capture this pattern, the NON-GIVEN HYPOTHESIS requires that the shifted prominence must map onto a position that is already prominent (Hayes 1995). The pitch accent must fall on the strong word within a phrase (15a) and the strong syllable within a word (16a).

(15) What is your favorite food?
   a. Raw BROCCOLI [is my favorite food.]GIVEn
   b. #Raw broccoli [is my favorite food.]GIVEn

(16) What is your favorite food?
   a. BRÓCCOLI [is my favorite food.]GIVEn
   b. #Broccoli [is my favorite food.]GIVEn
Superficially, a similar pattern appears to emerge in SMPM. When an answer to a wh-question is modified, preliminary evidence suggests that prominence falls on the adjective instead of the modified noun (Figure 12).

\[(17) \text{nà nákàbà nùhù nù’ù} \]
\[
\text{what fall.comp face ground }
\]
\[
\text{"What fell onto the ground?"
}\]

\[a. \text{[Tsyàká}^{T} \text{nákàbà nùhù nù’ù]}_{\text{GIVEN}}\text{fish fall.comp face ground}
\]
\[
\text{"The fish fell onto the ground."
}\]

\[b. \text{Tsyàká}^{T} \text{ndu’ù} \text{nákàbà nùhù nù’ù]}_{\text{GIVEN}}\text{fish fat fall.comp face ground}
\]
\[
\text{"The fat fish fell onto the ground."
}\]

Exs: tsỳà [‘fish’] and tsys̀á [ndu’ú] [‘fat fish’]

Figure 12: High Tones in Fronted Position

Modified vs. Unmodified Nouns: n=242, \(p<0.05\)

\[\text{Difference}=0.14 \text{ ERB}\]

On its face, this pattern is consistent with the non-given hypothesis, or with an analysis where the wh-answer is marked as a type a focus, and the prominence is realized at the right edge of the focus-marked phrase.

\[(18) H \rightarrow H^{T} / [... \_\_\_ \_\_\_\_\_\_\_\_]_{\text{FOC}}\]

One instantiation of the non-given hypothesis predicts that prominence falls on the adjective because it is most prominent part of the non-given answer.

So, in order to account for the prominence pattern in (17), the non-given hypothesis predicts that in SMPM:

- Rightmost word is most prominent within the phrase, and;
- Rightmost syllable is most prominent within the word\(^5\)

\(^5\) Some support for this prediction comes from DiCanio et al. (2018), who argue for fixed final stress in Yoloxóchitl Mixtec. However, it should be noted that the towns of San Martín Peras and Yoloxóchitl are several hundred kilometers apart in a region with a great diversity of languages. More work needs to be done to determine if SMPM has a similar pattern.
Crucially, if this is a default prominence, then we expect it to also show up outside of answers to wh-questions.

— To test this prediction, I compared the pitch of high tones in modified nouns and adjectives in neutral contexts (20).

(20) Shâhmi  yûtsì ihmî rà lo'o
burn.comp sand  hot  he small
‘The hot sand burned the boy.’

Figure 13: Relative H tone Pitch of Nouns and Adjectives in Neutral Context
n=128, n.s.
Difference=0.04 ERB

There is no evidence that adjectives are more prominent than the nouns the modify in neutral contexts.

— Final high tones of adjectives are not produced at a higher pitch than final high tones of preceding nouns (Figure 13).
4.1 Sentence Final Prominence

An alternative approach pursued in Kabagema-Bilan et al. (2011): sentence final prominence is shifted onto non-given constituents.

This analysis could be the result of the interaction between two constraints proposed by Féry and Samek-Lodovici (2006) (pg.134-135):

(21)  

<table>
<thead>
<tr>
<th>a. hi:</th>
<th>Align the right boundary of every iP with its head.</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. destress-given:</td>
<td>A given phrase is prosodically nonprominent.</td>
</tr>
</tbody>
</table>

When destress-given is ranked above hi, the prominence will fall as close to the right edge of the sentence as possible, without falling in the given constituent.

(22) Nā nákābā nūhū nū’ū
what fall.comp face ground
"What fell onto the floor?"

a. Tsyáká [nákābā nūhū nū’ū]GIVEN
fish fall.comp face ground
‘The FISH fell on the ground’

b. Tsyáká ndu’ú [nákābā nūhū nū’ū]GIVEN
fish fat fall.comp face ground
‘The FAT FISH fell on the ground’

This analysis predicts that there should be sentence-final prominence in SMPM.

However, tonal languages undergo declination throughout the clause (Connell, 2001; Ladd, 2008).  

− To demonstrate prominence, one would have to show that the sentence-final high tone is prominent relative to its expected pitch after declination.

I elicited 60 sentences with the form in (23): 4 high tones roughly spaced throughout the sentence.6

(23) Sháshi ndushí tsya’á chichí
eat.cont chicken dirty avocado
‘The dirty chicken is eating the avocado.’

− High tones were isolated in Praat.

− Linear regression model fit over the first three syllables, representing the average rate of declination (solid blue line).

− Extended to predict the pitch of the sentence-final high tone (dotted blue line).
  − 95% confidence that mean will fall within blue bar (actual mean represented with blue dot).
  − 95% of the observations should fall within red bar.

− In fact, the observed high tones fall within the predicted range (Figure 14).

This suggests that final high tones are not more prominent than expected.

I take these facts as evidence against the non-given hypothesis.

6To my knowledge, there are no verbs in SMPM that end in a high tone. For this reason, it was impossible to disperse the high tones completely evenly throughout the clause.
5 Against Alignment to an Intonational Phrase

In the previous section, I argued against the non-given hypothesis.

— No evidence that the prominence surfaces in an inherently prominent position.
— No evidence of right-aligned prominence that is shifted.

The question remains: do answers to wh-questions receive prominence because they are **aligned a prosodic boundary** (Féry, 2013; Büring, 2013; Truckenbrodt, 1999), or directly via a **rule that triggers prominence at PF** (cf. Focus Prominence Rule, Zubizarreta, 1998:21; Stress Focus Constraint, Samek-Lodovici, 2005:697)?

Féry (2013) suggests that foci (including answers to wh-questions) are **aligned to a prosodic boundary, most often an intonational phrase**.

(24) a. Answer to wh-question (What did Mariana give Bernardo?)

\[(Chichi^{1})i \tash=\text{\text{"n\text{"a} nt\text{"a}r=\text{"r}}}]\]
avocado give.comp=3SG.F hand=3SG.M
‘She gave him an avocado.’

b. Answer to broad focus question (What happened today?)

\[(Chichi \tashi \text{Mariana nt"a\text{"r}} B\text{"ernardo}]\]
avocado give.comp M. hand B.
‘Mariana gave Bernardo an avocado.’
In this subsection, I introduce two diagnostics for intonational phrases in SMPM: Tone Sandhi and Final Lengthening.

I use them to demonstrate that there is no intonational phrase boundary between fronted answers to wh-questions and the main verb.

5.1 Tone Sandhi

In SMPM, an adjective that normally ends in a high tone (25) will become a rising tone if it follows a low tone (26).

(25) Shìnì lesō ká’no
     saw.I rabbit big
     ‘I saw the big rabbit’

(26) Shìnì kíńi ká’no
     saw.I pig big
     ‘I saw the big pig’

This pattern can be described with the following rule:

(27) HIGH TONE CONTOURING
    H → R / L #

However, this tone sandhi rule is blocked between a matrix subject and an embedded adjectival predicate.

(28) Ká’á kíńi [ká’no itũ]cp
    think.cont pig big tree
    ‘The pig thinks that the tree is big.’

I argue that it is blocked by a prosodic boundary, likely an intonational phrase boundary that matched to the embedded CP (Selkirk, 2011).

— Other tone sandhi processes have been argued to be blocked by prosodic boundaries (e.g. Campbell 2014 on Zenzontepec Chatino and Chen 1987 on Xiamen Chinese).

If there is an intonational boundary between fronted answers to wh-questions and the predicate, then we expect tone sandhi to be blocked.

In fact, tone sandhi is not blocked, indicating a lack of a large prosodic boundary.

(29) Q: Nā yā ká’no?
     what it.neut big
     ‘What is big?’

A: Kíńi ká’no?
     pig big
     ‘THE PIG is big.’

5.2 Final Lengthening

Another reliable cross linguistic diagnostic for intonational phrases is phrase final lengthening (Wightman et al., 1992; Klatt, 1976; Oller, 1973).

Indeed, subjects that immediately precede the embedded predicate (30a) are significantly longer in duration than subjects that are modified by an adjective (30b) (Figure 15).
(30) a. \((Kā’ā \text{ [tsinå]̂}i (àhsī kõñũ)i)\)
think.cont dog tasty meat
‘The dog thinks that meat is tasty.’

b. \((Kā’ā \text{ [tsinå]̂}lo’o)i (àhsī kõñũ)i)\)
think.cont dog small tasty meat
‘The small dog thinks that meat is tasty.’

Figure 15: Matrix Subject Final Vowel Length Before an Embedded Clause
\(n=50, \text{ p}<0.001\)
Difference=27.8 ms

Recall that the alignment hypothesis predicts that the difference between answer to wh-questions and broad focus answers is whether an intonational boundary intervenes between the constituent and the verb.

(31) a. Answer to wh-question (What did Mariana give Bernardo?)

\((Chichī̂)̄i (tâshī=ñā \ ntâ’ā=rā)i)\)
avocado give.comp=3sg.f hand=3sg.m
‘She gave him an avocado.’

b. Answer to broad focus question (What happened today?)

\((Chichī \ tâshī \ Mariana ntâ’ā Bernardo)i)\)
avocado give.comp M. hand B.
‘Mariana gave Bernardo an avocado.’

Thus, under this view we expect lengthening on answers to wh-questions, and not on answers to broad focus questions.

In fact, there is no significant difference in duration (Figure 16).
I take these two diagnostics to demonstrate that there is no intonational phrase boundary after answers to wh-questions.

Additionally, there is no significant difference in the pitch of final high tones of modified and unmodified subjects (Figure 17).

(32)  

a. (Kã’ã ndushi) t (֊āhs̅i sibã) t
think.cont chicken tasty seed
‘The chicken thinks that seeds are tasty.’

b. (Kã’ã ndushi) lo’o t (֊āhs̅i sibã) t
think.cont chicken small tasty seed
‘The small chicken thinks that seeds are tasty.’
I take this to indicate that high tone raising on answers to wh-questions is **not caused by a default intonational phrase prominence**.

Instead, I suggest that **prosodic prominence is due to a feature, which directly triggers high tone raising at the right edge of the focused constituent**.

(33) focal upstep

\[
\text{H} \rightarrow \text{H}^\uparrow / [... ]_F
\]

### 6 Conclusion and Future Directions

Today I have made the following claim: **answers to wh-questions must be represented featurealy in the grammar of San Martin Peras Mixtec**.

- This feature is realized by the phonology as **asymmetric prominence**.
  - Word final high tones raise in pitch.
  - No other correlates of prominence.

- Following Rooth (1992); Selkirk (1995); Féry and Samek-Lodovici (2006), a.m.o., I assume this feature is **focus**.

Furthermore, I have argued against the **non-given hypothesis** on the following grounds:

- There is **no evidence that prominence is mapped onto an inherently prominent position**.
- There is **no evidence of a right-aligned sentence prominence**.

Finally, I argued that answers to wh-questions are **not aligned to an intonational phrase boundary**.

- **Tone sandhi is not blocked**.
- There is **no phrase final lengthening**.

Going forward, more work must be done to fit SMPM into the typology of prominence realization in tonal languages. Some tonal languages:

- Expand the entire F_0 space (e.g. Mandarin—Xu 1999).
- Shift the entire pitch register (e.g. Akan—Kügler and Genzel 2013).
- Realize prominence asymmetrically (e.g. SMPM, Hausa—Leben et al. 1989)

### References


Appendix

A Syntactic Differences

Convergent evidence for the claim that wh-question answers are represented with a feature in the grammar comes from their syntactic behavior.

Recall that constituents can front when they are answers to wh-questions (34), or when they are part of the response to a broad focus question (35).

(34) a. Ná tàshí Mariana ntà’ā Bernardo
    what give.comp M. hand B.
    ‘What did Mariana give Bernardo?’

   b. Chìchí tàshí=ñá ntà’ā=rà
    avocado give.comp=3sg.f hand=3sg.m
    ‘She gave him a AVOCADO.’

(35) a. Ná kù bitsi
    what cop.comp today
    ‘What happened today?’

   b. Chìchí tàshí Mariana ntà’ā Bernardo
    avocado give.comp M. hand B.
    ‘Mariana gave Bernardo an avocado.’

The two hypotheses we are considering make different predictions with respect to the syntactic behavior of answers to wh-questions:

**FOCUS HYPOTHESIS** predicts:

— Answers to wh-questions **should be subject to morphosyntactic operations in some languages.**

**NON-GIVEN HYPOTHESIS** predicts:

— Answers to wh-questions are not formally represented in the grammar, so **they shouldn’t be involved in any special morphosyntactic operations.**

Independent syntactic evidence that the grammar is sensitive to answers to wh-questions comes from two diagnostics: optionality and clause-boundedness.

As we have seen, answers to wh-questions surface in a pre-verbal position. **This movement is obligatory.**

— When the object is questioned, it is ungrammatical to leave the answer in-situ (36b), to front the subject (36c), or to front a subject clitic pronoun (36d).

(36) Ná shishi tsinà
    what ate dog
    ‘What did the dog eat?’

   a. Kônù shishi=rí
      meat ate=it.animal
      ‘It ate the MEAT.’

   b. *Shishi=rí kônù
      ate=it.animal meat
      Intended: It ate the MEAT.

   c. *Tsìnà shishi kônù
      dog ate meat
      Intended: The dog ate the MEAT.

   d. *Rí=shishi kônù
      it.animal=ate meat
      Intended: It ate the MEAT.
This is not the case in broad focus contexts. Here, either the subject (37a) or the object (37b) may front.\footnote{Interestingly, (1) is infelicitous in response to (37), but is acceptable as an out-of-the-blue assertion.}

(37)  
\begin{verbatim}
Ná kü bitsi what COP.COMP today
‘What happened today?’
\end{verbatim}  

a. Tsiná shishi kônù dog ate meat
‘The dog ate the meat.’

b. Kônù shishi tsiná meat ate dog
‘The dog ate the meat.’

This movement pattern strongly suggests that the syntax must be able to uniquely identify answers to wh-questions and that there is a feature that must be checked.

Second, fronting the answer to a wh-question is not clause-bounded.

(38)  
\begin{verbatim}
a. Ná kachi Juan [shashi Ana]_{cp} what said J. ate A.
‘What did Juan said that Ana ate?’

b. Ita i kachi=rà [shashí=ñá ___]_{cp}
flower said=3.SG.M ate=3.SG.M
‘He said that she ate a FLOWER.’
\end{verbatim}

Regardless of whether the answer originates in the matrix or embedded clause, it must move a sentence initial position.

Fronting in a broad focus context, on the other hand, cannot proceed from the embedded clause.

(39)  
\begin{verbatim}
a. Ná kü bitsi what COP.COMP today
‘What happened today?’

b. *Ita i kachi Juan [shashi Ana ___]_{cp}
flower said J. ate A.
‘Juan said that Ana ate a flower.’
\end{verbatim}

This syntactic data strongly suggests that answers to wh-questions are a category that the syntax cares about.

\begin{itemize}
\item Provides convergent evidence supporting the claim that answers to wh-questions are represented formally in the grammar.
\item Similar to patterns of wh-movement in English (Chomsky 1977), and contrastive focus movement (É. Kiss 1998).
\end{itemize}