

ON THE LACK OF INTERVENTION EFFECTS IN AMHARIC

Aviad Eilam (eilamavi@ling.upenn.edu)*
University of Pennsylvania

1. Background: Intervention effects

- Intervention effects arise when a quantificational or focusing element, labeled the intervener, precedes a *wh*-phrase in a *wh*-question, leading to degradedness.
- The core set of crosslinguistically stable interveners consists of the focusing operators equivalent to English *only*, *even*, and *also*, as well as NPIs (Kim 2002, Beck 2006). Certain quantificational elements and disjunctive NPs can also be interveners.

- (1) a. *Minsu-man nuku-lûl po-ass-ni?
Minsu-only who-ACC see-PAST-Q
b. nuku-lûl Minsu-man po-ass-ni?
who-ACC Minsu-only see-PAST-Q
'Who did only Minsu see?' (Korean; Beck 2006:3)

- (2) a. *amuto muôs-ûl ilk-chi anh-ass-ni?
anyone what-ACC read-CHI not.do-PAST-Q
b. muôs-ûl amuto ilk-chi anh-ass-ni?
what-ACC anyone read-CHI not.do-PAST-Q
'What did no one read?' (Korean; Beck 2006:4)

- (3) a. ^{??}nukuna-ka ônû kyosu-lûl chonkyôngha-ni?
everyone-NOM which professor-ACC respect-Q
b. ônû kyosu-lûl nukuna-ka chonkyôngha-ni?
which professor-ACC everyone-NOM respect-Q
'For which *x*, *x* a professor: everyone respects *x*?' (Korean; Beck 2006:4)

- (4) a. ^{???}[John-ka Bill]-ga nani-o yon-da-no?
John-or Bill-NOM what-ACC read-past-Q?
b. nani-o [John-ka Bill]-ga yon-da-no?
what-ACC John-or Bill-NOM read-past-Q
'What did John or Bill read?' (Japanese; Tomioka 2007b:1571)

- Crucially, the order in the (a) versions is the a priori expected one, since these are SOV *wh*-in-situ languages. The effects are eliminated if the *wh*-phrase is scrambled over the intervener, as in the (b) versions.
- Intervention effects surface in Asante Twi, Bangla, Dutch, English, French, German, Hindi, Japanese, Korean, Malayalam, Mandarin, Passamaquoddy, Persian, Thai, and Turkish (Simpson & Bhattacharya 2003, Beck 2006, Kobele & Torrence 2006).

* I thank Dave Embick for his guidance throughout this project. I am also grateful to Tony Kroch, Julie Legate, Satoshi Nambu, Satoshi Tomioka, and my fellow graduate students in the Linguistics Department at the University of Pennsylvania, as well as audiences at WCCFL 27 and Ben-Gurion University of the Negev. Special thanks to my Amharic informants: Mengistu Amberber, Tilahoun Amara, Tigist Guebreyes, Birtukan Medhani, Tefesehet Mesfin, Takala Chakele, and in particular Gelila Asnake.

- **Goal:** Argue for a non-structural approach to intervention effects, given novel data from Amharic, in which these effects (almost) never arise.

- **Outline:**
 - ▶ Existing analyses of intervention effects
 - ▶ The lack of intervention effects in Amharic
 - ▶ Attempting to apply a structural analysis
 - ▶ A non-structural explanation
 - ▶ Conclusions and remaining issues

2. Existing analyses of intervention effects

- Typically divided into syntactic, semantic, and pragmatic accounts. Alternatively:

Configuration \ Cause	Structural/Hierarchical	Linear
Wh-phrase	Kim (2005), Beck (2006)	
Intervener	Grohmann (2006)	Tomioka (2007a,b)

Table 1: Classes of Approaches to Intervention Effects

- Pesetsky (2000): A semantic restriction on a quantifier (including *wh*) may not be separated from that quantifier by a scope-bearing element (p. 67).

Feature Movement	Covert Phrasal Movement
– Doesn't license ACD	– Licenses ACD
– No Superiority effects	– Superiority effects
– Intervention effects	– No intervention effects
– No Subjacency effects	– Subjacency effects
– Obeys Attract Closest	– Obeys Attract Closest

Table 2: Properties of Feature Movement vs. LF Phrasal Movement (Pesetsky 2000)

- Predictions: **A configuration that lacks intervention effects (1) licenses *wh*-phrases through covert phrasal movement; (2) will exhibit Superiority effects; (3) will not allow *wh*-phrases inside islands.**
- No clear definition of the set of interveners
- Tsai (1994), Reinhart (1998), a.o.: in-situ *wh*-phrases do not move
- Beck (2006): Semantic theory in which the hierarchical structure at LF plays a role.
 - Intervenors come with the focus operator \sim in the sense of Rooth (1992).
 - *Wh*-phrases lack an ordinary semantic value; when \sim applies to the *wh*-phrase, the resulting value is undefined and ungrammaticality results.
 - **"... a *wh*-phrase may never have a focus-sensitive operator other than the Q operator as its closest c-commanding potential binder."** (p. 46)
 - Do all interveners give rise to focus-affected readings?

- Tomioka (2007a,b): Structural approaches do not capture a number of properties:
 1. Interspeaker variability in judgments
 2. Distinctions within the class of interveners
 3. Difficulties in defining a property which uniquely identifies interveners
 4. Weakening of the effect when the intervener is embedded or not a subject
 - Intervention effects are the result of a mismatch between the properties of interveners and the informational articulation of *wh*-questions.
- (5) [...A... [Wh] ...B...] (cf. Vallduví 1990, 1995)
 LINK FOCUS TAIL
- Intervenors cannot be links because they are anti-topic items (ATIs), and cannot be tails because tails must be phonologically reduced.
- (6) * [...Int... [Wh] ...B...]
~~LINK~~ FOCUS TAIL
- Scrambling places ATIs in the phonologically reduced part of the sentence.
- (7) [[Wh]_i ...Int... t_i ...B...]
 FOCUS TAIL →

3. The lack of intervention effects in Amharic

- Amharic is an SOV and *wh*-in-situ language.
 - Contra the descriptive generalization whereby intervention effects are universal (Beck 2006), Amharic does not exhibit degradedness when a quantificational or focusing element *c*-commands a nominal (8), adverbial (9), or *d*-linked *wh*-phrase (10)^{1,2,3}.
- (8) a. haile bəčča mən anəbbäb-ä? (only + nominal *wh*-phrase)
 Haile only what read.PER-3MS
 b. mən haile bəčča anəbbäb-ä?
 'What did only Haile read?'
- (9) a. haile bəčča lämən ya-n mäs'haf anəbbäb-ä? (only + adverbial *wh*-phrase)
 Haile only why that-ACC book read.PER-3MS
 b. lämən haile bəčča ya-n mäs'haf anəbbäb-ä?
 'Why did only Haile read that book?'
- (10) a. haile bəčča yätəññaw-ən mäs'haf anəbbäb-ä? (only + *which*-phrase)
 Haile only which-ACC book read.PER-3MS
 b. yätəññaw-ən mäs'haf haile bəčča anəbbäb-ä?
 'Which book did only Haile read?'

¹ Some languages exhibit distinctions among these categories (see Ko 2005, Soh 2005, Tomioka 2006).

² Abbreviations used for Amharic: ACC = accusative, AUX = auxiliary, DEF = definite, F = feminine, FOC = focus, IMP = imperfect, M = masculine, NEG = negation, subscribed O = object, P = prepositional suffix, PER = perfect, PL = plural, POSS = possessive, REL = relative marker, S = singular, TOP = topic.

³ The transcription is as follows: č', k', p', s' and t' are ejective stops; ñ is the palatal nasal; superscribed w represents labial secondary articulation; ə is a high central vowel and ä is a mid-central vowel.

- This is true of (almost) all potential interveners, including the core set of *bəčča* 'only', *dägmo* / *-mm* 'also' and *ənkwən* 'even', quantificational elements like *hullumm* 'everyone', and disjunctive NPs (see Eilam 2009 for full list).
- In the above examples, the (a) versions with the *wh*-phrase in situ are preferred, on a par with run-of-the-mill *wh*-questions. There is one class of interveners for which judgments are less clear: some speakers prefer a *wh*-phrase to remain in situ following an NPI (11a), while others prefer it scrambled above the NPI (11b).

- (11) a. mannəmm mən al-anəbbäb-ä-mm? (NPI)
 anyone what NEG-read.PER-3MS-NEG
 b. mən mannəmm al-anəbbäb-ä-mm?
 'What did no one read?'

- **What could explain the exceptionality of Amharic?**
 - Sensitivity to intervention effects is a parameterized feature: NO.
 - The semantics of Amharic *wh*-phrases and/or focus: NO (cf. Higginbotham 1985).
 - Amharic clausal structure: Amharic interveners, like subjects in general, are above the Q operator in C^0 , so that the latter is the closest c-commanding potential binder to the *wh*-phrase (cf. Pesetsky 2000, Beck 2006).
 - Amharic information structure and/or prosody (cf. Tomioka 2007a,b).

4. Attempting to apply a structural analysis

4.1 Evidence for a structural analysis

- Recall the predictions from Pesetsky (2000): **A configuration that lacks intervention effects (1) licenses *wh*-phrases through covert phrasal movement; (2) will exhibit Superiority effects; (3) will not allow *wh*-phrases inside islands.**
 - Not covert phrasal movement: Amharic *wh*-phrases in situ are acceptable inside islands. Thus, under Pesetsky's theory, *wh*-phrases in Amharic remain below the intervener at LF, and are licensed through feature movement.
- (12) a. haile astämari-w lä-man yä-sät't'-ä-w-ən mäs'haf anəbbäb-ä?
 Haile teacher-DEF to-who REL-give.PER-3MS-DEF-ACC book read.PER-3MS
 'Who is the person *x* such that Haile read the book that the teacher gave to *x*?'
 b. *lä-man haile astämari-w yä-sät't'-ä-w-ən mäs'haf anəbbäb-ä?
 to-who Haile teacher-DEF REL-give.PER-3MS-DEF-ACC book read.PER-3MS
 'Who is the person *x* such that Haile read the book that the teacher gave to *x*?'
- Beck (2006): "... a *wh*-phrase may never have a focus-sensitive operator other than the Q operator as its closest c-commanding potential binder." (p. 46)
 - Under Pesetsky or Beck, Amharic should only be able to evade intervention effects if potential interveners don't intervene, because they are above the Q operator in C^0 .

- Evidence for the C domain position of clause-initial elements, including interveners:
 1. Amharic is a null subject language with obligatory subject agreement affixes:

(13) sak'-äčč.

laugh.PER-3FS
'She laughed.'

(14) aster doro-wa-n arräd-*(äčč).

Esther hen-DEF-ACC butcher.PER-3FS
'Esther butchered the hen.'

- Following Alexiadou and Anagnostopoulou (1998) and many others, one can assume that agreement is pronominal in null subject languages, indicating that the subject is not in SpecIP, but rather adjoined in a higher position in the C domain.

2. Adverb positioning

- Sentential adverbs, adjoined to IP (e.g., Jonas & Bobaljik 1993), can follow the subject:

(15) polis-u dägğännätu leba-w-ən yaz-ä.

police-DEF fortunately thief-DEF-ACC catch.PER-3MS
'Fortunately, the police caught the thief.'

(cf. *The police, fortunately, caught the thief*)

(16) mannəmm mənäləbatə mäs'haf-u-n al-anäbbäb-ä-mm.

anyone probably book-DEF-ACC NEG-read.PER-3MS-NEG
'Probably, no one read the book.'

(cf. *??No one probably read the book*)

3. String-vacuous clitic-left-dislocation (CLLD)

- A clause-internal phrase moves to an A'-position in the C domain, often without any necessary surface reflex: it can remain below the subject (cf. Simpson & Bhattacharya 2003 for a similar proposal regarding "masked" movement).

(17) a. yonas anbäsa-w-ən gäddäl-ä.

Jonas lion-DEF-ACC kill.PER-3MS
'Jonas killed the lion.'

b. yonas anbäsa-w-ən gäddäl-ä-w.

Jonas lion-DEF-ACC kill.PER-3MS-3MS_o
'Jonas killed the lion.'

(Demeke 2003:66)

- Object marking (OM) as in (17b) is restricted as expected if the NP referred to is a topic, and hence in the C domain, where discourse dependencies are licensed:

1. Nonreferential pronouns and *wh*-words are incompatible with OM. Referentiality is an obligatory property of topics (Reinhart 1981), while *wh*-words, being inherently focused, cannot also serve as topics (Polinsky & Potsdam 2001).

(18) aster and nəgər ayy-äčč-(*əw).

Esther something see.PER-3FS-3MS_o
'Esther saw something.'

(Amberber 1996:139)

(19) aster mən ayy-äčč-(*əw)?
 Esther what see.PER-3FS-3MS_o
 'What did Esther see?' (Amberber 1996:139)

2. The forms used as reflexive pronouns can only have their nonreflexive interpretation if referred to by OM. Reflexive pronouns are not possible topics due to their nonreferentiality (Polinsky & Potsdam 2001).

(20) a. haile ras-u-n ayy-ä.
 Haile head-POSS.3MS-ACC see.PER-3MS
 'Haile saw himself.'
 b. haile ras-u-n ayy-ä-w.
 Haile head-POSS.3MS-ACC see.PER-3MS-3MS_o
 'Haile saw his head/*himself.'

- In terms of its discourse function, OM seems to be primarily a cataphoric device (e.g., Gasser 1983), which is characteristic of topics in the sense of Givón (2001).
- A syntactic reflex of OM can be seen in word order when an OMed phrase interacts with a non-subject. Displacement is then not hidden because the latter, unlike the subject, is not in the high left periphery.

(21) a. aster bet-u-n bä-mät'rägiya-w t'ärräg-äčč.
 Esther house-DEF-ACC with-broom-DEF clean.PER-3FS
 'Esther cleaned the house with the broom.' (Yabe 2007:80)

b. aster <bä-mät'rägiya-w> bet-u-n <??bä-mät'rägiya-w> t'ärräg-äčč-əbb-ät.
 Esther with-broom-DEF house-DEF-ACC with-broom-DEF clean.PER-3FS-P-3MS_o
 'Esther cleaned the house with the broom.'

c. aster <mät'rägiya-w-ən> bet-u-n <*mät'rägiya-w-ən> t'ärrägä-čč-əbb-ät.⁴
 Esther broom-DEF-ACC/TOP house-DEF-ACC broom-DEF-ACC/TOP clean.PER-3FS-P-3MS_o
 'Esther cleaned the house with the broom.' (Yabe 2007:82)

- If (21a) is not the base-generated order, but rather the result of scrambling the direct object: (21b-c) shows that the DO cannot be higher than the adjunct when the latter is referred to by OM, because CLLD places phrases in the high left periphery, whereas scrambling does not.
- Scrambling does not enable phrases to precede the subject (22) because it is limited to adjunction to IP/VP/AP (cf. Grewendorf & Sternefeld 1990), while CLLD derives this order because it is associated with the C domain.

(22) wəšša-w-ən_i aster t_i mätt-äčč-*(əw).⁵
 dog-DEF-ACC Esther hit.PER-3FS-3MS_o
 'Esther hit the dog.' (Amberber 1996:138)

⁴ There is some interspeaker variation regarding (21b): Yabe (2007) says that only for some speakers is the DO-PP order dispreferred, while Haile (1970) claims that it is ungrammatical. In any case, pace Yabe (2007), (21c) is not an applicative construction; it does not allow passivization, for example.

⁵ There is some interspeaker variation in the acceptability of (22) without OM, perhaps suggesting that some speakers allow scrambling to target CP-adjoined positions.

- If lexical subjects in declarative sentences occupy a CP-adjoined position in Amharic, we might expect other types of elements to be placed in such a position:

(23) man mäčə mən gäzz-a?
 who when what buy.PER-3MS
 'When did who buy what?'

(24) a. mäčə_i man t_i mən gäzz-a?
 when who what buy.PER-3MS
 'When did who buy what?'

b. tənant Kassa mäš'haf gäzz-a.
 yesterday Kassa book buy.PER-3MS
 'Yesterday Kassa bought a book.'

(Demeke 2003, in Aboh 2007:304)

- (24) and other possible permutations of the base order (23) are violations of Superiority. *Wh*-phrase movement motivated by something other than checking a [+wh] feature (e.g., focus movement; Bošković 2002) disregards Superiority.
- Given that the various permutations allow single-answer readings, we can also conclude that none of the *wh*-phrases occupy SpecCP (Bošković 2002). Rather, *wh*-phrases adjoin to CP on a par with lexical NPs in declaratives.

- The proposed clausal structure for Amharic allows us to maintain Pesetsky's (2000) classification of movement types, as well as Beck's (2006) ideas regarding the definition of interveners, the underlying cause responsible for intervention effects, and the relevance of hierarchical structure for the phenomenon at hand.

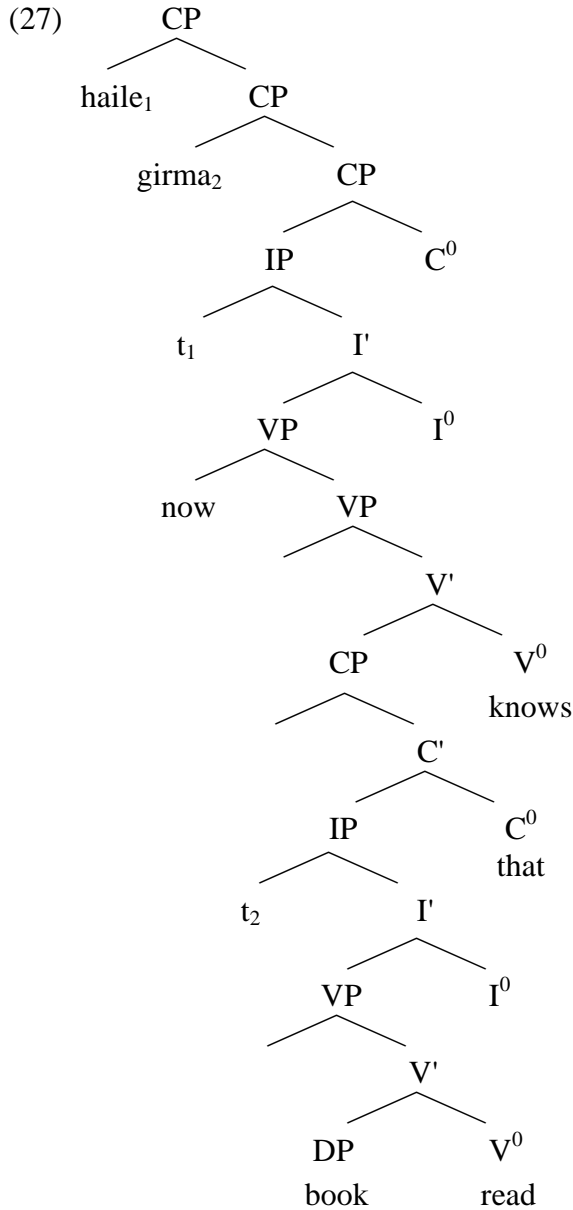
4.2 Problems with a structural analysis

1. Amharic also does not show intervention effects when the potential intervener is a non-matrix subject (25) or a non-subject (26):

(25) girma haile bəčča mən ənd-anəbbäb-ä y-asəb-all?
 Girma Haile only what that-read.PER-3MS 3MS-think.IMP-AUX.3MS
 'What does Girma think that only Haile read?'

(26) girma lä-haile bəčča mən sät't'-ä?
 Girma to-Haile only what give.PER-3MS
 'What did Girma give only to Haile?'

- Assuming that multiple elements can adjoin to CP, one could claim that in (25)-(26) both the matrix subject and the potential intervener are above C^0 .
- This leads to the prediction that adverbs associated with the matrix clause should be able to follow the embedded subject (27). However, the prediction fails (28).



(28) <ahun> haile <ahun> girma <*ahun> tənant mäs'haf-u-n ənd-anəbbäb-ä
 now Haile now Girma now yesterday book-DEF-ACC that-read.PER-3MS
 <ahun> y-awk'-all.
 now 3MS-know.IMP-AUX.3MS
 'Haile now knows that Girma read the book yesterday.'

2. There is interpretational evidence for a high left peripheral "hanging topic" position, but it is orthogonal to the absence of intervention effects:

(29) haile bæčča mən anəbbäb-ä? (=8a)
 Haile only what read.PER-3MS
 a. 'What did only Haile read?'
 b. 'Only speaking of Haile, what did he read?'

- (30) Context: There are four students in the class. All four have read "The Neverending Story" and "Harry Potter", but only Haile has read "The Hobbit".
- (31) Q: haile bəčča mən anəbbäb-ä?
 A1: "The Hobbit" (✓reading a)
 A2: "The Neverending Story", " Harry Potter", "The Hobbit". (✓reading b)
- (32) Q: mən haile bəčča anəbbäb-ä?
 A1: "The Hobbit" (✓reading a)
 A2: # "The Neverending Story", "Harry Potter", "The Hobbit". (*reading b)
- The subject must be in SpecIP in (32) in order to capture the interpretive distinction. This is the same position that derives reading (a) in (31), establishing that the hanging topic position is not required to evade intervention effects.
- **Only subjects can be hanging topics in the C domain, but they do not have to be.**
 - Explains the properties described above, fits in with the well-known correlation between subjecthood and topichood (e.g., Chafe 1976), and the obligatory status of subject agreement, as opposed to other forms of agreement.
 - **The lack of intervention effects is independent of the position of the subject.**

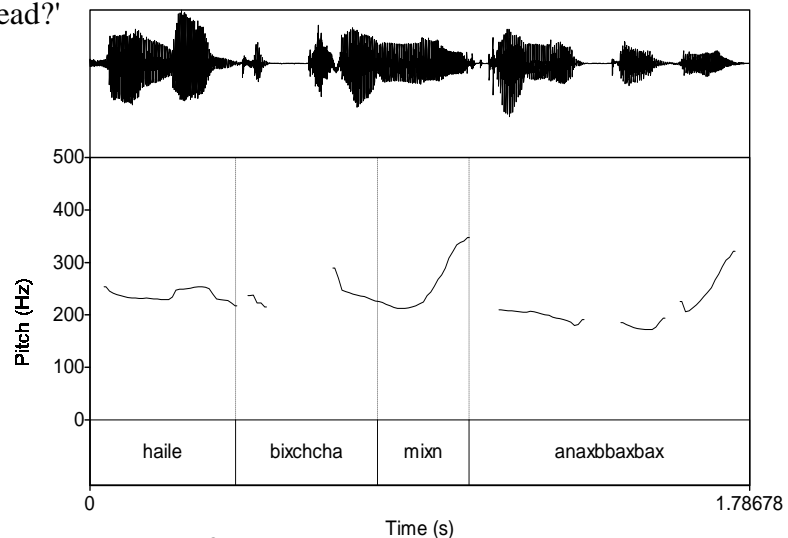
5. A non-structural explanation

- Tomioka (2007a,b): intervention effects are the result of a mismatch between the properties of interveners and the informational articulation of *wh*-questions.

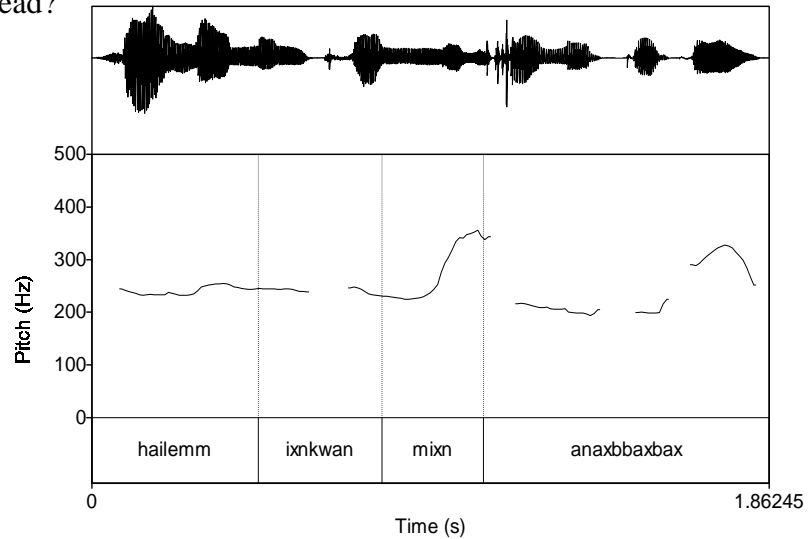
(33) * [...Int... [Wh] ...B...] (=6)
 LINK FOCUS TAIL

- **Amharic prosody and the lack of intervention effects**
 - The absence of intervention effects is correlated with prosodic properties which are predicted by Tomioka (2007a,b): Amharic does not seem to exhibit pitch prominence on the associate or on the focus particle.

(34) haile bəčča mən anəbbäb-ä?
 Haile only what read.PER-3MS
 'What did only Haile read?'



- (35) haile-mm ənkw^wan mən anəbbäb-ä?
 Haile-FOC even what read.PER-3MS
 'What did even Haile read?'

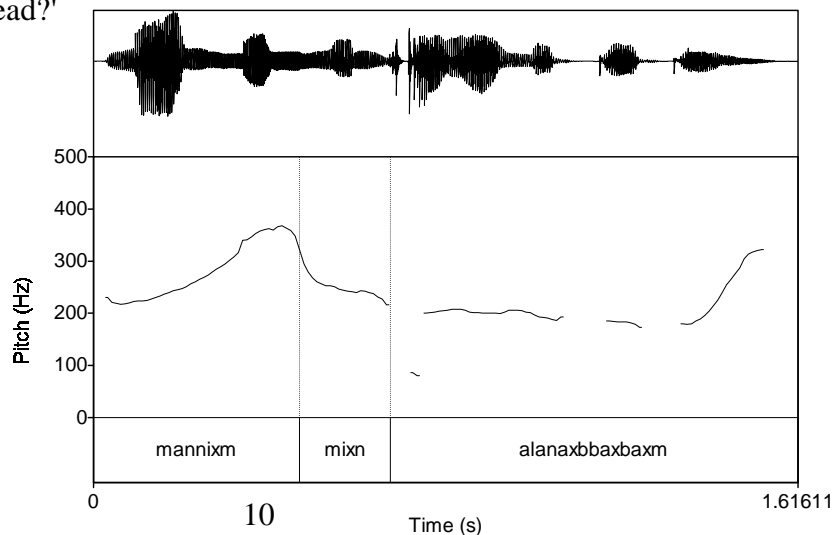


- Morphosyntactic focus structures in various languages are claimed to be independent of intonational prominence (Drubig 2003).
- Marking the associate of a focus particle in Amharic can be achieved through linear adjacency, even if this involves breaking up constituents.

- (36) aster k'ay bəčča shämiz-očč tə-därg-all-äčč.
 Esther red only shirt-PL 3FS-wear.IMP-AUX-3FS
 'Esther only wears [red]_F shirts.'

- In other words, **Amharic has as a default the property which other languages derive by scrambling the *wh*-phrase over the intervener**: the positioning of a nontopicalizable element in a phonologically reduced position, allowing it to be interpreted as (part of) the tail.
- The variable judgments vis-à-vis NPIs might indicate intervention effects. Interestingly, these elements do exhibit unambiguous intonational prominence.

- (37) mannəmm mən al-anəbbäb-ä-mm? (=11)
 anyone what NEG-read.PER-3MS-NEG
 'What did no one read?'



- **Amharic information structure and the lack of intervention effects**

- There is no degradedness when a focus particle like *bəčča* 'only' takes a hanging topic as its argument (38b) because the topic is not integrated in the information structure of the question.

(38) haile bəčča mən anəbbäb-ä?

Haile only what read.PER-3MS

a. 'What did only Haile read?'

b. 'Only speaking of Haile, what did he read?'

- Other languages ban this order of topic marking and focus particle and/or the interpretation which it derives in Amharic; some prohibit the combination of topic marking and focus particles altogether (e.g., Tsez; Polinsky & Potsdam 2001).

6. Conclusions and remaining issues
--

- Given the novel observation that Amharic exhibits (almost) no intervention effects, we first attempted to apply a structural theory, whereby the linear string of Amharic hides a hierarchical structure different from that of languages which have intervention effects.
- The structural approach did not capture the entire range of data, forcing us to abandon it in favor of a non-structural explanation. Under this theory, the attested crosslinguistic variation was reduced to prosodic and information structural properties which distinguish Amharic from other languages.
- The analysis can also be extended to alternative questions, where an intervener preceding a disjunctive phrase is said to remove the alternative question reading, allowing the sentence to be interpreted only as a yes/no question (Beck & Kim 2006).

(39) Does only John like Mary or Susan?

a. #Mary. [*AltQ]

b. Yes. [✓Yes/NoQ]

- The alternative reading is lost because the disjunct is the focus, but the intervener can be neither link nor tail in its surface position. The polar reading is retained because in a yes/no question the disjunct is not the focus.
- As expected, Amharic allows both readings despite the presence of an intervener.

(40) haile bəčča šay wäyöss buna t'ät'-a?

Haile only tea or coffee drink.PER-3MS

'Did only Haile drink tea or coffee?' /

'Only speaking of Haile, did he drink tea or coffee?'

a. šay. [✓AltQ]

tea

b. awo. [✓Yes/NoQ]

yes

- The explanation is the same as in *wh*-questions: interveners can be tails when preceding the disjunct since they are not prosodically prominent, and when they are interpreted as hanging topics they do not create intervention effects because they do not need to be incorporated in the information structure of the question.
- The analysis of Amharic contributes to a growing body of work showing that intervention effects are not structural in nature.
 - Tomioka (2006, 2007a,b): Japanese and Korean *wh*-questions
 - Zubizarreta (2003) & Hamlaoui (2007): French *wh*-in-situ questions
 - Eilam (2009): English alternative questions
- The analysis is also part of a broader line of research attempting to distinguish structural from non-structural phenomena, and, correspondingly, ungrammaticality from unacceptability (cf. Kroch 1989).
- Remaining issues and open questions:
 - Does the analysis extend to other interveners, and in particular QPs?
 - Find independent language-specific diagnostics for topicalizability.
 - Further work on the intonational phonology of Amharic is needed.
 - Further work on the left periphery in Amharic: are there any other correlates of hanging topics?

7. References

- Aboh, E. O. 2007. Focused versus non-focused wh-phrases. In E. O. Aboh, K. Hartmann and M. Zimmermann (eds.), *Focus Strategies in African Languages. The Interaction of Focus and Grammar in Niger-Congo and Afro-Asiatic*, 287–314. Berlin: Mouton de Gruyter.
- Alexiadou, A., and E. Anagnostopoulou. 1998. Parametrizing AGR: Word order, V-movement and EPP-checking. *Natural Language and Linguistic Theory* 16:491–539.
- Amberber, M. 1996. Transitivity Alternations, Event-types and Light Verbs. Doctoral dissertation, McGill University.
- Beck, S. 2006. Intervention effects follow from focus interpretation. *Natural Language Semantics* 14:1–56.
- Beck, S., and S.-S. Kim. 2006. Intervention effects in alternative questions. *Journal of Comparative Germanic Linguistics* 9:165–208.
- Bošković, Z. 2002. On multiple wh-fronting. *Linguistic Inquiry* 33:351–383.
- Chafe, W. 1976. Givenness, contrastiveness, definiteness, subjects, topics and point of view. In Charles N. Li (ed.), *Subject and Topic*, 27–55. New York: Academic Press.
- Demeke, G. A. 2003. The Clausal Syntax of Ethiosemitic. Doctoral dissertation, University of Tromsø.
- Drubig, H. B. 2003. Towards a typology of focus and focus constructions. *Linguistics* 41:1–50.
- Eilam, A. 2009. The Absence of Intervention Effects in Amharic: Evidence for a Non-Structural Approach. Ms., University of Pennsylvania.
- Gasser, M. 1983. Topic continuity in written Amharic narrative. In T. Givón (ed.), *Topic Continuity in Discourse: A Quantitative Cross-Language Study*, 95–139. Amsterdam & Philadelphia: John Benjamins.
- Givón, T. 2001. *Syntax. An Introduction*. Amsterdam: John Benjamins.
- Grewendorf, G., and W. Sternefeld. 1990. *Scrambling and Barriers*. Amsterdam: John Benjamins.
- Grohmann, K. 2006. Top issues in questions: Topics-topicalization-topicalizability. In L. L.-S. Cheng and N. Corver (eds.), *Wh-Movement: Moving On*, 249–288. Cambridge, MA: MIT Press.
- Haile, G. 1970. The suffix pronouns in Amharic. In C.-W. Kim and E. Stahlke (eds.), *Papers in African Linguistics* 3, 101–111. Edmonton: Linguistic Research, Inc.
- Hamlaoui, F. 2007. On the role of discourse and phonology in French wh-questions. Ms., University of Ottawa.
- Higginbotham, J. 1985. On semantics. *Linguistic Inquiry* 16:547–593.
- Jonas, D., and J. Bobaljik. 1993. Specs for subjects: The role of TP in Icelandic. In J. Bobaljik and C. Phillips (eds.), *MITWPL* 18:59–98.
- Kim, S.-S. 2002. Intervention effects are focus effects. In N. Akatsuka and S. Strauss (eds.), *Japanese/Korean Linguistics* Vol. 10, 615–628. Stanford: CSLI.
- Kim, S.-S. 2005. Focus intervention effects in questions. Paper presented at Theoretical East Asian Languages 3, Harvard University.
- Ko, H. 2005. Syntax of *why-in-situ*: Merge into [Spec,CP] in the overt syntax. *Natural Language and Linguistic Theory* 23:867–916.
- Kobebe, G., and H. Torrence. 2006. Intervention and focus in Asante Twi. *ZAS Papers in Linguistics* 46:161–184.

- Kroch, A. 1989. Amount quantification, referentiality, and long wh-movement. Ms., University of Pennsylvania.
- Pesetsky, D. 2000. *Phrasal Movement and its Kin*. Cambridge, MA.: MIT Press.
- Polinsky, M., and E. Potsdam. 2001. Long-distance agreement and topic in Tsez. *Natural Language and Linguistic Theory* 19:583–646.
- Reinhart, T. 1981. Pragmatics and linguistics: An analysis of sentence topics. *Philosophica* 27:53–94.
- Reinhart, T. 1998. Wh-in-situ in the framework of the Minimalist Program. *Natural Language Semantics* 6:29–56.
- Rooth, M. 1992. A theory of focus interpretation. *Natural Language Semantics* 1:75–116.
- Simpson, A., and T. Bhattacharya. 2003. Obligatory overt wh-movement in a wh-in-situ language. *Linguistic Inquiry* 34:127–142.
- Soh, H. L. 2005. Wh-in-situ in Mandarin Chinese. *Linguistic Inquiry* 36:143–155.
- Tomioka, S. 2006. LF intervention: Old and new challenges. Paper presented at the Workshop on Current Issues in Semantics, Kyoto University, Japan.
- Tomioka, S. 2007a. Intervention effects in focus: From a Japanese point of view. In S. Ishihara, S. Jannedy and A. Schwarz (eds.), *Working Papers of the SFB632, Interdisciplinary Studies on Information Structure (ISIS) 9*, 97–117. Potsdam: Universitätsverlag Potsdam.
- Tomioka, S. 2007b. Pragmatics of LF intervention effects: Japanese and Korean wh-interrogatives. *Journal of Pragmatics* 39:1570–1590.
- Tsai, W.-T. D. 1994. On nominal islands and LF extraction in Chinese. *Natural Language & Linguistic Theory* 12:121–175.
- Vallduví, E. 1990. The Information Component. Doctoral dissertation, University of Pennsylvania.
- Vallduví, E. 1995. Structural properties of information packaging in Catalan. In K. Kiss (ed.), *Discourse Configurational Languages*, 122–153. New York: Oxford University Press.
- Yabe, T. 2007. The Morphosyntax of Complex Verbal Expressions in the Horn of Africa. Doctoral dissertation, CUNY.
- Zubizarreta, M. L. 2003. Intervention effects in the French wh-in-situ construction: syntax or interpretation? In R. Nuñez-Cedeño, L. López, and R. Camero (eds.), *A Romance Perspective on Language Knowledge and Use: Selected Papers from the 31st Linguistic Symposium on Romance Languages*, 359–379. Amsterdam & Philadelphia: John Benjamins.