

Condition C in Nuu-chah-nulth
Henry Davis & Rachel Wojdak
UBC

GOAL:

- a preliminary investigation of Binding Condition C effects in Nuu-chah-nulth – or rather, the lack of them.

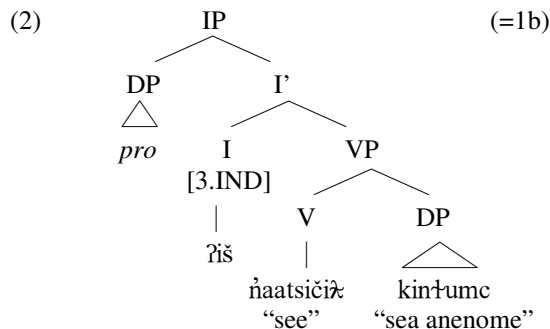
1. Background: relevant properties of Nuu-chah-nulth (NCN) syntax

1.1 Partial head marking

- subject arguments are freely omissible

- (1) a. $\acute{n}aatsi\acute{c}i\acute{\lambda}it\acute{\gamma}i\acute{s}$ Kyle $kin\acute{t}umc$
see-PERF-PST-3.IND Kyle sea.anenome
Kyle saw a sea anenome. (Ahousaht)
- d. $\acute{n}aatsi\acute{c}i\acute{\lambda}it\acute{\gamma}i\acute{s}$ $kin\acute{t}umc$
see-PERF-PST-3.IND sea.anenome
He saw a sea anenome. (identity of *he* is understood in context)

- rich subject inflection licenses a null pronominal (*pro*) as subject.



* We are very grateful to the following Nuu-chah-nulth consultants for their patience and dedication in sharing their language: Mary Jane Dick, Katherine Fraser, Barbara Touchie, Sarah Webster, Barney Williams Jr., and Barney Williams Sr. We are also indebted to Naomi Sawai for her original work on the Ahousaht dialect studying this topic. Thanks to Florence Woo for valuable suggestions. Fieldwork on Nuu-chah-nulth was funded by a UBC Hampton Fund Research Grant in the Humanities and Social Sciences awarded to Henry Davis.

- in contrast, object arguments are not freely omissible.

- (3) a. $maakuk^{w}i\acute{t}h$ $\acute{c}up\acute{c}up\acute{s}um\acute{t}$
buy-PST-3.Q sweater
Did he buy a sweater? (Ahousaht)
(context: you see a man holding a sweater)
- b. * $maakuk^{w}i\acute{t}h$
buy-PST-3.Q
Did he buy it? (Ahousaht)
(context: you see a man holding a sweater)

1.2 Word order

- Word order within the clause is predicate initial, with some flexibility in post-predicative order of DPs (Rose 1981, Whistler 1985, Jacobsen 1993, Davidson 2002, Woo 2004).

- (4) a. $\acute{\gamma}uu\acute{\gamma}i\acute{\lambda}as\acute{\gamma}i\acute{s}$ Mary $\acute{\gamma}itnii\acute{\lambda}$
 $\acute{\gamma}u\text{-}\acute{\gamma}i\acute{\lambda}as\text{-}\acute{\gamma}i\acute{s}$ Mary $\acute{\gamma}itnii\acute{\lambda}$
 \emptyset -go.get[+L]-3.IND Mary dog[pl]
Mary went to get dogs. (Ahousaht)
- b. $\acute{\gamma}uu\acute{\gamma}i\acute{\lambda}as\acute{\gamma}i\acute{s}$ $\acute{\gamma}itnii\acute{\lambda}$ Mary
 $\acute{\gamma}u\text{-}\acute{\gamma}i\acute{\lambda}as\text{-}\acute{\gamma}i\acute{s}$ $\acute{\gamma}itnii\acute{\lambda}$ Mary
 \emptyset -go.get[+L]-3.IND dog[pl] Mary
Mary went to get dogs. (Ahousaht)

- In DPs, either either possessum-possessee or possessee-possessum order is possible (though the former is preferred by many speakers, cf. Ravinski *in prep*):

- (5) a. $\acute{n}a\acute{c}uu\acute{\gamma}a\acute{t}i\acute{t}a\acute{h}$ $\acute{\gamma}um\acute{\gamma}i\acute{i}qsak$ Christine
see-PST-1sg.IND mother-POSS Christine
I saw Christine's mother. (Ucluelet)
- b. $\acute{n}acuu\acute{\gamma}a\acute{t}i\acute{t}a\acute{h}$ Christine $\acute{\gamma}um\acute{\gamma}i\acute{i}qsak$
see-PST-1sg.IND Christine mother-POSS
I saw Christine's mother. (Ucluelet)

- stacked possessives are possible:

- (6) $\gamma u u \dot{s} k^w a p a \dot{h}$ $p i i \dot{s} p i i \dot{s} u k \dot{\gamma} i$ $[\gamma u m \dot{\gamma} i i q s a k$ Florence]
 like-1sg.IND cat-POSS-3.POS mother Florence
 I like Florence's mom's cat. (Ucluelet)
- (7) $\gamma u u \dot{s} k^w a p a \dot{h}$ [Florence $\gamma u m \dot{\gamma} i i q s a k$] $p i i \dot{s} p i i \dot{s} u k \dot{\gamma} i$
 like-1sg.IND Florence mother cat-POSS-3.POS
 I like Florence's mom's cat. (Ucluelet)

- the possessor and possessum may not form a discontinuous constituent:

- (8) * $\gamma u u \dot{s} k^w a p a \dot{h}$ Florence $p i i \dot{s} p i i \dot{s} u k \dot{\gamma} i$ $\gamma u m \dot{\gamma} i i q s a k$
 like-1sg.IND Florence cat-POSS-3.PS mother
 [intended: I like Florence's mom's cat.] (Ucluelet)
- (9) * $\gamma u u \dot{s} k^w a p a \dot{h}$ $\gamma u m \dot{\gamma} i i q s a k$ $p i i \dot{s} p i i \dot{s} u k \dot{\gamma} i$ Florence
 like-1sg.IND mother cat-POSS-3.PS Florence
 [intended: I like Florence's mom's cat.] (Ucluelet)

1.3. Structural asymmetries

- NCN shows the following subject-object asymmetries (see references for details):

- (i) *Only DPs in object position may act as the source of incorporation (Yiu and Stonham 2000, Davis and Sawai 2001, Wojdak 2003a,b)*

- (10) a. $h a a \gamma u m \dot{\gamma} i \dot{\gamma} a s \dot{\gamma} i \dot{s}$ $\dot{n} u \dot{w} i i q$
 $h a \gamma u m - \dot{\gamma} i \dot{\gamma} a s - \dot{\gamma} i \dot{s}$ $\dot{n} u \dot{w} i i q$
 food-**go.get**[+L]-3.IND father
 Father went to get food. (Ahousaht)
- b. * $\dot{n} u \dot{w} i i c - \dot{\gamma} i \dot{\gamma} a s - \dot{\gamma} i \dot{s}$ $h a \gamma u m$
 father-**go.get**[+L]-3.IND food
 Father went to get food. (Ahousaht)

- (ii) *Only DPs in subject position may serve as the source of possessor raising (Davidson 2002, Ravinski in prep)*

- (11) a. $h i n k^w a \dot{\gamma} i i \dot{h} i t \dot{\gamma} i \dot{s}$ $p i i \dot{s} p i \dot{s}$ $m a a m a a t a k q s$
 chase-PST-3.IND cat bird-POSS-1sg.PS
 A cat was chasing my bird.

- b. $h i n k^w a \dot{\gamma} i i \dot{h} i t \dot{\gamma} i \dot{s}$ $p i i \dot{s} p i \dot{s} u k q s$ $m a a m a a t i$
 chase-PST-3.IND cat-POSS-1sg.PS bird
 My cat was after a bird.

- c. $h i n k^w a \dot{\gamma} i i \dot{h} u k s i \dot{s}$ $p i i \dot{s} p i \dot{s}$ $m a a m a a t i$
 chase-POSS-3.IND cat bird
 My cat was after a bird.
 (unavailable interpretation: A cat was chasing my bird.)

- At least (i) must be defined in configurational terms, since *part* of a DP object DP may be incorporated (Rose 1981):

- (12) a. $\dot{c} u \dot{c} u \dot{s} \dot{c} i q a \dot{\gamma} i \dot{s}$ Louis $\dot{s} u w i s$
 $\dot{c} u \dot{s} - \dot{c} i q a - \dot{\gamma} i \dot{s}$ Louis $\dot{s} u w i s$
 new-**lose**[+R]-3.IND Louis shoes
 Louis lost a brand new pair of shoes. (Ahousaht; incorporation)

- b. $\dot{\gamma} u \dot{\gamma} u \dot{c} i q a \dot{\gamma} i \dot{s}$ Louis $\dot{c} u \dot{s} u k$ $\dot{s} u w i s$
 $\dot{\gamma} u - \dot{c} i q a - \dot{\gamma} i \dot{s}$ Louis $\dot{c} u \dot{s} - u k$ $\dot{s} u w i s$
 $\emptyset - \text{lose}$ [+R]-3.IND Louis new-DUR shoes
 Louis lost a brand new pair of shoes. (Ahousaht; no incorporation)

2. Condition C

- Condition C of the Binding Theory (Chomsky 1981) expresses the generalization that referring expressions (names) cannot normally be referentially dependent.

- the standard formulation is that of Chomsky (1981):

- (13) *Condition C*
 R-expressions must not be A-bound.

- (14) α A-binds β iff
 a. α is in an argument position, and
 b. α c-commands β , and
 c. α and β are co-indexed.

- Condition C effects in English:

(15) *Clausal complement:*

- a. Christine_i said that she_i went to Tofino.
 b. * She_i said that Christine_i went to Tofino.

Adjunct clause:

- c. Christine_i will be happy if she_i wins the lottery.
 d. * She_i will be happy if Christine_i wins the lottery.

Relative clause:

- e. Christine_i visited the man that she_i is going to marry.
 f. * She_i visited the man that Christine_i is going to marry.

Possessor:

- g. Christine_i visited her_i fiancé.
 h. * She_i visited Christine_i's fiancé.

3. Contexts where Condition C is apparently violated in NCN

3.1. Clausal complements

- *Ahousaht dialect:*

- (16) a. wawaaʔiš Christine ʔen čatšičwítas sapnii ʔamiiłik
 say-3.IND Christine COMP push-gonna bread tomorrow
 Christine_i said that she_i's gonna knead bread tomorrow.
 b. wawaaʔiš ʔen čatšičwítas(huk) Christine sapnii ʔamiiłik
 say-3.IND COMP push-PERF-gonna-(3.ABS)Christine bread tomorrow
 Christine is saying that she is gonna knead bread tomorrow.
 (*literally:* She_i is saying that Christine_i's gonna knead bread tomorrow.)

- *Ucluelet dialect:*

- (17) a. wawaama Lucy ʔanič ʔapačaqłiitwítas ʔamiiłik
 say-3.IND Lucy COMP-3.C bread-make-about.to tomorrow
 Lucy_i said she_i is going to bake yeast bread tomorrow.

- b. wawaama ʔanič ʔapačaqłiitwítas Lucy ʔamiiłik
 say-3.IND COMP-3.C bread-make-about.to Lucy tomorrow
 Lucy said she is going to bake yeast bread tomorrow.
 (*literally:* She_i said that Lucy_i's going to bake yeast bread tomorrow.)

3.2. Adjunct clauses

- *Ahousaht dialect:*

- (18) a. čimqłʔaqłʔiš Christine ʔayiipquu taana
 happy-FUT-3.IND Christine lots-receive-3.COND money
 Christine_i will be happy if she_i gets a lot of money.
 b. čimqłʔaqłʔiš ʔayiipquu Christine taana
 happy-FUT-3.IND lots-receive-3.COND Christine money
 Christine will be happy if she gets get lots of money.
 (*literally:* She_i will be happy if Christine_i gets a lot of money.)

- *Ucluelet dialect:*

- (19) a. čimqłʔaqłma Jim ʔayiipquu taana
 happy-FUT-3.IND Jim lots-receive-3.COND money
 Jim_i is going to be happy if he_i gets lots of money.
 b. čimqłʔaqłma ʔayiipquu Jim taana
 happy-FUT-3.IND lots-receive-3.COND Jim money
 Jim is going to be happy if he gets a lot of money.
 (*literally:* He_i will be happy if Jim_i gets a lot of money.)

3.3. Relative clauses

- *headless relative clause in the Ahousaht dialect:*

- (20) a. ńaatsičiłitʔiš Christine yaaqʔititii hini ńačaałyák
 see-PST-3.IND Christine REL-do.to-3.REL give book
 Christine_i saw the one she_i handed over a book to.
 b. ńaatsičiłitʔiš yaaqʔititii Christine hini ńačaałyák
 see-PST-3.IND REL-do.to-3.REL Christine give book
 Christine saw the person that she gave a book to.
 (*literally:* She_i saw the one that Christine_i gave a book to.)

- *headless relative clause in the Ucluelet dialect:*

(21) a. *ñaatsičiłitma* Christine *yaaq^wiłitii* *hinii* *ñačaałýak*
 see-PST-3.IND Christine REL-do.to-3 give book
 Christine_i saw the one she_i handed over a book to.

b. *ñaatsičił-it-ma* *yaaq^wiłitii* Christine *hinii* *ñačaałýak*
 see-PST-3.IND REL-do.to-3 Christine give book
 Christine saw the one she handed over a book to.
 (*literally*: She_i saw the one Christine_i handed over a book to.)

- *note*: Condition C effects in headed relative clauses have been more difficult to elicit
- the nominal that would potentially be interpreted as the head of the relative clause is instead typically treated as the subject of the matrix clause.

- *headed relative clause in the Ucluelet dialect:*

(22) a. *ñačuułał-wełin* Lucy *čakup-łi* *yaaq^wiłitii* *hinii* *ñačaałýak*
 see-3.QUOT Lucy man-DET REL-do.to-3.REL give book
 Lucy_i seen the guy she_i gave a book to.

b. *ñačuułał-wełin* *čakup-łi* *yaaq^wiłitii* Lucy *hinii* *ñačaałýak*
 see-3.QUOT man-DET REL-do.to-3.REL Lucy give book
 The guy saw the one that Lucy gave a book to.
 * She_i saw the guy that Lucy_i gave a book to.

3.4. Possessives

- preliminary results show that that Condition C appears to be violated in Nuu-chah-nulth possessives (based on tests developed by Davis (1993))

(23) *k^wałak^wał-ap-ma* *łušhýums-uk* Christine *k^waasačus-uk*
 break-CAUS-3.IND relative-3.POSS Christine chair-3.POSS

two interpretations:

- Christine's relative broke her chair into pieces.
- Christine broke her relative's chair into pieces.

(consultant's comment: "you would need to ask 'Who broke it? Christine or the *łušhýums*?'")

- (24) a. *k^wałak^wał-ap-ma* [*łušhýums-uk* Christine] *k^waasačus-uk*
 break-CAUS-3.IND [relative-3.POSS Christine] chair-3.POSS
 Christine's relative broke her chair into pieces. (*Ucluelet*)
- b. *k^wałak^wał-ap-ma* *pro* [*łušhýums-uk* Christine] *k^waasačus-uk*
 break-CAUS-3.IND *pro* [relative-3.POSS Christine] chair-3.POSS
 Christine broke her relative's chair into pieces. (*Ucluelet*)
 (*literally*: She_i broke Christine_i's relative's chair into pieces.)

- the Condition C-violating interpretation is (23/24b).
- given the ban on discontinuous constituents in possessives (see 1.2 above), an alternative interpretation of (23/24b) with no antecedent *pro* is not possible.

4. Contexts where Condition C is apparently satisfied in NCN

- *between co-arguments(name):*

(25) *ñačuułał-itwełin* Christine
 see-PST-3.QUOT Christine
 She_i saw Christine_{*i/j}. (*Ucluelet*)

- *between co-arguments (variable, i.e. strong cross-over)*

(26) *łałačatiłitħa*
 who-dream.of-PST-3.Q
 Who_{*i/j} did s/he_i dream of? (*Ucluelet*)

Q: *łałačatiłitħa*
 who-dream.of-PST-3.Q

A: *yaa* *łuucmełi*
 DEIC woman-DET
 That woman.

Can the answer mean: a. Someone dreamt about that woman. YES
 b. That woman dreamt about herself. NO

(27) *łaačaciłħa* *łuušk^wap*
 who-aux-3.Q like
 Who_{*i/j} does he_i like? (*Ucluelet*)

Q: ʔaača-čiḥ-ḥa ʔuušk²wap
 who-aux-3.Q like

A: yaa ʔuucme-ʔi
 DEIC woman-DET
 That woman.

Can the answer mean: a. Someone likes that woman. YES
 b. That woman likes herself. NO

BUT: these could all be cases of *Condition B* violations, under Reinhart and Reuland's (1993) version of the Binding Theory.

- Condition B violations are induced by reflexive uses of predicates which are not reflexive-marked. This means that Condition C is generally not testable between co-arguments.
- It is impossible to check for strong crossover inter-clausally, because A'-movement in NCN is generally strictly clause-bound (Davis and Sawai 2001).

5. Summary

- Condition C with R-expressions (names) is systematically violated in NCN in every context where it is possible to test its effects.
- It is impossible to tell whether Condition C is respected with variables, due to independent restrictions on A'-movement and the possibility of reinterpreting intra-clausal Condition C effects as Condition B violations.

6. Preliminary analysis

- three possible strategies to deal with cross-linguistic variation in the application of Condition C:
 - (i) keep Condition C constant, and account for the variation via differences in configurationality (Jelinek and Demers 1994 on Salish, Baker 1996 on Mohawk, Russell and Reinholtz 1995 on Cree).
 - (ii) keep Condition C constant, and account for variation via differences in the binding properties of names (Lee 2003 on Zapotec and Thai).
 - (iii) allow limited variation in the domain of Condition C itself.

- evidence against variation in configurationality:
 - ◇ in order to avoid being bound i.e., c-commanded by a coindexed antecedent in an A-position, all Condition C-violating DPs must occupy or be contained in constituents occupying adjunct positions above the position of the potential (A-)binder.
 - ◇ in the case of NCN, this means all subordinate clauses and all DPs must then occupy adjunct positions.
 - ◇ but, to the extent that e.g. subject-object asymmetries depend on hierarchical structure (see 1.3.) this kind of configuration will fail to account for other properties of NCN syntax.
- evidence against variation in the binding properties of names:
 - ◇ under the analysis of Zapotec and Thai proposed by Lee, names and pronouns can optionally be interpreted as locally bound variables (essentially, as reflexives).
 - ◇ Condition C violations of this type typically involve two co-indexed names (or pronouns)
 - ◇ but these are ungrammatical in NCN:

(27) a. wawaamitma Jim ʔanič nanaʔaqaq
 say-PST-3.IND Jim COMP-3.C smart-very
 Jim_i said he_i is very well-educated. (*Ucluelet*)

b. wawaamitma ʔanič Jim nanaʔaqaq
 say-PST-3.IND COMP-3.C Jim smart-very
 Jim said he is very well-educated. (*Ucluelet*)
 (literally: He_i said Jim_i is very well-educated.)

c. * wawaamitma Jim ʔanič Jim nanaʔaqaq
 say-PST-3.IND Jim COMP-3 Jim smart-very
 Jim_i said that Jim_i is very educated. (*Ucluelet*)
 (consultant's comment: "Is there two Jims? (laughing)")

- evidence against variation in Principle P:
 - ◇ none so far. But a number of issues:
 - ◇ hard to tell bound variable anaphora apart from coreference in NCN, (unlike in Salish, where the two are clearly separable: Demirdache 1997).
 - ◇ no data yet on intersentential 'Principle P' (precedence) violations. (Salish has them: Davis 2003).
- if NCN, like Salish, turns out to be a Principle P violating language, then obvious questions arise as to why such a rare phenomenon should crop up in two neighbouring but unrelated sets of Northwestern languages.
- Two possibilities:
 - (i) it relates to syntax (via predicate-initial order: Davis 2003)
 - (ii) it relates to information structure
- If possibility (i) is correct, this kind of Condition C violation should be a characteristic of predicate initial languages.
- If possibility (ii) is correct, then the topic-subject mapping will be criterial for Condition C violations.
- One important lacuna in our NCN data is Condition C violating cases with the bound R-expression in an object rather than an (embedded) subject position. These should be helpful in elucidating (ii).

Selected References

- Baker, Mark. 1996. *Polysynthesis Parameter*. Oxford: Oxford University Press.
- Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Davis, Henry. 2003. Catephoric dependencies in Salish. Paper presented at the Workshop on Pronouns, UBC.
- Davidson, Matthew. 2002. *Studies in Southern Wakashan (Nootkan) Grammar*. Ph.D. dissertation, SUNY at Buffalo.
- Davis, Henry and Naomi Sawai. 2001. Wh-movement as Noun Incorporation in Nuu-chah-nulth. In *WCCFL 20 Proceedings*. K. Megerdooonian and L. A. Bar-El (eds). Somerville, MA: Cascadilla Press.
- Demirdache, Hamida. 1997. Condition C. In *Atomism and Binding*. H. Bennis, P. Pica, J. Rooryck (eds). Dordrecht: Foris.
- Jacobsen, William H., Jr. 1993. "Subordination and cosubordination in Nootka: Clause combining in a polysynthetic verb-initial language. In *Advances in role and reference grammar*. Robert D. Van Valin (ed). Amsterdam: John Benjamins.
- Jelinek, E. and R. Demers. 1994. "Predicates and pronominal arguments in Straits Salish. *Language* 70: 697-736.
- Lee, Felicia. 2003. Anaphoric R-expressions as bound variables. *Syntax* 6: 84-114.
- Ravinski, Christine. *in prep.* Possession in Nuu-chah-nulth. MA thesis, UBC.
- Reinhart, Tanya and Eric Reuland. 1993. Anaphors and Logophors: An Argument Structure Perspective." In J. Koster and E. Reuland (eds), *Long Distance Anaphora*, 445-479.
- Rusell, Kevin and Charlotte Reinholtz. 1995. Hierarchical structure in a non-configurational language: Asymmetries in Swampy Cree. In *WCCFL 14 Proceedings*. J. Camacho, L. Choueiri, M. Watanabe (eds.). Stanford: CSLI.
- Rose, Suzanne M. 1981. *Kyuquot Grammar*. Ph.D. dissertation, University of Victoria.
- Yiu, Sze Man and John Stonham. 2000. 'Good-stocked with mussels': incorporation on the edge. Paper presented at the LSA Annual winter meeting.
- Whistler, Kenneth W. 1985. Focus, perspective, and inverse person marking in Nootkan. *Grammar inside and outside the clause*. Johanna Nichols and Anthony C. Woodbury (eds). Cambridge: Cambridge University Press.
- Wojdak, Rachel. 2003a. PF Incorporation: Evidence from Wakashan. Paper presented at the 26th GLOW Colloquium (Lund, Sweden).
- Wojdak, Rachel. 2003b. Predicative lexical suffixes in Nuu-chah-nulth. In *Papers for the 38th ICSNL*. UBCWPL 11: 275-289.
- Woo, Florence. 2004. Recent research on Nuu-chah-nulth syntax: word order. Ms., UCSC.