A COMPARATIVE LOOK AT WH-QUESTIONS IN NORTHERN INTERIOR SALISH[1]

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1. Introduction

The aims of this paper are modest: to set out some of the basic properties of WH-questions in the three Northern Interior Salish (NIS) languages, St'át'imcets (Lillooet), Nlakapamuxcín (Thompson), and Secwepemctsín (Shuswap); to document major similarities and significant differences between WH-constructions in these languages; and to provide a comparative data-base for future exploration. We have chosen to investigate WH-questions because (a) they are well-studied in a number of languages (b) they constitute the criterial case of long-distance movement in syntactic theory, and (c) they provide a relatively self-contained set of data in the NIS languages. Many of the observations documented here are also applicable to relative clauses and focus movement, although much more work needs to be done on the differences between these three constructions.

2. Basic morphology of WH-words

WH-words in the three NIS languages are tabulated below, together with the subordinating determiners which they select:[2]

[1] We would like to thank the many speakers who have helped us to understand their languages. Dorothy Ursaki of Spences Bridge has provided the Nlakapamuxcín data. The late Leslie Jules of Kamloops, Mona Jules of Chu Chua, Basile Deneau and Annie May Jules of Skeetchestn have provided the Secwepemctsín data. Beverley Frank of Sek'wel'was, Rose Whitley of T'it'q'et and Gertrude Ned of Caclep have contributed the St'át'imcets data. Much of the material here was originally presented to the Salish Syntax Working Group at UBC; we would like to thank M.Dale Kinkade, Ewa Czaykowska-Higgins, Peter Jacobs, and other participants for their valuable input. Mistakes, of course, are our own. Research for some of the Secwepemctsín fieldwork has been funded by the Melville and Elizabeth Jacobs Fund and the Phillips Fund of the American Philosophical Society. Research on St'át'imcets has been funded by SSHRCC Grant 410-92-1629 to Patricia Shaw.

[2] We have followed usual phonemic practice in each of the three NIS languages. This means that [æ] , for example, ends up getting transcribed as [a] in ST', [e] in NL, and [ɛ] in SE. This is unfortunate, but unavoidable in the absence of a standard phonemic script for NIS languages. Abbreviations are as follows: AUG = augmentative, AUX = auxiliary, COMP = completive, CONJ = conjunctive clitic, DEIC = deictic, DET = determiner, DIR = direct, EP = established past, FOC = focus, HYP = hypothetical, INC = inceptive, INH = inherent, IND = indirective, IRR = irrealis, MDL = middle, NEG = negation, NOM = nominilization, OB = object, OBL = oblique, PART = particle, PASS = passive, PL = plural, PO = possessive, PST = past, RED = reduplication, REL = relational, RDR = redirective, S = singular, SU = subject, TO = topical object, TR= transitive. Sources quoted are: T and T: Thompson and Thompson (1992); van Eijk: van Eijk (1984); Kuipers: Kuipers (1974).

	ST'AT'IMCETS (ST')	NLAKAPAMUXCIN (NL)	SECWEPEMCTSIN (SE)
who	s-wat k^{w}u	s-wet k	s-wét-ẏ k
what	s-taʔ k^{w}u	s-teʔ k	s-téʔ-ɬ k
where	n-kaʔ ɬ	he-ʔ e	ɬ-hɛ-ʔn k
why	kánəm	kénm	kénm
how	s-káš-tš-aš	teʔxéʔ	kénm
when	(ɬ)-kanm-áš-(aš) ɬ	pɬ-štéʔ e	pn-hɛ-ʔn k

We have indicated morpheme boundaries where they seem justified in the context of the grammar of a particular language. While the derivative status of most WH-words seems clear, actual derivations are somewhat opaque; nevertheless, common elements at least hint at the origin, if not the synchronic status of interrogative elements. Thus the words for "what" and "who" in all three languages are nominalised (s-prefixed) forms of indefinite deictics, which show up independently in various subordinate environments (see section 4); likewise, the words for "where" in NL and SE clearly contain the interrogative clitic -n, and most of the WH-words in ST' (as well as the words for "why" in all three languages) contain the root -ka-, which surfaces independently in ST' as a modal enclitic meaning "should" or "would". Since the morphological composition of interrogatives is orthogonal to our main concerns here, we will confine ourselves to these brief and unsystematic observations; obviously, more work needs to be done in this area.

3. Categorial status of WH-words

The issue of categoriality is vexed in Salish generally, as is well-known; and indeed, WH-words in NIS show typically ambivalent behaviour with respect to predicate-argument status. A rough list of "nominal" as opposed to "verbal" characteristics is given in (2):

(2)

	"NOMINAL"	"VERBAL"
(i)	- in argument position	- in predicate position
(ii)	- is selected by D(eterminer)	- selects D
(iii)	- is quantified over	- quantifies over
(iv)	- takes nominal inflection	- takes verbal inflection

WH-words meet almost all of the criteria on both lists; we will briefly review the pertinent evidence.

(i) WH-words in NIS generally occupy clause-initial position.Whilst this suggests predicative status, it might equally reflect the universal tendency for WH-phrases to occur in initial position for scopal reasons. However, in NL and SE, which have pre-predicative positions lacking in ST' (see Gardiner et al. 1993), it is perfectly legitimate for a WH-word to occur in second position, as shown in (3):

(3) a. ɣ-John swɛtỳ k wɪk-x-t-m-əs ɣ-qé?č-əs
DET-J who IRR see-IND-TR-PASS-CONJ DET-father-3SPO
"Who saw John's father?" (SE)

b. ɬ-Mary šwet k mɬ́lt-əm-š
EP-M. who IRR visit-MDL-(TR)-3SSU
"Who visited Mary ?" (NL)

Moreover, whilst ordinary (non-initial) WH-in-situ is generally bad, as in (4)[3] , multiple WH-questions containing in situ WH-words are grammatical at least in NL, as shown in (5).

(4) * mɪ?x-at-éš ɬ-e ƛo?šqáyxʷ ɬ-e ntʌqčínṭn pɪ?šté?
kick-TR-3SU EP-DIR man EP-DIR door when
"When did the man kick the door?" (NL)

[3] There are some surprising exceptions to this generalization in NL, which, however, are subject to inconsistent judgements and need to be checked with a wider set of speakers. The following example was judged by our consultant to be grammatical on several different occasions:

(i) k mɪ?xa-t-éš-uš pɪ?šté? ɬ-e ƛo?šqayxʷ ɬ-e ntəqčínṭn
IRR kick-TR-3SU-CONJ when EP-DIR man EP-DIR door
"When did the man kick the door ?"

While predicate-medial word orders are by no means uncommon in elicited speech in NL, this type of structure is highly unusual, in that it involves fronting of a complement predicate, minus its arguments, into a matrix prepredicative position. Obviously, further investigation is necessary.

(5) šwet k-wɬk-əm te? tə-k šté?
who IRR-see-MID DEIC OBL-IRR what
"Who saw what?" (NL)

Interestingly, as shown in (6), NL appears to show a superiority effect, though much more work needs to be done in this area:

(6) * šte? k-š wɪk-əm-š te? tə-k šwet
what IRR-NOM see-MDL-3PO DEIC OBL-IRR who
* "What did who see ?" (NL)

(ii) while WH-words in initial position typically subcategorize for an irrealis determiner (see 1 above), "subordinate" WH-words are themselves selected by D, as shown in (5) above.
(iii) Quantificational evidence is ambivalent: WH-words are quantificational, and can range over individuals or sets (as in *which x* questions), but they can also act as variables (indefinite pronouns) when preceded by other quantifiers (see section 4 below).
(iv) Inflectional evidence shows WH-words can be both "verbal" (they may host the usual range of post-predicative clitics, as in (7), though of course it is often impossible to tell whether such clitics specifically target predicates , or are simply in second position) and "nominal" (forms for "who" and "what" are affixed with the nominalizer, and in NL they undergo plural reduplication). Such evidence, however, should be used with caution; predicate nominals are perfectly capable of inflecting like ordinary predicates, and morphological processes such as reduplication tend to be category neutral, their interpretation varying according to the semantics of the root.

(7) šwát-aš ƙ a múta? kʷu um̓-ən-čí-haš tɪ qlám̓-a
who 3SSu MOD again IRR give-TR-2SOB-3SSU DET-ugly thing-DET
"Who could have given you that ugly thing ?" (ST': van Eijk 194)

The ambivalent behaviour of WH-words with respect to the argument-predicate distinction is hardly surprising, given the slender or non-existent evidence for categorial distinctions in the Salish languages in general (see Jelinek 1984, Kinkade 1983, Hess and van Eijk 1985). Thus, from a Salish perspective there is nothing exceptional about WH-words in this respect, even if a "predicative" WH-word might seem to be bizarre in a cross-linguistic context.

4. D-type versus A-type quantification

An important typological distinction amongst WH-words is that of D-type versus A-type quantification (see Partee 1987, Jelinek 1990, Baker 1991b). In the former, WH-

words are determiners which quantify over the denotation of the NPs which they bind, as in English. In the latter, WH-words are indefinite expressions which pick up their interpretation from quantifiers which bind them, as in Chinese and Japanese; (Cheng 1991, Nishigauchi 1986) . NIS Salish WH-words are of the latter type; they may serve as indefinites in subordinate positions, either bound by quantifiers, as shown in (8a), or without, as in (8b), in which case they are interpreted as indefinites by "existential closure" (see Heim 1982, Diesing 1992) :

(8)a. tə-té? k e štέ?-š
NEG-DEIC IRR DIR what-3PO
"They didn't have anything." (NL; T and T 168)

b. qaɬ́m-xən-š-kan k^{w}u šwat-aš ḱ a
hear-foot(LS)-TR-1SSU IRR who-3SSU MOD
"I heard somebody's footsteps." (ST': van Eijk 194)

A-type quantification in WH-questions may have important typological consequences: Cheng, for example, argues that it correlates with lack of syntactic movement of the WH-word itself (though see Watanabe 1991). Instead, she argues that apparent cases of WH-movement in A-type languages are actually clefts, with the WH-word base-generated in situ and presumably linked to argument positions via empty operator movement. This appears plausible in Salish, where the complement of a WH-phrase looks very much like a relative clause (headed by a determiner); it is also the analysis adopted by Kroeber (1991) in his detailed survey of complementation in Salish, and the one that we will provisionally adopt here.

5. Special morphology

NIS languages show an interesting range of extraction-related morphology (see Kroeber 1991 for a pan-Salish overview). There are two triggering environments in NIS; adjunct extraction, and extraction of an ergative NP. We will briefly review the facts in this section.

In all three languages an absolutive argument may be directly questioned; as shown below:

(9) a. štaɬ́ k^{w}u áčx̣-ən-aš
what IRR see-TR-3SU
"What did (s)he see?" (ST')

b. šwet k wɬk-t-š ɬ-e Bɪll
who IRR see-TR-3SU EP-DIR B.
"Who did Bill see ?" (NL)

c. swέtỳ k x̣^{w}ɪ-st-és
who IRR like-CAUS-3SU
"Who does (s)he like?" (SE)

There is evidence that an ergative argument may also be directly questioned, particularly if no ambiguity results, as in (10):

(10)a. šwat k^{w}u áčx̣-ən-aš ta nḱyáp-a
who IRR see-TR-3SU DET coyote-DET
"Who saw the coyote?" (ST')

b. ɬ šmúɬeč šwet k mɬ́ɬt-əm-š
EP woman who IRR visit-REL-3SU
"Who did the woman visit?" (NL)

c. šwέtỳ k x̣^{w}ɪ-st-és ɣ-qέ?čə-s
who IRR like-CAUS-3SU DET-father-3PO
"Who likes his/her father?" (SE)

However, the general strategy for extracting an ergative is to make use of some disambiguating device. All three NIS languages use the passive to this effect; since passive demotes an agent to adjunctual status, this means that what is actually being extracted in questioning a transitive subject is in fact an adjunct. SE and NL both employ special morphology when an adjunct is extracted,[4] in the form of the

[4] Not all adjuncts trigger -wəs. In particular, kenm(NL)/kenm(SE) "why, how" generally (but not always) takes a nominalized complement without conjunctive morphology. Moreover, in NL, conjunctive morphology seems tied to focus. A WH-phrase immediately followed by a pre-predicative locative always appears with plain morphology, as in (i):

(i) šwat n-ɬ-e čɪtx^{w} k wɪk-t-š(*-uš) ɬ-John
who LOC-EP-DIR house IRR see-TR-3SU(-CONJ) EP-John

It seems that the reason for this exceptional behaviour is that a WH-phrase is obligatorily focused, as shown in (ii) and (iii):

(ii) ɬ-Bɪll šwet k wɪk-t-š
EP-Bill who IRR see-TR-3SU
"Who did Bill see ?"

(iii) *?e ɬ-e Bɪll šwet k wɪk-t-š
FOC-EP-DIR

conjunctive clitic *-wəs, which shows up as -uš in NL and -(w)əs in SE, as in(11); as might be expected, this morphology also appears in questioning a (passivized) ergative, as shown in (12):

(11)a. pɪʔštéʔ k wík-t-x^{w}-uš ɬ-e pəs-pʕ́ps
when IRR see-TR-2SSU-CONJ EP-DIR AUG-cat
"When did you see the kittens? (NL)

b. ƛhé?n k ník-nt-m-(w)əs
where IRR cut-TR-PASS-CONJ
"Where did (s)he cut it?" (SE)

(12)a. šwet k mílt-əm-t-əm-uš ɬ-e šmúɬeč
who IRR visit-REL-TR-PASS-CONJ EP-DIR woman
"By whom was the woman visited?" (NL)

b. swɛtỳ k čn-t-ém-əs
who IRR punch-TR-PASS-CONJ
"By whom was (s)he punched?" (SE)

ST' behaves rather differently: it has lost most if not all non-locative oblique marking, which means that passive agents are morphologically indistinguishable from direct arguments, and it has no equivalent of *-wəs. It is thus impossible to tell whether an agent or patient has been extracted in a passivized WH-question, though the discourse function of passives in Salish (which involves reversing the usual mapping of subject onto presupposed and object onto new information; see Kinkade 1989, 1990, Matthewson et al. 1993) generally forces an extracted WH-phrase to be interpreted as agent, as in (13)[5] :

(iii) differs from (ii) only in containing a focus-particle (word order is immaterial). If, as appears to be the case, there is a general constraint against more than one focused element per sentence in NL, then the ungrammaticality of (iii) can be accounted for by assuming that WH counts as an obligatory focus. But in that case, (i) can be explained by assuming that the fronted locative cannot be focused, since the sentence contains a WH-phrase, and that conjunctive morphology can only be triggered by pre-predicative **and** focused elements. In fact, the situation is even more complicated, since fronted objects (or rather, absolutives) **never** trigger conjunctive morphology: see Gardiner et al. (1993) for more on NIS word order and Kroeber (1993) for more on NL -uš.

[5] There is also an animacy effect operating in ST' which appears to prevent passive agent extraction just in case the patient is inanimate and the agent animate. Compare (i) and (ii):

(i) nɬɬ ta šk^{w}úk^{w}mɪt-a čáq^{w}-an-əm ɬ šq^{w}ə́l-a
FOC DET child-DET eat-TR-PASS PLDET berry-DET
"It was the child that got eaten by the berries."

(13) šwat k^{w}u ačx-ən-əm š-Bill l-ta čɪtx^{w}-š-a
who DET see-TR-PASS NOM-Bill LOC-DET house-3SPO-DET
"Who saw Bill in his house?" (ST')

ST' also has a quite separate mechanism for extracting ergative subjects, involving the special morpheme -tali, which appears to be related to the "topical object" markers studied by Kinkade (1989, 1990) in Upper Chehalis and Columbian.[6] Its use is illustrated below:

(14) šwat k^{w}u ačx-ən-tálɪ ta nƛyáp-a
who IRR see-TR-TO DET coyote-DET
"Who saw the coyote ?" (ST')

In terms of its discourse function, **-tali** appears indistinguishable from the passive, and seems to be used as a stylistic variant; see Matthewson (1993) for detailed analysis.

Adjunct extraction triggers a variety of morphological reflexes in NIS. In SE and NL, locative, temporal and instrumental WH-questions trigger the conjunctive clitic -wəs; see (11) above. In ST', in contrast, such questions are formed with the hypothetical complementizer ɬ-, which triggers subjunctive morphology on the following predicate, as in (15):

(15) a. nkaʔ ɬ-áčx-ən-ax^{w} ta mámeẇ-a
where HYP-go-2SSBJ DET kitten-DET
"Where did you see the kitten?" (ST')

b. kánmaš-aš ɬ-hú́z'-aš ƛɪq
when-3SSBJ HYP-INC-3SSBJ arrive
"When will (s)he arrive ?" (ST': van Eijk 206)

(ii) nɬɬ ɬ šq^{w}ə́l-a čáq^{w}-an-əm ta šk^{w}úk^{w}mɪt-a
FOC PLDET berry-DET eat-TR-PASS DET child-DET
"It was the child that ate the berries."

Again, this phenomenon needs further investigation.

[6] Kinkade (p.c.) has supplied the following reconstruction for the topical object marker:

Tillamook:	-əg^{w}ɪ	Cowlitz	: **-wali**	Columbian:	**-wa**
Chehalis	: **-wali**	Quinault	: **-uli**	Looshutseed:	-əg^{w}ɪ
St'at'imc	: **-tali**	Proto-Salish:	***-wali**		

In addition, he notes similarities between the topical object marker and the reciprocal suffix *-wax^{w}.

"Why" questions trigger nominalization in ST' and SE , but apparently not (or possibly optionally) in NL, as shown in (16):

(16) a. kánəm š-əš q^{w}ačáč-wɬt
why NOM-3PO leave-PL
"Why did they leave ?" (ST': van Eijk 271)

b. kɛ́nm ɣɪ? ɣ-s-čnɛs
why DEIC DET-NOM-go along
"Why did he go ?" (SE: Kuipers 207)

c. kɛ́nm k^{w} ƛu? ču?-t-ɛ́x^{w}
why 2SSU PART punch-TR-2SSU
"Why did you punch him ?" (NL: T and T 166)

It is unclear whether this difference has any structural consequences, or is simply a morphological quirk; we will not attempt to resolve this issue here.

As is typical of WH-questions cross-linguistically, the distance between the WH-word and its "launching site" in NIS can span more than one clause, as shown below:

(17) a. swɛ́tỳ lu? l-?-s-čut ɣ-Paul k-wɪk-t-s
who DEIC DET-2SPO-NOM-say DET-P. IRR-see-TR-3SU
ex tə ƙʊ́l-m-əs tə stúkčn
AUX OBL make-MDL-CONJ OBL dipnet
"Who did you say Paul saw making a dipnet ?" (SE)

b. šte? k-š-pɪla-x-t-x^{w} ɬ-Mary k-wɪk-t-na
what IRR-NOM-tell-IND-TR-2SSU EP-M. IRR -see-TR-1SSU
"What did you tell Mary I saw ?" (NL)

c. šwat k^{w}u čut k^{w}-š -Mary k^{w}-š -ačx̣-ən-tálɪ ta škʃxza?-š-a
who IRR say DET-NOM-M. DET-NOM-see-TR-TO DET mother-3SPO-DET
"Who did Mary say saw her mother?" (ST')

Clauses intermediate between launching and landing sites may be either nominalized or receive subordinate person marking (see Kroeber 1991, 1993, Gerdts 1988). Choice seems at least partially determined by the predicate itself: "say", for example, seems to be usually nominalized, (but see (17c)) whereas "know" is not. This may be related to the transitivity of the intermediate predicate: "know" is transitive, as shown in (18) for ST':

(18) šwat k^{w}u zwát-ən-ax^{w} k^{w}-š áčx̣-ən-an
who IRR know-TR-2SSU DET-NOM see-TR-1SSU
"Who do you know that I saw?" (ST')

It appears that nominalization is a common strategy in cases of WH-extraction of an "unlicensed" argument (i.e., one which is not registered by person marking on the predicate), as shown in (19a) for middle/with-object/antipassive forms and in (19b) with the theme of a ditransitive predicate:

(19)a. štaṁ k^{w}u š-úq^{w}a?-šu
what DET NOM-drink-2SPO
"What did you drink ?" (ST')

b. štaṁ k^{w}-š úṁ-n-ax^{w} ta šǩ^{w}úǩ^{w}ṁɪt-a
what DET-NOM give-TR-2SSU DET child-DET
"What did you give the child ?" (ST')

6. Islands

It might be argued, given the lack of motivation for overt syntactic movement, that NIS WH-questions lack any kind of movement at all, and instead involve some kind of dislocation process. Interestingly, there is reasonably strong evidence against such a hypothesis, based on the existence of island effects in all three NIS languages; as first argued by Ross (1967) such effects are diagnostic of syntactic movement. NIS languages obey all applicable major island constraints, including the Coordinate Structure Constraint (20) the Complex Noun Phrase Constraint (21), the WH-island Constraint (22), and the Adjunct-island Constraint (23):

(20) * ɬ-Mary šwet k-wɪk-t-š pəɬ John
EP-M. who IRR-see-TR-3SSU INH John
* "Who did Mary see and John?" (NL)

(21) a. * štaṁ k^{w}u pzá-n-ax^{w} tɪ šqáyx^{w}-a tɪ mayš-ən-tálɪ-ha
what IRR meet-TR-2SSU DET man-DET DET fix-TR-TO-DET
* "What did you meet the man who fixed ?" (ST')

b. * šte? k-š qa?nʃm-n-ux^{w} he š-pʃlax-əm k-š zoq^{w}š
what IRR-NOM hear-TR-2SSU DIR NOM-tell-MDL IRR-NOM dead-3SPO
* "What did you hear the rumour that died ?" (NL)

c. * swɛ́tỳ k-čn-čɛ́čms ɣ-sqɛ́lmx tə x̣^{w}ɪ-st-ɛ́s

who IRR-punch-(TR)-1SOB-3SSU-RED DET-man OBL like-CAUS-3SSU
* "Who did the man that likes punch me ?" (SE)

(22) a. * štaṁ kʷu šáw-ən-axʷ š-Bill nka? ɬ-áčx̣-ən-aš š-John
what IRR ask-TR-2SSU NOM-B. where HYP-see-TR-3SSU NOM-J.
* "What did you ask Bill where John saw ?" (ST')

b. * šte? k-š šéw-n-uxʷ ɬ-Bill he šwét-uš k qʷəz-t-ém-uš
what IRR-NOM ask-TR-2SSU EP-B. DIR who-CONJ IRR use-TR-PASS-CONJ
k-uš ču-t-éš ɬ-e kah
IRR-CONJ fix-TR-3SSU EP-DIR car
* "What did you ask Bill who used to fix the car ?" (NL)

c. * swetỳ lu? ɣ-John ləxéx̣yə-čm-s swétỳ k-čuṁqsns
who DEIC DET-J tell-(TR)-1SOB-3SSU who IRR-kiss-(TR)-3SSU
* "Who did John tell me who kissed?" (SE)

(23) a. * štaṁ kʷu šáw-ən-č-axʷ l kanmáš-aš ɬ-čút-an kʷ-š áčx̣-ən-an
what IRR ask-TR-1SOB-2SSU PST-when-3SSU HYP-say-1SSU DET-NOM see-TR-1SSU
* "What did you ask me when I said I saw ?" (ST')

b. * šwet k-?a?úy-m kʷ ?áwɪ?teš qʌlíl-əm-nuxʷ
who IRR-laugh-MDL 2SSU because angry-MDL-2SSU
* "Who did you laugh because you were mad at?" (NL)

c. * stém̓ɪ ɣɪ? k-čɪx̣ms-t-és pnhé?n ɣ-Sam k-ḱúɪn-s-əs
what DEIC IRR-know-TR-3SSU when DET-S. IRR-make-(TR)-3SSU-CONJ
* "What did he know when Sam made?" (SE)

There is a further significant consequence to the island-sensitivity shown above: there must be a structural distinction between adjunct and argument clauses to explain the difference in extraction possibilities shown in the contrast between the examples in (17) and those in (23). This is unexpected if all overt arguments are in adjunct positions, linked to pronominal affixes via coindexation, as proposed by Jelinek (1984); but it is predicted by Baker's (1991a) reworking of the pronominal argument hypothesis, in which clauses can remain in argument position, since they do not need (abstract) Case.

While the behaviour of all three languages is identical in (20-23), there is significant variation with respect to extraction in two other contexts - from "inner islands" (negatives) and from the possessor position of NPs.

In NL, WH-extraction from a negative clause is ungrammatical, as shown in (24), whereas in SE and ST' extraction of a complement WH-phrase from an inner island is grammatical, as in (25). In ST', extraction of an adjunct from a negated clause is impossible, just as in English: in (26), the WH-adjunct can only have matrix scope.

(24) * šwet he ?-š-čut k-š temeš-téʔe k-š nčúṁqš-eš ɬ-Mary
who DIR 2SPO- NOM-say IRR-NOM NEG IRR-NOM kiss-(TR)-3SSU EP-M.
"Who did you say didn't kiss Mary ?" (NL)

(25) a. šwat kʷu čút-kaxʷ kʷ-š xʷʔax̣ kʷ-š áčx̣-ən-aš ti šqáyxʷ-a
who IRR say-2SSU DET-NOM NEG DET-NOM see-TR-3SSU DET man-DET
"Who did you say didn't see the man?" (ST')

b. stém̓ɪ ɣɪ? m-čut-k ɣ-John k-s-taʔ-s k-s-ḱuɪn-s
what DEIC COMP-say-2SSU DET-J. IRR-NOM-NEG-3SPO IRR-NOM-make-3SPO
"What did you say John didn't make ?" (SE)

(26) nka? ɬ-čút-axʷ kʷ-š xʷʔay kʷ-š áčx̣-ən-aš ti šqáyxʷ-a
where HYP-say-2SSU DET-NOM NEG DET-NOM see-TR-3SSU DET man-DET
"Where did you say (s)he didn't see the man?" (ST')

The asymmetry in (26) (see Rizzi 1990, Cinque 1990), indicates that there must be a structural difference between complement and adjunct gaps in ST', as well as between clauses. This is again incompatible with a Jelinek-type view of pronominal argument languages, but compatible with Baker's revision (since in his theory WH-traces also escape part of the Case-filter).

"Possessor extraction" (where a possessive WH-phrase is separated from its possessum) also shows interesting variation in NIS. In ST' it appears to be simply impossible, as shown in (27), though our data is somewhat skimpy:

(27) a. * šwat kʷu áčx̣-ən-axʷ (kʷu) škɪxza?-š
who IRR see-TR-2SSU IRR mother-3SPO
* "Whose did you see mother?" (ST')

b. * šwat kʷu áčx̣-ən-čɪ-haš (kʷu) škɪxza?-š
who IRR see-TR-2SOB-3SSU IRR mother-3SPO
"Whose mother saw you?" (ST')

c. * šwat kʷu qʷačáč (kʷu) škɪxza?-š
who IRR leave IRR mother-3SPO

"Whose mother left?" (ST')

In contrast, SE seems to allow possessor extraction quite freely, at least in intransitive clauses, as in (28):

(28) a. swétỳ k-xʷéym k-sqéx̲-əs
who IRR-bark IRR-dog-3SPO
"Whose dog barked?" (SE)

b. swétỳ k-x̲yum k-čitxʷ-s
who IRR-big IRR-house-3SPO
"Whose house is big?" (SE)

NL shows an interesting intermediate pattern; extraction is impossible in transitive clauses, and only permitted from intransitives with an "individual level" as opposed to "stage level" predicate (see Kratzer 1989, Diesing 1992):

(29) a. * šwet k-ʕʷáčama k-šqáqxa-š
who IRR-bark IRR-dog-3SPO
"Whose dog barked?" (NL)

b. šwet k-x̲zum k-čitxʷ-š
who IRR-big IRR-house-3SPO
"Whose house is big?" (NL)

c. * šwet k-qʷčíyx k-šqáqxa-š
who IRR-leave IRR-dog-3SPO
"Whose dog left?" (NL)

d. šwet k-zoqʷ k-šqáqxa-š
who IRR-dead IRR-dog-3SPO
"Whose dog died?" (NL)

It should be noted that none of these patterns match the Halkomelem data presented in Gerdts (1988), where extraction of a possessor is apparently possible from absolutive but not from ergative NPs; it thus seems that this is a particularly variable phenomenon in Salish syntax.

7. Weak Crossover

Weak crossover (WCO) effects are often used as a diagnostic for structural asymmetries, since they reliably distinguish subject and object in straightforwardly configurational languages, as shown in (30) for English:

(30) a. **Who** loves **his** mother ?
b. * **Who** does **his** mother love ?
c. **Who** is loved by **his** mother ?

(Coreference indicated here by bold-face).

The "distributive" reading, involving pairs of mothers and sons, is only available in (a) and (c); disjoint reference is therefore forced in (b). Unfortunately, judgements are notoriously unstable on this delicate contrast, which, once explained, frequently disappears, as speakers over-rule syntactic unacceptability in favour of semantic plausibility. We have not yet discovered a way in which to cultivate the required informed naivete to get reliable WCO data. A further confounding factor is the use of plural agreement, which gives a "collective" force to WH-questions, rendering WCO (which depends on a distributive reading) irrelevant. Nevertheless, some of our results are suggestive, if not conclusive, and we will present them in the hope that others might reinforce or at least re-examine our conclusions.

In all three NIS languages WCO effects can be avoided by employing the passive, just as in English (see 30c above). Thus in NL, we get the following paradigm:

(31) a. šwet k-ỳe-mʃn-t-əm-uš k-škʃxəze?-š
who IRR-like-RDR-TR-PASS-CONJ IRR-mother-3SPO
"Who is **her** mother liked by?" (NL)

b. šwet k-ỳe-mʃn-t-əm tə-k škʃxəze?-š
who IRR-like-RDR-TR-PASS OBL-IRR mother-3SPO
"Who is liked by **her** mother?" (NL)

c. *šwet k-ỳe-mʃn-š k -škʃxəze?-š
who IRR-like-RDR-(TR)-3SSU IRR-mother-3SPO
*"**Who** does **her** mother like?" (NL)

The evidence here is certainly suggestive of a WCO effect; however, it appears that (c) is out for independent reasons, since sentences with coreference between the possessor of the subject NP and the object NP are generally ungrammatical in both NL and SE (see Matthewson et al. 1993), making passive the only option and WCO irrelevant. In ST', where this constraint does not hold, the picture is quite confusing, and judgements variable; however, it does appear that speakers avoid WCO

configurations, even if they do not reject them outright. Evidence for this is provided by WH-questions with ordinary ergative morphology, as in (32):

(32) šwat kʷu xʷɬ-š-aš kʷu škɬxza?-š
who IRR love-TR-3SSU IRR mother-3SPO
"Who loves **her** mother ?" (ST')

Ordinarily, as mentioned in section 5, direct morphology strongly favours an object interpretation for an extracted WH-word; in the case of a potential WCO violation, however, the favoured interpretation is for a subject question, effectively reversing the normal preference. As in NL and SE, passive is generally employed to circumvent WCO effects in object WH-questions:

(33) šwat kʷu xʷɬ-š-tum kʷu škɬxza?-š
who IRR love-TR-PASS IRR mother-3PO
"Who is loved by **her** mother ?" (ST')

A further intriguing twist to the ST' data is provided by WH-questions with **-tali** (see section 4 above). Apparently, variable binding is altogether disfavoured in such configurations; the only possible interpretation is one with disjoint reference:

(34) šwat kʷu xʷɬ-š-tálɬ kʷu škɬxza?-š
who IRR love-TR-TO IRR mother-3PO
"Who loves her/***her** mother ?" (ST')

It should be noted that this constraint is confined to the bound variable reading of the pronominal; it does not hold in "collective" WH-questions (35), signalled here by plural possessive inflection:

(35) šwat kʷu xʷɬ-š-tálɬ kʷu škɬxəz-ɬ-ha?
who IRR love-TR-TO IRR mother-3PLPO-DET
"Who loves **their** mother(s)?" (ST')

Thus, the whole ST' system seems to shift coreference possibilities in potential WCO configurations, suggesting that WCO effects do indeed exist. If so, this provides one potential argument in favour of a hierarchical asymmetry between subject and object NPs, which would provide yet another argument against Jelinek's view of Salish phrase structure.

8. Conclusion

Obviously, we have no more than scratched the surface of the syntax of WH-questions in NIS in this brief survey. There are many other issues to be explored, including

quantifier-WH interactions, the possible existence (and difficulties in detecting) parasitic gaps, reconstruction and anti-reconstruction effects, and so on. It is to be hoped that a detailed examination of these topics will eventually lead to a more sophisticated and theoretically informed approach to Salish syntax, one which might eventually resolve some of those basic questions concerning phrase-structure and configurationality which still remain mired in controversy.

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