

Alignments Across Tsimshianic*

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1 Introduction

Dixon (1994) claims that there is no language that manifests a purely ergative case or agreement system: all ergative languages have a split, which is typically conditioned by semantic factors such as animacy or an argument hierarchy, tense, aspect and modality, or syntactic factors such as matrix vs. subordinate environments. Typically, what lies on the other side of this split is a nominative alignment. In this paper I argue that the Tsimshianic languages present us with a case of a language family where the individual languages are almost entirely morphologically ergative in the agreement and pronominal systems. While there is a split in Tsimshianic, conditioned by both clause type and a person hierarchy, the other side of the split is not the expected nominative-accusative alignment. Rather, other

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logical groupings of semantic roles are found. One of the splits groups the Object (O) and Agent (A), or what is called a *transitive* (or ‘horizontal’) alignment in the Tsimshianic literature. In another split the Subject (S), A, and O are each marked distinctly, or what is called a *contrastive* or (or ‘tripartite’) alignment.

The goal of this paper is to present a description of the agreement patterns and pronoun distribution across Tsimshianic, with the aim of explaining these unusual alignments. This is done by undertaking a comparative analysis of the individual languages that make up the Tsimshianic family. The motivation for this comes from the observation that not all of the Tsimshianic languages realize these unusual alignments. The more conservative Tsimshianic languages, Gitksan and Nisgha, are purely morphologically ergative: the patterns of agreement morphology and pronouns on both sides of the split (conditioned by clause type) are ergative. A more complex picture is found in the Sm’algyax and Sgüüxs branches of Tsimshianic, where transitive, contrastive and neutral alignments are found, in addition to an ergative one. I show that this complexity arises from two factors: first, Sm’algyax and Sgüüxs have three sets of agreement morphemes plus one set of independent pronouns. Secondly, the splits found in Sm’algyax and Sgüüxs are conditioned not only by clause types, but also a person hierarchy. Because these languages have more options for realizing agreement, we find a greater variety of possible alignments – including the two non-standard ones. I claim that these are in fact expansions of ergativity, as A and S are never grouped in the agreement morphology. The outcome is that the Sm’algyax and Sgüüxs do not have any special, exotic properties that give rise to these unusual alignments: they fall out from

the well-known effects of the person hierarchy.

I extend this analysis to the *connective* system, a notable feature of Tsimshianic. In the Sm'algyax and Sgüüxs branches of Tsimshianic the connectives are determiner-like morphemes that appear to be sensitive to the semantic role of the NP they represent – a feature lacking in the Gitksan and Nisgha connectives. This leads to a variety of complications, including no less than four distinct alignments (nominative, ergative, neutral, and contrastive) in the Sm'algyax and Sgüüxs connective systems. I show how an understanding of the alignments in the agreement and pronouns across Tsimshianic can shed light on this complexity, and that a comparative analysis eliminates the purported alignments in the connectives, thus revealing a fairly standard (and non-aligned) paradigm of determiners.

1.1 Background and sources

The Tsimshianic languages are spoken on the northwest coast of Canada, almost entirely within the province of British Columbia, adjacent areas of the interior, and the southern tip of the Alaska panhandle. There are four linguistic and socio-cultural divisions that make up the Tsimshianic family, given in (1):

(1) The Tsimshianic Languages (Rigsby 1986; Mulder 1994; Tarpent 1997)

COAST TSIMSHIANIC (CT)

Coast Tsimshian (Sm'algyax)

Southern Tsimshian (Sgüüxs)

INTERIOR TSIMSHIANIC (IT)

Nisgha

Gitksan

The four languages that comprise the Tsimshianic family are socio-politically distinct entities. However, from a purely linguistic perspective the individual Tsimshianic languages in (1) form a continuum, as speakers of one of these languages report at least some degree of mutual intelligibility with the other languages that loosely correlates with geographical proximity, albeit with some asymmetries. For example, many Sm'algyax speakers can understand and speak Gitksan, but Gitksan speakers have slightly more difficulties with Sm'algyax. Nisgha and Gitksan, which are geographically proximate, are very similar, and speakers report few or no difficulties in communicating with each other.

These observations are supported by the fact that, aside from some lexical, phonological, and morphosyntactic differences all of the four languages share very similar core grammatical properties. Because one of these properties is the morphosyntax of the agreement and connective systems, for the purposes of this paper I will use the groupings in (1) and analyze Sm'algyax and Sgüüxs together

as the CT languages, and the Nisgha and Gitksan as IT.¹ I will also freely alternate language examples within these two groups, while noting any relevant language-specific differences. One of the underlying strategies of this paper is to use a comparative analysis of CT and IT to shed light on the grammatical features that make up this dialect continuum.

In this paper I make extensive use of what can be considered the foundational literature in Tsimshianic language studies: Tarpent's voluminous (1987) grammar of Nisgha, Rigbsy's (1986) grammar of Gitksan (complementing this with my own fieldwork), Dunn's (1979) grammar of Sm'algyax, and Boas' (1911) original studies on, and wealth of language data in what was known then as 'Tsimshian'. I also draw upon many of the insights in Mulder's (1994) dissertation on the ergative properties of Sm'algyax, even though I make several revisions to her analyses.

1.2 Outline

Section 2 is an outline of the basic morphosyntactic features of the Tsimshianic languages, with an emphasis on the two main clause types in the languages. A comprehensive description and comparative analysis of the Tsimshianic pronominal and agreement system is undertaken in Section 3. I examine first the IT languages, as they represent a conservative side of Tsimshianic in their manifestation of ergativity. I then turn to the CT languages, which are more complex. Using what we ascertain about IT, I unravel some of the more puzzling aspects of CT

¹Within this continuum there are several dialects and varieties, usually corresponding to the different villages and settlements the IT and CT languages are spoken in, and some dialects, such as Kitselas, share properties of both IT and CT. See Mulder 1994; Brown 2010 for details.

agreement and pronouns and show how the unusual alignments in CT are actually quite regular when viewed at the level of the language family. Section 4 examines another area of Tsimshianic grammar, the connectives. Here, too, we find many unusual alignments of semantic and grammatical roles. Again, I show that a comparative analysis coupled with an understanding of IT agreement and connectives can be used to explain these puzzling patterns. Section 5 concludes.

2 Basic morphosyntactic features of Tsimshianic

There are two clause types in Tsimshianic. In the IT literature these are called the *Independent* and *Dependent* clauses (Rigsby 1986). Generally speaking, Independent clauses have a base VSO word order: the verb stem is the first constituent in the clause followed by the grammatical subject, object and optional indirect object, as in (2a). Dependent clauses are called as such when another constituent, often called a *dependent marker* (DEP.MARK), is at the left periphery of the clause, which is then followed then by the verb stem, subject and object, as in (2b).

(2) IT (Gitksan)

a. *Independent clause*

V	S	O	IO
gi'nam-i-(t)=hl	hanak=hl	bilaa	'as na'aa-t
give-TR-3sg=CON	woman=CON	abalone	PREP mother-3sg

'The woman gave the abalone to her mother.'

b. *Dependent clause*

DEP.MARK	V	S	O	IO
yukw=t	gi'nam-(t)=hl	hanak=hl	bilaa	'as na'aa-t
IMPERF-3sg	give-3sg=CON	woman=CON	abalone	PREP mother-3sg

'The woman is giving the abalone to her mother.'

Independent clauses generally tend to have the simplest verbal morphology, but are relatively less common in everyday speech. Dependent clauses are usually found in paratactic and syntactically embedded environments, such as a coordinate and subordinate clauses, or in narratives. Dependent markers do not appear to form a homogeneous semantic or lexical class, as they include negation, circumstantial modals, spatio-temporal and aspectual particles (such as the imperfective *yukw* in (2b)), sentential conjunction, conditionals, and other narrative markers. Additionally, any kind of leftward displacement of a post-verbal constituent triggers a Dependent clause, such as the relativization, clefting, or topicalization of a subject, object or indirect object. For example, lexical negation in Tsimshianic is preverbal, and thus triggers a Dependent clause, as in (3b). However, not every preverbal element is a dependent marker; for example, the preverbal future particle *tim* in (3a) does not trigger a Dependent clause:

(3) IT (Gitksan)

a. *Independent clause*

V	S	O	IO
tim	gi'nam-i-(t)=hl	hanak=hl	bilaa 'as na'aa-t
FUT	give-TR-3sg=CON	woman=CON	abalone PREP mother-3sg

'The woman will give the abalone to her mother.'

b. *Dependent clause*

DEP.MARK	V	S	O	IO
needii=t	gi'nam-(t)=hl	hanak=hl	bilaa	'as na'aa-t
NEG-3sg	give-3sg=CON	woman=CON	abalone	PREP mother-3sg

'The woman didn't give the abalone to her mother.'

In the CT literature, Independent and Dependent clauses are called the *indicative* and the *subjunctive*, respectively (Boas 1911; Dunn 1979). For the ease of comparison (and given the fact that the syntax at this level is nearly identical across Tsimshianic), I will use the Rigsby Independent/Dependent labels in CT.

(4) CT (Sm'algyax)

a. *Independent clause (Indicative)*

	V	S	O	IO
nah	k'yilum	hana'a	bilhaa	das noo-t
PAST	give	woman	abalone	PREP mother-3sg

'The woman gave the abalone to her mother.' (Mulder 1994:42)

b. *Dependent clause (Subjunctive)*

DEP.MARK	V	S	O	IO
yagwa=t	k'yilum=da	hana'a	bilhaa	das noo-t
IMPERF=3sg	give=CON	woman	abalone	PREP mother-3sg

'The woman is giving the abalone to her mother.' (Mulder 1994:42)

Independent and Dependent clauses are also distinguished verbal agreement and pronoun patterns. In IT Independent clauses such as (2a) the agreement suffix *-t* represents the grammatical subject, *the woman*. This suffixal agreement on the verb stem appears to be lacking in CT in the corresponding example in (4a). I address this difference between IT and CT below.

In Dependent clauses such as (2b) and (4b) the verb is preceded by a dependent marker, in this case the the imperfective marker (IT *yukw*; CT *yagwa*). In Dependent clauses the agreement patterns are more complex, as two agreement morphemes appear: in both IT and CT the 3rd person agreement *-t* attaches to the dependent marker, which shifts to representing the grammatical subject (*the woman*). In IT the agreement suffix *-t* on the verb assumes the role of representing the grammatical object (*the abalone*). CT differs slightly in that there is no agreement with the grammatical object; instead, a different enclitic connective *=da* appears. I also examine this difference in more detail below.

The form and function of the connectives is also conditioned to some extent by the clause types, especially in CT (glossed as CON).² I will hold off on a description of these until section 4, which will be greatly aided by developing first a clearer picture of the alternations in agreement morphology between Independent and Dependent clauses. This is the next task.

3 Tsimshianic pronouns and agreement

3.1 Interior Tsimshianic

Independent intransitive clauses are the simplest constructions in IT, consisting of a verb root and an enclitic determiner (the connective; see section 4) which marks the argument status of its single DP argument and its status as either a proper noun

²In the CT literature the connectives are described as enclitics but notated with a dash: *-da* (Dunn 1979; Mulder 1994). For ease of comparison I use the standard '=' notation for enclitics: *=da*.

or common noun, as (5) shows in both Gitksan and Nisgha (Tarpent 1987:475):

- (5) limx=t Mary
 sing=PN.DET Mary
 ‘Mary sings.’

A pronominal intransitive subject (S) is represented by what is known in the IT literature as a *Series III* person marker, given in Table 1:³

	SG	PL
1	'nii'y	'nuum
2	'niin	'nisi'm
3	'nit	'nidiit

Table 1: IT Series III person markers (Rigsby 1986; Tarpent 1987)

Syntactically, Series III person markers are stand-alone independent pronouns, and occupy the same position as a nominal argument. However, an important difference between a full DP and the Series III independent pronouns is that the latter do not have an enclitic determiner when they immediately follow the verb.

(6) is an example of this in both Gitksan and Nisgha:⁴

- (6) a. limx 'nii'y
 sing 1sg.III
 ‘I sing/sang.’
- b. *limx=t 'nii'y

³Throughout this paper I use the following convention for glossing pronouns and agreement: the person and number followed by a dot and then the Series number. For example, a gloss for Series III 1st person singular is 1sg.III, 2nd person plural is 2pl.III, etc.

⁴Tarpent (1987) and Forbes (2013) report that the Series III pronouns can, under certain conditions, be preceded by a proper noun determiner, such as a coordinate structure: 'nii'y gan=t 'niin (1sg.III COORD=PN.DET 2sg.III) ‘Me and you’.

As described above, Dependent clauses are triggered by the insertion of a Dependent marker while maintaining the base VSO order. In Dependent clauses the *Series II* person suffixes, given in Table 2 below, emerge.

	SG	PL
1	-y	-m
2	-n	-si'm
3	-t	-diit

Table 2: IT Series II suffixes (Rigsby 1986; Tarpent 1987)

The 3rd person Series II suffix co-occurs with a DP to function as agreement. Example (7) is introduced with the Dependent marker *yukw* (IMPERF), which triggers Dependent morphology: the (often optional) 3rd person *-t* functions as agreement on the verb with the subject *John*:⁵

- (7) *yukw=hl litsxxw(-t_i)=s John_i*
 PROG=CN.DET read-3=PN.DET John
 ‘John is reading.’ (DJ)

In intransitive Dependent clauses a pronominal subject is represented by a Series II suffix on the verb and not a Series III pronoun, which cannot co-occur with or replace a Series II suffix. Based on the fact that the Series II functions as 3rd person agreement with a full DP, as in (7), following Hunt (1993) I claim that *pro* occupies this argument position and agrees with the Series II suffix:

⁵The 3rd person agreement suffix *-t* often disappears in normal speech. Some transcriptions do not include it all, and there is speculation that it has disappeared altogether in contemporary speech. I use brackets to indicate this variability. See Tarpent (1987:207) for an discussion of the optional 3rd person agreement in Nisgha, which also applies to Gitksan (Hunt 1993:115-118).

- (8) a. yukw=hl lits_{xx}w-'y_i pro_i
 IMPERF=CN.DET read-1sg.II
 'I'm reading.' (DJ)
- b. *yukw=hl lits_{xx}w-t_i 'nii'y_i
- c. *yukw=hl lits_{xx}w 'nii'y

As such, DPs and Series III pronouns have the same distribution in Independent intransitive clauses. However, Series II suffixes can co-occur as agreement with a DP in a Dependent clause but not with a Series III pronoun. These patterns are summarized in Table 3 on the next page.

		V	S
<i>Independent</i>		V	DP
		V	III
<i>Dependent</i>	DEP	V-II _i	DP _i
	DEP	V-II _i	pro _i /*III _i

Table 3: The distribution of Series III and II in intransitives clauses

Turning to transitive sentences, in an Independent clause a subject agrees with the Series II suffixes, while the object lacks agreement:

- (9) Nisgha (Tarpent 1987:235)

hlimoo-i(-t_i)=s Mary_i=t Peter
 help-TR-3=PN.DET Mary=PN.DET Peter

'Mary helped Peter.'

Analyzing Series II as subject agreement (and not object agreement) in Independent clauses is supported by the fact that a pronoun object is represented by a

Series III pronoun as in (10), and a pronominal subject is represented by a Series II suffix, as in (11):

(10) Gitksan

hlimoo-i-t_i=s Mary_i 'nii'y
 help-TR-3=PN.DET Mary=PN.DET 1sg.III

'Mary helped me.' (Tarpent 1987:234)

- (11) a. hlimoo-i-'y Mary
 help-TR-1sg.II Mary
 'I helped Mary.'
- b. hlimoo-i-'y 'niin
 help-TR-1sg.II 2sg.III
 'I helped you.'

Given that a full DP subject triggers Series II agreement, as (10) shows, and the Series III independent pronoun can occur in the object argument position as full DPs do, as (11) shows, we might expect that the Series III pronoun can occur in the subject argument position and also trigger Series II subject agreement. This turns out not to be the case. In these constructions a pronominal subject can only be represented by a Series II morpheme, and a Series III independent pronoun cannot occur in this position, as (12a) and (12b) show. I extend the *pro* analysis above to these cases, and claim that null *pro* occupies this position, which agrees with the Series II, as in (12c):

- (12) a. *hlimoo-i-'y_i 'nii'y_i 'niin
 help-TR-1sg.II 1sg.III 2sg.III
 'I helped you.'

- b. *hlimoo-i-t_i 'niⁱy_i 'niin
 help-TR-3sg.II 1sg.III 2sg.III
 'I helped you.'
- c. hlimoo-i-'y_i *pro*_i 'niin
 help-TR-1sg.II 2sg.III
 'I helped you.'

These patterns exemplify standard *pro*-drop behaviour: the person and number features of the Series II agreement are rich enough to compel the *pro*-drop observed in (12c).⁶

As with Dependent intransitives, Dependent transitives are also introduced by a Dependent marker (again using *yukw* PROG for ease of exposition). However, in Dependent transitives, the function of Series II agreement now shifts to representing the object, while another phi-indexing paradigm, the *Series I* phi-indexing morphemes given Table 4, assume the role of representing the subject.

	SG	PL
1	= <i>ni</i>	<i>tip</i>
2	= <i>mi</i>	(<i>mi</i>)... <i>sim</i>
3	= <i>t</i>	= <i>t</i>

Table 4: IT Series I enclitics (Rigsby 1986; Tarpent 1987)

The Series I morphemes surface pre-verbally and typically (but not always) encliticize to the Dependent marker, characterizing a typical second position clitic.

⁶The one possible difference with a typical *pro*-drop language such as Italian, where a pronoun can be optionally used for emphasis, is that *pro*-drop is obligatory in IT (see Hunt 1993 for a detailed analysis of *pro* in Gitksan). However, Tarpent (1987) reports cases in Nisgha where a Series III pronoun can replace *pro* while triggering 3rd person Series II agreement.

What this means is that in there is both subject and object agreement in Dependent transitive clauses, as shown in example (13):

- (13) yukw= t_i tsap- t_j =s Sheila $_i$ =hl hon $_j$
 PROG=3.I cook-3sg.II=PN.DET Sheila=CN.DET fish
 ‘Sheila’s doing up the fish.’

This example is not particularly revealing, as the 3rd person singular in both Series I and II are the same morpheme =*t*/*-t*. However, replacing a singular object for the plural pronoun object in (14) reveals that the Series II on the verb stem does indeed represent the object:

- (14) yukw= t_i stil-diit $_j$ =s Sheila $_i$ *pro* $_j$
 PROG=3.I accompany-3pl.II=PN.DET Sheila
 ‘Sheila’s going with them.’

The sentences in (15) using pronouns in both subject and object positions clearly exemplify the Series I and II paradigms:

- (15) a. yukw=ni hlimoo-n
 PROG=1sg.I help-2sg.II
 ‘I’m helping you.’
 b. yukw=mi hlimoo-’y
 PROG=2sg.I help-1sg.II
 ‘You’re helping me.’

The transitive clause types and the Series agreement patterns are summarized in Table 5:

By combining these observations with the pronoun and Series II agreement patterns in intransitive clauses, the following generalizations emerge: Series I

	V	A	O
<i>Independent</i>	V-II _i	DP _i /pro _i /*III _i	DP/*pro/III
<i>Dependent</i>	DEP=I _i	V-II _j	DP _j /pro _j /*III _j

Table 5: Template of distribution of Series I, II and III in transitive clauses

only ever mark an A argument, characterizing an ergative distribution; Series III can only ever mark a S or O argument, therefore absolutive in distribution. Series II is pivotal in the sense that it can represent an A, a S or an O, depending on the clause type: it represents an ergative argument in Independent clauses while absolutive in Dependent clauses. The overall distribution of Series I, II and III is summarized in Table 6 below.

	INDEPENDENT	DEPENDENT
<i>Series I</i>	—	A
<i>Series II</i>	A	S/O
<i>Series III</i>	S/O	—

Table 6: Split ergativity in IT

A cursory analysis of the mapping of the three phi-indexing Series to semantic roles, as conditioned by clause type, confirms that Rigsby in his initial study was prudent in not labelling the different Series as ‘ergative’ or ‘absolutive’, instead giving them the descriptively neutral labels I, II, and III. This table also leads to the main generalization that all sentences in Gitksan and Nisgha are ergative, with the Series II markers serving as a kind of lexical pivot across the Independent/Dependent clause types (with the Series II pivot itself showing an ergative alignment across clause types).

The IT Series III independent pronouns could be analyzed as being morphologically complex, consisting of the Series II suffixes suffixing to the ‘base’ *'ni(i)-*, along the lines of (16) (see Livingston 1989 for such an approach):

- (16) a. *gya'a-n=s* Alvin
 see-2sg.II=PN.DET Alvin
 ‘You saw Alvin.’
- b. *t'ugwantxw 'ni-n*
 fall.down 'ni-2sg.II
 ‘You fell down.’

From a purely morphological standpoint this analysis seems plausible, as all of the Series II morphemes could combine with *'ni(i)-* to form a Series III pronoun (cf. Table 1). One of the consequences of this analysis is that there are only two sets of phi-indexing morphemes plus the now-derived independent pronouns (I, II, and *'ni(i)-II*). From here, an independent analysis of the clausal morphosyntax could explain why a derived independent pronoun as in (16b) appears in argument position, as the full DP does in (16a). Déchaine and Wiltschko (2002) claim that this is the right analysis for a similar set of facts in Halkomelem and Shuswap (Salish) pronouns. Under this line of reasoning *'ni(i)-* could be a kind of pronominal determiner, thus allowing the Series II morphemes to occur in argument position as a DP. This would have the added advantage of explaining the lack of a lexical determiner on the non-derived Series III pronouns (cf. (6)).

Analyzing the Series III pronouns as morphologically complex could also reveal what looks like a nominative alignment in the Series II agreement, as both the A in (16a) and the S in (16b) are represented by Series II in the same clause

type (i.e. Independent), thus yielding a more familiar ergative/nominative split conditioned by clause type (Dependent and Independent). However, replacing the lexical DP with a derived Series III pronominal object would neutralize the nominative alignment of the Series II suffixes, as A, S, and O would all now be represented with the Series II suffixes. Using Independent clauses as an example, the 2sg.II suffix *-n* represents S in (16b) and also A and O in (17):

- (17) *tim hlimoo-i-'y 'nii-n*
 FUT help-TR-1sg.SII DET-2sg.SII
 'I'll help you.'

Appealing to an analysis of *'ni(i)-* as a determiner (or even a morphological case marker of some kind) does not rescue this analysis; in fact, the data shows *'ni(i)-* could only be an absolutive case marker, as it marks a Series II S in (16b) and O in (17). This would only confirm an ergative/absolutive orientation.

3.2 Coast Tsimshianic

3.2.1 Agreement and pronouns in CT

Aside from some phonological and morphosyntactic differences, CT agreement and pronouns are cognates with those of IT. The close similarity of forms can be most easily observed in the Series I and II paradigms (Dunn 1979a; Mulder 1994), given in Tables 7 and 8:

Given these similarities, IT and CT diverge in the Series III: in IT the Series III are pronouns and independent words; however, the CT cognates are bound suffixes

	SG	PL
1	<i>n</i>	<i>dp</i>
2	<i>m</i>	<i>m-...-sm</i>
3	<i>t</i>	<i>t</i>

	SG	PL
1	<i>-u / -i</i>	<i>-m</i>
2	<i>-n</i>	<i>-sm</i>
3	<i>-t</i>	<i>-dit</i>

Table 7: CT Series I (cf. Table 4) Table 8: CT Series II (cf. Table 2)

on the verb stem. I label this in CT as Series IIIa in Table 9 below, using the ‘a’ in IIIa to reflect this difference with IT. Another interesting point of divergence between IT and CT is found in an additional pronominal paradigm found only in CT. I call these Series IIIb, given in Table 10.⁷

	SG	PL
1	<i>-’nu</i>	<i>-’nm</i>
2	<i>-n</i>	<i>-’nsm</i>
3	<i>-t</i>	<i>-t</i>

	SG	PL
1	<i>’nüüyu</i>	<i>’nüüüm</i>
2	<i>’nüün</i>	<i>’nüüsm</i>
3	<i>’niit</i>	<i>’niit</i>

Table 9: CT Series IIIa (cf. Table 1) Table 10: CT Series IIIb

What is particularly striking is how the CT Series IIIb pronouns *also* resemble the IT Series III pronouns (hence the ‘b’ label): both are independent words, and both appear to be composed of a ‘base’ prefix (IT *’nii-*, CT *’nüü-*) plus their

⁷A point about terminology must be made here, as I depart from the glosses used in the CT literature (i.e. Dunn 1979; Mulder 1994). In the CT literature the phi-indexing paradigms are called *dependent pronouns*, which I re-label in the following way: the Series I in this paper are called the *subjective* in the CT literature, the Series II are called the *objective* and the Series III are called the *definite objective* (labels that originated with Boas 1911 and extended by Dunn 1979). In this paper and in other work (Peterson 2006) I advocate for the adoption of Rigsby’s IT Series numbering for CT. There are a number of reasons for doing this. First, the labels *subjective*, *objective* and *definite objective* are ambiguous and imply an analysis as, for example, the *subjective* as having something to do with the grammatical role of subjects, and the *objective* with objects, and the *definite objective* with definiteness (and objects). These analyses have never been clearly supported in the CT literature. Additionally, we saw in the previous section how the phi-indexing paradigms can shift in their orientation in representing A, S and O, thus making the traditional CT labels potentially confusing. On a more practical note, the differing labels between CT and IT obscure the observation that the paradigms between CT and IT are nearly identical in form. As such, the Rigsby labels I adapt to CT aid in the direct comparison of IT and CT.

respective Series II morphemes. In the absence of the relevant primary data in CT I will remain agnostic towards this analysis in CT, but I will examine the syntactic distribution and semantic roles of the Series IIIb in more detail below.

3.2.2 Dependent Clauses in CT

It is convenient to begin by looking first at Dependent clauses in CT, as these are very similar to those in IT with respect to the agreement and pronouns. Intransitive Dependent clauses in CT trigger Series II agreement with S exactly as in IT. (18) is a Dependent clause triggered by the imperfective morpheme *yagwa* (IT *yukw*), and the 3rd person plural Series II suffix *-dit* agrees with the plural S:

- (18) *yagwa bus-laxs-dit_i [dp Allen di=s Tom]_i*
 IMPERF chop-wood-3pl.II ASSOC Allen and=PN.DET Tom
 ‘Allen and Tom are wood-chopping.’ (Mulder 1994: 51)

In (19) the dependent markers *la dm* trigger a Dependent clause that has a pronominal S indexed by Series II agreement with *pro* in the argument position:

- (19) *la dm baa-yu_i pro_i*
 about FUT run-1sg.II
 ‘I am going to run soon.’ (Mulder 1994:85)

Also as in IT, in Dependent transitive clauses Series I agrees with the A, and Series II with the O, whether as agreement with full DPs or as pronouns via co-indexation with *pro*, as examples (20) – (23) show:

- (20) yagwa-t_i t'uus-t_j=it Dzon_i=at Meli_j
 PROG=3.I push=3.II-PN.DET John=PN.DET Mary
 'John is pushing Mary.' (Dunn 1979:67)
- (21) yagwa-n_i dzab-(t_j)=a pro_i duułk_j
 PROG-1sg.I make-3sg.II-CN.DET basket
 'I am making a basket.' (Mulder 1994:86)
- (22) ada wil-t_i way-u_j haas_i-it pro_j
 and then-3.I find-1sg.II dog-DEM
 'And then (this) dog found me.' (Boas 1911:384)
- (23) yagwa dp_i babuud-n_j pro_i pro_j
 PROG 1pl.I wait-2sg.II
 'We are waiting for you.' (Mulder 1994:79)

These data confirm a generalization across Tsimshianic: in Dependent clauses Series I always represents A, Series II represents S or O, and the Series IIIa/b pronouns do not occur.

At this point it is useful to look at the Series IIIb independent pronouns before turning to the Independent clauses. Mulder (1994) notes that the Series IIIb independent pronouns are not common in normal speech; rather, they are used for 'emphatic contrast' (p.64). Focus is a typical grammatical strategy used for this purpose, whereby a DP is displaced to the front of a sentence. As mentioned in the previous section, in the Tsimshianic languages displacement of any constituent to a pre-verbal position triggers Dependent clause morphology, along with the expected Series I agreement with A and Series II agreement with S or O. When a DP is focussed, as in (24a), Series II agreement with the focussed subject occurs. It is

in this preverbal focus position that we find the Series IIIb independent pronouns, as in (24b) – along with 3rd person Series II agreement on the verb:

- (24) a. **awta_i** uks-haytg-**it_i** gi-sga lax
 porcupine toward.water-stand-3sg.II DEM-CN.PREP LOC
 maliitg-m kyoox
 green-ATTRIB grass
 ‘It was the porcupine who stood at the edge on the green grass.’

(Mulder 1994: 135)

- b. **’nüüyu_i** nah algyag-**at_i**-a Sm’algyax
1sg.IIIb PAST speak-3sg.II-PREP Sm’algyax
 ‘I was the one who was speaking Sm’algyax.’ (Mulder 1994: 65)

This suggests that Series IIIb pronouns in CT are DPs, and that Series I and II 3rd person agreement occurs with DPs, a Series IIIb pronoun, or *pro* in argument position. Focus in CT (and also IT) is not sensitive to the semantic role of the DP that is displaced, as either an A, S or O can be focussed. If the Series IIIb pronouns can occur in the same position as a full DP and trigger agreement the same way, we predict that they can be focussed regardless of what semantic role they represent. This turns out to be the case; (24b) is a focussed S, and in (25) the A is focussed using a Series IIIb pronoun:

- (25) **’nüüyu_i** dm-**t_i** in baa-(**t_j**)-’n boot_j
1sg.IIIb FUT-3.I TOP run-3sg.II-TRANS boat
 ‘I’m the one who will run the boat.’ (Mulder 1994: 70)

With the focussed pronoun object in (26), the Series IIIb pronoun does not occur sentence-initially, but it is still in the preverbal field, along with the predicted Series I agreement enclitics on the dependent discourse marker *ada*:

- (26) ada- t_i 'niid $_j$ =a nah niidz-(t_j)=a ol $_i$
 and-3.I 1sg.IIIb=CN.DET PAST see-3sg.II=CN.DET bear
 'And I'm the one the bear saw.' (Dunn 1979:343)

I return to the distribution of the Series IIIb pronouns in the next section, where additional evidence is provided in support of analyzing the Series IIIb as DPs.

3.2.3 Independent clauses and the person hierarchy

At first blush, CT Independent clauses look very similar to IT Independent clauses: as with IT, Series IIIa in CT represent intransitive pronominal S in Independent clauses, either with a typical intransitive verb (27) or a predicative adjective (28). The main difference is morphological: the CT Series IIIb are suffixes on the verb:

- (27) t'aa-'nu da awaa ha'lihaʔels
 sit-1sg.IIIb PREP DEM table
 'I sit at the table.' (Mulder 1994:79)
- (28) 'wiileeks-a'nu ada amap'aas-a'nu
 big-1sg.IIIb and beautiful-1sg.IIIb
 'I am big and beautiful.' (Mulder 1994:57)

In the transitive clauses in (29) – (30) Series II agrees with a DP Agent or *pro*, and there is no agreement with O, exactly as in IT:

- (29) dm ts'laayk- t_i =a hana' a_i amt'aa da gwii
 FUT visit-3sg.II-CN.DET woman loon PREP DEM
 'The woman will visit the loon there.'
- (30) galiimks-id $_i$ =a *pro* $_i$ yuup da ts'al-t
 throw-3sg.II-CN.DET dirt PREP face-3.POSS
 'He threw dirt in her face.'

But this is where the similarity with IT ends. Unlike the IT languages, which are entirely ergative in both clause types, the CT languages have a number of splits in Independent clauses conditioned by a person hierarchy (Silverstein 1976: 113):

(31) Person hierarchy in CT

$$1 \geq 2 > 3 > \text{DP}$$

The basic effect of a typical person hierarchy such as (31) is that the further down the person is on the hierarchy, the more likely that argument will be marked with either ergative/absolutive case or agreement. Conversely, the higher up on the hierarchy the more like the person is marked with nominative/accusative agreement. While argument and person hierarchies are a central conditioning factor cross-linguistically in split ergativity, Mulder (1994) suggests that the resulting splits in CT are less common: in Independent transitive clauses with pronouns as arguments, the application of the hierarchy in (31) to the CT Series morphemes yields additional splits that are neither ergative-absolutive nor nominative-accusative. These are summarized in Table 11 below.

	INDEPENDENT			DEPENDENT
	O > A	A ₁ > O ₂	A _{1/2} > O ₃	
<i>Series I</i>	A	A	—	A
<i>Series II</i>	—	O	A/O	S/O
<i>Series III</i>	S/O	S	S	—

Table 11: Split ergativity in CT in sentences with pronoun arguments

In comparing the CT groupings in Independent clauses with the IT we find the lack of Series II representing A and Series III representing S/O, as found in IT

(cf. Table 6). Nonetheless, the $O > A$ grouping is an ergative one. What Mulder (1994:56) calls the *contrastive* alignment emerges from the $A_1 > O_2$ grouping, when a 1st person subject acts on a 2nd person object. The $A_{1/2} > O_3$ grouping is *transitive* alignment, as the person hierarchy forces a higher ranking first or 2nd person subject, and lower ranking object to both be represented with Series II.

When O outranks A on the person hierarchy A is represented with Series I and the O with Series IIIa. This is another point of divergence from IT: the Series I morphemes in both CT and IT are preverbal, but this creates what superficially looks like a Dependent clause in CT, only without a Dependent marker. The 1st person O outranks the 2nd person A in (32a) and the 3rd person A in (32b):

- (32) a. m waay-i'nu
 2sg.I find-1sg.IIIa
 'You found me.'
- b. t ap'ag-a'nu
 3.I remember-1sg.IIIa
 'He remembered me.'

The next question is whether CT Series IIIa are arguments or agreement morphemes. In (33) the pronoun in object position and the $O > A$ hierarchy forces the pronoun object to be realized as Series IIIa:

- (33) t_i waay-i'nu haas $_i$ -it
 3.I find-1sg.IIIa dog-DEM
 'The dog found me.' (Boas 1911:385)

Recall that in IT the Series III are independent pronouns that occupy an argument position. However, the CT facts are different in two respects: first, unlike

IT, the CT Series IIIa are verbal suffixes occupying the same position as the Series II agreement morphology.⁸ Second, a problematic result arises if the CT Series IIIa are treated as pronouns occupying an argument position, along the lines of IT Series III. In the Gitksan (IT) sentence in (34a) the pronoun object is realized as a Series III independent pronoun 'nii'y. If the CT Series IIIa suffixes were indeed pronouns the order of arguments would be reversed, as (34b) shows:

(34) a. Gitksan

gya'a-t_i=hl [smax_i]_A ['nii'y]_O
 see-3sg.II=CN.DET bear 1sg.III
 'The bear saw me.'

b. Sm'algyax

na-t_i 'niidz[-a'nu]_O [ol_i]_A
 PAST-3.I see-1sg.IIIa bear
 'The bear saw me.' (Dunn 1979f:63)
 ≠ 'I saw the bear.'

Treating the CT Series IIIa morphemes as agreement – and not pronouns as their IT Series III counterparts – makes them amenable to a *pro* analysis: *pro* occupies the object (or subject) argument position which triggers Series IIIa agreement on the verb.

(35) a. m_i ap'ag-a'nu_j [pro_i]_A [pro_j]_O (cf. (32b))

b. na-t_i 'niidz-a'nu_j [ol_i]_A [pro_j]_O (cf. (34b))

⁸Although the data is not conclusive, the Series IIIb appear to occupy argument positions in the same way that the Series III pronouns do in IT. This suggests that the CT Series IIIa are agreement morphemes and not pronouns, and that the CT Series IIIb instead fulfill this function.

An examination of the distribution of Series I and IIIa in examples (32a) – (33) yields an ergative orientation ($A_I:S/O_{III}$) in Independent clauses. At this point, the only notable difference between IT and CT is that the $O > A$ hierarchy forces the Series I agreement with the lower ranked agent (where this is Series II in IT without the argument hierarchy). The other difference is largely morphosyntactic in nature: unlike IT, in CT the Series IIIa are *bona fide* agreement.

The divergence between IT and CT is more noticeable when A outranks O. For example, in (36) the 1st person A outranks the 2nd person singular O in (36) and 2nd person plural O in (37). In cases such as these A is represented by Series I and O by Series II, again resulting in what superficially looks like a Dependent clause (the preverbal future particle *tim* does not trigger a Dependent clause in any of the Tsimshianic languages):

(36) n-dm man-gad-n
 1sg.I-FUT up.through-take-2sg.II
 ‘I will take you up.’ (Mulder 1994: 51)

(37) n-m humooon-sm
 1sg.I-FUT help-2pl.II
 ‘I’ll help you (pl).’ (Mulder 1994: 57; compare with IT in (17))

Examples (36) and (37) taken together with the intransitive pronominal S in (38), which are always Series IIIa in Independent clauses, reveals the contrastive orientation: each semantic role is represented by a different Series ($A_I:S_{II}:O_{IIIa}$):

(38) dm al tgyi ksgooga-’nu
 FUT EMPH down be.first-1sg.IIIa
 ‘I’ll go down first.’ (Mulder 1994: 51)

When a 1st or 2nd person subject A outranks a 3rd person object O ($A_{1/2} > O_3$), as in (39a) and (39b), both represented by Series II. The result is a sentence that has *two* Series II morphemes, both suffixed to the verb stem:

- (39) a. ap'ax-**d-u**
remember-**3sg.II-1sg.II**
'I remember him.' (Dunn 1979:225)
- b. 'dm waal-**u-t**, daya=ga awta
FUT do-**1sg.II-3sg.II** say=CN.DET porcupine
'I will do it,' said the porcupine. (Mulder 1994:58)

Because both A and O are marked with Series II, this yields Mulder's transitive orientation ($A/O_{II}:S_{IIIa}$). However, given the person hierarchy there should never be any ambiguity in which argument the stacked Series II morphemes represent: the 3rd person agreement will always be present and always represents the pronoun object, regardless of whether the subject agent is 1st or 2nd person. This explains the variation in the order of agreement between (39a) and (39b).

In constructions like these we find the Series IIIb independent pronouns again; example (40) shows how a Series IIIb pronoun co-refers with Series II on the verb:

- (40) niidz-u-t_i 'nüün_i
see-1sg.II-3sg.II 2sg.IIIb
'I see you.' (Mulder 1994: 71 [Boas 1911:386]; Lit. I see it, you)

Mulder (1994) notes that in constructions such as (40) the Series II is not agreement, but rather the expression of a pronoun. This suggests that Series IIIb in these cases is a kind of right dislocation (as the literal translation suggests). However, another example shows Series II co-referring with a full DP:

- (41) nah ʔa 'niidz-d_i-u 'yuuta_i dim-t_i in baa-'n
 PAST just see-3sg.II-1sg.II man FUT-3.I REL run-CAUS
 'I just saw the man who will run the boat.' (Mulder 1994: 143)

The Series II object co-refers with the head of the relative clause 'yuuta (man). If the right dislocation analysis is correct the literal translation of (41) is predicted to be 'I just saw him, the man who will run the boat.' The relevant primary data is lacking that would show whether this involves syntactic agreement or simply semantic co-reference. Either way, it provides evidence for a DP analysis of Series IIIb pronouns in CT.

The distribution of Series I, II, and IIIb in transitive CT sentences is summarized in the templates given in Table 12 (compare with Table 5 in IT):

		V	A	O
<i>Independent</i>		V-II _i	DP _i /pro _i	DP/*pro
	A _{1/2} > O ₃	V-II _i -II _j	pro _i	pro _j /DP _j /(IIIb _j)
	A ₁ > O ₂	I _i V-II _j	pro _i	pro _j
	O > A	I _i V-IIIb _j	pro _i /DP _i	pro _j
<i>Dependent</i>	DEP=I _i	V-II _j	DP _i /pro _i	DP _j /pro _j

Table 12: Template of distribution of Series I, II and IIIb in transitive clauses

It is important to emphasize that the CT languages do not have a rare or exotic property, given that these alternative alignments are not commonly found in the world's languages. Malchukov (2010) reports a similar situation in a number of Iranian languages, where it is called the *double-oblique* pattern. In Vafsi, both the A and O are marked by the oblique case in the past tense (Malchukov 2010: 184):

- (42) luas-i kærg-e=s bææ-værdæ
fox-OBL.SG chicken-OBL.SG=3sg PFV-take.PST
‘The fox carried off (the) chicken.’

Malchukov claims that this pattern can be made sense of from a diachronic perspective. The double-oblique case construction in (42) is the end point of grammaticalization path that has its origins in the multifunctional dative-genitive case in these languages. While applying a diachronic analysis to the CT facts would likely shed light on the emergence of the transitive and contrastive alignments, it is beyond the scope of this paper. Although Mulder’s analysis is essentially accurate, I suggest there is a deeper generalization that captures these groupings. The alignments in Table 12 can be described as logical expansions of ergativity: in each of the possible alignments A and S are never grouped in the same clause type, meaning both clause types are ergative; and they are ‘logical expansions’ as the other possible semantic to grammatical role mappings are realized using the three Series morphemes, while still preserving an ergative alignment. Under this view, the labels ‘transitive’ and ‘contrastive’ just characterize sub-types of ergativity. As such, we can sustain the claim that the Tsimshianic languages are purely morphologically ergative.

Equipped with an analysis of the agreement and pronoun morphology and how they are aligned in IT and CT we are now in an ideal position to examine the other area of Tsimshianic that apparently shows sensitivities to the mapping between semantic and grammatical roles: the connectives.

4 Tsimshianic connectives

A prominent feature of Tsimshianic is what are called the *connectives* in the Tsimshianic literature. Connectives have determiner-like properties in that they precede an NP and encode a specific kind of semantic information about that NP. In IT the *common noun connective* =hl (CN.DET) in (43a) encodes the status of *horse* as a common noun. In (43b) the *proper noun connective* =t (PN.DET) encodes the proper noun status of the individual *Alvin*. A curious feature of the connectives is the syntactic-phonological word mismatch between the NP and its connective: IT connectives typically (but not always) encliticize to the immediately preceding constituent in the sentence – regardless of that constituent’s status in the syntax of the clause, as the bracketing of the examples in (43) shows:

(43) IT connectives (examples from Gitksan)

- a. kuxw[=**hl** kyuwatan]
run.away=**CN.DET** horse
‘The horse ran away.’
- b. kuxw[=**t** Alvin]
run.away=**PN.DET** horse
‘Alvin ran away.’
- c. hlimoo-i(-t)[=**s** Tom][=**t** Mary]
help-TR-3sg.II=**PN.DET** Tom=**PN.DET** Mary
‘Tom helped Mary.’

The proper noun determiner has a morphosyntactically-conditioned allomorph =s, which occurs in Independent transitives as in (43c), and in Dependent transitives marking a proper noun subject, as in (44) (Hunt 1994):

- (44) hla yukw dim kuxw-(t_i)=s Alvin_i
 INCEPT PROG FUT run.away-3sg.II=PN.DET Alvin
 ‘Alvin is about to run away.’

Peterson (2004; 2006) analyzes the connectives as semantically weak determiners. Under this analysis the connectives =*t/s* and =*hl* simply represent the argument status of the NPs they precede – they do not have any typical determiner semantics (i.e. definiteness or uniqueness), but only a common vs. proper noun distinction. Because they are determiners, and not case morphology or agreement, we expect that the connectives do not encode any mappings between grammatical and semantic roles. However, Tarpent (1987:474) argues against =*t/s* allomorphy, citing cases where =*s* co-occurs with another connective, the associative *tip*:

- (45) giikw-i=s **dip** Lisa gan=t Henry=hl wilp
 buy-CTRL=PN.DET ASSOC Lisa COORD=PN.DET Henry=CN.DET house
 ‘Lisa and Henry bought a house.’ (Forbes 2013:36)

Forbes (2013) provides a fine-grained theoretical analysis of the internal structure of the Gitksan DP that captures the co-occurrence of =*s* and *tip* in sentences such as (45). Based on its semantic properties (proper noun status and associativity), Forbes calls *dip* a ‘true’ determiner. Because of this, *tip* is merged in a different syntactic position than =*t* and =*hl*, thus they are able to co-occur. This analysis is compatible with treating =*t* and =*s* as allomorphs.

A connective-as-determiner analysis is challenged by the CT languages, which have a considerably more complex paradigm of connectives. In addition to encoding the common/proper noun distinction, enclitic CT connectives are sensitive the

semantic role of the argument NP they mark. The Sm'algyax reduced connectives are given in Table 13, and the Sgüüxs in Table 14 (Dunn 1979; Mulder 1994):⁹

	PROPER NOUN CONNECTIVE	COMMON NOUN CONNECTIVE		PROPER NOUN CONNECTIVE	COMMON NOUN CONNECTIVE
A	=as/=dit	=a/=da	A	=as/=dit	=i/=di
S	=as	=a	S	=as	=i
O	=at	=a	O	=it	=i

Table 13: Sm'algyax connectives

Table 14: Sgüüxs connectives

What determines the arrangements in Tables 13 and 14 is the transitivity of the clause coupled with the Independent/Dependent type of the clause. Taken together, what emerges is all of the logically possible alignments of semantic and grammatical roles, as summarized in Table 15 (adapted from Mulder 1994: 97).

	PROPER NOUN	COMMON NOUN
<i>Independent clauses</i>	A/S/O (nominative)	A/S/O (neutral)
<i>Dependent clauses</i>	A:S/O (contrastive)	A:S/O (ergative)

Table 15: Alignments of the CT Connectives (both Sm'algyax and Sgüüxs)

A discussion of the CT connective system is relevant in two ways: first, it is claimed in the CT literature that the CT connectives reveal a nominative alignment (Dunn 1979a,b; Mulder 1994). The person hierarchy is used to support this claim, as a proper noun (a human individual) would be represented by nominative/accusative morphology, while the lower ranked common noun the erga-

⁹Mulder's (1994) study of the Boas (1911) texts claims that there are additional Sm'algyax connectives that encode a present/absent distinction (1994:33). However, there are many missing connectives in this expanded paradigm, and these additional meanings have not been conclusively determined. As such, these additional connectives are not discussed here. Rather, Tables 13 and 14 are what Mulder calls the *reduced* connectives.

tive/absolute. Although plausible, this would be surprising from another perspective, since determiners cross-linguistically do not encode alignments of grammatical and semantic roles. I show that a reconstruction of agreement morphology and determiners in CT, supported by a comparative analysis with IT determiners, reveals that the multiplicity of alignments in Table 15 result from the fusion of an invariant determiner with an independently attested agreement marker. As such, like their IT counterparts, CT connectives are not aligned in any way.

To begin with, the neutral alignment of the common noun connectives, analyzed as determiners, in Independent clauses comes for free:

(46) Sm'algyax: Neutral alignment

- a. nah t'uus(-t_i)[=**a** y'uut_i]_A[=**a** hanak']_O
 PAST push-3sg.II=CN.DET man=CN.DET woman
 'The man pushed the woman.' (Dunn 1979: 63)
- b. banm=xstoox[=**a** ɬguwoomɬk]_S
 pretend=sleep=CN.DET child
 'The child is pretending to sleep.' (Stebbins 2003: 397)

Peterson (2004, 2006) claims that the connectives in CT are in fact morphologically complex: their synchronic form is the result of the fusion of the 3rd person Series II agreement and a common or proper noun determiner. The linear order of these fused elements involves the 3rd person Series II agreement and a following determiner in IT, as schematized in (47):¹⁰

¹⁰See also Dunn (1979b) and Mulder (1994:43) who discuss the viability of this approach.

(47) CT: Verb=[AGR.DET]

IT: Verb-[AGR]=[DET]

Under this analysis the paradigm of CT connectives is drastically simplified, and all of the alignments in Table 15 disappear. The inventory of Tsimshianic connectives-as-determiners is given in Table 16:

	Common Noun CN.DET	Proper Noun PN.DET	Plural ASSOC.DET
IT	= <i>hl</i>	= <i>t</i> (or = <i>s</i>)	<i>tip</i>
CT	= <i>a</i> / <i>i</i>		

Table 16: Tsimshianic determiners (Peterson 2006)

The ergatively aligned common noun determiner in Dependent clauses is re-analyzed as non-aligned as follows: the common noun determiner =*a* marks the common nouns *hoon* ‘fish’, *óli* ‘bear’ and *y’axw* ‘man’, each of which represents a different semantic role in (48) (just as with the IT common nouns in (46)). The original common noun connective =*di* which is claimed to only mark A in Dependent clauses is isolable as 3rd person Series II grammatical object agreement (-*t*) plus the common noun determiner =*i* marking the grammatical subject, via (47). This fission analysis is applied in the second lines of example (48):

(48) Sgüüxs: Ergative reduced to non-aligned

- a. *yágwa-t níis=di* *óli=i* *hoon*
yágwa-t_i níis-t_j[=i *óli_i]_A[=i* *hoon_j]_O*
 PROG-3.I glare.at-3sg.II=CN.DET bear=CN.DET fish
 ‘The bear glared at the fish.’ (Dunn 1979: 133)

- b. dzagha dá'uhl(-t_i)[=i y'axw_i]S t'ei lu 'asdi nak
 across go-3sg.II=CN.DET man across on both sides
 'A man went across the inlet.' (Dunn 1990: 2)

Voicing of intervocalic obstruents is a robust phonological process across Tsimshianic, hence the [d] allophone of the underlying 3rd person /-t/ agreement in (48a) (Rigsby and Ingram 1990; Brown 2010). This analysis explains part of the original alignments in Table 15: the original A-marking connectives (*dit*, *da*, *di*) all contain Series II object agreement (/t/) fused with a grammatical subject-marking enclitic determiner (=t, =a, =i).

Davis and Forbes (2015) provide a detailed analysis of the morphophonological rules that condition that =s allomorphy that occurs with the proper noun determiners in IT, which also applies in CT. The isolable proper noun determiner =t, which is realized as the =s allomorph with transitive subjects, now reduces the nominative alignment to neutral, coupled with epenthetic [a] or [i], which breaks up the underlying /-t=t/ and C=t in sequences in general (see Mulder 1994:24, Tarpent 1987:852 and Davis and Forbes 2015 for details):

(49) Sm'algyax: Nominative reduced to non-aligned

- a. niic(-t)=as Nadine=at Isabelle
 niic(-t_i)[=t Nadine_i]A[=t Isabelle]_O
 see-3sg.II=PN.DET Nadine=PN.DET Isabelle
 'Nadine saw Isabelle.' (Stebbins 2003: 19)
- b. haytg=as simon da na-dzoog=a aks
 haytg[=t simon]_S da na-dzoog=a aks
 stand=PN.DET Simon PREP POSS-edge=CN.DET water
 'Simon stood by the edge of the water.' (Mulder 1994: 79)

Finally, we can apply fission to the original proper and common noun connectives in dependent clauses that give rise to the contrastive and ergative alignments, showing via agreement reconstruction that these are non-aligned, as in (50):

(50) Sm'algyax: Contrastive reduced to non-aligned

- a. ʔa-t k'yilum=**dit** dzodz=**a** baaysik das dzon
 ʔa-t_i k'yilum-t_j=[**t** dzodz_i]A[=**a** baaysik_j]O das dzon
 PAST-3.I give-3sg.II=PN.DET G.-CN.DET bicycle PREP J.
 'George gave a bicycle to John.' (Mulder 1994: 40)
- b. yagwa-t t'uus-**dit** Dzon=**at** Meli
 yagwa-t_i t'uus-t_j=[**t** Dzon_i]A[=**t** Meli_j]O
 PROG=3.I push=3.II-PN.DET John=PN.DET Mary
 'John is pushing Mary.' (Dunn 1979:67)
- c. yagwa yawxg(-t)=**as** ami
 yagwa yawxg(-t_i)=[**t** ami_i]S
 PROG eat-PN.DET Ami
 'Amy is eating.' (Mulder 1994: 68)

In sum, previous analyses of the CT connectives claim that there is a part of the CT grammar that is nominatively aligned, in addition to having contrastive and neutral alignments. Along with dissolving the alignments in Table 15, this analysis shows there is no alignments of any kind in the CT connective system, and by extension, no nominative alignment in the morphology of Tsimshianic. What we are left with is a fairly standard paradigm of determiners in CT that, despite being different lexemes, correspond exactly to those in IT.¹¹

¹¹Although in some sentences Boas (1911:362-363) does transcribe the CT common noun determiner =a as =t, the same lateral fricative [ʔ] as the IT common noun determiner =hl.

5 Conclusion

Dixon's generalization regarding the lack of a purely morphologically ergative language is challenged by the Tsimshianic languages: the alignments of agreement and pronoun distribution in both IT and CT are purely ergative (with the exception of the CT Series IIIb). The IT languages do have a split, one conditioned by clause type. Nonetheless, both sides of the split have an ergative alignment; even the pivot, the Series II agreement morphemes across Independent and Dependent clauses, is ergative. I also claim that the CT languages are purely morphologically ergative, in the sense that what lies on the other side of the split – the contrastive and transitive alignments – are simply expansions of how A and O are represented in the agreement patterns. Essentially, A and S never overlap, meaning CT has an ergative core. This analysis also shows that the CT languages are not exotic in any way: these unusual alignments follow logically from the available agreement options in CT, as conditioned by the person hierarchy.

This analysis does not shed light on the long standing issue of clause types in the Tsimshianic literature, as it does not provide an explanation as to why the Independent/Dependent clause types constitute the main split in Tsimshianic. This conforms to the cross-linguistic generalization that embedded environments are typically ergative in a split ergative language. However, we still lack an understanding of what exactly conditions the clause types. Mulder (1994) defends a mood analysis of the Independent/Dependent clause types in CT, and also provides the most detailed account of what role tense, aspect and the person hier-

archy plays in the clause types. We saw the effects of the last of these in the agreement/pronoun patterns. Nonetheless, a mood-based analysis seems untenable in IT. Evidence from displacement and other non-mood meanings suggest the two clause types are the result of purely syntactic factors.

Dunn (1979b) first suggested the possibility of segmenting that Sm'algyax connectives, but only to argue against it, as "...no great increase in efficiency or simplicity can be gained by considering the connectives a series of subsyllabic suffixes. The segmented analysis requires more morphs with greater ambiguity (measured as morphs per homonym set) than does the unsegmented analysis" (1979:136). What Dunn seems to be concerned with is the difficulty a Sm'algyax learner would face with the homonymy of the proper noun connective and 3rd person agreement, and with the added complication of =s allomorphy. Davis and Forbes (2015) express a similar concern from another perspective: the morphophonological rules (of which I only briefly summarized above) needed to derive the right surface forms of the connectives introduce their own unique complexities for the learner. Further research is needed to explore this balance. Nonetheless, what is not clear is the payoff in terms of learnability: the unsegmented connectives afford a smaller lexicon, but at the expense of creating a *sui generis* class of morphemes with highly specialized meanings. Cross-linguistically we do find fusions of determiners with other adjacent lexical categories in the syntax, such as the preposition-determiner contractions in the Romance languages. However, these fusions do not encode semantic roles as the unanalyzed connectives do. Additionally, the unsegmented connectives not only

obscure regular, predictable patterns of agreement and argument marking that are independently attested CT, but the correspondences that hold between the CT and IT agreement and determiners.

Finally, within the context of a study on the ergative properties of Tsimshianic it is worth mentioning that there has been some investigation into syntactic ergativity. Mulder (1994) claims that Sm'algyax is syntactically ergative, adducing tests from extraction, imperatives, coordination, subordination, and relativization that target A differently than S or O in Sm'algyax. Hunt (1993:41) suggests that the same results do not obtain in Gitksan. I also leave it to future research to cast a contemporary light on these properties, and how it connects to the morphological ergativity described in this paper.

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