A COMPARATIVE LOOK AT WH-QUESTIONS IN NORTHERN INTERIOR SALISH

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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'at'imcets (Lillooet), Nlakapamuxcin (Thompson), and Secwepemcstsin (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. We would like to thank the many speakers who have helped us to understand their languages. Dorothy Ursaki of Spences Bridge has provided the Nlakapamuxcin data. The late Leslie Jules of Kamloops, Mona Jules of Chu Chua, Basile Deneau and Annie May Jules of Skeetchestn have provided the Secwepemcstsin data. Beverley Frank of Ske'wel'was, Rose Whitley of T'qet and Gertrude Ned of Caclap have contributed the St'at'imcets data. Much of the material here was originally presented to the Salish Syntax Working Group at UBC; we would like to thank M. Dala Kinkade, Ewa Czajkowska-Higgins, Peter Jacobs, and other participants for their valuable input. Mistakes, of course, are ours own. Research for some of the Secwepemcstsin fieldwork has been funded by the McVille and Elizabeth Jacobs Fund and the Phillips Fund of the American Philosophical Society. Research on St'at'imcets has been funded by SSHRC Grant 410-92-1629 to Patricia Shaw.

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 (a-prefixes) 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 SE 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 categoriablity 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):

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2. We have followed usual phonemic practice in each of the three NIS languages. This means that [e] is the example, ends up getting transcribed as [a] in ST', [e] in NL, and [e] 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 = comparable, 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 = nominalization, OB = object, OBL = oblique, PART = particle, PASS = passive, PL = plural, PO = possessive, PST = past, RED = reduplication, REL = relational, RDR = redirecive, 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).
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. DET-who IRR-see-IND-TR·PASS-CONJ DET-father·3SPO
   "Who saw John's father?" (SE)

b. DET-who IRR-visit-MDL·(TR)-3SSU
   "Who visited Mary?" (NL)

Moreover, whilst ordinary (non-initial) WH-in-situ is generally bad, as in (4),

(4) DET-who IRR-kick·TR·3SU·CONJ when
   "When did the man kick the door?" (NL)

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:

(5) DET-who IRR-see-MID·DEC OBL-IRR what
   "Who could have given you that ugly thing?" (ST': van Eijk 1984)

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 1985, 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. ta-té? k e ńtć-w 
NEG-DEIC IRR DIR see-3PO
"They didn't have anything."

b. qanńm-kan-ń-kam kų ńwat-an-ń
hear-foot(LS)-TR-3SSU IRR who-3SSU MOD
"I heard somebody's footsteps."

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. ństə k ńčų-ń-an-ń 
what IRR see-TR-3SSU
"What did (s)he see?"

b. ńswet k ńwkt-ń 4-e Bill
who IRR see-TR-3SSU EP-DIR B.
"Who did Bill see?"

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

(10) a. ńswet k ńčų-ń-an-ń ˛ta ńkų-ń-p-ń
who IRR see-TR-3SSU DET coyote-DET
"Who saw the coyote?"

b. 4-śmųięęi ńswet k ńmilt-ń-an-ń
EP woman who IRR visit-REL-3SSU
"Who did the woman visit?"

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 -was. 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) ńswet w-ę næńm k ńwkt-ń (-uŋ) ˛-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) 4-śBí111 ńswet k ńwkt-ń
EP-Bill who IRR see-TR-3SSU
"Who did Bill see?"

(iii) 4-śBI11 ńswet k ńwkt-ń
FOC-EP-DIR
"Who did Bill see?"
conjunctive clitic -was, which shows up as -us in NL and -(w)es in SE, as in (11); as might be expected, this morphology also appears in questioning a (passivized) ergative, as shown in (12):

(11) a. pitsté? k wík-t-x'-u$ t-e pos-pépg
    when IRR see-TR-2SSU-CONJ EP-DIR AUG-cat
    "When did you see the kittens?" (NL)

b. kúé?k náf-knt-m-(w)es
    where IRR cut-TR-PASS-CONJ
    "Where did (s)he cut it?" (SE)

(12) a. šwe$t k mítl-am-t-am-u$ t-e žmúč
    who IRR visit-REL-TR-PASS-CONJ EP-DIR woman
    "By whom was the woman visited?" (NL)

b. šwe$t k čn-t-ém-as
    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 -was. 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):

(13) šwat k'w ačx-an-am §-Bili l-ta čítx‘-§-a
    who DET see-TR-PASS NOM-Bill LOC-Bill 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. 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 -was; see (11) above. In ST', in contrast, such questions are formed with the hypothetical complementizer t-, which triggers subjunctive morphology on the following predicate, as in (15):

(15) a. nka? i-čx-an-ax‘ t-máméw-a
    where HYP-go-2SSBJ DET kitten-DET
    "Where did you see the kitten?" (ST)

b. kánmaš-as t-húž‘-as λíq
    when-3SSBJ HYP-INC-3SSBJ arrive
    "When will (s)he arrive?" (ST': van Eijk 206)

There are also animacy effects 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) nít t̓ a š̄g‘-ší-a čáx‘-an-am l š̄g‘-ší-a
    FOC DET child-DET eat-TR-PASS PLDET berry-DET
    "It was the child that ate the berries." (SE)

(ii) nít t̓ a š̄g‘-ší-a čáx‘-an-am t̓a š̄g‘-ší-hit-a
    FOC DET child-DET eat-TR-PASS DET child-DET
    "It was the child that ate the berries." (ST)

Again, this phenomenon needs further investigation.

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

Tillamook: -ag'1 Cowlitz: -wa Chehalis: -wa
Quinault: -ulí Looshusseed: -ag'1 Statt'inc: -tali Protosalish: -wall

In addition, he notes similarities between the topical object marker and the reciprocal suffix *-wax'.

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(ii) nít t̓ a š̄g‘-ší-a čáx‘-an-am l š̄g‘-ší-a
    FOC DET child-DET eat-TR-PASS PLDET berry-DET
    "It was the child that ate the berries." (ST)

(14) šwat k’w ačx-an-tāl ła nkyáp-a
    who IRR see-TR-TO DET coyote-DET
    "Who saw the coyote?" (ST')
"Why" questions trigger nominalization in ST' and SE, but apparently not (or possibly optionally) in NL, as shown in (16):

(16) a. kënêm s-aš q'æq'æq-wit
    why NOM-3PO leave-PL
    "Why did they leave?" (ST': van Eijk 271)

b. kënêm s-ô-s-čëm
    why DET-NOM-go along
    "Why did he go?" (SE: Kuipers 207)

c. kënêm k̕Width ku? ču7-t-šx̕a
    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. swèty l̕u? 1-7-s-čæt
    who DET-2SPO-NOM-say DET-P. IRR·see-TR·1SSU
    "Who did you say saw?"

b. šteʔ k-š-pilà-x-t-x̕a
    who IRR-NOM·tell·IND-TR-2SSU EP·M.
    "Who did you tell?"

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) * i-Mary šwat k-wíkt-s pàJ John EP·M. who IRR·see-TR·3SSU INH John
    "Who did Mary see and John?" (NL)

(21) a. štaʔ k̕u p̕aJ-n-ax̕a ti sə̆f'yə̆m-a ti mayš-an-t̕aʔ-ha
    who IRR·meet·TR·3SSU DET·MAN·DET·fix·TR·TO·DET
    "What did you meet the man who fixed?" (ST')

b. šteʔ k-š qaʔn̕im-n-ux̕a he s-š-pilà-am k-š zoq̕as
    who IRR·hear·TR·3SSU DIR·NOM·tell·MDL IRR·NOM·dead·3SPO
    "What did you hear the rumour that died?" (NL)

c. swèty k-čh-čëmns
    who-sq'ëlmx to k̕n-st-šs

(18) šwat k̕u zwät-an-ax̕a k̕nš-š tò̆x-an-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:

(19a) štaʔ k̕u s-úq̕asʔ-šu
    what DET·NOM-drink·2SPO
    "What did you drink?"

(19b) štaʔ k̕nš-š ūn̕-n-ax̕a ta s̕k̕w̕mhit-a
    what DET·NOM·give·TR·2SSU DET·child·DET
    "What did you give the child?" (NL)
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.

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.
"Whose mother left?"

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

(28) a. swět k-‘ɛym k-swẽx-y-
who IRR-bark IRR-dog
"Whose dog barked?"

b. swět k-ɛyum k-ɛltx-"-
who IRR-big IRR-house
"Whose house is big?"

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. *swet k-‘ɛčama k-sqẽxa-
who IRR-like-3SSU
"Whose dog left?"

b. swet k-azum k-ɛltx-"-
who IRR-big IRR-house
"Whose house is big?"

c. *swet k-‘ɛľyx k-sqẽxa-
who IRR-leave IRR-dog
"Who is her mother liked by?" (NL)

d. swet k-žoq k-sqẽxa-
who IRR-dead IRR-dog
"Whose dog died?"

It should be noted that none of these patterns match the Halkomelem data presented in Gerds (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?

(Co-reference 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. swet k-ɛye-mfn-t-am-.ul k-ɛľxazx-?-
who IRR-like-RDR-TR-PASS-CONJ IRR-mother
"Who is her mother liked by?"

b. swet k-ɛye-mfn-t-am ta-k ɛľxazx-?-
who IRR-like-RDR-TR-PASS OBL-IRR mother
"Who is liked by her mother?"

c. *swet k-ɛye-mfn-? k-ɛľxazx-?-
who IRR-like-RDR-(TR)-3SSU IRR-mother
"Who does her mother like?"

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) \( \text{who} \) IRR love-TR-3SSU IRR mother-3SPO

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) \( \text{who} \) IRR love-TR-PASS IRR mother-3PO

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

(34) \( \text{who} \) IRR love-TR-TO IRR mother-3PO

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

(35) \( \text{who} \) IRR love-TR-SSSU IRR mother-3SPO

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.

References


