

## Russell Patrick Arts Undergraduate Research Award

*Preserving knowledge of Gitxsan elders:  
Story documentation and linguistic investigation  
of Gitxsanimx (Tsimshianic)*

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January-August 2012

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### **Research Problem**

It is of critical importance that information be gathered about endangered languages while they are still alive. Though it is taken for granted that languages vary, the extent to which languages are capable of differing from our established understanding has not yet been fully explored. Any endangered, undocumented language is capable of shedding new light on the extent of possible language variation, as well as confirming existing hypotheses about the existence of language universals. This knowledge impacts our conception of the overarching human capacity for language. In addition, endangered languages often provide crucial insights into the minority cultures and social models within which they developed. With these factors in mind, our research group has for the past few months been responsible for the concentrated collection of several types of data on one endangered BC language: Gitxsan.

Gitxsan is a Tsimshianic language of the northern interior of British Columbia, genetically related to Nisga'a and, more distantly, to Coast Tsimshian. Despite its relatively large number of speakers in comparison to many other endangered BC languages (our consultants estimate approximately 150 speakers remaining), Gitxsan and the Tsimshianic language family in general have been researched comparatively little by linguists so far. There is no published Gitxsan dictionary or grammar. Several decades ago, a few researchers conducted extensive foundational work on Gitxsan and the closely related Nisga'a (Risgby 1986, Tarpent 1987), but activity on the language has decreased since. Several dissertations have been written on various aspects of the language, but the body of existing literature is otherwise very small, and the majority of these researchers have moved on since. Little work was actively being done on the

language until Dr. Henry Davis and Dr. Lisa Matthewson's recent push to create the Gitksan Research Group at UBC, of which I am now a part. I believe strongly in the importance of documenting this language and discovering more targeted information about the grammar.

Our major aim with the AURA award was to collect a set of stories from our Gitksan speakers on varying topics, ranging from traditional oral histories and legends to more general anecdotes and life stories. These stories are, ultimately, valuable repositories of cultural and linguistic information that may be of interest to linguists, anthropologists, and community members of Gitksan heritage; they can be invaluable resources for language learners seeking fluency. There are few textual resources in Gitksan beyond the level of children's books. In addition to this, we have conducted more targeted linguistic investigations of various aspects of the Gitksan grammar, with the goal of filling the gaps in our knowledge of this language's basic grammatical principles. This project provided me with the opportunity to conduct linguistic field research of my own; this report is therefore two-sided, describing both our collective documentation efforts and my own research project on the topic of a word class of adjectives. As this report will show, I discovered new evidence unattested in prior literature, suggesting that a distinct adjective class does exist.

## **Research Questions**

We can assume nothing about the languages we encounter. Previous research on languages of the Pacific Northwest has shown that traditional word class distinctions such as noun, verb, and adjective are not always immediately apparent, and must be argued for with specific data (see Swadesh 1939, Kinkade 1983; vs. Van Eijk & Hess 1989, Matthewson & Demirdache 1995). The goal of my project was to prove that such a distinction between adjectives and verbs existed in Gitksan. My two guiding research questions were:

1. *What are the existing strategies for noun modification in Gitksan?*
2. *Is there a lexically distinct class of adjectives, or are these items identical to verbs?*

Though a distinction between noun and verb is clear in Gitksan, prior claims about Tsimshianic languages disagree on whether there is adequate empirical evidence to prove the existence of an adjective class. Rigsby (1986) claims that in Gitksan, verbs and adjectives are of the same class and cannot be differentiated. Tarpent (1987) claims that Nisga'a adjectives are a distinct class from verbs. Stebbins (1996) claims, for the slightly more distant Coast Tsimshian language, that there is no distinction between predicative verbs and adjectives.

## **Methods**

We initially had two language consultants available to us; a third joined us later in the project. All three speakers are from distinct dialect areas: Kispiox (east), Gitanyow (north-west),

and Gitsegukla (west). We ran 3-4 elicitation sessions each week with these speakers, with each session involving a single consultant and running for two hours.

Two to five researchers were present with the speaker over the course of each session. Elicitation during the sessions came in various forms:

1. Researcher requests that the speaker translate individual sentences from English into Gitxsan.
2. Researcher constructs Gitxsan sentences, and asks for positive or negative judgments of grammaticality from the consultant.
3. Researchers elicit material on the topic of the consultant's choice, entirely in Gitxsan.
4. Consultant volunteers information about or sentences in Gitxsan without prompting.

My own research involved mainly the first two types of elicitation, though I checked my results with data gathered in the latter two ways as well. The stories were elicited using the third method; the consultants were asked to monologue about any event or topic they wanted.

Collections of short sentences from each of the sessions were transcribed into text documents, to later be shared with other researchers on the project through a database. Longer runs of speech, such as the stories, were recorded on the spot as .WAV files and transcribed later.

## Results

### *Story Collection*

Prior to this project, we had recorded five stories from one speaker. The total number of stories we have collected has now risen to 29. Of these 21 additional stories, nine are from the same speaker as our original stories, ten are from another speaker, and two are from the speaker that joined us most recently.

The stories were each translated line-by-line shortly after they were recorded, through consultation with the speaker to originally tell the story. At this point we are currently breaking down the stories and providing interlinear glosses. Through this process, words are separated into individual morphemes (the smallest units of meaning) so that linguists and learners can identify the source of each meaning more precisely. Our gloss is in five lines, exemplified below.

<b>Gitxsan orthography:</b>	Ap yukwhl ha'niisgwaa'itxw.		
<b>Morpheme breakdown:</b>	ap	yukw=hl	ha-'nii-sgwaa'it-xw
<b>Phonetic script (APA):</b>	ʔəp	yuk <sup>w</sup> =ł	ha-ŋiː-sk <sup>w</sup> aːýt-x <sup>w</sup>
<b>Morpheme gloss<sup>1</sup>:</b>	EMPH	IMPF=CN	INSTR-on-rest-VAL
<b>Translation:</b>	<i>But it was Sunday.</i>		

No other available Gitxsan text collection contains detailed interlinear glossing of this sort. To accomplish this, we have been required to investigate individual words and phrases in detail to figure out how they should be glossed, and how to standardize words between stories.

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<sup>1</sup> **Linguistic abbreviations in this paper:** ATT = attributive; CN = connective; EMPH = emphatic; FOC = focus; IMPF = imperfective; INSTR = instrumental; NEG = negation; PREP = preposition; SX = subject extraction; VAL = valency-shifting

Our collection of texts is still ongoing, though our current focus is to continue glossing and standardizing the ones we have. This project has been accepted by UBC Press for both online and print publication, and we have a tentative completion date of August 2013. Hopefully this marks the beginning of a richer textual collection for endangered languages in general.

*Adjectives and Noun Modification*

Gitxsan has three strategies for noun modification: 1) a closed set of modifiers that appear before predicates, 2) a category-neutral suffix that can turn any predicate into a modifier, and 3) the formation of relative clauses from predicates. Identifying the order in which these strategies could be used in relation to each other and the noun brought to light some additional information.

I identified a test for compound phrases in Gitxsan. Compounds may be formed between pre-predicative modifiers and the predicates they precede. Whether the modifier is truly an attached compound element can be tested by the addition of an attributive modifier to the phrase. If the new modifier is allowed to intervene between the pre-predicative modifier and the noun, then both elements are simply modifying the noun (see 1 – note: \* marks an ungrammatical form). If the pre-predicative modifier cannot be separated from the noun, then it is part of a compound phrase: the two words must be interpreted together (see 2).

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|--|--|---|
| 1a. <b>hlgu</b> ganaa'w<br>little frog<br><i>["hlgu" is serving as a modifier]</i>                   | 1b. <b>hlgu</b> mihlatxwm ganaa'w<br>little green-ATT frog | 1c.    *mihlatxwm <b>hlgu</b> ganaa'w<br>green-ATT little frog  |
| 2a. <b>lax</b> mo'on<br>on salt = ocean<br><i>["lax" is part of a compound: "lax mo'on" – ocean]</i> | 2b.    * <b>lax</b> biluutxwa mo'on<br>on blue-ATT salt    | 2c.    biluutxwa <b>lax</b> mo'on<br>blue-ATT [on salt] = ocean |

I additionally discovered evidence suggesting that non-nominal predicates can be grouped into two distinct classes: verbs and adjectives. The two groups behave differently when they are converted into relative clauses that modify nouns. Relative clauses formed from verbal predicates appear after the noun (see 3), while relative clauses formed from adjectival predicates appear before the noun (see 4).

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|---|
| 3a.    Ts'axw=hl    [hlgu    mihlatxw-m    ganaa'w <b>hajiks-it</b><br>clever=CN    small    green-ATTR    frog    swim-SX<br>'The small <u>swimming</u> green frog is clever.' |
| 3b.    *Ts'axwhl [hlgu mihlatxwm <b>hajiksit</b> ganaa'w]   |
| 4a.    Wok=hl    ['wii <b>t'uuts'xw-it</b> smax]<br>sleep=CN    big    black-SX    bear<br>'The big <u>black</u> bear is sleeping.'   |

4b. \*Wokhl ['wii smax t'uuts'xwit]

The difference between these classes of words is not predictable; for example the word *ts'ee<sub>kkw</sub>* 'be noisy, make a noise' seems like it could be either verb or adjective, but instead regularly patterns like an adjective. I argue that a word's classification as *verb* or *adjective* is something individually determined in the lexicon, or mental dictionary—this is a requirement for a true word class. Furthermore, though these different types of relative clause are superficially identical apart from the side of the noun they appear on, I was able to determine that they have distinct underlying syntactic structures.

Though both types of relative clause take the form [PREDICATE + SUFFIX (-it)], only verbal relative clauses are capable of following the pattern noted by Davis & Brown (2011) of appearing with *wh*-words. This structure appears superficially similar to English; the English *wh*-word 'who' appears in the translation in (5).

5a. Gi'nam-'y=hl sip a=hl [os t'aa-it]  
 give-1SG.II=CN bone PREP=CN dog sit-SX  
 'I gave a bone to [the dog that sat].'

5b. Gi'nam-'y=hl sip a=hl [os **naa**=hl t'aa-it]  
 give-1SG.II=CN bone PREP=CN dog **who**=CN sit-SX  
 'I gave the bone to [the dog who sat].'

However, adjectival relative clauses cannot appear with this *wh*-word, despite their similar appearance and interpretation. The *wh*-word cannot appear in the Gitxsan example (6), regardless of the order of noun to relative clause.

6a. Gi'nam-'y=hl sip a=hl [t'uuts'xw-it=hl os]  
 give-1SG.II=CN bone PREP=CN black-SX=CN dog  
 'I gave a bone to [the dog that was black].'

6b. \* Gi'nam-'y=hl sip a=hl [**naa**=hl t'uuts'xw-it=hl os]  
 give-1SG.II=CN bone PREP=CN **who**=CN black-SX=CN dog

6c. \* Gi'nam-'y=hl sip a=hl [os t'uuts'xw-it]  
 give-1SG.II=CN bone PREP=CN dog black-SX

6d. \* Gi'nam-'y=hl sip a=hl [os **naa**=hl t'uuts'xw-it]  
 give-1SG.II=CN bone PREP=CN dog **who**=CN black-SX

However, when both types of relative clause (verbal and adjectival) are negated, the *wh*-word appears again. Identical structures are acceptable.

- 7a. Gi'nam-'y=hl sip a=hl [os **naa=hl nee=dii** wox-at]  
 give-1SG.II=CN bone PREP=CN dog **who=CN NEG=FOC** black-SX  
 'I gave a bone to the dog that wasn't barking.'
- 7b. Gi'nam-'y=hl sip a=hl [os **naa=hl nee=dii** t'uuts'xw-it]  
 give-1SG.II=CN bone PREP=CN dog **who=CN NEG=FOC** black-SX=CN  
 'I gave a bone to the dog that wasn't black.'

This data makes it clear that verbal relative clauses and negated relative clauses of any kind share certain features and thus similar structures, evidenced by their shared position after the verb and shared ability to take a *wh*-word inside the relative clause. By contrast, bare adjectival relative clauses appear before the verb and cannot take a relative clause. This is evidence both for a different underlying structural pattern between these two superficially similar sets, and a different (adjectival) categorization of the words that follow the outlier pattern.

## Learning Experience

This initial data collection project has opened the door to a much larger series of tasks, some that we've begun and some still currently in the works. I feel that I can truly consider myself a researcher with a significant hand in all of these projects; I've now gotten a taste of the linguistic researcher's life. I've helped to write several grants, gotten extensive experience in translating and breaking down Gitxsan texts, written a paper, submitted and presented my own research at a conference, and been on a two-week trip to traditional Gitxsan territory to do fieldwork and networking with a wider variety of speakers and dialects.

As mentioned above, our story compilation proposal has been well-received by UBC Press, and I'll have a hand in making the stories suitable for print. My own personal research on noun modification and adjectives in Gitxsan served as my Honours Essay topic and provided me with material to present for multiple academic audiences. I gave a short talk about noun modification to the UBC Linguistics Department in the spring, and later submitted a revised and expanded version of my findings to the 47<sup>th</sup> International Conference for Salish and Neighbouring Languages (ICSNL), which I attended and presented at in August (Forbes 2012). The energy that I felt while presenting made it clear to me that research is a difficult but ultimately highly rewarding field—one that I will be pursuing in the future.

We have begun the compilation of a database to hold all the Gitxsan material collected over the course of this and future work. This database is searchable, and will make future research more efficient as many researchers will be able to share their findings there and build upon each others' work.

The spring also provided me with experience writing grants. Our Gitxsan group was awarded a Jacobs Fund award and a UBC Hampton's grant, in pursuit of general research and with the larger goal of compiling a dictionary for the Gitxsan language. To do this, we budgeted for a series of trips up north to Gitxsan territory in order to work with a larger and more diverse collection of Gitxsan speakers. The first of these trips was in mid-August and I'm grateful to

have been able to take part; it was a very different style of elicitation than what happens in the elicitation room at UBC. We collected hours of useful and original data, and I look forward to sorting through and continuing to compile it.

My learning experience with this project was most definitively as a member of a collaborative team, beginning projects that I hope to have a hand in for a very long time. Linguistic fieldwork is far more complicated than just solving constructed problem sets, unlike what classroom activities might suggest—but it is ultimately more satisfying. I am at least sure of this: my research experience will not end here.

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