Gitxsan adjectives: evidence from nominal modification

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This paper explores nominal modification in Gitxsan, bringing to light new information about word classes, attributive modification, and relative clause structure. While attributive modification is determined to be category-neutral, relative clause modification—specifically the position of the relativized predicate on either side of the noun—is determined to serve as a test for two different categories of intransitive predicate, namely verbs and adjectives. When the structures of these two relative clause types are explored further, it is determined that they are the results of two different relativization processes, one of which cannot truly be clausal. This discovery raises questions about the nature of extraction morphology in Gitxsan, and calls for further investigation into the newly identified class of adjectives.[1]

1 Introduction[2]

Gitxsan, a Tsimshianic language of the British Columbia northern interior, is a language that has received less attention than many others in the Pacific Northwest, especially by syntacticians. There has been little exploration of lexical categories in Gitxsan, and none of the syntactic literature on the language (e.g. Rigsby 1975, Hunt 1993, and Davis & Brown 2011) is devoted to the issue.

This work aims to discuss Gitxsan word classes; specifically, the possibility of a lexical adjective class distinct from intransitive verbs, within the larger class of non-nominal predicates. This will be done through examination of the behavior of nominal modifiers. Though Rigsby (1986: 91) states specifically

[1] Endless thanks go to Barbara Sennott and Vincent Gogag (and more recently, Hector Hill) for sharing their language with us. Ha'miiyaa! The teamwork, support, and insights of the UBC Gitxsan research group were also major contributions to this paper; special thanks to Dr. Henry Davis for all of his help. This research was supported by a UBC Arts Undergraduate Research Award, SSHRCC grant 410-2008-2535, and a Jacobs Fund award.

[2] Examples are given in the Gitxsan orthography devised by Bruce Rigsby and Lonnie Hindle in use by speakers today; it is converted to APA in Appendix 1. The morphemic breakdown is given in the APA, with allophonic processes (such as phonological voicing, palatalization, vowel coloring, and 'echoed' vowels after glottal stops) removed. Glossing abbreviations are given in Appendix 2. All examples are from the author's own fieldwork.

that there is no lexical adjective class in Gitxsan, the evidence provided in this paper shows two distinct behaviors amongst intransitive predicative modifiers, one corresponding to an adjective class and one to a verbal class.

There are three possible nominal modification methods for intransitive predicate-class lexical items in Gitxsan. One is with the attributive marker *-m*, and takes place prenominally.

(1)	Giigw'yhl	[aguus**m**	ixsdaa**m**	anaax]
	ki:kʷ-ẏ=ɬ	akʷu:s-m	ixsta:-m	ana:x
	buy-1SG.II=CN	stale-ATTR	delicious-ATTR	bread

'I bought a stale cake (lit: sweet bread).'

The other two structures both involve relative clauses. Relative clauses can occur either prenominally or postnominally, and are marked by the intransitive extraction morphology /-ət/ placed on the relativized predicate[3].

(2)	Sga'wa'yhl	[aam**it**	gyat]
	sqaẇa-ẏ=ɬ	a:m-ət	kat
	meet-1SG.II=CN	good-SX	man

'I met a good man.'

(3)	Xsdaahl	[hanak'	lim**it**]	gi
	χsta:=ɬ	hanaq’	limx-ət	ki
	win=CN	woman	sing-SX	DIST

'The singing woman won.'

However, these positions are differentiated with respect to the syntactic category heading them. It will be shown that adjective-type predicates tend to relativize in the prenominal position, while verb-type predicates relativize in the postnominal position. This will be attributed to a difference in structure; postnominal relative clauses are CP modifiers of NPs, i.e. *true* relative clauses, while prenominal relative clauses are differently structured; they are non-clausal, and cannot use a WH-word as a relative pronoun, unlike true relatives (Davis & Brown 2011, Davis 2011).

1.1 Distinguishing Gitxsan noun and verb

In many languages of the Pacific Northwest, items taking the major syntactic roles of predicate and argument are unrestricted by word class. Many, if not all, lexical word classes are capable of taking either a predicate or argument role, depending on their placement in the sentence and interaction with functional elements. This is the case in Tsimshianic as well, where nouns, verbs,

[3] Typically both the relative clause and the noun it modifies are marked by the connective *=hl* (Rigsby 1986: 282). In some of my examples this connective is missing, but this has no syntactic or semantic effect and is more likely a result of fast or casual speech. When prompted, consultants simply say that the version with the connective is more correct.

adjectives, and numbers are all predicative categories (Tarpent 1987: 297, for Nisgha). The ability of items of different word classes in Salish and Wakashan to take the same syntactic positions and the same morphology without significant visible alteration was marked enough for prior analyses to posit no word class distinction amongst predicates at all (see Swadesh 1939, Kinkade 1983, Jelinek & Demers 1994, Renker 1987; though also see Van Eijk & Hess 1986, Matthewson & Demirdache 1995, and Wojdak 2000 for counterarguments that have been widely accepted in the literature on Pacific Northwestern languages).

However, things are a bit different in Tsimshianic. Lexical items are more obviously demarcated into the categories of noun and verb than in the Salish languages—no analysis of Tsimshianic has posited a single class of predicates, with both nouns and verbs grouped together. Such an analysis could be easily countered by the presence of visible extraction morphology on relative clauses. All non-nominal predicate-class items must be relativized to appear in argument position, and must thus appear with this morphology (the suffix /-ət/ for intransitive predicates) as 'headless' relative clauses. Nouns in Tsimshianic are the only word class capable of taking argument position without relativization, and thus without such extraction morphology.

(4) a. Gyuksin'yhl **smax**
kuksin-ẏ=ɬ smax
wake.up-1SG.II=CN bear
'I woke up the bear.'

b. *Gyuksin'yhl **smayit**

(5) a. Gyuksin'yhl **wogat**
kuksin-ẏ=ɬ woq-**ət**
wake.up-1SG.II=CN sleep-**SX**
'I woke up the sleeping one.'

b. *Gyuksin'yhl **wok**

A distinction between classes of nouns and non-nominal predicates is therefore quite clear in Gitxsan; each were described extensively as separate classes by Rigsby (1986). In addition, nouns carry a value for the feature [+/-determinate][4], and have the potential to possess or be possessed (Tarpent 1987: 297). Non-nominal predicates do not have these properties, but instead can appear with marking for transitivity or aspect (Rigsby 1986: 320, 325). In addition, most pre-predicative locative modifiers have category-specific distributions, often appearing either only with nouns or only with verbs (Stebbins 2003: 397).

[4] Determinacy refers essentially to the proper/common noun distinction. In Gitxsan, most nouns are non-determinate (common), while proper names, demonstratives, and independent pronouns are determinate.

(6) a. Gilbilhl ts'uuts' **luu** wanit **ts'im** gan
kilpil=ł c'u:c' lu: wan-ət c'im qan
two.animal=CN bird in sit.PL-SX in tree
'There are two birds in the tree.'

b. *Gilbilhl ts'uuts' **luu** gan
c. *Gilbilhl ts'uuts' **ts'im** wanit

The existence of distinct noun and verb classes in the Tsimshianic languages is undisputed, as opposed to Salish and Wakashan where the two categories have similar behavior in both predicate and argument position (though this similarity is now generally agreed to be superficial). Words in Gitxsan may be tested for category both through their selection of locative modifiers and through the presence/absence of relativization morphology when they take argument position.

1.2 Previous work on Interior Tsimshianic adjectives

Though a noun/verb distinction in Tsimshianic is clear, more disputed is whether a third category can be identified, namely that of adjectives, as distinct from the class of verbs (both appearing under the broader category of non-nominal predicates). In the Salish literature, more recent analyses have stated that in addition to a noun/verb distinction, there exists a distinction between verbs and adjectives as well (Matthewson and Demirdache 1995, Davis 2002, Montler 2003, Koch 2006). Such analyses have arisen with the intent of proving the universality of the three-way lexical class distinction: N, V, and A.

For Coast Tsimshian, it has been proposed that a small set of particles composes a closed class of adjectives (Stebbins 1996). Gitxsan shares this closed class of adjectival particles: with a distribution similar to that of the locative modifiers demonstrated in (7-9), though not with the same degree of category specificity, they appear almost solely as modifiers of predicative items (both nouns and verbs). These are items such as *hlgu* 'small'; *sim* 'real, true'; *'wii* 'big'; and *sii* 'new, fresh'.

(7) [**Hlgu** ts'uusx]hl [**hlgu** wilp] lax sga'nist
łkʷu c'u:sx=ł łkʷu wilp laχ sqaṅist
small small=CN small house on mountain
'The house on the mountain is very small.'

(8) [**Sim** **'wii** 'nakw] 'nii'y
səm ẇi: ṅakʷ ṅi:ý
real big long 1SG.III
'I'm very tall.'

(9)	Wil	[**sii**	sim'oogit]	dim	wat	gi
	wil	si:	səmʔo:kit	təm	wa-t	ki
	do	new	chief	PROS	name-3SG.II	DIST

'He has a new chief name…'

However, are these non-predicative adjectival/adverbial particles the sole A-type word class for the Tsimshianic languages? This paper explores the possibility of an additional *predicative* adjective class, composed of items that in previous work have been classified as stative verbs.

In the previous literature on Interior Tsimshianic, two proposals have been made regarding the possibility of a distinct predicative adjective class. Rigsby (1986: 91) states for Gitxsan that there are no adjectives, only stative intransitive verbs. His use of the term 'adjective' throughout his grammar is semantic in nature only, to refer more easily to those lexical items that English speakers most often consider adjectival. Tarpent (1987: 305), on the other hand, describes adjectives as a distinct word class in Nisgha, similar in nature to but ultimately separate from both eventive and stative verbs.

She describes adjectives as having the following qualities:

1) the ability to function as the sentence predicate,
2) the ability to be 'downshifted' (positioned prenominally and non-predicatively) as either an attributive or relative clause modifier,
3) the possibility of appearing in comparative structures,
4) the ability to appear as a bare complement to an evaluative verb.

The latter two properties are constructions not explored in Rigsby's (1986) manuscript, and though Hunt (1993) briefly discusses comparatives her discussion is not targeted toward the types of predicates that appear in them. The first two properties, however, have been explored for non-nominal predicates. With only those two properties in mind, Rigsby concluded that verbs and adjectives were syntactically indistinguishable from one another; verbs and adjectives are both directly predicative, and capable of both attributive and relativized modification (Rigsby 1986). The following sections will investigate this second property in more detail, however.

In section 2, I examine attributive marking, determining that it is not capable of distinguishing verbs from adjectives. It will be shown that the attributive marker displays behavior largely unaffected by word class. In section 3, I will show that though attributive marking is not a category-specific process and cannot serve to distinguish V from A, the behavior of relativized modifiers can. Specifically, the prenominal or postnominal placement of a relativized intransitive predicate in relation to the noun it modifies serves as a diagnostic for a second distinct class of non-nominal predicate. This class, I suggest, is that of adjectives. Section 4 will analyze the structure of these adjectival relative clauses as opposed to that of verbal relative clauses, as analyzed by Davis and Brown (2011); I show that these two types of relative clause cannot be equivalent since adjectival relative clauses do not overtly express the WH-

operator which serves as the relative clause gap, while verbal relative clauses can. The difference between prenominal and postnominal position cannot therefore be attributed to movement, but must be the result of two different types of relative clause construction.

2 Properties of attributives

Attributive modifiers in Gitxsan are marked by the suffixes *-m* and *-a* (Rigsby 1986: 58). Tarpent (1987: 632) suggests that *-a* is actually a different suffix, and non-productive; from work with my consultants it is clear that *-m* is by far the most productive of the two, though one eastern dialect consultant (BS) regularly uses *-a* with color terms, some numbers, and a few other predicates. It is unclear whether these suffixes are allomorphs, but since they share the same behavior and distribution, and never appear together, I treat them as such for the purpose of this investigation.

2.1 Category neutrality

The major thing to be noted about the attributive suffixes is that they cannot serve as a word class diagnostic of any kind. The attributive suffix is capable of attaching to any predicative item, regardless of category. It can attach to intransitive eventive and stative predicates, numbers, and nouns. The only predicates it cannot regularly attach to are transitives[5].

(10)	Xsduutxwhl	[**liip'aygwm**	ts'uuts']
	χstu:tx^{w}=ɬ	li:p'ayk^{w}-m	c'u:c'
	make.noise.PL=CN	fly.PL-ATTR	bird
	'The flying birds are noisy.'		

(11)	Gya'a'yhl	[**hilinm**	gyat]
	kaʔ-ẏ=ɬ	hilin-m	kat
	see-1SG.II=CN	lonely-ATTR	man
	'I saw a lonely man.'		

[5] Though for one of my consultants (VG), I do have an example of a transitive predicate appearing in attributive position as well:

(i)	Maaxwsxwhl	[**giigwm**	anaa'y]
	ma:x^{w}sx^{w}=ɬ	ki:k^{w}-m	ana:x-ẏ
	white=CN	buy-ATTR	bread-1SG.II
	'The bread I bought is white.' (Literally: 'My bought-bread is white.')		

(12) Am [**k'yula** gyat] 'nit goohl paatii
am k’ul-a kat ṅit qo:=hl pa:ti:
only one.person-ATTR man 3SG.III LOC=CN party
'He's the only man at the party.'[6]

(13) [**Sim'oogidim** hanak̲']t Alice
səmʔo:kit-m hanaq’=t A
chief-ATTR woman=DM A
'Alice is a female chief.'

As shown in example (13), the syntactic role of the modified item as sentence predicate or sentence argument is irrelevant. Complex nouns modified by attributives are still capable of taking predicate position.

Attributive modifiers are, in addition, able to modify more than just nouns (Tarpent 1987: 631). They may modify other predicate-class items, both when serving a predicate function or while relativized and serving as an argument.

(14) [**Ts'uusxm** mihlatxw]hl g̲anaa'w.
c’u:sx-m miłatxʷ=hl qana:ẇ
small-ATTR green=CN frog
'The frog is a little bit green.'

(15) Gya'a'yhl [**a'lag̲am** sowii ba x̲at]
kaʔ-ẏ=ł aḷaχ-m sowi: paχ-ət
see=CN angry-ATTR away run-SX
'I saw the angry running one.'

The constituent suffixed with the attributive modifier is strictly an adjunct, however, and cannot stand alone to serve as the head of a phrase. It requires that a predicate-class item follow it as the object of modification (16b). Attributive modifiers are also strictly prenominal (16c).

(16)a. Giigw'yhl [**maaxwsxwa** isxdaam anaax]
ki:kʷ-ẏ=ł ma:xʷsxʷ-a ixsta:-m ana:x
buy-1SG.II=CN white-ATTR sweet-ATTR bread
'I bought a white cake (sweet bread).'

b. *Giigw'yhl [**maaxwsxwa**]
Intended: 'I bought the white one.'

c. *Giigw'yhl [ixsdaam anaax **maaxwsxwa**]

[6] Numbers function syntactically like other intransitive non-nominal predicates. Whether numbers have their own distinct syntactic properties not shared by the larger class of non-nominal predicates has yet to be proven in Gitxsan. See section 3.4 for further discussion.

With regard to category, however, attributive modification is almost entirely unrestricted; it requires only that one predicate-class item be used to modify another predicate-class item, regardless of that item's syntactic function as predicate or argument of the clause.

2.2 Unrestricted order

Attributive modification is additionally unrestricted in terms of which predicative item should appear as the syntactic head of the phrase. In cases of intersective modification, the two predicative items are freely interchangeable:

(17) a. [**Sim'oogidim** hanak̲']t Alice
səmʔo:kit-m hanaq'=t A
chief-ATTR woman-DM A
'Alice is a female chief.'

b. [**Hanak̲'m** sim'oogit]t Alice
hanaq'-m səmʔo:kit=t A
woman-ATTR chief-DM A
'Alice is a female chief.'

This is even the case when attributive modification involves two different word classes. Most attribution does occur with nouns as the phrasal head and object of modification, but it is not necessary that a noun appear as the phrasal head when there is a choice between two different word classes.

(18) a. Gya'a'yhl [**gi'paygwm** ts'uuts']
kaʔ-ẏ=ɬ kip'ayk^{w}-m c'u:c'
see-1SG.II=CN fly-ATTR bird
'I saw a flying bird.'

b. Gya'a'yhl [**ts'uuts'm** gip'aygwit]
kaʔ-ẏ=ɬ c'u:c'-m kip'ayk^{w}-ət
see-1SG.II=CN bird-ATTR fly-SX
'I saw a flying bird.'

More surprisingly, order appears to be irrelevant even in cases of non-intersective modification. The noun in phrasal head position is not always the one describing the identity of the compound, and flipping the position of the constituents does not create an opposing meaning. Sometimes the flipped version of the phrase is ungrammatical or dispreferred, but the meaning is not impacted.

(19)a. [**g̲aydim** g̲anaa'w]
qayt-m qana:ẇ
hat-ATTR frog
'frog hat (a hat resembling a frog)'

b. ? [**ganaa'wm** g̲ayt]
qana:ẇ-m qayt
frog-ATTR hat
'frog hat (a hat resembling a frog)'
BS: It's not as correct as the other one.

(20)a. [**g̲anm** gyat]
qan-m kat
tree-ATTR man
'a wooden person, person of wood'

b. [**gyadim** g̲an]
kat-m qan
man-ATTR tree
'a wooden person, person of wood'
VG: No, it can't be a kind of tree. (referring to both a. and b.)

(21)a. **maa'ym** ii'esxw
ma:ẏ-m i:ʔsx^{w}
berry-ATTR basket
'a berry basket'

b. **ii'esxwm** maa'y
i:ʔsx^{w}-m ma:ẏ
basket-ATTR berry
'a berry basket'
Note: both grammatical for VG, only a. for BS

(22)a. **laldim** wis
lalt-m wis
snake-ATTR rain
'earthworm'

b. **wism** lalt
wis-m lalt
rain-ATTR snake
'earthworm'

This demonstrates apparent free word order between head and modifier in cases of non-intersective modification, at least in cases where there is a pragmatic bias about the interpretation. This raises the issue of how the head is

selected in pairs without such pragmatic bias, given that only one interpretation is available for each of the pairs in (19-22). I leave this question for now, but hope to investigate it with additional examples in the future.

2.3 Summary

The attributive suffix is a highly productive method of modification, allowing any predicative item to modify any other predicative item, in either predicate or argument position. As it allows any predicative item to take the typically adjectival/adverbial function of attributing a certain property to another item, it cannot serve as a specific test for a class of adjectives.

Whether the attributive suffix is truly neutral with regard to the categories it takes and modifies—specifically, whether there is no preference or limitation to which categories can modify one another—is a question that requires further, more systematic study with a large range of predicates. However, the curious fact that the order of nouns in a non-intersective pair is irrelevant to the meaning of the phrase as a whole would suggest that this is the case. Clearly, this is a topic for further investigation.

3 Relative clauses

The second method by which a predicative item may modify a noun is through relativization. For the purposes of this paper, only cases of intransitive, non-nominal relative clauses will be explored in detail[7].

Relative clauses are formed through the extraction of a nominal head or some kind of operator from the argument position of a clause, and the subsequent use of that clause as a modifier of either the extracted nominal head, or a noun sharing identity with the extracted operator. Davis's (2011) and Davis and Brown's (2011) analyses of Gitxsan relative clauses indicate that relative-clause movement must be indirect—that the extracted operator is a WH-pronoun, expressed overtly in headless relative clauses and optionally expressed in headed ones, and that the nominal head is identified with the WH-operator through matching (Sauerland 2003) rather than raising (Kayne 1994). I assume the same analysis.

Relativization of intransitive predicates is indicated via the presence of the subject extraction suffix /-ət/[8] on the relativized predicate. The relativized predicate is then positioned either prenominally or postnominally (Rigsby 1986: 405).

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[7] Nouns can also take extraction morphology. Note the following example:

(ii)	Ligit	naahl	gay	sim'oogidit	dim	luu	yuxwit	ayookxw
	liki=t	na:=ɬ	qay	səmʔo:kit-ət	təm	lu:	yux^{w}-ət	ayo:qx^{w}
	INDEF=DM	who=CN	CNTR	chief-SX	PROS	in	follow-SX	law

'Anyone who is a chief should follow the laws.'

[8] This is rendered in the orthography as *-it* or *-at*, depending on the way the preceding consonant colors the suffixal vowel.

3.1 An asymmetry in the position of relativized predicates

The choice of position in which a relativized intransitive predicate appears is not free, however—nor does it correspond to a difference in meaning. Rather, I suggest that the pre- or post-nominal position of a relative clause is dependent on lexical properties of the relativized predicate.

Relative clauses utilizing eventive predicates tend to occur postnominally, and are almost always volunteered this way in unprompted elicitation contexts.

(23)	Ts'eekxwhl	[[ts'uuts']	**gip'aygwit**	gosuust]
	cʼeːqxʷ=ł	cʼuːcʼ	kipʼaykʷ-ət	qoːsuːst
	make.noise=CN	bird	fly-SX	LOC.there
	'The bird that is flying around over there is noisy.'			

(24)	Haxolaxhl	[maaxwsxwm	smax	**baxat**].
	haχolaχ=ł	maːxʷsxʷ-m	smax	paχ-ət
	fast=CN	white-ATTR	bear	run-SX
	'The running white bear is fast.'			

While prenominal placement of these eventive relative clauses is sometimes acceptable, more frequently it is rejected or considered awkward by speakers.

(25) a.	Ts'axwhl	[hlgu	mihlatxwm	ganaa'w	**hajiksit**]
	cʼaxʷ=ł	łkʷu	miłatxʷ-m	qanaːẇ	haciks-ət
	clever=CN	small	green-ATTR	frog	swim-SX
	'The small swimming green frog is clever.'				

b. *Ts'axwhl [hlgu mihlatxwm **hajiksit** ganaa'w]

Most stative intransitive predicates, on the other hand, are obligatorily positioned prenominally.

(26) a.	Wokhl	['wii	**t'uuts'xwit**	smax]
	woq=ł	ẇiː	tʼuːcʼxʷ-ət	smax
	sleep=CN	big	black-SX	bear
	'The big black bear is sleeping.'			

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

(27) a.	'Miin	batsdi'yhl	[**sdinit**	xbiist]
	ṁiːn	pac-tə-ẏ=ł	stin-ət	χpiːst
	up	lift-TR-1SG.II=CN	heavy-SX	box
	'I lifted the heavy box.'			

b. *'Miin batsdi'yhl [xbiist **sdinit**]

(28) a. Didalga'yhl [hlgu **ts'awit** t'ihlxw]
titalq-ə-ẏ=ɬ ɬkʷu c'axʷ-ət t'iɬxʷ
talk-TR-1SG.II=CN small clever-SX child
'I talked with the clever child.'

b. *Didalga'yhl [hlgu t'ihlxw **ts'awit**]

The relative clauses of transitive predicates, in contrast, always position themselves following the noun.

(29) a. Gya'a'mhl [[smax] ant guphl helda maa'y]
kaʔ-ḿ=ɬ smax **an=t** kʷup=ɬ helt-a ma:ẏ
see-1PL.II=CN bear **AX-3SG.I** eat=CN many-ATTR berry
'We saw the bear who ate lots of berries.'

b. *Gya'a'mhl [ant guphl helda maa'y [smax]]

(30) a. Mihlatxwhl [[gayt] hooyin]
miłatxʷ=ɬ qayt ho:x-**ə**-n
green=CN hat use-**TR**-2SG.II
'The hat you're wearing is green.'

b. *Mihlatxwhl [hooyin [gayt]]

The relative clauses of transitive predicates therefore position themselves similarly to those of eventive intransitive predicates. Stative intransitive predicates, however, have an opposing distribution.

	Transitive Predicates	**Intransitive Eventive**	**Intransitive Stative**
Prenominal	X	?	✓
Postnominal	✓	✓	X

This table clearly shows the difference between these two sets of predicates.

3.2 Not simply individual/stage-level properties

The division in the behavior of intransitive non-nominal predicates shown above is not simply a stage-level versus individual-level distinction. Prenominally positioned predicates come in both individual- and stage-level types.

Individual-level:

(31) a. Giigw'yhl [**masxwit** kaa]
ki:k^{w}-ẏ=ɬ masx^{w}-ət kha:
buy-1SG.II=CN red-SX car
'I bought a red car.'

b. *Giigw'yhl [kaa **masxwit**]

(32) a. 'Miin batsdi'yhl [**sdinit** xbiist]
m̓i:n pac-tə-ẏ=ɬ stin-ət χpi:st
up lift-TR-1SG.II=CN heavy-SX box
'I lifted the heavy box.'

b. *'Miin batsdi'yhl [xbiist **sdinit**]

Stage-level:

(33) a. 'Nii yuksini'yhl [**aksithl** gwila]
n̓i: yuksin-ə-ẏ=ɬ aks-ət=ɬ k^{w}ila
on hang.up-TR-1SG.II=CN water-SX=CN blanket
'I hung up the wet blanket.'

b. *'Nii yuksin'yhl [gwilahl **aksit**]

(34) a. Gi'nami'yhl sip ahl [**xwt'ayithl** os]
kin̓am-ə-ẏ=ɬ sip a=ɬ x^{w}t'ax-ət=ɬ os
give-TR-1SG.II=CN bone OBL=CN hungry-SX=CN dog
'I gave a bone to the hungry dog.'

b. *Gi'nam'yhl sip ahl [oshl **xwt'ayit**]

Prenominal position can therefore not be attributed solely to individual-level predicates.

3.3 Attested adjective classes

What sort of predicates make up the prenominally-patterning class, then? I propose that they compose a lexically-determined open class of predicative adjectives, in contrast to the closed class of adjectival and adverbial particles proposed by Stebbins (1996).

To examine this proposal, consider the standard set of adjective classes proposed by Dixon and Aikhenvald (2004: 3). These classes are those of *dimension*, *age*, *value*, *color*, *physical property*, *human propensity*, and *speed*. The class of predicates that take a prenominal relative clause position cross all seven of these adjective classes.

(35) a. Giigw'yhl ['wii **t'isithl** ixsdaam anaax]
ki:kʷ-ẏ=ɬ ẇi: t’is-ət=ɬ ixsta:-m ana:x
buy=1SG.II big big-SX=CN sweet-ATTR bread
'I bought a big cake (sweet bread).'

b. *Giigw'yhl ['wii ixsdaam anaaxhl **t'isit**]

(36) a. Sim alaysthl [**dogo'odit** duus]
səm alayst=ɬ toqoʔt-ət tu:s
real lazy=CN old-SX cat
'The old cat is very lazy.'

b. *Sim alaysthl [duus **dogo'odit**]

(37) a. Sga'wa'yhl [**aamit** gyat]
sqaẇa-ẏ=ɬ a:m-ət kat
meet-1SG.II=CN good-SX man
'I met a good man.'

b. *Sga'wa'yhl [gyat **aamit**]

(38) a. Giigw'yhl [**masxwit** kaa]
ki:kʷ-ẏ=ɬ masxʷ-ət kha:
buy=1SG.II=CN red-SX car
'I bought a red car.'

b. *Giigw'yhl [kaa **masxwit**]

(39) a. 'Miin batsdi'yhl [**sdinit** xbiist]
ḿi:n pac-ti-’y=ɬ stin-ət χpi:st
up lift-TR-1SG.II=CN heavy-SX box
'I picked up the heavy box.'

b. *'Miin batsdi'yhl [xbiist **sdinit**]

(40) a. Didalga'yhl [hlgu **ts'awit** t'ihlxw]
titalq-ə-ẏ=ɬ ɬkʷu c’axʷ-ət t’iɬxʷ
speak-TR-1SG.II small clever-SX child
'I spoke with the clever child.'

b. *Didalga'yhl [hlgu t'ihlxw **ts'awit**]

(41) a. Needii xsdaahl [**ayeethl** gax]
ne:=ti: χsta:=ɬ aye:-ət=ɬ qaχ
NEG=CNTR win=CN fast-SX=CN rabbit
'The fast rabbit lost.' (Lit: 'The fast rabbit didn't win.')

b. Needii xsdaahl [gaxhl **ayeet**]

This class therefore spans the categories identified by Dixon and Aikhenvald (2004) to be cross-linguistically representative of languages with large, open adjective classes.

3.4 On the position of numbers

Numbers are also predicative in Gitxsan, and when modifying a noun via a relative clause they occupy a prenominal position, just like the adjectival items listed above.

(42)	Hasaga'y	'nim	didalkhl	[**gwilunithl**	iiuxwt]
	hasaq-ẏ	ńəm	də-dalq=ɬ	kʷilun-ət=ɬ	iːuxʷt
	want-1SG.II	want	TR-talk=CN	three.people-SX=CN	man.PL
	'I want to talk to three people.'				

No work in Gitxsan yet describes numbers as a class of their own, distinct from other pre-predicative modifiers. Tarpent (1987: 307) does so for Nisgha, describing a few nominal, rather than verbal, properties. However, unless those distinctions in Gitxsan can be confirmed for a separate numeral class and not reproduced for adjectival predicates, then numbers simply constitute an extension of the adjective class. They are both stative and intransitive.

4 Structure of prenominal modifiers

This section will analyze the syntactic structure of the adjectival prenominal modifiers, suggesting that they cannot be relative clauses of the type discussed by Davis and Brown (2011), that status being reserved for postnominal modifiers alone. I propose that the adjectival modifiers marked by extraction morphology are not structurally comparable to the superficially identical verbal modifiers.

4.1 Adjectives not headed by WH-phrase

Relative clauses in Gitxsan, as investigated by Davis and Brown (2011), involve movement of an optionally-expressed WH-operator to the specifier of a higher functional projection (presumably, CP). Adjectival modifiers in prenominal position, however, do not contain a WH-operator. This is illustrated below with the WH-word *naa* 'who'.

(43) a. Gi'nam'yhl sip ahl [os t'aat] gi
kiƛ̓am-ə-y̓=ł sip a=ł os t’a:-ət ki
give-TR-1SG.II=CN bone OBL=CN dog sit-SX DIST
'I gave a bone to the sitting dog.'

b. Gi'nam'yhl sip ahl [os **naahl** t'aat]
kiƛ̓am-ə-y̓=ł sip a=ł os na:=ł t’a:-ət
give-TR-1SG.II=CN bone OBL=CN dog who=CN sit-SX
'I gave a bone to the sitting dog.'

(44) a. Gi'nam'yhl sip ahl [t'uuts'xwithl os]
kiƛ̓am-ə-y̓=ł sip a=ł t’u:c’x^{w}-ət os
give-TR-1SG.II=CN bone OBL=CN black-SX dog
'I gave a bone to the black dog.'

b. *Gi'nam'yhl sip ahl [**naahl** t'uuts'xwithl os]
c. *Gi'nam'yhl sip ahl [os t'uuts'xwit]
d. *Gi'nam'yhl sip ahl [os **naahl** t'uuts'xwit]

While the verbal relative clause *t'aat* is perfectly capable of appearing with or without a WH-word, the adjectival relative clause *t'uuts'xwit* is not—either in prenominal or postnominal position. That the WH-word cannot surface in an adjectival relative even when it shows identical word order to a verbal relative indicates that these two types of relative clauses are not derived in the same way.

Also compare the inability of an adjectival modifier to take a WH-word as compared to the same modifier when it undergoes negation. Once negated, not only is the WH-word able to appear, but the construction appears postnominally, in structure identical to that of a negated verbal modifier—this is presumably because negation is clausal.

(45) Gi'nam'yhl sip ahl [os **naahl**
kiƛ̓am-ə-y̓=ł sip a=ł os na:=ł
give-TR-1SG.II=CN bone OBL=CN dog who=CN
needii t'uuts'xwit]
ne:=ti: t’u:c’x^{w}-ət
NEG=CNTR black-SX
'I gave a bone to the dog that wasn't black.'

(46) Gi'nam'yhl sip ahl [os **naahl**
kiƛ̓am-ə-y̓=ł sip a=ł os na:=ł
give-TR-1SG.II=CN bone OBL=CN dog who=CN
needii woat]
ne:=ti: woχ-ət
NEG=CNTR bark-SX
'I gave a bone to the dog that wasn't barking.'

Verbs and negated predicates (both verbal and adjectival) are capable of appearing postnominally and with a WH-word heading the constituent. Each of these things are indications of a full (CP) relative clause. Conversely, bare adjectives are capable of neither, and so cannot be considered as the same breed of relative clause.

4.2 Consequences for adjectival modifier structure

The fronted WH-word at the left edge of a full (CP) relative clause is linked to a gap in the clause itself. If it is unavailable in 'adjectival relatives', as claimed here, then we can draw one of two conclusions. Either the adjectival constituent has no gap in it for the WH-word to originate from, or there is a gap, but no spec-CP landing site for WH-movement.

There are problems with each approach. Extraction morphology is generally agreed to signal some degree of movement. If there were no WH-word gap in the adjectival constituent, why would it be necessary for the modifying predicate to be marked with extraction morphology? And if there were a WH-operator but no spec-CP for it to move to, there would again be no movement and therefore no reason for extraction morphology—assuming that the only possible operators are WH-pronouns.

One possible explanation is that there is a gap in the adjectival constituent, but that it is not identifiable with a WH-operator, as would be the case in a relative clause containing a verbal predicate. To prove such a hypothesis or identify the nature of what might exist in the gap instead of a WH-word operator is a topic I leave to future research, but see Koch (2006) and Thompson (2012) for analyses in the Salish literature employing 'small' (non-CP) relatives.

5 Conclusions

This paper has suggested the existence of an open class of predicative adjectives in Gitxsan, through examination of the behavior of modifiers. In section 1, the more basic noun/verb distinction was confirmed, and the results of other researchers' hunt for an adjective class in the Tsimshianic languages summarized. Section 2 examined the attributive markers *-m* and *-a*, determining that they are unable to serve as tests for an adjective class, but display interesting properties of category neutrality and raise questions about non-intersective modification. Specifically, when dealing with a non-intersective noun-noun pair, there does not seem to be a way of syntactically marking which noun fulfills the role of modifier and which the fulfills the role of head, given that the two nouns can switch places without impacting the phrase's meaning.

Section 3 looked at relative clauses, and it was there that a diagnostic for an adjective class was found: adjectives relativize prenominally, while verbs relativize postnominally. Section 4 examined the structure of these adjectival 'relative clauses' further, and it was determined that, due to their inability to host

WH-words, which occur overtly in relative clauses with verbal nuclei, adjectival relatives are not standard CP relatives, despite their extraction morphology.

Finally, while the examination of an adjective class through the lens of nominal modification has been quite illuminating, more evidence for such a class ought to be sought in areas such as degree modification and comparative structures, as examined by Tarpent (1987) for Nisgha. I leave it to future research to determine whether such study will support the conclusion of a distinct adjective class in Gitxsan drawn from this analysis of nominal modifiers.

Appendix 1: Gitxsan orthography

Orth.	APA	Orth.	APA	Orth.	APA	Orth.	APA	Orth.	APA
a	a, ə	hl	ɬ	l	l	s	s	x	x
aa	a:	i	i, ɪ, ə	'l	l̓	t	t	xw	x^w
b	b	ii	i:	m	m	t'	t’	x̲	χ
d	d	j	dz	'm	m̓	tl'	ƛ’	y	y
e	e	k	k	n	n	ts	c	'y	y̓
ee	e:	k'	k’	'n	n̓	ts'	c’	'	ʔ
g	g	kw	k^w	o	o	u	u, ʌ		
gw	g^w	kw'	k'^w	oo	o:	uu	u:		
g̲	ɢ	k̲	q	p	p	w	w		
h	h	k̲'	q’	p'	p’	'w	w̓		

Appendix 2: Abbreviations

ATTR	attributive	LOC	locative
AX	transitive subject (agent) extraction marker	NEG	negation
		OBL	oblique
CN	common noun connective	PL	plural
CNTR	contrastive	PROSP	prospective
DIST	distal	SX	intransitive subject extraction marker
DM	determinate marker		
INDEF	indefinite	TR	transitive marker

Pronouns:

Series I: pre-predicative clitics

	Singular	**Plural**
1st person	=n, na=, ni=	dip
2nd person	=m, ma=, mi=	=m … =si'm
3rd person	=t	=t … =diit

Series II: predicate suffixes

	Singular	**Plural**
1st person	-'y	-'m
2nd person	-n	-si'm
3rd person	-t	-diit

Series III: independent words

	Singular	**Plural**
1st person	'nii'y	'nuu'm
2nd person	'niin	'nisi'm
3rd person	'nit	'nidiit

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