

Fronting of wh-words in Inuktitut as focus movement*

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I argue that fronting of wh-words in Inuktitut is not wh-movement to Spec, CP for clause-typing or licensing, but it is focus-driven movement. I show that Inuktitut word order depends on the presence of topic/focus features. The unmarked order is subject-initial. The preferred position for wh-words and focused constituents is below the subject and above the verb. Following Rudin's (1988) analysis of multiple wh-fronting languages, I assume that wh-words bear contrastive focus, and this causes them to move. The landing site cannot be Spec, CP, because then the subject would have to move even higher, i.e. adjoin to Spec, CP, which is the position for contrastive topics (Rudin 1993), but not ordinary subjects. Thus, this position has to be lower than Spec, TP.

1 Introduction

In this paper, I analyze word order in wh-questions in Inuktitut. This language is said to have free word order. However, there is a preference for moving wh-words in questions; in the case of multiple wh-questions, there is a preference to move all wh-words.

Very little work has been done on this topic and on word order in Inuktitut in general, though the data from this language is interesting for the typology of wh-questions. Inuktitut has properties of a wh-in-situ language; however, fronting of wh-words into a pre-verbal position is preferred. I argue that this fronting is not wh-movement, and it is focus-driven (wh-words are generally assumed to be inherently contrastively focused). This account is in line with the analyses of multiple wh-fronting languages ((Horvath 1986 and E. Kiss 1995 for Hungarian, Rudin 1988 for Bulgarian, Stjepanovic 1998 for Serbo-Croatian, inter alia) and of languages with wh-in-situ characteristics and wh-fronting at the same time (Kahnemuyipour 2001 for Persian, Reglero 2003 for Basque).

I consider data from five dialects of Inuktitut (Mittimatalik, Siglitun, Uummarmiutun, West Greenlandic, South Baffin), relying mainly on my

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fieldwork in South Baffin dialect. South Baffin is closely related to Mittimatalik. All South Baffin examples are from my fieldwork.

In Section 2, I present data on word order in wh-questions in these dialects. Section 3 discusses word order in declarative sentences and its relation to word order in wh-questions. Section 4 is a discussion of how Inuktitut fits existing wh-typologies. Section 5 is about the derivation of the preferred word order in wh-questions and the landing site for fronted wh-word. Section 6 contains conclusions.

A note on glosses: The Case marker *-mit* (Mittimatalik)/*-mik* (South Baffin) marks an object in antipassive, but in fact functions much like as Accusative marker (Spreng, p.c.). The Case marker *-mut* marks Allative Case. Nouns in Absolutive Case have a null Case marker (not glossed).

2 Wh-questions: the data

2.1 Single wh-questions

Fortesque (1984) in a grammar of West Greenlandic stated that there are no restrictions on the positioning of wh-words in questions. According to his data, Inuktitut is a wh-in-situ language (a wh-word is generally in the same position as its declarative counterpart), but wh-words can be fronted. He notes that *suuq* ‘why’ prefers the initial position, and *qanuq* ‘how’ stands preferably just before the verb. In his other examples (cited here as (1) and (2)), wh-words are sentence-initial or at least in a pre-verbal position.

- (1) kikkun-ni najugaqar-pit
who-pl.loc live-2s.interr
'Who are you staying with?'
- (2) umiarsuaq qassi-nut aalla-ssa-vaa
ship how.many-all. leave-fut.-2s.interr
'When (what hour) does the ship leave?'

In the data collected by Gillon (1999) in Mittimatalik, Siglitun, and Uummarmiutun, wh-words cannot be lower than the verb (with the exception of D-linked wh-words).

- (3) a. Piipi suna-mik qukir-sir-qau-va
Phoebe what-acc shoot-ap-recpst-3sg.intr.interr.
'What did Phoebe hit?'
- b. suna-mik Piipi qukir-sir-qau-va
c. suna-mik qukir-sir-qau-va Piipi
d. *Piipi qukir-sir-qau-va suna-mik
e. *qukir-sir-qau-va Piipi suna-mik
f. *qukir-sir-qau-va suna-mik Piipi

In South Baffin, most word orders are acceptable, but the degree of acceptability varies more for wh-clauses than for declarative ones. There is a preference to place wh-words pre-verbally (though it is not obligatory).

However, subjects, no matter if they are wh-words or not, are preferred sentence-initially. The word *kina* 'who' (in Absolutive Case), when it is the subject, is clearly preferred sentence-initially.

- (4) a. kina qai-va?
 who come-3sg.interr
 'Who came?'
 b. (???)qai-va kina?

The preferred position for non-subject wh-words is between the subject and the verb. (5b) is rated less preferable than (5a), but better than the rest, most probably because the subject is kept higher than all other lexical material. However, *sunamit* is still preferred to be in a pre-verbal position, since (5c, d) are judged better than (5e, f).

- (5) a. anaana-ga suna-mit taku-guma-va?
 mother-my what-acc see-want-3sg.interr
 'What does my mother want to see?'
 b. (?) anaanaga takugumava sunamit?
 c. (??) sunamit anaanaga takugumava?
 d. (??) sunamit takugumava anaanaga?
 e. (???) takugumava anaanaga sunamit?
 f. (???) takugumava sunamit anaanaga?

In an answer to a question, the non-wh-object (new information) can be found in the same position as its wh-counterpart (though not necessarily).

- (6) a. Alana suna-mit niuvi-qau-va?
 Alana what-acc buy-past-3sg.interr
 'What did Alana buy?'
 b. Alana titirauti-mit niuvi-qau-va
 Alana pencil-acc buy-past-3sg.interr
 'Alana bought a pencil'

Absence of the interrogative morphology does not affect word order preferences. Sometimes the causative mood suffix is used in wh-questions, not the interrogative, but such questions do not appear different from ones with the interrogative suffix, as seen in (7). Indirect objects, such as *kinamut* 'to/for whom' (Allative Case), are also preferably placed between the subject and the verb.

- (7) a. ataata-ga kina-mut qaja-liu-mat?
 father-my who-allat kayak-make-3sg.caus
 'Who is my father making a kayak for?'
 b. (?) ataataga qajaliumat kinamut?
 c. (??) kinamut ataataga qajaliumat?
 d. (???) qajaliumat ataataga kinamut?

In questions with wh-adjuncts *nami* 'where' and *qanga* 'when', both wh-initial orders and wh-word between the subject and the verb were judged equally acceptable.

- (8) a. nami Lisi ijiq-sima-va?
 where Lisi hide-pres-3sg.interr
 'Where is Lisi hiding?'
 b. Lisi nami ijiqsimava?

The data presented in this section is consistent with the data in Gillon (1999), except that my informant just dispreferred the orders that Gillon's informants judged unacceptable. In fact, though Gillon argues for movement of wh-words to Spec, CP, the first orders given by her for each example are Subject-Wh-V.

Preference for subject-initial order may actually be preference for topic-initial order. The following example (from Igloodik dialect) was elicited in the context in which the object, 'fish', was mentioned before.

- (9) Iqalu kia tavvunggautijaa
 Fish-abs who-erg brought
 'Who brought the fish?'

2.2 Multiple wh-questions

In Gillon's (1999) data, all wh-words have to move in multiple wh-questions. In my data from South Baffin, there is a preference to place all wh-words pre-verbally (although the same constituents do not need to be in the same position in the answer).

- (10) a. kina qanga qai-guma-va?
 who when come-want-3sg.interr
 'Who wants to come when?'
 b. uvanga qai-guma-junga siuru
 1sg.emph come-want-3sg.indic later
 'As for me, I want to come later'

- (11) kina suna-mit kina-mut tunisi-va
 who what-acc who-all give-3s.interr
 'Who gave what to whom?'

There is also a PF constraint against having sequences of (even partially) homophonous wh-words: *kina* 'who (abs.)' and *kinamut* 'who (allat.)' next to each other were judged bad.

- (12) a. *kina kina-mut suna-mit tunisi-va
 who who-allat what-acc give-3s.interr
 'Who gave what to whom?'
- b. kina suna-mit kina-mut tunisi-va

The same constraint acts in Slavic languages (Billings & Rudin 1996, Bošković 2002). The following example is from Bulgarian, the language that normally requires all wh-words to front.

- (13) a. Kakvo obuslavlja kakvo?
 what conditions what
 'What conditions what?'
- b. *Kakvo kakvo obuslavlja?

Thus, there seem to be three constraints on the unmarked word order in Inuktitut wh-questions: the requirement to place wh-words in a pre-verbal position, the requirement to place subjects in the highest of overtly filled positions, and the constraint against homophonous sequences.

3 Declarative sentences

In declarative sentences, word order in Inuktitut is said to be 'free'; however, as it is usually the case for flexible word-order languages, it is defined by pragmatic considerations (Fortesque 1984 for West Greenlandic).

Gillon (1999) analyzed Inuktitut as a polysynthetic language, adopting Baker's (1996) Polysynthesis Parameter. For Baker, lexical NPs in polysynthetic languages are adjuncts, they freely adjoin to IP, and this is why the word order in such languages is free. Robust noun incorporation in a given language is an indication that this language is polysynthetic. However, Inuktitut, according to one of Baker's criteria of robustness of noun incorporation in a language, is not truly polysynthetic. In languages with robust noun incorporation, both the noun root and the verb root can be used independently; however, Baker cites, among others, Fortesque (1984), who observed that in Inuktitut (West Greenlandic dialect) noun incorporation is obligatory with some words and forbidden with the rest. This is true for other dialects, including South Baffin, as well (Johns, p.c.). In the examples below, N is obligatorily incorporated.

- (14) a. suna-tu-ruma-vit?
 what-eat/drink-want-2sg.interr
 'What do you want to have?'
 b. *tu-ruma-vit suna
- (15) a. ti-tu-ruma-vunga
 tea-eat/drink-want-1sg.indic
 'I want to have tea'
 b. *tu-ruma-vunga ti

In addition, Baker claims that polysynthetic languages have truly free word order, and no basic word order can be defined. However, SOV was often observed to be the most frequent and preferred order (Fortesque 1984, my own fieldwork). Moreover, in my fieldwork, I found a preference for placing a subject sentence-initially; a similar preference was found in North Baffin by Spreng (p.c). Therefore, Inuktitut is not a true polysynthetic language in terms of Baker (1996), and its properties are not defined by the Polysynthesis Parameter.

In fact, Inuktitut patterns much more like scrambling languages: it has overt subject-verb agreement, overt Case-marking, and movement driven by discourse factors. Fortesque (1984, West Greenlandic) reports that in declarative sentences with OSV order, the object is most likely to be the topic; with SVO, the object is the focus; and with OVS, the subject is the focus. Object-before-subject orders are particularly common if the object refers back to preceding context, i.e. when the object is given information. In addition, Inuktitut lacks overt definiteness markers, but word order bears on interpretation of DPs as being definite or indefinite: those in the initial position are more likely to be definite, and indefinite DPs mentioned for the first time (new information focus) are likely to be introduced in a post-verbal position. There is also interaction of word order and prosody (higher pitch on emphasized constituents, etc.). All this looks like regular universal patterns, familiar from topic/focus movement in scrambling languages (e.g. Slavic). Fortesque also notes that these are "tendencies rather than strict rules", which is usually the case with topic/focus movement. Both cross-linguistically and (with certain restrictions) within a language, topic and focus requirements can be satisfied either by syntactic means (movement, clefting, etc.) and/or by prosodic marking of focused constituents.

In my fieldwork data from South Baffin, the order that was given first in discourse-neutral declarative sentences was either SOV or SVO. However, when I elicited an object as a topic and a subject as a focus (context given in 16a), I got OSV (16b), with the topic in the highest overtly filled position, and the contrastive focus ('Mary' is contrasted to the other members of the set of people who were at the party) pre-verbally, but lower than the topic.

- (16) a. Context: 'At a potluck party, you see a delicious fish dish and you wonder who brought it; you ask and get the following reply.'
- b. iqalu-mit Miali naksaq-tuq
 fish-acc Mary brought-3sg.indic
 'As for the fish, it was Mary who brought it'

Interestingly, data from the same dialect as in Gillon (1999), Mittimatalik, collected by Spreng (p.c.), differs from that collected by Gillon with respect to word order in declarative sentences. Word orders in declarative sentences have the same restrictions both in ergative (17) and in antipassive (18). The preferred orders are SOV (17a) for ergative and SVO (18a) for antipassive (MIK stands for an NP marked with the inflection *-mik*, the equivalent of South Baffin *-mit*).

- (17) a. Erg Abs V
 b. Abs Erg V
 c. Erg V Abs
 d. *Abs V Erg
 e. *V Erg Abs
 f. *V Abs Erg
- (18) a. Abs V MIK
 b. Abs MIK V
 c. MIK Abs V
 d. *MIK V Abs
 e. *V Abs MIK
 f. *V MIK Abs

In this data, the subject cannot appear lower than the verb. This is parallel to what Gillon (1999) found for wh-questions: a wh-word cannot appear lower than the verb. Unlike wh-words, subject DPs in declarative sentences do not have to type the clause or be bound by wh-operators. However, all things being equal, subjects are, cross-linguistically, more likely to be topics, and wh-words are standardly assumed to be inherently focused (bearing contrastive, or, in terms of E.Kiss (1998), identificational focus).

Therefore, it appears that Inuktitut is a scrambling language, i.e. it exhibits topic/focus-driven movement in declarative sentences.

4 Wh-typology and Inuktitut

Cheng (1997) suggested the Clausal Typing Hypothesis: every wh-clause must be typed as such. According to her, there are two typing strategies: an interrogative particle (as in Chinese) and wh-movement to Spec, CP (as in English); a given language can have only one of these strategies. Gillon (1999)

argues that Inuktitut poses a problem for this hypothesis because it has properties of both *wh*-in-situ and multiple *wh*-movement languages.

Inuktitut has an equivalent of an interrogative particle (interrogative mood suffix on verbs). According to Cheng, if a language has one, it is an in-situ language, and there is no need, and even no possibility to type clauses by *wh*-movement to Spec, CP. And indeed, as seen from previous sections, fronting of *wh*-words in Inuktitut is not obligatory (unlike *wh*-movement in English-type languages).

Gillon (1999) noted that the interrogative mood suffix is not always present in *wh*-questions: sometimes another mood suffix is used instead, such as causative in Mittimatalik and South Baffin; it adds presuppositional flavour to a question. Compare (19a) and (19b) (Mittimatalik, from Gillon 1999).

- (19) a. kina taku-laur-*pa* taiksuminga angu-mmit?
who see-past-3sg.interr that man-abl
'Who saw that man?'
- b. kina taku-laur-*mat* taiksuminga angu-mmit?
who see-past-3sg.caus that man-abl
'Who (is it that) saw that man?'

However, the presence or absence of the interrogative suffix does not affect word order in *wh*-questions (except for D-linked *wh*-phrases, which I am not dealing with in this paper).

Inuktitut has another property of *wh*-in-situ languages: the possibility of both single-pair and pair-list answers to multiple *wh*-questions (Bošković 2002, *inter alia*). *Wh*-movement languages allow only pair-list answers (compare possible answers to the same questions in Inuktitut and English).

- (20) a. kina-mut Alana niuvi-qau-va suna-mit?
who-allat Alana buy-past-3sg.interr what-acc
'What did Alana buy for whom?'
- b. Alana Marina-mut kiik niuvi-qau-juq
Alana Marina-allat cake buy-past-3sg.indic
'Alana bought Marina a cake'
- (21) a. What did Alana buy for whom?
b. *Alana bought Marina a cake
c. Alana bought a cake for Marina and chocolates for Bettina

However, as Gillon (1999) noted, in addition to attested multiple fronting of *wh*-words, Inuktitut has another property of multiple *wh*-fronting languages, such as Slavic languages, etc. Indefinites and polarity items in these languages and in Inuktitut consist of a *wh*-word and a corresponding operator. The examples below are from South Baffin.

(22)	suná	suná-kiaq	suná-mit	suná-mi-kiaq
	what	what-indef	what-acc	what-acc-indef
	'what'	'something'	'what (acc)'	'something (acc)'

According to Cheng (1997), wh-words in such languages do not have inherent interrogative force, and they must compose with a null wh-operator in questions. It is the null wh-operator licensing that requires movement of all wh-words to Spec, CP. In languages with an interrogative particle, wh-words receive interrogative force from the particle. This could explain why multiple wh-fronting is not obligatory in Inuktitut, but in fact Slavic languages (which are prototypical multiple wh-fronting languages) also have an interrogative particle *li* in yes/no (and, in some of these languages, also in wh-questions, which is used optionally).

Gillon (1999) suggests that Cheng's hypothesis, allowing only one wh-type per language, still stands if Inuktitut wh-questions are typed by a question particle (here, interrogative morphology) where possible and by wh-movement where impossible (that is, where the verb has a presuppositional suffix instead of an interrogative one. Movement of wh-words in the presence of a question particle happens for other reasons (not to type the clause), similarly to multiple wh-movement languages. According to Cheng (1991), this reason is the necessity of wh-operator licensing (and only first wh-word moves to type the clause). Alternatively, according to Rudin (1988), wh-words move for focus reasons, since they are inherently focused.

However, a closer look reveals that Inuktitut does not pose problems for Cheng's hypothesis. First, wh-fronting is not obligatory, at least in other dialects or for other speakers than Gillon worked with. Second, for wh-in-situ, according to Cheng, it is enough if an interrogative particle is present in yes/no questions in a language, since it implies a null particle in wh-clauses, if there is no an overt one. Finally, again according to Cheng, wh-words that consist only of a variable receive their interrogative force from the interrogative particle, and there is no need for them to combine with an operator in the presence of the particle.

Bošković (2002) showed that multiple wh-fronting languages do not display uniform behavior with respect to wh-movement, and thus this type of language should be eliminated from the cross-linguistic typology concerning the behavior of wh-phrases. A deeper analysis of multiple wh-fronting languages demonstrates that they are scattered across three other types (English-type, French-type, and Chinese-type), differing from the prototypical language of their type only in the presence of the focus requirement, which forces all wh-phrases to move overtly (independently of wh-movement). Thus Bulgarian belongs to English type (obligatory wh-movement), Serbo-Croatian, to French type (wh-movement in certain cases), and Russian, to Chinese-type (does not require wh movement). According to Bošković, the focus requirement camouflaged the behavior of these languages with respect to wh-movement. Inuktitut then belongs to the Chinese-type, i.e. patterns with Russian (though in Russian, the preference for fronting of all wh-words is stronger). Therefore, it is

the requirement to move contrastively focused constituents (including wh-words) that is the common property of multiple wh-fronting languages (as suggested by Rudin (1988) and others).

Since wh-fronting in Inuktitut is optional, and otherwise it has properties of an in-situ language, it is even more clear that the driving force of wh-fronting (when it happens) is the focus requirement, not typing, checking features, or licensing wh-operators. Cheng (1997) argued that wh-fronting in optional fronting languages (which, according to her, are in-situ languages) is the result of clefting (which is a focusing structure) or topicalization (in Egyptian Arabic, Bahasa Indonesia and Palauan). That is, wh-fronting in optional fronting languages is driven by the same forces as scrambling.

5 Where do wh-words move?

As we have seen, the preferred word order in a wh-question in Inuktitut is the following:

(23) Subj Wh-word(s) ... V

Wh-words move into a position which is higher than the verb but lower than the subject position. This landing site cannot be Spec, CP, unless the subject moves even higher. This is the analysis that Rudin (1993) suggested for Bulgarian topicalized Subjects: they adjoin to CP and thus precede wh-phrases located in Spec, CP. However, such constituents in Slavic languages are contrastive topics. For example, in Russian, they are marked by intonation (stress) and can be preceded by a topic marker *-to* and/or by *a* 'but/and', as shown in (24).

(24) (A) Ivan(-to) što kupi-l?
but/and Ivan-topic what buy-pst-3sg.masc
'But what did IVAN buy?'
('don't tell me what others bought, I want to know about Ivan')

In Inuktitut, the order given in (23) is the unmarked order, without any additional topic or focus features in the numeration, whereas (24) is marked. Therefore, the contrastive topic analysis does not work for Inuktitut sentence-initial subjects in wh-questions.

Persian is similar to Inuktitut with respect to wh-fronting. Persian also has an interrogative particle in yes/no questions, and wh-words move into a position between the subject and the verb (Kahnemuyipour 2001). Kahnemuyipour (2001) shows that this position is also the locus of non-wh contrastively focused elements, and argues that it is directly above *v*P. He assumes that the subject is in its canonical position, Spec, TP, and therefore wh-words move higher than the verb, but inside TP. Since manner adverbs precede wh-words in Persian (and manner adverbs are generally assumed to be adjoined

to ν P), he concludes that wh-words move directly above, and not higher than, ν P.

Unfortunately, tests involving adverb placement are difficult to do in Inuktitut, because manner adverbs are often incorporated into verbs. Adjunction to ν P seems the right solution for Inuktitut as well, but more research is needed to find out what exactly the landing site of wh-words in Inuktitut is.

6 Conclusion

I showed that Inuktitut is a wh-in-situ language in which wh-words are fronted to a pre-verbal position below TP, and this fronting is focus-driven, because wh-words are generally assumed to be inherently contrastively focused. Though Inuktitut has been traditionally analyzed as a polysynthetic language, it appears more similar to languages traditionally analyzed as scrambling languages. Focus and topic are important features in the syntax of Inuktitut: they cause movement of a constituent bearing such a feature. Preferred word orders obey three constraints: the PF constraint against homophonous sequences, the requirement to place topics (in default cases, subjects) into the highest of overtly filled positions, and the requirement to place contrastively focused elements – including wh-words – in a pre-verbal positions.

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