Focus structures in Thompson Salish: (im)perfections in the syntax-semantics interface*

Karsten Koch (ZAS Berlin), karstenak@hotmail.com
Moscow Syntax and Semantics Conference, 9. October 2009

1. Introduction:

- *Goals of the Talk:*

i. Give an overview of focus-marking in Nɬeʔkepmxcin (Thompson Salish)

ii. Show how focus structure *syntax* splits the clause into focus *semantic* Background and Focus (eg. von Stechow 1990, Krifka 1992, 2006)

⇒ perfect syntax – (focus) semantics interface!

iii. Show that when narrow focus falls inside a complex NP, syntactic constraints prevent a perfect interface with focus semantic structure, but are rescued by an optional phonological operation, rightward extraposition

⇒ perfect phonology – (focus) semantics interface!

(0) a. [[keʔɬés]$_{FOCUS}$ t_i] [k pún-m-Ø-s t_x]$_{BACKGROUND}$ [tk qemút-s$_i$]$_{BACKGROUND}$.
three t_i COMP find-TRANS-3OBJ-3SUBJ t_x LINK hat-her
'What she looked for t_x was three hats.'

b. Focus/Background structure <F, B>: <λx.she looked for x hats, three>

- *Structure of the talk:*

§2: Background on the language Nɬeʔkepmxcin (Thompson Salish)

§3: Structured Meaning Approach to Focus (von Stechow 1990, Krifka 1992, 2006)

§4: Focus marking in Nɬeʔkepmxcin: basic cases

§5: Narrow focus in complex NPs

§6: Conclusion

* I am indebted to consultants Flora Ehrhardt and Patricia McKay, without whom this research would not be possible. This research has been supported by Jacobs and Kinkade Research Grants, SSHRC, and the DAAD. Thanks to Hotze Rullmann, Uli Sauerland, Donna Gerdts, Henry Davis, Hubert Truckenbrodt and Manfred Krifka for comments. All errors are my own.

2. Background: General Information on Nɬeʔkepmxcin

- Nɬeʔkepmxcin is one of 23 Salish languages, spoken in southwestern British Columbia, Canada. (For overviews, see Kinkade 1992, Kroeber 1999, Davis and Matthewson 2009)

  It is highly endangered: No more than a few hundred elderly speakers remain.

- *Grammatical properties: (see also Appendix for phonemic inventory and key to glosses)*

i. *word order*: predicate initial (typically: V S O Obl Adv), like all Salish languages, cf. (1ab); flexibility in post-predicative word order

ii. *radical head-marking*: transitivity and argument agreement marked on verb/predicate

(1)

V	2CL	S	O	Oblique	
n̓-t-Ø-és	**=xeʔ**	e=Bíll	e=qəɬmín	t=e=ʔescéqʷ	te=ʔéplṣ.[1]
give-TRANS-3O-3S	=DEM	DET=Bill	DET=elder	OBL=DET=red	LNK=apple

'Bill gave the elder a red apple.' [652i]

(2)

Aux	2CL	V	S	O
xʷúy̓	**=xeʔ**	níḱ-Ø-Ø-es	*pro*	e=syíqm.
FUT	=DEM	cut-TRANS-3OBJ-3SUBJ	*pro*	DET=grass

'He's going to cut the grass.' [661e]

iii. *predicate/argument flexibility*: any open class category can be the predicate, without a copula (e.g. bare NP predicates (3), and complex NP (4))
(e.g. Kuipers 1968, Kinkade 1983, Jelinek & Demers 1994, Kroeber 1999, Koch & Matthewson 2009)

(3)

NP	2CL	S
sqáqx̣a	=xeʔ	e=Hermann
dog	=DEM	DET=Hermann

'Hermann is a dog.'

- the LINK particle *tk / te / tɬ* marks predicate modification between NP and modifier(s)

(4)

NP		S
x̣zúm=xeʔ	tk=spzúʔ	e=sq̓ɛc̓ə
big=DEM	LINK=bird	DET=chickenhawk

'The chickenhawk is a big bird.'

(5)

AP	2CL	S		
zext-ʔúy	=hekʷu=meɬ=xeʔ	e=sqépqn-s	ʔeɬ	e=supcín-s.
long-RFM	=EVID=indeed=DEM	DET=hair-his	and	DET=beard-his

'His hair and his beard were really long.'

[1] See the Appendix for a key to orthography and glosses, and the phonemic inventory.

iv. *2nd position clitics (2CL)* include situational deictics (*xeʔ* in 1 and 2) , modal evidentials (*ekʷu* in 1b), and clause-typing markers (*us* in 3)

(6) Aux 2CL V
ʔéx =us =meɬ =iʔ =ƛ̓uʔ =xeʔ =neʔ ʕʷóy̓t.
IMPF =3CONJ =indeed =still =PERS=DEM =there sleep
'Better let him sleep.' [680b]

vi. *Relative clauses:*

- head external; ***two determiners*** (one preceding head NP, one introducing CP_{REL})
- operator movement of clause-internal DP to Spec,CP (Kroeber 1997, Davis 2004, Koch 2006, Koch 2008b); determiner of moved DP is pronounced and functions as quasi-relative pronoun, cf. (7a) (predicate abstraction -- Heim and Kratzer 1998).
- attributive LINK marker between head NP and relative clause marks predicate modification (Kroeber 1997), cf. (7a), in the absence of overt P-modifiers, cf. (7b):
- headless relative clauses (7c) realize only the initial determiner

(7) a. e=cítxʷ t $[_{CP}\,[_{DP}$ ɬ $]_i$ s=cuw-éɬxʷ=s ɬ=Jóhn t_i]
DET=house LINK DET NOM=build-house=3POSS.S DET=John t_i
'the house which John built'

b. e=npúytn $[_{CP}\,[_{PP}$ n=e $]_i$ xʷúy̓=wn ʕʷóy̓t t_i]
DET=bed in=DET FUT=1SG.CONJ sleep t_i
'a bed in which I will sleep'

c. ʔés-x̣ək-st-Ø-éne=xeʔ ɬ=$[_{NP}\,[_{NP}$ Ø] $[_{CP}$ qʷc-íyx u=ɬ=ƛ̓qəmcín *t*]]
STAT-know-TRANS-3O-1SG.S=DEM DET= leave-INTRANS to=DET=Lytton *t*
'I know the one that went to Lytton.' [FE392c]

- the predicate in the relative clause is marked by special embedding morphology, depending on the relationship of the gap in the clause to the head NP (e.g. nominalization/possessive *s*=...=*s* for the oblique in (7a), conjunctive (i.e. subjunctive) =*wn* for the locative in (7b))

3. Structured Meaning Approach to Focus (von Stechow 1990, Krifka 1992, 2006)

(8) Structured Meaning semantics: <F, A, B>
<Focus, Alternatives, Background>

‘It was [Bill]$_{FOCUS}$	[that t_x ate the food]$_{BACKGROUND}$.’
< F,	B>
a. F = *Bill*	b. B = *λx.x ate the food*

c. A = focus semantic value (Rooth 1985, 1992)
$[[..]]^{FOC}$ = {Pam ate the food, Bill ate the food, Sue ate the food, ...}

d. B(F) = [λx.x ate the food](Bill) = *Bill ate the food* = ordinary meaning $[[...]]^{o}$

4. Focus Marking in Nɬeʔkepmxcin

- *General Observations*:

i. Focus = the answer to a wh-question (“Question Under Discussion”)

ii. Nɬeʔkepmxcin employs a purely predicative focus marking strategy (Kroeber 1997, Koch 2008a; Davis 2007 for St’át’imcets, Benner 2006 for Sencothen): the focus constituent, or the focus exponent, form (part of) the syntactic predicate in sentence-initial position.

⇒ FOCUS = PREDICATE

iii. Background information is structured into the argument, a remnant clause

⇒ BACKGROUND = ARGUMENT

General strategy:

If the focus constituent is not the predicate to begin with (V(P), bare NP) it is turned into the predicate by means of a cleft-structure (Davis 2007, Koch 2008a)

- *Predication focus and sentence focus*: *V-initial*

All instances of predication focus (V-, VP-, TAM, verum-focus) as well as CP-focus on the extended verbal projection are realized with the verbal predicate in default sentence-initial position:

(9) a. A: *What’s going on?* [*CP focus*]
B: wʔéx=xeʔ=neʔ ʔes-téɬ-ix e=Pátricia.
IMPF=DEM=DEM STAT-stand-INTRANS DET=Patricia
‘Patricia is standing there.’ [639e]

b. A: *What are you doing?* [*VP focus*]
B: ʔéx=xeʔ ʔes-kʷéṅ-st-Ø-ne e=stéʔ=us=nke.
IMPF=DEM STAT-look.at-TR-3O-1SG.S DET=what=3CONJ=EVID
'I'm looking at something.' [640c]

c. A: *Does your grandmother like cherries?* [*verum focus*]
B: heʔáy, ẏecín-m-Ø-s=xeʔ e=n-kẓé e=céris.
yes, like-TR-3O-3S=DEM DET=1SG.POSS-grandmother DET=cherry
'Yes, my grandmother likes cherries.' [639g]

- *Bare NP focus on nominal predicates*:

Nominal Predicate Construction, in which the nominal predicate is realized in sentence-initial position (Davis et al. 2004) (= a subcase of predication focus)

Wh-words are also predicates (e.g. Jelinek 1998, Davis & Matthewson 2009) (10c)

(10) a. A: *What is Betsy going to put in her soup?* [*O-focus*]
B: [kálec]$_{FOC}$=xeʔ=néʔ [e=xʷúẏ méƛ-e-Ø-s *t*]$_{BACKGROUND}$.
carrot=DEM=DEM COMP=FUT mix-TRANS-3O-3S *t*
'[What she's going to put in]$_{BACKGROUND}$ is [carrots]$_{FOC}$.' [655n]

<F, B>: <carrot, λx. she's going to put in *x*>

b. A: *What appeared now?* [*S-focus*]
B: [nc̓esqáx̣a]$_{FOC}$=neʔ [e=wʔáz *t* cʔéyɬ]$_{BACKGROUND}$.
horse=there COMP=appear *t* now
'[What appeared now]$_{BACKGROUND}$ is [a horse]$_{FOC}$.' [647i]

<F, B>: <horse, λx. *x* appeared>

c. swét e=ɬóqʷ-s-t-Ø-**mus** *t* weʔ e=nƛpíc̓eʔ-**s**.
who COMP=hang-CAUS-TR-3O-**SUBJ.GAP** *t* there DET=shirt-**3POSS**
'Who hung their shirt out to dry?'
(more literally: 'That hung their shirts out to dry was who?')

<F, B>: <who, λx. *x* hung x's shirt out to dry>

- *Focus on DP-arguments*:

- Focus on DP-arguments is marked by means of a cleft-structure in which the focused DP is preceded by the cleft-predicate *c̓é* or *ʔé* in sentence-initial position;
- The background (= cleft remnant) is realized as an argument clause with a gap marked by subordinating morphology on the verb.

(11) a. c̓é [ɬ=Róss]$_{FOC}$ [e pínt-t-Ø-mus *t*]$_{BG}$. [*S-focus*]
CLEFT DET=Ross COMP paint-TRANS-3O-SUBJ.GAP *t*
'It was [Ross]$_{FOC}$ [that painted it]$_{BACKGROUND}$.'
<F, B>: <Ross, λx. *x* painted it>

b. ʔé=xeʔ=neʔ [e=kréps]$_{FOC}$ [e=wík-t-Ø-ne *t*]$_{BG}$. [*O-focus*]
CLEFT=DEM=there DET=grape COMP=see-TR-3O-1SG.S *t*
'It's [grapes]$_{FOC}$ [that I see]$_{BACKGROUND}$.' [640a]

<F, B>: <grapes, λx.I see *x*>

- Clefts mark focus on DP arguments, and are biclausal (Kroeber 1999, Davis et al. 2004, Koch 2008a, 2008b, Koch and Zimmermann 2009)

(12) The structure of clefts:

[$_{CP1}$ [$_{PredP}$ c̓e$_{<e,<et,t>>}$ [DP$_{<e>}$]] [$_{<et>}$ CP$_2$ ... *t* ...]]

- the remnant clause in both bare NP focus and cleft focus cases is a CP with an internal gap corresponding to the focus (Koch 2008a, 2008b)
  - it is never introduced by the determiner *ɬ* (c.f. 7c), but by complementizer *e* or *k*
  - it cannot contain an overt NP head like a relative clause
  - standard lambda abstraction gives us a CP of type <e,t> (e.g. Heim and Kratzer 1998) that maps directly to the Background and generated focus alternatives

- In the narrow focus cases in (10) and (11), the focus semantics can be read directly off the surface syntactic representation

Summary:
- Thompson Salish nominal predicate constructions and clefts split the clause into a <F, B> structure
- Focus semantics are straightforwardly provided by the syntax

5. Narrow focus in complex NPs: Imperfection in the Focus syntax-semantics interface

- When narrow focus falls on just a portion of a complex NP, the entire complex NP must be clefted / made the nominal predicate

⇒ a very general syntactic constraint that prevents the trace in the background clause from corresponding to just a single element within a complex NP, as complex NPs are islands for extraction (Ross 1967; Krifka 2006 on the same constraint applying to association with Focus).

(13) A: How many hats did she look for?
B: What she looked for t_x was [[three]$_{FOC}$ hats]$_x$.
* What she looked for t_x hats was [three$_x$]$_{FOC}$.

(14) [[keʔɬés]$_{FOCUS}$=nke=xeʔ tk=qemút-s]$_x$ [k pún-m-Ø-s t_x]$_{BACKGROUND}$.
three =EVID=DEM LINK=hat-her COMP find-TRANS-3OBJ-3SUBJ t_x
'What she looked for t_x was [three]$_{FOCUS}$ hats.'

(15) * [keʔɬés$_x$]$_{FOCUS}$=nke=xeʔ [k pún-m-Ø-s [e [t_x] [qemút-s]]$_{BACKGROUND}$.
three =EVID=DEM COMP find-TRANS-3OBJ-3S DET t_x hat-her
intended: *'What she looked for t_x hats was three.'

- in (14), the syntactic constituents do not split into focus semantic constituents <F, B>

5.1 Extraposition from complex NPs: Restoring <F, B> in the surface string

- A general rightward extraposition strategy allows the head noun of complex NPs to be optionally right-extraposed:

(16) a. [$_{NP}$ [$_{AP}$ púti]=xeʔe [$_{NP}$ tk=smúɬec]] [$_{DP}$ e=Máry].
pretty=DEM LINK=woman DET=Mary
'Mary is a pretty lady.'

b. [$_{NP}$ [$_{AP}$ púti]=xeʔe t_i] [$_{DP}$ e=Máry] [$_{NP}$ tk=smúɬec]$_i$
pretty=DEM DET=Mary LINK=woman
'Mary is a pretty lady.'

- when narrow focus falls on an NP modifier like *keʔɬes* 'three' in (14), the unfocused NP can be extraposed to the right
- it is marked by the link particle *tk* (and not by a determiner if it were an in situ argument of the transitive verb *punms*)
- the phonological string, but not the syntax, map onto the Focus semantics

(17) ( )$_{p\text{-}ph}$ ( )$_{p\text{-}phrase}$ ( )$_{p\text{-}phrase}$
[[keʔɬés]$_{FOCUS}$=nke=xeʔ t_i] [k pún-m-Ø-s t_x]$_{BACKGROUND}$ [tk=qemút-s$_i$]$_{BG}$.
three=EVID=DEM t_i COMP find-TRANS-3OBJ-3S t_x LINK=hat-her
'What she looked for t_x was [three]$_{FOC}$ hats.'

<three, λx.she looked for x hats>

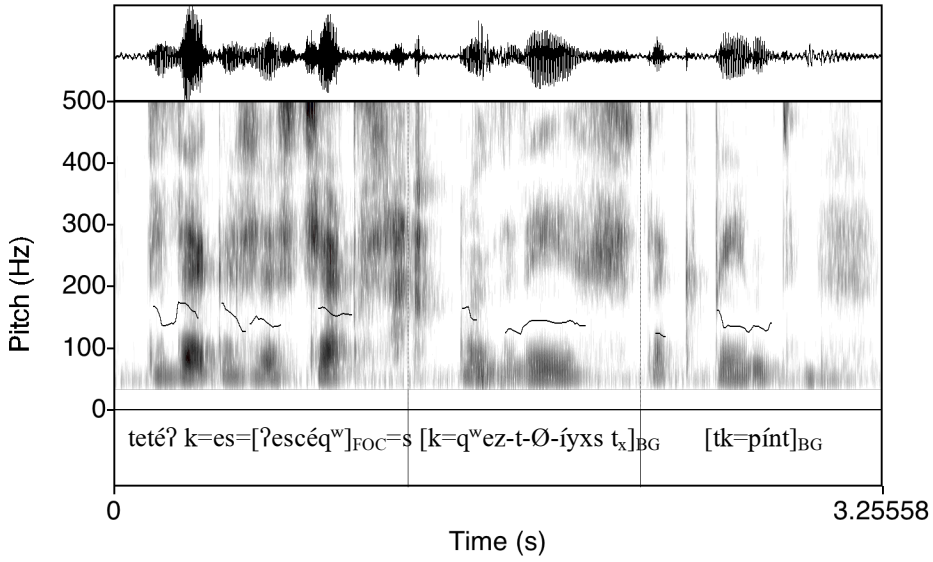
(18) ( )$_p$ ( )$_{p\text{-}ph}$ ( )$_{p\text{-}ph}$
[[ʔestpéq^w]$_{FOC}$=xeʔ=neʔ t_i] [ə=ʔes-ɬúm-s-Ø-ne t_x]$_{BG}$ [te=n-siɬc̓úʔ$_i$]$_{BG}$.
white=DEM=DEM t_i] C=STAT-wear-TR-3O-1SG.S t_x LINK=1SG.POSS-shoes
'What I am wearing t_x is [white]$_{FOC}$ shoes.'

<white, λx.I am wearing x shoes>

(19) ( )$_p$ ( )$_{p\text{-}ph}$ ( )$_{p\text{-}ph}$
teté? k=[es=[ʔescéqʷ]$_{FOC}$=s t_i] [k=qʷez-t-Ø-íyxs t_x]$_{BG}$ [tk=pínt$_i$]$_{BG}$.
NEG COMP=NOM=red=3POSS.SUBJ t_i COMP=use-TR-3O-3PL.SUBJ t_x LINK=paint
'They're not using [red]$_{FOC}$ paint.'
(more literally: 'It's not the case that what they're using t_x is [red]$_{FOC}$ paint.')

<red, λx.they are using x paint>

Figure 1: Material moved rightward is still phonologically part of the same clause (intonation phrase) (ex. 19)



5.2 Extraposing the unfocused head of a relative clause

(20) [c̓é [$_{DP}$ e= [$_{CP}$ ʔéx ʔestéɬix n=e=nx̌pénk-s e=syép neʔe]$_{FOCUS}$ t_i]]
CLEFT DET= IMPF stand in=DET=under-3PS DET=tree there
[$_{CP}$ e=ʔéx ʕʷóy̓t t_x]$_{BACKGROUND}$ [$_{NP}$ te=móṣmoṣ$_i$]$_{BACKGROUND}$.
COMP=IMPF sleep t_x LINK=cow
'It's the (one)$_i$ [standing under the tree]$_{FOC}$ that is sleeping t_x the cow$_i$.'

<standing under the tree, λx.the cow that x is sleeping>

5.3 Extraposing the unfocused NP out of a 'which NP' question

(21) [[hén̓=meɬ tux^{w} xéʔe]$_{FOC}$ t_i] [k=cíy̓ te=y̓é e=sx^{w}áwk-s t_x]$_{BG}$
which=indeed from those t_i COMP=seem that=good DET=heart-3ps t_x
[tk=k̓^{w}etn̓íʔ$_i$]$_{BG}$.
LINK=mouse
'[Which]$_{FOC}$ mouse is happiest?'
(more literally: 'That seems happy t_x mouse$_i$ is which of those t_i?')

<which, λx.x mouse seems happiest>

(22) [[sténʔ]$_{FOC}$=xeʔ t_i] [k=ex ʔéx ʔúpi-Ø-Ø-s e=Jóhn t_x] [tk=sq̓^{w}íyt$_i$].
what=DEM t_i COMP=IMPF IMPF eat-TR-3O-3S DET=John t_x LINK=fruit$_i$
'What kind of fruit does John like to eat?'
(more literally: 'That eats John t_x fruit$_i$ is what t_i?')

<what, λx.John eats x fruit>

7. Conclusion

- In simple narrow focus (NP, DP), syntax and focus semantics interface perfectly in Thompson Salish
- The syntax neatly splits the clause into a <Focus, Background> structure.
  - overt representation of the *Focus semantic meaning* $[[...]]^{FOC}$
- When focus falls on a narrow focus inside a complex NP, a phonological operation enables the listener to recover focus marking (e.g. Selkirk 1995)
  - phonological string maps onto focus semantics
  - underlying syntactic string does not map onto focus semantics

- unresolved issue: if both a focused bare NP predicate and the remnant clause with a gap are of type <e,t>, how does compositional semantics of ordinary meaning $[[...]]^{o}$ proceed?

Thank you!

References:

Benner, Allison. 2006. The prosody of Senchóthen. Paper given at *The 41st International Conference on Salish and Neighbouring Languages*, University of Victoria.

Davis, Henry. 1999. Subject inflection in Salish. In M. Caldecott, S. Gessner and E. Kim. eds. *Current Research on Language and Linguistics*. Vancouver, BC: UBC Working Papers in Linguistics 1. 181-240.

_____. 2000. Remarks on Proto-Salish subject inflection. *International Journal of American Linguistics* 66: 449-520.

_____. 2007. Prosody-focus dissociation and its consequences: The case of Salish. Paper presented November 10, 2007, Nagoya, Japan.

_____. 2009. Cross-linguistic variation in anaphoric dependencies: evidence from the Pacific Northwest. *Natural Language and Linguistic Theory* 27: 1-43.

_____, & Lisa Matthewson. 2009. Issues in Salish Syntax and Semantics. *Language and Linguistics Compass* 3/4: 1097-1166.
_____, Lisa Matthewson and Scott Shank. 2004. On the presuppositionality of clefts in Samish and Gerdts, Donna. 1989. Object agreement in the Halkomelem Salish passive. Key and Hoenigswald, eds. *General and Amerindian Ethnolinguistics.* Berlin: Mouton. 185-200.
Gerdts, Donna B., and Thomas E. Hukari. 2001a. A-Subjects and control in Halkomelem. In Dan Flickinger and Andreas Kathol, eds. Proceedings of the 7th International Conference on Head-Driven Phrase Structure Grammar. Stanford: CSLI. 100-123.
————. 2001b. Argument linking and passives in Halkomelem. In Leora Bar-el, Linda Tamburri Watt, and Ian Wilson, eds. Papers for the 36th ICSNL. Vancouver: UBC Working Papers in Linguistics 8. 113-144.
Harris, Alice. 2009. Implications of multiple exponence. Paper presented at *Morphology of the World's Languages*, Leipzig, June 12, 2009.
Heim, Irene. 2005. *Features on bound pronouns.* Ms., MIT.
Heim, Irene, and Angelika Kratzer. 1998. *Semantics in Generative Grammar*. Blackwell.
Heycock, Caroline, and Anthony Kroch. 1999. Pseudocleft connectedness. *LI* 30:365-397.
Hole, Daniel. 2008. EVEN, ALSO and ONLY in Vietnamese. S. Ishihara et al. (eds.). *ISIS* 8. Universität Potsdam. 1-54.
Jelinek, Eloise. 1998. Wh-Clefts in Lummi. *Papers for ICSNL 33*: 257-265. University of Washington, Seattle, WA.
_____, & Richard A. Demers. 1994. Predicates and Pronominal Arguments in Straits Salish. *Language* 70:697-736.
Kinkade, M. Dale. 1983. Salish evidence against the universality of 'Noun' and 'Verb.' Lingua 60: 25-39.
_____. 1992. Salishan languages. In: *International Encyclopedia of Linguistics* (Bright, William, ed.). New york: Oxford University Press. 359-362.
Koch, Karsten. 2006a. Nominal Modification in Nlhe7kepmxcin (Thompson River Salish). In Shannon T. Bischoff, Lynnika Butler, Peter Norquest, and Daniel Siddiqi, eds. *MIT Working Papers on Endangered and Less Familiar Languages: Salishan Volume.* 127-158.
_____. 2006b. Transitive word order in Nlhe7kepmxcin (Thompson River Salish). In M. Kiyota, J. Thompson and N. Yamane-Tanaka, eds. *Papers for the 41st ICSNL*. Vancouver: UBC Working Papers in Linguistics 18. 192-220.
_____. 2007. Questions and answers in Nɬeʔkepmxcin: Facilitating transfer from theoretical linguistics to education. In Martin Oberg and Kristin Johannsdottir, eds. *Papers for the 42nd ICSNL.* Vancouver: UBC Working Papers in Linguistics 20. 293-323.
_____. 2008a. *Intonation and Focus in Nlhe7kepmxcin (Thompson River Salish).* Ph.D. dissertation, University of British Columbia, July 2008. https://circle.ubc.ca/dspace/handle/2429/2848
_____. 2008b. Some issues in the structure and interpretation of clefts in Nlhe7kepmxcin (Thompson River Salish). In John Lyons, ed. *Papers for the 43rd ICSNL.* Vancouver: UBC Working Papers in Linguistics.
_____, and Lisa Matthewson. 2009. The Lexical Category Debate in Salish and its Relevance for Tagalog. *Theoretical Linguistics* 35(1): 125-137.
_____, and Malte Zimmermann. Focus-sensitive operators in Thompson Salish. Paper presented at *Sinn und Bedeutung 14*. University of Vienna, September 30, 2009.
Kratzer, Angelika. 2007. *Minimal Pronouns*. Ms., Semantics Archive.
————. 2009. Making a Pronoun: Fake Indexicals as Windows into the Properties of Pronouns. *Linguistic Inquiry* 40(2). 2009, 187-237.
Krifka, Manfred. 1992. A compositional semantics for mutiple focus constructions. In Joachim Jacobs, ed. *Informationsstruktur und Grammatik*. Opladen: Westdeutscher Verlag. 17-53.
————. 2006. Association with focus phrases. Molnar and Winkler, eds. *The Architecture of Focus*. Berlin: Mouton. 105-136.
Kroeber, Paul. 1997. Relativization in Thompson Salish. *Anthropological Linguistics* 39(3):376-422.
Kroeber, Paul. 1999. *The Salish Language Family: Reconstructing Syntax.* Lincoln: U Nebr. P.
Kuipers, Aert H. 1968. The categories Verb-Noun and Transitive-Intransitive in English and Squamish. *Lingua* 21: 610-626.
Rooths, Mat. 1992. A theory of focus interpretation. *NLS* 1:75-116.
Ross, J.R. 1967. *Constraints on variables in syntax*. Ph.D. dissertation, MIT.
Rullmann, Hotze. 2004. First and Second Person Pronouns as Bound Variables. *Linguistic Inquiry* 159 - 168.
————. 2008. Each of us must climb our separate mountain. *Poster presented at CLA 2008*, May 31-June 2,

University of British Columbia, Vancouver, B.C.
Selkirk, Elizabeth. 1995. Sentence prosody: Intonation, stress and phrasing. In J. Goldsmith, ed. *The Handbook of Phonological Theory.* Cambridge, MA: Blackwell. 550-569.
Thompson, Laurence C., and M. Terry Thompson. 1992. *The Thompson Language*. Missoula: University of Montana Occasional Papers in Linguistics 8.
von Stechow, Arnim. 1990. Focusing and background operators. In Werner Abraham, ed. *Discourse Particles*. Amsterdam: John Benjamins. 37-84.

Appendix

Abbreviations in the glosses are based on Thompson and Thompson 1992, 1996, Kroeber 1997:

'-' = affix
'=' = clitic
BG = background
C, COMP = complementizer
CONJ = conjunctive (i.e. subjunctive)
CAUS = causative transitivizer
DEM = demonstrative
DRV = directive transitivizer
DET, D = determiner
EMPH = emphatic (independent pronoun)
EVID = evidential
FOC = focus
FUT = future
IMPF = imperfective
INCH = inchoative [intransitive suffix]
INTRANS, INTR = intransitive
IRL = irrealis
LNK = link (predicate modification marker)
LOC = locative
NEG = negation
NOM = nominalizer
O, OBJ = object
OBL = oblique
PERF = perfective
PL = plural
-POSS, -PS = possessive (affix)
=POSS, =PS = possessive subject clitic
Q = yes/no question marker
RED = reduplication
RFM = reaffirmative (e.g. 'very' with AP)
S, SUBJ = subject
SG = singular
STAT = stative prefix
SUBJ.GAP = subject gap suffix
TRANS, TR = control transitivizer

Table 1. Phonemic inventory (adapted from Thompson and Thompson 1992)

CONSONANTS	labial	alveolar	alveo-palatal	velar	uvular	pharyngeal	glottal
Stops	p	t		k k^w	q q^w		ʔ
Ejectives	ṗ	ṫ		ḳ $ḳ^w$	q̓ $q̓^w$		
Lateral Eject.		ƛ̓					
Nasal	m	n					
Glottalized	ṁ	ṅ					
Affricates		c̣ [ts]	c [tʃ]				
Ejective		c̓ [ts’]					
Fricatives		ṣ [s]	s [ʃ]	x x^w	x̣ $x̣^w$		h
Lateral		ɬ					
Approximant	(w)	z	y [j]	w		ʕ $ʕ^w$	
Lateral		l					
Glottalized	(ẇ)	ż	ẏ	ẇ		ʕ̓ $ʕ̓^w$	
Glott. Lateral		l̓					

VOWELS	front	central		back
high	i	i̱		u
mid	e	ə	ə̱	o
low		a		

Data are presented in the orthography developed in Thompson and Thompson (1992, 1996). Acute accent ´ indicates word-level stress. Symbols not listed are the standard IPA forms:

c = [tʃ] or [č]
c̣ = [ts]
c̓ = [ts’]
e = [e, æ, a, ɛ, ə]
ə̱ = [ʌ]
i = [i, ei, ai]
o = [o, ɔ]
s = [ʃ] or [š]
ṣ = [s]
u = [u, o, ɔ]
x̣ = [χ]
y = [i, y]