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).

(1) \[ CP C \left[ \left[ IP \ldots \left[ QP \left[ \ldots \text{wh-word} \ldots \right] \right] Q \right] \ldots \right] \] Agree / Attract

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?
   This book – who will read it?
   b. * L daa sá aa sáyá uxda?

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?
   who Q how Q they.said.to.someone
   Who said what?
   b. * Wáa sá aa sá kuyawsikaa?

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 \( dē \) 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: Daan *(sá) aawaxa i éesh?
   what Q he.ate.it your father
   Wh-Indefinite: Tlél goodéi *(sá) xwagoot.
   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. [Aadóoch jeet ] sá [wé sakwnén] aawatee?
   who hand.to Q that bread he.brought.it
   Who did he give the bread to?
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.

b. * [ Aadóó jeet ] [ wé sakwnén ] 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-tó dunnə ] pota ] də kiewue?
you Chitra who-dat give book Q read

"Who, did you read the book that Chitra gave t₁?"


(9) a. (Tlingit) [ [ Waa kligéiyi ] xáat ] sá i tuwáa sigóó?

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

"How₁ do you want a fish that is t₁ big? (How big a fish do you want?)"

b. * [ [ Waa sá kligéiyi ] xáat ] i tuwáa sigóó?

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 shágóonich uwajéé [ _____ sá wutu.aadi ]? (c.f. (4a))
b. * Sá i éesh dəa aawáa? (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 aadóó yaagu sá xwsateen

not who boat Q I saw.it

I didn’t see anyone’s boat.

b. * Tléil aadóó sá yaagu xwsateen.