

AM3a: Typology of A-bar constructions

Week 3

More on wh- fronting vs. wh- in situ

Summary of last week: wh- questions involve a relation between the C^0 head and a Q particle; movement of the wh- phrase is epiphenomenal.

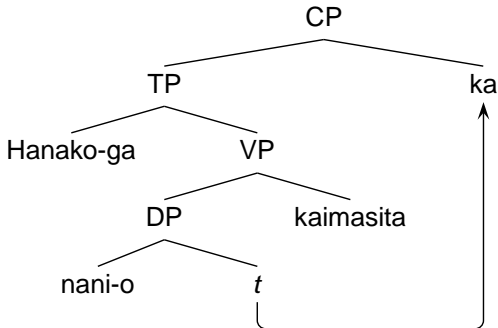
- ▶ *Wh- in situ*: Q particle moves alone.
- ▶ *Wh- fronting*: Q particle pied-pipes wh- phrase

(1) *Japanese: movement of Q-particle alone*

Hanako-ga nani-o kaimasita **ka**?

Hanako-NOM what-ACC bought Q

“What did Hanako buy?”

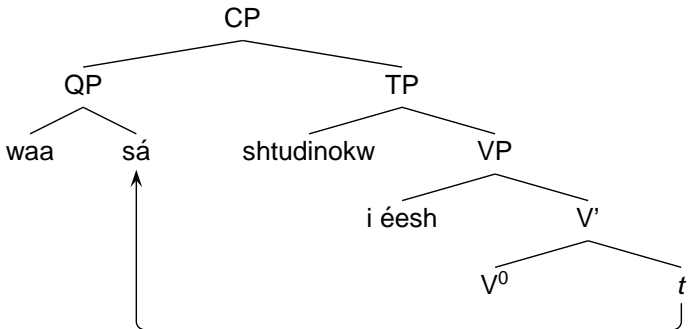


(2) *Tlingit*: Q particle movement pied-pipes wh- phrase

Waa **sá** shtudinokw i éesh?

how Q he.feels your father

“How is your father feeling?”



Language	Q movement	wh- pied-piping	Q phonology
Japanese	overt	no	<i>ka</i>
Tlingit	overt	yes	<i>sá</i>
Sinhala	covert	yes	<i>da</i>
English	overt	yes	∅

“whether a language requires overt fronting of wh- words depends upon two parameters: (i) whether the movement of Q(P) is overt; and (ii) whether the Q particle takes its sister as complement. Under this view, wh- fronting languages are simply those whose Qs move overtly and take their sisters as complements. A third, independent property affecting the surface appearance of a language’s wh- questions is whether the Q particles have any phonological content”

[Cable 2010:103–104]

“Consider a language that is identical to Tlingit, except that its Q is unpronounced. Such a language would appear exactly like a wh- fronting language of the kind we are familiar with.”

[Cable 2010:102]

Question: can we find evidence in favor of an unpronounced Q?

Back to Tlingit (I): *sá* cannot intervene between a wh- phrase and a selecting postposition.

- (3) a. [_{PP} Aadóo teen] **sá** yeegoot?
who with Q you.went
“Who did you go with?”
- b. * [_{PP} Aadóo **sá** teen] yeegoot?
who Q with you.went
“Who did you go with?”

Back to Tlingit (II): *sá* cannot intervene between a possessor and the possessed NP.

- (4) a. [PossP Aadóo yaagú] **sá** ysiteen?
 who boat Q you.saw.it
 “Whose boat did you see?”
- b. * [PossP Aadóo **sá** yaagú] ysiteen?
 who Q boat you.saw.it
 “Whose boat did you see?”

Back to Tlingit (III): *sá* cannot intervene between a determiner and its NP complement.

- (5) a. [_{DP} Daakw keitl] **sá** asháa?
 which dog Q it.barks
 “Which dog is barking?”
- b. * [_{DP} Daakw **sá** keitl] asháa?
 which Q dog it.barks
 “Which dog is barking?”

- ▶ **Option #1:** the pattern above reflects a restriction on movement.
- ▶ **Option #2:** the pattern above reflects a restriction on the placement of *sá*.

Option #2 is the correct one, because we observe its effects in environments where *sá* appears but no movement happens. Wh-indefinite expressions provide this environment: they combine a wh-word with *sá*, but they appear in situ.

- (6) a. Kéet axá daa **sá**.
 killer.whale he.eats.it what Q
 “A killer whale will eat anything”
- b. Daa **sá** axá kéet?
 what Q he.eats.it killer.whale
 “What will a killer whale eat?”

Wh- indefinites (I): A QP cannot intervene between a postposition and its wh- complement.

- (7) a. Tléil [_{PP} aadóo teen] **sá** xwaagoot.
not who with Q I.went
“I didn’t go with anyone”
- b. * Tléil [_{PP} aadóo **sá** teen] xwaagoot.
not who Q with I.went
“I didn’t go with anyone”

Wh- indefinites (II): A QP cannot intervene between a possessor and a possessed NP.

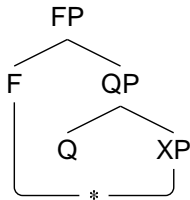
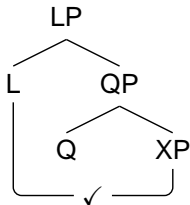
- (8) a. Tléil [_{POSSP} aadóo yaagú] **sá** xwsateen.
not who boat Q I.saw.it
“I didn’t see anyone’s boat”
- b. * Tléil [_{POSSP} aadóo **sá** yaagú] xwsateen.
not who Q boat I.saw.it
“I didn’t see anyone’s boat”

Wh- indefinites (III): A QP cannot intervene between a determiner and its complement NP.

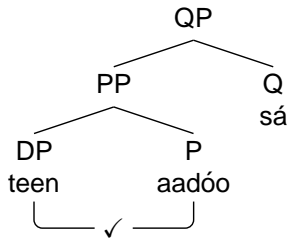
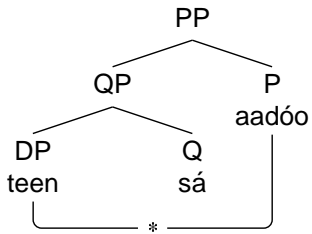
- (9) a. Tléil [_{DP} daakw keitl] **sá** ushaa.
not which dog Q it.barks
“None of the dogs are barking”
- b. * Tléil [_{DP} daakw **sá** keitl] ushaa.
not which Q dog it.barks
“None of the dogs are barking”

(10) *The QP-intervention condition*

A QP cannot intervene between a functional head F and phrase XP selected by F; however, QP can intervene between a lexical head L and XP.



The QP intervention condition illustrated



The QP intervention condition in German: assume that German has the same Q-placement restrictions as Tlingit, despite have a phonetically null Q particle

- (11) a. * Wem_i has du [_{PP} mit t_i] gesprochen?
b. * Wessen_i hast du [_{POSSP} t_i Auto] gesehen?
c. * Welches_i hast du [_{DP} t_i Auto] gesehen?

The large majority of languages work like this, but not all of them.

The QP intervention condition in English: English allows P-stranding, so it must allow placement of Q between a preposition and the wh- word.

- (12) a. ✓ Who_i did you talk [_{PP} to t_i]?
- b. * Whose_i have you seen [_{POSSP} t_i car]?
- c. * Which_i have you seen [_{DP} t_i car]?

Cable's solution: prepositions are generally functional categories, they are lexical categories in English, so they allow QP intervention.

“Huddleston and Pullum (2002:597–661) argue that the category P in English is much larger than traditionally conceived [. . .] They distinguish P as a relatively closed class, since it differs markedly from other functional categories (like determiners) in both the sheer number of its members and the relative rapidity with which it gains members”

[Cable 2010:112]

The QP intervention condition in Slavic: although Slavic wh-fronting cannot strand prepositions, it can strand possessives and NPs.

(13) *Russian*

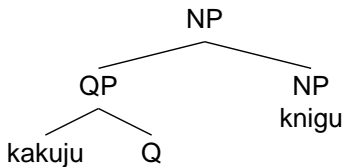
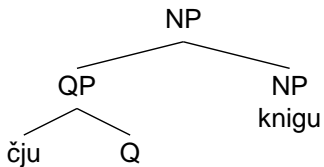
- a. ✓ Čju_i ty cital [_{POSSP} t_i knigu]?
whose you read book
“Whose book did you read?”
- b. ✓ Kakuju_i ty cital [_{DP} t_i knigu]?
what.kind.of you read book
“What kind of book did you read?”

Cable's solution: in Slavic languages, possessors and determiners do not select NPs, so the QP intervention condition is not violated.

“It has been widely noted that languages permitting possessor and determiner extraction generally permit NPs to appear without overt determiners. Many scholars have therefore sought to connect these two properties [...] For example, Bošković (2005) proposes that extraction of possessors and determiners in these languages is due to their being pure NP adjuncts”

[Cable 2010:109]

A syntax for Slavic wh- phrases



Similar effects outside Slavic: under certain circumstances, German allows fronting of wh- determiners and wh- possessors to the exclusion of their postnominal phrases.

- (14) a. Was_i hat der Professor den Studenten [_{DP} t_i alles] geraten?
b. Wen_i hat Hans [_{DP} t_i von den Musikern] getroffen?

The crucial factor here is that these postnominal phrases are *adjuncts*, so there is no QP intervention effect.

Homework: think about how a theory of wh- movement based on Q movement might account for these data.

More evidence: patterns of pied-piping in Chol (Mayan) follow from the variable placement of Q.

Chol possessors: in non-interrogative sentences, they appear in the order [possessed-possessor].

- (15) a. Tyi yajl-i [_{POSSP} i-plato aj-Maria].
PRFV fall-ITV A3-plate CL-Maria
“Maria’s plate fell”
- b. * Tyi yajl-i [_{POSSP} aj-Maria i-plato].
PRFV fall-ITV CL-Maria A3-plate
“Maria’s plate fell”

But in questions, the order is reversed to [possessor-possessed].

- (16) a. [_{POSSP} maxki i-plato] tyi yajl-i?
whose A3-plate PRFV fall-ITV
“Whose plate fell?”
- b. * [_{POSSP} i-plato maxki] tyi yajl-i?
A3-plate whose PRFV fall-ITV
“Whose plate fell?”

Patterns of extraction: in simple possessor phrases, either the whole possessor is fronted, or only the possessor is.

- (17) a. [PossP maxki i-plato] tyi yajl-i?
 whose A3-plate PRFV fall-ITV
 “Whose plate fell?”
- b. * [maxki]_i tyi yajl-i [PossP t_i i-plato]?
 whose PRFV fall-ITV A3-plate
 “Whose plate fell?”

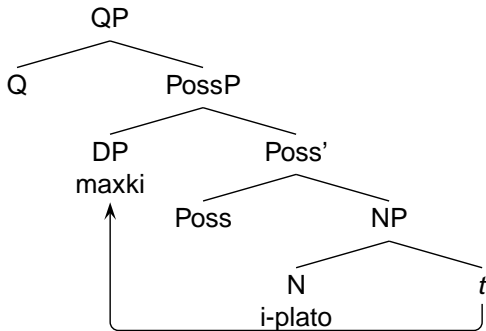
Some pre-requisites for the analysis:

- ▶ In Chol, SpecPossP can be occupied by a constituent with a [+Interrogative] feature. Elements with a [+Interrogative] feature are:
 - ▶ the phonetically null Q particle.
 - ▶ wh- phrases like *maxki* 'which'
- ▶ Movement to SpecCP is always Q movement, pied-piping its complement phrase.

[note: in Coon's paper, the [+Interrogative] feature is called a [+Q] feature; this is a confusing terminology, because the [+Q] feature and the Q particle are different things]

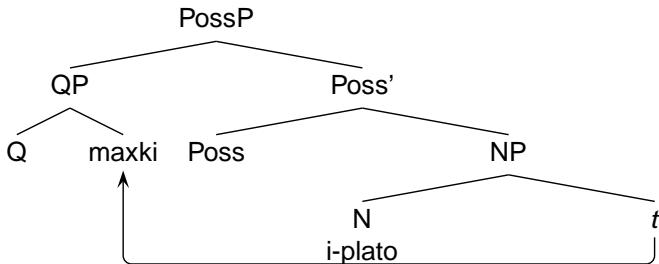
Analysis: QP moves to SpecPossP to derive the inverted order; then, the placement of the Q particle decides whether the whole PossP or only the possessor fronts.

Q-movement pied-pipes whole PossP



Analysis: the possessor first moves to SpecPossP to derive the inverted order; then, the placement of the Q particle decides whether the whole PossP or only the possessor fronts.

Q-movement pied-pipes only possessor



Multiple possessors:

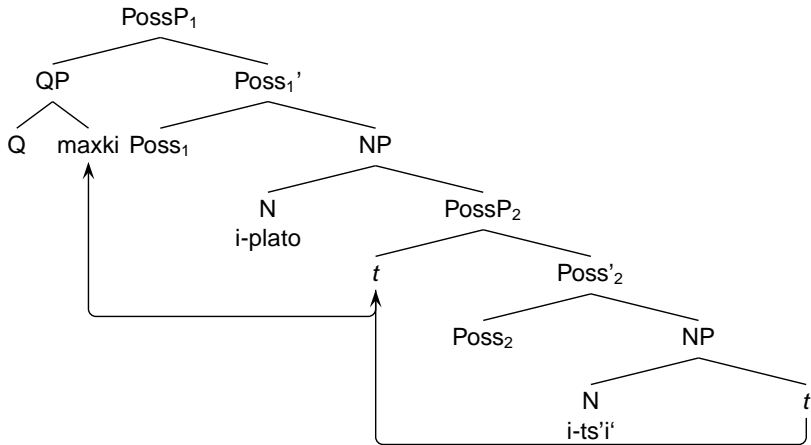
- (18) tyi yajl-i [_{PossP₁} i-plato [_{PossP₂} i-ts'i' aj-Maria]].
PRFV fall-ITV A3-plate A3-dog CL-Maria
“Maria’s dog’s plate fell”

Extraction out of multiple possessors: either the bare possessor, PossP₂, or PossP₁ can front.

- (19) a. [maxki]_i tyi yajl-i [PossP₁ i-plato [PossP₂ i-ts'i' t_i]].
 whose PRFV fall-ITV A3-plate A3-dog
 “Whose dog’s plate fell?”
- b. [PossP₂ maxki i-ts'i']_i tyi yajl-i [PossP₁ i-plato t_i].
 whose A3-dog PRFV fall-ITV A3-plate
 “Whose dog’s plate fell?”
- c. [PossP₁ maxki i-plato [PossP₂ i-ts'i']]_i tyi yajl-i t_i.
 whose A3-plate A3-dog PRFV fall-ITV
 “Whose dog’s plate fell?”

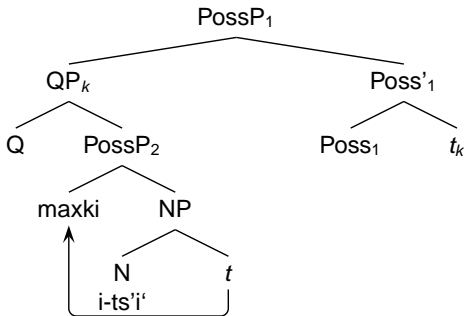
Derivation of (20a): QP attaches to *maxki*, which undergoes cyclic movement to SpecPossP₂, SpecPossP₁, and SpecCP.

Q-movement pied-pipes only possessor



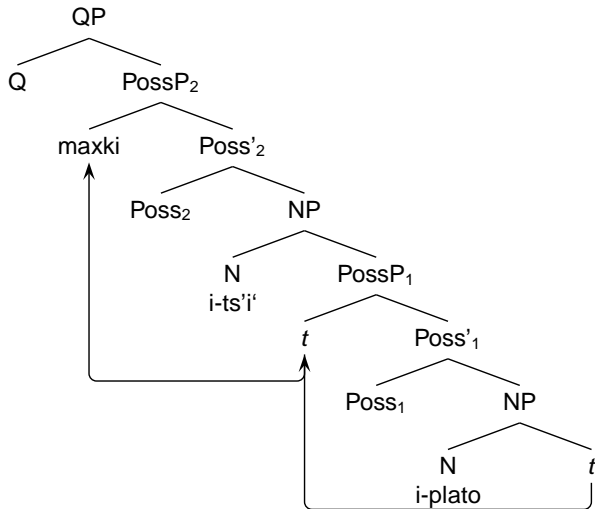
Derivation of (20b): *maxki*, moves to SpecPossP₂, then Q pied-pipes PossP₂ to SpecPossP₁ and SpecCP.

Q-movement pied-pipes PossP₂



Derivation of (20c): *maxki*, moves to SpecPossP₂, then to SpecPossP₁, and then Q pied-pipes PossP₁ to SpecCP.

Q-movement pied-pipes PossP₂



Today's class in summary: wh- movement is movement of a Q particle that pied-pipes the wh- phrase. This is true even in languages where the Q particle is phonetically null.