

## Wh-Fronting is a By-Product of Q-Movement: Evidence from Tlingit

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### 1. Overview

Wh-fronting is commonly thought to reflect conditions on wh-words themselves. I argue against this, and for a proposal similar in spirit to Watanabe (1992). I argue that in all languages, the fronting of wh-words in wh-questions has the structural character illustrated in (1).

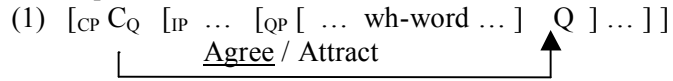


Diagram (1) represents the following claims: (i) a wh-word is always accompanied by a Q(uestion)-particle, which c-commands the wh-word; (ii) it is this Q-particle, *and not the wh-word itself*, which constitutes the Goal that is probed by and Agrees with the interrogative C; (iii) movement of the wh-word is a secondary effect of the attraction and movement of the Q-particle; it occurs only in languages where the complement of Q contains the wh-word, where it follows from general principles. I first demonstrate that wh-questions in Tlingit (Na-Dene; Alaska & British Columbia) must receive the analysis in (1).

### 2. Fronting of Wh-Words in Tlingit Wh-Questions

To argue that wh-questions in Tlingit have the structure in (1), I first show that wh-words in the language's wh-questions overtly occupy a left-peripheral position. Speaker judgments and textual examination indicate that, despite the otherwise free word order of the language, wh-words in wh-questions must precede the predicate of the clause.

- (2) a. **Aadóoch** **sá** gugwatoow yá x'úx'?'  
 who.erg Q he.will.read.it this book  
*Who will read this book?*  
 b. \* Yá x'úx' akgwatoow **aadóoch** **sá** ? (*Can only mean 'Someone will read this book.'*)

Textual examination indicates that wh-words are overwhelmingly initial in wh-questions. Any material preceding a wh-word in a wh-question must be a referential topic.

- (3) a. Yá x'úx' **aadóoch** **sá** gugwatoow?                      b. \* L daa **sá** **aa** **sáyá** uxá?  
*This book – who will read it?*    nothing who Q.ptcl he.ate.it  
*Nothing – who ate it?*

The wh-word in a long-distance question must be fronted into the matrix clause.

- (4) a. **Goodéi** **sá** i shagóonich uwajée [ \_\_\_\_\_ wutu.aadi ] ?  
 where.to Q your parents.erg they.think we.went  
*Where do your parents think that we went?*  
 b. \* I shagóonich uwajée [ **goodéi** **sá** wutu.aadi ] ?

Multiple wh-questions are subject to Superiority.

- (5) a. **Aa** **sá** **wáa** **sá** kuyawsikaa?                      b. \* **Wáa** **sá** **aa** **sá** kuyawsikaa?  
 who Q how Q they.said.to.someone  
*Who said what?*

### 3. The Status of Sá as a Q-Particle

I next show that wh-words in Tlingit are obligatorily c-commanded by a Q-particle. The Sinhala particle *də* and Japanese *ka* are uncontroversially categorized as 'Q-particles' (Hagstrom 1998, Kishimoto 2005). Remarkable syntactic parallels between these particles and Tlingit *sá* motivate adopting this label for the latter particle as well. All three particles are obligatory in wh-questions and wh-indefinites.

- (6) *Wh-Question*: **Daa** \*(**sá**) aawaxaa i éesh?                      *Wh-Indefinite*: Tlél **goodéi** \*(**sá**) xwagoot.  
 what Q he.ate.it your father    not where.to Q I.went  
*What did your father eat?*    *I didn't go anywhere.*

All three must c-command the wh-word.

- (7) a. [ **Aadóo** jeet ] **sá** [ wé sakwnéin ] aawatee?  
 who hand.to Q that bread he.brought.it  
*Who did he give the bread to?*

- b. \* [ **Aadóo** jeet ] [ wé sakwnéin ] **sá** aawatee?

Thus, all three particles may receive the same semantic analysis, as operators binding Hamblin Alternatives introduced by the wh-words (Hagstrom 1998, Shimoyama 2001). Finally, in Sinhala and Tlingit a wh-question may contain a wh-word inside an island if and only if the Q-particle is merged outside the island.

- (8) a. (**Sinhala**) Oyaa [ [ Chitra **kaa-tə** dunnə ] potə ] **də** kieuwe?

you Chitra who-dat give book Q read  
*Who<sub>i</sub> did you read the book that Chitra gave t<sub>i</sub> ?*

- b. \* Oyaa [ [ Chitra **kaa-tə də** dunnə ] potə ] kieuwe? (Hagstrom 1998)

- (9) a. (**Tlingit**) [ [ **Waa** kligéiyi ] **xáat** ] **sá** i tuwáa sigóo?

how it.is.big.REL fish Q your spirit it.is.glad

*How<sub>i</sub> do you want a fish that is t<sub>i</sub> big? (How big a fish do you want?)*

- b. \* [ [ **Waa** **sá** kligéiyi ] **xáat** ] i tuwáa sigóo?

#### 4. Wh-Movement in Tlingit as a By-Product of Q-Movement

Finally, I argue that the interrogative C of a Tlingit wh-question probes for features of the Q-particle *sá*, and not the wh-word itself. First, neither the wh-word nor the Q-particle may move by itself into the left-periphery.

- (10) a. \* **Goodéi** i shagóonich uwajée [ \_\_\_\_\_ **sá** wutu.aadi ] ? (c.f. (4a))

- b. \* **Sá** i éesh **daa** aawaxaa? (c.f. (6))

Basic word order facts entail that there is a single head in the left periphery attracting the entire wh-word+Q complex. Two facts argue that this head is targeting *only* the Q-particle. The first is the contrast between (10a) and (4a). The inability for *sá* to ever be stranded indicates that it is targeted by the interrogative C. The second is the data in (9); this establishes that *only* the Q-particle is targeted. If the attracting C head depended on any features of the wh-word, then the island-internal wh-word of (9a) should be as ill-formed as the island-internal *sá* of (9b). Thus, the analysis in (1) is required for Tlingit wh-questions.

#### 5. Broader Consequences

*The Typology of Wh-Questions:* Aside from the presence of *sá*, wh-questions in Tlingit are quite similar to those in more familiar wh-fronting languages. This invites the conclusion that wh-questions in these languages also have the structure in (1), their only real difference from Tlingit being that their Q-particles lack phonological content. Languages without wh-fronting may be viewed as ones where Q *adjoins to* – rather than takes as complement – the phrase containing the wh-word, and so can be detached from its sister when drawn into the left-periphery. Indeed, this is the analysis offered by Hagstrom (1998) and Kishimoto (2005) for wh-questions in the wh-*in-situ* languages Sinhala and Japanese.

*The Nature of Pied Piping:* Under this analysis, all instances of ‘pied-piping’ – where phrases larger than the wh-word are fronted – may be analyzed as cases where the complement of Q properly contains the wh-word. Thus, such structures may be derived without appeal to special mechanisms of ‘feature percolation’, such mechanisms being shown to have serious conceptual problems in Heck (2004).

*The Impossibility of Certain Extractions:* The particle *sá* is subject to an independent constraint that it cannot intervene between a functional head F and an XP that F selects for. Thus, it cannot intervene between (e.g.) a possessor and its NP, *even when the Q-particle remains in-situ*, such as when it appears with wh-indefinites.

- (12) a. Tléil **aadóo** yaagu **sá** **xwsateen**

not who boat Q I.saw.it

*I didn't see anyone's boat.*

- b. \* Tléil **aadóo** **sá** yaagu **xwsateen**.

Given the analysis in (1), this alone entails the impossibility of certain wh-extractions in Tlingit and other wh-fronting languages (e.g. possessor extraction, adposition stranding, extraction of wh-determiners). Thus, independently observable conditions on the placement of Q derive many ‘core’ cases of obligatory pied-piping. This perspective helps to resolve certain long-standing puzzles regarding pied-piping and the inability to strand certain elements.