

PERSISTENT ERGATIVITY: AGREEMENT AND SPLITS IN TSIMSHIANIC

by

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A thesis submitted in conformity with the requirements
for the degree of Doctor of Philosophy
Department of Linguistics
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Abstract

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University of Toronto
2018

This thesis presents a morphosyntactic analysis of agreement patterns in the Tsimshianic language family (primarily Gitksan, with some focus on Coast Tsimshian). These ergative languages demonstrate several distinct splits in the distribution of agreement, conditioned by differences in clause type, nominal type, and person. Despite the presence of such agreement splits, the ergative pattern of agreement is largely unaffected: I refer to this property as persistent ergativity, as opposed to split ergativity. A pattern of particular interest is that of agreement switch (Kalin 2014; Kalin and van Urk 2015), or pivoting ergativity (Davis 2018). In this type of split, the morphological paradigm used to mark ergative in one context is used to mark absolutive in another context, with the overall ergative/absolutive alignment of the system remaining unchanged.

At the heart of the proposed analysis is the use of feature relativization to generate several different arrays of potential agreement targets. I propose that agreement in Tsimshianic can be modeled with an ergative agreement probe on v which consistently agrees with the transitive subject, plus a higher agreement probe with several options for how it may be relativized, and consequently several potential agreement distributions: absolutive, nominative, or ergative. In particular, I analyze agreement switch as the result of the high probe agreeing directly with the lower ergative probe. This is accomplished by relativizing the higher agreement probe to uninterpretable ϕ -features, found exclusively on the lower ϕ -agreement probe. I capitalize on several familiar featural distinctions (including the interpretable/uninterpretable distinction), and apply them in new ways through feature relativization to generate typologically unusual splits without affecting the ergative pattern of v -agreement.

The proposed analysis is novel among accounts of Tsimshianic in its approach to the factor conditioning the clause type split, and in its connection between agreement and A'-patterns. It is furthermore comprehensive, in explicitly accounting for agreement and word order patterns across both the Interior and Coast branches of the family. The analysis of the complex agreement patterns presented is of interest to theories of ergativity, as well as theories on the mechanics of features and agreement systems.

Acknowledgements

Woy simgigyat, sigidim haanak', ganhl k'uba wilksihlxw. I am indebted to my generous Gitksan teachers, who have shared their language with me. In particular, thank you to Barbara Sennott (Harris), Vince Gogag, Hector Hill, and Louise Wilson for many sessions of learning. I also thank Ray Jones, Xsiwis, Simidiiks, Rena Benson and family, Myrna Aksidan, TB, AS, FW, PC, PH, Nik'at'een, VH, and all others who I have spoken with on the laxyip, as well as those who have witnessed and supported all of us in the sharing of knowledge and language. *Sim 'wii t'isim ha'miiyaa 'nii'y loosi'm.*

I don't know what order to thank everyone else. There have been so many people who have contributed to making this dissertation what it is. Thanks are due to: my generous supervisor, Susana Bejar, for supporting my ideas and offering me tissues even when I don't want them. Henry Davis, without whom I would never have started working on Gitksan at all, and who always, always, always pushes me forward. Diane Massam and Alana Johns, for being great teachers and committee members, and for sparking new thoughts and ideas. Elizabeth Cowper, for asking me hard questions at both the beginning and very end of this process. Arsalan Kahnemuyipour and especially Jessica Coon, for their fresh eyes and exciting questions! Keren Rice, for being the best chair and kindest presence in the department. Michael Schwan, the best fieldwork buddy, *yugwimaa xsax 'niin ant da'akhlxw dim litsxxwsun.* The six month club, Emily Clare, Tomohiro Yokoyama, Alex Motut, Alicia Grubb, and also Jessica Denniss, for being there for me for all six (seven? ten?) months, and who I know are going to crush all of their own dissertation monsters like the awesome people they are, just as I have. Everyone else who has been so integral to my department experience, some of whom are still around making it great and some of whom I see less often nowadays: Kaz Bamba, Emily Blamire, Joanna Chociejski, Derek Denis, Julie Doner, Ross Godfrey, Ruth Maddeaux, Dan Milway, Maida Percival, Chris Spahr, Becky Tollan... and of course Mary, and my birthday buddies Jennifer and Deem.

To my parents, for honestly being the best parents anyone could hope to have. I love you so much. More than anyone else, I would not be here without everything you have done for me. Thank you for every unnecessary package that has arrived at my doorstep. I have appreciated almost every single one. To my brother, for somehow turning into a cool grownup while I wasn't looking. To the temporary cat, for being cute and sometimes sitting on my lap of her own accord. To Janelle Monáe's song *Make Me Feel*, the best for dance breaks. And finally, to a couple of other people who will probably never read this document, for being inspiring.

This research was supported by the Social Sciences and Humanities Research Council of Canada and the Jacobs Research Fund.

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Abbreviations

1	first person	F	feminine
2	second person	FOC	focus
3	third person	HUM	human
ABS	absolutive	INAN	inanimate
ACC	accusative	INCEP	inceptive
AFFRM	affirmative	INS	instrumental
ANIM	animate	INTR	intransitive
ANTIP	antipassive	IPFV	imperfective
ART	article	IRR	irrealis
ASSOC	associative	JUSS	jussive
ATTR	attributive	LOC	locative
AUX	auxiliary	MOD	modal
AX	agent extraction	NEG	negative
CAUS	causative	NMLZ	nominalizer
CCNJ	clausal conjunction	NOM	nominative
CN	common noun determiner	OBJ	object
CNTR	contrastive	OBL	oblique
COM	comitative	PART	partitive
COMP	complementizer	PASS	passive
DAT	dative	PCNJ	phrasal conjunction
DEM	demonstrative	PFV	perfective
DESID	desiderative	PL	plural
DN	determinate noun determiner	PR.EV	prior evidence
DUR	durative	PREP	preposition
DWID	domain widener	PROSP	prospective
EPIS	epistemic	PST	past
ERG	ergative	QUOT	quotative

REPORT	reportative	T	T-morpheme
SG	singular	TR	transitive
SPT	spatiotemporal	VAL	valency adjuster
SS	subjunctive subject	VER	verum focus
SUBJ	subjunctive	YNQ	yes-no question
SX	intransitive subject extraction		

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Chapter 1

Introduction

Common to all language is the ability to distinguish the role of participants in an event. However, the method of communicating this information differs greatly across languages of the world. Some languages differentiate actors from act-ees through case marking on nouns, while other languages differentiate actors from act-ees through agreement on verbs; still others achieve this differentiation through word order. Languages furthermore vary in the precise way that actors are contrasted with act-ees – the way that grammatical subjects and objects are defined. Many languages use familiar nominative-accusative patterns to differentiate the participants in an event, while others use the less common ergative-absolutive pattern. This dissertation focuses on the latter type of pattern.

Ergative patterns in language are well-known to split. In particular, languages which exhibit an ergative case or agreement alignment frequently have the property of morphological *split ergativity*, where some factor such as the aspect or persons involved in the clause conditions a change between ergative and nominative agreement (Silverstein 1976; Dixon 1994). This dissertation, in contrast, examines an instance of ergative alignment that persists across splits in agreement.

I specifically examine the Tsimshianic languages of northern British Columbia, Canada, which in previous work have been described as having complex agreement and case marking. This is the first comprehensive analysis of agreement patterns across both branches of the Tsimshianic family; while the bulk of the dissertation focuses on the properties of Gitksan (Interior), the variety on which I have conducted primary fieldwork, I also extend my discussion to agreement patterns in Coast Tsimshian (Maritime). I demonstrate that agreement across the family follows a core ergative pattern in its agreement, which is almost never interrupted despite the presence of three major agreement splits. We can refer to this as *persistent ergativity*, in contrast to split ergativity.

Recent work demonstrates that splits that interrupt agreement in certain contexts can be modeled as differences in syntactic *structure* between those contexts (Laka 2006; Coon 2013; Coon and Preminger 2017). In direct contrast to this line of research, in this dissertation I propose that all three of the Tsimshianic agreement splits arise instead due to differences in *features*. I argue that the Tsimshianic languages are structurally similar across all split contexts, but that differences in the relativization of agreement probes and the features of potential agreement targets across different conditioning environments result in very different surface patterns. This difference in the way agreement splits can be modeled allows us to understand why, crosslinguistically, some agreement splits disrupt ergative alignment while others do not.

1.1 Goals of the thesis

This thesis has several major aims, both descriptive and analytical. First, I aim with this work to present a comprehensive review of verbal agreement patterns across both branches of the small Tsimshianic language family. This family-level perspective is appropriate for Tsimshianic, which has been described as a closely-related dialect *continuum* rather than a family with very divergent linguistic subgroups (Peterson 2017), but at the same time is not a continuum that is overwhelmingly large in scale.¹ The agreement facts have been previously laid out in the deep history of linguistic research on Tsimshianic (Boas 1911; Dunn 1979b; Rigsby 1986; Tarpent 1987b; Mulder 1994; Sasama 2001; Anderson and Ignace 2008), but to this point, work on the Interior and Maritime branches has remained fairly separate. Some cross-Tsimshianic work has been undertaken recently, primarily on the connective (case/article) system (Peterson 2017; Davis 2018). These works discuss agreement in Tsimshianic, but in detailing the connective system necessarily focus on third-person agreement patterns. This dissertation reviews verbal agreement across all persons, with the aim of providing a clear, comparative description of current patterns in both branches of the family. I do so specifically by comparing cognate morphemes and patterns, and pointing out similarities and differences.

The second major aim of the thesis is to present a cohesive theoretical analysis of agreement in Tsimshianic. By the end of the dissertation, I develop a morphosyntactic analysis of both varieties where the two active agreement paradigms are associated with identical points in the syntactic structure of both languages I consider, and operate in largely the same fashion. This

¹It has been reported that Coast Tsimshian speakers can understand Gitksan to some degree, while intelligibility in the other direction is somewhat harder. The speech of villages closer to the border between Coast Tsimshian and the Interior-speaking region (particularly Kitselas/Gitselas) is also said to have some mixed properties of both branches. A dialect-specific investigation of Tsimshianic has yet to be conducted, but an ongoing dictionary project at the University of British Columbia (PI: Henry Davis) is proceeding with the intent of documenting the individual village dialects independently.

demonstrates a deep parallel between the agreement of the Interior versus Maritime branches, despite surface differences in how agreement plays out for each.

It is hoped that this description and analysis will be of use both to researchers with a pre-existing interest in the Tsimshianic languages, and more broadly to those theoretically-inclined linguists interested in complex agreement patterns, and particularly ergativity. The Tsimshianic language family is of interest to the broader linguistic audience in that it is a relatively small dialect continuum. Areas where new grammatical contrasts have developed over time can be pinpointed, and the effect of developing such contrasts traced to additional areas of the grammar. I conduct such an investigation in Chapter 3, in analyzing a nominal-type split innovated in the Interior branch. In the context of the Tsimshianic family as a whole, we can not only see synchronic agreement splits in action, but also trace their emergence over time. It is highly valuable for theories of agreement to be able to trace such changes.

The Tsimshianic languages also exhibit some crosslinguistically novel agreement patterns, of interest to the theoretical audience. In Chapter 4 I engage in extensive discussion of *agreement switch* (or *agreement reversal*), a pattern that has received little prior analysis in the generative literature on agreement operations (perhaps exclusively Kalin 2014; Kalin and van Urk 2015). In an agreement switch pattern, the alignment of a clause as nominative/accusative or ergative/absolutive remains unchanged, but different morphological case or agreement paradigms are used to mark arguments in different contexts (for example, in Gitksan, the paradigm marking ergatives in one context switches to mark absolutes in another context; in the Tsimshianic literature this has also been referred to as a *pivoting ergative* pattern; Davis 2018). In this dissertation, I present a new syntactic analysis of the agreement switch pattern by proposing a new dimension along which ϕ -agreement can be relativized: to interpretable versus uninterpretable features. I also present some new analyses of agreement splits affecting absolutive, rather than ergative, agreement.

1.1.1 Introduction to ergativity

Ergative patterning, or ergativity, is a pattern that marks subjects differently depending on whether they appear in a transitive or intransitive clause – that is, whether or not an object also appears in the clause (e.g., Dixon 1979, 1994; Aldridge 2008; Deal 2015a). Subjects of transitive clauses (A) receive unique (*ergative*) marking, while subjects of intransitive clauses (S) and objects (O) are generally marked identically to one another (an *absolutive* pattern). Ergative/absolutive patterns contrast with nominative/accusative patterns, where subjects form a morphological class regardless of transitivity, in opposition to objects. This is schematized in Table 1.1.

	NOM/ACC		ERG/ABS	
Transitive	Agent	Object	Agent	Object
Intransitive	Subject		Subject	

Table 1.1: Ergative vs. nominative alignment

The description and analysis of ergative systems is typically concerned with two different types of ergativity: “surface” or “morphological” ergativity, where the above-described pattern is overtly apparent in the case or agreement system of a language; and “deep” or “syntactic” ergativity, where the above discrimination against transitive subjects occurs in areas like binding, coordination, or A'-extraction (Murasugi 1992; Manning 1996).

It has been famously claimed that languages with ergative-patterning morphology always split somewhere in their grammar to a nominative alignment, whether it be between morphology and syntax or between two different morphological patterns (Moravcsik 1978). Splits that affect morphological ergative patterns are typically based on the following factors: Tense/Aspect/Mood (most typically aspect; see Coon 2013 and Legate 2017 for some reevaluations of “tense” splits as aspect splits), nominal type (typically speech act participants vs. third persons, lexical vs. pronominal, etc), and volition or agentivity (“split S” or “fluid S” patterns, often involving a split in the behavior of intransitive verbs).

Generative theoretical work on ergativity is partially focused on identifying the proper means of modeling *ergative* patterns in natural language, which are restricted by the transitivity in a clause, as opposed to *nominative* ones, which are not (these approaches furthermore differ between modeling syntactic or morphological ergativity; see Aldridge 2008 and Deal 2015a for discussion). It has been debated whether ergativity is established via agreement relations high in the clause (e.g. Levin and Massam 1985; Bobaljik 1993; Bittner and Hale 1996b), low in the clause (e.g. Woolford 1997; Ura 2000; Anand and Nevins 2006; Legate 2017), or by other means entirely (Marantz 1991; Baker 2015). Lines of research on ergativity are also partially focused on developing explanations for how and why ergative-nominative *splits* occur in individual languages, based on the various factors that can condition these splits (see e.g. Laka 2006; Ura 2006; Legate 2014; Coon and Preminger 2017; Woolford 2017).

1.1.2 Questions raised by Tsimshianic

With this background in mind, Gitksan and the other Tsimshianic languages present a novel datapoint of interest to current research on ergativity. The Tsimshianic languages exhibit both ergativity in their agreement alignment, and also a number of splits that primarily disrupt *ab-*

solute agreement, leaving ergative agreement unaffected. Gitksan has two kinds of splits: a clause-type split, and a nominal-type sub-split (which, as I will demonstrate in Chapter 3, is based on a crosslinguistically atypical set of properties). Coast Tsimshian has the same clause type split, but rather than the nominal type split, shows a sub-split based on person features.

In both languages, the clause type split triggers agreement switch; in the Tsimshianic literature this has also been referred to as an *ergative pivot* (Davis 2018). This is visually schematized in Table 1.2. The (bolded) paradigm which marks ergative in one clause type marks absolutes in the other; this paradigm can be understood as the ‘pivot’ of the system. The alignment on either side of the split is ultimately fixed.

	ERG/ABS (1)	ERG/ABS (2)
Transitive	Agent Object	Agent Object
Intransitive	Subject	Subject

Table 1.2: Pivoting ergative alignment

In Tsimshianic, the split is triggered by a difference in clause types. There is not total agreement reversal: argument-marking is spread across three morphological paradigms, presented in Table 1.3. Paradigms I and III have dedicated functions, and Paradigm II acts as the pivot (of the *pivoting ergative* system). As both sides of the split have paradigms dedicated to the marking of the ergative A argument, they must both be characterized as ergative/absolute.

	Clause Type 1	Clause Type 2
Paradigm I	A	
Paradigm II	O, S	A
Paradigm III		O, S

Table 1.3: Distributions of three paradigms across clause types in Gitksan

The question raised by this data, which this thesis aims to answer, is how to model a syntactic split where *agreement* is affected, but *alignment* is not. That is, under what kind of agreement split can an ergative pattern persist?

There are further agreement splits in the languages under discussion: Gitksan’s *nominal type split* also leaves ergative alignment untouched. The split instead impacts normally absolutive-patterning agreement, causing it to shift to a surface-nominative distribution. The result is a split between an ERG+ABS pattern and an ERG+NOM pattern, with agreement sometimes doubling up on the ergative subject. This constitutes an additional shift in the alignment of Paradigm II, shown in Table 1.4 where I illustrate the behavior of paradigms across the nominal type split. A full schema of Gitksan agreement patterns is given in Table 1.5.

	Nominal Type 1	Nominal Type 2
Paradigm I	A	A
Paradigm II	O, S	A, S
Paradigm III		O

Table 1.4: Distributions of three paradigms across nominal types (Gitksan)

	ERG/ABS (1)		ERG/NOM/ACC		ERG/ABS (2)	
Transitive	Agent	Object	Agent	Object	Agent	Object
Intransitive		Subject		Subject		Subject

Table 1.5: An illustration of Gitksan agreement patterns

This second split demonstrates a second layer of ‘persistence’ to the Gitksan ergative pattern. This is a split under which *agreement* and *alignment* are both affected, but the ergative pattern remains intact, insofar as there is always a paradigm which uniquely picks out the transitive subject within the individual context. With these split patterns, the challenge when considering Gitksan agreement is thus not only limited to finding the best model for an ergative agreement system, but also how to model syntactic splits which fail to split that ergativity.

This contrasts with some recent accounts of ergativity, which attempt to account for why an ergative system should be expected to split under particular syntactic conditions (e.g. Laka 2006; Coon 2013; Coon and Preminger 2017). Under the assumption that ergative alignment is determined low in the derivation (as in an inherent case theory of ergativity; Woolford 1997, 2006), and/or as a factor of the size of a syntactic domain (as in a dependent case theory of ergativity; Marantz 1991; Bobaljik 2008), then subsequent differences in *structure* have the chance to alter the conditions for the assignment of ergative case/agreement.

I propose that it is not structure which differs across the context of the Tsimshianic agreement splits. Instead, it is differences in the properties of the agreement probes at play. The analysis is presented within an inherent case analysis of ergativity, in a probe/goal approach to agreement. The picture that is introduced is of two agreement probes operating simultaneously. The first, lower probe is a consistent ergative agreement probe that agrees with only A; my analysis therefore falls in with the family of analyses that places ergative agreement low in the clause. The second is a higher, exceptionally flexible agreement probe capable of accessing the features of all core arguments in the clause, which reflects the features of any of S, A, or O, depending on how it has been relativized. The higher, primarily-absolutive probe has a number of options regarding how to interact with the lower ergative one, including directly copying its features. We will see examples of a *bleeding* interaction, where the lower probe’s agreement

with the ergative A makes A an ineligible target for the higher probe (the nominal-type split). We will also see examples of a *feeding* interaction, where the lower probe's agreement with the ergative A results in the higher probe agreeing with A as well (the clause-type split; agreement switch).

1.1.3 Revisiting analyses of Tsimshianic

Finally, this dissertation constitutes a significant analytical contribution to research on Tsimshianic. Here, I revisit Hunt's (1993) claims about Gitksan's clausal structure and split case and agreement system. I build on insights about clausal structure presented by Tarpent (1991) and Hunt (1993), and present a novel alternative that accounts for agreement patterns in multiple contexts, including in both major clause types and in the context of A'-extraction.

Most notably, I adopt the recent proposal that the Tsimshianic *connective* system, typically analyzed as case marking, can actually be derived exclusively from alternations in the form of articles when adjacent to verbal agreement (Davis and Forbes 2015; Davis 2018, this idea is outlined in detail in section 2.4). Davis's (2018) recent work in particular, grounded in cross-Tsimshianic comparison, identifies the connective systems of Coast Tsimshian and Interior Tsimshian as fundamentally cognate, and based on identical interaction with verbal agreement. Davis' findings illustrate a synergy between the connective system and agreement system in both the Coast and Interior varieties, clearly demonstrating that the two Tsimshianic branches are not as distinct as prior description and divergence of terminology has led them to appear.

With the focus of alternations in the connective system essentially being reanalyzed as deriving from alternations in verbal agreement, the door has been opened for a closer investigation of agreement across Tsimshianic, including a theoretical analysis, as I conduct in this dissertation.

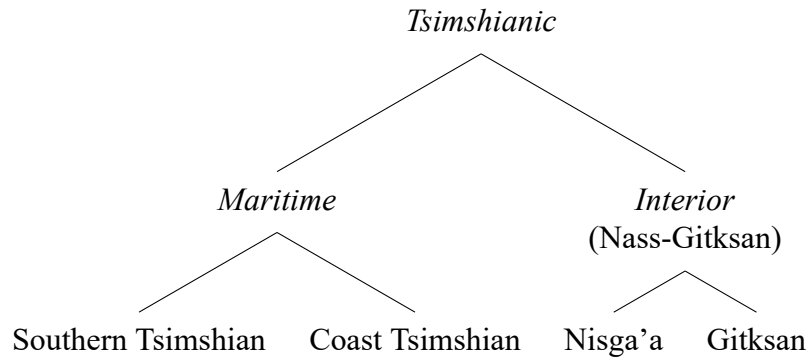
1.2 Language background

The Tsimshianic language family is located in northern British Columbia and the tip of the Alaska panhandle, spreading from the interior to the coast along the watershed of the Skeena and Nass Rivers and the Pacific coast.² The family is, broadly speaking, a dialect contin-

²The Tsimshianic languages have been proposed to be part of the Penutian stock, as a distantly related northern branch linked to more clearly connected languages further south (Sapir 1929). However, this connection is considered tenuous by some (see extensive discussion by Rigsby 1986: 26; also Silverstein 1979); in this dissertation I do not assume a connection between Tsimshianic and Penutian. Should there in fact be a genetic relation between Tsimshianic and other members of the supposed Penutian group, the time depth of this relation is great enough

uum ranging from the interior (north and east) to the coast (west and south), but is generally partitioned into two subfamilies: Interior Tsimshianic, consisting of Gitksan (G; Gitxsanim̓x, Gitksenim̓x) and Nisga’a (N; Nisga’am̓x), and Maritime Tsimshianic to the west, consisting of Coast Tsimshian (CT; Sm’algyax, Ts’msyen) and Southern Tsimshian (ST; Sgüüxs). The family relations are illustrated in (1).

(1) Tsimshianic family relations



The map in Figure 1.1 presents the general location of Tsimshianic within North America, and the map in Figure 1.2 presents the three major language subgroups within their local context, referencing some neighboring language groups.³ The Tsimshianic languages are neighbored by a number of different language families, including Tlingit, Dene/Athabaskan, Wakashan, and Haida (across the water).

In this thesis, the primary focus is on the Interior language Gitksan, on which I have conducted primary fieldwork since 2011 (see section 1.3 for methodological discussion). I also work with secondary data on Coast Tsimshian, giving me a robust view of the Tsimshianic family in both branches. I provide some linguistic and language-related social background on each of these varieties below; see Halpin and Seguin (1990) for a cultural and anthropological overview.

1.2.1 Gitksan

Gitksan is the easternmost member of the Tsimshianic language family. Gitksan and its closest Tsimshianic relative Nisga’a are to a large degree mutually intelligible, and for a time were cat-

that extensive typological differences have emerged, and most surface cognates lost or difficult to pick out. Sound change reconstruction by the standard comparative method is impossible. However, see Tarpent (1997) for fuller consideration of the possible Penutian connection, including some potential similarities in archaic morphology.

³Southern Tsimshian, or Sgüüxs, was only identified by linguists as a variety distinct from Coast Tsimshian as late as Dunn (1979d). This language recently lost its last remaining speaker; it was spoken in Klemtu, BC, at the southernmost tip of the Tsimshian area in Figure 1.2.



Figure 1.1: Location of the Tsimshianic family within North America

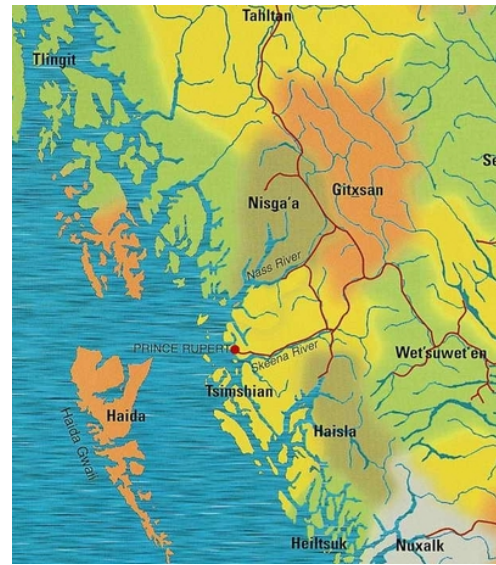


Figure 1.2: Local geography of the Tsimshianic languages (BC Ministry of Education)

egorized together as Nass-Gitksan. However, I follow Rigsby (1989) in classifying Gitksan as a language in its own right, due to the sharp cultural and political distinction between the Nass and Gitksan peoples. Culturally, the Gitksan are more closely tied to their Witsuwit'en-speaking neighbors, and bilingualism with Witsuwit'en (Dene/Athabaskan) was common before colonialism and the rise of English began to change the linguistic landscape of the region (Rigsby 1986; Rigsby and Kari 1987).

The name *Gitksan* derives from ‘the people of the Skeena River’ or ‘people of the misty river’.⁴ Speakers’ preferred name for their language varies in large part based on their dialect and the village that they come from. There are six villages today: Kispiox (Ansbayaxw), Glen Vowell (Sigit’ox), Hazelton (Git-anmaaxs), Kitseguecla (Gijigyukwhla), Kitwanga (Gitwingaak), and Kitwancool (Git-anyaw, formerly Gitwinhlguu’l). Historically, there were two additional, more remote villages (Gisgaga’as, Galdo’o) though the former occupants of these villages are now predominantly settled in Hazelton and Kispiox. Different varieties refer to their own speech as Gitksanimx, Gitksenimx, or Gyaanimx. A map of Gitksan territory, including the locations of the villages, is presented in Figure 1.3.

⁴*Gitksan* is more appropriately pronounced *Gitxsan* or *Gitxsen* based on the dialect, and is derived from *git-ksi-yan* ‘people-river-mist/cloud’. I have here followed the UBC Gitksan Research Lab convention in titling the language *Gitksan*, as this pronunciation is indicative of a historical form and is not consistently attested by any single modern dialect – it is intended to refer to all dialects while belonging to none. The Gitksan people do not adopt this spelling to refer to themselves; nonetheless, I use this spelling throughout the thesis for consistency.

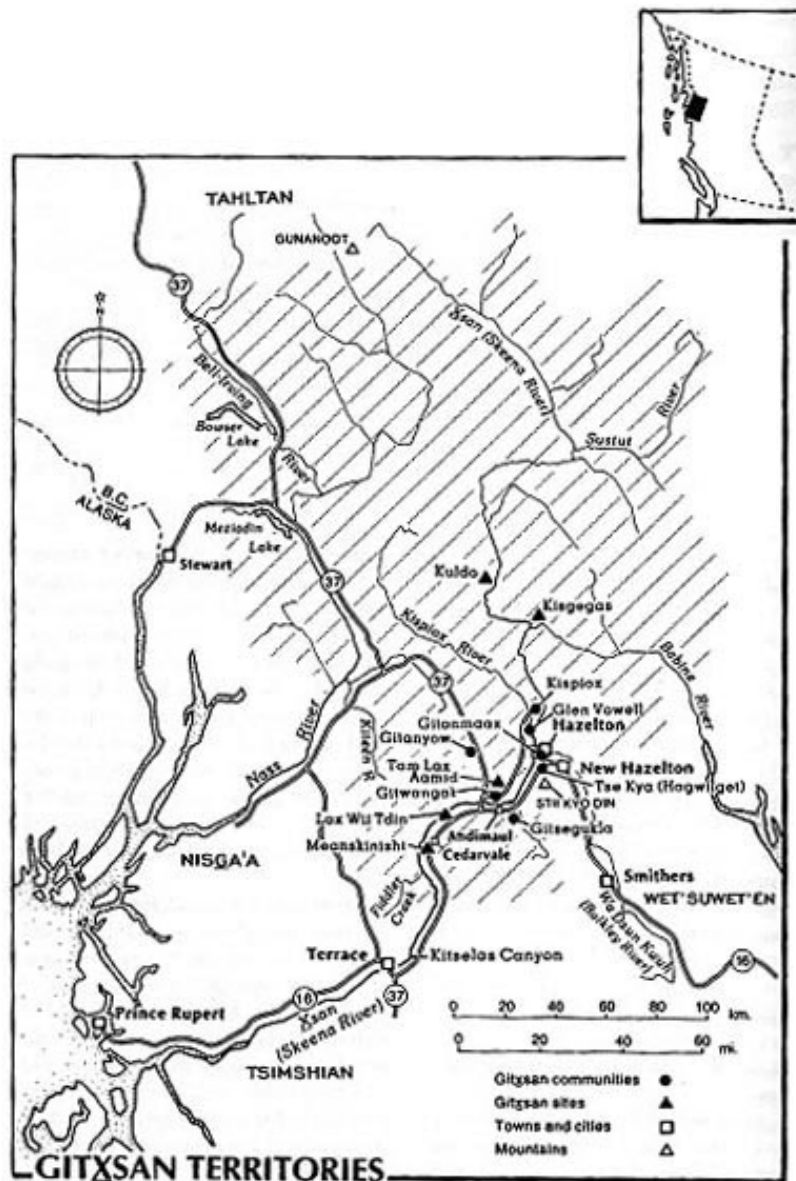


Figure 1.3: The territories of the Gitksan Nation (as in Coull 1996)

Today, Gitksan is highly endangered; 348 fluent speakers remain (FPCC 2015a), generally bilingual with English and over the age of 50. The language is still spoken in some social contexts, or privately among friends, and is the primary language used in conducting feasts, but it is not being passed down to children and is not typically spoken either in public or the home. Its incorporation in the school system is, at this point, minimal; there are few immersion opportunities, although the Gitwingaak Education Society has recently begun the process of developing programs in this vein. There have been a number of Master-Apprentice pairs working to develop fluency in recent years.

The existing literature on Interior varieties began with a cross-Tsimshianic descriptive grammatical account by Boas (1911) and Sapir's (1920) study of Nisga'a kinship terms. Both works focused on Nisga'a. More detailed work followed in the seventies and eighties, largely culminating in Rigsby's unpublished grammar of Gitksan (Rigsby 1986) and Tarpent's highly detailed dissertation, a grammar of Nisga'a (Tarpent 1983, 1987b). Preliminary word lists and lexical resources also exist (e.g. Hindle and Rigsby 1973; Sim'algaṣ Working Group n.d.).

The Tsimshianic languages additionally saw some syntactic discussion in the eighties and nineties, particularly with respect to ergativity and configurationality. Rigsby (1975, 1989) and Tarpent (1982, 1987a) argued in favor of radically ergative, non-configurational syntax for Interior Tsimshianic; later generative work by Belvin (1985, 1990a,b) and Hunt (1991, 1993) countered these claims. Work on Interior Tsimshianic, and particularly Gitksan, has picked up again in the last ten years, investigating different corners of the language in more detail, including glottalization and phonotactics (Brown 2008, 2010; Schwan 2013), tense/aspect (Jóhannsdóttir 2006; Matthewson 2012), modality and evidentiality (Peterson 2010a; Matthewson 2013), quantification (Bicevskis et al. 2017), A'-extraction (Davis and J. Brown 2011; C. Brown 2016), plurality and number (Forbes 2013a, to appearb), and the connective (case/article) system (Peterson 2006a; Davis and Forbes 2015; Davis 2018).

1.2.2 Coast Tsimshian

Coast Tsimshian, also known as Sm'algyax or the Ts'msyen language, is spoken at the drainage of the Skeena River on the Pacific coast, primarily in British Columbia (locations include Lax Kw'alaams/Port Simpson, Kitkatla, Hartley Bay), but also in one village in Alaska, settled in the late 1800s ((New) Metlakatla).⁵ The language has fewer than 100 fluent speakers remaining (FPCC 2015b, Alaskan population not surveyed here), with speakers typically over the age of 60.

Linguistic documentation of Coast Tsimshian is the oldest across the family, with text collection and grammatical description begun by Boas (1902, 1911); this was followed much later in the modern linguistic tradition by (Dunn 1970, 1978b, 1979b), Sasama (1995, 2001), Stebbins (1997, 2003), and most recently Anderson and Ignace (2008). Recent work has involved the development of grammar modules and a talking dictionary (Ts'msyen Sm'algyax Authority 2013).

Coast Tsimshian has been more widely referenced than the Interior varieties in both the ty-

⁵*Ts'msyen* derives from *ts'm-ksi-yeen* 'in the Skeena River'. *Sm'algyax* is the name for the language preferred by its speakers, from *sm* 'true' *algyax* 'speech, speak'. The phrase is also sometimes used in Interior varieties (cf. Gitksan *sim algyax*), so I continue to refer to the language as 'Coast Tsimshian', following prior linguistic work (e.g. Dunn 1970; Mulder 1994; Sasama 2001; Davis 2018) for clarity in cross-family comparison.

pological and generative literature (e.g. Dixon 1994; McGregor 2009; Coon 2013; Baker 2015), typically as an example of aspect or clause-type based split-ergativity due to its ‘case’ patterns (the connective/article system). Several authors have presented syntactic and morphosyntactic analysis of these (split-)ergative patterns (Mulder 1994; Peterson 2004, 2006a, 2017; Baker 2015; Bárány 2018; Davis 2018).⁶ There has been some other work on grammatical category and lexicographic issues (Stebbins 1996, 1997, 2003, 2004) and the morphological properties of cliticization (Mulder and Sellers 2010).

1.3 Data and methodology

The primary source for Gitksan data presented in this paper is my own fieldwork collected over the past seven years (2011-2018), supplemented by data collected by other members of the UBC Gitksan Research Lab over the same period. Fieldwork notes are shared between members of the lab, inclusive of notes on the provided context and speaker comments or judgements, and hosted on the linguistic database *Dative* (Dunham 2014). All primary data collected by myself or another lab member is marked with the initials of the speaker who provided it. The bulk of my own data has been elicited with two native Gitksan speakers living in Vancouver from distinct dialect regions: Barbara Sennott (née Harris; from Ansbayaxw, speaks *Gitxsanimx*) and Vince Gogag (from Git-anyaw, speaks *Gyaanimx*). I have also worked semi-regularly with Hector Hill (from Gijigyukwhla, speaks *Gitxsenimx*), and in total have worked with twenty-one speakers from five of the six villages during trips to traditional Gitksan territory. Differences between the dialects that I have observed are generally lexical and phonetic; all of the older speakers I work with share intuitions about the agreement patterns that serve as the focus of this thesis.⁷

In collecting primary data for this thesis, I have employed two main methods: story collection, and elicitation. Story collection involves the recording of a consultant’s volunteered speech in either narrative, conversational, or out of the blue contexts. Elicitation methods follow that of traditional syntactic elicitation. To elicit target language data, I provide a speaker with a context (verbally and sometimes also pictorially) and an English sentence, and request a translation of the sentence into Gitksan based on the context. To elicit grammaticality judgements, I instead provide a Gitksan sentence, and request comment from the speaker on its acceptabil-

⁶I will argue against most of these authors’ interpretation of Coast Tsimshian case in Chapter 6, instead following Davis (2018). In Chapter 6, I will show that Coast Tsimshian does exhibit a minor ergative-nominative split pattern in its verbal agreement system on the basis of person, rather than clause type or aspect as mentioned in earlier work.

⁷At least one slightly younger speaker that I have worked with shows interesting variation from the so-called ‘canonical’ agreement patterns that I will be discussing. These newer patterns, and the potential diachronic shift they point to, are interesting, but require further empirical investigation before any analysis can be attempted; I do not discuss these patterns in the thesis.

ity in context, including how it would be translated if acceptable, or an alternative sentence if unacceptable (see e.g. Matthewson 2004).

I have additionally drawn from other work on the Tsimshianic languages. Data from Coast Tsimshian was exclusively collected from secondary sources. All sentences reproduced from other papers are referenced with the original source.⁸ In glossing examples, I have used the abbreviation conventions of the Gitksan Research Lab (based on the Leipzig Glossing Conventions; Max Planck Institute and University of Leipzig 2008). Glosses in data from secondary sources are adapted for consistency throughout the thesis.

For all Tsimshianic examples, I present the language in a four-line format as follows:

1. the standard Gitksan or Sm'algyax practical orthography;⁹
2. a morpheme-by-morpheme breakdown, with cross-morpheme (morpho-)phonological alternations undone;¹⁰
3. a morpheme-by-morpheme gloss;
4. a free translation.

A four-line gloss is preferred due to the relatively large number of morphophonological changes that are assumed to take place between the underlying and surface representation of morphemes, particularly with respect to verbal agreement and nominal articles. For example, the Tsimshianic languages have a number of prosodic clitics. Articles, or determiners (typically referred to as 'connectives' in the Tsimshianic literature), prosodically encliticize onto the word preceding that with which they are syntactically associated, as in neighboring Wakashan languages (Anderson 2005; Wojdak 2007). This leads to a mismatch between syntactic and prosodic constituency, which can be difficult to interpret in the gloss. Enclitics are written together as part of the preceding word in the first line, as is standard in the practical orthography, but are separated in lower lines for ease of interpretation for the less-familiar reader. In addition, there are many

⁸Data from Sasama (2001) was originally presented only as an underlying phonemic form, without a corresponding phonetic or orthographic representation. I have done my best to create a likely orthographic representation for these examples based on my knowledge and her description of Coast Tsimshian phonological rules, and with reference to orthographic forms in the Sm'algyax Talking Dictionary (Ts'msyen Sm'algyax Authority 2013).

⁹Though the languages are closely related, their orthographic systems are somewhat different. In the Gitksan data, some atypical or complex symbols include <j> [dʒ], <x> [x, ç], <xw> [xʷ], <x̥, g̥, k̥, k'> [χ, ɡ, q, q̥], <hl> [h̥], and <y, 'y> [j, j̥]. In the Coast Tsimshian data, some atypical or complex symbols include <ɬ> [ɬ], <g̥, k̥, k'> [ɡ, q, q̥], <a, ḁ> [æ, æ̥], <ü> [i]. Both languages have large consonant inventories, including glottalized obstruents and sonorants, as is typical of the Northwest Pacific Coast region. See Hindle and Rigsby (1973) for the full Gitksan practical orthography, and Dunn (1979b) for the Coast Tsimshian practical orthography.

¹⁰This breakdown remains largely in the practical orthography, with the exception of two morphemes with extremely abstract representations: big T, represented as “-T-”, and the transitive vowel, represented as “-ə-”.

circumstances where verbal agreement is not present on the surface, often due to the aforementioned cliticization. By using a four-line gloss, I remain explicit about my assumptions regarding the distribution of verbal agreement.

1.4 Theoretical framework

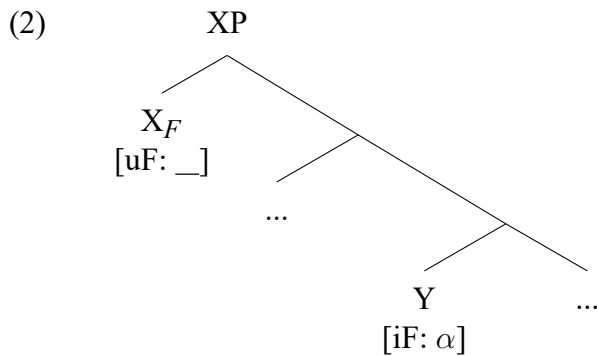
In this thesis I adopt a generative syntactic framework, specifically that of the MINIMALIST PROGRAM (Chomsky 1995, 2000). In this program, sentences are modeled by building hierarchical constituent structures from bottom to top in the form of trees, using a small number of versatile syntactic operations (here, Merge/Move and Agree). Syntactic research in the vein of the Minimalist Program aims to identify the ways that these operations can be used generate the wide range of surface patterns in language. It is assumed that the Merge/Move and Agree operations are restrained by a small number of conditions or principles; the intent of the Minimalist Program is specifically to reduce a large body of possible constraints and principles to only those minimally necessary and empirically justified. These mechanics and their limitations serve as a tool for inquiry into the precise patterns of the language under investigation, and as an abstract basis for crosslinguistic comparison.

I assume that agreement, modeled as the Agree operation, proceeds according to Chomsky's 2000; 2001 PROBE-GOAL framework. Under this framework, a head in the syntactic structure may host an agreement *probe*. A probe is considered to have unvalued features, and is driven to seek features of a certain type to find a value. This contrasts with other syntactic heads, which host feature values (e.g. a Num head may be specified for a SG or PL feature value).

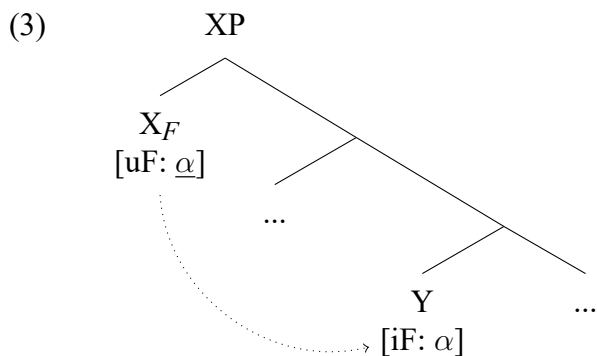
In order to find a value, the agreement probe conducts a *search*: I assume it looks either to its specifier (the argument merged within its projection) or into its c-command domain for a *goal* specified with a feature value of the appropriate type. Under this assumption, it follows that agreement is something of an indirect cue to constituency: if an agreement probe on a head X can agree with an argument, the argument must be within XP. A probe that is specified to initially attempt agreement with an element in its specifier can be understood as an 'inherent' case/agreement probe; that is, inherent case or agreement occurs between a head and the specifier it merges (Chomsky 1981; Woolford 2006). In contrast, probes that initially look into their c-command domain for a target can be understood as 'structural' agreement probes. In this thesis, I will be adopting an inherent case/agreement view of ergativity: ergative case is assigned between the ergative subject and the v^o that merges it.

Structural agreement is modeled below in (2), where we see a tree containing an agreement probe (X) searching for features of type F (Thus, X_F). There is a possible goal in the probe's search domain. Here, the probe's unvalued features are uninterpretable, and the goal's F feature

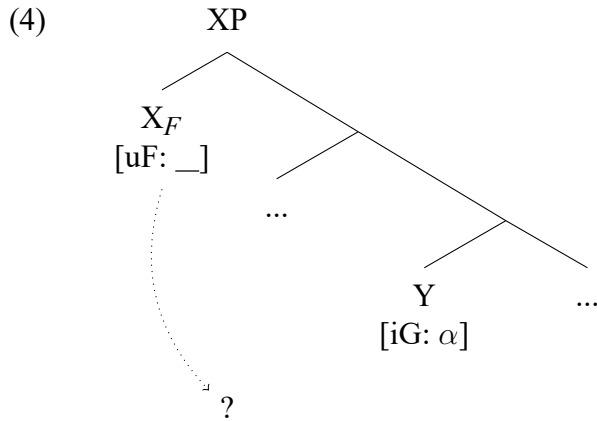
(α) is interpretable (uF vs. iF).



When a probe conducts its search and finds a goal with features of the relevant type, the probe copies those features to itself and is considered *valued*, the Agree operation satisfied. This is illustrated in (3).



An agreement probe may also be *relativized* to seek certain features of a certain type. This derives from Rizzi's (1990) notion of Relativized Minimality, where an agreement probe seeks the most local argument *that bears a particular type of feature* rather than the most local argument overall. In the examples above, the probe on head X searches for features of type F; should they encounter an element in their c-command domain that is instead of type G (and G is not a subset of F), then the element is not a potential target; the probe on X will not agree with the G-features, but instead continue searching for F-features. This is illustrated in (4) below.



In this fashion, a head or agreement probe that engages in ϕ -agreement may target ϕ -features, and ignore other features on an argument like *wh*- or gender features that may intervene. Similarly a head or agreement probe that seeks a *wh*-argument may be relativized to *wh*-features and ignore any intervening ϕ -features.

I adopt the proposal by Preminger (2012) that a probe need not succeed in finding an agreement value for a derivation to successfully converge. It is only obligated to search its domain.

In addition to this syntactic framework, I adopt a Late-Insertion model of morphology, specifically DISTRIBUTED MORPHOLOGY (Halle and Marantz 1993). Under this framework, syntactic principles apply “all the way down” the structure, to the morpheme rather than the word level. Overt morphemes themselves are not inserted into the syntactic structure until after it has been fully built and has left the syntactic component (at the point of Spellout; triggered by a phase head or the completion of the total structure). The process of inserting morphemes after syntax is referred to as Vocabulary Insertion.

The consequence of this choice of morphological framework is that words are not considered the smallest units of syntactic structure (nor even are morphemes). Indeed, syntactic structure is built out of features. I assume that features are ordered in sets that can have different values (e.g. the set of person features includes [SPEAKER], [PARTICIPANT], [PERSON], following Harley and Ritter 2002; Béjar 2003). The same features can be spelled out differently based on their context in the syntactic structure (or potentially, based on their context in the linear structure that is later derived from hierarchical syntactic structure). This allows the same feature [SPEAKER] to be realized differently in the morphology in different areas, as part of a different morphological paradigm, for example.

A final note concerns my use of case-related terminology. In contrast to some authors in the Minimalist tradition, I will not be using case alignment terms such as “nominative” to refer to the agreement initiated by a particular head (e.g. in the case of “nominative”, the head T/Infl); I use these terms to reflect surface distributions only. When linking agreement to par-

ticular syntactic heads in reference to an analysis, I will refer to the syntactic head specifically. When discussing the morphological form of agreement, I will refer to the paradigm by its name (e.g. “Series II”).

1.5 Structure of the thesis

The structure of the rest of the thesis is as follows.

Chapter 2: Gitksan morphosyntax and agreement. This chapter presents a thorough background on the primary language of investigation: Gitksan (Interior Tsimshianic). It serves as a descriptive overview of the syntax of the language, and includes a review of general typological properties and prior literature on, for example, configurationality. I provide a description of the two syntactic splits in the language, which are analyzed in subsequent chapters: the clause type split and nominal type sub-split. This serves as an introduction to the three morphological person-marking paradigms in Gitksan, the morphosyntax of agreement switch, and how ergative agreement is maintained in each split context.

After reviewing the simpler agreement patterns with pronoun arguments, I discuss how to identify verbal agreement in contexts with full nominal arguments. I recount the argument by Davis and Forbes (2015) and Davis (2018) regarding why Gitksan (and the rest of the Tsimshianic languages) should be regarded as purely head-marking languages (i.e. without case marking). I then investigate the properties of the three morphological paradigms under investigation, and argue that two should be analyzed as agreement paradigms, and the remaining as a set of independent pronouns. There is no set of syntactic clitics.

Chapter 3: The Gitksan nominal-type split. This chapter focuses on dependent clauses, with particular attention paid to the nominal type split in Gitksan. This sub-split results in a contrast in the agreement of clauses with DP and third-plural pronominal ergative arguments, versus participant and third-singular pronominal ergative arguments. This grouping of nominals is not one which has been previously described as conditioning an agreement split. I propose that the split must be analyzed as conditioned by an emergent set of featural properties not within the set of ϕ -features, and requires a certain order of operations between the two agreement probes at play. That is, in this chapter I forward an argument for the location of the two agreement probes in the language: Series I on *v*, and Series II on Infl.

In this chapter I also settle on an inherent case(/agreement) analysis of ergativity; I demonstrate that this approach to ergativity is necessary in order to effectively derive the appropriate distribution of agreement paradigms. I further demonstrate how my proposed approach to the

Gitksan nominal type split extends naturally to the presence and absence of other alternations, both within the same language and in Coast Tsimshian.

The chapter, though at first glance apparently focused on a smaller corner of the grammar, provides a foundation for analyses of the other splits in subsequent chapters by initially motivating the location of agreement probes. In addition, I choose to examine dependent clauses in detail first because of my later proposal that dependent clauses are the ‘basic’ clause type, and independent clauses the ‘derived’ type. It is important to have a solid grasp of the non-derived agreement pattern.

Chapter 4: The Tsimshianic clause-type split. I move here to the major agreement split that crosses the entire Tsimshianic family: the clause type split. In this split, alignment remains fixed, but the paradigms involved change, in an instance of agreement switch; I review details of the morphosyntactic cues to the different inflectional patterns of each clause type. I discuss challenges for several potential analyses of this split, some previously proposed and some novel (e.g. analyzing independent clauses as relativized, or dependent clauses as nominalized). I then propose a new alternative, whereby independent clauses are derived by a matrix C° licensing different feature-relativization properties on the agreement probe in Infl° . Specifically, I introduce a mechanism by which an agreement probe may be valued directly by the agreement features copied to another agreement probe, rather than the features on an argument.

Chapter 5: Agreement switch in A'-extraction contexts. In this chapter I extend my analysis to contexts where the agreement switch seems to be required independently of other properties of clause-typing: extraction contexts. I interpret the emergence of agreement switch in these contexts as an absolute *anti-agreement effect*. By presenting an analysis of the full range of situations where agreement switch occurs (across both the clause-type split and extraction contexts), the thesis presents the most comprehensive account of agreement patterns in Gitksan to date.

To accommodate the apparently absolute pattern of agreement switch, I furthermore adopt a multiple-agreement analysis whereby the high agreement probe copies features from both transitive arguments, and more specifically licenses absolute subjects and objects. This view of absolute licensing serves as a foundation for my interpretation of agreement in Coast Tsimshian, to follow.

Chapter 6: The Coast Tsimshian person split. In this chapter, I describe a sub-split in Coast Tsimshian on the basis of person, and present the first theoretical analysis of these facts. This person split is very different from the nominal-type split of the Interior, appearing in different

contexts and triggering entirely new agreement patterns. I also discuss some areas where prior description of Coast Tsimshian can be simplified, particularly with respect to the number of agreement paradigms. This increases the degree to which the Maritime and Interior branches can be compared.

Here, I demonstrate that my analysis of the clause type split can be extended directly to Coast Tsimshian, and that very few additions need to be made to account for the person split. I attribute the differences to a syntactic *licensing condition* on local person arguments, which triggers two different types of agreement repair (in intransitive versus transitive clauses). I further propose that this syntactic condition on person licensing in Coast Tsimshian can be contrasted with a morphological condition on person licensing in both languages. I propose that this morphological person-licensing condition is responsible for atypical VOS orders with local-person objects (a ‘word order inverse’ pattern; Givón 1994).

Chapter 7: Concluding discussion. In this section I summarize the proposals of the thesis and discuss some consequences and additional questions. I revisit the analysis under which the agreement splits are derived, commenting on novel additions or interesting approaches, and consider the consequences of this thesis for our understanding of ergativity both within Tsimshianic and more broadly, within the theory. I also touch on some consequences of the reinterpretation of Tsimshianic as exclusively head-marking for its typological profile, as well as further empirical issues such as conditions on overt versus null pronominals.

Chapter 2

Gitksan morphosyntax and agreement

In this chapter, I aim to provide a detailed description and characterization of the agreement patterns and syntactic splits in Gitksan (Interior Tsimshianic), including all basic information relevant to the understanding of examples, such as constituent order. Prior analyses of the general syntactic structure are presented for background, leading to the assumptions I adopt regarding configurationality and the underlying positions of arguments. This chapter additionally provides some foundational analysis necessary for further consideration of the syntactic mechanisms responsible for deriving the splits and agreement system, including an analysis of the system of ‘connectives’ marking full nominal expressions, and the status of pronominal markers as pronouns, clitics, or agreement.

Section 2.1 introduces the basic surface structure of Gitksan, with respect to word order, configurationality, and core argument distinctions visible in extraction contexts. Section 2.2 introduces ergativity, and how ergative and absolutive alignment surface in Gitksan in terms of both morphology and syntax. Gitksan’s three sets of pronominal paradigms are introduced in this section. Section 2.3 reviews the distribution and alignment patterns of these paradigms in detail. I illustrate Gitksan’s primary syntactic split on the basis of clause type, which triggers a switch between the paradigms used to realize ergative/absolutive alignment. I then move to a secondary split visible in just one clause type, which triggers a shift between absolutive and nominative alignment. Section 2.4 reviews and explains the morphophonological interaction of agreement markers with DP arguments, arguing that Gitksan does not show morphological case distinctions despite surface variation in the form of determiners. Finally, section 2.5 provides a characterization of the three pronominal paradigms, arguing that Gitksan has one set of independent pronouns and two sets of true agreement, and no clitic paradigms. Section 2.6

summarizes.

2.1 Typological and syntactic properties

Gitksan is a predicate-initial language exhibiting a fairly rigid VSOX order.¹ The core arguments S/A and O always follow the predicate, and obliques (X) follow core arguments. Auxiliaries, when present, precede the predicate but do not otherwise affect constituent order. This is exemplified with a transitive sentence (without an auxiliary) in (1).

- (1) Gi'namis Henryhl wineex as Aidan.
 gi'nam-ə-t =s Henry =hl wineex a-t =s Aidan
 give-TR-3.II =DN Henry =CN food OBL-3.II =DN Aidan
 ‘Henry gave food to Aidan.’ (VG)

The language is strictly head-marking, and does not have overt case distinctions (Davis and Forbes 2015; Davis 2018).² The details of agreement and nominal marking, including the motivation for why nominal marking should not be interpreted as *case*, will be discussed in section 2.4.

2.1.1 Categories and the morphosyntax of predicates

Verbs, nouns, and adjectives may all serve as the sentential predicate. Predicates of all types exhibit the same clausal syntax; there is no overt copula or difference in the representation of inflection. The morphological structure of the predicate itself may be anywhere from bare to relatively complex. Examples are given below: a morphologically simple intransitive predicate in (2), and two morphologically complex predicates (intransitive and transitive) in (3).

- (2) Wok t Michael.
 wok t Michael
 sleep DN Michael
 ‘Michael slept.’ (BS)

¹The other Tsimshianic languages, Coast Tsimshian and Nisga'a, have consistent VOS orderings for certain clauses with local-person objects (Tarpent 1987b; Jelinek 1986; Mulder 1994; Peterson 2017). Today, use of the VOS order for in local-person object constructions appears to be eroding; Rigsby (1986: 263) notes the VOS order was previously obligatory, and was referred to as “proper” by his consultants, but that they themselves knew they used the construction variably. My consultants rarely volunteer this order, but accept it without trouble when it is presented. The conclusion to be drawn is that Gitksan is innovative with respect to word order, and has largely leveled the VSO order across contexts. See section 3.3.2 for a context which still involves free alternation between VOS and VSO order, and see section 6.5 for my analysis of VOS ordering across Tsimshianic.

²See earlier work such as Hunt 1993 for an alternate interpretation of verbal morphology as case.

- (3) a. Dagasgosasxwhl hlit'.
 da-gas~gos-asxw =hl hlit'
 COM-PL~jump-ANTIP =CN ball
 'The balls bounced.' (BS)
- b. Saayt ixsdadini'yhl hun, k'uxhl, ganhl laaxw.
 sagayt ixsda-in-ə-'y =hl hun k'uxhl gan-t =hl laaxw
 together tasty-CAUS-TR-1SG.II =CN salmon halibut PCNJ-3.II =CN trout
 'I like to eat salmon, halibut, and trout.' (RJ)

A maximally complex predicate, including transitive inflection, will follow the template given in (4).

- (4) Advb Deriv-Advb-Pl-**Root**-Voice/Valency-Trans-Agr.II

The predicate may be introduced with some number of adverbials, called preverbs/prenouns or proclitics in the Tsimshianic literature, which vary in character from straightforwardly compositional to opaque (similar to English particle verbs, e.g. *dust off* versus *tell off*). Semantically, they encode temporal, aspectual, locative, and adjectival/adverbial meanings – *sagayt* 'together' in (3b) is an example. Other preverbs encode the meanings typical of English control-type predicates (e.g. *si'ix* 'try to VERB', or *gun* 'have s.o. do VERB').

These preverbs all appear left of the predicate; they surface outside of, or occasionally inside of, apparently productive derivational prefixes such as nominalizers (*an-*, *ha-*), verbalizers or low causatives (*si-*, *x-*), and comitatives (*di-*). An example of a locative preverb appearing inside a nominalizer can be seen in (5), which involves the common deverbal or deadjectival sequence *ha'nii-*.

- (5) ha-'nii-goyp'ax
 NMLZ-on-bright
 'window'

Immediately preceding the predicate is pluralizing morphology, including prefixes and reduplication (*ga-*, *l-*, CV-, CVC-, CVX-) – this can be seen in (3a). These have a number of syntactic/semantic functions, including the introduction of iterativity, durativity, or agreement with a plural argument.

Following the predicate root is valency-related morphology, such as passive, antipassive, and more causative marking (*-xw*, *-asxw*, *-in*, *-T*). Such morphology sometimes appears to be syntactically active, and occurs in semantically transparent alternations, but in other cases seems to be frozen, associated with specific roots. The precise structure of predicate-internal morphology has not been analyzed in great detail, aside from Hunt's (1993) analysis of plural

and pluractional prefixes as aspect, and so I mainly leave this issue open.

Last in the predicate complex are morphemes which are clearly syntactically active: a morpheme which marks transitive predicates in independent clauses (*-i/a-*, referred to as the *transitive vowel* and marked in glosses as *-ə-*), and the Series II agreement suffixes, where relevant. The dissertation will discuss these morphemes extensively (see section 4.1.1 for further descriptive detail).

2.1.2 Configurationality

Configurationality in Gitksan was the subject of much debate in the initial period of linguistic research on the language; this topic was particularly of interest due to the language's typologically uncommon properties of VSO word order and ergative morphological alignment. Rigsby (1975) argued that the language should be analyzed as having a 'deeply ergative' structure, with the base positions of transitive subjects and objects inverted (along the lines of Marantz 1984), while Jelinek (1986) and Tarpent (1988) each argued that neighboring Nisga'a was non-configurational and of the Pronominal Argument type (Jelinek 1984). These conclusions were hotly contested by Belvin (1985, 1990a) and Hunt (1993), who each argued in favor of conventional 'accusative' base positions and a traditional VP constituent containing the verb and object, on the basis of evidence such as weak crossover judgements, the consistency of VO-patterning noun incorporation, and VP ellipsis in comparatives. The 'accusative' VP structure, which at its most basic differentiates VP-internal objects and VP-external subjects, is now generally accepted.

I will briefly note some additional evidence against a non-configurational or pronominal-argument analysis of Gitksan, based on Davis and Matthewson's (2009) rebuttal of this proposal for Salish languages. As in the Salish languages, a fundamental asymmetry exists between core argument DPs and adjunct DPs in Tsimshianic. In Gitksan, different extraction morphology is used for subjects and objects on the one hand, compared to adjuncts on the other, and subject and objects are themselves distinguished when extracted (as I will review shortly in section 2.1.3). This would be unexpected under a pronominal argument analysis where all DPs were predicted to function simply as coreferent adjuncts. Extraction asymmetries additionally hold between CPs in argument and adjunct positions; long distance extraction is possible out of the latter, while the former are islands for extraction (Hunt 1993; Davis and Brown 2011).

One major obstacle for identifying Gitksan's basic constituent structure, which remains an issue in this dissertation's consideration of argument positions and structure, is the lack of straightforward tests for c-command. It is questionable whether the Gitksan conjunctions behave as traditional coordinators; Forbes (2013b) explicitly argues for a prepositional analysis

of the Gitksan nominal coordinator, *gan*. Binding, a more common test, is also questionable; Hunt (1993) has argued that binding relations in Gitksan are conditioned by precedence rather than c-command. This is based on the observation of two types of data, replicated below.

First, an R-expression like *John* may not be preceded by a coreferent pronoun, even when that pronoun does not c-command the R-expression. In (6a), the R-expression embedded within the relative clause *a man who knows John* is allowed before a following coreferent pronoun, but in (6b), the pronominal element *-t* ‘3 (him)’ embedded in the relative clause cannot be coreferent with following *John*. The same pattern holds in possessive constructions (Hunt 1993: 106-7).

- (6) a. Hlimooyihl gyat ant wilaaxs John ’nit.
 hlimoo-ə-t [=hl gyat an=t wilaax-t =s John] ’nit
 help-TR-3.II [=CN man AX=3.I know-3.II =DN John] 3.III
 ‘A man who knows John_i helped him_i.’
 b. *hlimoo-ə-t [=hl gyat an=t wilaax-t] t John.
 help-TR-3.II [=CN man AX=3.I know-3.II] DN John
 (‘A man who knows him_i helped John_i.’) (Hunt 1993: 106-107)

Standardly, the pronoun *-t* ‘him/3’ does not bind the R-expression from within the complex subject, because it does not c-command it. This predicts that (6b) should be grammatical; however, it is not.³

The second piece of data Hunt uses involve a clearer contrast between the Gitksan examples and the English translations. Example (7) involves an object-centered question, and is answered with the object-focused sentence in (7a). This data shows that fronted objects may contain an R-expression, even when that object originates in a position where the R-expression would have been c-commanded by a coreferent pronoun. In (7a), the R-expression is in fact *preferred* in the fronted possessed object *nigwoots Mary* ‘Mary’s father’, whose base position is c-commanded by a pronoun in subject position (represented by the agreement marker *-t*). This is accepted over the alternative in (7b) where the R-expression *Mary* is in subject position and c-commands the base position of the pronoun in the possessed DP object *nigwoott* ‘her father’.

- (7) Oo hlimooyis Mary t noxt ky’ootsa?
 oo hlimoo-ə-t =s Mary =t nox-t ky’oots=aa
 oh help-TR-3.II =DN Mary =DN mother-3.II yesterday=YNQ
 ‘Oh, did Mary_i help her_i mother yesterday?’ (*Question*)

³However, this data is questionable to me and other native speakers I have questioned; although the English variant *A man who knows him_i helped John_i* is referred to as acceptable by Hunt and in other literature on binding, the coreferent interpretation is highly disfavored colloquially, and made marginally acceptable only with an irregular intonation suggesting an information-structural effect. It’s possible that similar facts are at play in Gitksan, leading to an immediate judgement of ungrammaticality; it’s unclear what information-structural contexts Hunt’s (1993) data was collected under.

- a. Nee, negwoots Maryhl dii hlimooyit __ .
 nee nigwoot-t =s Mary =hl dii hlimoo-ə-t __
 no father-3.II =DN Mary =CN FOC help-TR-3.II __
 *‘No, it was Mary_i’s father that she_i helped.’ (*Answer*)
- b. *nee nigwoot-t =hl dii hlimoo-ə-t =s Mary __
 no father-3.II =CN FOC help-TR-3.II =DN Mary __
 ‘No, it was her_i father that Mary_i helped.’ (*Answer*) (Hunt 1993: 107)

This evidence has been taken as suggestive that linear precedence, rather than structural c-command, governs binding in Gitksan.⁴ As a consequence, c-command is difficult to test directly in this language. In work to follow in this dissertation, structural relations are often inferred from agreement alignment.

2.1.3 Extraction

Gitksan has a robust system of argument focus and A'-movement, initially detailed by Rigsby (1986), and later revisited in Davis and Brown (2011), Brown (2016) and Forbes (to appear, 2017). In short, the inflection of a *wh*-extraction clause often more clearly indicates the grammatical role of an extracted argument than does inflection in a plain declarative, as the role of Series II agreement in declaratives varies widely based on a number of factors such as clause type and transitivity.

In this system, morphology on (or preceding) the predicate distinguishes extraction of different types of arguments. In particular, extraction of each of the three core argument types (intransitive subject (S), transitive object (O), and transitive subject (A)) is morphologically distinguished. This is illustrated in (8), with an example provided for each of S, O, and A extraction.

(8) Subject extraction (SX)

- a. Limx 'nit.
 limx 'nit
 sing 3.III
 ‘He’s singing.’ (BS)
- b. Naahl limit?
 naa =hl limx-it __
 who =CN sing-SX __
 ‘Who sang?’ (Rigsby 1986: 303)

⁴See Forbes (to appear) for a review of subsequent work and remaining questions on the topic. So far, only anaphoric binding has been shown in the literature to have this effect. Variable binding requires additional investigation.

(9) Object extraction (OX)

- a. Hlimooyi'yt Mary.
 hlimoo-ə-'y =t Mary
 help-TR-1SG.II =DN Mary
 'I helped Mary.' (VG)
- b. Naahl hlimooyin?
 naa =hl hlimoo-ə-n __
 who =CN help-TR-2SG.II __
 'Who did you help?' (Rigsby 1986: 303)

(10) Agent extraction (AX)

- a. Gubis Lisahl anaax.
 gub-i-t =s Lisa =hl anaax
 eat-TR-3.II =DN Lisa =CN bread
 'Lisa ate bread.' (BS)
- b. Naa ant guphl susiit?
 naa an=t gup-t __ =hl susiit
 who AX=3.I eat-3.II __ =CN potato
 'Who ate the potato?' (Davis and Brown 2011: 50)

Both intransitive subject (S) and transitive object (O) extraction involve suffixal marking on the predicate, though each takes a different suffix (I discuss this in more detail in section 5.1), and transitive subject extraction involves a pre-predicative particle. Furthermore, the two transitive sentences obligatorily follow different inflectional patterns: examples of O-extraction take *independent* inflection and agreement, while examples of A-extraction take *dependent* inflection and agreement. These patterns are discussed specifically in the following section. The pattern of core-argument extraction is fundamentally tripartite, as summarized in Table 2.1.

Extraction type	Morphology			
Subject (SX)	S=hl		Pred-it	
Object (OX)	O=hl		Pred-ə-Agr _A	(A)
Agent (AX)	A	an=Agr _A	Pred-Agr _O	(O)

Table 2.1: Summary of core-argument extraction morphology (Brown 2016)

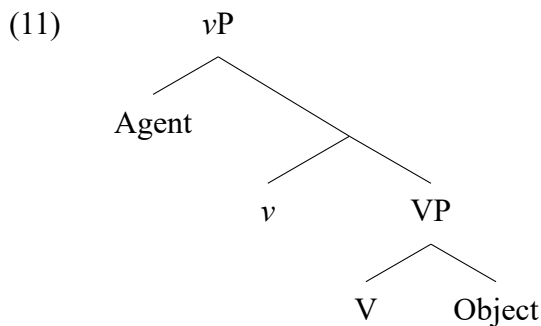
This has recently been interpreted in a number of ways, but most relevant for the purposes of this dissertation is the fact that the type of extraction morphology used is consistently determined by the argument-structural properties of the arguments involved and the formal transitivity of the clause.⁵ That is, the selection of extraction strategy remains unaffected by factors that

⁵See Brown (2016) for a discussion of how ergative (A) extraction morphology might be interpreted as syntactic

we will later see triggering differences in agreement and inflection (the splits to be described in section 2.3). A'-extraction patterns therefore highlight consistent properties of argument structure which morphological ϕ -agreement patterns obscure. See Chapter 5 for extensive discussion of extraction, particularly the connection between agreement patterns and extraction, and some comments on syntactic ergativity.

2.1.4 A structural summary

In this section, we have seen the basic surface pattern of word ordering, morphological marking, configurationality, and how extraction can be used to identify syntactic role. Based on this background, I will assume an underlying SVO structure for Gitksan (specifically that of (11), which adopts a split v P/VP; e.g. Hale and Keyser 1993a; Kratzer 1996), despite its surface VSO order.⁶



I will now proceed to present the patterns that serve as the main focus of this dissertation: ergative alignment in Gitksan's person-marking, and two syntactic splits that affect the realization of that person-marking.

2.2 Ergative alignment

Gitksan boasts three morphological paradigms, or 'series', of pronouns and person-marking morphemes. Rigsby (1986) labeled these three pronominal series 'I, II, and III' – the numbering references their linear order in Gitksan's VSO template, as indicated in (12). The Series I clitics precede V, the Series II affixes are suffixed to V, and the Series III independent pronouns appear

ergativity, and Forbes (2017) for an alternate argument that object (O) extraction morphology should be interpreted as indicative of underlying formal accusative case-assignment.

⁶I will return to the derivation of verb-initial order in section 4.3.4, where I will specifically adopt a v P-raising analysis (Massam 2000, 2001). This will entail subsequent movement of S and O from their base positions.

as either Subject or Object, following V.⁷

$$(12) \quad (\text{Dep/Aux})=\boxed{\text{I}} \text{ Predicate}-\boxed{\text{II}} \boxed{\text{DP/III}}_{\text{Subj}} \boxed{\text{DP/III}}_{\text{Obj}}$$

The three series have distinct distributions and morphological properties. Series I is a set of phonological clitics, Series II is a set of verbal suffixes, and Series III is a set of pronouns that appear as independent words. The full paradigms are presented in (13).

Pre-predicate clitics (I)			Predicate suffixes (II)		Independent/full (III)	
	SG	PL	SG	PL	SG	PL
1	n	(n) dip	-’y	-’m	’nii’y	’nuu’m
2	m	m sim	-n	-si’m	’niin	’nisi’m
3		t	-t	-diit	’nit	’nidiit

Table 2.2: Gitksan person-marking series

A close morphophonological relation can be seen between the independent pronouns (III) and the suffixes (II), with the suffixes resembling truncated versions of the independent pronouns (or, vice versa, the pronouns resembling the suffixes on a *’ni-* or *’nii-* base). In contrast, the clitic series (I) uses an entirely different form for the first and second persons. In the third person, the single phoneme *t* is used for both Series I and Series II, but the position of these morphemes remains distinct: the Series I clitic precedes V, appearing on pre-predicate auxiliaries and operators, while the Series II morpheme suffixes to V. Finally, the suffixes (II) and pronouns (III) exhibit a third-person number contrast, while the clitics (I) have only a neutral third person member. Local persons contrast for number in all paradigms.

The distribution of Gitksan’s agreement paradigms is fundamentally *ergative*. Below in (13), both the absolutive arguments (S and O) are spelled out with the independent Series III paradigm, in contrast to the ergative suffix *-n* ‘2SG’ in (13a).

- (13) a. Iilenn ’nii’y.
 hilen-ə-n ’nii’y
 chase-TR-2SG.II 1SG.III
 ‘You chased me.’ (VG)
- b. Bax ’nii’y.
 bax ’nii’y
 run 1SG.III

⁷I use the term ‘clitic’ here in the morphophonological sense. See Mulder and Sellers (2010) for discussion of the oddly flexible cliticization properties of these elements, which sometimes surface as proclitics and sometimes as enclitics, but always in a position preceding the clause predicate.

‘I run.’

(VG)

Whether Gitksan is merely morphologically or also syntactically ergative is a matter of some debate. Aside from the alignment of agreement paradigms, ergative/absolutive patterning is also exhibited in the following contexts (Tarpent 1982; Rigsby 1986; Hunt 1993; Brown 2016):

1. the distribution of zero-pronouns in the absence of agreement (only absolutive),
2. the deletion of second-persons in imperatives (only ergative),
3. the patterning of verbal number agreement (only absolutive), and,
4. under some interpretations, the morphology of extraction (ergative-specific?).

The first two of these have been argued to directly follow from the distribution of agreement paradigms, and can be accomplished purely morphologically; I will discuss this further in section 2.4. The final property, extraction morphosyntax, is more properly descriptively tripartite rather than ergative/absolutive, as I reviewed in section 2.1.3; however, Brown (2016) argues that ergative extraction is syntactically distinct, and I argue in Chapter 5 that absolutive extraction is as well. Tarpent (1982) reviews some additional ergative features, such as the patterning of ellipsis and reconstruction in coordination, but noted that the ergative ellipsis pattern was only the ‘default’ interpretation of ellipsis structures; Hunt (1993: 43) argued that this data, found also in Gitksan, does not sufficiently demonstrate a fundamentally ergative alignment for ellipsis in coordination.

Rigsby (1975) and Tarpent (1982) claim that the structure of the language is “deeply ergative” (i.e. in the style of Marantz 1984, where the object c-commands the subject in deep structure), and Rigsby (1989) questions whether a VP constituent is necessary. Tarpent (1988) further argues that Nisga’a is a non-configurational pronominal-argument language (Jelinek 1984). As discussed in section 2.1.2 on the topic of configurationality, Belvin (1985) and Hunt (1993) argue against the inverted deep-ergative structure proposed by Rigsby and Tarpent, instead in favor of a standard VP constituent; I adopt this analysis.

Mulder (1994) evaluates some additional areas in Coast Tsimshian for an ergative versus accusative alignment, such as the patterning of causatives, reflexives, and *want*-complements. While occasional properties patterned on a nominative-accusative basis (e.g. the predicate *hasax* ‘want’ controls the A or S argument of the complement clause in a *nominative* pattern), and some showed an ergative pattern (e.g. causative formation), she finds that most tests for ergativity and accusativity were inconclusive in Coast Tsimshian. That is, mainly tripartite or neutral patterns were exhibited. Thus, on a typological scale ranging from an ‘ergative’ to an ‘accusative’ language, she claims Coast Tsimshian would fall somewhere in the middle.

Recent work re-evaluates Gitksan for syntactic ergativity with respect to a more recent generative definition, seeking *syntactic processes where A is differentiated from S and O* (see discussion in e.g. Deal 2015a). Brown (2016) argues that Gitksan *is* syntactically ergative under this definition, based on anomalous morphology used to extract ergative arguments. Brown argues that the A-extraction morpheme *an*, homophonous with a morpheme found in some deverbal nouns, is a syntactic nominalizer. By implication this means that A arguments are unable to undergo direct extraction via the same process used with other arguments. Instead it extracts indirectly. This is similar to Tongan, where A-arguments may be extracted, but only when the construction is repaired with an otherwise unnecessary resumptive pronoun (Otsuka 2006). According to Brown (2016), extraction of A arguments in Gitksan occurs only through a circumvention strategy of nominalization.

To summarize, the Tsimshianic languages including Gitksan show strongly ergative patterns in their agreement morphology, but a mixture of ergative, nominative, and tripartite patterns with respect to other factors. It remains a matter of debate whether these languages should be classified as syntactically ergative.

2.3 Agreement splits

Crosslinguistically, languages which display a morphological ergative/absolutive pattern in their case or agreement systems also tend to display a *syntactic split*, wherein a non-ergative pattern is exhibited in a different area of the grammar (Dixon 1994). This might be exemplified by a language appearing with consistent surface morphological ergativity in case or agreement but nominative patterns in syntactic areas such as binding and control. More commonly, it involves split morphological ergativity, where the alignment of case or agreement surfaces as ergative in one environment but nominative or neutral in another, based on a particular syntactic, semantic, or lexical factor. Common factors conditioning ergative splits include tense/aspect, exhibited in such geographically widespread language families as Basque, Mayan, Indo-European, and Tibeto-Burman; NP-types like animacy, person, or pronominality, as in Panoan, Pama-Nyungan, Jê, and Caucasian; or clause type/mood, as in Macro-Jê, Nilotic, and Panoan (McGregor 2009).⁸ So far, generative analyses of these ergative splits mainly tackle the conditioning factors of aspect (Laka 2006; Coon 2013) and NP-type (Legate 2014; Deal 2015c). Clause-type splits have been less thoroughly discussed, though Wiltschko (2006) presents an analysis of an indicative/subjunctive split in Halkomelem (Salish), and Coon (2013: 189) suggests that all clause-type splits likely break down to a contrast between matrix and subordinate

⁸Although see Legate (2017) for an argument that many splits based on syntactically ‘high’ factors such as mood are in fact more accurately described as tense or aspect splits.

clauses.

The Tsimshianic family has been cited as an example of tense/aspect-based split ergativity (Baker 2015: 66) or split ergativity based on clause-type (Dixon 1994: 103; Coon 2013: 190), primarily on the basis of Coast Tsimshian.⁹ In this section, I describe the pattern in Gitksan: a clause-type split which cannot be reinterpreted as a tense or aspectual split, and an NP-type split conditioned by an atypical set of features. I show that these splits clearly impact the pattern of agreement, and yet do not do so in a way that can be characterized as a split-ergative alignment. Indeed, what is instead exhibited is a persistently *ergative* alignment alongside a *split absolutive* alignment: while one of the two splits affects the absolutive grouping of S and O, the distinct marking of A goes undisrupted. All contexts across both splits have ergative agreement.

In section 2.3.1 I first present the clause-type split, discussing the inflectional differences that are triggered on the basis of this split. In addition, I review the conditioning environment of the split; it is not simply a distinction between matrix and embedded clauses, but seems to be sensitive to several types of subordination. In section 2.3.2 I discuss the nominal-type split, demonstrating that it is the properties of the ergative argument which condition the split, and showing how Series II agreement is affected. Section 2.3.3 summarizes the Gitksan agreement system as a whole.

2.3.1 By clause type

Gitksan exhibits a primary syntactic split based on clause-type, with agreement patterns and some other verbal morphology changing based on whether the clause is categorized as ‘independent’ or ‘dependent’. The terminology used to reference the clause-type division has varied by author, ranging from ‘indicative/subjunctive’ (Boas 1911), to ‘independent/dependent’ (Rigsby 1986), to ‘predicate-focused/regular’ (Tarpent 1987b). I will adopt Rigsby’s ‘independent/dependent’ terminology to refer to this split, following most recent work on Interior Tsimshianic, as it is the most analysis-neutral.

There are three surface properties associated with the independent/dependent clause-type distinction:

1. the choice of pronominal paradigms used to represent ergative/absolutive agreement,
2. the presence or absence of a morpheme /-ə-/ (which I will refer to as the ‘transitive schwa’, or ‘transitive stem vowel’) on transitive verb stems, and

⁹I lay out a description of Coast Tsimshian in Chapter 6, and provide a syntactic treatment of its particular agreement patterns. Just as in Gitksan, the primary split in Coast Tsimshian is made on the basis of clause type. The non-ergative pattern across this split is not nominative/accusative, however, but is itself instead a person-based split system sensitive to the features of both arguments.

3. the presence or absence of a pre-predicate auxiliary, complementizer, or operator (I will refer to these as ‘dependent markers’, following Hunt 1993: 25).

These are discussed in order below. In Gitksan, the first two properties are strictly correlated – I refer to these properties (pronominal paradigm choice and use of the transitive vowel) as the *inflectional* properties of the clause-type split.

The most striking difference between independent and dependent clauses is a shift in the function of pronominal paradigms and which arguments they represent in the clause.¹⁰ Examples of each clause type are provided in (14) and (15). The (a) examples are intransitive, and the (b) examples are transitive.

(14)	Independent clauses	(15)	Dependent clauses
a.	Bax̣ 'nii'y. bax̣ 'nii'y run 1SG.III 'I ran.'	a.	Needii baha'y. nee=dii bax̣-'y NEG=FOC run-1SG.II 'I didn't run.'
b.	Yaji'y 'nit. yats-ə-'y 'nit hit-TR-1SG.II 3.III 'I hit him.'	b.	Neediin yatst. nee=dii= n yats-t NEG=FOC=1.I hit-3.II 'I didn't hit him.'

(BS)

In the independent clauses above in (14), the Series III pronouns *'nii'y* and *'nit* mark absolutive arguments (in italics) and the Series II suffix *-y* marks the ergative (bolded). However, in the dependent clauses in (15), the same Series II suffixes switch their function to mark the absolutive arguments *-y* and *-t* (bolded), and a different paradigm – the Series I clitic, *n* – marks the ergative (boxed). This pattern can be described as ‘agreement switch’ (Kalin and van Urk 2015) or ‘pivoting ergative’ (Davis 2018), with Series II suffixes switching (or pivoting) to function as either ergative or absolutive depending on the clause type. Series I clitics strictly mark ergatives, and only appear in dependent clauses; conversely, Series III pronouns only mark absolutives, and are restricted to independent clauses.

The same pattern is reproduced below with all third-person arguments. Though both the Series I and Series II third-person markers are realized as *t*, they have distinct linear positions (attaching to preverbal negation and to the verb, respectively), and they co-vary with different paradigms.

¹⁰Independent and dependent clauses also differ in the patterning of connective morphemes, or articles, which introduce full DP arguments. I assume following Davis and Forbes (2015) that this falls out entirely from differences in person-marking between the two clauses; see section 2.4 for detailed discussion of these patterns.

- (16) Independent clause
- a. Bax̣ 'nit.
 bax̣ 'nit
 run 3.III
 'S/he ran.'
- b. Yajit 'nit.
 yats-ə-t 'nit
 hit-TR-3.II 3.III
 'S/he hit him.'
- (17) Dependent clause
- a. Needii bax̣t.
 nee=dii bax̣-t
 NEG=FOC run-3.II
 'S/he didn't run.'
- b. Neediit yatst.
 nee=dii=[t] yats-t
 NEG=FOC=3.I hit-3.II
 'S/he didn't hit him.'
- (BS)

The function of the person-marking paradigms differs by clause type just as above: ergative arguments are picked out by a Series II suffix in the independent clauses and Series I clitic in the dependent clauses, while absolutive arguments are picked out by the independent Series III pronouns in the independent clauses and Series II suffixes in the dependent clauses. Both the independent and dependent clauses above demonstrate ergative/absolutive distributions. Therefore while Gitksan can be described as having a clause-type split, it cannot be described as a split-ergative system on the basis of that split. Both halves of the partition exhibit ergative/absolutive alignment.

The basic distribution of agreement is summarized in (18).

		Independent	Dependent
ERG	A	II	I
ABS	S	III	II
	O	III	II

Table 2.3: The distribution of person markers (initial version)

Aside from the distribution of person-marking, a second diagnostic for clause type is visible in transitive sentences: the stem of transitive predicates has a different shape in independent versus dependent clauses. The relevant transitive example sentences from (16) and (17) are reproduced below. In independent clauses like (18a), the transitive verb stem has a vowel suffixed, while dependent clause verb stems like (18b) lack this vowel.¹¹ The presence of the transitive vowel on the independent verb stem results in *yajit*, contrasting with the vowel-less dependent stem, *yatst*.¹²

¹¹Due to the interaction of vowels and sonorants, the presence of this vowel is sometimes not obvious. It is best identifiable between obstruents (when the predicate ends with an obstruent, and the following argument is an obstruent-initial Series II pronoun, i.e. *-si'm* '2PL' or *-t* '3SG', or a DP introduced by the *=hl*, *=s* connectives).

¹²The insertion of a vowel suffix triggers prevocalic voicing on the stem-final consonant of the verb *yats* 'hit', with *ts* [ts] voicing to *j* [dz].

- (18) a. Yajit 'nit.
yats-ə-t 'nit
hit-TR-3.II 3.III
'S/he hit him.'
- b. Neediit yatst.
nee=dii=t yats-t
NEG=FOC=3.I hit-3.II
'S/he didn't hit him.'
- (BS)

The same is true for clauses with full DP arguments. This results in the difference between *gubis* in an independent transitive clause (19a)), and *gups* in a dependent transitive clause (19b)).

- (19) a. Gubis Lisahl anaax.
gup-ə-t =s Lisa =hl anaax
eat-TR-3.II =DN Lisa =CN bread
'Lisa ate bread.'
- (BS)
- b. Yukwt gups Lisahl anaax gyuu'n.
yukw=t gup-t =s Lisa =hl anaax gyuu'n
IPFV=3.I eat-3.II =DN Lisa =CN bread now
'Lisa is eating bread now.'
- (BS)

I refer to this morpheme as the 'transitive schwa' or the 'transitive stem vowel', and gloss it in examples as 'TR', for transitivity (following Rigsby 1986; Belvin 1990b; Matthewson 2013). Others have glossed it as ergative case (for ergative case assignment: Jelinek 1986; Hunt 1993), control (Tarpent 1987b), and aspect (Peterson 2004); its purpose has not been conclusively established. Details of the surface distribution of this morpheme will be discussed in section 4.1.1.2, and its formal role is addressed in 4.3.3. I ultimately analyze it as an impoverished realization of Series I ergative agreement (on v^o).

These two properties, related to the pattern of the agreement series and the transitive vowel, constitute the inflectional properties of the clause type split. However, on a purely descriptive level, the most obvious indicator of the clause-type division is whether a clause is introduced by one of a specific set of special pre-predicative functional morphemes. This is a heterogeneous set of morphemes which typically 'trigger' the inflectional properties described above; I refer to these morphemes as 'dependent markers'. The set of dependent markers include the imperfective *yukw*, perfective *hlis*, inceptive *hlaa*, irrealis *ji*, the negator *nee*, and even the clausal coordinator *ii* ~ *k'ii*. The following pair demonstrates the shift in the paradigm used to mark an intransitive argument: the independent clause in (20a) has no dependent marker, while the dependent clause in (20b) has the dependent marker *hlaa* 'INCEP'. The intransitive argument's realization shifts from a Series III full pronoun to a Series II suffix with the introduction of this

marker.

- (20) a. Hadixs 'nii'y.
 hadixs 'nii'y
 swim 1SG.III
 'I swam.'
- b. Hlaa hadixsi'y.
 hlaa hadixs-'y
 INCEP swim-1SG.II
 'I'm now swimming.'
- (Rigsby 1986: 277)

In the two examples below, the embedded or subordinated clauses (introduced by the irrealis *ji* and coordinator *ii* respectively) are dependent; because these clauses are transitive, this can be identified by the appearance of Series I clitics marking the ergative subjects, and the simultaneous lack of stem vowel on the transitive predicates.

- (21) Ha'niigoodi'y jit giikws Henlii susiit.
 ha-'nii-goot-'y [ji=t giikw-t =s Henli =hl susiit]
 INS-on-heart-1SG.II IRR=3.I buy-3.II =DN Henry =CN potato
 'I think Henry bought potatoes.'
- (BS)
- (22) A'laxhl duus iit hlakshl us.
 a'lax =hl duus [ii=t hlak-s-t =hl us]
 angry =CN cat CCNJ=3.I scratch-3.II =CN dog
 'A cat is angry and it's scratching a dog.'
- (VG)

Imperative clauses are not introduced by an overt morpheme, but also pattern as dependent clauses, as demonstrated in (24). In the intransitive (24a), the second-person actor is marked with a Series II suffix *-si'm* on the predicate. In the transitive (24b), this Series II suffix instead marks the object (*-m* '1PL'), and the second-person ergative actor is marked by the pre-predicate Series I clitic *sim*.¹³ As is characteristic of dependent clauses, the Series II suffix

¹³Only the plural exponent *sim* surfaces in imperatives. Recall from Table 2.2 that Series I marking for second persons typically involves two exponents; the number-neutral second person exponent *m* is deleted in all imperatives. This can be seen in (23), the counterpart to (24b) but with singular participants: all morphology referring to the second-person agent is absent.

- (23) Giba'y!
 giba-'y
 wait-1SG.II
 '(You-SG:) Wait for me!'
- (Rigsby 1986: 310)

The presence of ergative plural *sim* with plural agents (as in (24b)) indicates that Series I agreement does occur; the absence of the person-related exponent *m* in imperatives has been analyzed as morphological in nature (Hunt 1993).

tracks the absolutive argument rather than the ergative argument.

- (24) a. Ha'wsi'm!
 ha'w-si'm
 go.home-2PL.II
 '(You all:) Go home!'
- b. Sim giba'm!
 sim giba-'m
 2PL.I wait-1PL.II
 '(You all:) Wait for us!'
- (Rigsby 1986: 310)

It might therefore be assumed that imperatives do involve a high functional morpheme or operator (a dependent marker), but that this morpheme is null; alternately, the material that embeds the predicate is truncated or deleted (Tarpent 1987b).

Dependent markers can be distinguished from pre-predicate morphemes which do not affect the clause's inflectional properties; these include the pre-predicative marker of prospective aspect, *dim*, verum focus marker *ap* ~ *k'ap* (Matthewson 2017; Gutzmann et al. 2018), and pre-predicative locative and adverbial modifiers.

In general, if any dependent-marker morpheme is present at the beginning of the clause, the clause is dependent with respect to its inflectional properties (agreement morphology and transitive stem); otherwise it is independent.¹⁴ Consequently, all embedded clauses are dependent, but some matrix clauses are also dependent. It seems as though distinct 'dependent' inflection is triggered whenever the clause's event is subordinated to a higher element or operator, though these elements do not form an obvious natural class. Some dependent markers are historically derived from verbs, while others are not. Hunt (1993) argues that dependent clauses cannot be straightforwardly treated as biclausal, even when the dependent marker itself is clearly derived from a verb; I discuss this further in section 4.2.3.

2.3.2 By nominal type

Gitksan has a second syntactic split which affects the function of its agreement morphology, surfacing only in dependent clauses. As this section will show, it is based on the *nominal type* of the arguments in the clause, and is specifically conditioned by variation in properties of the *ergative* argument.

If the ergative argument is a pronoun other than the third-person plural, it is marked exclusively by the Series I clitic paradigm, as we have seen so far.

¹⁴An important divergence from this generalization in contexts of object extraction will be reviewed in section 4.1.1.3, and discussed in detail in Chapter 5.

- (25) Neediit yatst.
 nee=dii=**t** yats-t
 NEG=FOC=3.I hit-3.II
 ‘S/he didn’t hit him.’
Ergative/Absolutive; (BS)

This pattern of transitive agreement can be referred to as a *ERGATIVE/ABSOLUTIVE* pattern; Series I clitics index the ergative argument, and Series II suffixes index the absolutive argument.

In contrast, if the ergative argument is a DP or a third-plural pronoun, a different pattern emerges. To mark a third-plural ergative, the Series I clitic *t* is not sufficient; the Series II suffix *-diiit* must be used as well. With the Series II paradigm spoken for, the absolutive object is in some sense ‘bumped off’ the verb, and spelled out with a full Series III pronoun, in this case *’nit*.

- (26) Neediit yatsdiiit ’nit.
 nee=dii=**t** yats-**diiit** ’nit
 NEG=FOC=3.I hit-3PL.II 3.III
 ‘They didn’t hit him/her.’
Double Ergative; (BS)

Essentially, third person plural transitive subjects, which are not morphologically distinguished from third-singulars in the Series I clitic paradigm, receive priority for Series II marking over an object. Because the Series I and II paradigms jointly function to index the ergative argument, this pattern of transitive agreement can be referred to as a *Double Ergative* pattern.

The Double Ergative pattern is also used when the ergative argument is a DP, regardless of number. A full ergative subject DP appears directly following the predicate in a dependent clause; the object then follows the subject as a Series III full pronoun (if pronominal), producing a surface VSO order.¹⁵ Examples are provided below with a third-plural object in (27), and a first-person object in (27). Series II agreement here indexes the DP subject, rather than the object.¹⁶

- (27) Neediit gya’as Michael ’nidiit.
 nee=dii=**t** gya’a-**t**=s Michael ’nidiit
 NEG=FOC=3.I see-3.II =DN Michael 3PL.III
 ‘Michael didn’t see them.’
(Davis and Forbes 2015: 168)

¹⁵ An alternate “VOS” order, where Series II suffixes switch to index the object, thereby appearing on the predicate before the ergative DP, will be discussed further in section 3.3.2.

¹⁶ Suffixal Series II agreement is here represented in the underlying form in the second line of the example, but is not visible in the surface representation. Evidence for the presence of Series II agreement in these contexts is laid out by Hunt (1993) and Davis and Forbes (2015), and will be reviewed in the next section.

- (28) Neediit gya'as Michael 'nii'y.
 nee=dii=t gya'a-t=s Michael 'nii'y
 NEG=FOC=3.I see-3.II =DN Michael 1SG.III
 'Michael didn't see me.'
- (Davis and Forbes 2015: 170)

Thus, though we have previously described Series III full pronouns as only marking absolutes in independent clauses, we see that it is actually possible for them to appear in dependent clauses as well. Objects surface with this marking when Series II suffixal marking has been used on the ergative argument. In other words, Series III full pronouns are utilized as something like a last resort when Series II agreement is not available.

This data disrupts the generalization from the prior section that the Series II paradigm indexes absolutes in dependent clauses. In the Double Ergative pattern, Series II morphology can be described as following a *nominative* alignment, insofar as it marks S arguments in intransitive clauses and also jointly marks A arguments in transitive clauses along with the Series I clitics. Rather than split-ergative, as the ergative alignment of Series I morphology is unaffected, this can be described as a split-absolutive pattern on the Series II suffixes (between absolutive and nominative), conditioned by the nominal properties of the ergative subject.

2.3.3 Summary

The two syntactic splits we have discussed affect the selection of person-marking paradigms that are used to index core arguments, and in one case also affects alignment. The clause-type split is relevant to all sentences; the nominal-type split is relevant only in dependent clauses. This means that across all contexts, there are a total of three transitive agreement patterns: the independent pattern, the dependent Ergative/Absolutive pattern, and the dependent Double Ergative pattern. Examples of each are provided below in (29), with ergative morphology bolded and absolutive morphology italicized.

- (29) Transitive patterns
- a. Iilenit 'nit.
 hilen-ə-t 'nit
 chase-TR-3.II 3.III
 'She chased him.'
- Independent Ergative*
- b. Neediit iilent.
 nee=dii=t hilen-t
 NEG=FOC=3.I chase-3.II
 'She didn't chase him.'
- Ergative/Absolutive*

- c. Neediit iilendiit 'nit.
 nee=dii=t hilen-**diit** 'nit
 NEG=FOC=3.I chase-3PL.II 3.III
 'They didn't chase her.'

Double Ergative

In addition, there are two intransitive agreement patterns: the independent and the dependent pattern.

(30) Intransitive patterns

- a. Bax 'nit.
 bax 'nit
 run 3.III
 'S/he ran.'

Independent Intransitive

- b. Needii baxt.
 nee=dii bax-t
 NEG=FOC run-3.II
 'S/he didn't run.'

Dependent Intransitive

These agreement patterns, and the distribution of the person-marking paradigms in each, are summarized in (31).

	Independent	Dependent	Dependent (with 3PL/DP A)
A	II	I	I + II
S	III	II	(n/a)
O	III	II	III

Table 2.4: Argument marking morphology across clause types (revised)

The nominal type split within dependent clauses governs different patterns for the three available paradigms. In the standard Ergative/Absolutive pattern, Series I suffixes surface in transitive clauses to mark the ergative subject, and Series II suffixes mark an absolutive argument. In the Double Ergative pattern, third-plural and DP ergative subjects are marked by both paradigms jointly, and the absolutive object surfaces as Series III. That is, Series II suffixal agreement is consistently employed in dependent clauses, but shifts between an absolutive distribution and a nominative distribution. The syntax of the nominal-type split is discussed in Chapter 3, where I propose that additional D-features on third-plurals and DP arguments result in the Series II suffixes following a pattern of highest-argument agreement.

The clause-type split does not affect the fundamental alignment of agreement (which remains ergative/absolutive), but rather governs which paradigms are available to realize that

alignment: the Series I clitics are only available in dependent clauses, and never appear in independent clauses. All three paradigms are available in dependent clauses, though Series I and II are predominant, while independent clauses allow only Series II and III. The syntax of the clause-type split is discussed in Chapter 4, where I propose that agreement switch is the result of a higher agreement probe (Series II) agreeing directly with the features on a lower agreement probe (Series I).

This section has demonstrated the basic pattern of syntactic splits and their effect on the alignment of person-marking paradigms, primarily by focusing on sentences with pronoun arguments. The next section will focus on the properties of nominal expressions, including the agreement status of the Series I and II paradigms, and will review the morphology of DP arguments and articles to show how they fit into the patterns I have so far described.

2.4 Full nominals and the connective system

Straightforward examination of case and agreement morphology with DP arguments is somewhat difficult in Gitksan. This section discusses the relation between surface morphology occurring with DPs (the ‘connective’ system) and illustrates how this morphology interacts with the verbal agreement paradigms previously described. Here, I will show (following Davis and Forbes 2015) that no case system need be referenced when describing alternations in the form of determiners on full DP arguments; determiner alternations can be derived directly from the split distribution of Series II agreement described above.

Full DP expressions in the Tsimshianic languages have been described in prior literature as bearing morphological case (e.g. Dunn 1979c). These descriptions reference the *connective system*: almost every DP in the language surfaces with one of three *connective* morphemes, shown below in (31).¹⁷ I here continue to focus on the Interior data; I return to Coast Tsimshian in Chapter 6.

	Common	Determinate
Context 1	=hl	t
Context 2		=s

Table 2.5: Interior Tsimshianic connective morphemes (initial version)

The basic split in the connective system is between common nouns, introduced by =hl, and determinate nouns, introduced by either =s or t. The determinate class of nouns is similar to a

¹⁷Exceptions include Series III pronouns in core argument positions, and sometimes nouns with a prenominal modifier, particularly locative modifiers like lax ‘on’. Connectives (which consist only of a single consonant) may also be dropped in fast speech, particularly before common nouns.

class of proper nouns, and specifically consists of personal names, ascending kinship terms, animate pronouns, and demonstratives (Rigsby 1986: 80; Tarpent 1987b: 165). In this dissertation I typically use names when illustrating determinate nouns.

Two examples of the connectives in use are given in (31) and (32) below. The connective morphemes are enclitics on the preceding phonological word.¹⁸ Bracketing indicative of syntactic constituency is given in the second line of the gloss; comparison of the first and second lines will show that the connectives prosodically associate with hosts that are *not* part of the same syntactic constituent.

- (31) Gi'namis Henryhl wineex as Aidan.
 gi'nam-ə-t [=s Henry] [=hl wineex] a-t [=s Aidan]
 give-TR-3.II [=DN Henry] [=CN food] OBL-3.II [=DN Aidan]
 'Henry gave food to Aidan.' (VG)
- (32) 'Witxwt Lisa ii ap needii 'witxws Henry.
 'witxw [=t Lisa] ii ap nee=dii 'witxw-t [=s Henry]
 come [=DN Lisa] CCNJ VER NEG=FOC come-3.II [=DN Henry]
 'Lisa came, but Henry didn't come.' (BS)

The connectives can be described as articles or determiners. I assume they instantiate the heads of a high nominal projection K, following Forbes (2013b, to appearb). They contribute little other semantic information beyond common/determinate, and are unaffected by the definiteness or specificity of the argument they introduce (Bicevskis et al. 2017: 293).

While common nouns are universally introduced with =hl, determinate nouns may be introduced by either =s or t, as shown in (32). The choice between the two is conditioned primarily by the agreement patterns described in section 2.3 above. Due to the importance of the syntactic role of the argument in conditioning =s versus t, previous work has settled on describing the alternation between these morphemes as one of case (Hunt 1993). However, following Davis and Forbes (2015) and Davis (2018), I interpret Gitksan as a strictly head-marking language, where the alternation between =s and t is held to be a morphophonological change in the form of the article conditioned by the presence of Series II agreement. I review the argumentation for this conclusion in this section.¹⁹

¹⁸The connective t may either encliticize or procliticize; it is capable of appearing sentence-initially on a focused argument, unlike either =s or =hl.

¹⁹I present the argumentation from the above papers in this thesis so as to make clear why I reconstruct Series II agreement as I have in the second line of example glosses. Readers are welcome to refer to the original papers for further details and motivation.

2.4.1 Obscured Series II agreement

It is difficult to assess the co-occurrence of DP arguments and Series II suffixal agreement due to near surface-complementarity between lexical arguments and the aforementioned agreement. This can be attributed to the the *enclitic* nature of the connectives. Series II suffixal agreement with a DP argument is entirely obscured where the DP's article connects to the predicate, as seen in (33) (repeated from (31)).

- (33) Gi'namis Henryhl wineex as Aidan.
 gi'nam-ə-t [=s Henry] [=hl wineex] a-t [=s Aidan]
 give-TR-3.II [=DN Henry] [=CN food] OBL-3.II [=DN Aidan]
 'Henry gave food to Aidan.' (VG)

However, Tarpent (1987b, 1988) shows that third-person agreement reappears when a second-position clitic (epistemic =*ima* 'a or reportative =*gat*) appears at the end of the predicate. In this situation, the 2nd-position clitic appears between suffixal agreement on the predicate and the following enclitic connective associated with the DP argument, as illustrated by the following pairs in (34) and (35).

- (34) a. Hlimooyis Kathy t John.
 hlimoo-ə-t =s Kathy t John
 help-TR-3.II =DN Kathy DN John
 'Kathy helped John.'
- b. Hlimooyitgas Kathy t John.
 hlimoo-ə-t=gat =s Kathy t John
 help-TR-3.II=REPORT =DN Kathy DN John
 'I heard that Kathy helped John.' (Hunt 1993: 19)
- (35) a. Needii yees John goohl Vancouver.
 nee=dii yee-t =s John goo-t =hl Vancouver
 NEG=FOC walk-3.II =DN John LOC-3.II =CN Vancouver
 'John didn't go to Vancouver.'
- b. Needii yeedimaas John goohl Vancouver.
 nee=dii yee-t=imaa =s John goo-t =hl Vancouver
 NEG=FOC walk-3.II=EPIS =DN John LOC-3.II =CN Vancouver
 'John apparently didn't go to Vancouver.' (Hunt 1993: 115)

Tarpent (1988) treats the complementarity of Series II agreement and a following DP in a purely phonological manner. She analyzes the lack of the Series II agreement suffix as resulting from deletion of the *t* by a following coronal fricative: namely, the =*s* and =*hl* connectives. Hunt (1993: 127) points out an exception to this generalization: when the Series II suffix is followed

by the enclitic determiner of a different argument, no deletion occurs. Such is the case when a Series II ergative pronoun is followed by a lexical object in an independent clause, as in (36).

- (36) 'Majithl ha'niigoyp'a_x ahl lo'op.
 'mats-ə-t =hl ha-'nii-goyp'a_x a-t =hl lo'op
 hit-TR-3.II =CN INS-on-bright PREP-3.II =CN rock
 'S/he hit the window with a rock.' (Hunt 1993: 126)

Davis and Forbes's (2015) solution was to amend the rule to be morphophonological: only when the third-person Series II suffix and the connective are associated with the same argument – that is, only when the two *corefer* – may the Series II suffix delete.²⁰

2.4.2 The distribution of Series II and =s marking

Hunt (1993) and Davis and Forbes (2015) show that the distribution of this hidden Series II agreement and the distribution of the =s connective are intrinsically related. Hunt (1993) generalizes the following of the =s connective (which she refers to as *case*):

- (37) /s/-case is assigned to an NP if and only if
 a. it is adjacent to a lexical head, and
 b. it is coreferential with the Series II suffix on that head. (Hunt 1993: 200)

That is, firstly, determinate DP arguments are introduced with the =s connective rather than *t* whenever they are possessors, or the complements of prepositions and obliques. Pronoun arguments in these positions are referenced with Series II suffixes. Determinate DP arguments of verbs receive =s marking under a more complex set of conditions: they must be in the position for Series II agreement as described in the previous section, and they must be immediately right-adjacent to the verb where the Series II suffix surfaces. The distribution of =s marking for core-arguments is presented in Table 2.6.

The table in Table 2.6 demonstrates that =s marking follows an ergative distribution in independent clauses, just as Series II marking does. For dependent clauses, the distribution of =s marking does not match any of ergative, absolutive, nominative, or accusative; determinate DPs receive the =s connective whenever they are adjacent to the verb. This can be understood in relation to Series II agreement as well: when a dependent clause has no ergative argument (intransitive; as in row V-S above) or when the ergative argument is spelled out exclusively

²⁰ Alternately, Tarpent (1988) and Hunt (1993: 127) each refer to the interaction of phonological rules and syntactic structure, arguing that deletion may not apply in the case of (36) due to the intervention of an ergative *pro* or due to increased syntactic distance between the verb and an object DP.

	INDEPENDENT			DEPENDENT		
	S	A	O	S	A	O
V-S	t			s		
V-A		s			s	
V-A-O		s	t		s	t
V-O			t			s

Table 2.6: Distribution of =s and t connectives across clause types

as a pre-predicative Series I pronoun (as in row V-O above), then Series II agreement follows an absolutive pattern, targeting S or O. However, when the ergative argument is lexical (as in rows V-A and V-A-O above) then the ergative A argument is targeted by Series II agreement, following the nominative-patterning split with the Double Ergative pattern. This distribution is confirmed by the appearance of =s marking and hidden third-person Series II agreement with the ergative when a second-position clitic is inserted, as in (38).

- (38) Neediit gya'adimaas Michael 'nii'y.
 nee=dii=t gya'a-**d**=imaa =s Michael 'nii'y
 NEG=FOC=3.I see-3.II-EPIS =DN Michael 1SG.III
 '(Maybe) Michael didn't see me.' (Davis and Forbes 2015: 170)

It is further confirmed by the pattern of connective marking in rarer VOS orders. In the other Tsimshianic languages, participant objects precede third-person lexical subjects, usually resulting in a VOS order (Jelinek 1986, for Nisga'a).²¹ This pattern is less common in Gitksan; Rigsby (1986: 264) reports his consultants' judgement that the VOS order is the most formal and correct, but that they used both variants. He predicted that speakers were shifting toward the VSO order; indeed, over seven years of fieldwork I have only had the VOS order volunteered once. The alternation can be seen below, with the familiar (presumably innovated) VSO version in (39a) and the older VOS version in (39b).

- (39) a. Hlimooyis Mary 'nuu'm.
 hlimoo-ə-t =s Mary 'nuu'm
 help-TR-3.II =DN Mary 1PL.III
 'Mary helped us.'
 b. Hlimooyit 'nuu'm t Mary.
 hlimoo-ə-t 'nuu'm t Mary
 help-TR-3.II 1PL.III DN Mary
 'Mary helped us.' (Rigsby 1986: 263-4)

²¹The VOS orders will be explored in further detail in section 6.5 during a consideration of person-based splits.

With these examples, we can see the importance of *adjacency* on the form of the connective. Though Series II agreement targets the ergative argument *Mary* in either case, *Mary*'s determiner is =s when it is immediately adjacent to agreement in (39a), and *t* when the object *'nuu'm* intervenes between the two in (39b). Syntactic role and adjacency are therefore both crucial factors in determining the form of the connective for a lexical argument.

In summary, following the work of Tarpent (1988), Hunt (1993), and particularly Davis and Forbes (2015), we can assume that =s marking on a determinate DP indicates covert Series II agreement with that DP. That is, the distribution of =s marking directly follows from the pattern of Series II agreement, plus adjacency between the connective and that agreement.²² When Series II agreement is *overt*, this must be the case for one of two reasons:

1. Something intervenes between agreement and the connective that would normally obscure it (either a 2nd position clitic or another argument in a VOS order).
2. Series II agreement is not with the adjacent argument, but instead another, non-adjacent argument.

Because Series II agreement is so commonly hidden, I represent it in the second line of each four-line gloss following the practice of e.g. Tarpent (1987b) and Hunt (1993), to make explicit my assumptions about its distribution while also representing the surface string.

2.4.3 Against morphological case

Having laid out the distribution of =s marking and shown that it is directly related to the pattern of Series II agreement, the question remains whether the alternation between =s and *t* for the determinate connectives can be interpreted as a case contrast. I follow Davis and Forbes (2015) in interpreting the alternation between =s and *t* as purely morphophonological; that is, contra Hunt (1993), =s is *not* a case marker. Gitksan should then be considered a strictly head-marking language; this is an important cornerstone of the analysis forwarded in later chapters, in contrast to some previous analyses of Tsimshianic which expressly rely on the role of “case-marking” (e.g. Baker 2015 for Coast Tsimshian).

The morphophonological approach to the connective system is motivated by the importance of string-adjacency in the distribution of the =s connective. Davis and Forbes (2015) propose a series of surface rules resulting in the pattern we see in the Gitksan data. First, we assume a

²²The same generalization linking the =s connective and Series II suffixal agreement can be extended directly to Coast Tsimshian, as Davis and Forbes (2015) and particularly Davis (2018) detail. In places where the Coast Tsimshian Series II agreement system differs from the Interior system, the pattern of *s*-marked arguments differs as well, as I discuss in 6.1.4. Davis (2018) uses this as cross-Tsimshianic support for the idea that Series II agreement directly feeds the patterning of the connective system.

two-member connective system, given in (40), which exclusively tracks the difference between common and determinate DPs.

Common	=hl
Determinate	t

Table 2.7: Interior Tsimshianic connective morphemes (revised)

All determinate DPs are introduced exclusively with the connective *t*. The connective =s, which exclusively appears adjacent to the predicate, is the result of a *Softening Rule* given in (40), which lenites /t/ to /s/ when preceded by another /t/.

- (40) Softening Rule (Davis and Forbes 2015: 172)
- | | | | | | | |
|----|---|----|---|-------------------|-------|-------------------|
| t | → | =s | / | -t _i] | _____ | [NP] _i |
| DN | | DN | | Series II | | |

This rule is sensitive to the identity of both /t/ elements; the two must be Series II agreement and a connective morpheme, and they must be coreferent with each other, associated with the same DP. This prevents unnecessary lenition to /s/ in the (not uncommon) environments with two adjacent /t/s, such as (41), where Series II agreement is not associated with the following DP, or (42), where a root ending in *t* is suffixed with a third-person *-t*.²³

- (41) Hlimooyit t Mary
 hlimoo-ə-t t Mary
 help-TR-3.II DN Mary
 ‘He/she helped Mary.’ (VG)
- (42) gaytt
 gayt-t
 hat-3.II
 ‘his/her hat’

The coreference requirement between the two /t/ morphemes involved in the Softening Rule in (40) can be likened to a process of haplology; two identical adjacent morphemes associated with the same argument, either due to coreference or shared abstract case, are dispreferred.

The conversion of the connective *t* to the fricative [s] feeds Tarpent’s (1988) deaffrication rule, or the *t*-deletion rule, whereby coronal fricative determiners delete any preceding coreferent Series II *-t*, as in (43a). Deletion can be blocked, however, by the insertion of second-position clitics, leading to the contrasting situation in (43b). Here, the connective has lenited to [s] but the Series II agreement (*-t*, here [d]) which triggered this is still present.

²³In these examples, both /t/s are released. Phonetically, some frication is often involved, particularly in fast speech, resulting in [t^st].

- This account assumes a post-syntactic approach to the placement of second-position clitics, which may intervene between the two other relevant rules. The three morphophonological rules necessary for this analysis are crucially ordered. The rules and their order are given in (44).

- This approach leans somewhat heavily on an approach to morphology capable of generating the necessary morphologically-sensitive rules, and ordered application of these rules.

Alternatives which instead interpret the distinction between *t* and *=s* as one of *case*, such as that of Hunt (1993), are no more explanatory than the morphophonological approach, and furthermore fall short of accounting for the adjacency requirement on *s*-marked arguments. As previously stated, the split between *s*-DPs and *t*-DPs, particularly in dependent clauses, does not match any preexisting alignment pattern: it is not ergative, absolutive, nominative, or accusative. The most that can be said for *=s* marking is that it tracks the argument indexed by Series II agreement; Davis and Forbes (2015) note that there are no other known processes or structural tests which track the argument targeted by Series II agreement. Under a Minimalist view of case, where agreement is sufficient to transmit a case feature, we might nonetheless consider this sufficient; given the independently attested pattern of Series II agreement, we might assume that this agreement process redundantly transmits a case or agreement feature to the DP. The determinate connective could be spelled out as /s/ in the context of this feature, and as /t/ if the feature is absent. However, such a process ignores the requirement for *adjacency* between agreement and the DP, which the morphophonological approach crucially relies on. As demonstrated in (45), ergative arguments in VOS orders surface with the *t* connective, even

when they are tracked by Series II agreement on the predicate.

- (45) Hlimooyit 'nuu'm t Mary.
 hlimoo-ə-t 'nuu'm t Mary
 help-TR-3.II 1PL.III DN Mary
 'Mary helped us.' (Rigsby 1986: 263)

An analysis of =s as case assigned under any conditions other than direct adjacency (e.g., syntactic conditions) fails to predict this. The morphophonological approach to *s*-marking is therefore the only explanatorily adequate approach to the connective system in at least neighboring Nisga'a and older forms of Gitksan, where this pattern was prevalent. I therefore assume this approach for modern Gitksan as well, despite the infrequent appearance of the independent VOS pattern in the modern variety.

2.5 The syntactic representation of person paradigms

In this section, I investigate the nature of each morphological series of person-markers in light of three hypotheses: that these ϕ -marking paradigms may be *agreement*, syntactic *clitics*, or true *pronouns* (either independent, or morphologically bound/fused). The person-marking paradigms of Interior Tsimshianic are presented again in (46).

	Pre-pred clitics (I)		Suffixes (II)		Independent/full (III)	
	SG	PL	SG	PL	SG	PL
1	n	(n) dip	-y	-m	'nii'y	'nuu'm
2	m	m sim	-n	-si'm	'niin	'nisi'm
3		t	-t	-diit	'nit	'nidiit

Table 2.8: Gitksan person-marking series

Previous work on Interior Tsimshianic has provided different labels for the three person-marking paradigms. Rigsby (1986) calls all three series 'pronouns', while Hunt (1993) refers to Series I and II as 'agreement'. To date, the possibility of any paradigm functioning as a syntactic clitic has not been considered.

In section 2.5.1, I consider the Series III paradigm and argue that this set should be considered full-fledged pronouns. In section 2.5.2, I consider the Series I and II paradigms, reviewing tests which distinguish agreement and clitics. Based on novel data from the co-occurrence of these paradigms with indefinite arguments, I ultimately conclude that the Series I and II paradigms must both be analyzed as reflexes of agreement, rather than syntactic clitics.

2.5.1 Series III are pronouns

The Series III morphemes – independent words which seem to be formed from a *'ni-* base hosting Series II suffixal marking – are the easiest to consider initially. It must be noted immediately that the distribution of these morphemes largely resembles that of lexical DP arguments, aside from their restriction to representing certain syntactic roles. They follow the predicate in the same position as DP arguments, and may be taken as the complement of the oblique marker *a*.²⁴

- (47) Gi'namis Alyssahl anaax as 'nii'y gant Michael.
 gi'nam-i-t =s Alyssa =hl anaax a-t =s 'nii'y gan =t Michael
 give-TR-3.II =DN Alyssa =CN bread OBL-3.II =DN 1SG.III PCNJ =DN Michael
 'Alyssa gave bread to me and Michael.' (BS)

The primary difference between the Series III paradigm and full DPs is that Series III elements appear exclusively in complementary distribution with the other two person-marking series. They never appear as ergative arguments, reflecting the fact that ergative arguments always receive Series I or II marking, and they only appear in *non-agreeing* absolutive positions. That is, they surface as the absolutive arguments of independent clauses, where Series II marking goes exclusively to the ergative, and they only surface as objects in dependent clauses when both other paradigms mark the ergative subject.

The Series III pronouns are more nuanced than either the Series I and II pronouns in terms of the meaning they encode. In addition to person and number features, they are sensitive to animacy and definiteness. As Tarpent (1987b: 333) and Forbes (to appearb) discuss, the entire Series III paradigm is limited to use with animate referents.²⁵ The Series III third person marker *'nit* cannot be used to refer to an inanimate referent, as shown in (48), or to an indefinite referent, as shown in (49).

²⁴The introduction of a Series III pronoun by the oblique *a* is relatively infrequent, and is possibly a recent innovation serving as an alternative to the canonical oblique pronoun set, which involve the Series II markers suffixed to a different base: *loo-*. Compare (46) and (47), both of which were volunteered for the same situation.

- (46) Gi'namis Alyssahl anaax loo'y gant Michael.
 gi'nam-i-t =s Alyssa =hl anaax loo-'y gan =t Michael
 give-TR-3.II =DN Alyssa =CN bread OBL-1SG.II PCNJ =DN Michael
 'Alyssa gave bread to me and Michael.' (BS)

²⁵Third-person plurality in the Series II suffixal paradigm is also restricted to use with animate referents, but the singular/neutral third person suffix *-t* is obligatory with all arguments regardless of animacy.

- (48) a. T'igwantxw!
t'ip-gwan-txw
sharply.down-fall-PASS
'It (a vase) fell!'
- b. *t'ip-gwan-txw 'nit
sharply.down-fall-PASS 3.III
- (VG)
- (49) a. Gi'nami'yhl daal ehl ligit naa ii neediin
gi'nam-ə-'y =hl daal e-t =hl ligi=t naa ii nee=dii=n
give-TR-1SG.II =CN money PREP=3.II =CN DWID=DN who CCNJ NEG=FOC=1.I
hilaax'yhl naa.
hilaax-'y =hl naa
know-1SG.II =CN who
'I gave the money to someone but I don't know who.'
- b. *gi'nam-ə-'y =hl daal e-t =hl 'nit ii nee=dii=n hilaax-'y
give-TR-1SG.II =CN money PREP=3.II =CN 3.III CCNJ NEG=FOC=1.I know-1SG.II
=hl naa
=CN who
Comment: When you put 'nit in it, it just killed the whole thing. (Brown 2014: 13)

The Series III paradigm is further distinct from the other two in that a third-person singular Series III argument may be omitted when its referent is contextually salient. This is shown in (50), which demonstrates that an S argument may be dropped in an independent clause, where it would otherwise be realized as the full form 'nit '3.III'.

- (50) a. Gwi=hl jab-i=s Bill ky'oots?
what=CN do-TR=DN Bill yesterday
'What did Bill do yesterday?' (Hunt 1993: 31)
- b. Yee ____ goo=hl Terrace.
go *pro* LOC=CN Terrace
'He went to Terrace.'

In contrast, in (51), the same S argument realized as a Series II suffix in a dependent clause may not be dropped.

- (51) a. Nee=dii yee-t goo=hl Terrace.
NEG=FOC go-3.II LOC=CN Terrace
'He didn't go to Terrace.'
- b. *Nee=dii yee goo=hl Terrace.
NEG=FOC go LOC=CN Terrace
- (Hunt 1993: 32)

The Series II suffixes, as well as the Series I clitics, are obligatory in their contexts of occurrence, as will be further detailed in the next section. There are no circumstances where Series I or II marking is expected to appear, based on their distribution as described in section 2.3, but does not.

It would be easy to interpret the optionality of the Series III markers as indicative of their status as pronouns, and specifically of a *pro*-drop pattern. It should be clarified precisely what this means, however, given the typological variety of *pro*-drop patterns in languages (Barbosa 2011). First, local person arguments are unable to be dropped, as demonstrated in (52).

- (52) a. Neediit gya'as Aidan 'niin.
 nee=dii=t gya'a-t =s Aidan '**niin**
 NEG=FOC=3.I see-3.II =DN Aidan 2SG.III
 'Aidan didn't see you.'
- b. *nee=dii=t gya'a-t =s Aidan
 NEG=FOC=3.I see-3.II =DN Aidan
 (Only 'Aidan didn't see him/her.') (BS)

This would perhaps indicate that Gitksan falls under the umbrella of a 'partial *pro*-drop' language, where only pronouns of a certain person-value are capable of dropping Barbosa (2011). The partial *pro*-drop languages that Barbosa (2011) discusses, such as Finnish, conversely allow *pro*-drop only of local persons, and do not allow third-person drop. However, in Gitksan, not all third-person arguments are able to drop equally. Even on contextually salient contexts, third-person plural arguments in position to be spelled out as the Series III '*nidiit* may not be entirely dropped, but instead only replaced with the plural suffix *-da*, as shown in (53).

- (53) a. Luxdax 'nidiit.
 lə-xwdax '**nidiit**
 PL-hungry 3PL.III
 'They're hungry.'
- b. Luxdaxda.
 lə-xwdax-**da**
 PL-hungry-3PL
 'They're hungry.'
- c. *lə-xwdax
 PL-hungry (BS)

This suffix is only available for the plural argument of an intransitive independent clause. In any other situation where '*nidiit* might be used, such as the object of a Double Ergative dependent clause, Series III third plural pronouns are obligatory.

Rather than a pattern of *pro*-drop restricted to singular third persons only, I suggest that the Series III morphemes essentially exhibit a strong/weak pronoun alternation, where the weak variant of third-person *'nit* is null and the weak variant of plural *'nidiit* is the suffix *-da*. I propose that the Series III paradigm be analyzed as one of full pronouns in argument positions, which may be realized in either a strong or deficient form, in contrast to the other two paradigms which exhibit no such alternations. Furthermore, the ‘weak’ forms of the Series III third-person pronouns are distinct from Series II marking.

The question now turns to the nature of the Series I and II markers, which occur in complementary distribution with the Series III full pronouns.

2.5.2 Series I and II are agreement

In Hunt’s (1993) foundational work on Gitksan syntax, an analysis of the Series I and II paradigms as agreement is largely assumed without discussion. In this section, I provide novel data to support this analysis, showing that neither series can be analyzed as pronouns which have undergone morphological fusion to another element, or as syntactic clitics. Accordingly, I analyze both the Series I and Series II paradigms as true agreement.

2.5.2.1 Against a bound pronoun analysis

I first begin with the consideration that these two phonologically-bound series might be true pronouns which undergo morphological fusion with another element in the sentence. Under this hypothesis, Series I or II markers would be analyzed as *arguments*. They would be generated in an argument position, and later undergo a phonological fusion operation such as Morphological Merger (Embick and Noyer 2001) to attach as a suffix to the V complex. This type of analysis most straightforwardly accounts for complementarity between pronouns or DPs and rich ϕ -feature marking on the predicate (as Taylor 2004 argues to account for pronoun/suffix complementarity in Irish).

Counterevidence for this analysis is obvious for the Series I clitics. Though these morphemes are sufficient to index a pronominal argument, as in (54a), they are also obligatory when a full DP ergative argument is present, as in (54b).

- (54) a. Yukwt guphl huxws.
 yukw=**t** gup-t =hl huxws
 IPFV=**3.I** eat-3.II =CN dried.salmon
 ‘She’s eating huxws (dried salmon strips).’

- b. Yukwt gups Maryhl huxws.
 yukw=**t** gup-t =**s** **Mary** =hl huxws
 IPFV=**3.I** eat-3.II =**DN** **Mary** =CN dried.salmon
 ‘Mary’s eating huxws.’ (VG)

Were the Series I clitics full pronouns, we would not expect both a pronoun and a DP argument to be base-generated in the same argument position, as would have to be said for (54b) with =*t* and =*s* *Mary*.

Similar evidence is less obvious for the Series II pronouns, which are bound to the predicate – adjacent to the position where the relevant argument is generated. In typical examples like (55a), Series II agreement and a DP argument are complementary. However, recall from section 2.4.1 that third person Series II suffixes in fact *do* co-occur with DP arguments, but that they are obscured by enclitic connectives, leaving only the connectives themselves visible unless a second-position clitic intervenes, as in (55b).

- (55) a. Hlimooyitgas Kathy t John.
 hlimoo-ə-**t**=gat =**s** Kathy t John
 help-TR-3.II=REPORT =DN Kathy DN John
 ‘I heard that Kathy helped John.’ (Hunt 1993: 19)
- b. Gapgaabidimahl duushl aats’ip.
 gap~gaab-ə-**d**=imaa =hl duus =hl aats’ip
 PL~scratch-TR-3.II=EPIS =CN cat =CN door
 ‘The cats might have scratched the door.’ (BS)

Following the analysis of this pattern presented in section 2.4, the Series II suffixes may not be analyzed as fused pronouns either, given their lack of complementarity with full DP arguments.

2.5.2.2 Against a clitic analysis

In this subsection, I consider the possibility that either the Series I or II series might be analyzed as syntactic clitics with the capacity to double DP arguments. To determine this, I investigate several properties meant to distinguish agreement markers and syntactic clitics (drawn from studies contrasting clitic and agreement paradigms such as Nevins 2011; Kramer 2014; Harizanov 2014, etc). I first demonstrate that the Gitksan paradigms behave ambiguously with respect to most of these tests, not giving a clear picture either way how the person-marking paradigms should be analyzed.²⁶ However, I also demonstrate that the Series I and II sets fail to exhibit definiteness effects. Given that argument-doubling clitics typically show these effects, and Gitksan pronouns are strictly definite, I argue that both the Series I phonological clitic

²⁶See Forbes (2016) for an earlier version of these arguments, and consideration of a few additional properties differentiating clitics and agreement.

paradigm and the Series II suffixal paradigm are better analyzed as *agreement*.

In order to evaluate the claim in depth, we must first identify a definition of ‘syntactic clitic’ which is clearly differentiated from both pronouns and verbal agreement. I take ‘verbal agreement’ to be the reflex of an Agree relation between a predicate (or clausal functional head) and its argument (in the clausal spine). Agreement features on the verb are verbal in nature, having been copied onto a verb-related functional head via a valuation mechanism.

The working definition of ‘syntactic clitic’ which I adopt has some opposition to this notion of agreement. Following Harizanov’s (2014) conception of clitics, I take a clitic to be a D-element associated with an argument, which is pronounced along at some point along that argument’s agreement or movement chain as an instance of multiple spell-out. The chain may be either a verbal agreement chain (a feature copy generated by the argument in response to an agreement operation) or a movement chain (where a clitic results when the argument engages in either A- or A'-movement).

Clitics are primarily distinguished from agreement in that their features are *nominal*, and consequently are expected to share some properties with pronouns and determiners that agreement features do not. Agreement features, in contrast, are verbal, and consequently have a greater dependency on clausal properties and an ability to interact with other verbal features.

For a paradigm to be analyzed as a syntactic clitic, it must bear independent morphological resemblance to a pronoun or determiner. The Series II suffix paradigm has a very close morphological relationship to the Series III pronouns, which seem to contain an additional *'ni-* base. Furthermore, both the Series I and Series II third person markers – the elements which actually double a DP argument – have the form *t*, which is identical to the determinate connective (a determiner under my analysis). Thus, a necessary condition for clitic-hood is met, but this alone is insufficient to categorize either paradigm as syntactic clitics. (The strength of this particular diagnostic for Gitksan is called further into question by how common the segment /t/ is in the functional morphology, more generally.)

A second criteria for distinguishing agreement paradigms from clitic paradigms lies in the range of permissible hosts for the set of bound morphemes. Agreement morphemes are affixed strictly to the verb or other head which triggers agreement, while clitics may move to different positions, affixing to a wider range of elements that may not have been the direct trigger for their appearance, and may not always have a final landing site close to the verb. Flexibility in potential host element is therefore taken to be a cue that a particular person-marking element is a *clitic*.

The Series II suffixes appear on several categories of host, including verbs and other categories of predicate (marking arguments), nouns (marking possessors), and prepositions or obliques. However, they always predictably appear as suffixes to these major lexical cate-

gory elements; this could easily be interpreted as each category of host triggering a similar agreement operation, spelled out as the Series II paradigm. It does not seem sufficient to take the several categories to which Series II suffixes attach as sufficient evidence that these bound elements attach “unpredictably” to a wide variety of elements, as clitics might be expected to.

The Gitksan Series I elements are more clitic-like in this respect, having a fairly flexible pre-predicate point of attachment. They may appear prosodically as proclitics to the predicate, as in (56), enclitics to the pre-predicative dependent marker, as in (57), or even proclitics to the dependent marker, also demonstrated in (57). Both of following examples are from the same narrative.

- (56) Ii na'wahl anhahla'lst goohl Stockholm sawatdiit.
 ii na='wa-t =hl an-hahla'lst goo-t =hl Stockholm sa-wa-t-diit
 CCNJ 1.I=find-3.II =CN NMLZ-work LOC-3.II =CN Stockholm CAUS-name-T-3PL.II
 ‘And I found work in Stockholm, that’s what they call it.’ (BS)

- (57) Nii xhl*ii* guut iin yatshl pole loot..
 n=ii xhl*ii* guu-t ii=n yats-t =hl pole loo-t
 1.I=CCNJ all.the.way take-3.II CCNJ=1.I hit-3.II =CN pole OBL-3.II
 ‘And I took it apart, and I hit the pole with it...’ (BS)

However, this is best described as a prosodic property rather than a morphosyntactic one; there are no clear syntactic triggers associated with any of the three potential behaviors. Analysis of discourse-related factors, or of particular combinations of clitics and dependent markers might be required to pursue the issue further. In summary, for neither Series I nor Series II is it clear that their flexibility in attaching to a host is due to a property of being a syntactic clitic.

We might now consider criteria for categorizing a person-marking set as *agreement*. One such property consists of the expectation that verbal agreement, but not a clitic, is capable of triggering suppletion of the verbal host, or conversely, of exhibiting allomorphy based on the features of the host (Zwicky and Pullum 1983; Nevins 2011). These behaviors are sufficient cues for an agreement analysis because only verbal features are expected to interact with other features in the verbal or clausal domain. The features of arguments would be expected to remain unaffected by, for example, aspectual or mood features in the clause, and should not be able to affect the spellout of particular verbal roots.²⁷ In Gitksan, the spellout of Series II forms is

²⁷There is some variation in the form of particular roots depending on the attachment of different Series II suffixes, as shown in (58).

- (58) a. yee
 go
 b. yee-t
 go-3.II

constant; suppletion in verbal roots seems to be triggered only by iterative/plural agreement, analyzed by Hunt (1993) as a clausal feature.

- (59) a. *bax* ‘run (single person)’
 b. *gol* ‘run (multiple people)’

As the Series I and II sets both lack the property of triggering or displaying allomorphy with their host, they remain ambiguous between an agreement or clitic analysis.

A final property concerns the obligatoriness of the paradigm. Agreement is typically obligatory within a particular clausal configuration, while clitics may be optional in the same clausal configuration, as they are generated based on the properties of the noun within that configuration. Crosslinguistically, clitics are typically optional, with their availability being conditioned by some property of their associate, such as specificity or definiteness (cf. Spanish Jaeggli 1982; Suñer 1988, or Amharic Kramer 2014). Both the Series I and II markers are obligatory in their contexts of occurrence, regardless of the definiteness or specificity of their associate. This is shown in (60) and (61) below, where both the Series I and Series II third-person morphemes double indefinite and non-specific arguments.

- (60) Yukwt gigi’yhl ligit naa ’nii’n.
 yukw=**t** gi~gi’y =hl ligi=**t** naa ’niin
 IPFV=**3.I** DUR~look.for =CN DWID=DN who 2SG.III
 ‘Someone was looking for you.’ (BS)

- (61) Gya’atgat ligit naa ’niin.
 gya’a-**ə-t**=gat (=hl) ligi=**t** naa ’niin
 see-TR-**3.II**=REPORT (=CN) DWID=DN who 2SG.III
 ‘I heard that someone saw you.’ (BS)

This definiteness- and specificity-insensitive behavior suggests that an agreement analysis is more appropriate for these paradigms.

It may be noted that instances of obligatory clitic doubling exist, regardless of the definiteness or specificity of their associate, but this is typically restricted to certain structural positions (indirect objects) or types of predicate (e.g. psych verbs). Neither the Series I or Series II distribution is restricted in this way; these paradigms are used to mark the core arguments of all kinds of predicates.

-
- c. **yi-n**
 go-2SG.II

However, this is quite possibly a predictable phonological process: the result of suffixing a sonorant coda to a long mid vowel, causing it to shorten (see Rigsby 1986: 201 on Vowel Shortening) and then raise. There are very few roots which meet this phonological condition.

We can also see that other D-elements in the language do exhibit definiteness restrictions. A null pronoun (which I will refer to as *pro*) is possible under a definite interpretation, as shown in Speaker B's answer in (62). The expected Series III pronoun *'nit* is optional.

- (62) A: Gos jin 'wahl duusi'y ligi hinda.
 gos ji=n 'wa-t =hl duus-'y ligi hinda
 unable IRR=1.I find-3.II =CN cat-1SG.II DWID where
 'I can't find my cat anywhere.'
- B: Gya'a'y ('nit) gyalk.
 gya'a-ə-'y *pro*/'nit gyalk
 see-TR-1SG.II *pro*/3.III outside
 'I saw it outside.' (BS)

In contrast, an indefinite interpretation is not possible for *pro*. Instead, the overt indefinite phrase *=hl ligi agu* 'something' must appear, as in (63b).

- (63) Gos siwoga'y...
 gos si-wok-'y
 unable CAUS-sleep-1SG.II
 'I can't get to sleep...' (VG)
- a. Gya'a'yhl ligi agu gyalk.
 ...gya'a-ə-'y =hl **ligi agu** gyalk
 ...see-TR-1SG.II =CN **DWID what** outside
 'I saw something outside.'
- b. #...gya'a-ə-'y *pro* gyalk
 ...see-TR-1SG.II *pro* outside

Neither is an indefinite interpretation possible for the full pronoun *'nit*, as demonstrated in (49) from the previous section, repeated below.

- (64) a. Gi'nami'yhl daal ehl ligit naa ii neediin
 gi'nam-ə-'y =hl daal e-t =hl ligi=t naa ii nee=dii=n
 give-TR-1SG.II =CN money PREP=3.II =CN DWID=DN who CCNJ NEG=FOC=1.I
 hilaayhl naa.
 hilaax-'y =hl naa
 know-1SG.II =CN who
 'I gave the money to someone but I don't know who.'
- b. *gi'nam-ə-'y =hl daal e-t =hl **'nit** ii nee=dii=n hilaax-'y
 give-TR-1SG.II =CN money PREP=3.II =CN 3.III CCNJ NEG=FOC=1.I know-1SG.II
 =hl naa
 =CN who
Comment: When you put 'nit in it, it just killed the whole thing. (Brown 2014: 13)

Clitics are presumed to be pronominal in nature; as already stated, a major property distinguishing clitics from agreement is their status as D-elements rather than nominal features copied onto a verbal head. In light of this, I suggest that we would expect clitics in Gitksan to display the same definiteness restrictions as their true pronominal counterparts. More strongly, since clitics are taken to be pronominal, we might expect clitics to have semantic restrictions consistent with any restrictions on the interpretation of pronouns that hold in the language, for example reflecting the availability of definite or indefinite pronominals or *pro* in the language.

With this in mind, the lack of definiteness effects for either the Series I or Series II paradigm despite both a language-internal and crosslinguistic tendency for clitic and pronominal elements to exhibit such effects, suggest that neither paradigm should be analyzed as syntactic clitics. These paradigms' obligatoriness, illustrated by their insensitivity to definiteness, is therefore best accounted for under an analysis as verbal *agreement*, rather than doubled clitics spelled out as part of an argument's movement chain.

2.5.3 Summary

In this section, I have argued in favor of an analysis of the Gitksan person-marking paradigms as two sets of true agreement and one set of independent pronouns. First, I argued that the Series III morphemes were independent pronouns on the basis of their linear distribution in the same positions as lexical DPs, their restrictions to animate and definite arguments, and the apparent participation of the third-person markers in a strong-weak pronoun alternation, if not partial *pro*-drop. Second, I presented an argument in favor of both the Series I and II paradigms as agreement, rather than morphologically bound pronouns or syntactic clitics spelling out part of an argument's agreement or movement chain. This is done primarily on the basis of the strict obligatoriness of both paradigms, or conversely, the failure of either paradigm to exhibit the definiteness sensitivities characteristic of both Series III pronouns and null *pro*. I argued that for languages with a *pro* that can only be construed as definite, a paradigm of syntactic clitics must exhibit similar restrictions on construal. As the Gitksan Series I and II paradigms do not exhibit such restrictions, they cannot be interpreted as pronominal or clitic-like.

A remaining consequence of this analysis of the person-marking paradigms regards *complementarity*: the Series II and III pronouns exist in strict complementary distribution. While there is a context where Series I and II may jointly index the same argument, thereby co-occurring, there is no context where either Series I or Series II may index a simple Series III pronoun.²⁸ This fact begs explanation. By analyzing the Series I and II paradigms as *agreement*, we are

²⁸Extending the analysis to Coast Tsimshian in Chapter 6, we will see that there is a context where Series I agreement can co-occur with Series III. There remains, however, a stronger, cross-Tsimshianic generalization that Series II agreement may never co-occur with a Series III pronoun.

less easily able to explain why Series II is complementary with Series III full pronouns. Under a clitic or bound pronoun analysis of the Series II suffixes, we would be able to explain such complementarity as a matter of course, as they would be one possible realization of the same abstract D element. I return to this issue in the conclusion to the thesis (section 7.4.2).

2.6 Review

This chaoter has provided background on the essential data that serves as the focus of this dissertation, as well as some foundational arguments that guide the analysis to come.

Section 2.1 provided an overview of research in favor of a configurational syntax for Gitksan, utilizing a standard VP, and provided some background on categories and argument structure visible in extraction morphosyntax. Section 2.2 reviewed ergative alignment and the areas that it has been argued to surface in Gitksan.

Section 2.3 discussed the major data with respect to agreement patterns and alignment in Gitksan. There is a clause-type split in Gitksan agreement linked to three properties: the agreement-switch patterns across the three pronominal paradigms, where Series II agreement pivots between ergative and absolutive function; the appearance of a stem vowel in transitive clauses; and the appearance of a functional word high in the clause, referred to as ‘dependent markers’. Furthermore, in dependent clauses, there is a secondary split conditioned by the nominal properties of the ergative argument. This further controls the alignment of Series II agreement, shifting it from an absolutive to a nominative alignment.

Section 2.4 reviewed argumentation in favor of analyzing Gitksan as an exclusively head-marking language, by demonstrating that the form of connective determiners on lexical DPs is determined on a strictly morphophonological basis. This is relevant in light of several previous analyses of Tsimshianic languages that interpret connectives as morphological case markers (Hunt 1993; Baker 2015). Under the analysis I have reviewed and adopted here, determiners in Gitksan provide no insight into syntactic structure or properties of syntactic case or agreement. Only morphological agreement (and properties of abstract case revealed by extraction morphology) does this.

Section 2.5 presented argumentation in favor of analyzing both the Series I clitic paradigm and Series II suffix paradigm as true agreement, rather than a syntactic clitic paradigm. That is, unlike many languages which have only a single agreement paradigm or those which have an agreement and clitic set, Gitksan has two sets of true agreement. Consequently, we must develop a means of differentiating the two paradigms in the morphology with reference to syntactic properties (such as their location in the structure) rather than categorial ones (such as a D-category feature for a set of clitics).

Gitksan is a language of particular interest to syntactic theory for two major reasons. First, the Gitksan agreement system exhibits what I refer to as *persistent ergativity*: despite the presence of two syntactic splits affecting the alignment of agreement, and the strong crosslinguistic trend for ergative alignment to be disrupted, ergative arguments always receive a distinct type of agreement. That is, the ergative nature of the agreement system is never disrupted, even as various paradigms undergo shifts in alignment. Second, Gitksan is an example of a system with two types of ϕ -agreement. Some of this agreement targets absolutive arguments, including objects. Some of this agreement specifically picks out the ergative argument. This provides an interesting case study for the ways that independently operating agreement mechanisms may or may not interact.

Chapter 3

The Gitksan nominal-type split via feature grouping

This chapter presents an analysis of agreement in Gitksan dependent clauses, where both the Series I and Series II agreement paradigms operate. In this clause type, we find a sub-split in the pattern of agreement based on features of the ergative subject. Although the clause-type split itself affects agreement more broadly than does this smaller sub-split, I choose not to discuss this split immediately. Instead, I first examine dependent clauses in significant detail for two reasons: one, the nominal-type split found in dependent clauses provides insight into the structural locus of the two agreement probes in the clause (associated with the Series I and II paradigms). This is subsequently incorporated into the analysis of the clause-type split. Two, in my later analysis of the clause-type split in Chapter 4, I propose that independent clause agreement is derived from the more ‘basic’ or transparent of dependent clauses. With this in mind, it is necessary to come to a thorough understanding of agreement in the dependent clause type.

The agreement patterns attested in Gitksan, described in detail in the previous chapter, are summarized in Table 3.1.

ERG is →	Dependent		Independent
	Most Pronouns	3PL/DP	
Series I (clitic)	A	A	
Series II (suffix)	O, S	A, S	A
Series III (full)		O	O, S

Table 3.1: Gitksan argument-marking distributions, by paradigm

Our focus in this chapter is on the sub-split in dependent clauses. In dependent clauses, the Series I clitics consistently index the ergative argument of transitive clauses, while Series II agreement varies between an absolutive and nominative pattern: the Series II suffixes index the arguments of intransitive clauses, but vary between picking out the ergative subject or accusative object in transitive clauses. That is, in transitive dependent clauses, we see an alternation between the two paradigms picking out *different* arguments to agree with, in an Ergative/Absolutive pattern as in (1a), or the two series doubling up to index the *same* argument, in a Double Ergative agreement pattern as in (1b). Morphology referring to the ergative A is bolded below, and morphology referring to the object O is italic.

- (1) a. Neediit yatst.
 nee=dii=**t** yats-*t*
 NEG=FOC=3.I hit-3.II
 ‘S/he didn’t hit him.’ *Ergative/Absolutive*
- b. Neediit yatsdiit ’nit.
 nee=dii=**t** yats-**diit** *’nit*
 NEG=FOC=3.I hit-3PL.II 3.III
 ‘They didn’t hit him/her.’ *Double Ergative*

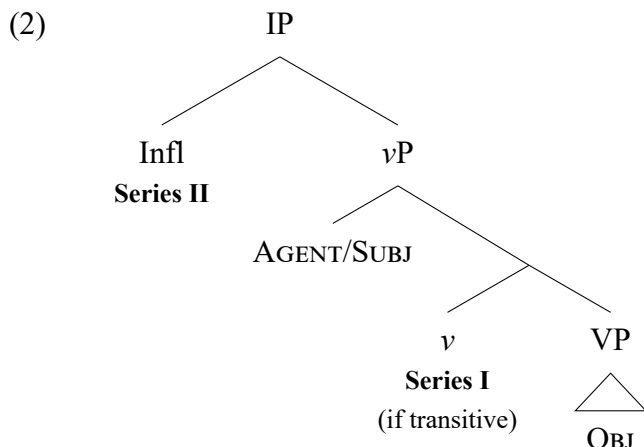
The Ergative/Absolutive pattern occurs when the ergative subject is a local person, or a third singular pronoun as in (1a), while the Double Ergative pattern occurs when the ergative subject is a full lexical noun (regardless of number), or a third plural pronoun as in (1b). This is an example of a *nominal-type split*, where the factor conditioning a split in the alignment of agreement is some property or properties of an argument. As I show, the properties of the ergative (A) argument are referenced predominantly in this split; the features of the object are almost entirely irrelevant in conditioning either pattern.

The mechanism that I utilize to account for this split pattern is *feature relativization*, where an agreement probe is sensitive to a certain type of feature, preferring to agree with an element that bears that feature and skipping elements that do not bear it (Rizzi 1990; Chomsky 1995). Specifically, I propose that the Series I clitic and Series II suffix agreement probes are relativized to *different* sets of features, and that the Gitksan nominal-type split pattern falls out naturally as a consequence of this difference and the order in which they probe.¹

I propose that both agreement probes initially target the ergative argument position. The Series I probe is located on a transitive *v*, and is specified to undergo inherent agreement with the argument it merges: the ergative subject. The Series II probe, by contrast, is located on Infl, and undergoes standard Agree, probing for arguments in its c-command domain. It encounters subjects regardless of the transitivity of the clause, and then may encounter an object further

¹ An earlier version of this proposal is given in Forbes (2016).

down. The basic position of these probes is illustrated in (2).



The two probes further differ in that they are relativized to different feature sets: person-related ϕ -features for one (Series I), and a more general set of nominal features, which I refer to as *D-features*, for the other (Series II). Under my analysis, ϕ -feature groups like [PERSON] and its associated values are a proper subset of nominal D-features. When an argument has both ϕ - and D-features, it is possible for both types of agreement to target it simultaneously. In contrast, when an ergative argument has only ϕ -features, agreement by the first probe pre-empts and blocks agreement by the other probe. Understood in a different way, DPs and third-plurals constitute ‘bigger’ targets,² visible to both rounds of agreement, while other pronoun arguments are smaller, containing only ϕ -features, and are only visible once. The relationship between the two agreement probes (Series I and Series II) therefore has aspects of intervention and competition, in that the probes are capable of agreeing with some of the same features, but do not fully overlap. This results in a visible *bleeding* alternation, where both probes are fundamentally capable of establishing an agreement relation with the same argument, but in some contexts one probe prevents the other from establishing that relation.

In section 3.1, I present my analysis of Gitksan dependent-clause agreement in detail, including its implementation with respect to sets of features and the order of probing. Section 3.2 reviews some alternative approaches, discussing their shortcomings in relation to the proposed analysis in accounting for the data. Section 3.3 presents additional details about dependent clauses in Tsimshianic, including a comparison with dependent clause agreement in closely related Coast Tsimshian, and another sub-split in Gitksan interacting with the nominal-type split. I argue that this sub-split seems to be conditioned exclusively by person features and merits

²I do not necessarily assume that the availability of more features on a nominal correlates directly with *structural size* of that nominal. This is discussed in some more detail in section 3.4.1.

a distinct analysis, to be returned to in later chapters. Finally, section 3.4 concludes with a discussion of some consequences of the feature structure I propose.

3.1 Proposal

In dependent clauses, both of the two types of agreement – Series I clitics and Series II suffixes – are capable of agreeing with the ergative argument. Series I is, like a standard ergative marker, present only in transitive clauses, while Series II agreement is consistently present regardless of the transitivity of the clause. Series I indexes only the A argument, while Series II may target any of A, S, or O. The question I address here is why, if there are conditions where Series II is able to agree with the A argument on some occasions, it does not do so consistently.

The alternation between Ergative/Absolutive agreement (2a) and Double Ergative agreement (2b) can be understood if we consider that Series II suffixal agreement with the A argument seems to be *bled* by Series I agreement with this same argument. That is, Series II can agree with an ergative argument, and indeed must do so, only in the conditions where the features of the ergative *fail to be spelled out completely by the Series I clitic*. Recall that one context for obligatory simultaneous Series I and II agreement is with third person plural arguments: this is the precise feature combination where Series I agreement is underspecified, offering only a generic third person =*t* clitic, as shown in Table 3.2.

	SG	PL
1	=n	(=n) dip
2	=m	=m sim
3		=t

Table 3.2: Series I agreement paradigm

This observation is largely morphological – however, I propose a syntactic analysis. To translate it into syntactic terms, I propose that Series I clitic agreement precedes Series II suffixal agreement in the derivation, but that the Series I probe is sensitive to only a *subset* of the features visible to Series II agreement. The third plural feature, in particular, is only visible to later Series II agreement, not Series I.

In the rest of this section, I discuss the organization of nominal features in Gitksan, determining what properties each of the Series I and II agreement probes are sensitive to. Then I discuss the order of operations and how the interaction of the two agreement probes results in the pattern attested in Gitksan.

3.1.1 Relativizing agreement



To account for the alternations in agreement across the nominal-type split in Gitksan dependent clauses, I utilize the mechanism of *feature relativization*. The relativization of probes to particular feature specifications in ϕ -agreement is used to derive patterns where some types of arguments are favored for agreement over others (e.g. Béjar 2003; Nevins 2007). Relativized ϕ -agreement is therefore particularly useful in the analysis of systems where agreement may choose between arguments in several different syntactic positions, depending on their features. Due to the “pickiness” of the relativized probe, the agreeing head may seek out non-local elements to agree with. This is therefore an appropriate initial mechanism to utilize in an account of Gitksan agreement, where Series II agreement chooses between the A or O argument of a transitive clause based on their features.

What features may a probe be relativized to, crosslinguistically? I follow the assumption that syntactic features, even features specific to the nominal domain, are not simple unordered primitives, but rather are organized into groups that may differ crosslinguistically depending on the available features in particular languages. There are a number of proposals regarding the specific nature of this organization (geometries, as in Harley and Ritter 2002; lattices, as in Harbour 2007, 2016), but for the purposes of this dissertation I assume a relatively simple model of hierarchical ordering that can be represented either as sets or as structured geometries.³ Sets of features can either be in non-overlapping sister relations, or containment/domination relations. An example of a sister set would be *wh*-features (e.g. [WH], [TOPIC]...) versus ϕ -features (e.g. [PLURAL], [PARTICIPANT]...). An example of two sets in a containment relation might be person features (e.g. [π], [PARTICIPANT], [SPEAKER]) versus local person features (e.g. [PARTICIPANT]).⁴ In principle, an agreement probe should be able to interact with any potential grouping of features in the language that may be borne on an argument, not exclusively ϕ -features.

In prior work, agreement probes have been relativized to ϕ -features in general, or a specific subset of ϕ -features (e.g. local person features, as in many accounts of person-sensitive agreement; Béjar 2003; Coon and Preminger 2017), or even a specific feature value (e.g. plural; Nevins 2011). Such relativization is used to model patterns where arguments bearing a marked feature are preferred for agreement even when another argument intervenes between it and the probe. This is demonstrated abstractly in (3).

³Note that these geometries can be *represented* structurally, but have no necessary relation to constituency; they do not mirror the syntactic structure of a DP. This is discussed further in section 3.4.1.

⁴I here adopt Béjar’s (2003) privative formalization of person features using [π], [PARTICIPANT], [SPEAKER], but this is not crucial.

- (3) a.  **uF** Subject.F Object.G
 b.  **uF** Subject.G Object.F

An example of this is so-called ‘omnivorous’ agreement, where an agreement probe preferentially registers the marked feature value no matter which argument it occurs on, as in Georgian number agreement. Example (4a) is singular; in (4b), the plural marker *-t* can be interpreted as indexing plurality on the subject, object, or both.

- (4) a. g-xedav
 2.OBJ-saw
 ‘I/he saw you.’
 b. g-xedav-t
 2.OBJ-saw-PL
 ‘I saw y’all; he saw y’all; we saw you; we saw y’all.’ (Nevins 2011: 941)

The Gitksan nominal-type split, despite showing a particular sensitivity to third-person number, does not follow an omnivorous pattern (contra Nevins’s 2011 predictions regarding number agreement). Although the Series II probe has the ability to choose between either the subject or object in determining its agreement target in dependent transitive clauses, it does not appear to do so on the basis of seeking out a particular marked feature long-distance. Recall that Series II agreement can ignore the Series I-indexed subject in favor of establishing an agreement relationship with the otherwise unindexed absolutive object – as in (5), which features the Ergative/Absolutive pattern:

- (5) Neediin yatst.
 nee=dii=**n** yats-*t*
 NEG=FOC=1.I hit-3.II
 ‘I didn’t hit him.’

This choice by the Series II suffix is based entirely on the properties of the subject argument, not on the features of the object. Gitksan does not allow objects bearing local person features to be preferentially agreed with instead of a third-plural subject, as demonstrated by the ungrammaticality of agreement with the second-person object in (6b).⁵

⁵It is, however, possible for a local object to be agreed with over a DP subject (e.g. in a DP.A<1.O sentence, Series II may agree with 1.O rather than with the DP.A as expected. Sentences such as the equivalent of (6b), with a DP subject, are commonly volunteered. This is described in more detail in section 3.3.2, and analyzed in section 6.5, where I propose that this is the result of an independent morphological condition on person-licensing that holds across the Tsimshianic family. Reflexes of this pattern can be identified in both independent and dependent clauses in Maritime and Interior Tsimshianic, so I leave them aside for now to focus on this dependent-only split.

(6) *No omnivorous person: 3A over 2O*

- a. Neediit 'wadiit 'niin.
 nee=dii=t 'wa-**diit** 'niin.
 NEG=FOC=3.I find-3PL.II 2SG.III
 'They didn't find you.' (BS)
- b. *nee=dii=t 'wa-*n* 'nidiit⁶
 NEG=FOC=3.I find-2SG.II 3PL.III

Neither does it allow third-plural objects to be preferentially agreed with over a simple singular DP subject, as demonstrated by the ungrammaticality of agreement with the third-plural object in (8b).

(7) *No omnivorous number: A.SG over O.PL*

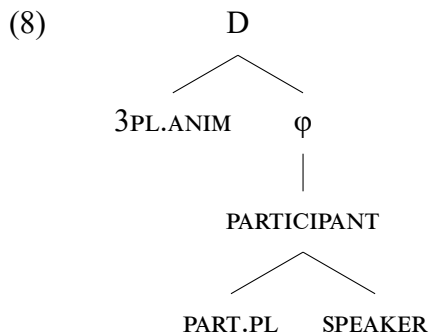
- a. Neediit gya'as Mary 'nidiit.
 nee=dii=t gya'a-**t** =s Mary 'nidiit.
 NEG=FOC=3.I see-3.II =DN Mary 3PL.III
 'Mary didn't see them.' (VG)
- b. Neediit gya'adiit Mary.
 nee=dii=t gya'a-**diit** =t Mary.
 NEG=FOC=3.I see=3PL.II =DN Mary
 *'Mary didn't see them.' (Only 'They didn't see Mary.') (VG)

Series II agreement is not drawn to marked objects, and particularly not plural objects. This much is clear based on the above data and the complete lack of other long-distance person or long-distance number effects. Instead, I propose that Series II is able to look to the object whenever it *fails* to be satisfied by the properties of the ergative subject – specifically, whenever the subject is a local person pronoun or a simple third-person pronoun, lacking third-person plurality or the lexical content of a full DP.

To model this generalization, I propose that the Series II agreement probe of a Gitksan dependent clause is relativized not to a more specific ϕ -feature value, but instead to a larger *superset* of features which take ϕ -features as a subset. Series II agreement is sensitive to non- ϕ nominal properties such as a feature distinguishing lexical and pronominal nouns, or a third-person plural feature. The Series II suffixes prefer to agree with more-local arguments bearing these features in subject position (for Double Ergative agreement), but may look further down to a less-local object when these features are not present on the subject (for Ergative/Absolutive agreement).

⁶Discussion in this thesis proceeds as if these sentences are ungrammatical; however, recent checking of these examples has shown that one of my speakers allows it about half the time (see the full list of sentences in appendix A). This variability in judgement requires more thorough investigation with a larger number of speakers.

I refer to the general set of nominal features as D-features, and suggest that they consist of three subgroups: a root [D] feature, present on any argument consisting of more than a pronominal feature bundle; plurality, which specifically denotes the plurality of animate third persons; and the pronominal features themselves (ϕ -features), from which can be derived a three-way person split and plurality distinctions specifically for participants. The entire set can be represented in a feature-geometric manner as in (8), following Harley and Ritter (2002).



Amongst participants, the feature [SPEAKER] is sufficient to differentiate first and second persons. There is a participant-specific plural feature responsible for pluralization of local persons. Third persons are identified by their lack of [PARTICIPANT] feature; a second plural feature is a sister to the bare [ϕ] node in this geometry, and corresponds to those (specifically animate) third-persons that receive third-plural agreement with Series II *-diit* in Gitksan.

Recall the Series I and II paradigms, repeated below in Table 3.3.

	I: Clitics		II: Suffixes	
	SG	PL	SG	PL
1	n	(n) dip	-’y	-’m
2	m	m sim	-n	-si’m
3		t	-t	-diit

Table 3.3: Gitksan agreement paradigms (Series I and II)

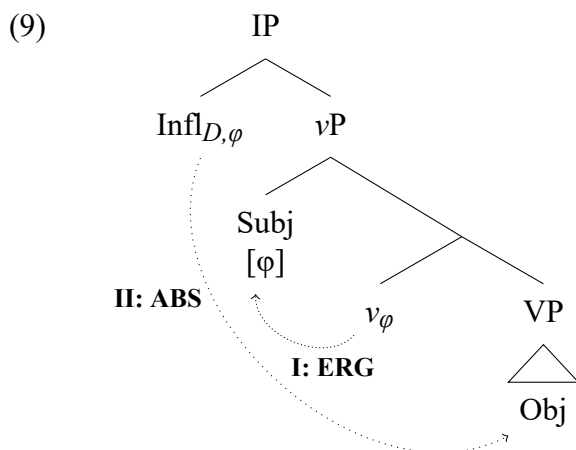
I propose that the Series I clitics have an agreement sensitivity (in other words, are *relativized*) only to the group of ϕ -features, while the Series II suffixes have an agreement sensitivity to all nominal D-features. The Series I clitics target only the features distinguished at the level of the ϕ node, and spell out these contrasts in their entirety through the Series I paradigm. This leaves us with a clitic set distinguishing three potential person values, and plurality contrasts only for the local persons, in contrast to the Series II set which distinguishes number at the third-person level. The Series II agreement probe is sensitive to these remaining D-features;

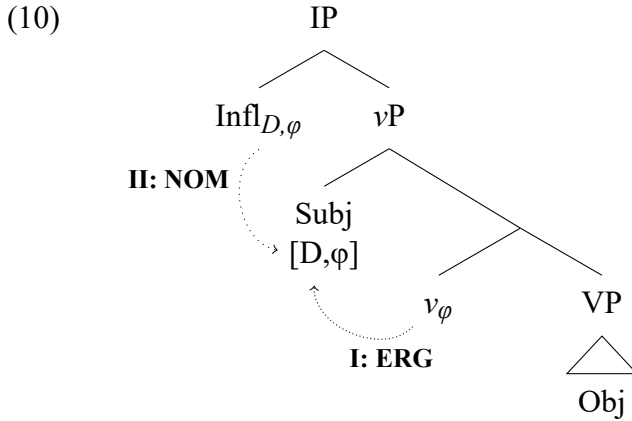
this allows both third-plurals and full DP arguments to behave as a natural class for the purposes of agreement, with respect to their ability to trigger the ‘Double Ergative’ pattern. They have additional features with which to attract agreement.

Crucially, third person plurality is located at a representationally higher level than participant plurality, directly under D. The feature [D] itself distinguishes lexical and pronominal nominal structures. This proposal directly entails that third-person plurality and the property of being a DP are both features able to be targeted by a D-focused agreement probe, but not a ϕ -agreement probe. Concretely, these properties are not ϕ -properties. I discuss some consequences and predictions of the proposed distinction in section 3.4.1.

3.1.2 Order of operations

Having distinguished the nominal types featurally, we can now examine the agreement derivation itself. I propose that the switch in Series II agreement between the subject and object is the result of it being the second probe to engage in agreement. Following a bottom-up derivation, Series II agreement is located higher than Series I agreement. The structures I propose are given in (9) and (10), below, for absolutive-patterning and nominative-patterning Series II agreement, respectively.





The difference in the final Series II agreement target is a consequence of the fact that it is relativized to D-features, and earlier Series I agreement is relativized to a subset of D-features, specifically ϕ -features. I assume that features are deactivated upon being successfully agreed with, in line with the Activity Condition (Chomsky 2000, 2001). Crucially, I assume deactivation is applied to individual features on an argument, not to the argument as a whole. As a consequence, nominals with a single type of feature (e.g. ϕ -features) may be agreed with once, while nominals with two types of features (e.g. both D- and ϕ -features) may be agreed with twice.⁷

The stages of the dependent clause derivation proceed as follows. First, ergative Series I agreement, sensitive to ϕ -features, probes for a target in a transitive clause. It always finds and agrees with the ϕ -features on the ergative argument, rendering them inaccessible for future agreement probing. This is demonstrated in the string-based representation in (11) – for now, I abstract away from both the precise heads where these agreement probes are located and their linear order, focusing on the alignment properties of the paradigms to determine how they should be modeled in the derivation. (I discuss linearization for both dependent and independent clauses in section 4.3.4.)

(11) DEP.MARKER=u ϕ Predicate-uD Agent Object

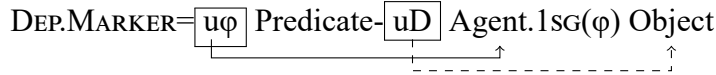
↑

Second, the Series II suffixes probe for a target. This agreement probe is sensitive to a superset of nominal features (D-features), and enters into an agreement relation with the highest nominal with active D- or ϕ -features. The outcome of this agreement operation is therefore dependent on whether all the features of the A argument have been exhausted by prior Series I agreement. If

⁷This is a desirable assumption – arguments must remain active and accessible to different operations such as number agreement (Hunt 1993; Forbes to appearb) or *wh*-agreement (Brown 2016; Forbes 2017), which apply at different points in a single derivation on top of the ϕ -agreement that I discuss here. An argument participating in number agreement must not be rendered inert for later ϕ -agreement, for example.

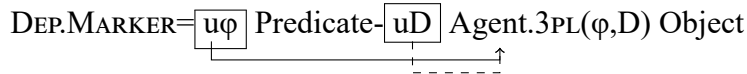
the A argument only has ϕ -features, as in (12), which models the situation with a first-singular ergative, then this D-agreement probe must look further to the object. This instantiates the Ergative/Absolutive agreement pattern.

(12) *Ergative/Absolutive*



If the A argument has both ϕ - and D-features, as in (13), which models the situation with a third-plural ergative, then the D-agreement probe may agree with it, even though it has already been the target of a previous agreement operation. This instantiates the Double Ergative agreement pattern.

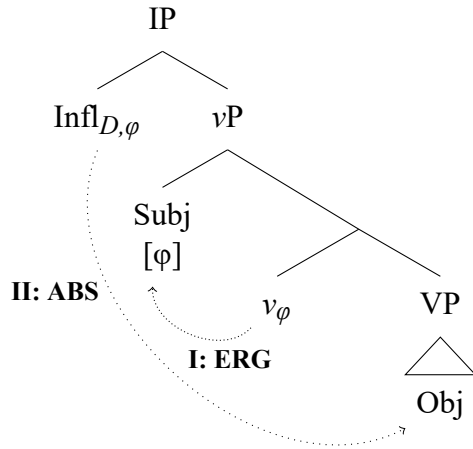
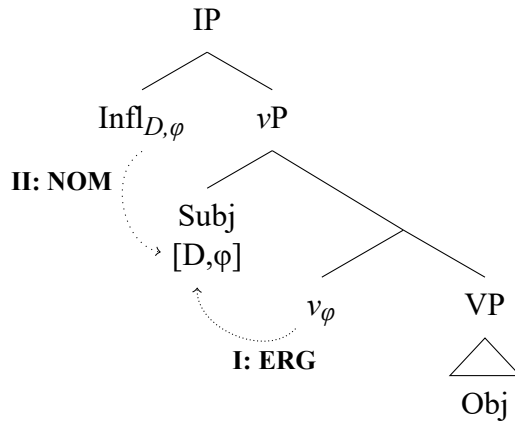
(13) *Double Ergative*



I propose that the Series I clitic probe is located low in the head of a transitive v^o where the ergative argument is merged, reflecting its consistently ergative distribution.⁸ It undergoes inherent agreement with the transitive subject (Woolford 1997, 2006; Coon 2017). The Series II suffix probe, which may have an ergative, nominative, or absolutive distribution, is located higher. Recall that in dependent clauses this type of agreement is available in both transitive and intransitive sentences. Ultimately, I argue that Series II agreement in dependent clauses can be interpreted as *highest argument agreement*, with the exception being where Series I first spells out the features of the highest argument in their entirety. The Series I probe, being lower in the structure, will probe for an agreement target first, and the higher Series II probe will agree second.

The proposed structures hierarchical structures are repeated below. The tree in (14) shows the agreement pattern for a sentence with Ergative/Absolutive agreement, where the subject is a third-singular or local person pronoun. The tree in (15) shows the agreement pattern for a sentence with Double Ergative agreement, where the subject is a DP or third-plural pronoun.

⁸This is seemingly inconsistent with the position of the Series I clitics near the beginning of the sentence; we might instead consider that these elements could be interpreted as agreement on C^o . However, complementizer agreement is typically nominative in its alignment, as opposed to ergative. In section 4.3.4, I adopt a remnant movement analysis that involves Series I agreement on v^o and the verb both raising to precede the subject.

(14) *Ergative/Absolutive*(15) *Double Ergative*

The split absolutive-nominative alignment exhibited by the Series II suffixes can therefore be understood as *highest-argument agreement* (i.e. a typically nominative alignment) which may be interrupted by intervening ergative Series I agreement (resulting in absolutive alignment). Under this analysis, split-absolutive patterning is derived as the effect of two independent agreement probes relativized to overlapping sets of features in a superset-subset relation, with the subset probe intervening between the superset probe and two potential goals.

In sum, in this section I have proposed that the Series I clitic paradigm can be represented as an agreement probe relativized to ϕ -features; it spells out all ϕ -contrasts. The Series II suffixal paradigm can be represented as an agreement probe relativized to D-features, where ‘D’ is understood to stand for all nominal features, including both ϕ -features and other nominal fea-

tures including third-person plurality and an additional feature carried by full DPs. D-features are therefore a superset, and ϕ -features a subset, of formal features that may be held by nominals. The ordering of these differently-relativized agreement probes, with Series I probing first and Series II second, results in the Gitksan nominal-type split and the alternation between Ergative/Absolutive and Double Ergative agreement.

3.2 Alternate approaches

In this section I discuss the challenges faced by other possible analyses of the nominal-type split in Gitksan dependent clauses, including those drawing on nominal hierarchies (section 3.2.1), alternate notions of feature markedness in a probe-goal framework (section 3.2.2), post-syntactic spellout rules (section 3.2.3), and case discrimination or ‘dependent’ case (section 3.2.4). In addition, I review Brown’s (2016) account of agreement marking in Gitksan (section 3.2.5), which primarily focuses on independent agreement, and discuss some of the challenges it faces in extending to the dependent clauses I have examined, particularly with respect to the nominal type split.

3.2.1 Hierarchy-based approaches

Crosslinguistically, nominal-type splits in a clause may be conditioned by a variety of nominal properties. For example, Differential Object Marking (DOM) and object-shift patterns are generally conditioned by definiteness, animacy, or topicality (Croft 1988; Comrie 1989; de Hoop and de Swart 2008a; Kornfilt 2008). The nominal-type split in Gitksan is not affected by such factors, as illustrated in (16). The same Double Ergative agreement pattern is used whether the ergative subject DP is a name (16a), an inanimate object (16b), or an indefinite (16c). Series I and II agreement are both used for the ergative subject; the object receives no agreement and is spelled out as a Series III pronoun, if pronominal (italicized in (16b,c)).

- (16) a. Yukwt giikws Henryhl susiit.
 yukw=**t** giikw-**t** =**s** Henry =hl susiit
 IPFV=3.I buy-3.II =DN Henry =CN potato
 ‘Henry is buying potatoes.’ (BS)
- b. Neemdiithl wok’hl maaxws ’nuu’m.
 nee=dim=dii=**t** =hl wok’-**t** =hl maaxws ’*nuu*’m
 NEG=PROSP=FOC=3.I =CN dig-3.II =CN snow 1PL.III
 ‘The snow is not going to bury us.’ (LW)

- c. Yugwimaat 'wehl ligit naa 'nit.
 yukw=imaa=**t** 'we-**t** =**hl** ligi=t naa 'nit
 IPFV=EPIS=**3.I** find-**3.II** =CN DWID=DN who 3.III
 'Maybe someone found him.' (VG)

In contrast, Differential Subject Marking (DSM) and split-ergative patterns (where case or agreement varies between ergative and nominative alignment, by contrast), have been described as referencing features such as person, whether the noun is lexical or pronominal, or occasionally number (Coon and Preminger 2017). DSM and split-ergativity have frequently been analyzed as being conditioned based on the argument's status within a nominal *hierarchy*. Two examples of such hierarchies ranging from more 'nominative' to more 'ergative' types of nouns are given in (17) and (18).

- (17) NOM » ERG (Silverstein 1976)
 Addr > Spkr > Pron > Proper > Human > Anim > ...
- (18) NOM » ERG (Woolford 2008)
 1PL > 1SG > 2PL > 2SG > 3PL.HUM > 3SG.HUM > 3PL.ANIM > 3SG.ANIM > 3PL.INAN > 3SG.INAN

Approaches that attempt to directly associate elements on one side of the hierarchy with a particular case (e.g. NOM), and those on the other side with another case (e.g. ABS), face a challenge in the fact that Gitksan ergative case assignment with the Series I paradigm operates simultaneously with Series II agreement, requiring some "nominative" arguments or some "absolute" arguments to receive ergative case at the same time. Another problem arises in light of the fact that these hierarchies were developed to mediate crosslinguistic patterns where a linguistic factor varies between a nominative and *ergative* distribution, unlike the Gitksan Series II split between nominative and absolute. To my knowledge, hierarchies relating to splits between nominative and absolute distributions have not been developed. The patterning of local arguments in Gitksan is strictly absolute, corresponding with the *non-nominative* side of a potential absolute-versus-nominative hierarchy. This potentially conflicts with the hierarchies above, where local person features are associated with the *nominative* side.

There is a more serious problem: attempting to superimpose these proposed markedness-based hierarchies upon the Gitksan nominal-type split results in an ordering problem. Assuming that plurals are more marked on these hierarchies than singulars, following Woolford (2008), any natural class where third-plural pronouns and DPs are grouped together also entails the inclusion of third-person singulars. However, the Gitksan split requires that third-singulars be grouped with participants rather than with other third person arguments. This is illustrated in

the mock hierarchy in (19).

(19) Participants > 3PL > 3SG > DP

To account for the Gitksan pattern, we would instead require multiple hierarchies, governing the preference for agreement with subjects versus objects independently. There are debates in the literature about the relation of singular and plural in terms of which one is more *marked*, with syntactic accounts frequently citing plural as the more marked option (e.g. Harley and Ritter 2002; McGinnis 2005; Cowper and Hall 2014) and semantic accounts taking the opposite approach, that individuated singulars are more marked than plurals (e.g. Sauerland et al. 2005). The body of languages providing evidence as to the relative markedness of number on a nominal hierarchy governing alignment patterning, specifically, is quite small, and most work in the tradition of nominal hierarchies does not incorporate number. Overall, this discussion points to a weakness of hierarchies for the problem at hand: they are developed to represent crosslinguistic trends, but may not account for categorical patterns in individual languages so readily. If it is possible to develop multiple versions of a hierarchy based on considerable variation in the languages consulted, the value of the hierarchy as even a descriptive tool for comparative purposes erodes considerably.

Under some analyses, hierarchies and similar categorization tools are encoded in the grammar as the means by which categorical variation in a particular language is modeled. I suggest that the Gitksan pattern, in its deviation from commonly attested split alignments or the typical group of features triggering such splits, provides motivation for hierarchies or feature groupings that are *emergent* rather than innate, with the child developing them through experience with the language rather than drawing on a single feature structure encoded into a Universal Grammar. This follows Cowper and Hall's (2015) work on emergent feature geometries.

3.2.2 Markedness-based approaches

Here I review the effectiveness of models that use agreement probes relativized to specific marked ϕ -features, as compared to my analysis proposed in section 3.1 where Series II agreement is relativized to a broader feature set. In such analyses, arguments bearing particular marked features are preferred for agreement, and arguments without these marked features are ignored, at least on the first pass (cf. Cyclic Agree, Béjar and Rezac 2009).

In some analyses of relativized ϕ -feature agreement, the data is argued to merit only one of the two groups of canonical ϕ -features (person and number) being initially referenced when evaluating markedness. This has led several researchers to argue that distinct sets of features like [PERSON] and [NUMBER] are considered one at a time on a so-called 'split probe' (Béjar and

Rezac 2003). Breaking down ϕ -features into person and number so that they may be evaluated independently on the basis of their marked values does not allow adequate characterization of either group of nominals involved in the Gitksan pattern; no single feature can be used to pick out either group. The [PERSON] feature is insufficient, given that third-person singulars group with participants. The [NUMBER] feature is insufficient, given that third-person plurals pattern together with singular DPs, and differently than first- or second-person plurals. Finally, the property distinguishing DPs and PRONOUNS is insufficient, given that third-person plural pronouns group with DPs. These are illustrated in (20); splits by any of these features individually fail to produce the appropriate natural classes of bolded (Double Ergative) versus non-bolded (Ergative/Absolutive) argument types.

(20) Argument types split by single features

<i>Split by PERSON</i>	1, 2	<	3SG, 3PL , 3.DP
<i>Split by NUMBER</i>	1PL, 2PL, 3PL , 3PL.DP	<	1SG, 2SG, 3SG, 3SG.DP
<i>Split by PRONOUN</i>	1, 2, 3SG, 3PL	<	3.DP
<hr/>			
<i>The Gitksan split</i>	1, 2, 3SG	<	3PL , 3.DP

The last property (DP versus pronoun) is the least frequently utilized in agreement-probe accounts, which to this point have primarily discussed splits based on person. In my analysis of Gitksan, I draw heavily on the lexical/pronominal contrast as one sub-property of nominal features, contrasting with third-person plurality and ϕ -features like person and number. All three of these sub-properties function simultaneously as subsets within the broader category of nominal D-features, and it is this larger category that is relevant to suffixal Series II agreement.

Analyses splitting person and number are often built to account for *omnivorous* effects (Nevins 2011; Preminger 2012). As discussed in the prior section, Gitksan fails to exhibit clear omnivorous agreement: omnivorous person effects are not consistently attested, as shown in (21) repeated from (6), and neither are omnivorous number effects, as in (22) repeated from (7).

- (21) a. Neediit 'wadiit 'niin.
 nee=dii=t 'wa-**diit** 'niin.
 NEG=FOC=3.I find-3PL.II 2SG.III
 'They didn't find you.'
- b. *nee=dii=t 'wa-n 'nidiit.
 NEG=FOC=3.I find-2SG.II 3PL.III

- (22) a. Neediit gya'as Mary 'nidiit.
 nee=dii=t gya'a-t=s Mary 'nidiit.
 NEG=FOC=3.I see-3.II =DN Mary 3PL.III
 'Mary didn't see them.'
- b. #nee=dii=t gya'a-diit Mary.
 NEG=FOC=3.I see=3PL.II Mary
 (Only 'They didn't see Mary.')

More frequently, such analyses generate *Person Case Constraint* (PCC) effects, where marked arguments cannot appear in certain positions when an argument of equal or lesser markedness appears above them (Bonet 1991). The Basque examples in (23) exemplify such patterns: in the presence of an indirect object, a direct object may not be a local person.

- (23) a. Zuk niri liburu-a saldu d-i-Ø-da-zu.
 you.ERG me.DAT book-ART(ABS) sell 3.ABS-√-SG.ABS-1SG.DAT-3SG.ERG
 'You have sold the book to me.'
- b. *Zuk harakin-ari ni saldu n-(a)i-Ø-o-zu.
 you.ERG butcher-ART.DAT me(ABS) sell 1.ABS-√-SG.ABS-3SG.DAT-3SG.ERG
 'You have sold me to the butcher.'

(Preminger to appear, from Laka 1996: 98)

Neither does Gitksan exhibit PCC effects. There are no apparent restrictions on forming sentences involving a third person goal and local theme, as there are in Basque and other PCC languages. In (24) below, a local person oblique theme 'nuu'm 'us, 1PL' is located below a third person direct object goal *gawk'aw* 'crows', with no apparent issue.⁹

- (25) Nax'ni'y wint 'nim ginhl gawk'aw as 'nuu'm.
 nax'ni-ə-y [win=t 'nim gin-t =hl gawk'aw a-t =s 'nuu'm]
 hear-TR-1SG.II [COMP=3.I DESID feed-3.II =CN crow PREP-3.II =DN 1PL.III]
 'I heard [that she wants to feed us to the crows].'

(VG)

Finally, it might be supposed that the Series II probe does not in fact engage in agreement

⁹Though curiously, there does seem to be variation as to which overt nominal is realized as oblique. An alternative version of (25) is given in (24); while the third person goal *gawk'aw* 'crows' always receives Series II agreement, the theme 'nuu'm 'us, 1PL' may appear directly after the verb, and need not always be marked as oblique.

- (24) Nax'ni'y wint 'nim gint 'nuu'm ahl gawk'aw.
 nax'ni-ə-y [win=t 'nim gin-t 'nuu'm a-t =hl gawk'aw]
 hear-TR-1SG.II [COMP=3.I DESID feed-3.II 1PL.III PREP-3.II =CN crow]
 'I heard [that she wants to feed us to the crows].'

(VG)

This pattern requires further investigation. I hypothesize that the oblique alternation can be partially explained in terms of local persons needing to be verb-adjacent, as discussed in section 6.5.

with DPs, but that instead the *-t* morpheme that appears is some sort of default value, returned if agreement has failed. This would allow some of the difficulties in understanding Series II agreement with DPs to be sidestepped, and an analysis about object-markedness pursued. However, we would then expect the same ‘default’ *-t* morpheme to appear with weather predicates, where agreement fails due to a lack of target. Weather predicates instead show *no* agreement, as illustrated in (26), a dependent clause. The Series II morpheme *-t* therefore cannot be a morphological default.

- (26) Yugwimaa dim wis.
 yukw=imaa dim wis
 IPFV=EPIS PROSP rain
 ‘It might be going to rain.’ (BS)

In summary, the predictions of accounts which relativize agreement probes to particular *marked* values of feature groups are not borne out in Gitksan.¹⁰ In order for a ϕ -probe to target the relevant set of arguments, some precise configuration of many features (including all of person, number, and DP/pronoun) would have to be referenced. For this to happen on a single probe, the arrangement of relevant features would be little more than stipulation; this is more characteristic of morphology and spellout than it is of systematic syntactic patterning. I have instead proposed that the higher agreement probe is relativized to a *less marked* feature group.

3.2.3 Morphological approaches

We can also entertain the idea of an approach to the absolutive-nominative split of Series II agreement as arising *post-syntactically*, in the morphological component. McGinnis (2008) advises caution in adopting such analyses at the outset, given that syntactic analyses typically result in predictions for structure elsewhere in the language, driving further investigation. She suggests that morphological analyses should be taken up only after syntactic approaches have been explored.

Given that third-plural is not spelled out contrastively by the Series I clitics (refer to Table 3.2 for the full paradigm), we might suppose that there is a morphological pressure to overtly realize the plural feature of an ergative argument. This might trigger post-syntactic movement of the plural feature from the site of Series I agreement, where it goes unrealized, to the site of Series II agreement, where third-person plurality can be spelled out.

To demonstrate more clearly, we might suppose that Series I clitic agreement is strictly ergative, and Series II suffixal agreement is strictly absolutive. The standard situation would

¹⁰With the exception of some person-specific behavior (involving DP subjects over local-person objects), though it will be shown in section 3.3.2 that this is an independent pattern.

therefore be the Ergative/Absolutive agreement pattern, illustrated in (27); a schematic of agreement is given in (28).

- (27) Neediit yatst.
 nee=dii=t yats-*t*
 NEG=FOC=3.I hit-3.II
 ‘S/he_I didn’t hit him_{II}.’ *Ergative/Absolutive*

- (28) *Agreement:*
 NEG=I Predicate-II Agent.3 Object.3
-
- The diagram shows a horizontal line with three upward-pointing arrows. The first arrow points from the 'I' in the NEG=I box to the 'II' in the Predicate-II box. The second arrow points from the 'II' in the Predicate-II box to the '3' in the Agent.3 box. The third arrow points from the '3' in the Agent.3 box to the '3' in the Object.3 box.

When the Double Ergative pattern arises, as it does in (29) with a third-plural agent, agreement is the same in the syntax (30a). After the derivation is sent to PF for spellout, however, the 3PL feature cannot be spelled out by the Series I paradigm. This leads to the feature shifting to the Series II head where it can be morphologically accommodated, as in (30b), and the remaining object features being realized as a full pronoun.

- (29) Neediit yatsdiit ’nit.
 nee=dii=t yats-**diit** ’nit
 NEG=FOC=3.I hit-3PL.II 3.III
 ‘They_{I,II} didn’t hit him/her_{III}.’ *Double Ergative*

- (30) a. *Agreement:*
 NEG=I Predicate-II Agent.**3PL** Object.3
-
- The diagram shows a horizontal line with three upward-pointing arrows. The first arrow points from the 'I' in the NEG=I box to the 'II' in the Predicate-II box. The second arrow points from the 'II' in the Predicate-II box to the '3PL' in the Agent.3PL box. The third arrow points from the '3PL' in the Agent.3PL box to the '3' in the Object.3 box.
- b. *Postsyntactic shift:*
 NEG=I Predicate-II Agent.**3PL** Object.3
-
- The diagram shows a horizontal line with three upward-pointing arrows. The first arrow points from the 'I' in the NEG=I box to the 'II' in the Predicate-II box. The second arrow points from the 'II' in the Predicate-II box to the '3PL' in the Agent.3PL box. The third arrow points from the '3PL' in the Agent.3PL box to the '3' in the Object.3 box. A dashed line connects the '3PL' in the Agent.3PL box to the 'II' in the Predicate-II box, indicating a shift.

This post-syntactic feature movement is essentially motivated to resolve the issue of ambiguity: to more robustly realize possible morphological contrasts, and to prevent sentences like (27), which only have neutral 3rd-person ergative agreement on the Series I clitic, from being ambiguous between a singular or plural agent. However, an analysis motivated by the resolution of ambiguity does not explain why the Series II paradigm follows a Double Ergative pattern not just for third-plural agents, but also for full DP agents as in (31), where the presence of the DP itself is sufficient to resolve any possible case of ambiguity.

- (31) Neediit gya’as Michael ’nii’y.
 nee=dii=t gya’a-t =s Michael ’nii’y
 NEG=FOC=3.I see-3.II =DN Michael 1SG.III
 ‘Michael didn’t see me.’ (Davis and Forbes 2015: 170)

(32) Neediit t'isdiit.
nee=dii=t t'is=diit
NEG=FOC=3.I hit-3PL.II
(a) 'They didn't hit him/her.'
(b) 'S/he didn't hit them.'

(Davis and Forbes 2015: 168)

There are other possibilities for morphological approaches to agreement splits than post-syntactic feature rearrangement. Legate (2014) has proposed a morphological analysis for certain kinds of nominal-type splits, particularly those where pronouns exhibit a nominative/accusative case alignment and lexical arguments exhibit an ergative/absolutive one. Under her approach, all arguments in these types of systems are subject to underlying three-way case assignment. The nominative grouping for pronouns, versus absolutive grouping for other nominals, is interpreted as a difference in *case syncretism* for the two types of arguments. For both pronouns and lexical arguments in these systems, nominative and absolutive are spelled out as zero; the difference responsible for the surface split lies in the differing availability of non-zero vocabulary items for ergative or accusative case across pronouns versus lexical DPs.

This type of morphological analysis – one based on syncretism – is difficult to apply to the Gitksan split for several reasons. First, the Gitksan nominal-type split does not hold across the entire language; it is restricted to dependent clauses. A morphological analysis dependent on the rules of Vocabulary Insertion will have to accommodate a third agreement pattern that appears only in independent clauses, where Series II agreement targets an ergative distribution rather than either an absolutive or nominative one. This cannot be interpreted as a different “grouping” of arguments; while a ‘nominative’ and ‘absolutive’ distribution overlap with respect to their inclusion of intransitive S, an ‘ergative’ distribution does not. The overall agreement pattern of the Series II suffixes is therefore less well-handled by syncretism.¹¹

¹¹Of course, clause type could be referenced by the morphological component as a conditioning factor on Vocabulary Insertion, through use of a reference to some [DEPENDENT] or [INDEPENDENT] feature, and the spellout of particular paradigms determined differently in the presence or absence of the clause-typing feature. I believe this is best

Second, the Gitksan agreement split arises with respect to the target of verbal agreement, rather than the shape of nominal case marking. It is assumed that the same abstract relations can underlie both head- and dependent-marking languages; the point of difference is with respect to which side of the relation is marked morphologically (the head = verb, or the dependent = noun). Under a *morphological syncretism* approach to a split, the object of morphological marking is extremely important. For a nominal-type split, it follows naturally that different nouns may have different available cases. The trigger of the split follows directly from the available inventory of vocabulary items. The same abstract cases are assigned, but different inventories for different nouns can result in a distinct surface alignment.

For an agreement language, we must invert our perspective. Assuming a probe-goal approach to agreement, as both Legate (2014) and I do, the form of an agreement paradigm is determined based on its context in the syntactic structure: typically, which head bears the agreement probe. Syncretism in agreement is when two agreement contexts trigger the same morphological paradigm: for example, clausal *vP* and a nominal *PossP* might use the same paradigm, resulting in syncretism for ergative and possessor agreement. A syncretic split for a verbal agreement paradigm is therefore expected not on the basis of the agreement *target*, but instead on the basis of different syntactic contexts, or probes, which happen to trigger the same morphological realization. This is unlikely to result in a nominal-type split.

Therefore, rather than utilizing either a defined nominal hierarchy or specific markedness values on ϕ -features that are selected either as an agreement target or as a target for spellout, I propose to account for the pattern in terms of defined groups or *sets* of features, defined based on their activity in the nominal split and supported by their differing historical development in the Tsimshianic family. By ordering two probes relativized to smaller and larger feature sets, and neither to a specific marked value, we arrive at the appropriate pattern.

3.2.4 Case-competition approaches

Not all approaches take morphological agreement to be the relation between an agreement probe on a syntactic head and a goal argument bearing syntactic features. Marantz (1991) argues for the possibility of post-syntactic determination of morphological case and/or agreement in a ‘dependent case’ framework: after syntactic structure has been built, the nominals present in a domain are assigned case on the basis of, first, their proximity to a lexical or inherent case-assigner, and second, whether they are the unique nominal in the domain. Specific lexical items are capable of assigning *lexical* case to their arguments. Arguments without lexical case that are alone in their domain receive *unmarked* case. Where two nominals are present in a domain,

avoided if possible, however, since this feature doesn’t clearly spell out anything else; in the account of the clause type split I provide in Chapter 4, I do not draw upon a clause-type feature.

and neither takes a lexically-assigned case, one must be assigned a *dependent* case, and the remaining receives unmarked case. Languages are taken to vary parametrically in whether the dependent case is assigned to the lower nominal in the domain (= accusative case) or the higher nominal (= ergative case). The ‘dependent case’ or ‘case competition’ framework is a prominent alternate framework for analysis of ergative alignment.

The dependent case framework has been further developed by later researchers (Bobaljik 2008) (Bobaljik 2008; Baker and Vinokurova 2010; Baker 2015). It remains a matter of current debate whether dependent case is truly post-syntactic, as originally proposed; Bobaljik (2008) proposes that case assignment is post-syntactic, and furthermore that agreement depends on the results of case assignment, and is therefore also post-syntactic. In contrast, Levin and Preminger (2015) argue that both operations must take place in the syntax. Though this framework has typically been used to account for morphological *case* systems in natural language, Marantz (1991) notes that it is easily extensible to morphological agreement. This extension might be direct or indirect; Bobaljik (2008) proposes that agreeing heads may target nominals with certain types of the three above cases. Specifically, he argues that agreement with the three abstract types of case is available in an individual language on the basis of an implicational hierarchy as in (33); if one case on the hierarchy is a possible target for agreement, then all cases to its right are also possible targets. For example, if nominals with abstractly-assigned dependent case are available for a morphological agreement process, then elsewhere in the language nominals with unmarked case must also be targeted by agreement.

(33) Lexical Case (DAT) < Dependent Case (ACC/ERG) < Unmarked Case (NOM/ABS)

Gitksan initially appears a promising system for analysis in a dependent case framework. Just as Marantz (1991) proposes three abstract cases (lexical, dependent, unmarked), Gitksan has three types of person-marking paradigm (Series I, II, III). However, the approach faces several problems. First, to engage in direct correspondence with Marantz’s (1991) three cases, one of the three Gitksan paradigms would have to be associated with Marantz’s *lexical case*, typically reserved for so-called ‘quirky’ dative arguments. There is no obvious case or agreement form in Gitksan for quirky case – to the extent that quirky arguments might be presumed to exist, they are realized as obliques under the preposition *a-* or oblique pronominal base *loo-*. Beyond this, Series I has the most restricted distribution (ergative of dependent clauses) so it might be considered the best candidate for the lexical case. This is problematic for a number of other reasons: first, Baker and Bobaljik (2017) argue explicitly that ergative case should *not* be interpreted as inherent (theta-related, lexical) case; second, it goes unexplained why the most lexical of cases should be assigned in one clause type but not the other, as Series I is (clause

type being a thoroughly non-thematic property).¹²

It is most appropriate to assume that none of the three paradigms corresponds to lexical case. Which paradigm corresponds to the dependent case, then? Recall the distribution of the three paradigms in their entirety, as repeated in Table 3.4.

ERG is →	Dependent		Independent
	Most Pronouns	3PL/DP	
Series I (clitic)	A	A	
Series II (suffix)	O, S	A, S	A
Series III (full)		O	O, S

Table 3.4: Gitksan agreement distributions, by paradigm

Independent clauses, which exhibit a simple ergative/absolutive alignment between Series II agreement and Series III pronouns, can be accounted for if Series II (ergative) is interpreted as the dependent case and Series III (absolutive) as the unmarked case. However, extension into dependent clauses proves more troublesome, partially due to agreement switch across the clause-type split. In the Ergative/Absolutive pattern, the same ergative/absolutive alignment that arises would be best accommodated if instead Series I (ergative) were the dependent case and Series II (absolutive) the unmarked case.¹³ How does the Series II paradigm come to agree with nominals that have dependent case in independent clauses, but unmarked case in dependent clauses? This type of analysis seems to require a particular case-specification for Series I and II agreement in the context of one clause type, but not the other.

The nominal type split further complicates the picture, as this triggers a morphological ERG/NOM/ACC alignment across the three paradigms. Under a dependent-case framework, it is impossible to pick out an ergative distribution and a nominative distribution simultaneously; if dependent case is parametrically set to pick out the ergative, then unmarked case is necessarily assigned to the complementary absolutive group of arguments. This parameter setting is nec-

¹²This is a problem faced by any analysis of Gitksan that attempts to associate Series I agreement with ‘inherent’ or theta-related case along the lines of Woolford (2006) including my own to this point. This is addressed in my analysis of ergative Series II agreement in independent clauses, in Chapter 4.

¹³Baker (2015) presents a dependent-case analysis of Coast Tsimshian (based on various descriptions by Dunn) wherein he interprets Series I as dependent case and Series II as pronominal clitics. Baker (2015) looks primarily at dependent clauses and does not appropriately interpret the distribution of Series II suffixal marking (cf. discussion by Davis and Forbes 2015; Davis 2018); his dependent-case analysis ultimately fails to accommodate the full range of complexity in Coast Tsimshian alignment patterns. (Later discussion by Bárány (2018) suffers from the same issue.) I have already shown in section 2.5.2 that an analysis of Series II as pronominal clitics is untenable for Gitksan, so Baker’s proposal cannot extend to the Interior; until further research is conducted on whether the Coast Tsimshian paradigms are *agreement* or *syntactic clitics* (as in my discussion of Gitksan), I assume that the two closely related Coast and Interior branches do not differ in this respect. See also Davis (2016) for specific argumentation against Baker’s (2015) analysis.

essary in Gitksan, in order to pick out ergatives. However, in the Double Ergative context of dependent clauses, Series II agrees with both A (dependent case) and S (unmarked case). We are then forced to say that the Series II suffixes have a more abstract distribution: they may agree with arguments with either dependent *or* unmarked case. This picture is illustrated in Table 3.5.

ERG is →	Dependent		Independent
	Most Pron.	3PL/DP	
Series I (clitic)	DEP	DEP	
Series II (suffix)	UNM	DEP+UNM	DEP
Series III (full)		UNM?	UNM

Table 3.5: Gitksan agreement distributions mapped to a dependent case framework

At this point, the distribution of Series II agreement is boiled down to a list of which types of arguments it may or may not agree with in each particular context. Ideally, there should be something about the contexts that would naturally trigger the necessary specifications – perhaps by defining ‘domains’ differently in the two clause types, or across the nominal type split – but this is not obviously the case (see Chapter 4 for further discussion). Concentrating on the nominal-type split in particular, it would be ideal if the switch in the distribution of Series II was due to some property of the nominals themselves (as in my proposed analysis). We might consider, for example, that the DP and third-plural group of arguments is particularly “large” or “heavy”, and in some way qualifies as “two” nominals, that are able to receive both dependent and unmarked case simultaneously; that is, a “heavy” A argument could receive both dependent and unmarked case. In this way, Series II in dependent clauses could exclusively mark nominals with unmarked case, and still agree with A. However, if DP arguments are treated as “two nominals” when functioning as A, the same should be true when they function as S. Intransitive S arguments only ever receive a single type of agreement, however, and never receive ergative (dependent case) marking, as would be expected if they received both types of abstract case.

While it remains possible that the dependent case mechanism is at work in the Tsimshianic languages for the assignment of *abstract* case,¹⁴ it does not seem intuitive to reference dependent case notions for the patterning of *morphological agreement* in Gitksan, particularly across the two split contexts. The persistent ergative alignment of Series I and Series II in either clause type, and in particular the doubled agreement within dependent clauses, both present challenges to the dependent case framework. Doubled agreement is accounted for in a relatively straight-

¹⁴Indeed, see Davis’s (2018) analysis, which is based on this assumption.

forward way, with reference to the features of the nominals involved, under my approach to the nominal-type split in a probe-goal agreement framework.

3.2.5 Brown's (2016) analysis

This section considers a final alternative, this time not a family of analyses, but instead a particular syntax proposed specifically for Gitksan. Coon et al. (2014) argue based on variation in the Mayan family that, in ergative languages with extraction restrictions on the A argument, absolutive S and O arguments receive case high in the clause from T/Infl. The extraction restriction is said to arise through an issue with case-licensing the absolutive object when ergative A raises. Brown (2016) recently argues that Gitksan exhibits an ergative extraction restriction. Following Coon et al.'s (2014) work, Brown (2016) proposes that the extraction restriction in Gitksan arises due to a problem with case-licensing the absolutive object when the ergative subject is raised over it and out of the clause.

Brown (2016) proposes specifically that Gitksan independent clauses are more 'canonical' with respect to agreement (in a language-internal sense), on the assumption that dependent clauses are *nonfinite*. Series II agreement is interpreted as ergative agreement from *v* in independent clauses, following an inherent case approach (Woolford 2006), and as possessor agreement in nonfinite dependent clauses. Realization of an argument as a Series III pronoun is possible if an argument is licensed by T/Infl. In independent clauses, this results in an absolutive distribution for Series III arguments. Series III pronouns are not found in most dependent clauses because nonfinite T/Infl does not license arguments.

I note two immediate issues with this proposal. First, it is unclear why dependent clauses should be interpreted as nonfinite, particularly when they exhibit *more* agreement than independent clauses do, in the form of both Series I and II agreement. There are no tense, aspectual, or modal contrasts that are present in independent clauses but are lost or neutralized in dependent clauses – more frequently the opposite is the case, with a number of aspectual and modal distinctions being realized exclusively in dependent clauses. More detailed argumentation against an analysis of dependent markers as nonfinite or nominalizations is presented in section 4.2.

Second, the analysis of Series III elements as licensed by T/Infl intuitively suggests that the Series III distribution should be coherent in some way – Series III is a preferred form licensed by an agreement head seeking a target. Gitksan dependent clauses go against this expectation, however. Series III arguments do indeed appear, and in something of a 'leftover' pattern; the primary generalization to be made about their distribution is that arguments surface in this form when they are *not* indexed by the other two forms of agreement. Brown's (2016) analysis accommodates Series III arguments in dependent clauses by interpreting them as default or

‘repair’ forms, homophonous with the absolutive T-licensed forms of independent clauses. This follows based on the use of Series III forms in focus positions and other unlicensed contexts. That is, Brown (2016) proposes two types of Series III argument: T-licensed forms in finite clauses, and default forms elsewhere.

To support this claim, Brown (2016) argues that neighboring Coast Tsimshian in fact uses two different pronominal forms in either case; a bound/affixed pronoun for the ‘T-licensed’ arguments in independent clauses, and a free pronoun elsewhere. Indeed, the Interior Tsimshianic Series III pronoun set that I have so far discussed for Gitksan does correlate with two distinct paradigms in Coast Tsimshian, presented in (34).¹⁵

	IIIa: Bound		IIIb: Free/Independent	
	SG	PL	SG	PL
1	-’nu	-’nm	’nüüyu	’nüüm
2	-n	-nsm	’nüün	’nüüsm
3		—		’niit

Table 3.6: Coast Tsimshian pronouns (Series IIIa and IIIb)

Contra Brown’s (2016) claim, the distribution of the bound Series IIIa set does not correspond to the absolutive arguments of independent clauses. In Chapter 6, where I discuss Coast Tsimshian independent clauses in detail, I demonstrate that the absolutive arguments of independent clauses can be realized as either Series IIIa pronouns, Series IIIb pronouns, or *neither*. I propose an alternate means of understanding the Series IIIa/b distinction in Coast Tsimshian: the Coast Tsimshian Series IIIa forms do not differ in their underlying syntax from the IIIb full pronouns, but instead are simply phonological clitics licensed under adjacency with the verb. Series III arguments therefore receive a unified analysis as default spellout forms, and predictably appear where no other agreement is available. The proposal forwarded in this chapter, that the Gitksan Series I and II agreement heads target particular distributions of arguments and Series III is a default form for arguments that receive no agreement, explicitly encodes the ‘leftover’-like distribution of Series III arguments in dependent clauses. I discuss the issue of Series III pronouns in more detail in section 7.4.2.

¹⁵I refer to these sets as Series IIIa and IIIb (following Peterson 2017), to retain consistency with the Gitksan terminology and to facilitate cross-Tsimshianic comparison for the unfamiliar reader. See Chapter 6 for more detailed review of the Coast Tsimshian patterns, as well as a proposed analysis.

3.3 A wider view of dependent clauses

Having presented an analysis of the nominal-type split under an agreement-probe framework and defended it against several alternative possibilities, I now discuss how the proposed analysis can be extended to related empirical patterns. I first demonstrate that the analysis of dependent clauses in Gitksan intuitively extends to dependent clause agreement in closely related Coast Tsimshian (section 3.3.1), and then turn to a point of free variation in Gitksan, where dependent clauses containing local-person objects may follow either the Ergative/Absolutive or Double Ergative pattern of agreement (section 3.3.2). I argue that this is yet another syntactic split, made on the basis of person and operating independently of the nominal-type split previously laid out.

3.3.1 Coast Tsimshian dependent clauses

Coast Tsimshian, or Sm'algyax, spoken on the Pacific coast of BC and southern Alaska, exhibits a clause-type contrast identical in all relevant respects to Gitksan and Nisga'a (the Interior languages);¹⁶ its agreement paradigms are largely cognate with the three series we are familiar with from Gitksan. A notable difference, however, is in third-person number: there is no number contrast for third persons in any of the Coast Tsimshian agreement series. The Coast and Interior suffixal paradigms (Series II) are presented for comparison in Table 3.7.

	Gitksan (Interior)		Coast Tsimshian (Maritime)	
	SG	PL	SG	PL
1	-y	-m	-u	-m
2	-n	-si'm	-n	-sm
3	-t	-diit		-t

Table 3.7: Series II suffix paradigms (IT versus CT)

Third persons in Coast Tsimshian are referred to with the neutral suffix *-t* regardless of number.¹⁷ There is no number contrast for third-persons in any Coast Tsimshian paradigm; third-plurals with the morpheme *-diit* are an innovation of the Interior Tsimshianic branch (see fuller discussion in section 4.1.1.2). This is highly relevant, as third-person plurals are one of the two types of nominal that trigger the Double Ergative agreement pattern when functioning

¹⁶I describe Coast Tsimshian in much more detail, including prior literature, full agreement paradigms, and agreement across both clause types, in Chapter 6.

¹⁷Third plural pronouns in Coast Tsimshian are specified with *dp 'niit*, formed from the neutral third person pronoun *'niit* plus *dp*, the cognate of which I have analyzed in Gitksan as an associative plural marker (Forbes to appearb).

as an ergative subject in the Interior varieties. With this class of arguments absent, how does agreement function in Coast Tsimshian?

It turns out that Coast Tsimshian dependent clauses contain no split whatsoever. All combinations of arguments uniformly take the Ergative/Absolutive agreement pattern across the cognate Series I and Series II paradigms. Three transitive examples are presented below, with the ergative clitic (Series I) and absolutive suffix (Series II) marked.

(34) *1sg subject < 3sg object*

Dm gūūdagut Lucille dzida ɫan didaalxt.
 dm gūūdax-u =t Lucille [dzida ɫa=**n** didaalx-**t**]
 PROSP ask-1SG.II =DN Lucille [when INCEP=**1.I** talk.to-**3.II**]
 ‘I’ll ask Lucille when I talk to her.’ *Coast*, (Sasama 2001: 69)

(35) *DP subject < 1pl object*

ɫat ts’inslooygm gyat.
 ɫa=**t** ts’ins-looyk-**m** gyat
 INCEP=**3.I** away-move.away-**1PL.II** people
 ‘People are moving away from us.’ *Coast*, (Sasama 2001: 151)

(36) *DP subject < 3sg object*

Yagwat ɫūmoomdit Meli.
 yagwa=**t** ɫūmoom-**t** =t Meli
 IPFV=**3.I** help-**3.II** =DN Mary
 ‘Mary is helping him.’ *Coast*, (Bach 2004)

As demonstrated in particular by (35) and (36), even clauses with DP ergatives, which receive Double Ergative agreement in Interior Tsimshianic, see complementary Ergative/Absolutive agreement in Coast Tsimshian – in each case, it is the absolutive object that is represented by the verbal suffix, rather than the ergative DP. The absolutive object does not surface as a free Series III pronoun.

We can also compare the Coast Tsimshian pattern directly with the Interior (Gitksan) pattern analyzed earlier in this chapter. The Interior correlate of (36) is provided in (37), for reference; here we see Double Ergative agreement by the Series I and II paradigms with the agent. The Series II suffix does not mark the third-singular object; O is instead realized as an overt Series III pronoun, or simply *pro*-dropped.

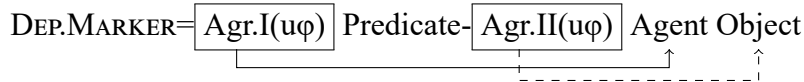
(37) Yukwt hlimoos Mary (’nit).
 yukw=**t** hlimoo-**t** =s Mary (’**nit**)
 IPFV=**3.I** help-**3.II** =DN Mary (**3.III**)
 ‘Mary is helping him.’

Interior, (Bach 2004)

In Coast Tsimshian, then, we can say that dependent clauses participate in a uniformly Ergative/Absolutive agreement pattern. This is partially expected – the Double Ergative pattern is triggered by third-plural arguments in the Interior languages, and as we have seen, Coast Tsimshian does not incorporate a grammatical third-plural contrast in its pronominal system (or indeed any paradigm). However, recall that full DPs pattern like third-plurals in Gitksan with respect to following the *Double Ergative* pattern. That is, DPs behave like plurals, not like simple third-person pronouns. It is notable, then, that Coast Tsimshian ergative DPs behave no differently than simple third person pronouns. All combinations of arguments engage in identical Ergative/Absolutive agreement.

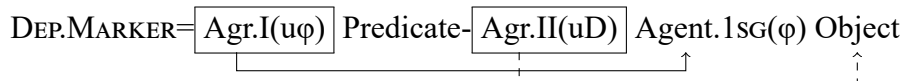
The divergent behavior of DPs in the two branches provides support for my account of the Interior nominal type split, which places the locus of the split in the realm of general nominal D-features. We may interpret Coast Tsimshian agreement as follows: in Coast Tsimshian, both the Series I and Series II agreement probes are relativized to ϕ -features (person and participant number). The contrast between lexical and pronominal nouns goes unreferenced – that is, D-features are entirely irrelevant. With both the Series I and II probes being relativized to the same set of features, agreement is expected to proceed as illustrated in (38); with the Series I and II probes targeting different arguments. Once an argument has entered into an agreement relation with either probe, all of its ϕ -features will be entirely deactivated, making it inaccessible to a subsequent probe.

(38) *Coast Tsimshian Ergative/Absolutive*

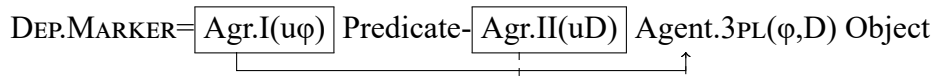


In the Interior branch, third person plurality was innovated into the set of D-features and incorporated into the Series II (and III) pronominal system. The Series II agreement probe was reanalyzed as being sensitive to this newly modified set of more general nominal features, rather than only ϕ -features. This allowed not only third-plurals but also DP arguments, which bear a [D] feature, to remain accessible to D-relativized agreement after their ϕ -features have been deactivated by ϕ -agreement. Agreement is expected to proceed differently if the A argument *does not* have D-features (illustrated in (39)) versus if it *does* have D-features (illustrated in (40)).

(39) *Interior Tsimshianic Ergative/Absolutive*



(40) *Interior Tsimshianic Double Ergative*



The innovation of D-feature-sensitivity onto Series II agreement in the Interior results in the rise of the Double Ergative agreement pattern in the Interior, and allows third-singular and third-plural ergatives to be differentiated even though these are non-contrastive in the ergative Series I paradigm. DP arguments also have D-features, so the Double Ergative agreement pattern naturally extends to them even though double agreement here is functionally redundant: no information is conveyed by Series II agreement that is not already apparent from the DP itself. The close connection that my analysis (proposed in section 3.1) draws between third-person number and the lexical/pronominal feature of DP arguments, both falling under the umbrella of D-features, is therefore a major benefit. Competing approaches do not predict the extension of the third-plural agreement pattern to DP arguments, especially considering that Series II marking of the DP agent rather than the absolutive object is functionally unnecessary.

3.3.2 A dependent-clause person split

There is a final note of variability in the picture of Interior Tsimshianic agreement that I have presented in this chapter. In situations where DP ergatives act on local-person objects, Series II suffixal agreement has the option of agreeing with *either* the subject or object of the configuration. That is, either the Ergative/Absolutive or Double Ergative agreement pattern is possible. Speakers do not note any difference between the two options and appear to switch between them freely.¹⁸

- (41) a. Jidaat 'maji'mhl lo'op, ...
 ji-daa=t 'mats-'m =hl lo'op ...
 IRR-SPT=3.I hit-1PL.II =CN rock ...
 'If a rock hits us ...' *Ergative/Absolutive*
- b. Jidaat 'matshl lo'op 'nuu'm, ...
 ji-daa=t 'mats-t =hl lo'op 'nuu'm, ...
 IRR-SPT=3.I hit-3.II =CN rock 1PL.III ...
 'If a rock hits us ...' *Double Ergative*
- (42) a. Hinda dim wili'y jit gun ha'wi'y t Lisa?
 hinda dim wil-'y ji=[t gun ha'w-'y =t Lisa?]
 how PROSP do-1SG.II IRR=[3.I JUSS go.home-1SG.II =DN Lisa]
 'What will I do if Lisa makes me go home?' (BS)
- b. Hinda dim wili'y jit gun ha'ws Lisa 'nii'y?
 hinda dim wil-'y ji=[t gun ha'w-t =s Lisa 'nii'y?]
 how PROSP do-1SG.II IRR=[3.I JUSS go.home-3.II =DN Lisa 1SG.III]
 'What will I do if Lisa makes me go home?' (BS)

¹⁸No targeted analysis has yet been conducted on the conditioning properties for either possible pattern. A corpus-based or variationist investigation might be a suitable point of departure for such a question.

With this additional data, we can provide a final generalization of agreement patterns and the types of arguments that trigger them as in Table 3.8. The final two rows illustrate different agreement patterns for the same set of transitive arguments (DP agent < 1/2 object), indicating free variation.

AGENT	<i>agreement</i>	OBJECT	<i>agreement</i>	<i>pronoun?</i>
Pronoun (1,2,3SG)	I	(any)	II	
Pronoun (3PL)	I, II	(any)		→ III
DP	I, II	DP, Pronoun (3)		→ III
DP	I	Pronoun (1/2)	II	
DP	I, II	Pronoun (1/2)		→ III

Table 3.8: Possible agreement patterns in Gitksan dependent clauses

This variable pattern in what the Series II probe chooses to agree with might be taken as an indication that the Series II suffixal agreement probe is in fact specially relativized to the feature [PARTICIPANT] in some way – that dependent clauses do exhibit a person-split, rather than the ϕ /D split I have proposed. However, there are three reasons why such a proposal is not tenable.

First, the Ergative/Absolutive pattern is not consistently available in clauses featuring third-plural ergatives over participant objects (as previously demonstrated in discussion on omnivorous number effects in section 3.2.2). Such configurations obligatorily engage in Double Ergative agreement with the third-plural argument. In (43), Series II agreement targets the third-plural ergative subject, and cannot look below to the local-person object.

- (43) a. Neediit 'wadiit 'niin.
 nee=dii=t 'wa-diit 'niin.
 NEG=FOC=3.I find-3PL.II 2SG.III
 'They didn't find you.' *Double Ergative*
- b. *nee=dii=t 'wa-n 'nidiit.
 NEG=FOC=3.I find-2SG.II 3PL.III

Second, the claim that participants should in some way outrank DPs on a scale of markedness for agreement leads to a paradox in argument ranking. As demonstrated in (43) above, third-plurals are preferred for agreement over local person arguments. Local persons may be preferred over DPs, and yet DPs are always preferred over third-plurals, as demonstrated in (44).

- (44) a. Neediit gya'as Mary 'nidiit.
 nee=dii=t gya'a-t=s Mary 'nidiit.
 NEG=FOC=3.I see-3.II =DN Mary 3PL.III
 'Mary didn't see them.'
- b. *nee=dii=t gya'a-diit Mary.
 NEG=FOC=3.I see=3PL.II Mary
 (Only 'They didn't see Mary.')

The circularity of these agreement preferences is illustrated in the hypothetical hierarchy in (45).

- (45) 1/2 > DP > 3PL > 1/2 > DP > 3PL ...

Local person objects are optionally preferred for agreement over a DP subject (as in (41) above), but never over a third-plural subject (as in (43)). Yet, third-plural objects are never preferred for agreement over any kind of subject. That is, there is no obvious reason to interpret this as a situation where arguments of a particular marked feature value (local persons) are targeted for agreement by a 'picky' probe.

The third point against modifying our current understanding of the Gitksan nominal type split based on these local-person object preferences lies in the much deeper nature of such preferences. There are additional marked patterns when objects are local persons, not restricted to the target of Series II agreement. *Independent clauses* also show an atypical pattern when a third person acts on a local person object; this pattern is only rarely volunteered but always accepted by the Gitksan speakers I have worked with, and is used consistently in the neighboring language Nisga'a (Jelinek 1986; Tarpent 1987b). The typical VSO sentence used in Gitksan is presented in (46a). The (likely older) VOS alternative is given in (46b). Rather than shifting Series II agreement, the local person object simply moves to a position between the verbal complex and the ergative DP (if a lexical DP is present), resulting in VOS order.

- (46) a. Hlimooyis Mary 'nuu'm.
 hlimoo-ə-t =s Mary 'nuu'm.
 help-TR-3.II =DN Mary 1PL.III
 'Mary helped us.'
- b. Hlimooyit 'nuu'm t Mary.
 hlimoo-ə-t 'nuu'm=t Mary
 help-TR-3.II 1PL.III =DN Mary
 'Mary helped us.'
- (Rigsby 1986: 263-4)

This points to the need for a special syntax for local person objects regardless of clause type or association with any particular agreement pattern: a person-related split able to cross-cut the

clause types on top of the previously established ϕ /D nominal-type split of dependent clauses.

This person split is of some interest to theories of split-ergativity on the basis of person. Some syntactic analyses of person-based split ergativity specifically utilize constructions to structurally pick out the marked persons, for example by raising local persons to an additional PersonP, which may disrupt ergative case assignment (Coon and Preminger 2017; Deal 2015c). By contrast, the syntactic split sketched here leaves the ergative alignment of agreement intact, in both dependent and independent clauses, and adopts no additional structure. An alternate analysis is therefore required, which will allow for the desired movement of marked persons without disrupting the ergative agreement configuration.

I will conclude this section on something of a diachronic note. It may be observed that the use of the Ergative/Absolutive pattern that can re-surface with a DP subject, with the Series II suffix indexing the local person object, is in some ways a reversion to the ‘normal’ Tsimshianic pattern; Coast Tsimshian dependent clauses use this pattern exclusively, and it is most likely that this agreement pattern was characteristic of Proto-Tsimshianic dependent clauses. We may then wonder how *variation* between the two possible patterns – an additional complication on top of the complicated dependent agreement split – arose in Gitksan, and why this variation is not possible for third-plurals. In all likelihood, the development of third-person plurality initially forced the development of the Double Ergative agreement pattern in the context of third-plural ergative subjects. From there, I suggest that the pattern extended to DP ergatives due to the similar feature structure of third-plurality under the umbrella of D-features. However, it remains unclear whether DP ergatives failed to ever grammaticalize obligatory Double Ergative agreement over a local person object, or if they succeeded in doing so, but that the properties of local objects (exhibited by their special behavior in independent clauses) triggered a later reversion to the Ergative/Absolutive pattern.

In my discussion of Coast Tsimshian independent clauses in Chapter 6, we will see more special patterns triggered by local-person objects (both in Coast Tsimshian and Gitksan). I propose an analysis of Gitksan’s variable agreement pattern (alternating freely between Double Ergative and Ergative/Absolutive agreement) for DP<Local configurations in section 6.5.

3.4 Discussion

In this chapter, I have presented an analysis of the Gitksan dependent clause split between the Ergative/Absolutive pattern of agreement, which occurs in the context of local person and third-singular pronominal subjects, and the Double Ergative pattern of agreement, which occurs with third-plural and full lexical subjects.

The grouping of nominals on either side of this split, which can only be categorized by

simultaneously cross-referencing all of person, number, and the DP-pronominal contrast, motivated me to propose two different levels of sensitivity on the two agreement probes: the Series I clitics agree with (and spell out) features characterizing [PERSON] and participant-related [NUMBER] on the ergative subject. Series II suffixes are able to agree with (and spell out) all of these features, but also third-person [NUMBER] and the [DP/PRONOUN] contrast. I proposed that the first group form the set of ϕ -features in Gitksan, and the second group is a superset, containing all nominal features.

Capitalizing on the consequences of the Activity Condition Chomsky (2001), where features that have been agreed with are deactivated in later agreement operations, I argued that the Series I agreement head agrees first, deactivating nominal features which were part of the ϕ -feature set. After this, Series II agrees with the highest argument with active features. The result depends on what features are present on the transitive subject: if it is a local or third-singular pronoun, it has been exhausted of features accessible to this probe, and Series II can look down to the object for agreement. If it bears additional D-features such as third-plural, it remains active and is agreed with a total of twice.

In subsequent sections, I argued against alternative approaches based on nominal hierarchies, ϕ -feature markedness, morphological syncretism, post-syntactic feature readjustment, and dependent case. I also provided a preliminary argument against Brown's (2016) analysis of dependent clauses as exhibiting a non-finite or nominalized agreement pattern (to be revisited in sections 4.2.2 and 4.2.3). Comparison with Coast Tsimshian showed that there is strong basis for connecting the agreement split to the innovation of the third-person plural contrast, which the present analysis does. Finally, closer examination of a point of free variation between the Ergative/Absolutive and Double Ergative agreement patterns, in 'inverse'-like contexts where a DP subject acts on a local person object, did not motivate significant amendment of the analysis proposed to account for dependent clause agreement.

In this section, I explore some predictions of the proposed analysis for our understanding of features and plurality, and note some points of the analysis that will be revisited in later chapters.

3.4.1 Representations of plurality

The unique grouping of nominals on either side of nominal-type split discussed in this chapter (a split in which third-singular pronouns contrast with third-plurals and all full DP arguments) has demanded that we come to a more nuanced understanding of ϕ -features and other nominal features. I have proposed that third-person number in Gitksan, while now a formal contrast innovated into the pronominal and agreement system, is not part of the language's ϕ -feature

inventory as participant number is. This contrasts with previously proposed feature geometries (e.g. Harley and Ritter 2002), where person and number features do not interact in any way; all number features pattern together as a subset of ϕ -features.

My proposed representation of third-person number in Gitksan suggests that plurality might behave differently in a language like Gitksan, where participant and third-person number features contrast, versus a language where number is independent of person. This is in fact borne out: third-person plurality functions in a fundamentally different way in Gitksan than it does in languages like English.

First, English plurality is used to refer to the count properties of all types of arguments. The example in (47) illustrates plural agreement with inanimate entities.

- (47) A: Where **are** your toys?
 B: They **are** all broken.

In contrast, the plurality marked by Gitksan *-diit* only refers to a plural animate argument; it is never used to agree with or refer to an inanimate plural entity (Rigsby 1986; Tarpent 1987b; Forbes to appearb). Non-plural *-t* agreement is used in the context of inanimate entities in (49a). The example in (49b) demonstrates that plural agreement is impossible.

- (48) Naa ant guphl xcookies'y?
 naa an=t gup-**t** =hl x-cookies-'y
 who AX=3.I eat-3.II =CN consume-cookies-1SG.II
 'Who ate my cookies?'
 a. 'Nii'y ant gupt.
 'nii'y an=t gup-**t**.
 1SG.III AX=3.I eat-3.II
 'I ate them.'
 b. #'nii'y an=t gup-**diit**
 1SG.III AX=3.I eat-3PL.II
Comment: I guess 'diit' is for people, not cookies. (BS)

It may be worthwhile to investigate whether an analysis of third-person plurality as a D-level feature, rather than a ϕ -level feature, is extensible to other languages where full DP arguments are in complementary distribution with number agreement, or languages where third-plurality is restricted to animate referents (Corbett 2000 discusses e.g. Slave, Marind).

Second, a plural DP in Gitksan never co-occurs with plural agreement, in contrast to English verbal agreement. English verbal plural agreement is obligatory in the presence of a plural DP, as illustrated in (49b) (contrasting with singular (49a)).

- (49) a. [That fish]_{sg} **is**/*are jumping very high.
 b. [Those fish]_{pl} *is/**are** jumping very high.

In contrast, the Gitksan third-person plural *-diit* is in complementary distribution with a full DP argument.

- (50) a. Gapgaabidimahl duushl aats'ip.
 gap~gaap-ə-**t**=imaa [=hl duus]_{pl} =hl aats'ip
 PL~scratch-TR-**3.II**=EPIS [=CN cat] =CN door
 'The cats might have scratched the door.'
 b. *gap~gaap-ə-**diit**=imaa [=hl duus]_{pl} =hl aats'ip
 PL~scratch-TR-**3PL.II**=EPIS [=CN cat] =CN door

(BS)

This mirrors patterns of complementarity between number agreement and DP arguments in other languages, including Irish, Welsh, and Arabic (specifically, sentences with unmarked VSO order). Below in (51) is an example from Welsh illustrating the complementarity between an overt nominal argument and plural agreement on the verb:

- (51) Darllenodd y dynion y llyfr.
 read.PST the **men** the book
 'The men read the book.'
 (51) *Darllenasant y dynion y llyfr.
 read.PST.**3PL** the **men** the book
 Intended: 'The men read the book' (Doron 1988: 204; from Harlow 1981)

These facts are well-known and have received numerous treatments in the literature (Mohammad 1990; Rouveret 1991; Benmamoun 1992; Fassi-Fehri 1993; Aoun et al. 1994). Some of these analyses draw on the crosslinguistic generalization that complementarity between DPs and plural agreement seems to arise for postverbal arguments, but not preverbal arguments, proposing that full (number-inclusive) agreement is restricted to arguments in certain structural positions. It's possible that the feature-geometric organization of plurality with respect to other nominal features is another factor that may contribute to crosslinguistic variation of this kind, or perhaps is another means of modeling it; perhaps agreement higher in the clause has access to fuller sets of features, and agreement lower in the clause only certain subsets.

One tradition of morphosyntactic work seeks to understand crosslinguistic variation in the properties of number as a difference in the structural location of these features across languages. Locating number features at the level of the root (e.g. Wiltschko 2008 for Halkomelem) versus NumP (e.g. Ritter 1992 for Hebrew and others) explains the different behavior of plurals in different languages. Following this tradition of work, Forbes (to appearb) has analyzed Gitksan

third-person Series II plurality not as part of a nominal NumP projection, linked to individuation and countability, but instead higher in the nominal spine.

It should here be concretely demonstrated that the contrast proposed in this chapter between D-level and ϕ -level plurality, in terms of a feature-geometric representation, cannot be equated with a difference in the structural placement of the [PLURAL] feature. That is, what I have referred to as D-level plurality in the geometry of nominal features cannot be equated with placement of the [PLURAL] feature on D° , as opposed to Num° .

If D-type plurality is a feature present on D° , and ϕ -type plurality appears only lower in the nominal spine, it should follow that nominals which have D-type features are those with DP projections; all other nominals should be smaller (NPs or pronominal ϕ Ps). We would therefore expect *third-plural* pronouns to contrast with third-singular pronouns, as DPs as opposed to ϕ Ps. A prediction of this would be that third-plural pronouns, but not third-singular pronouns, should exhibit the characteristics of Déchaine and Wiltschko's (2002) D-type pronouns, such as strict referentiality. D-type pronouns are specifically argued to be unable to function as bound variables.

In Gitksan, third-singular and third-plural elements may *both* function as bound variables; that is, either a third-singular or third-plural element may be used to indicate an animate plural bound variable, with no change in meaning. Several examples of this are provided below where the plural quantificational DP *mehla k'i'yhl niinixsxwit* 'each married (pair)' binds into a variable: (52) illustrates binding into a possessive pronoun, marked with singular or plural Series II agreement; (53) illustrates binding into an intransitive S, also marked with singular or plural Series II agreement.

- (52) Siip'inhl mehla k'i'ihl niinixsxwithl ost/osdiit.
 siip-'in-t =hl mehla k'i'y =hl niinixsxw-it =hl os[-t/-**diit**]
 ache-CAUS-3.II =CN each one =CN marry.PL-SX CN dog[-3.II/-3PL.II]
 'Each couple_i loves their_i dog.' (VG)

- (53) Mehla k'i'yhl niinixsxwithl enigoot dim xsdaat/xsdaadiit.
 mehla k'i'y =hl niinixsxw-it =hl he-'nii-goot dim xsdaa[-t/-**diit**]
 each one =CN marry.PL-SX CN INS-on-heart PROSP win[-3.II/-3PL.II]
 'Each couple_i thinks that they_i will win.' (VG)

Both of the above examples involve a null *pro* and co-occurring Series II agreement. The same singular~plural alternation is found in the absence of Series II agreement, instead with full Series III pronouns used as bound variables, demonstrated in (54). Either singular/neutral '*nit*' or plural '*nidiit*' may be used as the variable.

- (54) He'niigoothl mehla k'i'yhl niinixsxwit dim xsi guudihl
 he-'nii-goot =hl mehla k'i'y =hl niinixsxw-it dim xsi-guu-T-t =hl
 INS-on-heart =CN each one =CN marry.PL-SX PROSP out.from-take-T-3.II =CN
 mayor 'nit/'nidiit.
 mayor ['nit/'nidiit]
 mayor [3.III/3PL.III]
 'Each couple_i thinks that the mayor will choose them_i.' (VG)

The D-/φ-contrast that I have proposed in the organization of features can therefore not be taken as a split between DPs and φPs/NPs. The Gitksan nominal type split allows us to identify a contrast between types of plurality that is not represented in syntactic structure, but rather is encoded in the structure of feature sets.

3.4.2 Cornerstones of the analysis

In the next chapter, I return to the main agreement split of the Tsimshianic family: the clause type split. This discussion will involve contrasting the dependent agreement pattern that I have analyzed here with an *independent clause* agreement pattern. While in dependent clauses we have seen that Series II agreement shifts between an absolutive and nominative distribution, across the clause type we will see an abrupt switch of Series II agreement to a strict ergative pattern.

In this chapter, I have proposed that Series I agreement, which in dependent clauses is ergative, is located low, on v° . Series II agreement, which in dependent clauses is effectively highest-argument agreement (absolutive or nominative), is located higher on Infl° . This was proposed to account for the apparent dependency of Series II's agreement target on the 'left-over' features that remain after Series I agreement has concluded. This placement of the two agreement probes will hold throughout the thesis.

Chapter 4

The Tsimshianic clause-type split via indirect agreement

This chapter concerns the Tsimshianic clause type split, and in particular the pivoting ergative alignment of the Series II suffixal agreement paradigm. In dependent clauses, the Gitksan Series II agreement suffixes switch between an absolutive and nominative distribution; in independent clauses, however, they are strictly ergative. At the same time, the ergative Series I clitics are absent. This is illustrated in Table 4.1.

		Independent	Dependent
ERG	A	II	I
ABS	S	III	II
	O	III	II

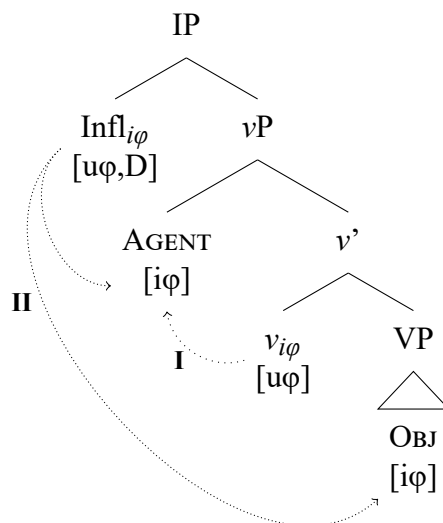
Table 4.1: The simplified Tsimshianic clause-type split

In this chapter, I begin in section 4.1 by reviewing the differences between independent clauses and dependent clauses in greater detail. I also point out similarities between the clause types. In section 4.2, I rebut several potential analyses of the clause type division, some previously proposed and some novel. Ultimately, I argue that independent and dependent clauses are structurally identical and only differ in terms of inflection, following Hunt (1993). I briefly review argumentation against Tarpent’s (1991) analysis of independent clauses as pseudocleft structures involving relativization, argue against dependent clauses as nominalizations or bi-clausal constructions, and finally argue against Hunt’s (1993) own analysis of dependent clause inflection as licensed by high functional structure. That is, I argue that dependent clauses are *not* differentiated from independent clauses by having additional agreement in the C domain.

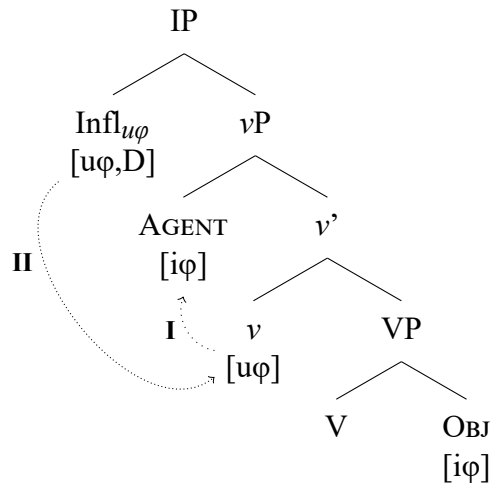
I propose a novel approach in section 4.3 under which *independent* clause inflection is triggered by a relationship between Infl/T and a matrix C, unbroken by an intervening dependent marker. To account for agreement switch of the Series II paradigm in independent clauses, I propose that the Series II agreement head enters into an *indirect* agreement relationship with the ϕ -features of the ergative argument, mediated by the Series I agreement head. Specifically, in independent clauses, I argue that Series I agrees with the ergative argument, and that Series II agrees with the Series I probe.

Dependent and independent clauses can then be compared as follows: in a dependent clause, the Series II probe on Infl is relativized to seek ϕ -features on an argument, and so agrees directly with either the subject or object (following my analysis in Chapter 3), as in (1).

(1) *Dependent clause*



In an independent clause, the Series II probe on Infl is relativized to seek ϕ -features on a probe, and so agrees *indirectly* with the Series I agreement probe on *v*, as in (2).

(2) *Independent clause*

With two consecutive agreement heads bearing identical features, one of the two heads is impoverished: Series I fails to appear, and instead is realized as the transitive vowel.

Section 4.4 considers some alternatives to this proposal, and section 4.5 concludes with some discussion on the proposed mechanism.

4.1 Empirical basis of the clause-type split

In this section I review the morphological properties of each clause type. I begin in section 4.1.1 with a description of the three major properties differentiating independent and dependent clauses; these are:

- (3) a. the *agreement paradigms* used;
- b. the presence of the *transitive vowel* (or ‘transitive schwa’, phonemically /-ə-/ but orthographically -i/a-, based on its surface quality); and
- c. the presence of a *dependent marker*.

The properties of agreement have already been discussed in some detail in previous chapters, so I devote additional space in this section to reviewing the behavior of the latter two cues.

These three surface properties do not always align cleanly to determine the independent or dependent status of the clause; there is one area where the properties are split, making it necessary to clearly define an ‘independent’ versus ‘dependent’ clause. The pattern of agreement paradigms is strictly correlated with the appearance of the transitive stem vowel; these always pattern together, and appear on the predicate stem. I refer to these paired properties, where rel-

evant, as the *inflectional* properties of clause typing. Clauses which have the dependent style of agreement and no transitive vowel will be referred to as ‘inflectionally dependent’, and those with the independent style as ‘inflectionally independent’, regardless of the presence or absence of a dependent marker. The appearance of a dependent marker is very strongly correlated with dependent clause inflection (i.e. no stem vowel, use of both Series I and II pronouns), but this correlation is not exact.

4.1.1 Differences across clause types

4.1.1.1 Agreement patterns

As discussed in Chapter 2, Gitksan (and the other Tsimshianic languages) exhibit *agreement switch* along an ergative/absolutive alignment: the alignment of both clause types is ergative/absolutive, but the paradigms used to realize this alignment differ across the clause-types with regard to their function. An ergative alignment can be seen in the independent clauses in (4), where a Series II suffix marks the ergative argument, as well as the dependent clauses in (5), where a Series I clitic marks the ergative argument.

- | | |
|---|---|
| <p>(4) Independent clauses</p> <p>a. Bax̣ 'nii'y.
 bax̣ 'nii'y
 run 1SG.III
 'I ran.'</p> <p>b. Yaji'y 'nit.
 yats-ə-'y 'nit
 hit-TR-1SG.II 3.III
 'I hit him.'</p> | <p>(5) Dependent clauses</p> <p>a. Needii baha'y.
 nee=dii bax̣-'y
 NEG=FOC run-1SG.II
 'I didn't run.'</p> <p>b. Neediin yatst.
 nee=dii=n yats-t
 NEG=FOC=1.I hit-3.II
 'I didn't hit him.'</p> |
|---|---|

(BS)

Above, the Series II suffixes best illustrate this pattern of agreement switch. They mark the ergative subject in the independent transitive clause in (4b), and conversely mark the absolutive arguments in the dependent clauses in (5). Also important to note is that Series II agreement is entirely absent from independent intransitive clauses like (4a). Series II agreement *cannot* be used in an independent intransitive, as illustrated in (6). Arguments are realized exclusively as Series III pronouns.

- (6) a. Dim ḳ'ap bakw 'nidiit aa?
 dim ḳ'ap bakw '**nidiit** =aa
 PROSP VER come.PL 3PL.III =YNQ
 'Are they really coming?'

- b. *dim k'ap bakw-**diit** =aa
 PROSP VER come.PL-3PL.II =YNQ
- (PC)

Putting aside for now the absolutive-nominative split in the distribution of Series II agreement discussed in the prior chapter, the general distribution of agreement is represented in Table 4.2. This is likely the agreement distribution of Proto-Tsimshianic, given the robustness of the clause-type split in all daughter languages.¹

		Independent	Dependent
ERG	A	II	I
ABS	S	III	II
	O	III	II

Table 4.2: The simplified Tsimshianic clause-type split (repeated)

In this basic pattern, the Series I clitics are strictly ergative, and free Series III pronouns are never ergative. The Series II suffixes can index any argument in principle, but the choice is entirely predictable from clause-type. The analysis I forwarded in section 2.5 proposed that Series I clitics and Series II suffixes are agreement, and that Series III pronouns are default realizations of arguments that have not received agreement. This means that there are two types of agreement operating in dependent transitive clauses (Series I and II) and no agreement at all in independent intransitive clauses (the S is a Series III pronoun).

4.1.1.2 The transitive stem vowel (schwa)

A second morphological property can be used to further differentiate transitive clauses as independent or dependent. This is the *transitive vowel*, also referred to as the transitive schwa. This is a vowel of predictable surface quality that appears between the verb stem and Series II suffixal agreement: independent clauses have a transitive vowel, as in (7), while dependent clauses do not, as in (8). The transitive vowel therefore only precedes an *ergative*-agreeing Series II suffix. It never appears before a Series II suffix agreeing with an absolutive argument. In addition, it is in complementary distribution with Series I clitic agreement, which only appears in dependent clauses.

¹Interior Tsimshianic would have had this agreement pattern prior to the innovation of the nominal type split discussed in Chapter 3. The Maritime Tsimshianic languages Coast Tsimshian and Southern Tsimshian maintain a similar clause-type split, though the agreement details of independent clauses differ as will be discussed in Chapter 6.

- | | |
|--|--|
| <p>(7) Yajit 'nit.
 yats-ə-t 'nit
 hit-TR-3.II 3.III
 'S/he hit him.'</p> | <p>(8) Neediit yatst.
 nee=dii=t yats-t
 NEG=FOC=3.I hit-3.II
 'S/he didn't hit him.'</p> |
|--|--|
- (BS)

There are a number of contexts that obscure the distribution of the transitive vowel, either causing it not to appear as predicted or to appear unexpectedly. Insightful argumentation by Hunt (1993) clarifies these as having phonological or morphophonological explanation. I will briefly review three contexts where the pattern of this stem vowel is obscured, following Hunt's (1993) analysis, though note that throughout this thesis I consistently mark the underlying presence of the transitive stem vowel in the second line of example glosses.

First, the stem vowel is only visible after predicate stems with final stress or which end in an obstruent. It is not present after stems ending in an unstressed syllable with no coda, or with a sonorant coda, as in (9). (I mark stress in the following examples with an accent.) This most commonly affects roots suffixed with the causative or transitivizing suffix *-in*, as in (9a), but is not limited to that suffix; see also (9b), with an unproductive suffix *-l*.

- (9) a. Gwihl **kw'ásins**/(***kw'ásinis**) John?
 gwi =hl kw'as-in-ə-t =s John
 what =CN break-CAUS-TR-3.II =DN John
 'What did John break?' (Hunt 1993: 228)
- b. **Kw'óódils** John dip Mary.
 kw'oot-l-ə-t =s John t=dip Mary
 lose-SUFF-TR-3.II =DN John DN=ASSOC Mary
 'John lost sight of Mary and them.' (Hunt 1993: 232)

I assume Hunt's (1993) analysis of the transitive schwa and the causative *-in* as distinct morphemes. Causative *-in* appears on specific transitive predicates in all clause types, actively transitivizing them.² In contrast, the transitive vowel appears consistently on all transitive predicates (as a *marker* of transitivity rather than a syntactic *transitivizer*), but only in independent clauses. The transitive vowel is deleted in the presence of the suffix *-in* or *-l* in accordance with a purely phonological rule or constraint sensitive to metrical structure.³

The deletion context is limited to immediately following an unstressed syllable. Deletion does not apply following vowel- or sonorant-final stems which have primary stress; in these

²I assume the morpheme *-in* is an instance of a *v* head, and that *v* elements can stack on a root. It frequently appears in transitive/intransitive alternations such as *hetxw* 'to stand' ~ *hedin* 'to erect, to stand ABS upright'.

³For instance, this constraint might limit the number of syllables which may follow the main stress, which must fall on the predicate. See Rigsby (1986) and Forbes (2015) for a more detailed description of morphologically-bounded stress in Gitksan.

cases the vowel does surface, as in (10).

- (10) a. **’Wá̌yis** Lisahl hlit’.
 ’wa-ə-t =s Lisa =hl hlit’
 find-TR-3.II =DN Lisa =CN ball
 ‘Lisa found the ball.’ (VG)
- b. **Gínis** Mary t John ahl hun.
 gin-ə-t =s Mary =t John a-t =hl hun
 feed-TR-3.II =DN Mary =DN John PREP-3.II =CN salmon
 ‘Mary gave John fish (to eat).’ (Hunt 1993: 230)

Furthermore, the deletion context is limited to sonorant-final syllables. The stem vowel always appears following an obstruent, even if the syllable is unstressed as in (11).

- (11) **Gídagas** John t Mary gwihl heen.
 gidax-ə-t =s John =t Mary gwi =hl he-n
 ask-TR-3.II =DN John =DN Mary what =CN word-2SG.II
 ‘John asked Mary what you said.’ (Hunt 1993: 230)

The second context obscuring the distribution of the transitive stem vowel is a set of predicates referred to as ‘T-verbs’, following notation by Tarpent (1987b). This is a set of transitive verbs, lexically specified,⁴ which are accompanied by a morpheme which I gloss simply as ‘T’. The function of this morpheme has not been worked out in detail; Tarpent (1987b) glosses it as ‘definite medial’, and Peterson (to appear) suggests that it is a grammatical applicative.

A standard transitive verb is presented in (12), for ease of comparison with the T-verb in (13). As previously discussed, a standard transitive verb stem has the transitive vowel -ə/i- suffixed in independent clauses as in (12a), but is bare in a dependent clause as in (12b). (Series II suffixal agreement follows the stem in either case.) By contrast, a T-verb is apparently suffixed with -di- in an independent clause, as in (13a), and has a vowel -ə/i- suffixed in a dependent clause, as in (13b). The gloss below follows Rigsby (1986), who originally conceived of -də/di- as an allomorph of the transitive vowel. The identity of the vowel on the dependent verb stem (i.e. in (13b)) is unclear under this analysis, however.

⁴The distribution of this morpheme is not frozen, but rather lexically determined; it can also be triggered on a predicate by certain prefixes or proclitics, e.g. jussive *gun~gwin* ‘have s.o. do VERB’ or *ama* ‘do VERB well’ (see Tarpent 1987b: 634 on the detailed distribution of -T-). I have also seen it appear in English code-switching contexts.

(12) *Standard verb: Independent (a) and dependent (b)*

- a. Yajit 'nit.
yats-ə-t 'nit
hit-TR-3.II 3.III
'S/he hit him.'
- b. Neediit yatst.
nee=dii=t yats-t
NEG=FOC=3.I hit-3.II
'S/he didn't hit him.'
- (BS)

(13) *T-verb: Independent (a) and dependent (b)*

- a. Iitsdi'mhl hun.
iits-**də**-m =hl hun
fry-TR?-1PL.II =CN salmon
'We fried the fish.'
- b. Yukw dip ijihl hun.
yukw dip iits-ə-t =hl hun
IPFV 1PL.I fry-??-3.II =CN salmon
'We are frying fish.'
- (Hunt 1993: 239)

In contrast, Tarpent (1987b) and Hunt (1993) decompose the *-di-* suffix, and propose that the distribution of the transitive stem vowel is consistent across standard verbs and T-verbs: the transitive schwa is only present in *independent* clauses, and always surfaces as a vowel. The difference in the stem of a T-verb is tied to an additional morpheme which accompanies the predicate in both clause types: *-T-*. The T-morpheme surfaces as a consonant ([d] or [t]) in independent clauses, when it is followed by the stem vowel, and as a vowel ([i-]) in dependent clauses, where it is followed by a Series II suffix or connective article. The underlying form of the T-verb in (13) can therefore be reanalyzed to that in (14).

- (14) a. Iitsdi'mhl hun.
iits-**T**-ə-m =hl hun
fry-**T**-TR-1PL.II =CN salmon
'We fried the fish.'
- b. Yukw dip ijihl hun.
yukw dip iits-**T**-t =hl hun
IPFV 1PL.I fry-**T**-3.II =CN salmon
'We are frying fish.'
- (Hunt 1993: 239)

I assume that conditions on syllable structure govern the consonantal or vocalic realization of this morpheme; the 'T' label refers to its extremely abstract segmental representation, which

perhaps is not specified for consonantal or vocalic properties as it can be realized as either.⁵

The two above contexts obscure the distribution of the transitive stem vowel on the basis of the phonological shape of the predicate: stems ending in an unstressed sonorant-final syllable, or ending in the T-morpheme, obscure the distribution of schwa. Hunt's (1993) analysis levels these contexts by attributing the obscuring properties to the phonology.

The third and final context obscuring the distribution of the transitive stem vowel may occur with any predicate: the vowel never co-occurs with the third-person plural Series II suffix, *-diit*.

- (17) a. Mahld**it** aloohl jaxjogot.
 mahl-T-**ə-t** a-loo-t =hl jək~jok-it
 tell-T-TR-3.II PREP-OBL-3.II =CN PL~dwell-SX
 'He told (it) to the villagers.' (BS)
- b. Mahld**diit** gwihl japdiit ahl k'i'ihl k'uuhl.
 mahl-T-**ə-diit** gwi =hl jap-ə-diit a-t =hl k'i'y =hl k'uuhl
 tell-T-TR-3PL.II what =CN make-TR-3PL.II PREP-3.II =CN one =CN year
 'They said what they had done after one year.' (BS)

Rigsby (1986: 340) suggests that the absence of the vowel is morphologically conditioned; a simple morphological property of the third-plural suffix is to suppress the preceding transitive stem vowel. That is, the spellout rules for the transitive schwa realize the morpheme as zero when it is immediately followed by a third-plural *-diit*. Alternately, *-diit* itself can be morphologically decomposed into parts which *contain* the transitive schwa, as suggested by Tarpent (1987b, 1991). Under this view, the absence of the stem vowel before third plurals is attributed to how the third-plural morpheme itself is composed: third-plural *-diit* is synchronically complex.

⁵There are additional complexities regarding the realization of the T-morpheme after a vowel-final stem, as discussed by Tarpent (1987b: 634) and Hunt (1993: 239). The T-morpheme appears to resist being syllabified as a coda in the predicate stem; it may epenthesize a /t/ and surface as [-di-] in contexts such as (15).

- (15) hli 'wad**ihl** axwt
 hli 'wa-T-t =hl axwt
 PART find-T-3.II =CN porcupine
 'the finding of a porcupine' (Tarpent 1987b: 244)

This [t]-epenthesis property crucially distinguishes the T-morpheme from the transitive schwa, which epenthesizes a glide (y [j]) in these contexts instead. See the minimally contrasting example in (16).

- (16) hli 'way**ihl** axwt
 hli 'wa-**ə-t** =hl axwt
 PART find-TR-3.II =CN porcupine
 'what the porcupine found' (Tarpent 1987b: 244)

This is based on the presumed historical origin of the third-plural marker. Tarpent (1987b) proposes that the third-plural morpheme *-diit* can be decomposed as the focus marker *=dii*, the transitive vowel *-i-*, and the Series II unmarked third person marker *-t*. I suggest that alternately, *-diit* contains an older plural marker *-da*; this contributes plural semantics. The essential composition of plural *-diit* would therefore be *-da-ə-t*, with the transitive vowel sandwiched between the plural marker and pronominal agreement.⁶ In the Interior, plural *-da* appears elsewhere, but its distribution is relatively restricted; it seems to appear exclusively in intransitive independent clauses, and seems to function as a weak pronoun, contrasting with the full independent pronoun *'nidiit* (as discussed in section 2.5.1 and Forbes to appearb). The Coast Tsimshian distribution of this plural morpheme is much wider, and it can appear in first and second person plural contexts as well (Sasama 2001: 139). This suggests that Proto-Tsimshianic had a historical plural morpheme **-da* which could mark plural number for all persons. In the Interior, **-da* was recruited as part of a new contrast in the pronominal system as part of the new Series II plural *-diit*. It retained some small leftover distribution in the Interior, but in all contexts developed a third-person restriction. On the Coast, its distribution remained general, having not been so recruited into the main pronominal paradigm.

Although *-diit* and the transitive schwa likely fail to co-occur because of this diachronic path, I suggest that the best synchronic account for this pattern is a morphological co-occurrence restriction, following Rigsby (1986). Over the course of my work with Gitksan speakers, *-diit* seems to be strongly interpreted as a single unit; there is no intuition that it is synchronically compositional, or even that it bears any association with the weak plural *-da*.

4.1.1.3 Dependent markers

The previous subsections have reviewed the inflectional properties of the clause type distinction: the switch-patterning of agreement paradigms and the appearance of the transitive vowel in independent transitive clauses. In this section, I will discuss another difference between the clause types: dependent clauses typically begin with an element referred to as a *dependent marker* (Hunt 1993: 25), followed by the predicate, while independent clauses begin directly with the predicate.

When a dependent marker is present in the clause, agreement in the clause shifts. This is illustrated by the contrasting agreement in (18) and (19) below even though both sentences have the same arguments (1PL subject, 3SG DP object). Example (18) is independent, and contains Series II agreement with the ergative subject - *'m* ‘-1PL’. With the introduction of the dependent

⁶It is not unusual to suggest that a short vowel [a] should lengthen and raise to high front [i:] – alternations in short-long vowel quality including *a ~ ii* are attested elsewhere, for example in reduplicative lengthening for certain plurals such as *sak ~ siisax* ‘cold, sharp’.

marker *yukw* ‘IPFV’ in (19), the Series II suffix may no longer function as an ergative, but must mark the absolutive object. Series I surfaces and marks the ergative instead, as shown by the ungrammaticality of (19b).

- (18) Dim jami'mhl wineex lun goohl Ansbayaxw.
 dim jam-ə-'m =hl wineex loo-n goo-t =hl Ansbayaxw
 PROSP cook-TR-1PL.II =CN food OBL-2SG.II LOC-3.II =CN Ansbayaxw
 ‘We’ll cook your dinner in Kispiox.’ (BS)

- (19) a. Yukw dim dip jamhl wineex lun goohl Ansbayaxw.
 yukw dim **dip** jam-t =hl wineex loo-n goo-t =hl Ansbayaxw
 IPFV PROSP 1PL.I cook-3.II =CN food OBL-2SG.II LOC-3.II =CN Ansbayaxw
 ‘We’re going to cook your dinner in Kispiox.’
 b. *yukw dim jam-'m =hl wineex loo-n goo-t =hl Ansbayaxw
 IPFV PROSP cook-1PL.II =CN food OBL-2SG.II LOC-3.II =CN Ansbayaxw (BS)

Dependent markers do not obviously form a homogenous class. Some seem to derive from intransitive predicates, including the imperfective *yukw*, perfective *hlis*, circumstantial necessity modal *sgi*, or negator *needii* (derived from the negative predicate *nee* and focus marker =*dii*). The complementizer *wil/win* also likely derived from a predicate (the light verb *wil*). Other dependent markers, such as the clausal conjunction *ii*, irrealis marker *ji*, or inceptive marker *hlaa*, have no association with any synchronic predicate to my knowledge. Dependent markers seem to fall on a scale of more-to-less predicate-like; some appear with connective determiners as if taking an argument, while others do not.

A clause need not have an overt dependent marker to be dependent. Embedded clauses are always inflectionally dependent (with respect to agreement and the absent transitive vowel) even if there is no overt complementizer. The embedded clause in (20) below is dependent, as evidenced by ergative Series I clitic agreement and absolutive Series II agreement, even though there is no overt embedding complementizer or other element.⁷

- (20) Needii 'wii'u'y dimt haksi'yhl ligit naa.
 nee=dii 'wii-'u-'y [dim=t haks-'y =hl ligi=t naa]
 NEG=FOC big-top-1SG.II [PROSP=3.I scold-1SG.II =CN DWID=DN who]
 ‘I don’t like for anyone to scold me.’ (BS)

There is also one circumstance where the opposite is true: clauses may be inflectionally *in-*

⁷The Series I clitic =*t* here encliticizes to prospective *dim*, but this does not mean that *dim* is an embedding element – in general Series I morphemes may either procliticize or encliticize to *dim*, but proclisis in this circumstance, with a third-person clitic (i.e. as *t=dim*), would render the clitic inaudible. See discussion in 4.1.2 below for evidence that *dim* does not act as a dependent marker.

dependent even if a dependent marker is present. This is the case of object extraction.⁸ When the object of a transitive clause is A'-extracted, the clause always bears independent inflection, regardless of whether the base sentence was dependent or independent. In (21), we see an example of extraction from a clause with no dependent marker; the A'-extraction clause is inflectionally independent, as can be gleaned from the lack of Series I ergative clitic, and presence of the transitive vowel. In (22), we see extraction from a dependent clause. The marker *mooji* typically induces dependent inflection, but when the object *hun* 'fish, salmon' is extracted, the lower clause lacks the expected Series I ergative agreement. Instead, the transitive vowel is present, and the Series II suffix agrees with the ergative subject *John*, just as in (21).

(21) O extraction from Independent clause

Guhl	giigwis	Henry?	
gu	=hl giikw-ə-t	=s	Henry
what	=CN buy-TR-3.II	=DN	Henry
'What did Henry buy?'			

(VG)

(22) O extraction from Dependent clause

Hunhl	mooji	agubis	John.
hun	=hl moo-ji	a-gub-ə-t	=s John
salmon	=CN almost-IRR	not-eat-TR-3.II	=DN John
'John almost never eats FISH.'			

(Hunt 1993: 243)

When object extraction is taken into consideration, the presence of a dependent marker can therefore not be strictly linked to the clause type. I return to this point in my discussion of alternate analyses in section 4.2, and ultimately present an analysis of agreement in A'-contexts (like the above examples) in Chapter 5.

4.1.2 Constants across clause type

Having reviewed the major differences between the independent and dependent clause types, this subsection considers properties that are consistent across clause types.

After the dependent marker, word order in either clause type remains unchanged; both are VSO. This is illustrated with the independent clause in (23a) and the dependent clause in (23b). A lexical object always follows a lexical subject.⁹

⁸All types of A'-movement behave the same in this respect, including *wh*-movement, focus movement, and relative clause formation.

⁹SVO word order can only be attested insofar as the Series I clitics, which appear before V, are counted as the true 'subject' in situations where there is no overt lexical subject. I will discuss VOS alternations in some detail in section 6.5.

- (23) a. Gubis Lisahl anaax.
 gup-ə-t =s Lisa =hl anaax
 eat-TR-3.II =DN Lisa =CN bread
 ‘Lisa ate bread.’
- b. Yukwt gups Lisahl anaax.
 yukw=t gup-t =s Lisa =hl anaax
 IPFV=3.I eat-3.II =DN Lisa =CN bread
 ‘Lisa is eating bread.’ (VG)

I have observed no restrictions on the types of predicate that occur in either clause type; neither do there seem to be restrictions on pre-predicative modifiers that may occur with the predicate, or types of arguments that can be used with the predicate.

Above the level of the predicate itself, we find that prospective aspect marking (with the morpheme *dim*) appears in both clause types; unlike most other aspect markers which function as dependent markers, it has no impact on the inflection of the clause. The example in (24a) demonstrates prospective marking in an independent clause, while (24b) demonstrates it in a dependent clause. Prospective *dim* typically appears following the dependent marker.

- (24) a. Dim sdilis Colin ’nidiit.
dim sdil-ə-t =s Colin ’nidiit
 PROSP accompany-TR-3.II =DN Colin 3PL.III
 ‘Colin is going with them.’
- b. Yukw dimt sdils Colin ’nidiit.
 yukw **dim**=t sdil-t =s Colin 3PL.III
 IPFV PROSP=3.I accompany-3.II =DN Colin 3PL.III
 ‘Colin is going to go with them.’ (BS)

We also find that both independent and dependent clauses can be marked with verum focus (Matthewson 2017; Gutzmann et al. 2018), signaled by the pre-predicate morpheme *k’ap* ~ *ap*. As initially discussed by Höhle (1992), this type of focus is typically marked in German by a stressed verb or auxiliary in C°. The same is true in English with stress on the T-element of a clause (e.g. *He is sick*; *She knows I hate fish*; *That noise does bother me*). Verum focus in an independent clause is shown in (25); verum focus in a dependent clause is shown in (26). This focus morpheme can appear either before the dependent marker (26a) or after (26b).

- (25) Ap xatxw ’nii’y.
ap xatxw ’nii’y
 VER cold 1SG.III
 ‘I really am very cold.’ (BS)

- (26) a. Ap sgidim siipxwt.
ap sgi-dim siip-xw-t
 VER MOD-PROSP sick-INTR-3.II
 ‘He should be very sick.’ (BS)
- b. Yugwimaa ap gwineekxwhl laxha goohl Antarctica.
 yukw=imaa **ap** gwineek-xw-t =hl lax-ha goo-t =hl Antarctica
 IPFV=EPIS VER cold-INTR-3.II =CN on-air LOC-3.II =CN Antarctica
 ‘Perhaps it IS cold in Antarctica.’ (BS)

From this, we can see that the properties remaining consistent across clause types are at different heights within the clausal spine: from the predicate level, to the aspectual level, to properties of focus and the proposition.

4.2 Challenges for prior analyses

In this section, I review and rebut three potential analyses of the clause type split in Tsimshianic. To begin, I consider the question of whether independent and dependent clauses differ in a major structural way. In section 4.2.1 I consider Tarpent’s (1991) analysis of independent clauses as pseudoclefts (in contrast with ‘normal’ dependent clauses), and in sections 4.2.2 and 4.2.3 I consider a suggestion by some authors that dependent clauses might be nominalized, nonfinite, or otherwise part of a fundamentally biclausal structure (in contrast with ‘normal’ independent clauses) (Coon 2013: 190; Brown 2016). I argue against both of these approaches for Gitksan, proposing instead that independent clauses and dependent clauses are identical in their basic clause structure but differ in a particular inflectional way, following Hunt (1993). In section 4.2.4, I then argue against a family of approaches attributing dependent-style inflection to additional agreement or agreement-licensing in the C domain, including Hunt’s (1993) own approach.

4.2.1 Against a pseudocleft analysis of independent clauses

As discussed in section 4.1.1.3, the transitive vowel and the independent style of agreement appear consistently in clauses where objects have been extracted. Tarpent (1991) was the first to build on this connection, proposing that the transitive vowel should be fundamentally understood as an object-relativization marker. This leads her to suggest that transitive independent clauses are in fact pseudocleft constructions:

“...what has usually been considered as an independent transitive clause... should actually be interpreted as a headless Object-relative clause used as clause predicate.” (Tarpent 1991: 317)

An example is given in (27), with the proposed relative clause labeled in the second line, and the proposed re-translation at bottom.

- (27) Gubis Johnhl hun.
 [gup-ə-t =s John]_{ORC} =hl hun
 eat-TR-3.II =DN John =CN fish
 ‘John ate the fish.’ → [*What John ate*] was the fish. (Hunt 1993: 248)

Hunt (1993) presents strong argumentation against this analysis that has been generally accepted by later researchers; further counterarguments can be mustered on the basis of later work diagnosing crosslinguistic properties of different types of pseudoclefts (e.g. den Dikken 2006; Mikkelsen 2011).

Among a number of problems Hunt (1993: 242) raises for the pseudocleft analysis (I refer the reader directly to her dissertation for a complete discussion) are issues with the necessary interpretation of the [VS] element as clausal, or even as a constituent. For example, the purported headless relative clause constituent cannot contain any additional adverbial material as part of that ‘clause’ (Hunt 1993). This is illustrated in (28); an oblique phrase modifying the event can only appear sentence-finally. This contrasts with the English pseudocleft construction in (29), where an adjoined adverbial phrase appears as part of the relative clause subject.

- (28) a. Giigwis Johnhl hon **go’ohl** **Hazelton.**
 giikw-i-t =s John =hl hon go’o-t =hl Hazelton
 buy-TR-3.II =DN John =CN salmon LOC-3.II =CN Hazelton
 ‘John bought fish in Hazelton.’ (Hunt 1993: 250)
 b. *[giikw-i-t =s John go’o-t =hl Hazelton] =hl hon
 [buy-TR-3.II =DN John LOC-3.II =CN Hazelton] =CN salmon
 (29) [What John bought **in Hazelton**] was fish.

Temporal adverbs and oblique elements always follow the VSO components of a clause, regardless of whether it is dependent or independent; nothing may intervene between S and O, as may be expected if the [VS] element were a clausal constituent.

Furthermore, Hunt (1993) rightly points out that independent clauses, if pseudoclefts, should be considered the focus-neutral *predicational* type of pseudocleft (illustrated in (30)), as opposed to the specificational type (illustrated in (31)).

- (30) *Predicational*
 a. [What/whatever John is] is important to him.
 b. [What/whatever John is wearing] is a disaster.

(31) *Specificational*

- a. [What John is] is proud of himself.
- b. [What John is wearing] is a plaid sunhat.

In a predicationale pseudocleft, the relative clause is taken as the subject, and the following element as the predicate (thus, *predicationale* pseudocleft); conversely in a specificational pseudocleft, the relative clause is taken as the predicate and the following element as the subject, endowing it with special focus effects. Tarpent (1991) proposes the latter, and yet Gitksan independent clauses lack any particular focus on the O element of a clause. That is, they do not have the discourse properties expected of specificational pseudoclefts.

The alternative is that independent clauses may be predicationale pseudoclefts, with the O element of the surface VSO sentence acting as the predicate. Hunt (1993) raises several problems with this interpretation, predominantly based on morphology. I will here point out one additional problem in the area of semantics. We would expect the predicate of a predicationale pseudocleft to be a *semantic predicate*, or property-denoting expression of type $\langle e, t \rangle$. That is, we would expect the possible objects of independent clauses to be severely restricted, and perhaps exclusively indefinite. Instead, the objects of independent clauses are commonly referential elements of type e , including definite nominals and names. The independent clause given in (32) has a named entity in object position.

- (32) Hlimooyis Kathy t John.
 hlimoo-ə-t =s Kathy t John
 help-TR-3.II =DN Kathy DN John
 ‘Kathy helped John.’ (Hunt 1993: 19)

For a predicationale pseudocleft construction, this would be expected to be ill-formed; however, it would be natural of a specificational pseudocleft, with consequent focus on *John*. English correlates are given in (33).

- (33) a. Predicationale: #[Whoever Kathy helped] was John.¹⁰
 b. Specificational: [Who Kathy helped] was John.

The discussion as a whole serves to demonstrate that Gitksan independent clauses cannot be interpreted as any type of pseudocleft consistent with our crosslinguistic understanding of the construction. They do not cleanly exhibit the properties of either predicationale or specificational pseudoclefts, but instead a mixture of the two types; coincidentally, this mixture of properties

¹⁰This might be acceptable under a marked context where everyone that Kathy attempted to help happened to be named John; i.e. in a situation where *John* can function as a predicate.

are precisely those expected of normal declarative clauses.

Tarpent's (1991) analysis of independent clauses as derived from object-relativization, furthermore, provides no insight into the morphology of *intransitive* independent clauses. Although transitive independent clauses look identical to cases of object extraction, by virtue of their use of the transitive vowel, intransitive independent clauses do not incorporate this vowel. Neither do intransitive independent clauses show the same morphology as intransitive extraction. The two types of clause are compared below: an independent clause is given in (34a), and an intransitive case of S-fronting in (34b). Only the latter involves the characteristic S-extraction morpheme *-it*.

- (34) a. Dim yookxwt James t'aahlakw.
 dim yook-xw =t James t'aahlakw
 PROSP eat-INTR =DN James tomorrow
 'James will eat tomorrow.' (BS)
- b. Ksaxt Aidanhl yookxwit.
 ksax =t Aidan =hl yook-xw-**it** __
 only =DN Aidan =hl eat-INTR-SX __
 'Only Aidan is eating.' (VG)

Attributing the clause type distinction to a structure involving A'-movement is therefore only half a story, as this morphological parallel can only be drawn for transitive sentences.¹¹ An analysis of Tsimshianic clause typing must crucially account for the distinct morphology of both transitive and intransitive clauses.

4.2.2 Against dependent clauses as (nominalized) arguments

An alternative potential understanding of the clause-type split, not pursued in detail in prior work, is of dependent clauses as *nominalizations*, embedded under some subordinating element that take them as an argument. Because dependent clauses have a basic ergative alignment in the distribution of Series I clitic agreement, this hypothesis has some additional appeal; a crosslinguistic connection has been noted between ergativity and nominal structure (e.g. Johns 1992; Alexiadou 2001; Salanova 2007).

There are some language-internal reasons to seriously consider this possibility, mainly based on morphological similarity. Primarily, Series II suffixal agreement – which appears in all dependent clauses – is also used to mark *possessors* in the nominal domain. In this section, I

¹¹In my own analysis, I draw a parallel between independent clauses and A'-extraction contexts – not because of the similarity of *wh*-extraction morphology (as Tarpent 1991 does), but because both S- and O-extraction contexts appear to lack Series II agreement. That is, absolutive extraction contexts appear to undergo Series II agreement switch, unlike other types of extraction. This serves as the topic of Chapter 5.

argue that these similarities are only superficial and do not hold up to deeper comparison.

First, when considering whether dependent clauses are nominalized, we must establish some sort of baseline for comparison: how big is the nominalization, or in other words, what parts of the nominalization remain verbal? Recall from section 4.1.2 that several parts of the clausal structure appear to be unaffected by the clause type. The availability of different predicate and argument properties remain unaffected; prospective aspect is equally available in either clause type, and even verum focus at the propositional level is unaffected. Furthermore, these latter two morphemes – prospective *dim* and verum focus *k'ap ~ ap* – are not available in the extended nominal projection. They are restricted to clauses. The only properties obviously affected by clause-type shift are the aforementioned inflectional properties of the clause types: the realization of dependent clause agreement, and the absence of the transitive vowel. ‘Nominalization’, therefore, must change the agreement of both subject and objects, while leaving all other clausal structure unaffected.

Let us more closely consider the nature of how agreement would be forced to change in a ‘nominalized’ dependent clause. Unlike independent clauses, which have only ergative Series II suffixal agreement, this nominal/dependent Series II agreement would become available regardless of the transitivity of the clause. Series II agreement would also be linked to the possessor argument of the nominalization.

Notably, however, neither the subject nor object would be consistently selected as the ‘possessor’ of a dependent clause ‘nominalization’. As discussed in Chapter 3, the element which receives suffixal agreement varies between subject or object depending on its features: only third-plural and DP ergative subjects receive this agreement (Double Ergative, as in (35)), otherwise it goes to the object (Ergative/Absolutive, as in (36)).

- (35) Neediit yatsdiit 'nit.
 nee=dii=t yats-diit 'nit
 NEG=FOC=3.I hit-3PL.II 3.III
 ‘They didn’t hit him/her.’ *Double Ergative; (BS)*

- (36) Neediit yatst.
 nee=dii=t yats-t
 NEG=FOC=3.I hit-3.II
 ‘S/he didn’t hit him.’ *Ergative/Absolutive; (BS)*

This runs counter to a perhaps more expected alternative, that possessor agreement in a nominalization should more predictably go to the argument in a particular structural position. Instead, consistent ergative agreement is a property of the other type of agreement – the Series I clitics.

Dependent clauses differ from independent clauses in the availability of this ergative Series

I marking. Under the hypothesis that dependent clauses are nominalized, we would expect Series I marking to be typically ‘nominal’ agreement as well. However, the Series I clitics are not found in any unambiguously nominal context – they exclusively appear as ergative markers in dependent clauses.

I have tried many times to elicit transitive nominalizations comparable to *the army’s destruction of the city*, complete with two transitive arguments, but have had little luck. When translating English deverbal nominalizations, speakers usually reorganize the sentence into multiple clauses to avoid the embedded nominalization, as in (37).

- (37) Yukwhl hadikshl hanak’ iit saa luguksinhl hon.
 yukw =hl hadiks-t =hl hanak’ ii=t saa- luguks-in-t =hl hon
 IPFV =CN swim-3.II =CN woman and=3.I away- jump.PL-CAUS-3.II =CN salmon
 ‘The girl was swimming and she startled the fish.’
Elicited: “[The girl’s swimming] startled the fish.” (VG)

Alternately, constructions involving an embedded transitive structure are frequently detransitivized, usually via an attributive construction as in (38) (which I analyze in section 4.3.4 as object pseudo-incorporation) and/or antipassivization.

- (38) ’Min luxlukwhl gyat wint gya’adiit sii sgalsim gayts
 ’min- lux~lukw =hl gyat win=t gya’a-diit sii- sgals-m gayt-t
 upward- PL~surprise =CN people COMP=3.I see-3PL.II new- purchase-ATTR hat-3.II
 Michael.
 =s Michael
 =DN Michael
 ‘The people were surprised when they saw Michael’s new hat-buy.’
Elicited: “[Michael’s purchase of a new hat] surprised everyone.” (VG)

I have furthermore never been able to elicit an embedded transitive structure in a position restricted to DPs, such as ergative subject position. These embedded transitive constructions are always S or O arguments, and so always may quite feasibly be verbal/clausal. There is therefore no obvious reason to consider Series I agreement as nominal in any respect.

In summary, dependent clause inflection should not be attributed to nominalization of the predicate or clause, as none of their specific properties are clearly characteristic of other nominal structures.

4.2.3 Against dependent clauses as arguments

This section considers a related hypothesis. Certain dependent markers look, morphologically, extremely similar to predicates,¹² so we might explore whether dependent clause inflection is conditioned when a clause is embedded as an argument, regardless of whether it is actually nominalized. For example, Brown (2016) assumes Gitksan dependent clauses to be nonfinite.

Some supporting evidence for an analysis of dependent markers as predicate-like subordinators can be found in extraction contexts. When an argument is extracted over certain dependent markers such as *yukw* ‘IPFV’, the dependent marker may host its own *wh*-extraction morpheme (the intransitive extraction marker *-it*), as illustrated in (39). This is identical to the behavior of full intransitive predicates with CP complements, when an argument is extracted long-distance out of the embedded CP (shown for comparison in (40)).

- (39) Guhl yugwit jebin?
 gu =hl yukw-**it** jep-ə-n —
 what =CN IPFV-SX make-TR-2SG.II —
 ‘What are you making?’ (VG)

- (40) Guhl aamit ji japxwit?
 gu =hl aam-**it** [ji jap-xw-it —]
 what =CN good-SX [IRR make-PASS-SX —]
 ‘What would it be good if it were made?’ (VG)

In addition, some of these subordinating dependent markers have connective determiners encliticized to them when the lower clause is intransitive, as shown in (41a). When the dependent clause is transitive, the Series I clitics appear in this position instead.

- (41) a. Yukwhl yookxwt.
 yukw =**hl** yook-xw-t
 IPFV =CN eat-INTR-3.II
 ‘She’s eating.’ (BS)
- b. Yukwt guphl huxws.
 yukw =**t** gup-t =hl huxws
 IPFV =3.I eat-3.II =CN dried.salmon
 ‘She’s eating huxws.’ (VG)

We might take the appearance of the connective on a dependent marker as signaling the argument status of the dependent clause under a dependent-marker predicate like *yukw*.¹³ However,

¹²So much so, in fact, that in many cases it is not apparent whether a sentence involves a dependent marker introducing a dependent clause, or a ‘true’ intransitive matrix predicate introducing an embedded CP argument.

¹³We could further take this complementarity between the connective and Series I clitics to identify the Series I clitics as members of the same *determiner* category, as D elements (Peterson 2010b). However, there is no supporting

it should be noted at this point that very few dependent markers exhibit these very predicate-like morphological characteristics. The complementizer *win/wil*, which may derive from the light verb *wil* ‘do, be’, fails to exhibit extraction marking when extracted over, and does not typically introduce intransitive complement clauses with a connective determiner.¹⁴ Irrealis *ji*, which does not have any main verb counterpart, lacks these properties as well. Yet all dependent markers function identically with regard to agreement, regardless of their similarities to true predicates, shifting the inflectional properties of the lower clause in exactly the same way.

Hunt (1993) argues that even the most predicate-like dependent markers cannot be analyzed as true predicates. There is typically a difference in the semantic interpretation of the dependent marker element compared to its main predicate usage (e.g. dependent marker *yukw* ‘IPFV’ versus predicate *yukw* ‘be busy’). In addition, true predicates may host the prospective marker *dim*, as in (44), while dependent markers cannot independently host this marker – it only appears lower, as part of the dependent clause, as in (45).

- (44) Dim hiyukw ’nii’y ahl jamhun.
dim hi~yukw ’nii’y a-t =hl jam-hun.
 PROSP DUR~busy 1SG.III PREP-3.II =CN cook-fish
 ‘I’m going to be busy cooking fish.’ (Hunt 1993: 147)

evidence for this analysis; I have indeed argued in section 2.5.2.2 against an analysis of the Series I clitics as true, D-category clitics. A simple alternative explanation for the complementarity between the connective enclitic and Series I ergative clitics is some kind of morphological competition between the two elements for the enclitic position.

¹⁴The complementizer is usually bare (no connective) when introducing an intransitive dependent clause despite its resemblance to the predicate *wil* ‘do (light verb)’. This is illustrated in (42):

- (42) ... Iit gya’adiit wil hasbagyoos ’Wii Gyat.
 ... ii=t gya’a-diit **wil** hasba-gyoo-t =s ’Wii Gyat
 ... and=3.I see-3PL.II COMP on.back-lay/float-3.II =DN Big Man
 ‘And they saw that ’Wii Gyat was lying on his back.’ (BS)

When *wil* does appear with a connective introducing a lower clause, it is usually in combination with a reason or manner modifier (i.e. *gan wihl* and *wila wihl*), as in (43):

- (43) Agwiyukwhl ha’niisgwaa’ytxwhl gan wihl neediit naa ji hahla’ljit.
 agwiyukw =hl ha-’nii-sgwaa’ytxw =hl gan- **wil** =hl nee=dii=t naa ji hahla’lst-it
 because =CN INS-on-rest =CN reason- be/do =CN NEG=FOC=3.I who IRR work-SX
 ‘Because it was Sunday, (that’s why) no one was at work.’ (BS)

This is suggestive to me that the actual light verb *wil* is being used in these constructions, rather than a complementizer.

- (45) a. Hlaa yukw dim hlisxwi'y.
 hlaa yukw **dim** hlis-xw-'y
 INCEP IPFV PROSP finish-INTR-1SG.II
 'I'm very close to finishing.'
- b. *hlaa **dim** yukw hlis-xw-'y
 INCEP PROSP IPFV finish-INTR-1SG.II

(Hunt 1993: 147)

A final point for consideration is the role of the dependent marker in the agreement shift that takes place in dependent clauses. While the paradigms used for ergative versus absolutive change across the clause type (in an example of agreement switch), the actual *ergative alignment* of agreement remains persistent. It is unclear how a high (e.g. C-level) embedding element could trigger such a difference in ergative marking, especially under an analysis where ergativity is assigned low in the clause (e.g. in *vP*; Woolford 2006). If the dependent marking elements appear low enough to impact *v*-agreement in the dependent clause, Laka (2006) and Coon (2013) predict that the subordinating element should create a biclausal division through the middle of the normal clausal structure, potentially shifting the alignment of that agreement to *nominative*. However, the alignment of agreement remains persistently ergative.

I suggest that dependent marker elements appear too high in the clause to impact its agreement alignment. Alternately, even if they are low, Laka (2006) specifically suggests that in languages where ergative alignment is left unchanged across two apparent domains, *restructuring* has taken place (Wurmbrand 2004): what might have been two clausal domains is reassessed as only one, and the agreement domain is not subdivided by the subordinating element. In short, regardless of the position of the dependent marker as high or low, there is no division between the matrix and embedded domain in any way that should actually affect agreement in the manner proposed by previous authors. Agreement probes should be able to reach their normal targets unimpeded.

Ultimately, in this section I have demonstrated that it is not the nature of the dependent marker as 'deriving from a predicate' which results in dependent clause inflection. Yet, whatever property responsible for the difference between independent and dependent inflection is closely linked to the presence of a dependent marker.

4.2.4 Against a C-level trigger for dependent clauses

Having argued in the previous sections that there is insufficient motivation to consider independent and dependent clauses structurally or categorially distinct from each other as would be expected under a pseudocleft, nominalization, or embedded-CP analysis, and in light of consistency across the two clause types at different levels of the clausal spine, I assume that the

two clause types are structurally identical. As suggested by Hunt (1993), the two clause types differ only in terms of their inflection – ϕ -agreement and the transitive vowel.

The final prominent analysis that I will argue against is one which derives the properties of dependent clause inflection from additional agreement licensing by C° or some other high functional projection which merges the dependent marker. More precisely, in this section I argue that the independent/dependent clause distinction should be entirely dissociated from the appearance of dependent markers or other high functional material. I show that insertion of agreement on C° would not be expected to result in an agreement-switch pattern; furthermore, dependent markers do not categorically trigger dependent inflection.

An initial view of the Gitksan agreement-switch pattern, where a single type of agreement is available in independent clauses (Series II) and two types are available in dependent clauses (Series I and II), might lead one to suggest that the dependent marker itself introduces the additional type of agreement in dependent clauses. That is, the dependent marking element is introduced as part of a projection whose head hosts an additional agreement probe: the Series I agreement probe.

The major problem facing this analysis is the fact that Series I agreement has an ergative distribution, and appears only in transitive clauses. We would initially expect an agreement probe introduced in C° to appear regardless of the transitivity of a clause; it should therefore agree with the intransitive S, and have a nominative or absolutive distribution. This is precisely how Wiltschko (2006) derives nominative agreement in the subjunctive in Halkomelem. She demonstrates that subjunctive agreement (the *-s* element on the auxiliary in (46)) appears in addition to standard ergative agreement (the *-es* verbal suffix only in transitive (46b)). She proposes that the subjunctive agreement probe is in C° .

- (46) a. éwe lí-s í:mex.
 NEG AUX-3SS walking
 ‘He is not walking.’
- b. éwe lí-s tl’íls-th-òx-es.
 NEG AUX-3SS want-TR-1SG.O-3S
 ‘He does not like me.’
- (Wiltschko 2006: 201)

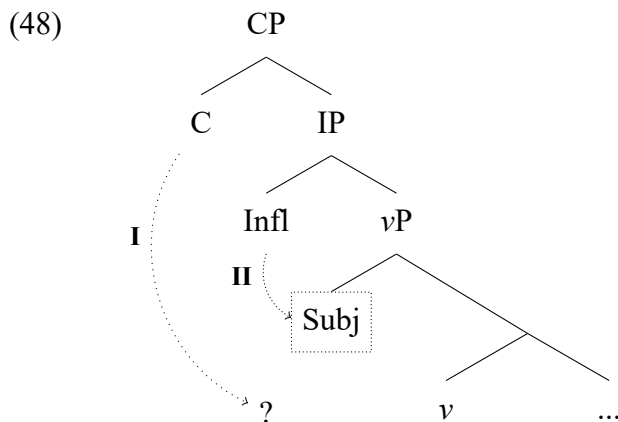
A similar intransitive-transitive pair of Gitksan dependent clauses is given in (47). We might say that the Series I agreement characteristic of dependent clauses is located high in C° , just like Halkomelem subjunctive agreement, and Series II agreement on the verb is located lower.

(47) Dependent clause

- a. Needii baxt.
 nee=dii bax-t
 NEG=FOC run-3.II
 ‘S/he didn’t run.’ (BS)
- b. Neediit iileni’y.
 nee=dii=t hilen-’y
 NEG=FOC=3.I chase-1SG.II
 ‘She didn’t chase me.’ (VG)

However, notice that the alignment of the two types of agreement in Gitksan is quite different from Halkomelem. In Halkomelem (46), auxiliary agreement is nominative and verbal agreement is ergative. In Gitksan (47), agreement on the dependent marker (I) is ergative and verbal agreement (II) is absolutive. If we would like to place Gitksan Series I agreement on C° similar to Halkomelem subjunctive agreement, we must explain why it has an ergative distribution rather than the nominative distribution of Halkomelem subjunctive agreement, and complementizer agreement in other languages (e.g. Dutch; Zwart 2011). Specifically, how can we prevent Gitksan Series I agreement on C° from agreeing with an intransitive S?

We might say that Gitksan Series I agreement, unlike Halkomelem subjunctive agreement, fails to agree with S in intransitives because Series II absolutive agreement pre-empts it. Series I agreement is then unable to agree with S, as this argument has been deactivated through prior agreement (in accordance with the Activity Condition; Chomsky 2000, 2001). This is illustrated in (48), an example of an intransitive structure. Lower Series II agreement on Infl° finds the S and deactivates it for subsequent Series I agreement.



However, it is then unexplained why *Series II* agreement is not consistently nominative. Recall that my analysis of the nominal-type split in Chapter 3 crucially relied on ergative Series I

Furthermore, placing Series I agreement in C° provides no immediate explanation for the different pattern of Series II agreement in independent versus dependent intransitives. Unlike in dependent clauses, the sole S argument of an independent clause receives no agreement at all. The two types of intransitive clause are compared below: (49a) is independent, and lacks any Series II agreement, while (49b) is dependent and involves Series II agreement.

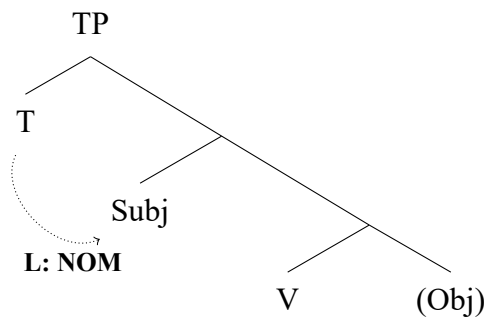
- Let us review a prior analysis of agreement switch, given by Kalin and van Urk (2015). They demonstrate that in the Neo-Aramaic languages, agreement switch is conditioned by aspect. The closest pattern to Gitksan's agreement switch is exemplified by Senaya (the pattern is referred to by Kalin and van Urk 2015 as *partial agreement reversal*). In the perfective clauses shown in (50), subject agreement is marked by the so-called L-suffixes (bolded). In the imperfective clauses shown in (51), subject agreement is instead marked with the so-called S-suffixes (italicized). Furthermore, agreement with definite objects is possible in the imperfective, and occurs with the L-suffix paradigm (51c).

- a. Axnii damx-ox.
we sleep.IPFV-S.1PL
'We sleep.'
- b. Axnii xa ksuuta kasw-ox
we one book write.IPFV-S.1PL
'We write a book(fem.).'

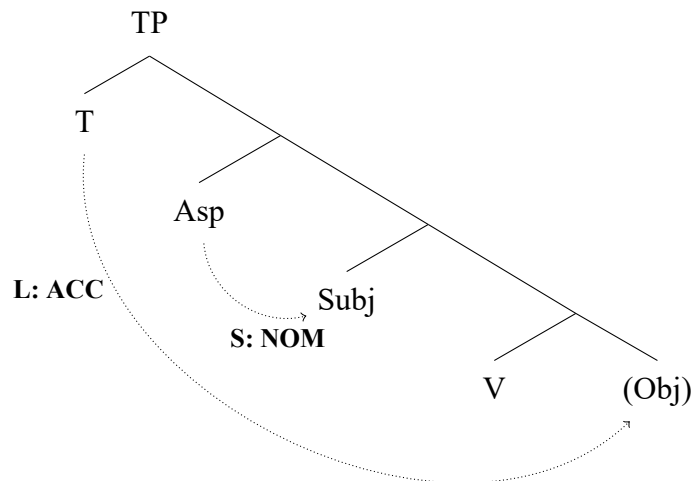
- c. Axnii oo ksuuta kasw-ox-**laa**
 we that book write.IPFV-S.1PL-L.3FS
 ‘We write that book(fem.).’ (Kalin and van Urk 2015: 667)

Their analysis of this agreement switch pattern involves the introduction of an additional agreement probe in one of the split contexts. While the standard L-suffix agreement is consistently present in T° , an additional agreement probe (marked by the S-suffixes) is introduced in the head of an imperfective Aspect Phrase. The two contexts are illustrated in the trees in (52), for the perfective, and (53), for the imperfective.

(52) Perfective (Senaya)



(53) Imperfective (Senaya)



This is an *intervention*-based account of agreement switch. The analysis crucially involves intervention of the new imperfective-aspect probe between the nominative L-suffix probe in T° and its standard goal. The newly-introduced S-suffix probe on Aspect° appears below T° , and

so is in the correct position to ‘take over’ the nominative alignment of the L-suffix probe on T° , agreeing with the subjects of both transitive and intransitive clauses. This leaves the original L-suffix probe on T° with only a transitive object as a possible target. When this agreement occurs (with specific objects only), its distribution becomes accusative.

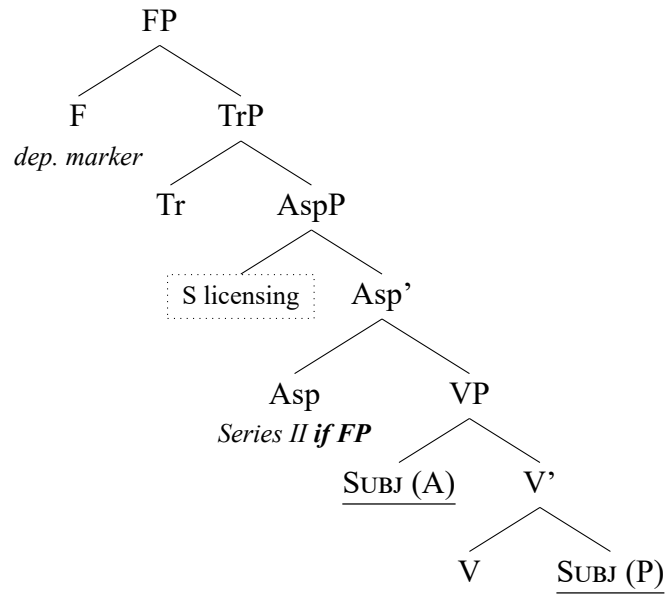
By contrast, agreement switch in Gitksan is not conditioned by a particular aspect, but rather a particular clause type. If, in Gitksan, the additional Series I agreement characteristic of dependent clauses were introduced in C° , and the Series II probe introduced below it (e.g. in Infl° or v°), there would be no opportunity for intervention between the Series II probe and its standard goal. In short, if Series I agreement is located in C° , there is no obvious way to change the alignment of the Series II probe (from ergative in the independent to split absolutive-nominative in the dependent), because there is no intervention. Unlike in Kalin and van Urk’s (2015) analysis, agreement switch does not directly follow from the location of the probes.

Hunt’s (1993) analysis takes a somewhat more indirect approach to dependent clause inflection as conditioned by properties of the C-level. Under her analysis, rather than introducing a new agreement probe outright, the presence of high functional structure containing lexically overt material is capable of triggering differences in where the agreement paradigms engage in feature checking, lower down.

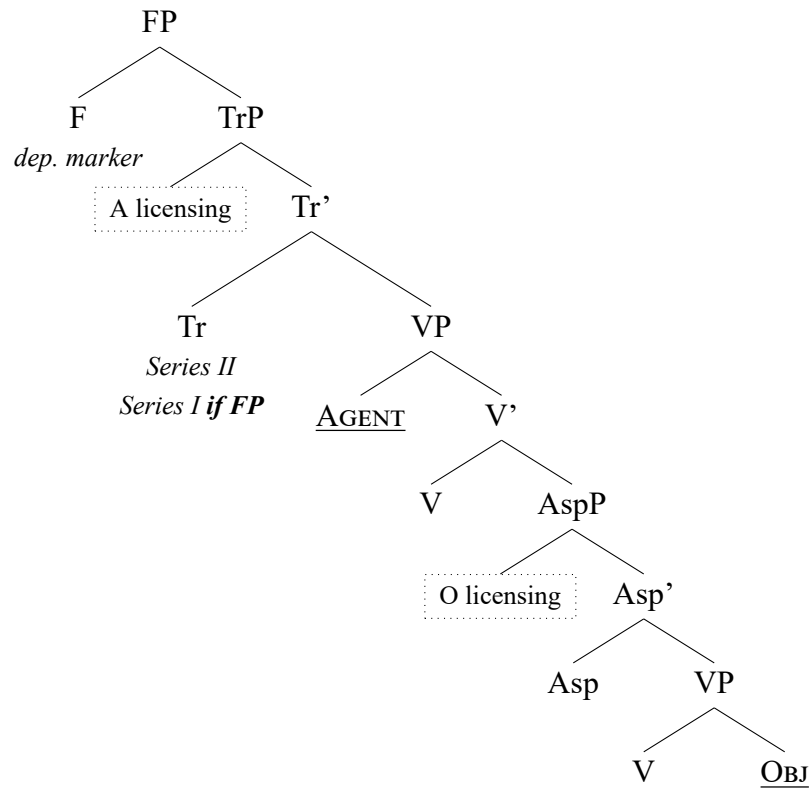
The clausal structure that Hunt (1993) utilized for Gitksan consists of a split VP, where ergative subjects are merged in the higher projection and absolutive subjects and objects are merged in the lower projection.¹⁵ The two VPs are split by a low Aspect Phrase that serves as the locus of plural agreement and pluractional marking, which is sensitive exclusively to the properties of absolutive arguments. Above all of these is a Transitive Phrase, which formally encodes the transitivity of the clause. There is no TP, Gitksan having no morphologically obvious tense marking. Instead, Hunt (1993) uses the Transitive Phrase (TrP) as the primary inflectional projection, based on the major role of transitivity in both the syntax and morphology of a Gitksan clause. This structure is illustrated below, with an intransitive clause in (54) and a transitive clause in (55).

¹⁵ All intransitive subjects are merged in the lower VP. There is therefore no substantive difference between unergative and unaccusative subjects.

(54) Hunt's (1993) intransitive clause structure



(55) Hunt's (1993) transitive clause structure



Arguments are licensed by AspP and TrP, with the lower AspP being responsible for absolutive argument licensing and the higher TrP being responsible for ergative subject licensing. The ergative and absolutive arguments move to the specifiers of these projections, either overtly or covertly. The head of TrP is specified for $[\pm\text{TRANSITIVE}]$; this specification is partially responsible for determining what kind of inflection (ϕ -agreement of either the Series I or II paradigm, and the transitive vowel) appears in the clause. The other determining factor is the presence of a higher functional projection of any kind (referred to as FP) higher than TrP. If this higher FP contains overt material (i.e. a dependent marker), it alters how or whether these inflectional elements appear.

The specifications for agreement in each type of clause under Hunt's (1993) proposal are presented in Table 4.3, where the differences conditioned by the higher FP are bolded.

High FP present?	TrP value	<i>Series I</i>	<i>Series II</i>	<i>Transitive -ə-</i>
no	$[-\text{TRANS}]$			→ indep intransitive
	$[\text{+TRANS}]$		Tr°	Tr° → indep transitive
yes	$[-\text{TRANS}]$		Asp°	→ dep intransitive
	$[\text{+TRANS}]$	Tr°	Tr°	→ dep transitive

Table 4.3: Structure and morphosyntax across clause types for Hunt (1993)

Under Hunt's (1993) analysis, Series II agreement takes place on the verb, but it does so at different heights in the clausal spine as it head-moves its way upward. Series II agreement typically occurs once the verb is in the head of a $[\text{+TRANSITIVE}]$ TrP. However, an additional FP projection above TrP may also license Series II agreement when the verb reaches Asp° in a dependent clause, allowing agreement with an intransitive argument. A high FP projection also conditions whether a $[\text{+TRANSITIVE}]$ Tr° is realized as the transitive vowel (a default form), or as Series I agreement with the ergative argument in the specifier of TrP.

This analysis generates the relevant patterns, but does so almost entirely by stipulating the position of agreement. The Series II paradigm is conceptualized as agreement from the V head, with the actual point of where it agrees changing (Tr° and Asp° – or no agreement at all) depending on other conditions in the clause. The distinct surface distributions that the Series II paradigm can have is a result of it moving and agreeing in different positions. However, it should be noted that Series II agreement in Asp° in an intransitive clause is triggered in a non-local fashion, by the presence of a much higher FP.

In my own analysis I adopt the assumption that an agreement paradigm is a probe on a functional head, and that it always agrees from its merge position. More specifically, an agreement

probe on a head Agrees immediately after being merged.¹⁶ The ϕ -features copied as a result of this operation are spelled out as one morphological paradigm or another on the basis of what head they are located on, as a matter of Vocabulary Insertion conditioned by their environment. This assumption is inconsistent with Hunt's analysis, where a) Series II agreement is associated with V° , but agreement is postponed until well after the completion of the VP, and b) two morphologically distinct sets of agreement (Series I and II) may take place in Tr° .

I additionally assume that morpheme-ordering is largely determined by the syntax. Under Hunt's (1993) analysis, several different things occur in Tr° : verb movement, Series I and II agreement, and the realization of the transitive vowel. However, Hunt (1993) provides no discussion on how these elements fall into their ultimate linear order; in particular it is never discussed how the transitive vowel comes to intervene between the lexical verb and Series II agreement. While later in this chapter I ultimately follow Hunt (1993) in proposing that the Series I clitic paradigm and the transitive vowel are realizations of the same head (reflecting their strict complementary distribution), the proposed derivation addresses the different linear position of these elements.

Finally, Hunt's (1993) characterization of the distinction between independent and dependent clauses simply as *lexically overt functional material* above TrP runs into additional problems in a Minimalist analysis. This formulation of the distinction was meant to accommodate the syntactic, semantic, and morphological heterogeneity of dependent-marker elements. However, under Minimalism (and particularly a Distributed Morphology approach), the phonological content of functional projections as null or overt should not be able to influence the syntax proper by introducing additional agreement probes. Whether an agreement probe is spelled out as null or overt could potentially be done by the morphological component, if this were attributed to *contextual allomorphy*. That is, we could morphologically specify that Series I elements surface as null, regardless of their features, unless they neighbor a dependent marker. However, contextual allomorphy is typically used to account for more idiosyncratic changes than this.

The final weakness of Hunt's (1993) approach, or indeed any approach attributing the clause type split directly to properties of C , is its dependence on the dependent marker as the main condition for dependent-style inflection. Although this is seemingly the most obvious way of accounting for the difference between clause types, we have seen in section 4.1.1.3 that whenever an object is A'-extracted, the clause must take independent inflection even when a dependent marker is present. The object extraction example countering this generalization is

¹⁶I leave open the possibility of e.g. Cyclic Agree (Béjar and Rezac 2009), where agreement by a probe can be cycled or postponed – however, under Cyclic Agree, agreement can only be postponed until the completion of the projection. Once the projection that contains the agreement probe is complete, this probe has no further chances to re-Agree.

repeated in (56), with dependent marker *mooji* ‘almost’.

- (56) Hunhl mooji agubis John.
 hun =hl moo-ji a-gub-ǝ-t =s John __
 salmon =CN almost-IRR not-eat-TR-3.II =DN John __
 ‘John almost never eats FISH.’ (Hunt 1993: 243)

Hunt (1993) provides no rationale for why dependent inflection should be blocked under object extraction, leaving it as an open problem. Object extraction must involve movement of the object to a projection above TrP – that is, there must be a CP above TrP hosting the focused object, which under Hunt’s (1993) analysis would trigger dependent inflection. Yet, dependent inflection is blocked. Only independent inflection is possible when an object extracts.

We cannot understand obligatory independent inflection in this context as following from the null nature of the CP which triggers extraction (recall that Hunt refers specifically to a phonologically *overt* element as triggering dependent clause properties). Oblique themes of ditransitive predicates provide a counterexample to this possibility. Such obliques are similarly extracted without an overt CP or extraction marker, but instead trigger *dependent* inflection; the remnant clause has Series I ergative agreement, and Series II absolutive agreement, as shown in (57). This is in contrast to direct object extraction which results in independent inflection (as in (55) above).

- (57) Gu ma gins Michael __?
 gu m= gin-t =s Michael __?
 what 2.I= feed-3.II =DN Michael __
 ‘What did you feed Michael?’ (VG)

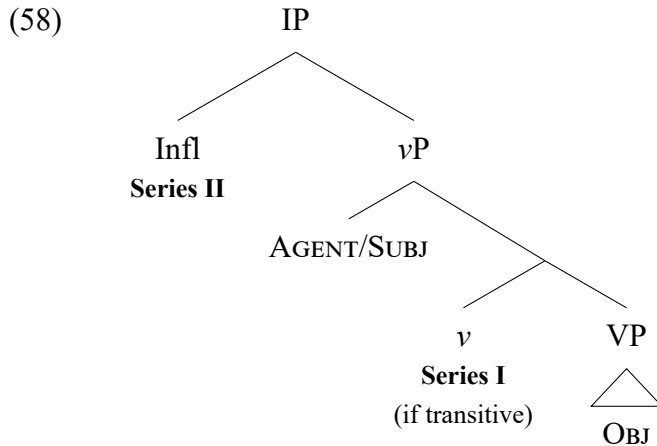
I propose that the dissociation of dependent marker and dependent-style agreement in cases of direct object extraction is evidence *against* linking the clause type split directly to the dependent marker or high functional structure. That is, the presence of the dependent marker cannot be claimed to categorically ‘trigger’ dependent inflection. The correlation between dependent marker and dependent inflection must be less direct. In the next section I claim that it is in fact the converse: dependent markers are *blockers* of *independent* inflection. It is instead independent inflection which is triggered by an element in the clause, in contrast to Hunt (1993). I return to the object extraction data in Chapter 5, where I propose an account which directly links independent inflection to the object extraction context.

4.3 Agreement switch as indirect ϕ -agreement

In the previous sections, I argued that independent clauses are not pseudoclefts formed around object-centered relativization, and that dependent clause inflection is not triggered by nominalization, structural embedding, or any particular properties of the dependent marker or C head. In this section, I propose a novel approach to deriving the inflectional properties of the Tsimshianic clause-type split that draws upon some of Tarpent's (1991) intuitions, without resorting to true A'-movement in the derivation. I propose a novel approach to the Series II agreement switch across clause types.

Similar to Tarpent's (1991) pseudocleft analysis, I propose that it is independent clauses which are the 'derived' construction; that is, a historically older inflectional pattern is retained in an embedded context. Such is the case for example in the Algonquian languages, which contrast the older inflection of the conjunct order (roughly: embedded clauses) with more innovative inflection in the independent order (matrix clauses) (Goddard 1967; Proulx 1982; Oxford 2014). In Gitksan, it is quite obvious that the Series III person-marking paradigm (more characteristic of the independent clause type) is transparently composed of two different morphemes ('*nii*- and the Series II suffixes). The unique Series I clitic paradigm of dependent clauses, in comparison, cannot be decomposed, and must be analyzed as already present in a much earlier stage of the language.

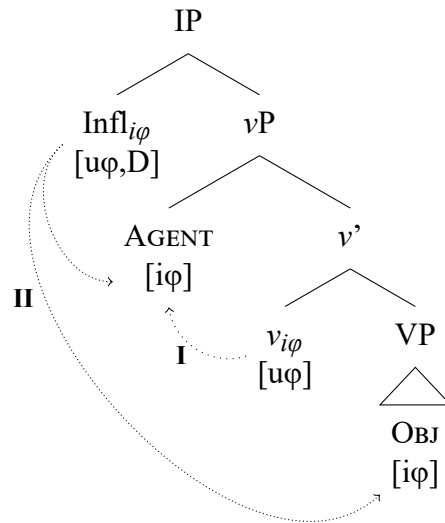
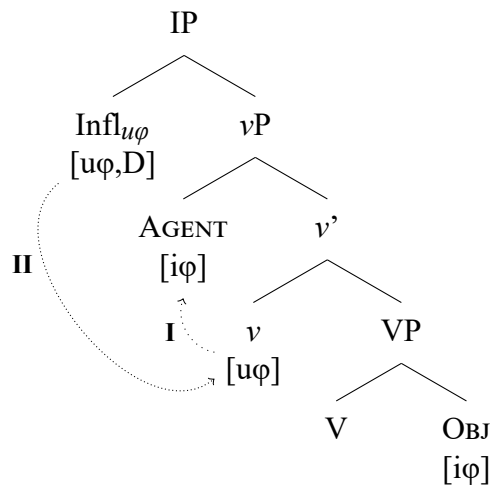
I follow Hunt (1993) in assuming that the underlying structure of both clause types is the same, but I also follow Tarpent (1991) in considering dependent clause inflection the 'original' or more 'basic' pattern. By hypothesis, I assume that the fundamental structure of agreement in dependent clauses – the location of both Series I and Series II agreement probes from the previous chapter, illustrated in (58)– underlie both dependent and independent clauses in Gitksan, as the canonical agreement pattern. That is, ergative Series I agreement is always on v° , and flexible Series II agreement is always on Infl.



As I argued in section 2.5, the Series I clitics and Series II suffixes are both instances of agreement, and the Series III pronouns are the last-resort spellout of unchecked pronominal features that have not entered into an agreement relationship. A base property that differs for clauses which become formally ‘independent’, therefore, is that S and O arguments fail to receive Series II agreement, as they do in dependent clauses. Series II agreement instead *switches* or *pivots* to index the ergative target of Series I agreement. The Series I clitics themselves are suppressed.

I propose to model this generalization as the Series II agreement probe literally agreeing with the Series I probe itself. The ϕ -features of the Series I agreement operation are then able to be spelled out on the higher Series II probe, in a process that I will refer to as *indirect agreement*.

To illustrate, we can compare the agreement process of dependent clauses (from Chapter 3) with the proposed agreement process of independent clauses in (59) and (60) below. The Series II probe on Infl in an independent clause like (60), undergoes indirect agreement with the ergative subject, by agreement with the Series I probe. I argue in this section that the probe on Infl is specifically relativized to seek uninterpretable ϕ -features located on the lower Series I probe.

(59) *Dependent clause*(60) *Independent clause*

In section 4.3.1, I discuss the trigger of independent clause inflection in the C domain, and the mechanism by which the Series II agreement probe engages in indirect agreement. I lay out the agreement derivations of transitive and intransitive clauses of both clause types: first dependent clauses in section 4.3.2, then independent clauses in section 4.3.3. In section 4.3.4, I discuss the linearization of the predicate and agreement morphemes. Specifically, I propose that verb-initial order is derived by ν P-remnant raising (Massam 2000, 2001): the subject and object raise to positions outside the ν P, and then the ν P itself raises above them, resulting in VSO order.

4.3.1 Proposal

Just as dependent clauses are largely characterized as clauses which contain a dependent marker, independent clauses may conversely be characterized as clauses *lacking* a dependent marker.¹⁷ I therefore propose that the primary trigger for independent clause inflection is a C head found in matrix clauses. This particular instantiation of C cannot be embedded, and is complementary with the several dependent markers that may themselves be realizations of C (e.g. the complementizer *wil*, irrealis marker *ji*, and imperative operator). Some other dependent markers can be considered high embedding elements (the clausal coordinator *ii*, clausal negation *needii*, some clause-level aspectual elements like imperfective *yukw*). These elements either select a smaller clause without a CP projection, or cannot select a CP headed by the matrix C head, strictly requiring an embedded C.

Setting aside a precise analysis for each of these morphemes, I will assume that all dependent-marker elements either *replace* the matrix C head, *select* an alternate embedded C head, or otherwise count as an *intervenor* between matrix C and the Series II agreement probe in Infl. This is in many ways the inverse of Hunt's (1993) analysis as described in the previous section; rather than having multiple things trigger a particular change, resulting in dependent agreement, a single factor (matrix C°) triggers a conversion to independent agreement, but may be blocked in multiple different ways. This better reflects the heterogeneous nature of the set of dependent markers, and provides the necessary complementarity between dependent markers and independent inflection.

If the matrix C° – what I will refer to as the *independent* C° – is able to take IP as its complement with no intervening dependent marker, it then licenses an alternate agreement probe in the head of Infl, which controls Series II agreement.¹⁸ I propose that the Infl-agreement probe licensed by an independent C° is valued by *uninterpretable* ϕ -features (Chomsky 2001), rather than seeking out interpretable ϕ -features on nominals in its c-command domain.

I assume, following Pesetsky and Torrego (2007), that the distinction between *interpretable* versus *uninterpretable* features – those features which are semantically contentful at LF versus those which are not – is independent of the distinction between *valued* and *unvalued* features – those features which enter the syntax with a value versus those which gain a value via agreement or some other feature-sharing mechanism. The approach to agreement initially proposed by Chomsky (2001) is that uninterpretable, unvalued features serve as probes (i.e. [uF: __]) while interpretable, valued features serve as goals (i.e. [iF: α]). Pesetsky and Torrego's (2007)

¹⁷With the exception of object-extraction clauses, which I will discuss in Chapter 5.

¹⁸Although I propose that the properties of the Series II agreement probe differ, they are still spelled out using the same paradigm. I assume this is due to the form of an agreement paradigm being conditioned by the category of the head it is hosted on. As the independent and dependent Series II agreement probes are located in the same position (on Infl°), they are expected to look morphologically identical despite the difference in their target.

fundamental contribution was to argue that these two properties (interpretability and valuation) are independent. This provides us with a complete picture of a four-way contrast between types of features and their contribution to the syntax and semantics, summarized in Table 4.4.

	<i>Interpretable</i>	<i>Uninterpretable</i>
<i>Valued (Goal)</i>	[iF: α]	[uF: α]
<i>Unvalued (Probe)</i>	[iF: $_\$]	[uF: $_\$]

Table 4.4: Pesetsky and Torrego's (2007) four-way cross-section of features

Interpretable features have semantically interpretable content which serves a purpose at LF, while uninterpretable features function only in the syntactic component, and are stripped away before LF. Regardless of interpretability, valued features on heads may function as goals, while unvalued features on heads may function as probes. Pesetsky and Torrego (2007) specifically propose instances of *interpretable*, unvalued features that serve as probes (i.e. [iF: $_\$]; one proposed example was Q features on C $^\circ$). I propose that agreement switch in Tsimshianic constitutes an example of the remaining possibility: uninterpretable, *valued* features serving as goals (i.e. [uF: α]). Given that unvalued features may gain a value if they undergo a successful Agree operation, this leaves them open to the possibility of converting from probes into potential goals (assuming that they are not immediately deleted upon valuation). Bošković (2009) has used this same idea to account for first/last conjunct agreement on participles with number and gender.

The application of this idea to Tsimshianic is as follows. The Series II ϕ -agreement probe on Infl $^\circ$ may either seek *interpretable* ϕ -features as its goal (dependent clauses), or *uninterpretable* ϕ -features (independent clauses, when licensed by matrix C $^\circ$). When the Series II probe seeks uninterpretable ϕ -features, its only possible target is uninterpretable features on a lower agreement head which has already been valued. This is the Series I agreement probe, which I propose is located on a formally transitive v° .¹⁹ In an independent clause derivation where the uninterpretable- ϕ probe has been licensed, it probes downward and agrees with the first valued agreement head it finds.

¹⁹I assume a potentially recursive vP, since there is other morphology in Gitksan that might be associated with *v*. I assume that vP is the highest projection of the aspectual/event domain, and introduces external arguments. The specifically transitive *v* which introduces the external argument of a transitive clause can also be referred to as Voice. Although Hunt (1993) assumes that the external arguments of intransitive versus transitive clauses are merged in different positions, this is not necessary if we assume that formal 'transitivity', in the sense of whether ergative ϕ -agreement is possible, involves a fundamental distinction between a 'transitive' *v* and an intransitive one. However, if absolutive arguments are not all merged low as Hunt assumes, this raises the question of how verbal number marking picks out the set of absolutive arguments; I suggest that verbal number agreement on Asp $^\circ$ can potentially be analyzed as agreeing cyclically (Béjar and Rezac 2009).

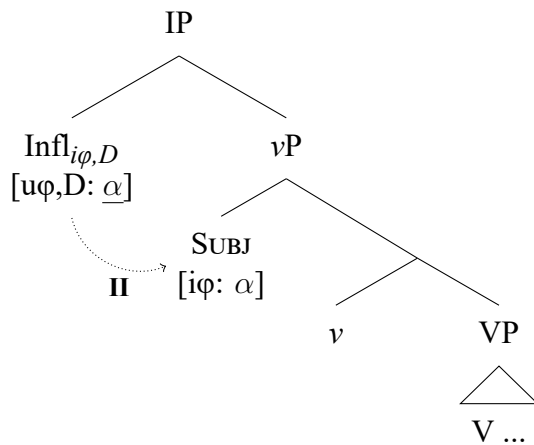
When the Series II probe encounters the Series I agreement head on v° , it is valued by the features already copied to the Series I probe. By shifting its agreement target to uninterpretable ϕ -features, the Series II agreement probe now only agrees with an argument *indirectly*, rather than directly; it finds a value only through interaction with another agreement head. By taking on the ergative agreement distribution of another agreement probe, Series II engages in *agreement switch*.

In the following sections, I will first review the canonical agreement system found in dependent clauses, and then I will present illustrations of independent clauses, where agreement switch has taken place via the proposed indirect agreement method. I discuss linearization and surface word/morpheme order after reviewing these agreement processes.

4.3.2 Canonical (dependent) derivations

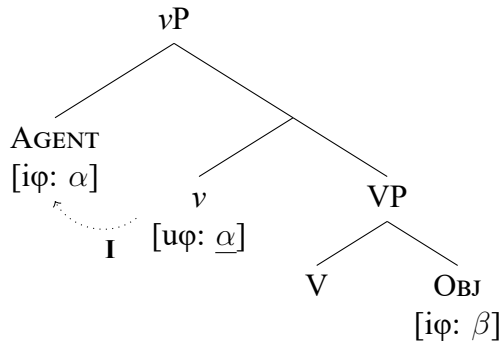
In a dependent clause, as proposed in section 3.1.2, Series II highest-argument agreement occurs on Infl° , and ergative Series I agreement occurs on the transitive v° , the projection that introduces the transitive subject. For intransitives, the v projection does not involve ϕ -agreement, so Series I clitic agreement is absent. The Series II agreement probe on Infl° engages in standard agreement with the sole S argument, as illustrated in (61).

(61) Dependent intransitive: Series II agreement only



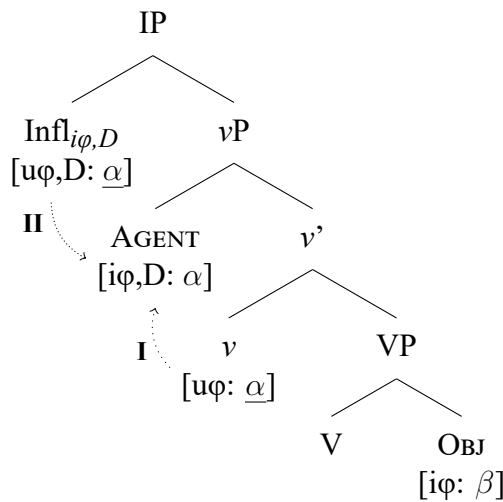
In a transitive clause, v° bears an agreement probe and introduces the transitive subject. The Series I agreement probe on v° engages in ergative agreement with its specifier, in an instance of inherent agreement (Woolford 2006; Coon 2017), as illustrated in (62).

- (62) Dependent transitive: Series I ergative (v°) agreement



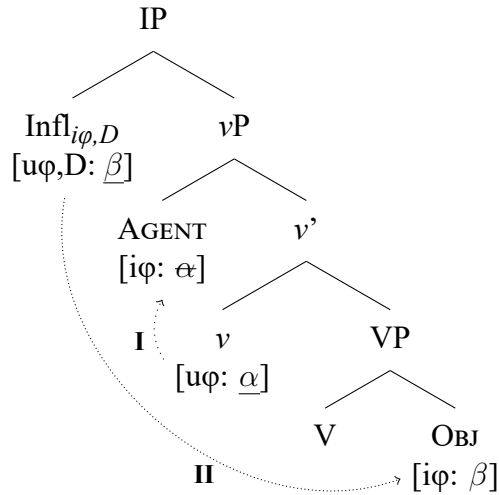
Infl° , once merged, introduces the Series II agreement probe. This probe agrees with the highest argument bearing active D-features, as argued in Chapter 3. To review, the analysis is as follows. In a Double Ergative agreement context, where the ergative subject is third-plural or a DP, the Infl° -probe will agree with the higher ergative subject (as in (63)). This is because, while the ϕ -features of the DP or third-plural ergative subject have been copied onto v° and deactivated over the course of Series I agreement, it still has other active D-features.

- (63) Dependent transitive: Series II highest-argument agreement with A (*Double Erg*)



Otherwise, the probe agrees with the object, in the Ergative/Absolutive pattern. If the ergative subject is any other pronoun besides third-plural, it has no D-features – only ϕ -features. All of its features are copied and deactivated by Series I agreement with v° , and so it is no longer a viable agreement target for Series II agreement in Infl° ; Series II agreement then skips the inert ergative subject and agrees with the object as in (64).

- (64) Dependent transitive: Series II highest-argument agreement with O (*Erg/Abs*)



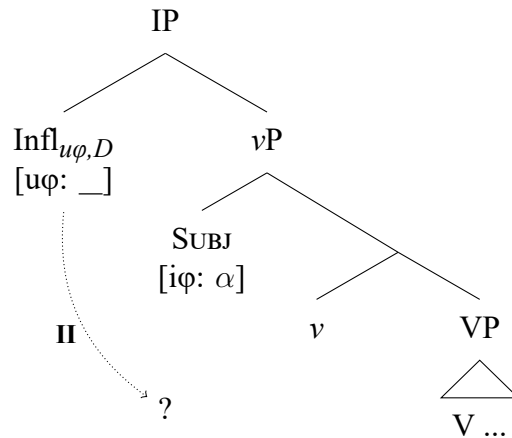
This split in the feature sensitivity of the higher versus lower agreement probes – with the lower Series I *v*-probe seeking only ϕ -features, and the higher Series II Infl-probe seeking D-features as well – generates the split between Series II agreement as absolutive or nominative in dependent clauses, depending on the features borne by the ergative argument.

4.3.3 Agreement switch (independent) derivations

In an independent clause, an alternate Series II probe is licensed through a relation between Infl[°] and the independent C[°]. I suggest that this licensing is achieved through feature inheritance (Chomsky 2007, 2008). The preferred type of agreement head for Infl must therefore be the one which seeks uninterpretable ϕ -features to agree with, though it converges only under an independent C[°].

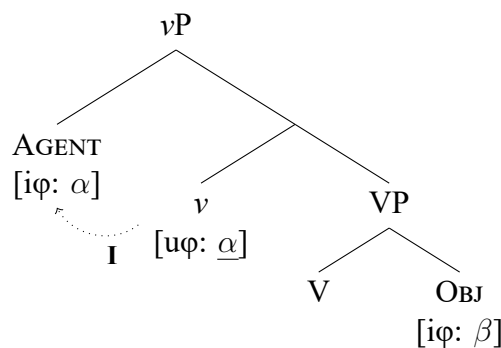
Crucially, the behavior of Series I agreement on *v*[°] does not change across clause types. In an intransitive clause, *v*[°] is not specified to merge with a probe, so there is no Series I agreement head. When the Series II agreement probe is merged in Infl[°], seeking uninterpretable ϕ -features, it finds nothing to agree with in its c-command domain, as shown in (65). The intransitive subject itself bears only interpretable ϕ -features, with which it cannot directly agree.

(65) Independent intransitive: no Series II valuation



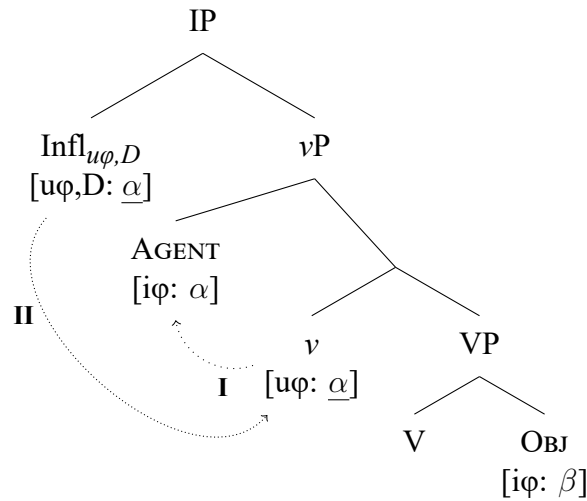
Having failed to find a value, the Series II agreement probe is spelled out as its default value: null (as it does with e.g. weather predicates; see section 3.2.2). The intransitive S, if pronominal, is realized as a Series III pronoun in lieu of agreement.

In a transitive clause, v° is merged with an inherent agreement probe. It agrees with its ergative specifier, resulting in Series I agreement. This is identical to the process in a dependent clause.

(66) Independent transitive: Series I ergative (v°) agreement

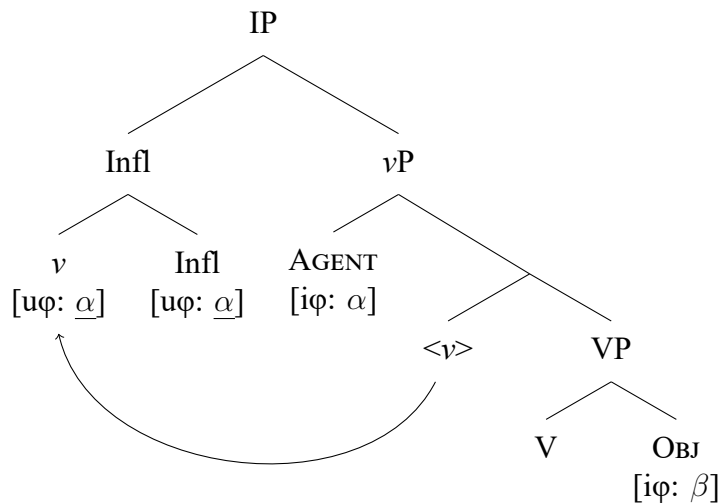
Once merged, the now *indirectly-agreeing* Series II head, which specifically seeks uninterpretable ϕ -features, agrees with the Series I agreement probe in its c-command domain, as in (67). The Series II probe is valued by the uninterpretable ϕ -features on v° , thereby adopting the value of Series I agreement for itself.

- (67) Independent transitive: Series II valuation by v°



As a consequence of agreement between heads, the v° Series I bearing agreement then head-moves to adjoin to the Series II Infl head that has agreed with it, as shown in (68).

- (68) Independent transitive: Series I-II head adjunction



This has the consequence of directly aligning two probes with identical ϕ -agreement values. I suggest that, as Oxford (2017) proposes for agreement heads in Algonquian languages, this results in impoverishment of the features on the lower head: v . This is illustrated in (69): when the features of Infl° and v° are adjacent and exactly identical, v° is impoverished.

(69) *Impoverishment conditioned by adjacency and identity:*

$$\begin{array}{c} v \\ [\text{u}\phi: \alpha] \end{array} \rightarrow v \quad / \quad \text{Infl} \quad \text{---} \quad [\text{u}\phi: \alpha]$$

To some extent, this can be understood as v and Infl *bundling* together postsyntactically. Though they begin the derivation as distinct syntactic elements, when agreement results in them sharing identical feature values, they end up combining prosodically as well.

After this occurs, the spellout of the impoverished v° is as the transitive vowel rather than Series I clitic agreement. A set of spellout rules for v° is given in (70); where transitive v° has a ϕ -feature specification, it is spelled out as the various Series I clitics, but the elsewhere realization is the transitive vowel.

(70) *Vocabulary Insertion rules for v° : Series I, transitive vowel*²⁰

v , TR, 1PL	\rightarrow	/təp/ (<i>dip</i>)
v , TR, 1	\rightarrow	/n/
v , TR, 2	\rightarrow	/m/
v , TR, 2PL	\rightarrow	/səm/ (<i>sim</i>)
v , TR, 3	\rightarrow	/t/
v , TR	\rightarrow	/ə/

In sum, the Series II agreement switch pattern is achieved by converting this agreement probe from searching for interpretable ϕ -features to uninterpretable ones, located on another agreement head. When it finds these features on the lower v° , the Series II probe copies the value on the Series I agreement head, head-moves it upward, and consequently impoverishes it.

This proposal has two major benefits. First, I am here able to model how Series II takes on an ergative distribution without actually deriving ergative alignment in a different way in the two clause types. An ergative alignment is always derived from v° agreeing with its specifier, but this relation can be morphologically realized either on v° itself or, if properly licensed, on Infl $^\circ$. Second, I am able to account for the complementarity between Series I agreement and the transitive vowel by treating them as the *same abstract syntactic object*. In one clause type, the agreement features of v° are spelled out, and in the other, they are impoverished under adjacency with an element bearing identical agreement features.

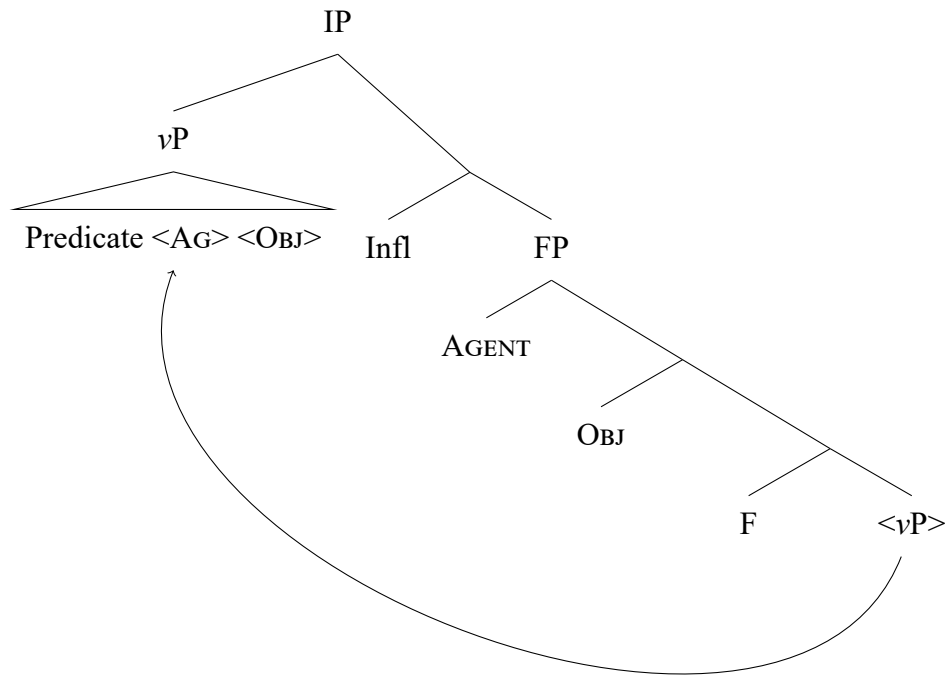
²⁰In some dialects, *n* and *dip* co-occur when realizing a first-person plural ergative subject (e.g. HH clearly produces *ndip* for first-plural ergatives). This alternate output can be achieved by reversing the application order of the 1 and 1PL rules.

4.3.4 Linearization and verb-initial order

I have so far accounted for the alignment and distribution of both the Series I and Series II paradigms, including agreement switch, but have not yet devoted attention to deriving word or morpheme order. In this section I briefly outline the process of linearizing the agreement morphemes with respect to the predicate.

In all of the derivations I have described so far, I assume that the next step after after Series II valuation is to raise the predicate over the Series II agreement probe on Infl° . This can be accomplished via most of the varied analyses proposed to derive verb-initial word order (Emonds 1980; Chung 1998; Carnie and Guilfoyle 2000; Carnie et al. 2000; Massam 2000, 2001; Carnie et al. 2005; Clemens and Coon to appear). Hunt (1993) assumes that verb-initial order is derived via head movement of the verb to Tr° , above the overt arguments. I propose instead that a νP -remnant analysis following Massam (2000, 2001) is appropriate to generate the Gitksan pattern.

Under a remnant-raising analysis of predicate-initial order, a verbal phrase is raised to the specifier of IP (commonly to satisfy an EPP requirement on Infl° ; see Massam and Smallwood 1997; Massam 2000). Before it does so, the arguments vacate their base positions, leaving a low clausal constituent (typically VP) containing only the predicate. This verbal constituent is then raised over the arguments, creating a predicate-initial order, as illustrated in (71).

(71) Raised vP remnant

I suggest that in Gitksan, the predicate raises into the specifier of Infl, and that the raised clausal constituent is large enough to contain the Series I probe on v° (when it remains in its base position, in a dependent clause). In this way, we derive both predicate-initial order and the pre-predicate position of the Series I clitic.

In prior analyses, it is typically VP which raises; VP only contains the object argument, so only the object is forced to move upward before the predicate is raised. Under my proposal that v° also raises, it is also necessary account for the position of the external argument (merged in vP). We are forced to assume one of two possibilities:

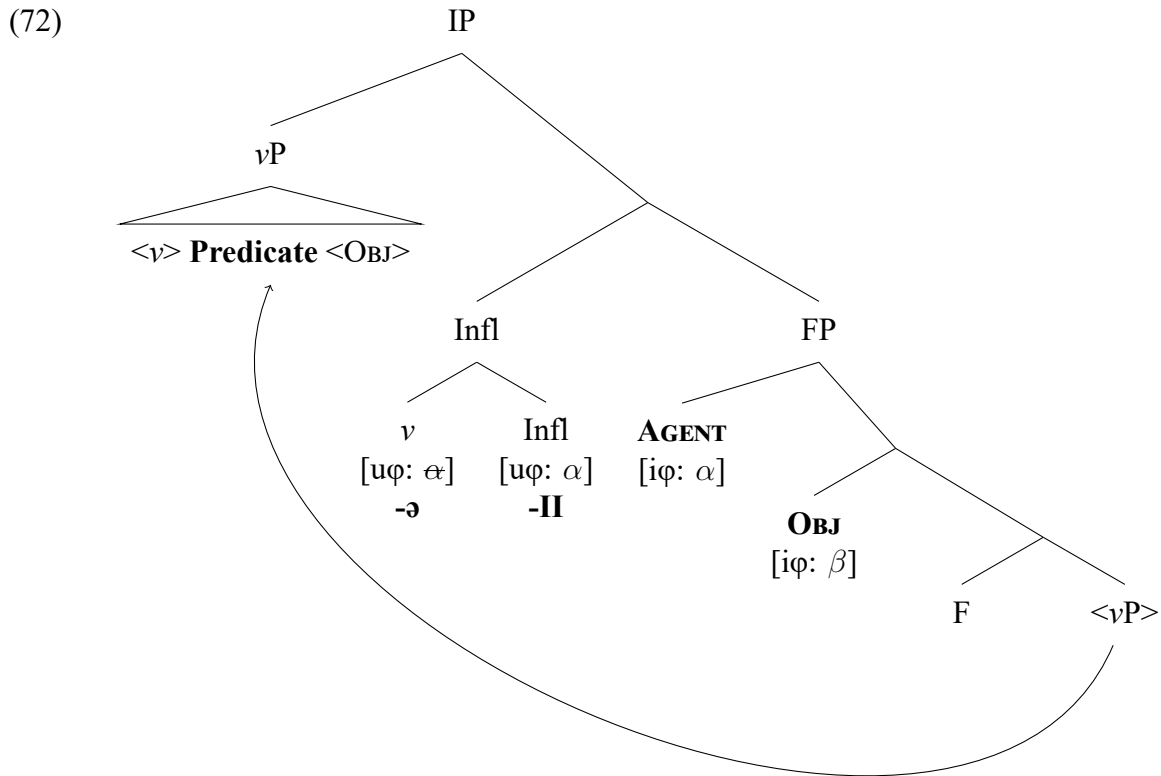
1. The clausal constituent that raises is not VP or vP , but instead v' (an intermediate projection). The agent is left in situ in the specifier of vP .
2. The clausal constituent that raises is not VP, but vP . The object *and* agent move upward before predicate-raising occurs.

I assume that intermediate projections are not legitimate syntactic objects, and therefore cannot be targeted for movement, so adopt the latter option. I suggest that the agent and ob-

ject arguments vacate the vP and move to a functional projection that I will refer to for now as FP . There is no obvious morphological or phonological basis for this phrase; I leave this as a problem to be explored in future work, if the remnant-movement option for Gitksan is more thoroughly pursued.²¹ To avoid positing multiple such projections, I assume that the agent and object both raise to the specifier of the same FP , following a ‘tucking in’ process that maintains their original c-command relation (Richards 1997). This is the configuration illustrated in (71). Series II agreement on $Infl^{\circ}$ ultimately proceeds after these arguments have raised; I demonstrate in subsequent chapters (particularly section 5.3) that this does not affect the outcome of any agreement operation I have described.

The Series II agreement probe in $Infl^{\circ}$ follows the predicate complex and ultimately suffixes to it. In an independent intransitive sentence, or any other agreement-switch clause where Series II does not find a target and receives no value, the phonological content of $Infl^{\circ}$ is null. In an independent transitive sentence where the Series II probe on $Infl^{\circ}$ has agreed with v° and formed a complex head with it, the entire complex head suffixes to the predicate, as in (72). When this occurs, v° is impoverished and spelled out as the transitive vowel, as discussed in the previous section.

²¹ An alternate possibility that would obviate the need for FP is that only VP raises, but the head v bearing Series I agreement is also able to move up due to some kind of lowering operation, or through fusion to the VP . This requires further thought about the timing of such fusion with respect to movement and spellout.



This accounts for the difference in the linear position of Series I as preverbal versus the transitive schwa as immediately following the verb as part of the complex head on Infl°. It furthermore accounts for why the Series I element is close to the left edge of the sentence, without analyzing it as located on a head high in the clausal spine (e.g. C).

The Series II head chooses its controller from among the two specifiers of FP. This should not disrupt the process of agreement laid out to this point if it is assumed that the two specifiers are ordered to some degree (contra some assumptions that multiple specifiers are equidistant, e.g. McGinnis (1998)): the Series II agreement probe should always encounter the ergative-agreeing agent argument first, and the so-far-unlicensed object second. However, the approach to Series II agreement that I take in Chapter 5 largely obviates the need for this kind of strict ordering in terms of the agent and object, reframing it in terms of argument licensing.

I leave it to future research to provide a dedicated case in favor of a predicate-raising analysis as opposed to the alternatives, including Hunt's (1993) head movement analysis, but will mention here two independent facts motivating my choice of approach. Under a predicate-

raising analysis, it is expected that there should be some circumstances where the object argument stays in situ, resulting in a VOS order. For Massam (2001), objects fail to vacate the VP when they are NPs, rather than DPs, typically leading to VOS orders with indefinite objects in instances of *pseudo-incorporation*. Gitksan object incorporation, which has never received a formal treatment, is more similar to Massam's (2001) pseudo-incorporation than Baker's (1996) head-incorporation, in terms of generating a VO rather than OV order, as shown in (73) and (74). Note that in both cases Series II agreement appears following the entire VO complex, rather than immediately after V.

- (73) Yukwhl hisyets lekws John.
 yukw =hl [yəts~**yets** -**lek**w]-t =s John
 IPFV =CN [PL~chop -firewood]-3.II =DN John
 'John was chopping wood (wood-chopping).' (VG)
- (74) Needii gubasxum smaxt.
 nee=dii [**gup**-asxw-m -**smax**]-t
 NEG=FOC [eat-ANTIP-ATTR -meat]-3.II
 'He never eats meat (meat-eats).' (BS)

A predicate-raising analysis is also better able to account for the wide range of apparently low adverbial elements which appear preceding the Gitksan verb (the class of pre-verbs; Rigsby 1986). An example of some such elements is given in (75).

- (75) T'ek'il suwi k'eeqwhl xpts'ewit hlgu gyet.
 [t'ek'il suwi k'eeq] =hl xpts'exw-it hlgu gyet
 [curled.up away flee] =CN afraid-sx little man
 'The frightened little guy took off right away.' (RJ)

Assuming the raised ν P constituent is large enough to contain these adverbs, then it is straightforwardly predicted that these low adverbial elements will raise to initial position along with the verb itself. Under another analysis of verb-initial order, such as head movement, such elements would have to be individually specified to fuse or somehow prosodically cliticize onto the verbal head before it raises, or alternately, move there afterward for some independent reason.²² Previous formal analyses of Tsimshianic have not discussed these preverbal elements in any detail. The predicate-raising option I propose is a promising way to accommodate them.

²² A predicate-raising account of preverb position has some predictive power that should be pursued in further research, particularly regarding the possible ordering of different kinds of preverbal elements. There may be a set of syntactically and semantically 'low' preverbal elements, which we would expect should appear closest to the verb (as part of the raised ν P remnant), which contrast with syntactically and semantically 'high' preverbal elements, which are merged in the structure above the point where the ν P-remnant is moved.

4.4 Alternate possibilities

In this section, I briefly consider some alternatives to relativizing the Series II agreement probe to the *interpretability* of the features it seeks. I have proposed such relativization in order to model the way Series II agreement in independent clauses seems to take up the precise ergative alignment exhibited by Series I in dependent clauses. It is well known that ‘ergativity’ is captured differently in different languages – in some languages, any *external* argument receives ergative case regardless of the presence of an object (e.g. ‘fluid-S’ languages or verb-type split ergative languages), while in others only animate or agentive arguments receive ergative case (see e.g. Sheehan 2017). Under my proposed analysis of agreement switch, through Series I agreement directly *feeding* Series II agreement, there is no predicted difference in which arguments should be picked out by each paradigm when each engages in ‘ergative’ agreement. If Series I ergative agreement (dependent clauses) and Series II ergative agreement (independent clauses) each picked out this distribution independently through different mechanisms, we might expect the set of ergatives to subtly differ across clause types, perhaps with respect to experiencer subjects or inanimate agents, which have elsewhere been argued to merge in a different position than more prototypical transitive subjects (see discussion in e.g. McGinnis 2008).

Let us nevertheless consider some alternative ways that Series II agreement might agree with ergative arguments in independent clauses, such that relativization to uninterpretable features is not necessary. I have characterized Series II agreement as ‘highest argument agreement’ in dependent clauses, due to the flexibility in what it may agree with; how might its agreement path be restricted in independent clauses so as to result in agreement with only A?

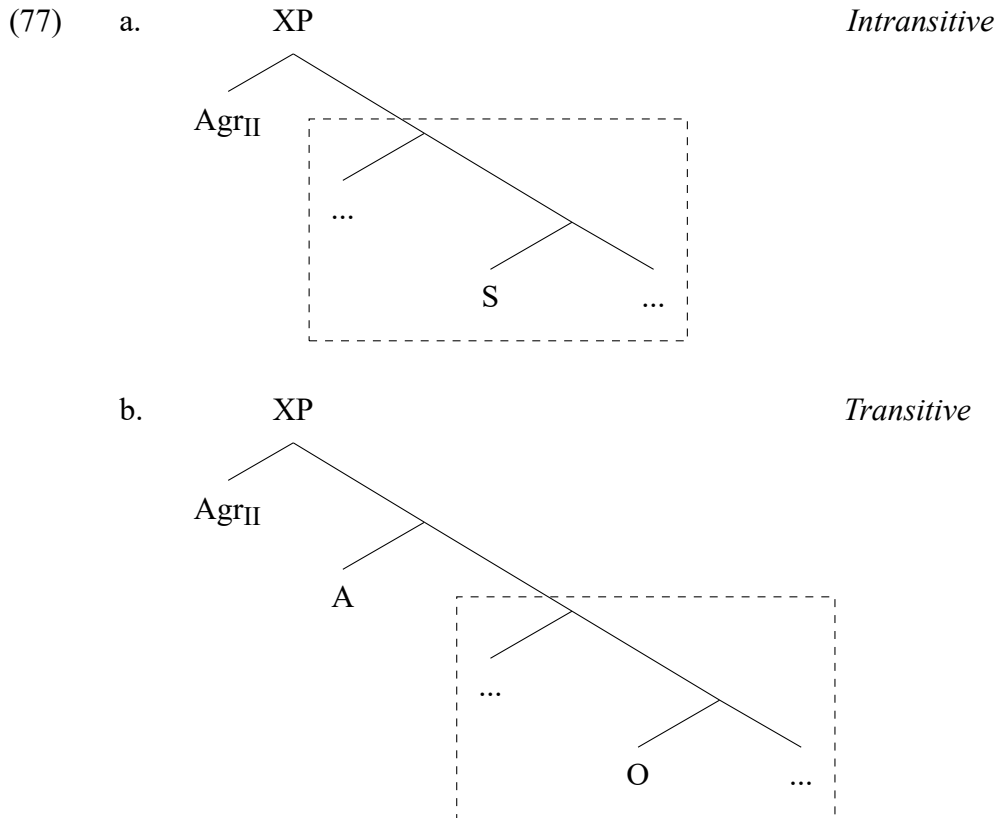
The main problem to address is how the Series II agreement probe can fail to find the S argument in an intransitive independent clause. Recall that there is no Series II agreement in these clauses, as in (76); the sole argument is a Series III full pronoun.

- (76) Bax ’nii’y.
 bax ’nii’y
 run 1SG.III
 ‘I ran.’ (BS)

Under my analysis, where Series II can only agree with uninterpretable ϕ -features, there is no available target in an intransitive clause, which lacks an ergative Series I ϕ -probe. If Series II could see any kind of ϕ -feature, it would be expected to find the potential target S in its c-command domain.

An alternative would be to suppose that there is some domain split or phase boundary in

independent clauses – but not dependent clauses – which prevents Series II agreement from targeting an S (or O) argument, but leaves A accessible. The potential domain split in independent clauses is schematized in (77), with a box indicating the closed domain.



Such an analysis is slightly more difficult to achieve under a *vP*-remnant raising approach to Gitksan's verb-initial order, which I have argued is independently motivated based on data regarding object incorporation and adverb placement. I have proposed that all arguments, including S, raise from their base positions to evacuate the *vP*, finding a higher landing site and making it less likely that they would be contained within a barrier of this kind.

We might propose that the intransitive argument is below a domain splitting boundary in the independent clause type because it is left *inside* the *vP* as it raises, in its base position. If it remains in its base position, it might be blocked from view of the Series II probe. However, this would constitute a major structural difference between dependent and independent intransitive clauses (unless it is assumed that S *always* raises inside the *vP*) and would essentially put intransitive S arguments on par with (pseudo-)incorporated objects, the other type of argument that we might expect would be left inside a raised predicate. (Pseudo-)incorporation constructions commonly utilize connecting elements between verb and incorporated object, such as the attributive marker *-m* shown in (78) (this marker is also used in the formation of complex

predicates).

- (78) Needii gubasxum smaxt.
 nee=dii [gup-asxw-m -smax]-t
 NEG=FOC [eat-ANTIP-ATTR -meat]-3.II
 ‘He never eats meat (meat-eats).’ (BS)

Simple intransitives never use this kind of marking. I therefore suggest it is inappropriate to assume S arguments are pseudo-incorporated and raise with the *vP*.

Again, if all arguments including S move high enough to evacuate the *vP* remnant, they are likely high enough to have escaped a domain boundary that would block Series II agreement. However, let us consider for the sake of argument that the hypothetical domain boundary *does* block S and O from view of the Series II probe. This can be accomplished under a revised *vP*-raising approach with some differences in the higher landing site for arguments, or under a head movement approach to verb-initial order (such as that taken by Hunt 1993). We should then evaluate some additional predictions generated under an analysis of this kind which places a domain boundary in one clause type (independent clauses) but not the other (dependent clauses).

Phase boundaries which are able to block agreement across domains might be expected to block other syntactic processes across domains. That is, if only one clause type contains a domain-splitting phase boundary, and not the other, then the two clause types might be predicted to differ with respect to the availability of some domain-spanning operations. Some possibilities would include binding, various kinds of raising, or A'-movement. I here review quantifier raising and A'-movement.

Bicevskis et al. (2017) show that high quantifiers may associate with objects in independent clauses – potentially spanning the two hypothetical domains. An example is provided in (79): the universal quantifier '*walk*'*a* is associated with the object, *t'ihlxum ha'nak* 'girls'.

- (79) 'Walk'a silmiihluxwi'yhl t'ihlxum ha'nak'.
 '*walk*'a sil-miihluxw-i-'y =hl t'ihlxw-m ha'nak'
 all COM-dance-TR-1SG.II =CN young-ATTR PL.woman
 'I danced with all the girls.' (Bicevskis et al. 2017: 333)

This demonstrates at least a base level of potentially cross-domain activity. However, Bicevskis et al. (2017) specifically argue that the universal quantifier '*walk*'*a* does not 'float' to its sentence-initial position by moving there from within the object DP, but instead is generated in situ before the verb.

Scope interactions that may involve an object quantifier raising through a clause (for example, in 'inverse scope' readings) are also of interest. Bicevskis et al. (2017) discuss some scope interactions. The basic structure of a scope-ambiguous sentence in Gitksan is that of

a quantifier in predicative position, and of a DP in argument position modified by a relative clause containing the second quantifier. That is, one of the quantifiers is embedded in a relative clause. This is illustrated in (80) with the numeral quantifiers *bagadil* ‘two’ and embedded *gwile’l* ‘three’.

- (80) Bagadilhl gyet ant yeedi hl gwile’hl limix.
bagadil =hl gyet [an=t yee-T-t =hl **gwile’l** =hl limix]
 two =CN man [AX=3.I go-T-3.II =CN three =CN song]
 ‘Two singers sang three songs.’ (Bicevskis et al. 2017: 349)²³
Direct scope: There are two singers. Up to six songs are sung (three each).
Inverse scope: Three songs are sung. There may be six singers in total (two each per song).

Despite the embedded position of the second quantifier, both the direct scope reading and the inverse scope reading are possible.

In order to get an inverse reading, the quantifier embedded in the relative clause must move to a position above the other quantifier in the matrix clause. In the context of the structure in (80), this means that it must move through both the relative clause (a dependent clause, as shown by the ergative Series I clitic) and the matrix clause (an intransitive independent clause). That is, quantifier raising through both dependent and independent clauses is possible.

The example above is specifically of quantifier raising out of an embedded dependent clause (an A-centered relative clause). Bicevskis et al. (2017) do not present examples of similar quantificational constructions with embedded independent clauses (O-centered relative clauses) – the availability of an inverse scope reading in such a context would show that independent clauses can clearly be moved across. Even in lieu of this specific information, we can identify from other data that long-distance A'-extraction from independent clauses is possible. In (81) below, both the matrix clause and embedded object clause are inflectionally independent, as shown in each by the presence of the transitive vowel instead of an ergative Series I clitic.

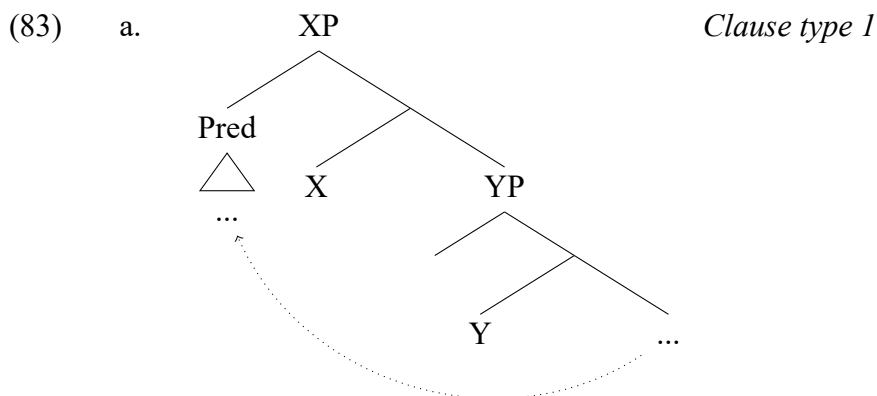
- (81) Guuhl gay anoogas Clarissa dim gubis Aidan?
 gu =hl gay anook-ə-t =s Clarissa [dim gup-ə-t =s Aidan ____]
 what =CN CNTR allow-TR-3.II =DN Clarissa [PROSP eat-TR-3.II =DN Aidan ____]
 ‘What did Clarissa allow Aidan to eat?’ (Brown 2016: 17)

If independent clauses contained a phase boundary, blocking low elements such as objects from Series II agreement, we might expect A'-extraction of those same objects to be impossible out

²³The speaker’s original volunteered translation was ‘A duet (two people) sang three songs’. See the original paper for full discussion of this translation, as well as the permissibility of each reading for the speakers consulted (and the difficulty involved in identifying the scopal ambiguity of these constructions).

of them. However, (81) illustrates that this is not the case. Objects are freely able to extract through multiple clauses with independent inflection.²⁴ This discussion serves to show that the structure of independent and dependent clauses does not appear to differ in such a way that motivates a domain-splitting boundary in one, but not the other.

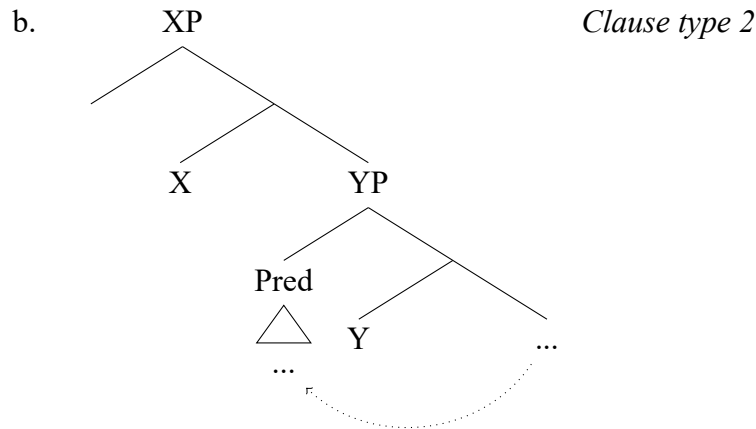
Finally, one might suppose that a difference between canonical (dependent) agreement and agreement in switch contexts has to do some difference in the position or timing of predicate raising between the two clause types. For example, we might suppose that in one clause type, the predicate raises to a higher position than in the other, and that certain arguments might be rendered inaccessible for agreement due to this difference in position, somehow blocked from the ‘view’ of the Series II agreement probe. The potential difference between clause types is illustrated in (83). In both clause types, the predicate moves above Series II agreement in the head of Y, but sometimes it also moves above the head X.



²⁴We might suppose that the use of independent inflection is precisely what allows arguments to cross a domain boundary (just as, for example special ‘Agent Focus’ morphology in Mayan languages allows ergative arguments to extract, when they are typically unable to; see e.g. Coon et al. 2014; Erlewine 2016). It is not only direct objects which we might predict to be trapped in this way, however. Indirect objects, another type of ‘low’ argument, would be in the same situation. If independent morphology exceptionally allows for low arguments to A'-move over a domain boundary, we would expect it with indirect object extraction as well. However, indirect objects extract using dependent morphology, as shown in (82). Below, the ergative A argument is marked with a Series I clitic and the object with suffixal Series II marking, as expected of dependent clauses.

- (82) Gu ma gins Michael?
 gu **ma**= gin-**t** =s Michael __?
 what 2.I= feed-3.II =DN Michael __
 ‘What did you feed Michael?’ (VG)

Independent inflection therefore does not seem to be connected with crossing a phase boundary. I return to the consequences of extraction morphology in Chapter 5.



The main problem with an analysis along these lines is that we would perhaps expect some element to alternate between pre- and post-predicate position, as the head *X* does in (83). There is no obvious element which undergoes an alternation of this kind in Gitksan.²⁵

This section has in part amounted to stressing the lack of empirical motivation for syntactic models of the clause-type distinction which structurally differentiate the two clause types (by changing the position of the predicate, or placing a phase boundary in one clause type but not the other). I wish to conclude by noting that it is of course impossible to definitively prove the *lack* of evidence for anything. My analysis takes a strong position by equating the two clause types structurally; *any* evidence which demonstrates a difference between the structure of the clause types, in some area that my data has failed to reveal, should be sufficient to discard it and adopt an alternative. Until such evidence is identified, I argue that agreement switch across clause types is best conceptually modeled as an agreement relationship between the Series I and II probes, as I have presented in this chapter. This analysis reflects the direct correspondence between the Series I ergative pattern of dependent clauses and the Series II ergative pattern in independent clauses.

4.5 Discussion

In this chapter, I have proposed that the Gitksan clause-type split is best analyzed as triggered by a matrix C° licensing a very specific Series II agreement probe on Infl° . This probe uniquely agrees with *uninterpretable* ϕ -features, rather than interpretable ϕ -features found on nominal

²⁵Less obviously, in my own analysis, I have proposed that the pre-verbal Series I clitics and the transitive vowel suffix are the same abstract element (v°), and these do surface on different sides of the predicate in either clause type. However, I model their difference in position as a difference in the movement path of v° , not through a difference in movement of the predicate. I have previously discussed my motivation for placing ergative Series I agreement on the low, transitivity-related head v (see section 4.2.4), rather than a high head above Series II agreement like *X* above.

arguments (the typical ϕ -agreement goal). In seeking only uninterpretable features, the Series II probe of independent clauses can successfully agree only with a *valued ϕ -agreement probe* in its c-command domain. This is possible in transitive clauses, where ergative agreement occurs on v° (as Series I agreement), but not in intransitive clauses, where there is no other agreement present. The ergative distribution of Series II agreement in independent clauses is therefore analyzed as the result of it agreeing directly with the Series I clitic agreement probe.

If the Series I ϕ -probe serves as the target of Series II agreement, I have proposed that it undergoes head movement (adjoining to the Series II head) and is impoverished of its features at PF. It is spelled out as the transitive schwa. This draws to some degree from Hunt's (1993) prior analysis of Series I agreement and the transitive schwa appearing on the same functional head, and the transitive schwa specifically serving as a default form, but in this chapter I have provided a specific implementation linked to a novel treatment of Gitksan's verb-initial order as vP -remnant raising.

Wurmbrand (2014) proposes indirect agreement between matrix verbs and uninterpretable features on CP complements, such as Q features. In this way, she accounts for specific selectional restrictions for predicates like *wonder*, which require embedded question complements. Bošković (2009) proposes indirect agreement to account for patterns of participial number/gender agreement with conjoined phrases in Serbo-Croatian. It is my own extension of this mechanism to the empirical phenomenon of primary verbal ϕ -agreement, rather than participial agreement or selectional restrictions. Furthermore, I propose that the interpretability of a given feature is a property that an agreement probe may be specifically relativized to. We might use indirect ϕ -agreement of this sort to account for cases of apparent multiple exponence in agreement (for example, the prefix and inner suffix of the Algonquian verb, which always track the same argument and realize person and person/number features, respectively).

I do predict that indirect ϕ -agreement systems should be crosslinguistically rare, for several reasons. First, as a baseline, indirect agreement is only possible in languages where there are multiple ϕ -probes in a single clause. Second, indirect agreement is in many ways functionally redundant. It contributes little to the derivation in terms of argument indexing or licensing; we might assume languages with multiple agreement probes would commonly exploit them for these purposes instead.

Third, and perhaps most importantly, systems of *opaque* indirect agreement such as I have proposed, where the original source of agreement is impoverished, are likely difficult to acquire. Upon identifying a single agreement probe which has an ergative distribution, the most straightforward analysis is to assume that the probe agrees directly with the ergative argument, rather than positing an additional step of covert agreement in between. For a hypothetical language that develops opaque indirect agreement, a child newly acquiring the system would

likely reanalyze the situation such that the directly-agreeing, impoverished agreement probe is entirely lost, and its place taken by the single overt agreement head. The Gitksan system, which atypically involves an agreement probe switching between multiple distributions, provides the evidence necessary to suggest a complex valuation process involving indirect agreement. In one context, the Series I clitics have an ergative distribution; in another, the Series II suffixes take their place.

One consequence of this analysis is that only the ergative argument of an independent clause receives ϕ -agreement; the absolutive S and O are never agreed with, as the Series II agreement probe is not interested in the interpretable ϕ -features they bear. I draw on this issue in my analysis of Coast Tsimshian in Chapter 6. I argue that novel agreement patterns surface in Coast Tsimshian independent clauses when a local-person argument is in one of these unlicensed absolutive positions.

Finally, a major, novel aspect of the proposal lies in its interpretation of so-called ‘dependent markers’ not as elements which *trigger* dependent inflection, but as intervenors which *block* independent inflection. This accommodates the quite heterogeneous semantic and syntactic nature of these elements; there may be several potential means of blocking the licensing relationship between C° and the Series II probe on Infl° . Any sort of embedding, or the use of any alternate C° , blocks the insertion of the uninterpretable- ϕ probe. In addition, some non-head elements high in the clause may also potentially intervene between C° and Infl° . This is in contrast to, for example, Brown’s (2016) interpretation of the clause type split as a finite/nonfinite contrast. A finiteness contrast does not seem to obviously characterize the split in any case, since nonfinite clauses are typically a subset of embedded clauses with reduced inflection; Gitksan instead seems to exhibit a subset of *matrix* clauses with reduced inflection (= independent clauses). I suggest that the Tsimshianic clause-type split is abstractly similar to a finiteness contrast in that it is “formal”, with the clause types differing only in terms of the precise ϕ -agreement properties of the Infl head, determined by C . Otherwise, the two contrasts are not related.²⁶

In Chapter 5, I extend this analysis to the appearance of independent inflection in cases of object extraction, even when dependent markers are present. In Chapter 6, I demonstrate that the exact same analysis of the clause type split can be extended to neighboring Coast Tsimshian, with minor revision.

²⁶It is as yet undetermined whether Gitksan has a crosslinguistically typical finiteness contrast. Interestingly, finiteness seems to be more difficult to identify in verb-initial languages. See Doner (2018, to appear) for further discussion.

Chapter 5

Agreement switch in A'-extraction contexts

In this chapter, I extend my analysis of the clause-type split to agreement patterns attested in A'-extraction contexts. I specifically turn my attention to the fact that the inflection characteristic of independent clauses is required in cases of object extraction. To refresh, the agreement properties of the two clause types (independent and dependent) are presented in Table 5.1, with agreement morphology bolded. Dependent clauses typically involve a dependent marker ('Dep'), but also exhibit distinct agreement in comparison to independent clauses. My analysis of this agreement split in Chapter 4 adopts the assumption that agreement in independent clauses is *derived* from that of dependent clauses, when dependent markers are absent.

<i>Clause properties</i>		<i>Template</i>			
INDEPENDENT	Intransitive		Verb	(III/DP _S)	
	Transitive		Verb- ə -II _A	(DP _A)	(DP _O)
DEPENDENT	Intransitive	Dep	Verb-II _S	(DP _S)	
	Transitive: Erg/Abs	Dep=I _A	Verb-II _O		(DP _O)
	Transitive: Double Erg	Dep=I _A	Verb-II _A	(DP _A)	(III/DP _O)

Table 5.1: Summary of IT agreement patterns across clause types

We find that independent-style inflection is required in transitive clauses when objects are extracted, even when the clause also contains a dependent marker. In (1) below, the presence of the dependent marker *mooji* 'almost' would be typically expected to condition dependent inflection, in the form of ergative Series I marking in the following clause. Instead, we see no ergative Series I clitic (instead, ergative Series II suffixal agreement); we also see the transitive

vowel -ə- characteristic of independent clauses.

- (1) Hunhl mooji agubis John.
 hun =hl moo-ji a-gub-ə-t =s John __
 salmon =CN almost-IRR not-eat-**TR-3.II** =DN John __
 'John almost never eats FISH.' (Hunt 1993: 243)

Independent inflection, in the form of the transitive vowel and Series II agreement switch to an ergative distribution, is thus required in two distinct contexts: matrix clauses which fail to receive a dependent marker, and object extraction (regardless of whether a dependent marker is used).

The morphological similarity of independent clauses and object-relative contexts was discussed extensively by Tarpent (1987b, 1991), though only later did Hunt (1993) demonstrate that a dependent marker was irrelevant to the morphology of object extraction specifically. To connect the two contexts, Tarpent (1991) proposed that independent clauses are synchronically derived by object relativization; this was thoroughly argued against by Hunt (1993), as I reviewed in section 4.2.1. Hunt's (1993) own analysis, however, did not propose an explanation for why independent inflection is obligatory in object-relative contexts.

The aim of this chapter is to connect the two distinct empirical areas where independent inflection is attested: independent clauses, and object extraction. I approach this in a novel way, by proposing that we can interpret cases of *absolute* A'-extraction (the A'-movement of both S and O arguments) as exhibiting independent clause inflection: Series II agreement can only track A when either S or O are extracted. I then interpret this generalization as a restriction on extracting absolute arguments in a derivation with canonical (dependent clause) agreement. The extraction restriction is circumvented or repaired via agreement switch. That is, rather than take the proposed connection between extraction and agreement switch to be incidental, I propose that the emergence of agreement switch in absolute A'-extraction contexts is in fact an *anti-agreement effect*, emerging from a ban on extracting the target of Series II agreement.

This reinterpretation motivates an amendment to our earlier understanding of Series II agreement in Gitksan (from Chapter 3). In this chapter, I suggest that despite a surface split in the target of Series II agreement between nominative and absolute, the Series II agreement probe consistently licenses the transitive object and intransitive subject: the class of absolute arguments.

The chapter is organized as follows. I review the morphology of argument extraction in section 5.1, and in section 5.2 argue that the independent inflection surfacing in object extraction is best interpreted as one half of a more general absolute anti-agreement effect. The pattern of Series II agreement across all extraction contexts is best characterized as exhibiting an anti-

agreement effect, never targeting the argument that is to be extracted. In section 5.3 I present a modified view of Series II agreement as the consistent licenser of absolutive arguments, by adopting a system under which an agreement probe may copy the features of multiple arguments (Deal 2015b). I propose an implementation for the extraction restriction and anti-agreement in section 5.4. Section 5.5 concludes with some discussion on broader topics such as ergative extraction restrictions and multiple agreement.

5.1 Gitksan A'-extraction morphosyntax

In Gitksan, extraction morphology surfaces whenever an argument is A'-moved (for the purposes of *wh*-question formation, relative clause formation, and argument focus). As discussed briefly in Chapter 2, extraction morphology in Tsimshianic is typically described as ‘tripartite’, since different morphology appears in the clause depending on which of the core arguments S, O, and A are extracted. Object (O) extraction is typically described as having ‘independent’ inflection, as Series II agreement marks the subject, and ergative subject (A) extraction as having ‘dependent’ inflection, as Series I agreement marks the subject and Series II marks the object. Intransitive subject (S) extraction does not clearly show either type of inflection; there is no agreement at all, but instead a special suffix.

However, a comprehensive overview of A'-extraction for other types of arguments shows that dependent inflection, where both Series I and II agreement appear, is most typical. Dependent inflection consistently appears when extracting the oblique theme arguments of ditransitives as in (2), the oblique themes of antipassives as in (3), and other non-core arguments such as causers, benefactives, and recipients, as in (4).¹ In the examples below, the (a) examples show a declarative with the oblique argument, and the (b) examples show an instance of oblique extraction.

(2) *Oblique theme of ditransitive*

- a. Gini'y Michael ahl yipx ...
 gin-i-'y Michael a-t =hl yipx ...
 feed-TR-1SG.II Michael PREP-3.II =CN soup ...
 ‘I fed Michael soup (when he was sick).’

¹Brown and Forbes (2018) categorize each of these three types of extraction distinctly, based on the distinct preverbal morphology required in each case. Ditransitive theme obliques have no preverbal marker (see (2)); antipassive theme obliques require the nominalizer *an-* (see (3)), and other obliques require the preverbal complementizer *win* ~ *wil* (see (4)).

- b. Gu ma gins Michael __?
 gu **ma**= gin-**t** =s Michael __?
 what 2.I= feed-3.II =DN Michael __
 'What did you feed Michael?' (VG)

(3) *Oblique theme of antipassive*

- a. Yukwhl gibee'esxwi'y as Henry.
 yukw =hl giba-'asxw-'y a-t =s Henry
 IPFV =CN wait.for-ANTIP-1SG.II PREP-3.II =DN Henry
 'I'm waiting for Henry.'
- b. Naahl an gibee'esxwdist?
 naa =hl an giba-'asxw-**t** __ =ist?
 who =CN AX wait.for-ANTIP-3.II __ =AFFRM
 'Who's she waiting for?' (BS)

(4) *Adjunct (recipient)*

- a. Gi'nami'yhl majagalee as Michael.
 gi'nam-i-'y =hl majagalee a-t =s Michael
 give-TR-1SG.II =CN flower PREP-3.II =DN Michael
 'I gave flowers to Michael.'
- b. Naa wima gi'namhl majagalee?
 naa win=**ma** gi'nam-**t** =hl majagalee __
 who COMP=2.I give-3.II =CN flowers __
 'Who did you give flowers to?' (VG)

In all of these extraction types, Series I clitic agreement has an ergative distribution, visible in the transitive clauses of (2) and (4), where it marks the transitive subject. In contrast, Series II suffixal agreement has an absolutive distribution; it marks the absolutive object in (2) and (4), and the intransitive subject in the intransitive example in (3). Just as in dependent clauses, the transitive vowel is consistently absent.

Dependent clause inflection is also used when an ergative argument is extracted. Series I clitic agreement, which agrees with the extracted ergative argument, always shows simple third-person agreement regardless of the features of the A'-extracted argument.² This is demonstrated in (6), an example of extracting a second-person ergative, and (7), an example of extracting a

²It may be noted that this itself is a relatively straightforward anti-agreement effect: rather than agree with the actual features of an extracted argument, Series I agreement reflects a reduced third-person value.

As a side note, this behavior is not consistent across the entire Tsimshianic family. The strict third-person pattern in Gitksan is more striking in light some examples from dialects of the Maritime Tsimshianic branch, collected in 1976 by Dunn (1978a), where third-person agreement is not required. In these cases, the cognate Series I ergative clitics accurately agree in person/number with an extracted first person, in contrast to (6) in the main text.

(5) From Dunn (1978a: 337)

DP ergative. Both examples have a third-person Series I clitic marking the extracted argument, and the Series II suffix indicating the object.

- (6) Oo, 'nii'y ant gwasxwt gi.
 oo 'nii'y an=t gwasxw-t __=gi
 oo 1SG.III AX=3.I borrow-3.II __=PR.EV
 'Oh, it was me who borrowed it.' (VG)
- (7) Mary ant wilaagwit.
 Mary an=t wilaakw-T-t
 Mary AX=3.I do.wrong.to-T-3.II
 'Mary's the one who did it.' (VG)

Series II agreement never tracks the ergative subject, even if the extracted argument is third-plural or a DP. It strictly follows the absolutive object, consistently behaving as if the extracted A were a third-singular pronoun. This agreement pattern, with ergative Series I and absolutive Series II, is characteristic of dependent clauses (Ergative/Absolutive).

The outliers to the generalization made to this point – that extraction predominantly involves dependent-style agreement – are those arguments standardly targeted by Series II agreement: intransitive subjects, possessors, and transitive objects. We find that in each case, Series II agreement fails to occur as expected of a dependent clause when this type of argument is extracted.

First, when a transitive object is extracted, as in (9b), Series II tracks not the object, but instead the transitive subject. The transitive vowel also obligatorily appears, and Series I clitic agreement is entirely absent.³ This is characteristic of *independent* inflection, rather than de-

- a. 'Nüüyu na'in dzaba waap.
 'nüüyu na=in dzap-t =a waap
 1SG.IIIB 1.I=AX make-3.II =CN house
 'I'm the one who built the house.'
- b. 'Naxhu na'in dzabi waap.
 'naxhu na=in dzap-t =i waap
 1SG.IIIB 1.I=AX make-3.II =CN house
 'I'm the one who built the house.'

CT: Metlakatla; Hartley Bay

ST: Klemtu

This is unrelated to the position of the Series I clitic with respect to the agent extraction marker 'in – other dialects of Coast Tsimshian (CT) have third person agreement, like Gitksan, but are otherwise identical to what is presented in (5a).

³ Tarpent (2012) suggests that the Interior Tsimshianic quotative particles indicate an older O extraction pattern. Assuming these are instances of a fronted CP object over a transitive verb *ya* 'say', it seems that Series II for the CP object is simply absent, while Series I for the ergative sayers remains, as demonstrated in (8).

- (8) a. Yugwimaa luu bagadilt niya 'niy.
 [yukw=imaa luu- bagadil-it] n=ya 'nii'y __
 [IPFV=EPIS in- two.HUM-SX] 1.I=say 1SG.III __

pendent inflection. The example in (9a) provides a dependent clause without A'-movement, and a similar example in (9b) with A'-movement, which demonstrates the different agreement pattern.

- (9) a. ... lin gint ahl yip_x.
 ... ii=**n** gin-**t** a-t =hl yip_x
 ... and=1.I feet-3.II PREP-3.II =CN soup
 ‘(Michael is sick)... and I fed him soup.’
- b. Naahl ginin ahl yip_x?
 naa =hl gin-ə-**n** _ a-t =hl yip_x
 who =CN feed-TR-2SG.II _ PREP-3.II =CN soup
 ‘Who did you feed soup?’ (VG)

Second, when an intransitive S or nominal possessor is A'-moved (as in (10) and (11) respectively), Series II suffixal agreement is suppressed. Instead, the extraction suffix *-it* appears in its place, as demonstrated in the (b) examples below. (10) below shows focus movement of an intransitive S from a dependent clause, and (11) shows *wh*-movement of a possessor from within a DP (the DP itself also moves from object position). The (a) example provides the sentence before A'-movement, and the (b) example shows the same sentence with A'-movement and ensuing suffix *-it*.

- (10) a. Yukwhl yook_xwt.
 yukw =hl yook_x-xw-**t**
 IPFV =CN eat-INTR-3.II
 ‘She’s eating.’ (VG)
- b. Ksax_t Aidanhl yook_xwit.
 ksax =t Aidan =hl yook_x-xw-**it** _
 only =DN Aidan =CN eat-INTR-SX _
 ‘Only Aidan is eating.’ (VG)

‘I said maybe there’s two in there (twins).’

- b. Nee diya.
 [nee] t=ya _
 [not.so] 3.I=say _
 ‘She said no.’ (FW)

This is not exceedingly informative, given that CP arguments never receive clear Series II agreement, but it is interesting to note that it is possible to use a Series III pronoun for the ergative sayer argument in this construction. Elsewhere in Gitksan, ergative pronominals with Series I agreement must be null. If this construction is truly derived from an older ergative extraction pattern, it is consistent with an analysis of an anti-agreement effect for Series II agreement, even predating the development of the independent transitive verb form in this context.

- (11) a. Ginis Michael duusxws Clarissa.
 gin-ə-t =s Michael [duus-xw-**t** =s Clarissa]
 feed-TR-3.II =DN Michael [cat-VAL-3.II =DN Clarissa]
 'Michael fed Clarissa's cat.'
- b. Naahl duusxwithl ginis Michael?
 naa [=hl duus-xw-**it** __] =hl gin-i-t =s Michael __
 who [=CN cat-VAL-SX __] =CN feed-ə-3.II =DN Michael __
 'Whose cat did Michael feed?' (BS)

Though this pattern with *-it* is characteristic of both S-extraction and Possessor-extraction, I refer to it henceforth simply as S-extraction.

It should be noted that *intransitive subject* (S) and *object* (O) extraction marking can sometimes look quite similar, particularly when an OX clause contains agreement with a 3SG pronominal Agent. The form in either case is *VERB-it*, as demonstrated in the following examples: (12) for S-extraction, and (13) for O-extraction.

- (12) Ansiip'insxwi'y **'witxwit** ky'oots.
 ansiip'insxw-'y **'witxw-it** __ ky'oots
 friend-1SG.II arrive-SX __ yesterday
 'My FRIEND came yesterday.' (BS)
- (13) Gal t'ishl **gubit** __.
 gal t'is =hl **gup-ə-t** __
 too large =CN eat-TR-3.II __
 'He/she ate too much. (Lit: (What) he/she ate was too much.)' (BS)

It's tempting to suggest that these are underlyingly the same morphosyntactic strategy, where the intransitive extraction morpheme *-it* can be decomposed as including a vowel (/ə/, orthographically *-i-*) and Series II third person agreement with the *wh*-gap (*-t*).

However, the vowels which surface in the S versus O extraction strategies behave differently with respect to hiatus resolution. When affixed to a vowel-final stem, the S extraction morpheme *-it* undergoes vowel deletion, as in (14), while the transitive schwa in O extraction *-i-t* triggers glide epenthesis to remain distinct from the stem, as in (15).

- (14) Naahl **wat** as Clarissa?
 naa =hl wa-**it** __ a-t =s Clarissa
 who =CN name-SX __ PREP-3.II =DN Clarissa
 'Whose name is Clarissa?' (VG)

- (15) Guhl da'akhlxwis Michael 'wayit?
 gu =hl da'akhlxw-ə-t =s Michael 'wa-ə-t ____
 what =CN be.able-TR-3.II =DN Michael find-TR-3.II ____
 'What was Michael able to find?' (VG)

We are thus forced to conclude that the two morphological strategies are significantly different; the vowels in each have distinct morphophonological behavior. Object extraction involves the transitive vowel and ergative Series II agreement, while intransitive subject extraction involves an atomic suffixed morpheme *-it*, not composed of Series II agreement at all.

The intransitive *-it* extraction morpheme is analyzed as *wh*-agreement by Brown (2016) and Forbes (2017), though neither discusses it in detail. Essentially, both analyses assume *-it* to reflect a *wh*-value for Series II agreement. I note, however, that this morpheme appears in a crucial position where Series II agreement does not: on certain verb-like dependent markers such as *yukw* 'IPFV', which do not otherwise bear Series II agreement.

- (16) Naahl **yugwit** ant ts'ileexws Michael gi?
 naa =hl yukw-**it** an=t ts'ileexw-t =s Michael gi
 who =CN IPFV-SX AX=3.I visit-3.II =DN Michael PR.EV
 'Who is visiting Michael?' (VG)

I therefore do not consider the extraction morpheme *-it* to be a true reflex of Series II agreement with a *wh*-argument, although I do not attempt in this thesis to provide a specific alternative analysis.⁴

The different morphosyntactic strategies used for agreement with different types of arguments are summarized in Table 5.2. All types of extraction in the top block exhibit canonical

⁴ I suggest that one place to consider investigating the *-it* morpheme more deeply is 'looks like' contexts, which often involve a similar *-it* morpheme preceding the resemblance clitic *=ii*. These contexts do not involve extraction, at least not overtly, but the morpheme similarly seems to copy to multiple words in the span:

- (17) Hehl ligidii siipxwidiigat Mark.
 he-t =hl ligi-**it**=ii siip-xw-**it**=ii=gat Mark
 say/feel-3.II =CN DWID-SX?=like sick-INTR-SX?=like=REPORT Mark
 'It seems like Mark is sick (so I heard).' (VG)

This *-it* morpheme appears regardless of the person value of the argument in the clause. Below, (18a) involves a third person argument, and (18b) involves a second person argument, but the same morpheme appears. This suggests the morpheme cannot be analyzed as Series II agreement; if it was, we would expect second-person *-n* in (18b).

- (18) a. Wihl ap hunidiit Maddie.
 wil =hl ap hun-**it**=ii =t Maddie
 do =CN VER fish-SX?=like =DN Maddie
 'Maddie is like a fish.'

dependent clause inflection: for oblique, adjunct, or ergative extraction, both the Series I and Series II agreement probes are operative, and agree with the core arguments as usual. The second and third block of the table pick out the absolutive arguments typically indexed by Series II agreement; it is here that significantly different agreement strategies arise. Descriptively, these two contexts show the agreement pattern of independent clauses: in intransitives, there is no agreement with S, and in transitives, there is Series II agreement with A, and the transitive vowel is inserted. Intransitive clauses also take an additional morpheme *-it*.

Extraction type	Morphology				
Agent	WH _A	<i>an</i>	=Agr _A	Pred-Agr _O	(O)
Indirect Obj	WH _{IO}		=Agr _A	Pred-Agr _O	(A) (O)
Adjunct	WH	<i>wil</i>	=Agr _A	Pred-Agr _{S/O}	(A) (S/O)
Antipassive Obj	WH _{Obl}	<i>an</i>		Pred-Agr _S	(S)
Intr. Subject	WH _S			Pred- it	
Possessor	WH _{Psr}			Pred- it	
Object	WH _O			Pred- ə-Agr_A	(A)

Table 5.2: All extraction patterns

A final generalization that can be made about A'-extraction contexts, which will be explored in the remainder of this chapter, is that Series II never agrees with an A'-moved argument. Instead, Series II suffixal agreement engages in agreement switch: in a transitive clause, A arguments are consistently targeted instead of O, and in an intransitive clause S arguments fail to receive this type of agreement at all.

5.2 Agreement switch as Series II anti-agreement

We have seen that the agreement that occurs in an O-extraction context does not match the expected agreement if O is not extracted. In clauses where we would expect dependent-style agreement to take place (i.e., because there is a dependent marker), independent-style agreement occurs instead. Another example of this is given in (19); in the presence of the dependent marker *needii* 'not (NEG)', we would expect ergative agreement with the Series I clitics. Instead, these

- b. Wihl ap hunidii 'niin.
 wil =hl ap hun-**it**=ii 'niin
 do =CN VER fish-SX?=like 2SG.III
 'You are like a fish.'

(BS)

I suspect that the morpheme used here is the same as the one used in S-extraction contexts, but leave for further work a detailed analysis of what exactly this morpheme does.

clitics fail to appear, and the independent-clause transitive vowel appears on the stem instead. Series II agreement is with the adjacent ergative subject.

- (19) Guhl gay needii t'amis Mark?
 gu =hl gay nee=dii t'am-**ə-t** =s Mark __
 what =CN CNTR NEG=FOC mark-TR-3.II =DN Mark __
 ‘What did Mark not write down?’ (VG)

In this subsection, I propose that this independent inflection – and specifically, Series II agreement switch – is triggered in A'-contexts as an alternative to allowing the Series II probe to agree with a *wh*-argument. That is, Series II agreement in Tsimshianic is *wh*-sensitive. I propose that the inflectional differences of A'-contexts should be interpreted as an *anti-agreement effect* that is resolved via agreement switch: Series II changes its target, allowing extraction to go forward.

5.2.1 Problem: Linking Series II agreement with O-extraction

Before moving ahead with this proposal, let us revisit the distribution of Series II agreement in the ‘canonical agreement’ context (i.e. dependent clauses). It is necessary to do this in light of the fact that Series II switches its target in Gitksan; it is subject to a nominal-type split in dependent clauses.

We can approach this question (*what is the canonical Series II agreement target?*) from a cross-Tsimshianic perspective. Historically, the targets of Series II agreement in dependent clauses were S and O: the same set of arguments which I have argued condition agreement switch when extracted. This is still the case in Coast Tsimshian dependent clauses, which consistently exhibit ergative Series I agreement with A and absolutive Series II agreement with S and O, regardless of the features of either argument (as discussed in sections 3.3.1 and 6.1.3). The Coast Tsimshian dependent-clause agreement pattern is demonstrated in (20) and (21). In both examples, the ergative subject is marked with a Series I clitic, which agrees with the full DP subject ((20): *gyat* ‘people’; (21) *Mary* ‘Meli’). The Series II suffix marks the absolutive object ((20): *-m* ‘us’; (21) *-t* ‘him’).

- (20) Łat ts'inslooygm gyat.
 ła=**t** ts'ins-looyk-**m** gyat
 INCEP=**3.I** away-move.away-**1PL.II** people
 ‘People are moving away from us.’ (Sasama 2001: 151)

- (21) Yagwat lümoomdit Meli.
 yagwa=t lümoom-t =t Meli
 IPFV=3.I help-3.II =DN Mary
 ‘Mary is helping him.’ (Bach 2004)

Agreement switch to the independent pattern is triggered when objects are extracted in Coast Tsimshian, just as described previously for Gitksan (Interior). In the examples below, each of which involves A'-movement of an object, Series I agreement is absent, and Series II suffixal agreement instead marks the ergative subject (-u ‘1SG’ for the subject *I* in (22); -t ‘3’ for the subject =a *k’abatküülk* ‘the children’ in (23)). This is an agreement switch pattern, more familiarly triggered in independent clauses.

- (22) Waaba awaan nah dzabu.
 waap =a awaan na dzap-ə-u _
 house =CN DEM PST make-TR-1SG.II _
 ‘That’s the house I built.’ (Lit: *That house, I built.*) (Dunn 1978a: 342)
- (23) Hashaasa kwli kwłəlaaxsa k’abatküülk.
 has~haas =a kwli kwłəlaaxs-t =a k’abatküülk _
 PL~dog =CN all.over PL.kick-3.II =CN PL.child _
 ‘It was the dogs that the children were kicking.’ (Sasama 2001: 225)

Though data on relativization patterns in Coast Tsimshian is somewhat limited, all of the data I have seen indicates that extraction morphosyntax (and agreement in extraction contexts) is cognate between the Maritime and Interior branches (Dunn 1978a; Sasama 2001).⁵ These extraction patterns can therefore most likely be traced directly to Proto-Tsimshianic. Coast Tsimshian also preserves its pattern of dependent-clause agreement (where Series II is firmly absolutive) from Proto-Tsimshianic. There then seems to be a quite robust diachronic connection between those arguments targeted by Series II agreement and those arguments conditioning non-canonical inflection (agreement switch) when extracted: in both cases, S and O.

This connection is interrupted in Gitksan, however, due to the innovation of the nominal type split discussed in Chapter 3. Series II agreement is now capable of targeting either A or O in a transitive clause, dependent on the features of the ergative argument. In (24) below, where the subject is a pronoun, the Series II suffix targets the absolutive O (I have referred to this as an *Ergative/Absolutive* agreement pattern); however in (25), where the subject is a full DP, the Series II suffix targets the subject A (I have referred to this as a *Double Ergative* agreement pattern).

⁵This holds of core argument extraction (S, A, O); I have seen no cases of adjunct extraction. There are differences in the marking of interrogatives and questions, but I believe these to be independent of the A'-extraction morphology on the verb.

- (24) Neediit gya'a'y.
 nee=dii=t gya'a-'y
 NEG=FOC=3.I see-1SG.II
 'S/he didn't see me.' (BS)
- (25) Neediit gya'as Michael 'nii'y.
 nee=dii=t gya'a-t =s Michael 'nii'y
 NEG=FOC=3.I see-3.II =DN Michael 1SG.III
 'Michael didn't see me.' (Davis and Forbes 2015: 170)

In a dependent clause, we expect both Series I and Series II agreement to target the ergative when the ergative subject is a DP or third-plural, leaving the object without agreement just as in (25) above. That is, we would not expect the object to be targeted by Series II agreement when the subject is a DP or third plural. How does object extraction proceed in this situation, then? Do we see dependent clause inflection, since Series II does not target the *wh*-argument, or do we see independent inflection, as with other cases of object extraction?

It turns out that regardless of the difference in the target of Gitksan Series II agreement – even in contexts that would potentially trigger Double Ergative agreement – the independent-style agreement strategy is used for O extraction. Below, (26) demonstrates object extraction from a clause with a DP subject, and (27) demonstrates object extraction from a clause with a third-plural subject. Although dependent clause agreement (Series I and Series II) could occur in these sentences without any agreement indexing the *wh*-object, this is not what is produced. In both cases, Series II agreement marks the ergative, and there is no Series I agreement.

- (26) Guhl giigwis Henry?
 gu =hl giikw-ə-t =s Henry _
 what =CN buy-TR-3.II =DN Henry _
 'What did Henry buy?' (VG)
- (27) Gungya'adiithl gwihl japdiit ahl k'i'ihl k'uuhl.
 gun-gya'a-diit =hl [gwi =hl jap-ə-diit _] a-t =hl k'i'y =hl k'uuhl
 JUSS-see-3PL.II =CN [what =CN make-TR-3PL.II _] PREP-3.II =CN one =CN year
 'They showed [what they had done] after one year.' (BS)

If Gitksan Series II agreement was not expected to have targeted O in the above contexts – if in fact, the O is not targeted by any agreement probe at all – then perhaps it is not *Series II agreement* with a *wh*-argument that triggers alternate inflection, but some other property. At the core of it, an independent clause agreement pattern seems to be consistently triggered by the movement of the object, regardless of all other factors that might affect Series II agreement (i.e. a dependent marker or ergative subject features).

The dissociation between the target of Series II agreement target in Gitksan and the argu-

ments which trigger independent agreement under extraction therefore makes it necessary to evaluate some alternate hypotheses regarding how independent inflection is triggered in A'-contexts. In the subsections to follow, I evaluate three options under which alternate inflection is *not* an anti-agreement effect. These are the following:

1. Alternate inflection in absolutive A'-extraction contexts is triggered by the particular *wh*-C used in clauses containing extraction.
2. Alternate inflection in absolutive A'-extraction contexts is triggered by extraction out of a particular subdomain, such as a phase domain.
3. Alternate inflection in absolutive A'-extraction contexts is a case-discrimination effect, preventing the extraction of absolutive arguments.

Ultimately, I argue in favor of a fourth option:

4. Alternate inflection in absolutive A'-extraction contexts is an anti-agreement effect. Despite the surface absolutive-nominative split discussed in Chapter 3, Series II in fact covertly agrees with absolutive arguments in Gitksan, even in Double Ergative contexts where its distribution appears to be nominative. This covert absolutive agreement cannot occur when A'-movement takes place.

5.2.2 The extraction C°

One option in considering the alternate agreement possibilities in A'-extraction contexts would be to attribute the source of alternate agreement to the C° that licenses A'-movement, following my earlier proposal that the special agreement properties of independent clauses derive from a particular C°.

This hypothesis runs into immediate problems, however. Foremost is the fact that the majority of extraction contexts do not involve (and indeed do not allow) independent inflection. Cases of ergative subject extraction, adjunct extraction, and oblique theme extraction all engage in typical dependent clause agreement.

We might then attempt to somehow restrict the special agreement properties specifically to a C° which extracts an absolutive argument. Even if we were to do so, however, recall that independent inflection is obligatory in object extraction contexts even when a dependent marker appears above the predicate, as in (28). Here, there is no dependent Series I agreement with the ergative subject *John*; instead, we see ergative Series II agreement, alongside the transitive vowel characteristic of independent clauses.

- (28) Hunhl mooji agubis John.
 hun =hl moo-ji a-gub-ə-t =s John _
 salmon =CN almost-IRR not-eat-TR-3.II =DN John _
 'John almost never eats FISH.'
 (Hunt 1993: 243)

Assuming that dependent markers should block independent inflection triggered by an extraction C° just as they block independent inflection triggered by a matrix C° , we would not expect independent inflection to be possible, much less obligatory, in cases such as (28).

5.2.3 Phase domains

Another possibility is that independent inflection is triggered when extracting an argument out of a certain syntactic domain, for example a phase domain. Under the assumption that objects and intransitive subjects are base-generated inside a νP , and that ν always acts as a phase head,⁶ we might expect A'-movement out of the phase domain to be restricted or particularly costly in a derivational sense. Standard Series II agreement on Infl° might have the effect of closing off this phase and preventing an S or O argument from moving upward to its A'-position.

In adopting this approach, we attempt to pick out the class of absolutive arguments – those arguments triggering alternate agreement under extraction – as a natural class, by defining them structurally as those arguments inside a particular low domain (νP) to the exclusion of transitive subjects, which do not trigger this type of inflection. However, absolutive arguments are not the only arguments base-generated this low. The oblique arguments of ditransitive predicates are most likely generated even lower than their absolutive object counterparts; as demonstrated in (29), the *recipient* (*Michael*) surfaces as the direct (absolutive) object, while the *theme* (*yipx* 'soup') surfaces as an oblique, preceded by the preposition *a-*. This can be likened to an English double object construction.

- (29) Gini'y Michael ahl yipx ...
 gin-i-'y (=t) Michael a-t =hl yipx ...
 feed-TR-1SG.II (=DN) Michael PREP-3.II =CN soup ...
 'I fed Michael soup (when he was sick).'

Nevertheless, this low oblique theme extracts without triggering independent inflection. Instead, dependent inflection is used, as shown in (30): the Series I clitic agrees with the ergative, and Series II with the absolutive recipient. No other morphological markers are required when extracting these obliques.

⁶This contravenes the proposal that only the ν head of a *transitive* clause acts as a phase head (Chomsky 2001).

- (30) Gu ma gins Michael?
 gu **ma**= gin-**t** =s Michael _?
 what 2.I= feed-3.II =DN Michael _
 ‘What did you feed Michael?’ (VG)

The extraction behavior of oblique themes is distinct from the extraction properties of other obliques like recipients, causers, and benefactives, suggesting to me that they remain structurally low, or otherwise structurally unlike other kinds of adjuncts.⁷ Independent inflection is therefore not something triggered whenever a low argument A'-moves from within a *vP* phase, but is instead specific to the extraction of absolutive S and O.

5.2.4 Case-discrimination versus anti-agreement

In the previous sections we have determined that agreement switch in A'-contexts is obligatorily triggered specifically by the extraction of absolutive arguments. This is particularly noteworthy because formal absolutive arguments are not defined in an obvious morphological way where ϕ -agreement is concerned; assuming that a canonical clause involves dependent agreement, we have seen that the Gitksan Series II head switches between overtly selecting a nominative or absolutive target. There are other processes in the language that do pick out absolutives: plural agreement on the verb targets absolutive arguments, and in the absence of Series II agreement only absolutive arguments may surface as a Series III pronoun (i.e. obliques are not Series III pronouns). It is clear, then, that there remains some covert means of picking out absolutive arguments in the grammar.

There are several ways to do this. We might posit a means of assigning covert absolutive case to the S and O arguments, related or unrelated to Series II ϕ -agreement on the Infl head. If the process of determining of abstract absolutive case is independent of Series II ϕ -agreement, we may maintain the analysis of ϕ -agreement proposed in Chapter 3. However, we would then need to connect the extraction of *wh*-arguments with absolutive case to the emergence of independent style inflection.

It is possible that the use of independent inflection in the A'-extraction context is indicative that case has in fact been assigned differently than in a canonical dependent-inflected clause, due to a restriction on the extraction of absolutive arguments, perhaps via some sort of case-discrimination. However, there is no obvious reason to me why changing the agreement of the clause should be an appropriate repair for absolutive A'-extraction unless Series II ϕ -agreement *is* in fact responsible, at least in part, for absolutive case assignment itself.

⁷ Another type of low oblique are antipassive themes; however, Brown (2016) and Brown and Forbes (2018) argue that these do not involve direct extraction, but instead indirect relativization via predicate nominalization, so they are not particularly informative with respect to this point.

I suggest that the best analysis of non-canonical independent inflection in absolutive extraction contexts is one with a clear connection between the problem and its apparent resolution. The problem, in this case, is the impossibility of extracting an S or O from a context with canonical dependent agreement, and its resolution is to force the Series II probe to agree with A instead. This can be accomplished if we propose that, *despite the surface nominal-type split in dependent clauses*, canonical dependent agreement consistently involves a relation between the Series II agreement probe and absolutive S and O, and an argument in such a relation cannot be extracted.⁸ Under these assumptions, alternate agreement in absolutive A'-contexts can be interpreted as an anti-agreement repair, albeit one with an unusual resolution (agreement switch). I adopt this view in the section to follow.

5.3 Absolutive Series II agreement

To this point I have argued that the simplest way of interpreting obligatory agreement switch (away from canonical dependent clause inflection) when extracting absolutives is to assume that extraction of a Series II agreement target is impossible. That is, in order for an absolutive argument to be extracted, Series II is forced to change its agreement target. This means we are forced to assume that absolutives are always the normal target of Series II agreement; at some prominent stage of the canonical agreement derivation, the Series II probe agrees with S (in intransitives) and O (in transitives). This is so both in the neighboring Maritime branch of Tsimshianic where Series II agreement is consistently absolutive, *and* for Gitksan, where Series II agreement is subject to an absolutive/nominative split.

In this section, I will outline a new conception of the Series II agreement process under which it consistently acts as a licenser for absolutive arguments. This is the case even when the surface Series II agreement controller is the ergative subject (due to the absolutive/nominative nominal-type split described in section 2.3.2 and discussed in Chapter 3).

5.3.1 Multiple feature copying

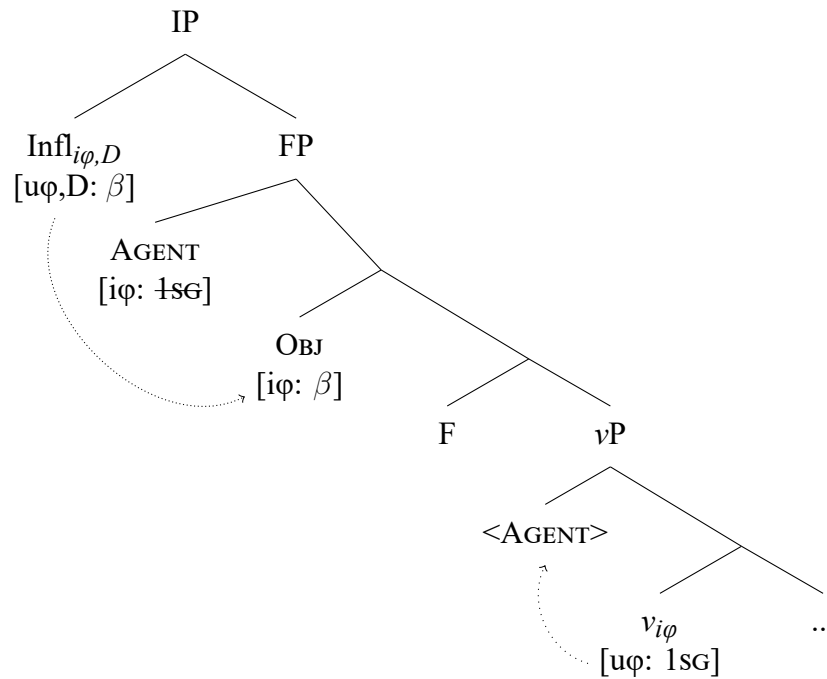
In the previous chapters I have proposed that Series I agreement is on a transitive v° , and undergoes inherent agreement with the ergative subject in its specifier. Specifically, I proposed in Chapter 3 that the Series I agreement probe on v° agrees with and deactivates the ϕ -features of the ergative argument, leaving additional D-features on third-plural and DP ergative subjects active for subsequent agreement by the Series II agreement probe. We can also think of

⁸Recall that on the surface, Gitksan's Series II agreement is with the A argument if it is a DP or third-plural, and is only with the O argument otherwise. This is a nominative-absolutive split.

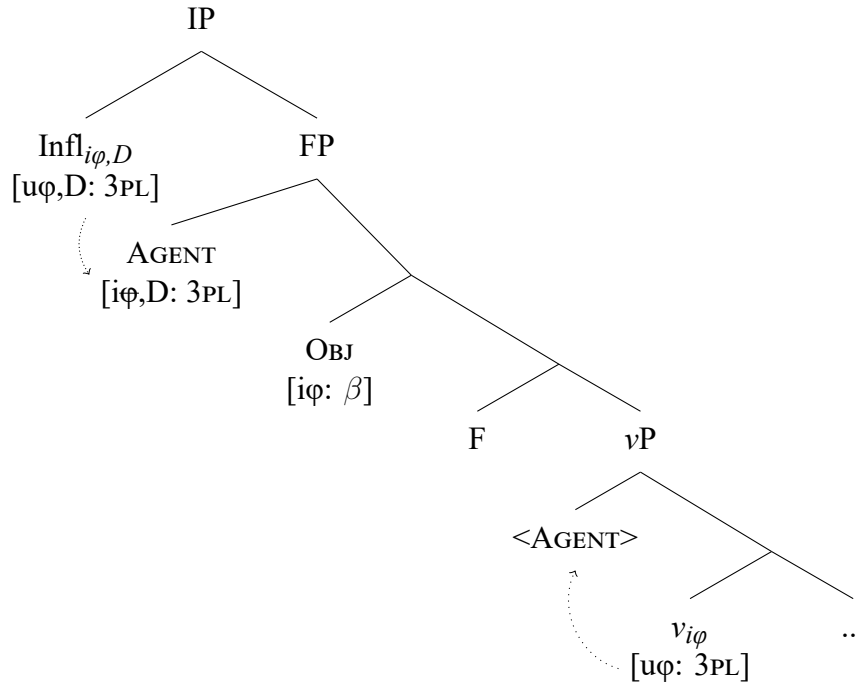
ϕ -agreement in terms of *argument licensing*. The Series I probe, the first probe to agree, copies and deactivates the ϕ -features of the ergative subject, and in so doing, licenses it.

After Series I agreement has taken place, the Series II probe on Infl° is merged. In a Coast Tsimshian dependent clause, the Series II probe consistently agrees with the unlicensed object; in a Gitksan dependent clause, the Series II probe agrees with the argument with the highest active D-features, which may be an ergative DP or third-plural argument, but is otherwise the object. The two potential argument configurations are illustrated in (31) and (32) below; recall from section 4.3.4 that both of the arguments have vacated the νP in preparation for remnant raising, and now both are specifiers of an FP between νP and IP.

(31) *Ergative/Absolutive: Series II agreement with O (A is e.g. 1SG)*



- (32) *Double Ergative: Series II agreement with A (subject is e.g. 3PL)*



I now propose that in both of these configurations, the Series II agreement probe actually copies the features of *both* the subject and object, and ultimately licenses the transitive object. This makes my analysis consistent with proposals that multiple specifiers of the same projection (in this case, FP) are equidistant, and therefore equally local targets for agreement (in this case, the Series II probe on Infl°).

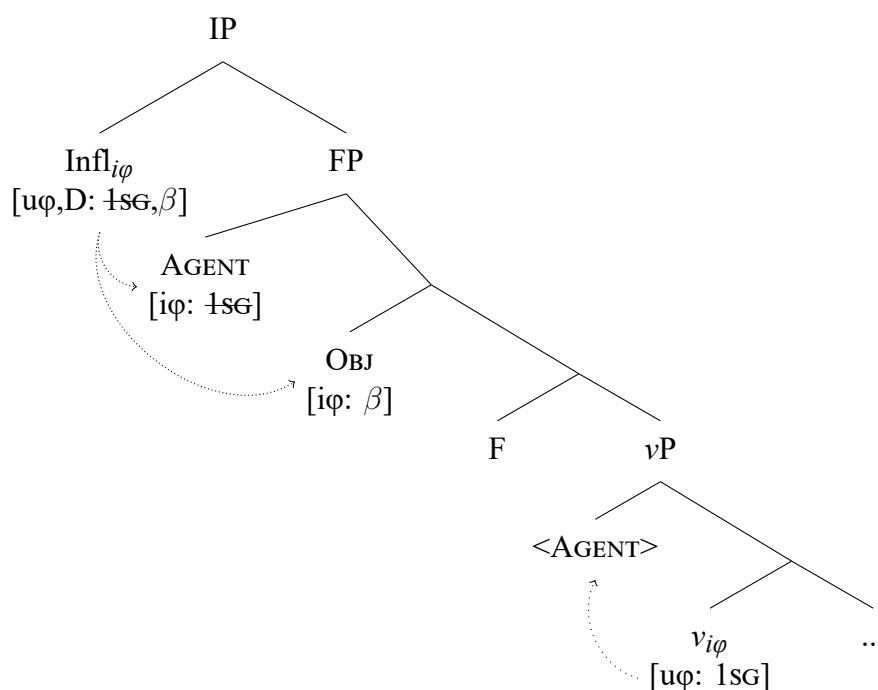
I suggest an implementation following Deal (2015b), who breaks down the relativization properties of a probe into two components: what a probe *interacts with*, and what a probe is *satisfied by*. When a probe interacts with a set of features, it copies them to itself (as part of valuation). When a probe is satisfied by a set of features, it stops probing. In many cases, the set of features that a probe may interact with are identical to those that satisfy it; however, Deal (2015b) crucially proposes that these sets may be distinct. The set of features that can satisfy a probe may be only a subset of those which it can interact with. Her original formulation of this is given in (33).

- (33) A probe may interact with feature set F even if it may only be satisfied by feature set G, where $F, G \subseteq \varphi$ (the set of φ -features) and $F \neq G$. (Deal 2015b: 2)

Assuming a more articulated view of feature relativization, we can apply this to the behav-

ior of the Series II agreement probe. I suggest that the Series II agreement probe *interacts* with D-features (the full set of nominal features discussed in Chapter 3, including a feature which distinguishes lexical and pronominal DPs, third-person [PLURAL], and the entire set of ϕ -features), but is only *satisfied* by ϕ -features.⁹ The Series II probe therefore copies the features of both transitive arguments, and ceases probing once it finds and copies the active ϕ -features on the object. I propose that this valuation process occurs whether or not the Series II probe ultimately agrees with the object (in an Ergative/Absolutive construction, illustrated in (35)) or the subject (in a Double Ergative construction, illustrated in (36)).

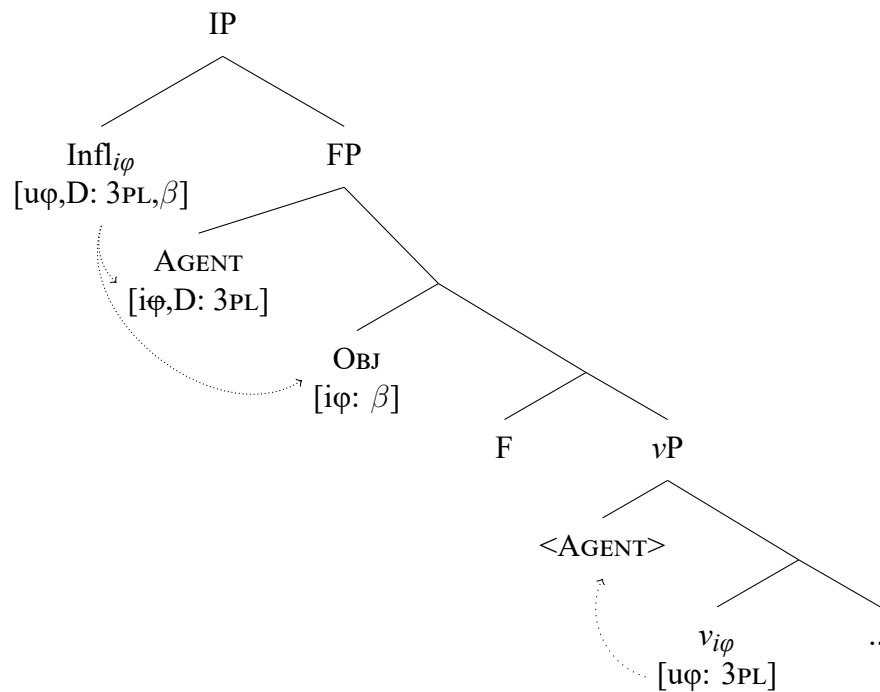
(35) *Multiple feature copying: Ergative/Absolutive (A is 1sg)*



⁹Note that Deal's (2015b) original formulation restricts this principle to subsets of ϕ -features; I propose that the principle is more widely applicable, and suggest the generalized version in (34):

(34) A probe may interact with feature set F even if it may only be satisfied by feature set G, where $G \subset F$.

This allows ϕ -features to act as the 'satisfying' subset G and not only the 'interaction' set F, as required for my analysis of Series II agreement.

(36) *Multiple feature copying: Double Ergative (A is 3PL)*

In either construction, the ergative A has previously been ϕ -licensed by the Series I probe on v° ; its ϕ -features are not available to satisfy the Series II probe on Infl $^\circ$. Series II agreement is therefore always satisfied by the ϕ -features of the next available unlicensed nominal: O. However, it still copies the ϕ -features of the either intervening or equidistant A argument as part of the search process.

There are other mechanical options for modeling agreement with multiple arguments; a prominent example is Multiple Agree (Hiraiwa 2005; Nevins 2007, 2011). Under a Multiple Agree analysis, the Series II probe is expected to agree with all arguments in its c-command domain that bear the particular feature it is searching for. This makes slightly different predictions than the proposed analysis, potentially suggesting that indirect objects could also be the targets of covert Series II licensing.¹⁰ The oblique themes of true ditransitives have a different extraction pattern than direct objects do, however (as demonstrated in section 5.1). Under the assumption that extraction morphology provides insight into abstract case or agreement, this means that indirect and direct objects do not have the same abstract case – they do not pattern

¹⁰This depends on whether indirect objects are part of the same syntactic domain as direct objects. There is much to be further explored with respect to the syntactic position of ditransitive themes, particularly under a vP-remnant raising analysis. It remains to be explained how these obliques (as well as other PPs) appear post-VSO, rather than raising as part of the vP-remnant – perhaps they raise as well, or perhaps they are extraposed. This is a known hurdle for remnant-raising analyses.

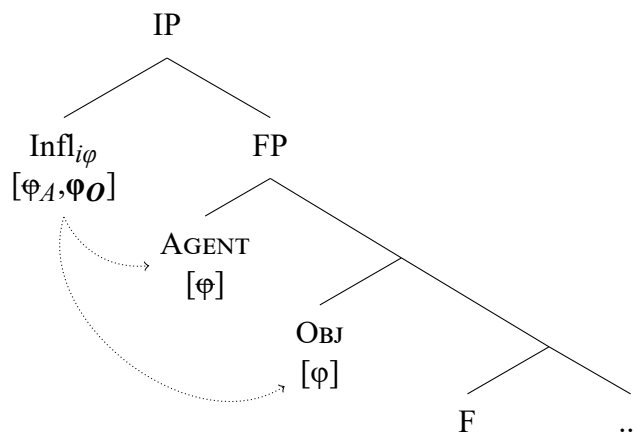
together. There is no indication that indirect objects interact at all with the Series II agreement probe, so I choose to follow Deal's (2015b) approach to multiple agreement (or, multiple feature copying): though valuation by multiple arguments is possible, only one argument fully satisfies the probe.

5.3.2 The Series II surface agreement controller

The system proposed here allows the absolutive object to serve as the consistent target of Series II agreement: the Series II probe is satisfied once it copies the ϕ -features of the absolutive argument, consequently licensing it. However, the Series II probe always copies, and therefore has some degree of access to, the features of the ergative subject as well. It is necessary to determine how the final surface controller of Series II agreement is determined, when it has copied the feature bundles of two arguments.

In Coast Tsimshian, where the absolutive argument is the consistent Series II agreement controller, this is relatively trivial to explain: the Series II head is only sensitive to ϕ -features, and does not copy D-features at all (as argued in section 3.3.1). The surface controller of Series II agreement is therefore the only feature bundle that is still active at the time of being copied: those of the object. The features of A have previously been licensed through Series I ϕ -agreement. This is illustrated in (37), with the feature bundle serving as the final surface agreement controller **bolded**.

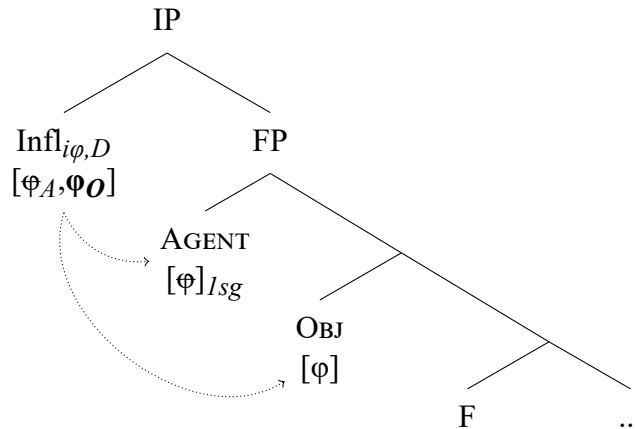
(37) *Coast Tsimshian dependent transitive*



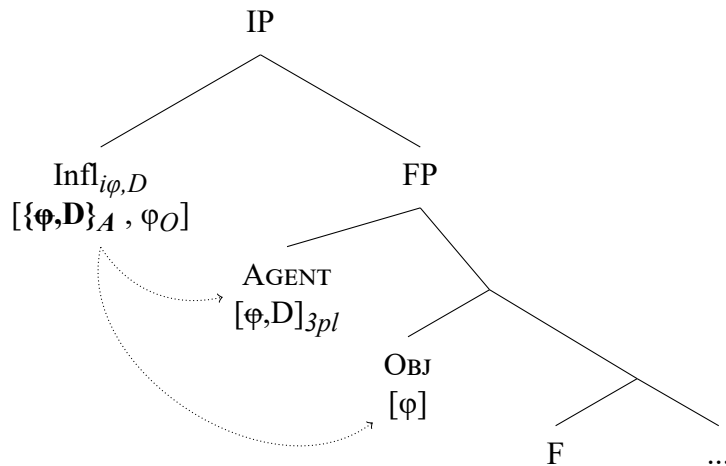
In Gitksan, the Series II agreement probe also interacts with D-features, and may find and copy them (still active) on the ergative subject. This leaves two possible situations. The first, illustrated in (38), is that the ergative subject has no active ϕ - or D-features; the highest active features belong to the absolutive object. The second, illustrated in (39), is that the ergative

subject has active D-features. In either situation, the probe is controlled by the first feature bundle containing active features: O for (38), and A for (39).

(38) *Gitksan dependent transitive (Ergative/Absolutive)*



(39) *Gitksan dependent transitive (Double Ergative)*



This means that the absolutive object, despite always engaging in full agreement with the Series II probe, is not necessarily the argument which wins out as the surface agreement controller. The emergence of the absolutive/nominative nominal type split is the result of the Series II probe copying D-features as well as φ-features from the arguments it encounters on its agreement path.

Under this formulation of agreement, we end up in a situation where the Series II agreement probe of a dependent clause has access to the features of both transitive subject and object. Some

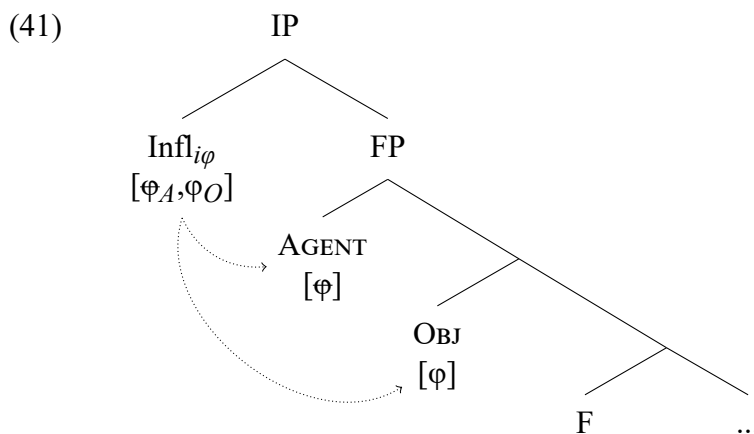
of the consequences of this are explored further in discussion of Coast Tsimshian in Chapter 6, and in discussion of pronouns in section 7.4.2.

5.3.3 Series II agreement with A

There is one potential hole that must be discussed before moving forward. We might expect (at least some) ergative extraction to trigger agreement switch, if the Series II head agrees with both transitive arguments as I propose here. Recall that when a transitive subject A is extracted, it registers strictly as a third-singular pronoun for the purposes of agreement, but the agreement pattern is otherwise canonical dependent agreement (with both Series I and II agreement in the clause). An example of ergative extraction is repeated in (40).

- (40) Oo, 'nii'y ant gwasxwt gi.
 oo 'nii'y an=t gwasxw-t __=gi
 oo 1SG.III AX=3.I borrow-3.II __=PR.EV
 'Oh, it was me who borrowed it.' (VG)

In this section, I've argued that examples such as these with dependent-style agreement, where Series II agreement is with O, involve the Series II probe copying the features of both A *and* O. That is, agreement is modeled as in (41), where the Series II probe interacts with both arguments.



The potential question is, if the target of Series II agreement cannot be extracted, and the Series II probe copies the features of both A and O in dependent-style inflection, why does A not also trigger a different Series II agreement pattern, as O does?

Although I have proposed that the Series II probe interacts with A's features, it should be noted that A's φ -features were previously copied by ergative Series I agreement, and therefore

The same holds of languages with other agreement patterns: either ergative- or absolutive-patterning agreement may be affected by an AAE. That is, either only the ergative agreement may have an AAE (Kaqchikel; Erlewine 2016), or only the absolutive agreement (Selayarese; Finer 1997), or both types of agreement (Abaza; O'Herin 2002). Baier (2018) therefore argues that anti-agreement is not restricted to 'subjects', but instead a phenomenon that may apply to any kind of agreement – in effect, its prior description as a subject-related phenomenon is the result of a sampling bias.

Several theoretical approaches have been taken in the past to account for AAEs, including anti-locality (Cheng 2006; Schneider-Zioga 2007; Erlewine 2016), Criterial Freezing (Rizzi and Schlonsky 2007; Diercks 2010; Jarrah 2017), intervention (Kinjo 2017), and feature impoverishment (Baier 2018).

On the face of it, Tsimshianic agreement switch in A'-contexts might require a different analysis than many of these previously discussed AAEs. Rather than maintaining the normal agreement configuration with the *wh*-argument but establishing an abnormal agreement *value*, (and rather than forgoing agreement entirely,) we instead see an abnormal agreement *configuration*. Series II agreement takes place in a manner that avoids the *wh*-argument, resulting in a situation where it may find other accessible ϕ -features.¹¹ There are veins of work on A'-restrictions and extraction conditions that reiterate a connection to ϕ -agreement. I pursue these in the next subsection.

5.4.2 Criterial Freezing versus ϕ -based Freezing

To implement the extraction restriction on Series II-agreeing arguments in Tsimshianic, I draw on Gallego's (2010) analysis of the Subject Condition, which proposes that ϕ -complete agreement in a clause freezes its agreement target for *wh*-movement. That is, if an argument is the target of ϕ -complete agreement, it cannot be extracted.¹² Gallego's reference to ϕ -complete agreement indicates nominative-patterning agreement from T (in Spanish); however, any type of morphologically-rich agreement might in principle be considered ϕ -complete, and in an

¹¹ Although Baier's (2018) recent work aims to unify all instances of anti-agreement under a single analysis (that of Feature Impoverishment), I suggest that various means of deriving anti-agreement effects might be possible and/or appropriate, depending on the language (i.e. the descriptive phenomenon of 'anti-agreement' may be epiphenomenal). The Tsimshianic agreement switch pattern, which I have argued should be interpreted as a unique type of anti-agreement, certainly cannot be accounted for under Baier's (2018) agreement Impoverishment analysis. More broadly, while cases of reduced or *wh*-specific agreement are well accounted for under Baier's (2018) approach, there may be alternate explanations for systems where agreement is entirely absent in A'-extraction.

¹² Gallego's (2010) analysis is similar to Criterial Freezing (Rizzi and Schlonsky 2007), but instead of attributing the A'-freezing property to configurational conditions, such as being in a specifier or an A'-criterial position, it is actually ϕ -complete agreement which freezes an argument. He argues that this better accounts for data from Spanish.

ergative/absolute language we might expect this property to be found on whatever type of agreement is located on T/Infl°. As I have previously argued, Tsimshianic Series II agreement is located on Infl°, and it is more featurally ‘complete’ than Series I agreement. In Gitksan, once an argument receives Series II agreement, it is fully deactivated and never receives any further agreement; conversely, arguments which receive Series I agreement may subsequently receive Series II agreement.¹³ Series II agreement copies and deactivates D-features as well as ϕ -features, while Series I agreement is restricted to interacting with only ϕ -features. I therefore propose that in Tsimshianic, arguments which receive Series II agreement are frozen for extraction, and cannot subsequently undergo *wh*-movement, parallel to nominative arguments in Gallego’s (2010) analysis.

Under traditional Criterial Freezing approaches (Rizzi and Schlonsky 2007), freezing is not associated with ϕ -agreement, but instead with movement to the subject position, which is analyzed as a topic position, the lowest A'-type (= ‘criterial’) position. Once an argument has risen to a criterial position, it is associated with the information structure of the clause and cannot undergo further movement.

Rizzi and Schlonsky (2007), in their initial formulation of Criterial Freezing as a mechanism for anti-agreement effects, propose that two broad categories of languages emerge with respect to how the freezing effect on subjects is handled: there are ‘fixed-subject’ languages, where subjects move to the criterial position and do not undergo subsequent A'-movement but instead leave the subject in-situ, or utilize resumption or some other strategy; and ‘skipping’ languages, where subjects rise directly to spec-CP from their thematic positions, never landing in the subject position. Some example languages of each of the proposed types are illustrated in Table 5.3.

<i>‘Fixed’ subject</i>	<i>‘Skipping’ subject</i>
Hebrew (resumption)	French, Italian
Quechua (clausal pied-piping)	Jordanian Arabic
English? (subject in situ)	

Table 5.3: Types of Criterial Freezing repair (based on Rizzi and Schlonsky 2007; Jarrah 2017)

This analysis works well for subject-initial languages with clear evidence of subject A'-movement to a designated high position, but is difficult to extend to a verb-initial language

¹³I diverge from Hunt (1993) here in my interpretation of the ‘completeness’ (or ‘strength’) of the Gitksan agreement paradigms. While Hunt (1993) proposes that both the Series I and II paradigms are morphologically and featurally ‘strong’, (with ‘weak’ sub-paradigms consisting only of the third-person *-t* and *=t* that co-occur with overt DPs), I instead suggest that Series I and II differ in terms of featural completeness. I explore Series II agreement further in section 7.4.2.

like Gitksan. (In my analysis, I have assumed that the ν P, rather than the subject DP, moves to the specifier of IP.) This is partially why I suggest transferring the source of freezing effects to ϕ -complete agreement on the T/Infl head, which is closely associated with ‘subjecthood’. The other factor, of course, is the generalization established previously that A'-movement and Series II ϕ -agreement never coincide.

Suppose that the impetus for Freezing differs parametrically across languages: it may be that an argument which moves to a criterial position is frozen, as originally proposed by Rizzi and Schlonksy (2007), or it may be that an argument targeted by ϕ -complete agreement is frozen, as proposed by Gallego (2010). We may then assume that there are still two broad categories of how freezing can be repaired (‘fixed-subject’ or ‘skipping’ languages), but expect these repairs to look slightly different in each case.

In particular, ‘skipping’ types of languages in which freezing is associated with a *configurational position* will allow *wh*-arguments to skip their A-position to avoid freezing. This would contrast with ‘skipping’ types of languages in which freezing results from *ϕ -agreement*. These languages will have other resolutions, such as the deletion of ϕ -agreement, the emergence of default agreement, or the use of alternate agreement strategies (such as a differently-relativized probe) in contexts where agreement would target a *wh*-argument. This results in a more articulated typology for the resolution of Freezing, presented in Table 5.4.

	<i>‘Fixed’ type</i>	<i>‘Skipping’ type</i>
<i>Configurational Freezing</i>	Hebrew (resumption) Quechua (clausal pied-piping) English? (subject in situ)	French, Italian Jordanian Arabic
<i>Agreement-based Freezing</i>	?	Gitksan (agreement switch)

Table 5.4: An initial typology of repair strategies based on type of Freezing

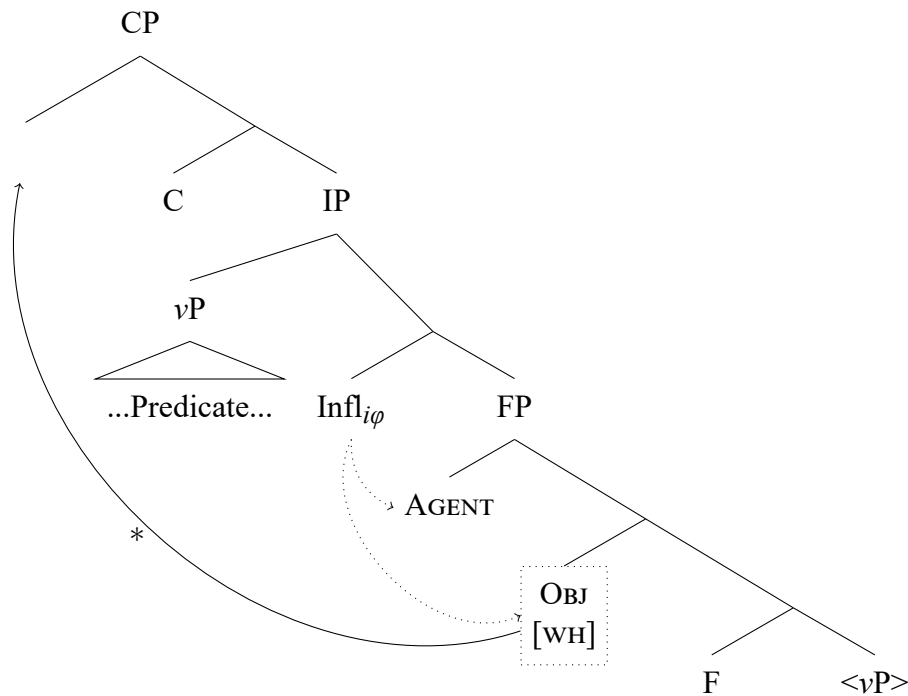
If this two-parameter approach is correct, we should be able to draw some finer contrasts between special patterns found in *wh*-contexts in different languages. For example, Jordanian Arabic is argued to be a language with Criterial Freezing in the subject position, which achieves subject-*wh*-movement through a ‘skipping’ strategy that passes over the normal subject position (Jarrah 2017). In Jordanian Arabic, when subjects are extracted, other D-type elements can be found in subject position instead; the verb also exhibits full agreement with *wh*-subjects (Jarrah 2017). It is therefore clear that Freezing in Jordanian Arabic is determined configurationally, being linked to the configurational subject position, and is not associated with ϕ -agreement. I propose that Gitksan exemplifies the other type of ‘skipping’ language, where Freezing is the result of ϕ -complete agreement with a target. This should entail a different types of repair

which affects agreement, but no obvious changes to the position of arguments. I explore this in the following section.

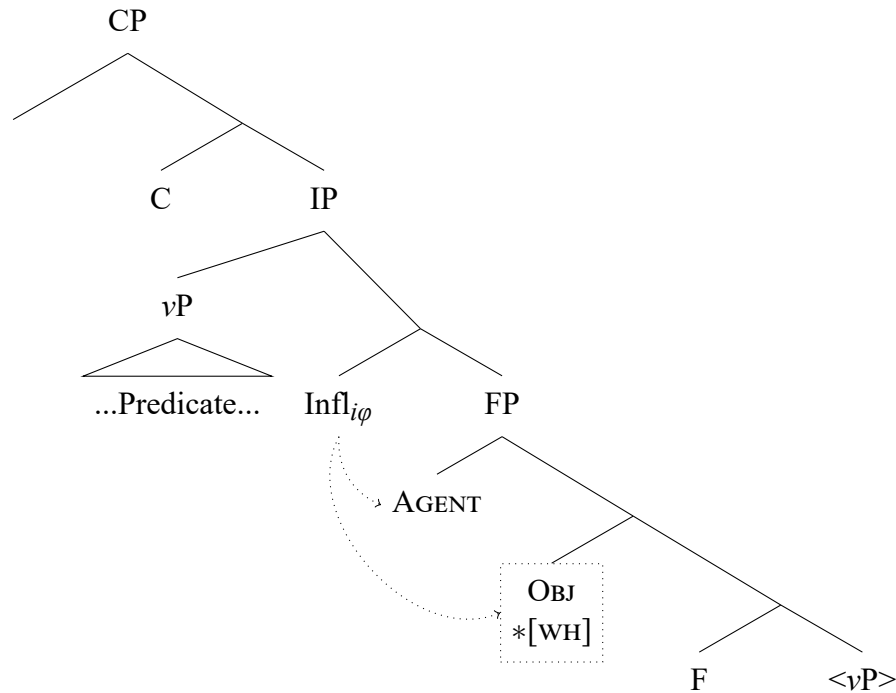
5.4.3 Agreement in Gitksan absolutive extraction

Gitksan does not use a strategy for absolutive extraction in line with the ‘fixed-subject’ category of languages: *wh*-arguments in interrogatives must overtly A'-move to spec-CP (Davis and Brown 2011: 54). I propose that this results in a problem when the *wh*-argument is targeted by ϕ -complete agreement. If the absolutive *wh*-argument moves to spec-CP after it has received Series II agreement, as in (43), the derivation crashes.

(43) *Illegal movement of ϕ -frozen object*



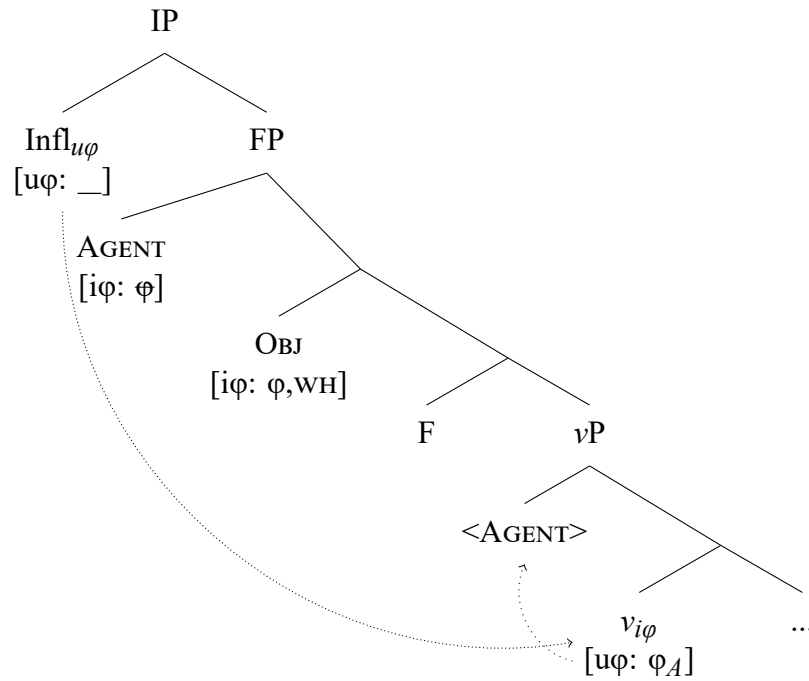
If the absolutive *wh*-argument is agreed with and left in situ, as in (44), the derivation also crashes.

(44) *Illegal wh-in-situ*

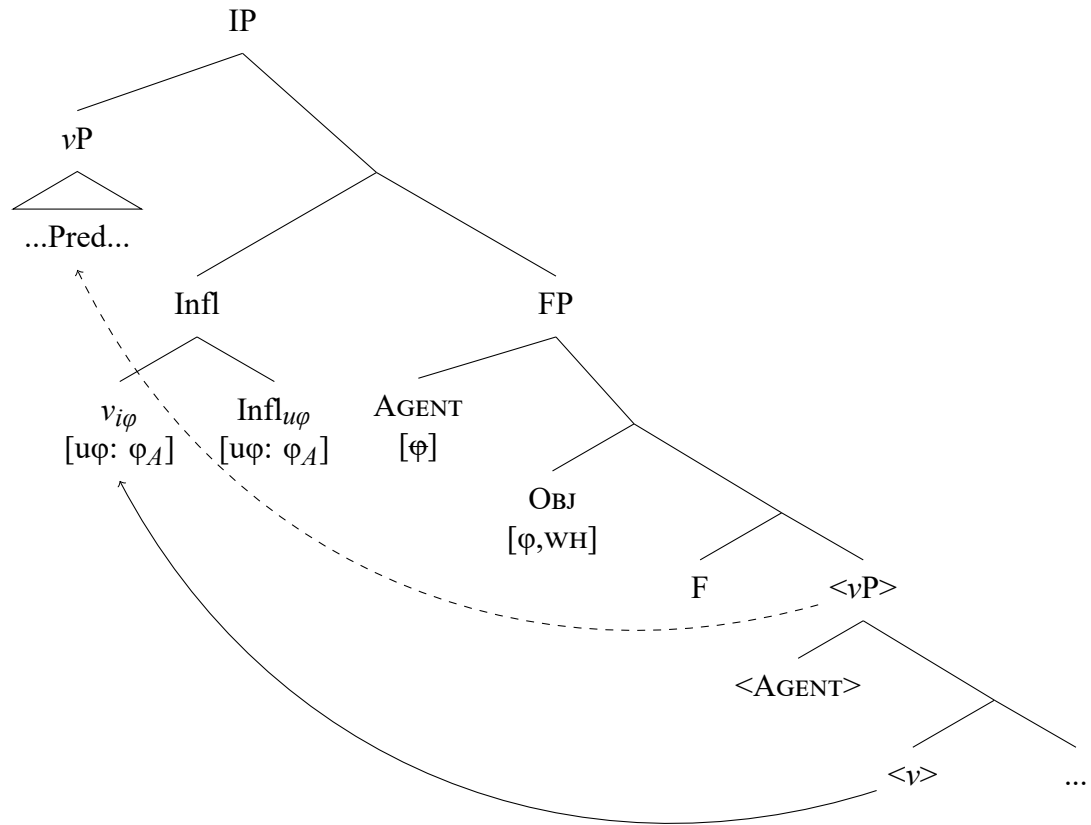
For Gitksan, I have proposed that Freezing is instead determined on the basis of ϕ -agreement, since Series II agreement never targets a *wh*-argument. A ‘skipping’ resolution for a ϕ -based Freezing language necessitates a derivation where ϕ -agreement ‘skips’ the *wh*-argument, so that *wh*-movement can proceed. I propose that in Gitksan, a Series II probe with different feature-relativization properties, allowing it to look past the *wh*-argument, is inserted. An alternate agreement probe is indeed available in the lexicon: this is the independent clause Series II probe described in Chapter 4, which is relativized to uninterpretable, rather than interpretable, ϕ -features. I propose that it is inserted on Infl° as a last-resort workaround, even though the standard conditions for insertion of this probe (locality between a matrix C° and Infl°) may be absent. The insertion of this probe then triggers agreement switch just as it does in independent clauses. This derivation allows the absolutive *wh*-argument to successfully extract, as it does not receive any agreement.

The sequence of events is illustrated in the examples below. First, in (45), the typically-independent Series II probe agrees with uninterpretable ϕ -features on *v*, resulting in indirect agreement with the ergative argument. The absolutive object receives no agreement whatsoever, and is not licensed.

(45) *Series II agreement with valued Series I probe*

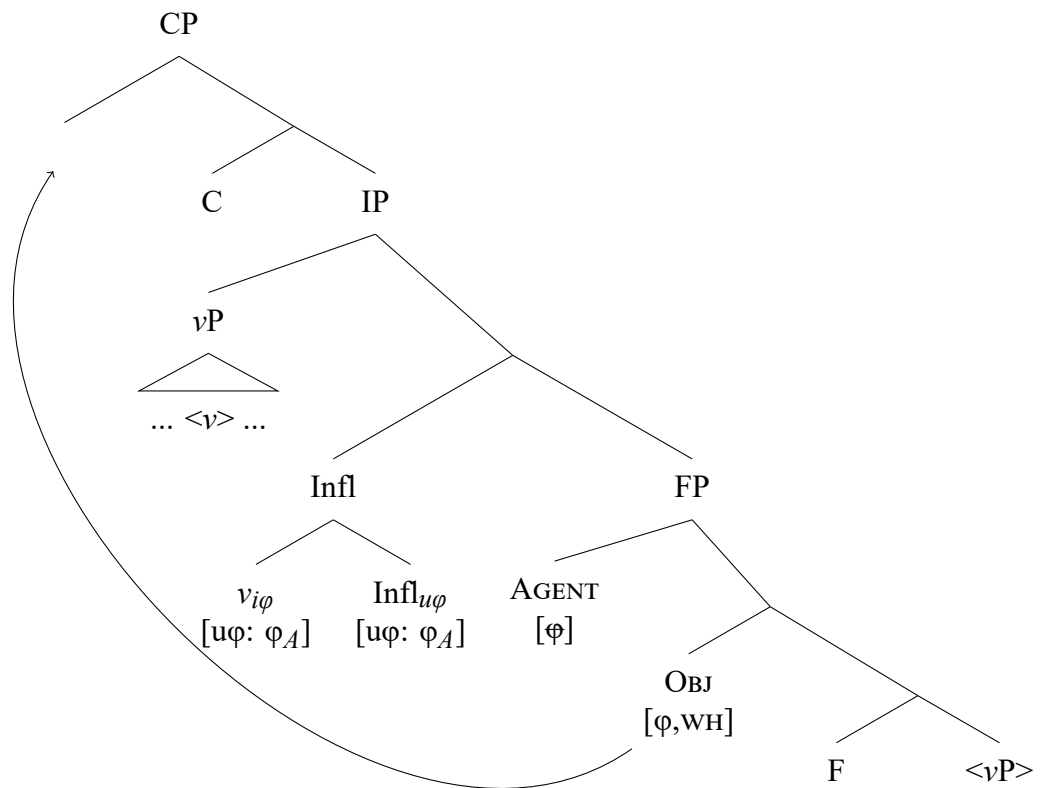


The Series I probe on v° head-moves to Infl[°] upon being agreed with, and will later be Impoverished and realized as the transitive schwa. The vP proceeds to raise to spec-TP, resulting in predicate-initial order through remnant movement. This is shown in (46).

(46) *Movement of v° and vP -remnant*

Finally, because the *wh*-object has not been targeted for Series II ϕ -agreement, it is free to move to spec-CP. This movement is shown in (47).

- (47) *A'-movement of unlicensed object, after movement of v^o , vP*



It should be noted that Gallego's (2010) proposal on freezing was originally proposed as a restriction on sub-extraction, rather than direct extraction, as a means of accounting for the Subject Island condition. In Gitksan, A'-extraction from an absolutive position using the agreement switch strategy is possible both for direct extraction *and* for sub-extraction. In (48), two examples are provided of extraction from the CP argument of an intransitive predicate. Independent clause inflection is used in both the matrix clause and embedded clause of each: Series II agreement is either absent, or with some argument other than the CP from which the *wh*-element extracts.

- (48) a. Guhl needii t'is(it) ji jebin?
 gu =hl nee=dii t'is-it [ji jep-ə-n ____]
 what =CN NEG=FOC big-SX [IRR do-TR-2SG.II ____]
 'What do you not do often?' (Lit: What is it not much that you do (it)?) (VG)

- b. Guhl gay aamit ji japxwit?
 gu =hl gay aam-it [ji jap-xw-it _]
 what =CN CNTR good-SX [IRR make-PASS-SX _]
 ‘What would it be good if (it) were made?’ (VG)

Note that in English these constructions would both be island violations. These examples seem to demonstrate that where some repair for Freezing is possible, it may be possible as a repair for both local extraction and sub-extraction. Where a repair is not possible, as in fixed-subject type languages, my analysis predicts that the Subject Island Condition should hold.

5.4.4 Summary

To summarize my crosslinguistic proposal, I have suggested that Freezing (in the sense of Rizzi and Scholnsky’s (2007) Criterial Freezing) can be parameterized in terms of whether arguments that enter a *configurational subject position* (spec-TP) are frozen, or whether the targets of φ -complete agreement (typically T-agreement) are frozen. Regardless of the type of freezing that applies in a given language, a frozen argument is unable to A'-move from the position where freezing has occurred. This predicts a four-way typology of repairs for freezing, developed from Rizzi and Scholnsky’s (2007) two-way typology; I have proposed that Gitksan exemplifies one of the new types of repair. I suggest that other languages which exhibit anti-agreement effects may be of this type.

To summarize my analysis of absolutive A' derivations in Gitksan, I have proposed that when an argument is φ -licensed by the Series II probe on Infl^o, it is frozen for the purposes of further movement, including A'-movement. In order for the *wh*-argument to undergo *wh*-movement as is required, this freezing condition must be avoided. Specifically, Series II φ -agreement, which triggers freezing, must not target a *wh*-argument. This is made possible by introducing the alternate agreement probe on Infl^o, which is valued by uninterpretable features rather than interpretable ones; the situation warrants the insertion of this probe even in the absence of the matrix C that normally licenses it. In seeking uninterpretable features instead, the probe engages in agreement switch, agreeing with features on the Series I agreement probe rather than the absolutive DP. This analysis of agreement switch leaves the absolutive arguments without any φ -licenser, thereby free for A'-movement.

5.5 Discussion

This chapter constitutes the second attempt to connect the inflection of independent clauses with the identical inflection of object A'-extraction contexts.¹⁴ To summarize, I have demonstrated that all A'-movement in Tsimshianic proceeds from a position lacking Series II agreement: extraction is either from an ergative or oblique position that Series II agreement does not target, or otherwise is from a clause with the inflectional properties of an independent clause (for absolutive S and O). O-extraction has the morphology of an independent clause even when a dependent marker is present; S-extraction also lacks Series II agreement.¹⁵

This has driven me to posit an *absolutive* extraction restriction in Tsimshianic – an extraction restriction on the targets of Series II licensing – resulting in anti-agreement. I have proposed that ϕ -complete agreement (here: Series II agreement) freezes an argument for further movement, banning subsequent A'-extraction; this is based on Gallego's (2010) analysis of ϕ -based Freezing for Spanish. I suggest that Freezing on the basis of ϕ -agreement is a parametric alternative to Rizzi and Schlonsky's (2007) Criterial Freezing, which bars arguments in particular *structural* positions from undergoing A'-movement.

In Tsimshianic, the extraction restriction is addressed by inserting the independent-clause Series II probe: this probe agrees indirectly with ϕ -features on a lower verbal head, rather than with an argument. The insertion of this probe is necessary to prevent Series II agreement with an absolutive *wh*-argument, and is therefore required even in the absence of the independent C° that typically licenses it, and irrespective of any dependent markers in the clause. In this way, we are able to explain the appearance of obligatory independent inflection in object extraction contexts, despite its insensitivity to the usual conditions licensing independent inflection. With absolutive arguments going un-licensed by Series II agreement, they are free to extract.¹⁶ All other types of extraction proceed from clauses with dependent-style inflection, strongly suggesting that it is the default situation.

I have no answer as to whether the agreement-switch Series II probe initially originated in the independent clause context or the absolutive A' context; it seems possible to me that either

¹⁴The first attempt is that of Tarpent (1991), who proposed that independent clauses were derived from relativization, i.e. that they are pseudocleft constructions. See section 4.2.1 for some review of Hunt's (1993) rebuttal of this analysis.

¹⁵I do not interpret the S-extraction morpheme as Series II agreement, as it appears in places that Series II does not (such as on the end of the dependent marker *yukw* 'IPFV' (and potentially on the end of other elements, such as *ligi* 'DWID; any, some'; see footnote 4 in this chapter).

¹⁶In discussion of Coast Tsimshian in the next chapter we will see some additional agreement patterns emerge in independent clauses when certain types of arguments (local persons) are absolutive. I suggest this follows from my proposal that absolutive arguments in independent clauses receive no ϕ -licensing. Specifically, it will be proposed that local person arguments in Coast Tsimshian *require* ϕ -licensing. Alternate agreement patterns emerge when local persons are in positions that fail to receive ϕ -agreement.

might have arisen first, and extended to the other context.

5.5.1 Ergative and absolutive extraction restrictions

The proposal that Gitksan exhibits an absolutive extraction restriction may seem unintuitive to anyone familiar with the typical properties of ergative languages (particularly syntactically ergative languages), where a restriction on the extraction of the *ergative* argument is expected. However, ergative extraction restrictions have not typically been diagnosed as Freezing in the sense of Rizzi and Scholnsky (2007). Several prominent analyses of syntactic ergativity propose that absolutive case/agreement in syntactically ergative languages is located high (the equivalent to nominative T-agreement), and that extraction of the ergative argument is blocked due to some locality or intervention issue arising as the absolutive object raises for case (Bittner and Hale 1996a; Aldridge 2004; Coon et al. 2014). Alternately, case-discrimination analyses of syntactic ergativity abstractly equate absolutive and nominative case; ergative and accusative case are lower on an accessibility hierarchy, and in some languages may not be possible targets for agreement or certain types of movement (Deal 2017). Other approaches identify ergative subjects as PPs rather than DPs, and identify a number of reasons that extraction of PP-type ergatives is impossible (Polinsky 2016). That is, ergative extraction restrictions and subject extraction restrictions (in the vein of the anti-agreement or Subject Island Condition literature) have not consistently been linked under the same analytical umbrella.

I suggest that it should not be considered strange for both types of restriction to potentially apply within a single language, particularly under an analysis like mine where absolutive agreement is linked to T/Infl°. That is, ergative arguments and absolutive arguments may both potentially suffer extraction restrictions for independent reasons. This may in fact be the case in the Tsimshianic languages: ergative extraction requires a distinct morphological strategy involving the particle *an*, which Brown (2016), in his analysis of Gitksan ergative extraction, suggests is derived from the nominalizer *an*-.¹⁷ I have no immediate account for the possible restriction on ergative extraction, but it is clearly unrelated to Series II ϕ -agreement, since ergative extraction does not trigger Series II agreement switch.

¹⁷It is quite likely that ergative extraction is only possible where the V-O constituent has undergone predicate nominalization. If this is not true of synchronic ergative extraction, it is certainly true of some earlier stage of the language, and is likely still true of antipassive object extraction, which involves the same *an* morpheme (as discussed by Brown 2016; Brown and Forbes 2018). An example of ergative extraction is given in (49), and an example of antipassive extraction in (50). The potentially nominalized constituent is bracketed.

(49) Naa ant gya'ahl ul?
 naa [an=t gya'a-t =hl ul]
 who [AX=3.I see-3.II =CN bear]
 'Who saw the bear?'

(Brown 2016: 2)

To reiterate the contribution of this chapter in this light: I have proposed that the morphologically tripartite pattern of extraction in Gitksan (setting aside oblique extraction) can be abstractly understood as involving an absolutive extraction restriction, resolved by a shift in the pattern of ϕ -agreement, and an ergative extraction restriction, potentially resolved by nominalization (following Brown 2016). This follows from my analysis of Series II agreement in Infl°. As discussed at length in the literature on ergativity, languages where absolutivity is linked to T/Infl° are more broadly expected to exhibit subject-typical properties (Legate 2008), which may include restrictions on A'-movement.¹⁸

5.5.2 Accessing multiple features

I have also proposed in this section that the Series II probe of a dependent clause consistently copies the features of both transitive arguments, and ϕ -licenses the absolutive O. This is possible in part due to the proposed equidistance of A and O as multiple specifiers of the same projection (as I proposed in Chapter 4 to allow for a ν P-remnant analysis of verb initial order), and in part due to adopting Deal's (2015b) approach to feature interaction with multiple arguments. The Series II agreement probe copies the features of the A argument on its way to the active ϕ -features borne by O. This is so even in Gitksan, where Series II undergoes a nominative-absolutive split: its agreement controller may be either A or O.

Under this analysis, a syntactic relationship is established between the Series II agreement head and both transitive arguments; the features of both A and O are accessible to the Series II probe. Elsewhere in the literature, multiple agreement (via e.g. multiple feature copying, Multiple Agree, or equidistance) has been used to model a variety of phenomena where agreement seems to mediate between the features of two arguments, including portmanteau agreement and Person-Case Constraint (PCC) effects (e.g. Bobaljik and Branigan 2006; Nevins 2007, 2011; Deal 2015b). Gitksan exhibits neither of these specific properties – however, Gitksan Series II agreement does alternate between selecting A or O as its surface controller in the nominal-

- (50) Gwihl an xpts'axws Michael?
 gwi =hl [an-xpts'axw-t =s Michael] =ist?
 what =CN [NMLZ-afraid-3.II =DN Michael] =AFFRM
 'What is Michael afraid of?'

(Brown and Forbes 2018: 9)

Under a nominalization analysis, these are more literally interpreted along such lines as (49) *Who is [the bear's see-er]?* and (50) *What is [Michael's fear]?*

Note also that in (49), Series I agreement is contained within the predicate nominalization directly preceding the nominalizing element *an*. This is expected under my analysis, where Series I agreement appears low in the clausal structure (on ν°), rather than one where it is inserted high (in e.g. C°).

¹⁸Indeed, one of the major diagnostics that Legate (2008) proposes of NOM=ABS languages is that absolutive case should not be assigned in nonfinite clauses. One problem in applying this diagnostic to Gitksan is the lack of a clear finiteness distinction. Doner (to appear) suggests this is not uncommon for V-initial languages.

type split. In the next chapter, I will demonstrate that agreement patterns in neighboring Coast Tsimshian are determined based on the properties of *both* the subject and object of a transitive clause. A multiple-agreement analysis is well suited to accounting for these facts. Thus, while a multiple-agreement model for the Series II probe can be seen as only tangentially motivated for Gitksan itself (I have proposed it mainly on the basis of connecting the agreement switch in independent clauses to the agreement switch of absolutive extraction), its use extends to additional areas.

Chapter 6

The Coast person split via participant licensing

Having developed an analysis of agreement splits in Gitksan, representative of the Interior branch of the Tsimshianic languages, I turn in this chapter to the syntax of Coast Tsimshian (Sm'algyax), representative of the Maritime branch. While the clause-type split in Coast Tsimshian (CT) is largely similar to that of Gitksan and Interior Tsimshianic (IT), being conditioned by exactly the same factors, there is a complex sub-split in CT *independent* clauses that operates on the basis of person features. This allows for extension of the clause-type split analysis from Chapter 4, and further development of the analysis of Series I and II agreement proposed therein.

I first consolidate some background on the CT agreement patterns in section 6.1, including an introduction to all four of its person-marking paradigms, discussion of the clause type split, and a review of agreement patterns in dependent clauses. Section 6.2 presents the agreement patterns found in independent clauses. I identify five different agreement configurations (three transitive, and two intransitive), and demonstrate that the system is split on the basis of person features, including an area of true split-ergativity. In section 6.3, I argue for a reinterpretation of two aspects of Coast Tsimshian grammar that allow for a more cohesive cross-Tsimshianic picture. First, I argue for a unification of two of the four Coast Tsimshian paradigms, making a total of three, on the basis of the CT agreement patterns and recent work by Davis (2018). Second, I discuss the distribution of the CT morpheme cognate to the transitive vowel in the Interior languages, demonstrating that it is not found in all CT independent transitive clauses.

In section 6.4, I propose an analysis of CT agreement following directly from my analysis of the Gitksan clause type split in Chapter 4. To recount, in that chapter I argued that Series II agreement switch from an absolutive alignment in dependent clauses to an ergative alignment in independent clauses is due to *indirect agreement*: agreement with features on another agreement

probe, in this case the Series I ergative agreement probe. In contexts of agreement switch – that is, independent clauses – absolutive arguments do not receive ϕ -agreement or licensing. I demonstrate that this analysis accounts for CT independent clauses that show an identical agreement pattern to Gitksan/IT independent clauses. I argue that the remaining differences, which arise when an absolutive argument is a local person, are the result of an additional *person-licensing requirement* for local persons. This requirement can be satisfied in two ways: a return to the canonical pattern of direct Series II agreement, where absolutives receive ϕ -licensing, or the insertion of an additional agreement probe. I agree that each of these is attested. Finally, I argue that an analysis of Series II agreement as agreeing with both transitive arguments (under Deal’s 2015b multiple feature-copying approach to agreement, as proposed in section 5.3) helps to account for a specific agreement pattern in inverse contexts where a local person object outranks a third-person subject ($3 < 1/2$).

Section 6.5 provides a summative comparison of my analyses of CT and IT agreement, with some notes on the path of language change and on exceptional VOS ordering properties in local-object contexts. Section 6.6 concludes.

6.1 Coast Tsimshian morphosyntactic background

In this section I first present the four Coast Tsimshian agreement paradigms (6.1.1). I then review the properties of the clause-type split (which does not significantly differ from IT) (6.1.2); and the agreement patterns of dependent clauses (6.1.3). Finally, I briefly discuss the nominal connectives that introduce full DP arguments (6.1.4).

6.1.1 Agreement and pronominal paradigms

Coast Tsimshian exhibits not three, but four agreement paradigms, presented in Table 6.1. The three Interior Tsimshianic (= Gitksan, Nisga’a) paradigms are presented for comparison in Table 6.2.¹

¹The descriptive labels given to the Coast Tsimshian paradigms in previous work typically refer to syntactic function (from Boas 1911 and Dunn 1979a, in order: Subjective, Objective, Definite Objective, and Independent; and the recent, improved alternatives by Anderson and Ignace 2008: Ergative, Absolutive, Marked Absolutive, and Independent). However, Coast Tsimshian exhibits a pivoting-ergative clause type split just like Gitksan, somewhat obscuring the association of the paradigms with particular alignments. I therefore gloss each paradigm with the cognate labels of I, II, and III for ease of comparison with the Interior paradigms and their already-established labels used in prior chapters. Following Peterson (2017), the Definite Objective/Marked Absolutive paradigm is glossed as IIIa, and the Independent as IIIb, as both can clearly be morphologically linked to the Interior paradigm of Series III independent pronouns. I argue in section 6.3.1 that these paradigms should actually be understood as a single paradigm in the syntax itself.

	Pre-pred clitics (I, ‘Subjective’)		Suffixes (II, ‘Objective’)		Bound pronouns (IIIa, ‘Definite objective’)		Free pronouns (IIIb, ‘Independent’)	
	SG	PL	SG	PL	SG	PL	SG	PL
1	n	(n) dp	-u	-m	-’nu	-’nm	’nüüyu	’nüüm
2	m	m sm	-n	-sm	-n	-nsm	’nüün	’nüüsm
3		t		-t		–		’niit

Table 6.1: Coast Tsimshian pronominal paradigms (Mulder 1994; Davis 2018)

	Pre-pred clitics (I)		Suffixes (II)		Independent pronouns (III)	
	SG	PL	SG	PL	SG	PL
1	n	(n) dip	-’y	-’m	’nii’y	’nuu’m
2	m	m sim	-n	-si’m	’niin	’nisi’m
3		t	-t	-diit	’nit	’nidiit

Table 6.2: Gitksan person-marking series

We can observe two fundamental differences between the person-marking paradigms of the Coast and Interior varieties. First, as discussed in Chapter 3, there is no third-person number contrast in Coast Tsimshian in any of the paradigms; this contrast was innovated exclusively in the Interior branch with the *-diit* and *’nidiit* forms (bolded). Second, Coast Tsimshian seems to have two reflexes of the Interior Series III pronoun paradigm. The ‘Series IIIb’ set are almost identical to the Interior Series III set (cf. 1SG *’nüüyu* vs. *’nii’y*, 3/3SG *’niit* vs. *’nit*). Both have a transparent *’nii* ~ *’nüü* base, and surface as freestanding words. In addition, Coast Tsimshian has the ‘Series IIIa’ set, which appear bound to the verb stem as suffixes, and seem to be phonologically reduced. The *’nii* ~ *’nüü* base can be detected in the initial *-’n-* of most members of the IIIa paradigm (cf. *-’nu*, *-’nm*, *-nsm*).² Finally, as argued by Davis (2018), there is no third-person member of the reduced Series IIIa paradigm.³

Beyond these deviations and some small phonological differences, the systems are extremely similar: for both the Interior and Coast branches, the Series I clitic paradigm and Series II suffix paradigm are nearly identical, and the Series III set(s) are clearly formed from the Series II suffix attached to a base. The similarities extend to the distribution of these paradigms across the clause type split, as I will discuss shortly, and to the interaction of the third-person Se-

²The *’nii* ~ *’nüü* base seems to have been lost from the second-singular form; its Series II form *-n* and Series IIIa form *-n* are homophonous. This is likely due to additional reduction between the two identical coronal nasal [n] segments (Series IIIb *’nüün* → *-’nn* → *-n*).

³Davis’s (2018) argument is summarized in section 6.3.1. He argues against interpreting this gap as a zero-member of the paradigm; instead, he demonstrates that the third-person member of the Series IIIb paradigm can be used freely in this position instead.

ries II *-t* with enclitic connective determiners, as I will discuss in section 6.1.4. In section 6.3.1, I argue that the distinction between the IIIa and IIIb series is purely morphological, contra a previous assumption that the prosodically bound Series IIIa set is a novel agreement paradigm (Peterson 2017).

6.1.2 Basis of the clause-type split

Coast Tsimshian exhibits a clause-type split nearly identical to that described in earlier chapters for Gitksan, in the Interior branch. Dependent clauses⁴ are seemingly triggered by the presence of dependent-marking elements like CT *yagwa* ‘IPFV’, *la* ‘INCEP’, and *ada* ‘and’ as exemplified in (1) and the following examples. Just as in the Interior branch, all subordinate clauses are dependent, and main clauses are dependent when they contain these markers.

(1) *Dependent clauses (CT)*

- a. Ada k’a t’aat.
ada k’a t’aa-t
 and short.time sit-3.II
 ‘And he sat for a while.’ (Mulder 1994: 101)
- b. Łaa dm łuuntiis Matthew.
laa dm łuuntii-t =s Matthew
 INCEP PROSP angry-3.II =DN Matthew
 ‘Matthew is about to get mad.’ (Mulder 1994: 80)
- c. Łaat ’wiiha’wntu.
laa=t ’wii-ha’w-in-th-u
 INCEP=3.I big-cry.out-CAUS-T-u
 ‘She just made me cry.’ (Sasama 2001: 150)
- d. Yagwa dp babuudn.
yagwa dp babuu-t-n
 IPFV 1PL.I wait.for-T-2SG.II
 ‘We are waiting for you.’ (Mulder 1994: 79)

In the dependent clauses above, the Series II suffixes agree with absolutive arguments (S and O). The pre-predicate Series I clitics exclusively mark transitive subjects (A).

Independent clauses are main clauses which lack the aforementioned preverbal elements. There are two preverbal aspectual elements which do not typically trigger dependent-style morphology: the prospective aspect marker *dm* shown in (2b-c) (identical to IT *dim*), and the marker

⁴The clause-type distinction in the Coast Tsimshian has frequently been referred to as *indicative vs. subjunctive*, following Boas (1911), rather than *independent vs. dependent*. I continue to use the independent/dependent terminology following Rigsby’s (1986) work on Gitksan, given that the split is essentially identical to that observed in the Interior branch.

na shown in (2d-e), typically glossed as past tense (not attested in IT). They are effectively “transparent” for the purposes of clause typing: if these elements are the sole aspectual marker present, as in the following examples, the clause is independent; if a dependent marker is present alongside either of these two elements, the clause is dependent.

(2) *Independent clauses (CT)*

- a. Liimit Kayla da spagaytgyat.
liimi =t Kayla da-t =a spagayt-gyat
sing =DN Kayla OBL-3.II =CN among-people
‘Kayla is singing to the people.’ (Sasama 2001: 42)
- b. Dm gugi’nu.
dm guk -’nu
PROSP cook -1SG.IIIA
‘I’m going to cook (later).’ (Sasama 2001: 68)
- c. Dm algagulu ’lax.
dm algagul-u =a ’lax
PROSP look.for-1SG.II =CN needle
‘I’ll look for the needle.’ (Mulder 1994: 145)
- d. Nah tsüü baask da ganlaak.
na tsüü baask da-t =a ganlaak
PST blow wind OBL-3.II =CN morning
‘The wind was blowing hard this morning.’ (Mulder 1994: 79)
- e. Nah dzabas Dzon waap das Helen.
na dzap-ə-t =s Dzon =a waap da-t =s Helen
PST make-TR-3.II =DN Dzon =CN house OBL-3.II =DN Helen
‘John has built a house for Helen.’ (Mulder 1994: 78)

In the independent clauses above, there are no Series I clitics. The Series II suffixes, where present, mark only ergative arguments. Absolutive arguments surface as Series IIIa pronouns (if pronominal).

As described in Chapter 4, Gitksan independent and dependent clause types are morphologically differentiated in three ways:

1. Agreement pattern (varies between dependent and independent clauses)
2. Vowel on transitive verb stem (independent clauses only)
3. Presence of a dependent marker (dependent clauses only)

These diagnostics extend to Coast Tsimshian. I have just demonstrated the relevance of the third point; in the rest of this section, I focus on the first point: the agreement pattern of each clause type.

In example (3) below, the main clause is independent, and the embedded clause is dependent. Both clauses show a first person acting on a third person, but the paradigms used to index the arguments differ. Specifically, the Series II suffixal paradigm marks the 1SG ergative subject in the independent clause, but the 3SG absolutive object in the dependent clause.

- (3) Dm güüdagut Lucille dzida łan didaalxt.
 dm güüda_x-ə-**u** =t Lucille [dzida ła=n didaalx-**t**]
 PROSP ask-TR-**1SG.II** =DN Lucille [when INCEP=1.I talk.to-**3.II**]
 ‘I’ll ask Lucille when I talk to her.’ (Sasama 2001: 69)

This example illustrates a pattern consistent across the Tsimshianic languages: both the Interior and Coast branches of the Tsimshianic family seem to derive from a core *pivoting-ergative distribution* (Davis 2018), presented in Table 6.3. The Series II suffixes switch their function from ergative in independent clauses, to absolutive in dependent clauses. The remaining set of arguments in either clause type are filled in with different paradigms: Series III for independent absolutives, and Series I for dependent ergatives. This is considered an example of *agreement switch*.

		Independent	Dependent
ERG	A	II	I
ABS	S	III	II
	O	III	II

Table 6.3: The simplified Tsimshianic clause-type split

Both Tsimshianic branches exhibit further sub-splits, based on this common pattern. As discussed in Chapter 3, Gitksan (Interior) contains a nominal-type split within dependent clauses. In Coast Tsimshian, dependent clauses have no sub-split (as I show next). Instead, there is a complex sub-split in independent clauses, on the basis of person features (presented in section 6.2).

6.1.3 Dependent clause agreement

Dependent clauses in Coast Tsimshian have a consistent ergative-absolutive agreement pattern, falling across the Series I clitic paradigm (which references ergative arguments) and the Series II suffix paradigm (which references absolutives). Intransitive clauses such as (4) and (5) consistently exhibit Series II suffixal agreement with the lone S argument.

- (4) Ada k'a t'aat.
 ada k'a t'aa-t
 and short.time sit-3.II
 'And he sat for a while.'
 (Mulder 1994: 101)
- (5) Daxdooyaxsism!
 dəx~dooyaxs-**sm**
 PL~dress.warmly-2PL.II
 'Dress warm you guys!'
 (Sasama 2001: 148)

Transitive clauses such as (6) and (7) consistently show preverbal Series I clitic agreement with the ergative subject, and suffixal Series II agreement with the object. This is the case regardless of the person values of the arguments, or whether they are pronominal or lexical. The examples below demonstrate the ergative I/absolutive II pattern where a first person acts on third person (6), third person acts on first person (7), and in a clause with two third persons (8).

- (6) Dm güüdagut Lucille dzida lan didaalxt.
 dm güüdax-u =t Lucille [dzida la=**n** didaalx-**t**]
 PROSP ask-1SG.II =DN Lucille [when INCEP=**1.I** talk.to-**3.II**]
 'I'll ask Lucille when I talk to her.'
 1A < 3O; (Sasama 2001: 69)
- (7) Łat ts'inslooygm gyat.
la=**t** ts'ins-looyk-**m** gyat
 INCEP=**3.I** away-move.away-**1PL.II** people
 'People are moving away from us.'
 3A < 1O; (Sasama 2001: 151)
- (8) Yagwat lümoomdit Meli.
 yagwa=**t** lümoom-**t** =t Meli
 IPFV=**3.I** help-**3.II** =DN Mary
 'Mary is helping him.'
 3A < 3O; (Bach 2004)

Templates summarizing agreement in CT dependent clauses are given in Table 6.4. We can compare these with similar templates for agreement in IT dependent clauses in Table 6.5, which involves the same paradigms but has two possible transitive agreement patterns, based on the properties of the A argument.

<i>Type</i>		<i>Template</i>			
CT	Intransitive	Dep	Verb-II _S	(DP _S)	
	Transitive	Dep=I _A	Verb-II _O	(DP _A)	(DP _O)

Table 6.4: Summary of CT dependent clause constructions

The Coast Tsimshian transitive agreement frame is identical to Gitksan's Ergative/Absolutive transitive agreement frame. In CT, all clauses including those with full DP ergative arguments

	<i>Type</i>	<i>Template</i>			
IT	Intransitive	Dep	Verb-II _S	(DP _S)	
	Transitive: Erg/Abs	Dep=I _A	Verb-II _O		(DP _O)
	Transitive: Double Erg	Dep=I _A	Verb-II _A	(DP _A)	(III/DP _O)

Table 6.5: Summary of IT dependent clause constructions

use this frame, while Gitksan clauses with full DP ergatives typically take the Double Ergative frame instead.

6.1.4 Connectives

The Tsimshianic ‘connectives’ are morphological markers introducing argument nouns which encliticize to the preceding prosodic unit, in an example of syntax-prosody mismatch. In previous analyses, particularly of Coast Tsimshian, they have been interpreted as case markers (e.g. Baker 2015). In section 2.4, I reviewed Davis and Forbes’s (2015) proposal that connectives in the Interior instead result from adjacency with verbal agreement (building from insights by Hunt 1993), rather than from a syntactic process of case assignment. Davis (2018) argues in even greater detail for the same conclusion for Coast Tsimshian; I review this argument briefly below, in hopes that the reader may better understand the glossing choices I have made for Series II agreement in CT examples throughout.

The set of CT connectives is laid out in Table 6.6. As in the Interior, these are split between common nouns and determinate nouns (personal names and pronouns, some kinship terms, demonstratives). Boas’s (1911) initial description identified elements like *-da* (common) and *-dit* (determinate) as single units; later work identified the [d] of these elements as the Series II third-person agreement suffix *-t* (Peterson 2004; Anderson and Ignace 2008). Upon decomposing Series II agreement from the connective itself, we are left with a single common noun connective *=a* (or *=l*, identical to the IT connective *=hl*, in certain environments), and two determinate connectives *=t* and *=s*.

Common	<i>=a/=l</i>	<i>→ sometimes =da (-t=a)</i>
Determinate 1	<i>=t</i>	<i>→ sometimes =dit (-t=t)</i>
Determinate 2	<i>=s</i>	

Table 6.6: Coast Tsimshian ‘connectives’ (modified from Davis 2018)

What, then, governs the distribution of *=t* versus *=s* for a determinate noun? Davis (2018) demonstrates that Hunt’s (1993) generalizations regarding the distribution of *=s* in Gitksan hold for Coast Tsimshian as well. These generalizations are as follows:

- (9) [The =s connective] is assigned to an NP if and only if:
- it is adjacent to a lexical head, and
 - it is coreferential with the Series II suffix on that head. (Hunt 1993: 200)

That is, when a Series II agreement suffix and an immediately following determinate connective refer to the same nominal, the connective is =s rather than =t. Sequences of /-t_i=t_i/ are realized as /=s/, while sequences of /-t_i=t_j/ are realized as /-dit/.

Davis (2018) arrives at these generalizations by comparing the distribution of the =s connective between CT and IT, which have different patterns of Series II agreement in dependent clauses (as we have already seen). CT and IT differ in which connective is used to introduce the ergative DP of a dependent clause. In CT, an ergative DP in (10a) is introduced with the connective =t, rather than the =s that appears in the IT equivalent in (10b). The third person Series II suffix in CT remains distinct from the following ergative determiner in a coronal stop sequence (/ -t=t/ → -dit), but coalesces into the determiner in IT (/ -t=t/ → -s).

- (10) a. Yagwat ħumoom**dit** Meli.
yagwa=t ħumoom-**t** =**t** Meli
IPFV=3.I help-3.II =DN Mary
‘Mary is helping him.’ (Coast; Bach 2004)
- b. Yukwt hlimoos Mary (‘nit).
yukw=t hlimoo-**t** =**s** Mary (‘nit)
IPFV=3.I help-3.II =DN Mary (3.III)
‘Mary is helping him.’ (Interior; Bach 2004)

This strongly suggests that the target of Series II agreement differs between the two varieties. For CT in (10a), agreement is with the object; for IT in (10b), agreement is with the adjacent ergative subject DP.

For the connectives of object DPs, the two varieties demonstrate identical behavior. The object appears with the =s connective when it is adjacent to the Series II agreement suffix, as in (11), and with the =t connective when it is not adjacent to the agreement suffix (i.e. when an ergative DP intervenes), as in (12).

- (11) a. Ła dmt ħimooms Doug.
ła dm=t ħimoom-**t** =**s** Doug
INCEP PROSP=3.I help-3.II =DN Doug
‘S/he is about to help Doug.’ (Coast; Anderson and Ignace 2008)
- b. Neediit gya’as Michael.
nee=dii=t gya’a-**t** =**s** Michael
NEG=FOC=3.I see-3.II =DN Michael
‘She didn’t see Michael.’ (Interior; Davis 2018: 21)

- (12) a. Yagwat yaatsdit Papat Kayla.
 yagwa=t yaats-t =t Papa =t Kayla
 IPFV=3.I hit-3.II =DN Papa =DN Kayla
 ‘Papa is spanking Kayla.’ (Coast; Sasama 2001: 99)
- b. Neediit gya’as Gidi t Michael.
 nee=dii=t gya’a-t =s Gidi =t Michael
 NEG=FOC=3.I see-3.II =s Katie =DN Michael
 ‘Katie didn’t see Michael.’ (Interior; (Davis 2018: 21))

The distribution of the connectives in CT versus IT is summarized in Table 6.7. In CT, the =s connective appears on a DP only when it is both absolutive and adjacent to the verb. In IT, the =s connective appears on any DP adjacent to the verb, even if it is ergative. I refer the reader directly to Davis (2018) for more thorough description and analysis.

	<i>Coast Tsimshian (CT)</i>			<i>Gitksan (IT)</i>		
	S	A	O	S	A	O
V-S	s			s		
V-A		t			s	
V-A-O		t	t		s	t
V-O			s			s

Table 6.7: Dependent clause connectives in CT versus IT (modified from Davis 2018)

In sum, the complex pattern regarding the surfacing of the connective determiners as *t* versus *s* is best explained via the following generalizations (Davis and Forbes 2015; Davis 2018):

1. Across Tsimshianic, a Series II verbal suffix *-t* (third person) coalesces with a following determinate connective =*t* on a nominal if and only if the suffix agrees with that same nominal, producing =*s*.⁵

⁵In general, when a Series II third-person *-t* refers to the immediately adjacent noun, that *-t* suffix is deleted, regardless of whether the following connective enclitic is a determinate =*t* or common =*a*. This is illustrated in the following dependent clause examples, where all expected intransitive Series II agreement (on the verb in (13) and (14), and also on the preposition in (14)) fails to surface.

- (13) Ła dzaga gyiik.
 ła dzak-t =a gyiik
 INCEP die-3.II =CN fly
 ‘The fly is dead.’ (Sasama 2001: 98)
- (14) Ła luyeltgas Jodi da Txałgiw.
 ła lu-yeltk-t =t Jodi da-t =a Txałgiw
 INCEP in-return-3.II =DN Jodi PREP-3.II =CN Hartley.Bay
 ‘Jodi came back to Hartley Bay.’ (Sasama 2001: 98)

2. Coast and Interior Tsimshianic have a different Series II agreement pattern in dependent clauses. Coast: *absolute*. Interior: *split absolute-nominative* (based on nominal type; DP and 3PL = nominative, other pronouns = absolute).

The different patterns of suffix-connective coalescence for DP arguments in each language therefore follow directly from independently-attested differences in their Series II agreement distribution, identifiable when arguments are pronominal.

6.2 Independent clauses

Coast Tsimshian agreement is most complex in the independent clause type, where no preverbal auxiliary or operator is present. The Maritime Tsimshianic languages⁶ exhibit a unique split in this clause type not attested in the Interior branch, based on the person features of both the ergative and absolute arguments. As I will show, both the *absolute* and the *relative* person features of the arguments (as if ordered on a hierarchy) are relevant to determining agreement.

In this section, I discuss four contexts of interest. First, in section 6.2.1, are ALL-LOCAL clauses, or *you-and-me* forms. These are transitive clauses where both subject and object are a first or second person pronominal. Second, in section 6.2.2, are 3RD OBJECT forms. These are transitive clauses where the object is a third person; the subject may be any person. Third, in section 6.2.3, are LOCAL OBJECT forms. These are transitive clauses where the subject is third person and the object is a first or second person pronominal, so in some respect can be considered “inverse” contexts. Finally, in section 6.2.4 I consider INTRANSITIVE clauses.⁷ Each of these contexts exhibits a distinct combination of the four paradigms in realizing the features of A and O, presented in Table 6.8. There is some optionality with respect to the agreement possible in intransitives.

As is clear from the characterization of the four contexts, the choice of paradigms is largely based on the person features of the arguments involved. I describe each below.

While in the Interior deletion of the Series II suffix can be understood in something of a phonological sense, given that it occurs before the consonants [t, s, ɬ] – and indeed, Tarpent (1987b: 22) analyzes this process in Nisga’a as phonological deaffrication (see section 2.4.3) – this is clearly not the case in Coast Tsimshian. It would be remarkably unusual for a *phonological* rule to reduce the sequence /-t=a/ to zero, as occurs for the argument of the preposition in (16). While this process may have diachronically had its roots in a phonological deaffrication or reduction process, in Coast Tsimshian it has clearly morphologized or grammaticalized.

⁶The few secondary sources on Sgüüxs (Southern Tsimshian) are more limited in their coverage, but the data I have seen is consistent with the Coast Tsimshian pattern (Dunn 1990b, 1991).

⁷Since intransitive clauses cannot be clearly patterned with any of the transitive contexts – as some reference the features of two arguments – I consider them separately; this is so as to keep from creating the illusion of an ergative/absolute or nominative/accusative distribution. As none of the transitive contexts seems immediately ‘canonical’ for comparison with the intransitive pattern, neither distributional label is immediately appropriate.

	Dependent	Independent			
		LOCAL/LOCAL	3RD OBJ	LOCAL OBJ	INTRANS
Series I (clitic)	A	A		A	(S)
Series II (suffix)	O, S	O	A		
Series IIIa (bound)				O	
Series IIIb (free)			O		S

Table 6.8: CT agreement distributions across clause types (full)

6.2.1 All-Local transitives

In independent ALL-LOCAL clauses, where both arguments are first or second persons, the pattern of agreement is identical to what is attested in a CT dependent clause. Ergative arguments are marked with the Series I ergative clitic, and absolutive objects are marked by a Series II suffix on the verb, as in (15).

(15) LOCAL/LOCAL: $I_A < II_O$

- a. Nm *hümoomsm.*
 n=dm *hümoom-sm*
 1.I=PROSP help-2PL.II
 ‘I’ll help you (pl).’

(Mulder 1994: 57)

- b. Ma *anoogu.*
 ma= *anook-u*
 2.I= like-1SG.II
 ‘You like me.’

(Sasama 2001: 79)

This marks a major departure from the agreement pattern of IT independent clauses, where Series I agreement is never found. It furthermore marks a dissociation between Series I agreement and the presence of the dependent marker itself; the dependent marker in CT cannot be viewed as the sole trigger or conditioning factor for the appearance of Series I agreement.

6.2.2 3rd-Object transitives

Coast Tsimshian 3RD-PERSON OBJECT clauses correspond to the standard pattern for IT independent clauses. Here, where the transitive object is a third person, Series I clitic agreement disappears, and the Series II verbal suffix pivots to index the ergative subject. Typically, examples of this clause type involve a dropped (*pro*) object, as is the case for both sentences in (16a), or a DP object, as in (16b).

(16) 3RD OBJECT: II_A < IIIb_O

- a. Na anoog-**am**.
 PST like-1PL.II
 ‘We used to like him/her.’ (Sasama 2001: 150)
- b. Anoog-**u** =t Dzon.
 like-1SG.II =DN John
 ‘I like John.’ (Sasama 2001: 57)

A pronominal third-person object may also be realized as a full independent pronoun of the Series IIIb paradigm (*’niit*), as shown in (18). I assume that this is the standard paradigm for objects in this context, but that – identically to Gitksan – third-person pronouns in Coast Tsimshian may be dropped if contextually salient.⁸

- (18) Nah limoomu(t *’niit*).
 na limoom-**u** (=t *’niit*)
 PST help-1SG.II (=DN 3.IIIB)
 ‘I will help him/her.’ (Davis 2018: 35)

⁸There is inconsistency in the literature regarding what morpheme is used for pronominal objects in this context, and furthermore what paradigm that morpheme belongs to. Recently, Peterson (2017) contends that the morpheme used in these contexts is a suffix *-t*, and interprets this as a Series II verbal suffix. In contrast, Dunn (1979b) classifies the *-t* as a member of the bound Series IIIa pronominal paradigm. Both of these analyses are based on examples like those in (17):

- (17) a. Ap’ax-d-u.
 ap’ax-**t**-u
 remember-3??-1SG.II
 ‘I remember him.’ (Dunn 1979b: 225)
- b. Dm waalut, dayaga awta.
 dm waal-u-**t** daya =ga awta
 PROSP do-1SG.II-3?? QUOT.3 =CN porcupine
 “‘I will do it,’ said the porcupine.” (Mulder 1994: 58)

I instead assume that the realization of third-person objects is as zero or *’niit*, following Anderson and Ignace (2008) and Davis (2018), for the following reasons. First, their fieldwork (as well as Sasama’s body of fieldwork) consistently lacks a *-t* morpheme in these contexts. Second, where the morpheme *-t* appears, it can be plausibly reinterpreted: in (17a) the *-t* can be analyzed instead as a transitive marker (Sasama 2001) or applicative (Peterson 2006b), as argued in detail by Sasama (2001: 141) and Davis (2018), cognate with the morpheme ‘big T’ (glossed as ‘T’) that appears on certain transitive or derived predicates. The *-t* in (17b) is somewhat more difficult to explain, but I suggest that where it appears in earlier texts it is either a) a transcription error, or b) the connective *=t* of a following pronoun *’niit* (as in (18)), where the pronoun may itself have been dropped or interpreted as part of its own prosodic phrase (perhaps as in apposition; Boas 1911 interprets these pronouns as appositives). This allows us to maintain a simple generalization consistent with IT, that the relevant pronominal paradigm in this context is Series IIIb independent pronouns, which freely drop. Alternatively, as discussed by Davis (2018), the possibility of Series IIIb *’niit* in this context would atypically involve the co-occurrence of Series II/IIIa agreement and a full pronoun, or free variation between Series II/IIIa and a full pronoun.

The infrequency of full third-person pronominals in the data aside, recently elicited data is clear: this context seems to clearly mirror that of IT independent transitive clauses, with the Series II suffix marking the ergative A, and objects receiving no agreement. In CT, this agreement pattern appears to be conditioned by the presence of a third-person object.

6.2.3 Local-Object transitives

The final transitive context we will examine are instances of LOCAL OBJECTS, which participate in a third transitive agreement pattern. In contrast with ALL-LOCAL clauses, here the object is the only local person in the clause; the subject is third-person. For this reason, these clauses may also be described as *inverse* (assuming a hierarchy where only 1/2 and 3 are distinguished).

The agreement pattern characteristic of this context has no correlate in Interior Tsimshianic, and notably is the only transitive context lacking Series II suffixal agreement. As demonstrated in (19), the third-person subject is marked by a Series I preverbal clitic *t*, and the local-person object is realized with the Series IIIa suffixal paradigm unique to Coast Tsimshian.

(19) LOCAL-O (INVERSE): $I_A < IIIa_O$

- a. T ap'aga'nu.
 t ap'a_x-T ='**nu**
 3.I remember-T =1SG.IIIA
 'He remembered me.' (Dunn 1979a: 225)
- b. T waayi'nu haasit.
 t waay ='**nu** haas-it.
 3.I find =1SG.IIIA dog-DEM
 'The dog found me.' (Mulder 1994: 58)

Because this pattern is used for instances of local-person objects, the object is always pronominal. The ergative subject may either be pronominal or a full DP. If it is a lexical DP, as in (19b), then the DP follows the Series IIIa object morpheme.

6.2.4 Intransitives

Finally, we here examine the agreement pattern of intransitive independent clauses. There are three possible ways of marking an intransitive S argument. The first two are exemplified in (20). A third person S, as in (20a), is optionally marked by an independent Series IIb pronoun. A local person S, as in (20b), is marked with a bound Series IIIa pronoun.

(20) INTRANSITIVE: IIIa (1/2) or IIIb (3)

- a. Dm 'yaga-yaa(t 'niit).
 dm 'yaga-yaa (=t 'niit)
 PROSP down-go (=DN 3.IIB)
 'S/he will walk down.' (Davis 2018: 33)

- b. Dm k'yeexga'nu.
 dm k'yeex-k ='nu
 PROSP run.away-INTR =1SG.IIIA
 'I am going to run away.' (Mulder 1994: 57)

In addition, as shown in (21), a Series I clitic may appear to index the S argument (typically when it is a local person) in addition to the Series IIIa element.

(21) INTRANSITIVE: (I)+IIIa

- Nam siipginsm.
 na=**m** siip-k =**nsm**.
 PST=2.I sick-INTR =2PL.IIIA
 'You (pl) were sick.' (Sasama 2001: 78)

This marks the first context we have seen in our exploration of Tsimshianic agreement where a Series I clitic indexes something other than an ergative argument. This is also the first time we have seen *variable* Series I agreement. Different factors have been cited in the CT literature as conditioning Series I doubling in this context, including emphasis (Boas 1911), aspect (Sasama 2001), and/or person. Davis (2018) notes that usage varies across speakers, but appears to be primarily conditioned by two cross-classifying factors: the choice of aspect marker (*na* 'PST' > *dm* 'PROSP' > Ø) and the person of the S argument (1 > 2 > 3).⁹

Regardless, it appears that the primary marker of an independent clause S argument is with the Series IIIa or IIIb sets, which falls parallel to IT independent clauses. Third person IIIb pronouns appear optionally, as in (20a); local person Series IIIa pronouns from (20b) or (21), suffixed to the predicate, are obligatory. Recall from section 2.5 that in IT, the third-person singular/neutral pronoun *'nit* may be dropped, but all other Series III pronouns are obligatory. The CT data therefore demonstrates an identical pattern.

⁹The intrusion of Series I agreement into intransitive contexts, assuming that this is a CT innovation, marks the first instance of what we might be able to consider true split-ergativity in the Tsimshianic family (rather than "pivoting" persistent ergativity), where ergative A and intransitive S arguments pattern together in contrast with O. It is a matter of future research what precisely conditions the nominative-ergative split; sociolinguistic or corpus-based analysis might prove insightful in this area.

6.2.5 Summary

This section has illustrated five attested agreement patterns in Coast Tsimshian independent clauses, with alternations triggered by the transitivity of the clause and the features of one or both arguments.

In clauses where both arguments are local, Series I clitics mark the ergative and Series II suffixes mark the object, just as in a dependent clause, but with no dependent marker. In clauses where the object is a third person, Series I clitics are absent. The ergative subject (which may be any person) is marked with a Series II suffix, and the third-person object is realized as an independent Series IIIb pronoun. In clauses where only the object is a local person, a Series I clitic marks the ergative, but the local object is realized with a Series IIIa bound pronoun, suffixed to the verb. Series II suffixes are absent. In intransitive clauses, the sole argument is realized as a bound Series IIIa pronoun if it is local, and as a Series IIIb full pronoun if it is third person. The sole argument may also be doubly-marked by a Series I clitic, with the likelihood of such marking increasing if it is a local person or if certain aspectual markers appear in the clause. These patterns are summarized in Table 6.9.

	Dependent	Independent			
		LOCAL/LOCAL	3RD OBJ	LOCAL OBJ	INTRANS
Series I (clitic)	A	A		A	(S)
Series II (suffix)	O, S	O	A		
Series IIIa (bound)				O	
Series IIIb (free)			O		S

Table 6.9: CT agreement distributions across clause types (again)

We can draw some generalizations across these contexts regarding the conditioning factors for the different types of agreement. First, whenever the object is a local person, a Series I clitic is present, and indexes the ergative subject. If the object is local but at the same time the subject is not, then the Series II suffix fails to appear at all; otherwise the Series II agreement controller is determined based on the person features of the object. If the object is local, the Series II suffix agrees with it; if the object is third person, the Series II suffix agrees with the subject instead.

We can furthermore contrast this picture of Coast Tsimshian independent clauses with that of Interior Tsimshianic, which is much simpler in this context. The Interior Tsimshianic patterns are presented in Table 6.10.

Unlike Coast Tsimshian, Interior Tsimshianic only has a single transitive agreement pattern in the independent clause type: the Series II suffixes mark the ergative and the object is a

	Dependent	Dependent (with DP/3PL A)	Independent
Series I (clitic)	A	A	
Series II (suffix)	S, O	A, S	A
Series III (pronoun)		O	S, O

Table 6.10: IT agreement distributions across clause types

Series III pronoun. This corresponds to Coast Tsimshian’s “3RD OBJECT” pattern – the same set of agreement markers is used when the transitive object is third person. Agreement in Coast Tsimshian independent clauses is conditioned in a major way by the person features of both subject and object. We can refer to this as a *person sensitivity* or a *person split*.¹⁰

Because the agreement pattern of the Interior varieties only uses Series II and Series III, we can also see a second notable difference in the behavior of the Series I clitic paradigm in particular. It is entirely absent from Interior independent clauses, but is somewhat regularly present in the Coast contexts. Coast Tsimshian has even developed Series I in intransitive clauses to mark S arguments – this is a major departure from its previously consistent ergative distribution, and marks the beginning of a true split-ergative pattern. Unlike the Interior languages, the Coast

¹⁰Although this best characterizes the majority of the data I have found, there are a small number of deviating examples which might suggest an even more extreme type of split on the basis of a direct/inverse relation between subject and object, in accordance with a $1>2>3$ hierarchy. I have found two examples where the 3rd-Object pattern (as from (16)) is used in a $1<2$ context where the All-Local pattern would be expected:

- (22) a. Anoogut ’nüün.
 anook-ə-u =t ’nüün
 like-TR-1SG.II =DN 2SG.IIIB
 ‘I like you.’ (Sasama 2001: 57)
- b. T’ooyaxsut ’nüün.
 t’ooyaxs-ə-u =t ’nüün
 thank-TR-1SG.II =DN 2SG.IIIB
 ‘Thank you; I thank you.’ (Sasama 2001: 224)

In addition, there is one example where a $2<1$ context exhibits a Local-Object pattern (as in (19)), rather than the All-Local pattern:

- (23) M ay’ooyi’nm.
 m= ’ay~’ooy =’nm
 2.I= PL~hit =1PL.IIIA
 ‘You have hit us.’ (Boas 1911: 385)

It’s unclear whether this additional complexity indicates a change in progress, or if it is the result of otherwise stable variation between speakers. Alternately, this data may suggest an even more complex interaction between persons, or potentially also number. I leave this issue for future data collection and investigation.

Tsimshian Series I clitics are able to mark subjects of both transitive or intransitive clauses. Where the Series I clitics can extend to mark an intransitive subject, their distribution becomes nominative. This is likely a recent innovation of Coast Tsimshian, and marks a development to the crosslinguistically typical *split ergative-nominative* pattern. If intransitive Series I marking is triggered by a local S argument, it could be characterized as person-based split ergativity; if it is triggered by a particular type of aspect marked by *dm* ‘PROSP’ and *na* ‘PST’, then it could be characterized as tense- or aspect-based split ergativity. As discussed by Davis (2018), both factors seem to currently play a role. Further documentation on this point is required to pursue the issue further.

Having presented the basic distributions of each of the four Coast Tsimshian paradigms in the four independent clause agreement patterns, I argue in the the next section for further refinement of this picture.

6.3 Cross-Tsimshianic refinements

In this section I discuss two questions that arise upon comparing this data from Coast Tsimshian with the Interior Tsimshianic system. The first is: *how do the Series IIIa and Series IIIb paradigms differ?* The IT system is quite complex even with three paradigms; a fourth adds an additional level of complexity seemingly without functional or interpretive benefit. I assess the distribution of the Series IIIa and IIIb paradigms, and ultimately propose that they do *not* formally differ, contra an earlier assumption that the additional paradigm was indicative of an additional type of agreement (Peterson 2017). Instead, I propose that this split derives exclusively from a prosodic difference between strong pronouns and weak verb-adjacent pronouns.

The second question I address in this section is: *where is the cognate of the IT transitive vowel?* The transitive vowel is an important element of the IT clause type split; in this section I address its cognate distribution in CT. Although differences in vowel epenthesis and verb-final morphology make the distribution of the CT transitive-vowel-cognate unclear, I am able to present concrete evidence that the vowel is present in only some independent transitive contexts. Specifically, I demonstrate that the transitive vowel fails to appear in LOCAL OBJECT contexts where Series I agreement is present. This supports a cross-Tsimshianic generalization that the transitive vowel and Series I agreement are in complementary distribution, and is consistent with the analysis in Chapter 4 that these two elements are the same abstract syntactic object. This will ultimately allow me to extend my analysis of the clause type split to the CT patterns, later in the chapter.

6.3.1 Combining the IIIa and IIIb paradigms

Description in the previous sections has assumed that Coast and Interior Tsimshianic fundamentally differ in their inventory of pronominal markers: Coast Tsimshian has *four* person paradigms, while Interior Tsimshianic only has three. This makes Coast Tsimshian independent clauses somewhat more complicated than those of Interior Tsimshianic in two respects: CT has a person split while IT does not, and CT has more paradigms with which to realize its arguments.

If the Series IIIa bound forms (e.g. 1SG - *'nu*) and the Series IIIb independent forms (e.g. 1SG *'nüüyu*) truly differ, we must inquire into the nature of this difference. Two previous analyses link the suffixal Series IIIa paradigm to *agreement*: Peterson (2017) suggests that the bound Series IIIa forms are agreement while the independent Series IIIb forms are true pronouns, and Brown (2016) proposes that the bound Series IIIa are (absolutive) pronouns formally licensed via a relationship with T, while the independent Series IIIb are default or repair forms generated when no agreement has occurred. I propose in contrast that the Series IIIa and Series IIIb paradigms do *not* formally differ. In this section, I argue that the difference between the two sets is strictly morphological: the suffixal Series IIIa forms are a set of prosodically weak or cliticized forms which have developed specifically for first and second person pronouns adjacent to the verb.

Templates for Coast Tsimshian agreement in the four contexts discussed in the previous section are given in Table 6.11.

	I=	Verb	-II	-IIIa	(IIIb)
Local/Local	Ag	Verb	-Obj		
3rd Obj (Direct)		Verb	-Ag		Obj ₃
Local Obj (Inverse)	Ag	Verb		-Obj _{1/2}	
Intransitive	(S)	Verb		-S _{1/2}	S ₃

Table 6.11: Realization of CT arguments by context

The independent Series IIIb pronouns are used to represent third-person O arguments in the 3RD OBJECT context, and to represent third-person S arguments in the INTRANSITIVE context. The bound Series IIIa suffixes are used to represent local-person O arguments in the LOCAL OBJECT context, and to represent local-person S arguments in the INTRANSITIVE context. Both of these situations are those where Series II marking is either absent (LOCAL OBJECT or INTRANSITIVE) or marking another argument (3RD OBJECT). From this, we can therefore draw two generalizations:

1. The combined distribution of the Series IIIa and IIIb paradigms does not overlap with

Series II agreement; they are in complementary distribution.

2. The Series IIIa and IIIb paradigms themselves are in complementary distribution. Series IIIa (bound/suffixal) is used for first and second persons, and Series IIIb (independent) for third persons.

The first generalization holds across the Tsimshianic languages. In the Interior varieties like Gitksan, if an argument receives Series II agreement, it is realized as a *pro*, never as an overt Series III pronoun. Conversely, an argument that may surface in a Series III pronominal form is never doubled by Series II agreement. Doubling is attested with other paradigms: in Coast Tsimshian, for example, we find instances of Series I doubling Series IIIa forms in intransitives, and in Gitksan we find Series I and Series II doubling up to agree with the same argument.

Davis (2018) demonstrates that the Series IIIa forms and Series IIIb forms cannot co-occur either; they are strictly complementary. A Series IIIa suffix on the verb cannot be used in conjunction with a full Series IIIb pronoun, as in (24).

- (24) a. Dm 'yaga-yaa'nu.
 dm 'yaga-yaa = 'nu
 PROSP down-go = 1SG.IIIA
 'I will walk down.'
- b. *dm 'yaga-yaa = 'nu =t 'nüüyu
 PROSP down-go = 1SG.IIIA =DN 1SG.IIIB

(Davis 2018: 32)

He then points out the fact that for third persons, a full Series IIIb pronoun *can* occur in this position.

- (25) a. Dm 'yaga-yaa.
 dm 'yaga-yaa *pro*
 PROSP down-go *pro*
 'S/he will walk down.'
- b. Dm 'yaga-yaat 'niit.
 dm 'yaga-yaa =t 'niit
 PROSP down-go =DN 3.IIIB
 'S/he will walk down.'

(Davis 2018: 33)

To maintain a generalization of complementarity between Series IIIa and Series IIIb, Davis (2018) argues that there is no zero-element for the third person in the Series IIIa paradigm. The paradigm simply has a gap for third persons; this gap allows a Series IIIb pronoun to be optionally used instead.

Why should there be a paradigm gap for the bound Series IIIa set? I propose that this set of suffixal elements is an innovative paradigm of *prosodically reduced* forms, which specifically occur adjacent to the verb.¹¹ Third person *'niit* alone fails to develop a prosodically reduced form because, just as in Gitksan, it alone already has the ability to drop when contextually salient. Under a morphological analysis of the Series IIIa paradigm as *prosodically reduced Series IIIb pronouns*, the third-person gap in the Series IIIa paradigm can be directly linked to the independent availability of third-person *pro*-drop. There is no reduced Series IIIa third-person form because the Series IIIb third-person form reduces to zero.

In sum, third-person *'niit* can drop freely when contextually salient, regardless of linear position. First- and second-person pronouns cannot drop, but are always immediately adjacent to the verb, and have developed what I suggest is a prosodic clitic form in that environment.¹² The suffixal Series IIIa pronouns can therefore be characterized as immediately postverbal pronominal forms used specifically for local persons. I suggest that they can be understood as a set of ‘weak’ cliticized pronouns. We can therefore contrast them with the ‘strong’ independent pronouns of Series IIIb, as in Table 6.12.

	Pre-pred clitics (I)		Suffixes (II)		Weak pronouns (IIIa)		Strong pronouns (IIIb)	
	SG	PL	SG	PL	SG	PL	SG	PL
1	n	(n) dp	-u	-m	-’nu	-’nm	’nüüyu	’nüüm
2	m	m sm	-n	-sm	-n	-nsm	’nüün	’nüüsm
3	t		-t		—		’niit	

Table 6.12: Coast Tsimshian pronominal paradigms, revised

¹¹ Recall that local persons in S or O position are always verb-adjacent: local S arguments in intransitives are the sole argument, neighboring the verb stem, and local O arguments in LOCAL OBJECT configurations with a DP subject always appear closer to the verb than the subject, in a VOS order as demonstrated in (26).

(26) T waayi’nu haasit.
t waay =’**nu** haas-it.
3.I find =1SG.IIIA dog-DEM
‘The dog found me.’

(Mulder 1994: 58)

I discuss VOS ordering for local persons in section 6.5.

¹² Series IIIa elements have exclusively been described as ‘suffixes’ in the Tsimshianic literature, with the term ‘clitic’ being reserved for elements with more variable sites of attachment such as the connective articles and Series I morphemes. The debate regarding how to differentiate suffixes and clitics goes back to Zwicky and Pullum (1983). Under the tradition of Distributed Morphology, these terms are purely descriptive. There is no formal difference between a suffix and a clitic – both prosodically attach to another word – so in using the term ‘cliticize’ for the Series IIIa elements I do not see myself as recharacterizing them in any major way. It remains the case that Series IIIa elements only attach to the verb. However, it is perhaps suggestive that they do so outside of all other verbal morphology, and may only be nested inside other descriptive ‘clitics’ (i.e. the nominal connectives).

ment, given that in the 3RD OBJECT (or INVERSE) contexts, the local object is moved into a VOS order. Such a shift in word order, combined with the fact that the shifted argument is realized as a suffix, could indeed be understood as the result of an agreement operation: perhaps the probe reflects the ϕ -features of a pronoun it agrees with, or otherwise *moves* a DP it agrees with to a higher position, closer to the verb. However, recall from section 3.3.2 that the Interior languages exhibit the same VOS order with local person objects in these inverse contexts. The Interior languages do not have a special IIIa form for these verb-adjacent objects, as demonstrated in (32a), where a full Series III pronoun is used.

(32) INTERIOR (GITKSAN): VOS \rightarrow VSO

- a. Hlimooyit 'nuu'm t Mary.
 hlimoo-ə-t 'nuu'm t Mary
 help-TR-3.II **1PL.III** DN Mary
 'Mary helped us.' *Conservative*
- b. Hlimooyis Mary 'nuu'm.
 hlimoo-ə-t =s Mary 'nuu'm.
 help-TR-3.II =DN Mary **1PL.III**
 'Mary helped us.' *Innovative*

(Rigsby 1986: 263-4)

An explanation for the rearrangement of local person objects into VOS order is independently required across the Tsimshianic family, and cannot be directly associated with the development of an additional pronominal paradigm in Coast Tsimshian. I present such an analysis in section 6.5.

Brown (2016) suggests a related analysis for the Coast Tsimshian paradigms: he states that the CT Series IIIa bound forms can be analyzed as absolutive pronouns licensed by agreement with T exclusively in independent clauses, while full Series IIIb forms are default realizations of pronouns when no T-agreement has occurred, typically in fronted positions. Based on the distribution of Series IIIa versus Series IIIb pronouns within independent clauses, the answer cannot be so simple.

We have observed that third persons have no distinct Series IIIa form; where local persons surface as bound Series IIIa pronouns, third persons surface as Series IIIb pronouns instead, or are null. If the Series IIIa forms were developed as a result of absolutive case licensing, it is curious why third person absolutives alone do not have a distinct Series IIIa 'absolutive' form. The third-person gap in the Series IIIa paradigm remains coincidental, and cannot be directly related to their ability to surface as null pronouns.

Alternately, one might suggest that the zero-realization for third persons is the absolutive form licensed by agreement with T. However, the zero-form and full Series IIIb pronoun al-

ternate freely in absolutive position (seemingly based on emphasis); it is unclear to me why an argument in absolutive position would alternate freely in and out of its absolutive form. For local persons, recall that we also find Series IIIb full forms in some nominal predicate and equative contexts, such as (33) (repeated from (29)).

- (33) a. Fumikot 'nüüyu.
 Fumiko =t 'nüüyu
 Fumiko =DN 1SG.IIIB
 'I'm Fumiko.' (Sasama 2001: 40)
- b. Łgu ts'uusgm wütsiin 'nüüyu.
 łgu ts'uusk-m wütsiin 'nüüyu
 little small-ATTR mouse 1SG.IIIB
 'I am a very little mouse.' (Mulder 1994: 46)

These sentences would still presumably involve absolutive case-licensing by T, properties of the inflectional domain remaining consistent regardless of the type of predication, and so Brown (2016) would predict that the Series IIIa form *-nu* should be used instead. My own account predicts alternations between Series IIIa and IIIb forms.

In sum, in this section I have argued that Coast Tsimshian can be analyzed identically to the Interior Tsimshianic languages as having two sets of agreement paradigms (Series I clitics and Series II suffixes) and a single set of pronouns. Coast Tsimshian's sole innovation was of a set of weak clitic pronouns for local person arguments adjacent to the verb (Series IIIa bound pronouns); these pronouns have an identical distribution across independent clauses and differ only in their person value. In order to better understand the distribution of all three paradigms, I therefore condense Series IIIa and IIIb into a single pronominal Series III in Table 6.13.

	Dependent	Independent			
		LOCAL	DIRECT	INVERSE	INTRANS
Series I (clitic)	A	A		A	(S)
Series II (suffix)	O, S	O	A		
Series III (pronoun)			O	O	S

Table 6.13: CT agreement distributions across clause types (Series III compressed)

This somewhat simplifies the picture of Coast Tsimshian person-marking. In dependent clauses, there is an ergative/absolutive pattern across the Series I clitics and Series II suffixes. In independent clauses, there is a person split: where there is a local-person object, then Series II agreement either tracks that object (if both arguments are local) or fails to appear entirely (otherwise). The ergative subject is indexed by the Series I clitics. Where there is a third-person

object, Series I agreement is unavailable. In such a circumstance, the ergative subject is marked by Series II suffixal agreement. All other arguments not marked by agreement, including intransitives and inverse objects, are realized as Series III pronouns.

The (likely innovative) appearance of the Series I clitics in intransitives, doubling a Series III pronoun, marks the beginning of true split ergativity: the typically ergative Series I element extends its context of use to intransitives, and now has a nominative distribution. Given that this extension is to mark local persons, we can consider this a person-split. But the rest of the pattern, specifically the behavior of Series II, is *also* like a person-split, albeit operative only in transitive clauses. When both arguments are local, Series II agrees with the object. Otherwise, Series II agrees with the ergative subject. The stand-out case is that of LOCAL OBJECT contexts (specifically 3<1 and 3<2 contexts, which we may refer to as ‘inverse’ contexts), where there is no Series II agreement at all.

6.3.2 Notes on the distribution of transitive schwa

Here, I demonstrate that the transitive vowel present in independent transitive clauses in IT, as discussed in detail in in section 4.1.1.2, can be identified in Coast Tsimshian independent clauses as well. However, the distribution of the transitive vowel is more restricted in Coast Tsimshian independent clauses, varying as a function of what agreement pattern is being used in the sentence.

The transitive vowel is present in 3RD OBJECT clauses, as demonstrated in (34).

- (34) Nah dzabas Dzon waap das Helen.
 na dzap-ə-t =s Dzon =a waap da-t =s Helen
 PST make-TR-3.II =DN Dzon =CN house OBL-3.II =DN Helen
 ‘John has built a house for Helen.’ (Mulder 1994: 78)

This type of example, with a transitive schwa and an ergative pattern for Series II suffixal agreement, is directly cognate to transitive independent inflection in IT.

The transitive schwa, a morpheme consisting of a single vowel with no underlying quality (all vowel quality is derived via place assimilation from neighboring low or rounded consonants) is subject to phonological constraints which frequently obscure it on the surface, particularly near sonorants. Some of these obscuring conditions in IT include proximity to a sonorant and/or a stressed syllable; in CT, there are additional environments that may trigger schwa-epenthesis, making it doubly difficult to pin down the distribution of the underlying transitive vowel. Potentially obscuring environments include:

1. Following a sonorant consonant on the verb stem.

2. Preceding a vowel suffixed to the verb stem.
3. Preceding a sonorant consonant suffixed to the verb stem.
4. Preceding a glottalized segment suffixed to the verb stem.

As Table 6.14 makes clear, most of the CT pronominal suffixes involving local persons involve vowels, plain sonorants, or glottalized sonorants. It is therefore more difficult to identify whether transitive schwa appears in LOCAL OBJECT or ALL-LOCAL environments, because the Series II and Series IIIa morphemes that suffix to the verb in these forms primarily begin with plain or glottalized sonorants. The majority of data in the available primary sources uses these suffixes, making the presence of a vowel difficult to interpret.

	II: Suffix	IIIa: Bound pronoun
1SG	<i>-u</i>	<i>-’nu</i>
1PL	<i>-m</i>	<i>-’nm</i>
2SG	<i>-n</i>	<i>-n</i>
2PL	<i>-sm</i>	<i>-nsm</i>

Table 6.14: Coast Tsimshian suffixes for local persons (Series II and IIIa)

I have no evidence on whether the transitive vowel appears in ALL-LOCAL contexts; for now, I simply assume that it does not, as these cases seem to directly mirror dependent clauses. There is, however, concrete evidence that the transitive vowel is absent in LOCAL OBJECT clauses. Sasama (2001) demonstrates that the 3RD OBJECT and LOCAL OBJECT verb stems behave differently, as in (35) and (36): the 3RD OBJECT (a) forms have an unexpected glide after the verb stem, while the LOCAL OBJECT (b) forms do not.

- (35) a. **T’aaynt** Kayla.
 t’aa-ə-n =t Kayla
 hit-TR-2SG.II =DN Kayla
 ‘You slap Kayla.’
- b. **T’aant** Kayla.
 t’aa =n =t Kayla
 hit =2SG.IIIA =DN Kayla
 ‘Kayla slapped you.’
- (36) a. **’Nax’nuuynit** Tiffany?
 ’nax’nu-ə-n =t Tiffany
 hear-TR-2SG.II =DN Tiffany
 ‘Did you hear Tiffany?’

(Sasama 2001: 144)

- b. 'Nax'nuunit Tiffany?
 'nax'nu =n =t Tiffany
 hear =2SG.IIIA =DN Tiffany
 'Did Tiffany hear you?' (Sasama 2001: 144)

We can interpret this pattern as resulting from the underlying presence of a transitive vowel in the 3RD OBJECT (a) contexts, but not the LOCAL OBJECT (b) contexts. This is because the morpheme for the second person singular is identical in both the Series II and Series IIIa paradigms, consisting of a single, unglottalized *-n*. When this *-n* follows a verb stem culminating in a long vowel, no epenthesis appears to be necessary on independent phonological grounds. If the transitive schwa is present between the verb stem and suffixed *-n*, however, the nasal cannot be syllabified in the coda of the verb stem. The presence of the transitive schwa is evidenced by the presence of the glide *-y-*, inserted in the onset of the requisite new syllable. This parallels IT cases such as those in (37):

- (37) Guhl da'akhlxwis Michael 'wayit?
 gu =hl da'akhlxw-ə-t =s Michael 'wa-ə-t ____
 what =CN be.able-TR-3.II =DN Michael find-TR-3.II ____
 'What was Michael able to find?' (VG)

Sasama (2001) identifies the *-y-* element (i.e. the transitive vowel) as a *bi-argumental marker*, grouping it with allomorphs *-t-* and *-d-*. I suggest that some of these are likely cognate with the Interior Tsimshianic morpheme which I refer to as 'big T', discussed in section 4.1.1.2. The relationship between T and the transitive schwa is still unclear; they are neighbors in the verbal template and schwa plays an important role in the allomorphy of big T. However, as Hunt (1993) discusses for Gitksan, the transitive schwa component is restricted to independent clauses while big T can surface on a verb stem regardless of clause type and seems to play a role in transitivity or causativization. I leave it to future research to determine whether transitive schwa and big T have any further relationship in CT specifically.

In summary, I have argued that the transitive vowel *is* present in CT 3RD-OBJECT clauses, and is *not* present in LOCAL-OBJECT clauses. I have also assumed that it is absent in ALL-LOCAL clauses, which appear to be identical to dependent transitive clauses.

An interesting generalization can be made on the basis of this distribution. In IT, the transitive vowel of independent clauses is in complementary distribution with Series I agreement, which appears only in dependent clauses. Now, in CT, where the Series I clitics appear in both independent and dependent clauses, this complementary distribution appears to still be maintained. This is illustrated in Table 6.15, with the complementary Series I and schwa morphemes bolded.

<i>Type</i>	<i>Template</i>		
All-Local	I_A	Verb	-II _O
Local Object	I_A	Verb	-III _O
3rd-Object		Verb-ə-II _A	III _O
Intransitive	(I_S)	Verb	III _S

Table 6.15: Summary of Coast Tsimshian independent clause constructions

Such complementarity is consistent with my analysis of the transitive vowel as an impoverished realization of the Series I agreement head, from Chapter 4.

6.4 An analysis of Coast Tsimshian independent agreement

The goal of this section is to apply my syntactic analysis of the clause type split and ϕ -agreement from Chapter 4 to the new agreement patterns attested in Coast Tsimshian. I argue that the same analysis of the clause type split (including both the mechanic for agreement switch and the position of ϕ -agreement probes in the structure) can be adopted for Coast Tsimshian *without revision*. My proposal that Series II agreement does not target an argument in independent clauses, and that absolutes are consequently unlicensed, furthermore allows for a novel interpretation of the CT person split: new agreement patterns emerge in CT independent clauses so that local person arguments may receive licensing. That is, there is a Person Licensing Condition (Béjar and Rezac 2003) on local person arguments in CT, but not IT.

I present the basic clause type analysis in section 6.4.1, accounting for those CT agreement patterns which are directly cognate to IT. In section 6.4.2 I incorporate the Person Licensing Condition to account for ALL-LOCAL derivations, LOCAL-OBJECT derivations, and intransitive derivations with Series I agreement. Ultimately, I argue that there are two means of satisfying this condition, one of which is used in transitive clauses, and the other in intransitive clauses. I further argue that the use of a multiple-agreement mechanic for the Series II agreement probe, proposed in section 5.3 to account for alternate inflection in absolutive extraction contexts, can also explain the particular agreement pattern of inverse contexts (following Bobaljik and Branigan’s 2006 analysis of the Chukchi spurious antipassive).

6.4.1 IT-cognate derivations

Agreement in CT transitive independent clauses alternates between three patterns based on the person features of the arguments involved. One of the patterns looks like what I have argued to be ‘canonical’, dependent-style agreement in IT (ALL-LOCAL clauses), one looks like the

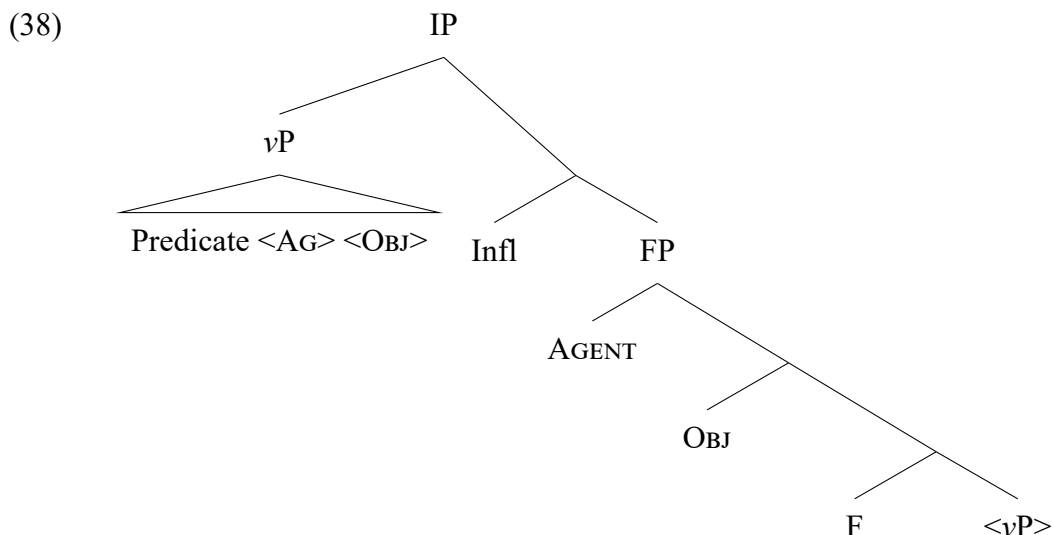
agreement switch pattern of an IT independent clause (3RD-OBJECT clauses), and one of the patterns is novel, and involves only Series I agreement. Intransitive clauses always involve Series III morphology, but may sometimes involve Series I agreement as well. A summary of these patterns is repeated in Table 6.16 for reference.

	Dependent	Independent			
		LOCAL	DIRECT	INVERSE	INTRANS
Series I (clitic)	A	A		A	(S)
Series II (suffix)	O, S	O	A		
Series III (pronoun)			O	O	S

Table 6.16: Summary of paradigms used in CT agreement across clause types

Notably, an independent intransitive clause never involves Series II agreement, and therefore never resembles the intransitive pattern of a dependent clause; intransitive agreement differs sharply between independent and dependent clauses. Although some transitive clauses appear to demonstrate a (partial) return to dependent inflection where objects are local, intransitive clauses always require Series II agreement switch to have taken place, regardless of the person of the S argument.

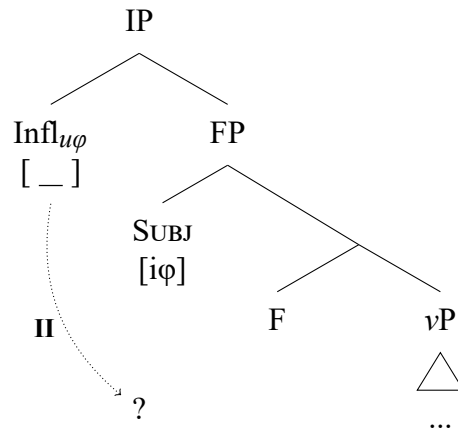
I propose to adopt the same analysis of the clause type switch as discussed for IT in Chapter 4. The agreement found in dependent clauses is taken to be the ‘canonical’ derivation; Series I agreement is on a transitive v^o , and agrees with the ergative subject; Series II agreement is on Infl^o , and agrees with the absolutive argument. In order to generate predicate-initial order, I assume that S, A, and O arguments raise out of vP , into the specifier of a functional projection FP between IP and vP , and that vP ultimately raises to the specifier of IP, leading to the configuration in (38).



In an independent clause, Series II agreement does not target absolutive arguments. Instead, it agrees with the Series I agreement probe on v° , indirectly agreeing with the features of the ergative argument copied there. I propose this occurs because a matrix C° licenses a Series II probe on Infl° which is relativized to seek *uninterpretable ϕ -features*, rather than the interpretable features typically present on arguments. (In a dependent clause, a dependent marker prevents the necessary licensing relationship between matrix C° and the Series II probe on Infl° .)

This analysis can be directly extended to some types of independent clause agreement in Coast Tsimshian: that of intransitives without Series I agreement, and 3RD-OBJECT transitive clauses. The derivation of an intransitive clause without Series I agreement is given in (39). In an intransitive clause v° bears no agreement probe. The intransitive argument evacuates the vP to the specifier of a projection FP , in preparation for vP -remnant raising. Then, a matrix C° licenses the insertion of a ϕ -probe in Infl , above FP , which agrees exclusively with *uninterpretable ϕ -features*, which can be found on a valued agreement probe within its c-command domain. Because there are no agreement probes lower in the structure, the Series II head cannot find a value.

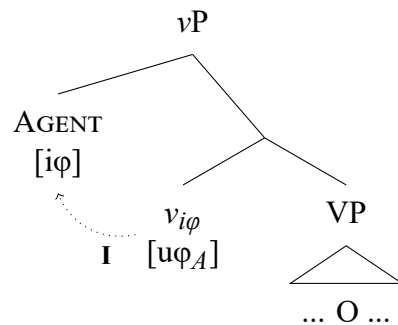
- (39) CT independent intransitive (S = III)



Finally, the vP is raised to the specifier of $Infl$, resulting in VSO order. The Series II probe has no value, and is spelled out as null; the intransitive S argument is spelled out as a Series III pronoun because it does not control agreement (IIIa or IIIb depending on its person value).

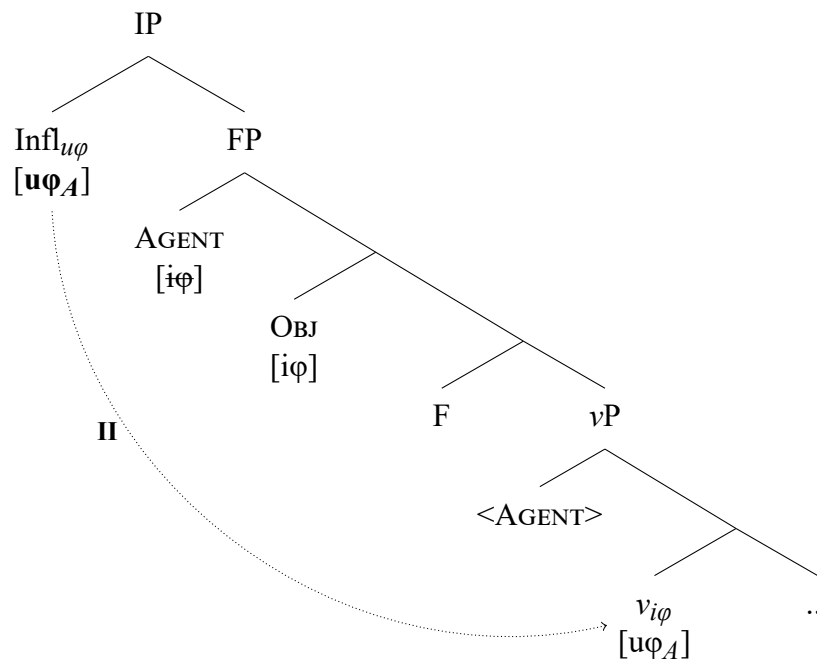
A 3RD-OBJECT transitive clause is derived as follows. First, Series I agreement on v° agrees with the ergative agent argument that it merges, as in (40).

- (40) CT independent transitive (3RD-OBJECT): ergative agreement by v°



Then, as discussed in section 4.3.4, both the A and O arguments raise to the specifier of another projection FP, arranging themselves in a ‘tucking in’ fashion (Richards 1997) to preserve their original order; this is so as to derive verb-initial order via remnant movement of the vP (Massam 2000, 2001). The Series II probe is subsequently merged on $Infl^\circ$, and agrees with the Series I ergative agreement head on v° , as it is the only element in its search domain that bears uninterpretable ϕ -features. The tucking-in and agreement process are illustrated in (41).

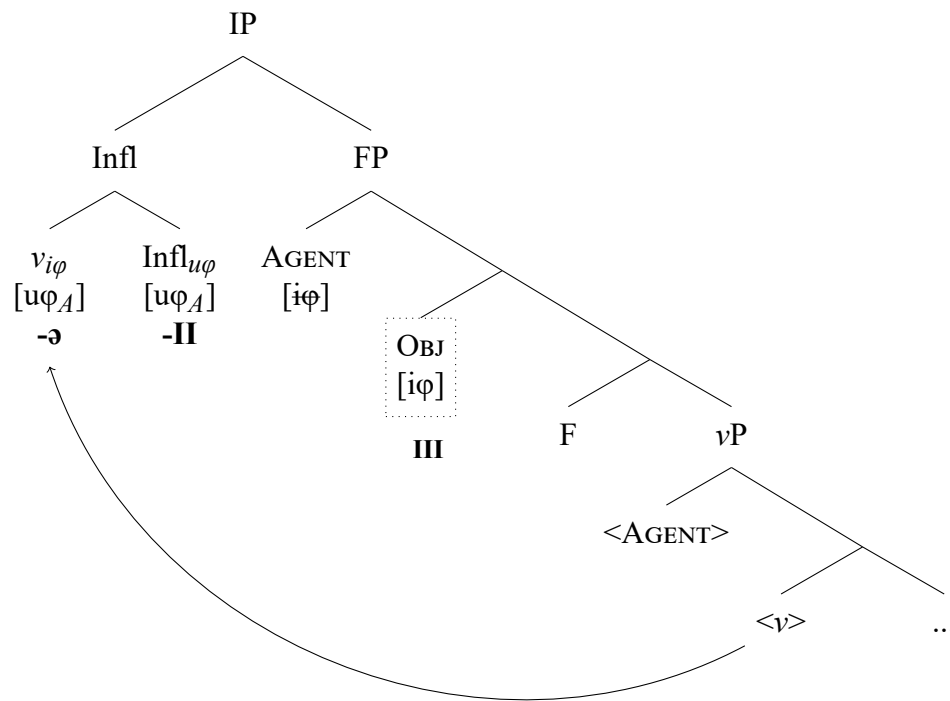
- (41) CT independent transitive (3RD-OBJECT): argument raising, Infl agreement with *v*



Finally, v° raises to adjoin to the Series II probe on Infl° that agrees with it. At spellout, because the two adjacent heads have identical agreement features, v° is impoverished of its features as discussed in section 4.3.3; the Series II probe indexes the ergative argument and the Series I morpheme is realized as the transitive vowel.¹⁵ These processes are presented in (42).

¹⁵ Alternately, following e.g. Bárány (2018), after v head-moves to Infl , the two heads are able to undergo Fusion because they bear the same features. This may be a more appropriate analysis for Coast Tsimshian, where the presence of the dedicated schwa morpheme is much more difficult to detect.

- (42) CT independent transitive (3RD-OBJECT): Head-movement and spellout forms



This set of derivations is sufficient to explain a basic intransitive construction without Series I doubling, as well as the 3RD-OBJECT construction, which involves a transitive vowel and ergative Series II agreement. It does not account for the other two contexts involving local person objects.

6.4.2 Person-split derivations

The remaining types of agreement patterns (the ALL-LOCAL transitive pattern, LOCAL-OBJECT transitive pattern, and INTRANSITIVE pattern involving Series I agreement) all notably involve a local person argument in absolutive position. In my analysis of independent clause agreement in IT (and for the CT 3RD-OBJECT pattern), absolutive arguments were left without any agreement whatsoever, the Series II probe instead agreeing with the Series I ergative agreement probe. I propose that the lack of absolutive argument licensing in my analysis of independent clauses can explain the emergence of other agreement patterns in contexts with local-person objects.

I suggest a major difference between CT and IT: CT has developed a special licensing requirement for local-person arguments in independent clauses. This licensing requirement

is only satisfied if all local arguments in the derivation receive ϕ -agreement. In independent clauses, where absolutes receive no Series II agreement and have no alternative licenser, the licensing requirement goes unsatisfied. Béjar and Rezac (2003, 2009) use a similar person-licensing requirement – the Person Licensing Condition (PLC), formalized in (43) – to account for PCC effects as well as other person splits and person-hierarchy effects in agreement.

- (43) *Person-Licensing Condition (PLC)* (Béjar and Rezac 2009: 46)
 A ϕ -feature [F] must be licensed by Agree of some segment in a feature structure of which [F] is a subset.

In Coast Tsimshian, there are two possible fixes to the problem of local-person absolute arguments failing to receive agreement in the standard agreement-switch derivation of independent clauses.

1. An agreement probe that is not in use in the current derivation could be exceptionally inserted to ϕ -agree with an argument that does not receive agreement.
2. The unique agreement probe licensed by independent C (which agrees with uninterpretable ϕ -features) could be abandoned in favor of the standard Series II agreement probe (which agrees with interpretable ϕ -features on arguments). That is, we can return to the inflection of dependent clauses, where absolutes do receive agreement.

I argue that both options are attested in CT: the first in intransitive clauses, and the second in transitive clauses.

6.4.2.1 Series I in intransitives

Although intransitive independent clauses seem to lack Series II agreement as a rule, we have seen that in Coast Tsimshian they may involve Series I agreement, as in (44).

- (44) Nam siipginsm.
 na=**m** siip-k =**nsm**.
 PST=2.I sick-INTR =2PL.IIIA
 ‘You (pl) were sick.’ (Sasama 2001: 78)

Such agreement with the intransitive S is not consistent. As reported by Davis (2018), it is more likely to appear with local person S arguments, and with the aspect markers *na* and *dm* present before the verb. This varies across speakers such that for some, clauses with past tense *na* and a first person subject exhibit obligatory Series I marking, while clauses with no overt aspect marker and a third person subject seem to disallow Series I marking.

Again, across both CT and IT, this is the only time we have Series I marking something other than an ergative argument. Furthermore, when it has marked the ergative argument it has never been optional; Series I ergative marking is required in dependent clauses. There is no variation in the appearance of ergative Series I marking depending on whether a certain type of aspect marker is present in the clause, for example. In the CT LOCAL-OBJECT examples in (45) below, ergative Series I marking appears even though there is no aspect marker at all.

- (45) a. T waayi'nu haasit.
 t waay = 'nu haas-it.
 3.I find =1SG.IIIA dog-DEM
 'The dog found me.' (Mulder 1994: 58)
- b. Ma anoogu.
 ma= anook-u
 2.I= like-1SG.II
 'You like me.' (Sasama 2001: 79)

Series I marking in intransitives is used primarily with local person S arguments in intransitive clauses. Again, we see no optionality with *ergative* Series I marking on the basis of person features; Series I marking in transitive clauses appears consistently even when the transitive subject is third person. This is the case both in dependent clauses, as in (46), and in 'inverse' contexts where third persons act on local person objects, as in (47).

- (46) Akat t'uust wil baast.
 aka=t t'uus-t wil baas-t
 NEG=3.I push-3.II COMP fear-3.II
 'She didn't hit her because she was afraid.' (Sasama 2001: 69)
- (47) T ap'aga'nu.
 t ap'ag-i = 'nu.
 3.I remember-T =1SG.IIIA
 'He remembered me.' (Dunn 1979a: 225)

What this serves to demonstrate is that the conditions on Series I agreement in *intransitive* clauses are quite unlike that of other circumstances where it appears to mark ergative arguments, appearing under different conditions than it does in transitive clauses. I propose that this is because in transitive clauses, the Series I agreement probe is inserted categorically as a result of *v*'s transitive specification. In intransitive clauses, by contrast, the Series I morpheme is exceptionally inserted on the intransitive *v*^o as a repair, to license or emphasize local person S arguments that otherwise do not receive ϕ -agreement.

It should be kept in mind, however, that intransitive Series I agreement does not seem to be

obligatory for all instances of a local person S, unlike many person-sensitive systems discussed in the literature. Series I marking in intransitives seems to emphasize local persons, without having always reached the point of being obligatory. In (48), the first person subject does not seem to require a Series I agreement marker.

- (48) Dm k'yeexga'nu.
 dm k'yeex-k =**'nu**.
 PROSP run.away-INTR =1SG.IIIA
 'I am going to run away.' (Mulder 1994: 57)

This may indicate a change in progress between two systems of local-person-licensing. I return to this issue in section 6.5.

6.4.2.2 All-Local constructions

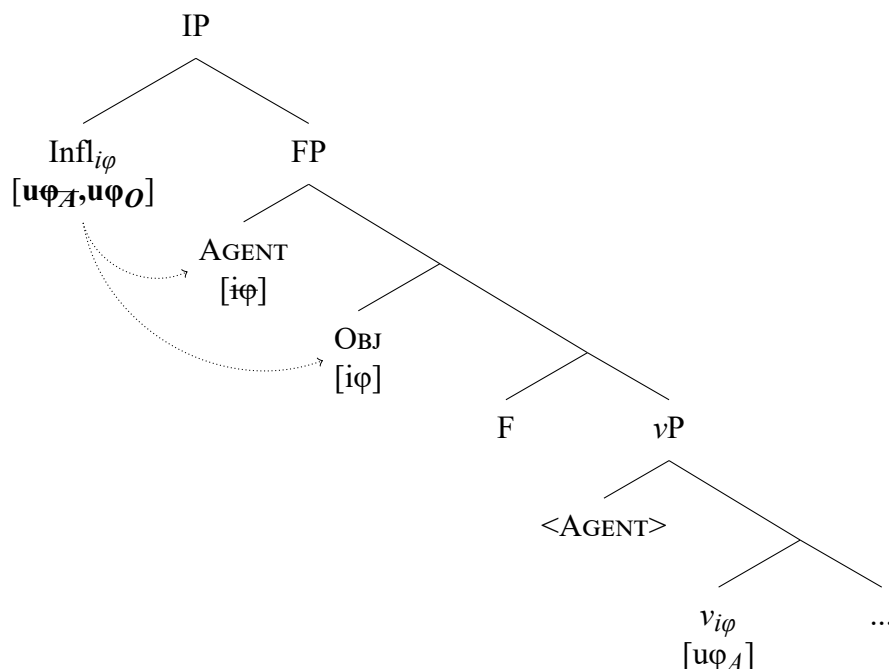
In transitive clauses, I suggest that the *standard* Series II agreement probe (from dependent clauses, which directly agrees with interpretable ϕ -features on arguments) is required on Infl^o, despite an independent C^o licensing the indirectly-agreeing probe. That is, just as in my analysis of absolutive A'-extraction in IT from Chapter 5, I propose that an independent syntactic condition requires a specific type of Series II agreement probe on Infl^o in order for the derivation to complete without crashing, irrespective of which probe would normally be conditioned by C. In IT A'-extraction, it was a condition requiring *wh*-phrases to obligatorily under go A'-movement, which necessitated that some arguments fail to be ϕ -licensed; here, it is a Person Licensing Condition requiring all local-person arguments to receive ϕ -licensing. Transitive clauses in CT independent clauses *require* the insertion of a directly-agreeing Series II probe on Infl so that the object can receive agreement.

Why is Series I agreement not inserted to agree with the unlicensed absolutive, as I just proposed for intransitive clauses? Here in transitive clauses, unlike for intransitives, the Series I probe is already occupied with ergative agreement, and so is not available to use as a repair-licenser.

Just as proposed in Chapter 5, I suggest that the directly-agreeing Series II probe interacts with the features of both DPs it encounters on its way to its final target: an argument with active ϕ -features (i.e. the absolutive argument). This interaction, in the form of feature copying, occurs even if the intervening argument has no active ϕ -features, due to prior agreement with another probe – the reason for this will become clear shortly.

Independent clause derivations which involve a local person in transitive object position end up mirroring the derivation of a standard dependent transitive clause, just as occurs in an ALL-LOCAL construction. This is illustrated in (49).

- (49) CT ALL-LOCAL clause: Series II multiple agreement with A and O



By inserting the directly-agreeing (iφ) Series II probe, both arguments are indexed by agreement: Series I agrees with A, and Series II agrees with O. The Person Licensing Condition is therefore guaranteed to be satisfied.

6.4.2.3 Local-Object constructions

This proposal in its current formulation fails to account for LOCAL-OBJECT constructions, however. In this type of transitive clause, the local person object co-occurs with a third-person subject, as in (50). The ergative subject receives Series I agreement, as expected if the directly-agreeing Series II probe had been inserted: the Series II agreement probe would not have agreed with the Series I head, and so we would expect Series I agreement to remain overt. However, we would also expect the Series II head to have agreed overtly with the absolutive object, and it is instead absent. The absolutive object surfaces as a Series III pronoun.

- (50) T ap'aga'nu.
 t ap'ax =nu.
 3.I remember =1SG.IIIA
 'He remembered me.'

(Dunn 1979a: 225)

I propose that these cases can be accounted for along the lines of Bobaljik and Branigan's (2006)

analysis of Chukchi inverse clauses as *morphologically detransitivized*. In Chukchi, transitive sentences standardly have morphology like that of (51): an agreement prefix marks the features of the subject, and an agreement suffix marks the features of the object, or portmanteau features of subject and object. Only in an intransitive clause will the suffix mark the subject alone.

- (51) **γəm-nan** γət tə-lʔu-γət.
 1SG-ERG 2SG.ABS 1SG.S-see-2SG.O
 ‘I saw you.’ (Bobaljik and Branigan 2006: 48)

Certain combinations of subject and object (most commonly, inverse configurations where the subject is outranked by an object with e.g. local person features) instead trigger morphology like that of (52). The prefix and suffix both mark the features of the subject; the object is not marked. Furthermore, antipassive morphology occurs on the verb. This is referred to as the ‘spurious antipassive’.

- (52) ə-nan γəm Ø-ine-lʔu-γʔi.
 he-ERG 1SG.ABS 3SG.S-ANTIP-see-3SG.S
 ‘He saw me.’ (Bobaljik and Branigan 2006: 49)

Under Bobaljik and Branigan’s (2006) analysis of these patterns, transitive agreement proceeds normally in the syntax. The agreement prefix spells out the result of subject agreement on C°, and the agreement suffix spells out agreement on T° with both the subject and the object, which are argued to be equidistant. In the spurious antipassive cases, a problem arises at PF: the T head is unable to mediate between the third person features of the subject and the local person features of the object, in that order. Essentially, this is interpreted as *post-syntactic feature conflict*, which impacts the derivation only at the point of spellout. With a single head involved in indexing the features of two arguments, the opportunity for feature conflict between subject and object also arises.

The precise feature combinations that can trigger a conflict are assumed to be language-specific, or perhaps a matter of Vocabulary Insertion. The conflict is resolved by post-syntactically deleting all of the features of the local object from the agreeing head; it is proposed that the object’s features are reconstructed within the vP. This creates a syntactically transitive clause with the morphology of an intransitive clause.¹⁶

¹⁶For Bobaljik and Branigan (2006) in Chukchi, this specifically creates a morphological *antipassive*. They propose that after deletion, the object’s features are reconstructed in their base position inside vP. The presence of object features in this position triggers the insertion of an antipassive morpheme on the v head. Even if this is the case in CT, I do not believe we would expect an antipassive morpheme to appear; antipassives in Tsimshianic are not productive, but instead appear with certain verbal roots (sometimes with specific meanings) and have been described as lexical (Mulder 1994: 143; Rigsby 1986: 328). Antipassive morphemes are not uniformly inserted in contexts that might be construed as having low objects (e.g. in incorporation-like constructions, contexts with

I propose that Coast Tsimshian LOCAL-OBJECT clauses differ from ALL-LOCAL clauses due to similar feature conflict. In an ALL-LOCAL clause, Series II agrees with both the subject and object, but both arguments are local. In a LOCAL-OBJECT clause, the Series II agreement probe agrees with both subject and object, but is unable to mediate between the [-PARTICIPANT] features of the third-person subject and the [+PARTICIPANT] features of the object. I propose one minor change in Coast Tsimshian: rather than deleting the object features *from* the agreeing head, in CT the entire agreement head bearing the feature conflict (Infl° , spelled out as Series II) is deleted.¹⁷

I believe a post-syntactic deletion analysis of the problem is warranted. This is because the ergative subjects of independent clauses, including LOCAL-OBJECT clauses, still behave as transitive for the purposes of A'-extraction: transitive subjects of these clauses still trigger the use of the ergative extraction particle (IT *an*, CT *in*) when undergoing A'-movement. In fact, *all* ergative subjects in both independent and dependent clauses require the use of this particle, seemingly without regard for what ϕ -agreement pattern was used in the declarative. The examples below show the extraction of an A argument from a direct (3RD OBJECT) independent clause and an inverse independent clause. These ergative arguments would be expected to receive Series II and Series I agreement, respectively, in standard clauses without extraction; regardless, they extract identically.

- (53) Naa int t'aa'n l̥guwooml̥ga gwa'a?
 naa **in=t** t'aa-in-t =a l̥guwooml̥k =a gwa'a
 who AX=3.I sit-CAUS-3.II =CN child =CN this
 'Who sat this child down?' (Sasama 2001: 64)

- (54) Archie int giinu da hoon.
 Archie **in=t** giin-u da-t =a hoon
 Archie AX=3.I give-1SG.II PREP-3.II =CN fish
 'Archie gave me fish; It was Archie who gave me fish.' (Sasama 2001: 40)

This can be taken as evidence in support of my analysis, under which all ergative arguments consistently receive Series I agreement from a transitive v° , regardless of the clause type or higher inflectional properties to do absolute inflection.

In Coast Tsimshian LOCAL-OBJECT constructions, do object features deleted from the Series

indefinite objects, or VOS constructions). It would be too strong to suggest that they are automatically inserted as a realization of a v head c-commanding an object, as in the Chukchi case. It is notable, however, that antipassives aside, CT LOCAL-OBJECT (inverse) clauses *look* very similar to independent intransitives, with the subject and object being realized with Series I and III morphology, respectively. Both of these types of agreement are attested in CT independent intransitives.

¹⁷ As this feature conflict issue only arises in independent clauses, not dependent ones, I believe the person licensing requirement only holds in independent clauses.

II probe on Infl reconstruct in their base position within the ν P? This is difficult to answer. Such an analysis would provide a natural reason for why local-person objects appear immediately after the verb, preceding the ergative subject (in a VOS order), as in (55); they have reappeared in the now-fronted ν P.

- (55) T waayi'nu haasit.
 t waay =**'nu** haas-it.
 3.I find =1SG.IIIA dog-DEM
 'The dog found me.' (Mulder 1994: 58)

However, unlike with the Chukchi agreement suffix, the Series II suffix in CT does not appear spelling out the features of the subject; it is completely absent, so I have suggested that it was deleted entirely. This would imply that both the object *and* subject features have been deleted, and should reconstruct in their base positions; we might expect subject pronouns to appear in the ν P area as well.

Ultimately, I suggest that neither subjects nor objects are overtly reconstructed within the raised ν P in CT. I provide an alternate, cross-Tsimshianic analysis of VOS ordering – not only in CT, but also in the Interior languages, where VOS order cannot plausibly be interpreted as object reconstruction within the ν P – in the next section.

6.5 VOS ordering

In this section, I discuss one loose thread common to both the Coast and Interior Tsimshianic languages that surfaces in inverse contexts (where a third person subject acts on a local person object: $3 < 1/2$). In CT, the O argument obligatorily precedes the A argument in these contexts, as shown in (56); in IT the same thing can occur, but we find gradation in the degree to which it is obligatory. In Nisga'a to the west, $O > A$ order is required. In Gitksan to the east, $O > A$ is possible but rarely volunteered; the $A > O$ order is most commonly used. An Interior VOS example is given in (57).

- (56) T waayi'**nu** haasit.
 t waay =**'nu** haas-it.
 3.I find =1SG.IIIA dog-DEM
 'The dog found me.' (Coast; Mulder 1994: 58)
- (57) Hlimooyit 'nuu'm t Mary.
 hlimoo-ə-t '**nuu'm**=t Mary
 help-TR-3.II **1PL.III** =DN Mary
 'Mary helped us.' (Interior; Rigsby 1986: 263)

This pattern has been referred to in the typological literature as a “word order inverse” system, where a local person object precedes a third person subject in contravention of the language’s standard word order (Givón 1994). In Tsimshianic, inverse contexts depart from the otherwise standard VSO order of DP arguments. In each case, the local person O is realized as a Series III pronoun immediately following the verb, and there is no overt agreement with this argument. The third person ergative A follows O, and does have other agreement – in CT it receives Series I pre-predicate clitic agreement, while in IT it receives Series II suffixal agreement.

How can we explain the movement of arguments such that the local object precedes the subject? It does not seem to be linked to *agreement* – in neither case does the object receive any overt agreement at all. I have proposed for CT that local objects do receive Series II suffixal agreement, but that it is deleted postsyntactically in this context; however, the object does not receive Series II agreement in IT, either on the surface or in my analysis. I have argued that in agreement-switch contexts like this one, the Series II probe indirectly agrees with A via the features on the Series I probe, and O is not licensed at all.

I suggest that VOS order in both languages reflects a different, *morphological* instantiation of a Person Licensing Condition (PLC), which held in an older form of the language (perhaps Proto-Tsimshianic), and which has developed differently in the daughter languages. Unlike the syntactic PLC which I have proposed for CT, which requires local person arguments to be licensed through syntactic ϕ -agreement, I propose an alternate PLC which may either be satisfied by surface agreement, or else through movement of the local person to the immediately postverbal position. That is, either overt agreement or string-adjacency with the verb – each being a condition evaluated at PF – is sufficient to satisfy this type of PLC.

We can refer to this as the M-PLC (M = morphological), versus the S-PLC (S = syntactic). Under the M-PLC, we expect all local-person arguments to either be overtly marked by ϕ -agreement, or in immediate postverbal position. Let us consider how this plays out for different possible types of arguments in the various Tsimshianic agreement configurations.

Ergative subjects (as well as oblique arguments) receive overt agreement marking in every agreement configuration across both languages. Therefore, this condition is always satisfied for ergative arguments. Intransitive subjects are always immediately postverbal; therefore the condition is satisfied independently for intransitive subjects as well.

There is more variation in how local persons in *object* position receive licensing. I will exemplify here with IT. In typical dependent clauses involving the canonical Ergative (I)/Absolutive (II) agreement pattern, objects receive overt ϕ -agreement via the directly-agreeing Series II agreement head, satisfying the PLC. An example of Series II object agreement is given in the imperative dependent clause in (58).

- (58) Sim giba'm.
 sim giba-'m
 2PL.I wait-1PL.II
 'Wait for us!' (Rigsby 1986: 310)

In independent clauses, however, objects receive no ϕ -agreement. In clauses with pronominal ergative subjects, the subject receives ϕ -agreement and is otherwise silent. This leaves the local object string-adjacent to the verb, as in (59).

- (59) Gya'a'y 'niin.
 gya'a-ə-y 'niin
 see-TR-1SG.II 2SG.III
 'I see you.' (BS)

In contrast, when the subject is a DP, VSO order would leave the object neither the target of any overt agreement, nor adjacent to the verb. Sentences may instead use a VOS order as in (60). Here we can overtly see the placement of the object in the position immediately following the verb.¹⁸

- (60) Hlimooyit 'nuu'm t Mary.
 hlimoo-ə-t 'nuu'm =t Mary
 help-TR-3.II 1PL.III =DN Mary
 'Mary helped us.'

In CT, the requirement on person-licensing has strengthened such that verb-adjacency is no longer sufficient. I have proposed that CT is also subject to a *syntactic* condition on person licensing, the S-PLC, whereby local persons require abstract ϕ -agreement in the syntax. As I have demonstrated over the course of this chapter, Series I has been introduced into intransitive contexts, providing a local intransitive S argument with ϕ -agreement; previously verb-adjacency may have been sufficient for licensing.¹⁹ Canonical dependent-style agreement has been introduced into transitive clauses such that local person objects can receive Series II agreement, as in (61a). However, we can still see evidence of an operative M-PLC in LOCAL-OBJECT constructions. I have argued that local person objects in these contexts receive covert ϕ -agreement by a later-deleted Series II head, but must still surface in immediate postverbal position, as demonstrated in (61b).

¹⁸Again, note that the VOS pattern in (60b) is obligatory only in Nisga'a. It is optional/infrequent in Gitksan. For the purposes of the immediate discussion I reference the older form of IT which had a more obligatory VOS requirement in inverse contexts with local-person objects.

¹⁹The apparent variability of Series I usage in intransitives may be indicative that the S-PLC has not been fully established in all contexts where the M-PLC is satisfied.

- (61) a. Nm ħümoomsm.
 n=m ħümoom-**sm**
 1.I=PROSP help-2PL.II
 ‘I’ll help you (pl).’ (Mulder 1994: 57)
- b. T waay**i’nu** haasit.
 t waay =**’nu** haas-it.
 3.I find =1SG.IIIA dog-DEM
 ‘The dog found me.’ (Mulder 1994: 58)

Conversely, in IT – specifically, Gitksan – the M-PLC appears to be weakening. This is evidenced by the increasing frequency of VSO ordering even for local person objects in independent clauses. When VSO order is used, as in (62), the object is no longer immediately postverbal; regardless, these sentences are fully acceptable.

- (62) Hlimooyis Mary ’nuu’**m**.
 hlimoo-ə-t =s Mary **’nuu’**m****.
 help-TR-3.II =DN Mary **1PL.III**
 ‘Mary helped us.’ (Rigsby 1986: 264)

In IT dependent clauses, we see another context where objects fail to receive overt ϕ -agreement: the nominal-type split allows the ergative argument to receive overt ϕ -agreement from both the Series I and II probe, in the Double Ergative construction. This is shown for a third-plural subject in (63).

- (63) Neediit ’wadiit ’niin.
 nee=dii=t ’wa-*dii*t **’niin**.
 NEG=FOC=3.I find-3PL.II 2SG.III
 ‘They didn’t find you.’ *Double Ergative*

Interestingly, in the case above, the local object is in immediately postverbal position because the pronominal ergative subject has no overt realization other than Series II agreement – nothing intervenes between the verb stem and the object. Here, then, the M-PLC is automatically satisfied.

Double Ergative agreement is also possible for DP subjects; however, in this configuration the M-PLC is *not* always satisfied. In a VSO order, the subject DP intervenes between the verb and the local person object pronoun. In this context, we see free variation: speakers either use VSO order as in (64a), ignoring the requirements of the M-PLC for objects, or they produce constructions where objects do receive Series II ϕ -agreement, as in (64b), thereby satisfying the condition.

- (64) a. Jidaat 'matshl lo'op 'nuu'm, ...
 ji-daa=**t** 'mats-**t** =hl lo'op '**nuu'm**, ...
 IRR-SPT=**3.I** hit-**3.II** =CN rock **1PL.III** ...
 'If a rock hits us ...' *Double Ergative*
- b. Jidaat 'maji'mhl lo'op, ...
 ji-daa=**t** 'mats-'**m** =hl lo'op ...
 IRR-SPT=**3.I** hit-**1PL.II** =CN rock ...
 'If a rock hits us ...' *Ergative/Absolutive*

One might wonder why ϕ -agreement is used to resolve the requirements of the M-PLC, rather than surface reordering. I suggest that this the case for two reasons. First, the alternative Ergative/Absolutive agreement pattern provides some analogical pressure in favor of realizing the object via Series II agreement. Second, as I proposed in section 5.3, the Series II agreement probe has in fact covertly agreed with the object; specifically, the Series II probe has agreed with both the subject and object argument in a dependent clause. In (64), there is therefore a single derivational point at which a choice must be made between overtly realizing the D-features of the ergative subject (in contravention of the M-PLC), or morphologically licensing a local-person object (to satisfy the M-PLC). With the M-PLC already weakening in independent clauses, we end up with a situation of free variation between the two options.

We may contrast my proposed analysis of VOS order in Gitksan, and across Tsimshianic, to Rigsby's (1975; 1989) conceptualization of it as extraposition of the subject to the right. He connects subject extraposition to the appearance of Series II agreement on the verb, with Series II agreement essentially acting as a trace, surfacing in the postverbal position than the subject vacates. To extend this extraposition analysis to CT, we would expect a similar trace or agreement pattern; instead, in CT there is Series I agreement, not Series II agreement, and it appears before the predicate, in a position that a DP subject never overtly occupies. The two different agreement patterns are repeated below for reference: (65) from Coast Tsimshian, and (66) from Gitksan.

- (65) T waayi'**nu** haasit.
 t waay ='**nu** haas-it.
 3.I find =1SG.IIIA dog-DEM
 'The dog found me.' (Mulder 1994: 58)
- (66) Hlimooyit 'nuu'm t Mary.
 hlimoo-ə-t '**nuu'm** =t Mary
 help-TR-3.II **1PL.III** =DN Mary
 'Mary helped us.' (Rigsby 1986: 263)

The difference in ergative Series I versus II agreement across the two languages would require

VOS order to be derived in a different way for the CT versus IT subject (moving from a different position, so as to leave a trace in a different position). My analysis, by contrast, considers Series I and II agreement in these contexts plainly as ergative agreement, not movement traces. VOS order is derived in the same way in both languages, as movement of the *object* to postverbal position, preceding the subject.

An analysis of the VOS “word order inverse” phenomenon as resulting from a morphological Person Licensing Condition (M-PLC), requiring either overt ϕ -agreement or immediate verbal adjacency for local person arguments, allows for a unified analysis across the Tsimshianic languages. Local person objects without ϕ -agreement are required to move to an immediately postverbal position preceding the subject to satisfy this condition.

The two varieties are beginning to deviate from this basic state of affairs, in quite different ways. In Coast Tsimshian, additional agreement patterns in contexts where local persons are unlicensed seem to indicate a stronger *syntactic* licensing condition (S-PLC) under which verbal adjacency is no longer sufficient for satisfaction. In Interior Tsimshianic, particularly Gitksan, the weakening of the VOS pattern, as well as the emergence of free variation in dependent clauses, indicates that the morphological condition is no longer obligatorily enforced. Instead, Gitksan seems to be moving towards leveling its word order to VSO in all contexts.

6.6 Summary

In this chapter I have described and analyzed the agreement patterns of Coast Tsimshian (Maritime). In contrast to prior descriptions of Coast Tsimshian alignment, which have focused on alternations in the connective system, I have instead focused on verbal agreement (motivated by the assumption that alternations in the connective system follow directly from verbal agreement, not from abstract case assignment; Davis and Forbes 2015; Davis 2018).

The picture of agreement in dependent clauses is of a simple Ergative/Absolutive pattern with one type of agreement for each of those two alignments (Series I = ergative, Series II = absolutive). Independent clause agreement is more complex, with three different transitive agreement patterns being triggered depending on whether the object is third person, whether the object is a local person, or whether *both* core arguments of the clause are local. In independent clauses, we also see Series I clitic agreement extending its function to (sometimes) mark S arguments, in the first deviation of this paradigm from ergative alignment anywhere in Tsimshianic.

After this description, I discussed some points that allowed for deeper comparison of morphosyntax across the Interior and Maritime branches. I argued for the unification of the Coast Tsimshian Series IIIa and IIIb paradigms in the syntax, proposing that the bound Series IIIa

forms are simply prosodic clitic realizations of pronouns, possible only in postverbal position, rather than indicating a novel type of agreement in Coast Tsimshian. This allows for a direct correspondence between person paradigms in the two Tsimshianic branches. I furthermore demonstrated that Coast Tsimshian has a cognate of the IT transitive vowel, and that this morpheme is not present in LOCAL-OBJECT (inverse) contexts. That is, across Tsimshianic, the transitive vowel only occurs where the Series I paradigm is absent and Series II suffixes index the ergative argument.

I proposed that these similarities allow for the direct adoption of my analysis of the IT clause-type split in Chapter 4. In CT intransitives and 3RD-OBJECT transitives, agreement switch occurs: a matrix C° licenses a Series II agreement probe on Infl° which agrees only with a lower agreement probe. It agrees with the ergative Series I head, which is subsequently impoverished and realized as the transitive vowel. This accounts for complementarity between ergative Series II agreement alongside the transitive vowel, on one hand, and ergative Series I agreement without the transitive vowel, on the other.

Different agreement patterns in contexts with local-person objects were argued to be the result of a syntactic *Person Licensing Condition* (PLC). Specifically, the available Series I probe is inserted in intransitive clauses to license local S arguments, since this paradigm is not already in use. For transitive clauses, both the Series I and II agreement probes have already been inserted in the structure. Instead of adding another probe to license local person objects, the dependent-clause version of the Series II probe on Infl° is exceptionally inserted instead, canceling the agreement-switch pattern. This probe seeks interpretable ϕ -features, and licenses the local object.

I have also discussed several post-syntactic processes that affect this picture. In LOCAL-OBJECT clauses, conflict arises between third-person features on the subject and the local person features of the object, copied to the same head during Agree. This results in post-syntactic deletion of Infl° and consequently, Series II agreement. In this construction, as well as several constructions in IT, VOS order is required, with the Series III object pronoun obligatorily appearing before the subject. I interpret this as the consequence of a *morphological PLC*, satisfied if a local person argument without overt agreement is reordered into immediate post-verbal position.

In short, I argued that a syntactic PLC accounts for exceptional agreement patterns arising in Coast Tsimshian independent clauses, particularly transitive clauses, while a morphological PLC in both languages accounts for variation in word order in contexts with local person objects. Each is satisfied by properties evaluated in the respective grammatical component: in the case of the S-PLC, by abstract agreement (deactivation of the argument's ϕ -features by agreement), and in the case of the M-PLC, by overt agreement or a certain linear position. Furthermore,

each version of the condition is resolved by a repair mechanism: in the case of the S-PLC, by the insertion of exceptional agreement probes in the syntax, which subsequently undergo search, and in the case of the M-PLC, by linear reordering.

The distinct agreement patterns arising in Coast Tsimshian independent clauses can therefore be categorized under the family of special grammatical effects triggered in the context of local persons, particularly local person objects (including, for example, Person-Case Constraint effects between direct and indirect objects; Béjar and Rezac 2003).

Chapter 7

Concluding discussion

Following the recent proposal that the Tsimshianic languages do not have syntactic case, but instead engage in argument-indexing exclusively through verbal agreement (Davis and Forbes 2015; Davis 2018), in this thesis I have undertaken a cross-Tsimshianic analysis of *splits* in those agreement patterns. I examined three splits and provided a morphosyntactic analysis for each: a split on the basis of *clause type* that appears in both the Interior and Maritime branches, a sub-split on the basis of *nominal type* that appears in the Interior branch (dependent clauses only), and a sub-split on the basis of *person* that appears in the Maritime branch (independent clauses only). Across all of these splits, a paradigm is dedicated to ergative agreement, resulting in what I have referred to as *persistent ergativity*. I have reflected this persistence in my analysis, by deriving ergative alignment consistently and exclusively through the inherent agreement of a transitive *v* with its specifier.

In this final chapter, I summarize the proposals of the thesis (section 7.1), discuss connections with and consequences for our theories of syntax and morphology (section 7.2), reflect further on models of ergativity (section 7.3), and discuss some outstanding empirical issues (section 7.4).

7.1 Summary of analytical proposals

Nominal type split (IT). I began with the Interior nominal type split, due to the unique grouping of nominal types conditioning the split. In this split, features of the ergative argument control whether Series II suffixal agreement targets the ergative subject or absolutive object; the features of the object are largely irrelevant in conditioning the pattern. If the ergative argument is third-person plural or a DP, it controls suffixal agreement; it simultaneously receives Series I ergative agreement. Otherwise, suffixal agreement goes to the absolutive object. In summary,

third-person plural pronominals and DP arguments act as a natural class, requiring Series II suffixal agreement even though they already control Series I ergative clitic agreement.

I argued that two factors were responsible for this surface pattern. First, I argued that Series I ergative agreement had to occur first, before Series II suffixal agreement. To reflect this, I suggested that the Series I ergative agreement probe is on v° , and that Series II agreement is higher, on Infl° . This location for the two agreement probes held throughout the thesis, for both Gitksan and Coast Tsimshian agreement patterns, and fundamentally allows the ergative argument to consistently receive Series I clitic agreement.

Second, and more notably, the pattern requires a split to be posited between ϕ -features and other nominal features (D-features), with third person plurality not being included in the set of ϕ -features. DP and third-plural ergative arguments are the only set of possible ergative nominals which bear D-features, in excess of ϕ -features. When the Series II probe on Infl° encounters an ergative argument with these additional, *active* D-features, then that argument must control Series II agreement.

- Series I clitic agreement derivationally precedes Series II suffixal agreement.
- Third-person plurality is not included in the set of ϕ -features that the Series I probe agrees with.
- Either A or O can control the Series II probe. The controller is A where A bears non- ϕ features, and O where A bears only ϕ -features.

Clause type split. After finding the necessary order of agreement probes to derive the nominal type split, I moved to an analysis of the clause-type split. This split triggers *agreement switch*. The Series II suffixes take an ergative distribution in independent clauses, rather than absolutive or nominative as in dependent clauses, and the former Series I ergative clitics are absent. I showed that in general, clauses in either clause type have the same properties and do not differ in major ways from each other; notably, transitivity (and specifically ergativity) seems to work the same way in each clause type. Contra Hunt (1993), who proposed that dependent clauses were triggered by particular agreement licensing properties of a high functional projection, I argue that instead *independent* clauses are the derived type. In an independent clause, a different Series II agreement probe is inherited from C. The possible goals of this probe are not interpretable ϕ -features, as in dependent clause, but rather uninterpretable ϕ -features. In this situation, the Series II probe agrees not with an argument, but instead a valued agreement probe. This results in *indirect agreement*, where the Series II probe receives the exact result of the Series I probe's prior agreement operation.

In this situation, the Series II probe on Infl° doesn't license any arguments. Argument indexing is done exclusively by the Series I probe on a transitive v° , which targets the ergative

argument; absolutive arguments are unlicensed. I propose that the transitive vowel of independent clauses is an impoverished realization of the Series I v° probe after its features have been copied by Infl $^{\circ}$.

- Ergative agreement is the result of v° agreement with the transitive subject in both clause types.
- In both the clause type split and the nominal type split, the Series I probe operates first, and the Series II probe operates second. Series II agreement has some dependency on the result of Series I ergative agreement in both contexts.
- The Series I clitics and transitive stem vowel are in complementary distribution because they are different morphological realizations of the same syntactic object.

Agreement switch under extraction. I also extend my analysis of agreement switch across clause types to the emergence of independent-clause-like agreement switch in contexts of absolutive argument extraction, regardless whether dependent markers are present in the clause. There, I interpret the agreement switch pattern as an *anti-agreement effect*, or a repair strategy in response to an inability for Series II-agreeing arguments to undergo A'-movement. By adopting the agreement switch pattern characteristic of independent clauses, absolutive arguments fail to receive any ϕ -licensing, and are able to extract freely.

- Although S and O extraction morphology is distinct, both types lack the Series II agreement characteristic of a dependent clause, and should be understood as exhibiting agreement switch.
- Series II is responsible for absolutive argument licensing in dependent clauses.

Series II agreement across multiple arguments. In both the Coast and the Interior, there are reasons to believe that the Series II agreement probe is sensitive to the features of both arguments of a transitive clause. In the Interior nominal type split, the Series II agreement controller alternates between the ergative subject and the absolutive object. In the Coast Tsimshian person split, Series II agreement fails to appear in inverse contexts where the subject is third person and the object is a participant (e.g. 3<1). I propose that this motivates a system in both varieties where the Series II suffixal agreement probe *licenses* absolutive arguments, but also consistently accesses the features of both transitive arguments, though it only ever has one surface controller. I model this through Deal's (2015b) system of probes interacting with (i.e. copying the features of) multiple possible goals before being satisfied by their final agreement targets. Series II copies the features of the ergative argument before moving to the absolutive argument, which it ϕ -licenses.

- Series II agreement is determined based on the features of both arguments of a transitive clause. In contrast, Series I agreement is only concerned with the ergative argument.

Person split (CT). Finally, I moved to the Coast Tsimshian person split. Here, I argued that the differences that arise in the agreement operative in independent clauses is a result of a syntactic condition on ϕ -licensing for local person arguments – they must receive ϕ -agreement in the syntactic component. This condition is automatically satisfied for all arguments in dependent clauses, because all arguments receive agreement, but not in independent clauses, where only ergative arguments receive agreement as part of the basic pattern. When local person arguments appear in absolutive position, additional ϕ -licensing is required.

This motivates changes to the available contingent of agreement probes; these changes differ between transitive and intransitive clauses. In transitive clauses, agreement switch is reversed: the indirectly-agreeing Series II probe on Infl° is discarded in favor of the standard Series II probe which agrees with interpretable ϕ -features on arguments, freeing it to agree with local person objects. In intransitive clauses, where v° is typically merged as a simple head lacking a ϕ -agreement probe, a probe can be exceptionally inserted to license a local person intransitive subject. The indirectly-agreeing Series II probe, conditioned by C° , remains in its indirectly-agreeing state. That is, the requirement for local persons to be licensed does not entirely erase the agreement switch pattern that occurs as part of the clause-type distinction.

I contrast the syntactic person-licensing condition (S-PLC) with a *post*-syntactic person-licensing condition (M-PLC), which I argue is responsible for triggering VOS word orders in clauses with local-person objects in both Coast Tsimshian and the Interior varieties (‘word order inverse’ patterns; Givón 1994). Under the postsyntactic person licensing condition (M-PLC), local person arguments are licensed either by overt ϕ -agreement, or by surfacing in an immediately postverbal position.

- Alternate or additional agreement probes can be inserted into a derivation, regardless of their normal conditions for inclusion, in order to ensure that a derivation will converge.
- There are different types of person-licensing conditions (syntactic vs. morphological), each satisfied by conditions that the relevant grammatical component is capable of assessing.

7.2 Morphosyntax and the picture of Agree

The empirical data under consideration in this thesis is quite distinct from the agreement patterns most commonly analyzed in the generative literature on agreement. Prior work more

commonly considers simple ergativity (no splits), split ergativity (ergative~nominative), or agreement that chooses between two arguments, typically exhibiting some alternation or restriction on the basis of marked ϕ -features (e.g. omnivorous agreement effects, PCC effects). Agreement switch, where the same alignment is retained across a different set of paradigms, has received little attention. A previous analysis by Kalin and van Urk (2015) discusses agreement switch in Neo-Aramaic; however, the alignment of the languages under consideration was nominative/accusative, and these splits were conditioned on the basis of aspect, rather than clause type. Agreement switch in Tsimshianic instead retains an ergative/absolutive alignment, and does so across a clause-type split; these properties necessitate a quite different analysis.

In order to account for the novel Tsimshianic patterns, I have drawn on a basic schema of two ordered agreement probes, working within a strictly bottom-up derivation. The lower probe on v° agrees first, and consistently targets the transitive subject that it merges, regardless of clause type, in an instance of inherent (spec-head) agreement. The second, higher probe on Infl° has several potential agreement distributions (absolutive, nominative, or ergative), each a consequence of how it may be relativized. Notably, the higher probe *interacts* with the lower probe in several ways. It selects its target only after the lower probe does, which may narrow down its possible goals to only the other remaining arguments (this can be considered a *bleeding* interaction). Alternately, the higher probe agrees directly with the lower probe itself, so that they both bear the features of the same goal (a *feeding* interaction).

Crucially, only the higher agreement probe (corresponding to the Series II suffixes) has any interaction with elements in the C-domain which determine the clause-type of the rest of the structure, and all other inflectional properties of the clause type follow from the agreement properties of Series II in Infl° . In determining how the distinct distributions of the higher Series II agreement probe are each generated, I have drawn upon several familiar syntactic mechanisms, in some cases utilizing them in novel ways to generate the attested patterns.

7.2.1 Features and feature sets

In addressing the Interior nominal-type split, I have demonstrated that the Tsimshianic data is not well modeled by the family of prior analyses where agreement is drawn to arguments with marked features lower in the structure. In particular, we see Series II agreement being obligatorily controlled by a *third-plural* agent. This suggests that there might be some sort of relativization to third-person plurals; however, there are no circumstances under which agreement is drawn to a third-plural object over a plain DP subject. I have suggested that this in fact motivates a converse model: rather than being drawn to marked features, the agreement probe is sensitive to both ϕ -features and certain nominal features not typically categorized among the

ϕ -feature set. Although the Series II head may be a ϕ -agreement probe, its controller in Gitksan is not determined on the basis of what active ϕ -features it encounters, but rather what active features of this *broader* set it first encounters. In attempting to seek ϕ -features on an argument low in the structure, it can therefore be blocked if it encounters an argument with active non- ϕ features.

I have therefore drawn deeply upon the notion that features and feature values are categorized into sets. The precise constitution of these sets seems to vary across languages: third person plurality in Gitksan, for example, does not seem to group together among the plurality distinctions of other persons. The split behavior of number features in Gitksan motivated me to propose that Gitksan's third-person plurality is not categorized amongst the set of ϕ -features, but rather with other nominal features such as the distinction between pronouns and lexical DPs.

This proposal supports an established generalization: there is not just one type of plurality in language. The semantic interpretation and syntactic behavior of plurality can vary extensively both language-internally (Gitksan: Rigsby 1986; Forbes to appearb) and crosslinguistically (e.g. Corbett 2000). Furthermore, the fact that Gitksan's recently-innovated third-person number feature seems to fall into a grammatical class with the lexical/pronominal contrast raises additional questions about the organization of features: how are groups of features categorized and stored in the grammar, and why should third-person plurality be associated with the lexical/pronominal contrast in Gitksan? There is no obvious logical/entailment relation between the two properties, as is classically proposed to be true of features connected via *feature geometries* (Harley and Ritter 2002). This raises questions regarding the nature of feature geometries and/or feature sets as grammatical objects.

7.2.2 Relativization and inheritance

In interpreting the clause-type split, I have additionally proposed a novel type of ϕ -feature relativization for the Series II probe: rather than search its domain for interpretable ϕ -features, I have suggested it search its domain for *uninterpretable* ϕ -features.

The distinction between interpretable and uninterpretable features was initially proposed to be tied to whether a probe was *valued* (serving as a goal) or *unvalued* (serving as a probe, and deleted after the narrow syntax; Chomsky 2001). Several revisions have been proposed for this original conceptualization of agreement; in particular, Pesetsky and Torrego (2007) propose that semantic interpretability of a feature does not correspond to whether or not it enters the derivation with an inherent value. That is, both probes and goals may be interpretable or uninterpretable. In the model I have utilized, once an unvalued ϕ -probe (interpretable or

uninterpretable) has received a value through agreement, it can be later accessed as a goal. This is how I derive Tsimshianic agreement switch: the high agreement probe (Infl°) agrees with uninterpretable features on the lower one (v°), copying the features of the ergative argument it has agreed with. In this way, one agreement probe can adopt the alignment of another, in a process of indirect agreement.

A consequence of the approach I have taken here is that the interpretability of a feature is a property that a probe can be specified to seek, or ignore. More broadly, under this analysis, some diacritics that we have used to formally differentiate types of features – for what may have purely representative purposes within the narrow syntax – can actually be exploited for the relativization of Agree.

We may also consider the agreement switch trigger, under my analysis. I have proposed that formally *independent* clauses in Tsimshianic are differentiated from *dependent* clauses via the inheritance of a different agreement probe from a matrix C° to Infl° : one which is relativized to uninterpretable features. This inheritance is blocked by any dependent marker intervening between matrix C° and Infl° , or by any alternate C° .

In previous work, it has been proposed that the standard (“nominative”) agreement probe on T/Infl° is always inherited from the phase head C° (Chomsky 2007; Miyagawa 2010). The T/Infl -probe functions in a consistent fashion in matrix clauses, but when C° is nonfinite (non-phasal), agreement on T/Infl° is instead absent or defective; this is the prototypical finiteness contrast. That is, matrix clauses have a consistent type of agreement, but embedded clauses fall into two inflectional classes (standard/finite, and nonfinite).

Tsimshianic-style clause types differ from this: they exhibit a consistent agreement pattern in *embedded* clauses (dependent), but two different types of *matrix* clauses (independent versus dependent). My analysis of Tsimshianic clause typing involves in some ways the converse syntactic arrangement as has been proposed for the finiteness contrast: I propose that there is always a an agreement probe on Infl° (which agrees with interpretable ϕ -features), but it may inherit from a matrix C° a different ‘setting’, to seek uninterpretable ϕ -features instead. Different elements are capable of blocking this property from being successfully transmitted to Infl° : these are dependent markers.

I suggest that a crosslinguistic difference emerges based on the agreement properties of T/Infl° in the absence of any inheritance from C° . For a language displaying defective agreement in nonfinite clauses, T/Infl° must inherit agreement from C° . In Tsimshianic and other languages without clear finiteness contrasts, perhaps T/Infl° inherently bears an agreement probe. This leaves room for other properties to be inherited from C° , resulting in different potential clause-type contrasts.¹

¹My proposal resembles Miyagawa’s (2010; 2017) proposal regarding the differentiation of agreement-based and

We might also wonder why the Series II probe on Infl° , in what I have proposed is its ‘default’ state in embedded clauses, is relativized to *interpretable* features, and why it switches to seeking *uninterpretable* features in matrix clauses. Is there any particular reason why the orientation of relativization is like this, as opposed to seeking interpretable features in the matrix clause and uninterpretable features in the embedded clause?

Embedded clauses have been noted to derive properties from the clauses that embed them; consider sequence of tense effects and the contrast between simultaneous- and future-oriented complement clauses. For sequence-of-tense, morphological tense marking in the embedded clause is past because of the past tense in the matrix clause, regardless of its own semantic tense, as shown in (1). For nonfinite complement clauses like those in (2), there is no morphological tense marking, but particular semantic interpretations of tense are forced based on the matrix predicate.

- | | | |
|-----|---|---------------------------------|
| (1) | Blair said that she was at the library. | <i>Sequence of Tense</i> |
| | a. Simultaneous reading: Blair is at the library at the time of speech. | |
| | b. Past reading: Blair had been at the library at a prior time. | |
| (2) | a. Blair tried to open the present. | <i>Simultaneous orientation</i> |
| | b. Blair wanted to open the present. | <i>Future orientation</i> |

Several analyses diagnose different means of syntactically valuing the tense features in the embedded clauses in constructions like these (Pesetsky and Torrego 2007; Ritter and Wiltschko 2014). In either situation, it is the matrix instance of $\text{T}/\text{Infl}^\circ$ that bears an interpretable value for tense, and the lower, embedded $\text{T}/\text{Infl}^\circ$ which depends on something above it to receive its value.

In light of this, it might seem strange that I have proposed that the ϕ -probe on embedded Infl° in Tsimshianic engages in full ϕ -agreement with arguments, but the ϕ -probe on matrix Infl° can be valued by another probe elsewhere in the clause. Here it is the matrix Infl° probe that seems more ‘deficient’, with respect to how it values its ϕ -features.

On this point, we can consider work that proposes special discourse-related projections and information above the level of the matrix C° ; for example, Speas and Tenny (2003) propose projections corresponding to the speech act participants of the clause. Perhaps in matrix clauses – but not embedded clauses – some of the interpretable properties of the high, participant-related discourse projections naturally saturate the clause, resulting in somewhat laxer requirements for the probe on Infl° , which can then be relativized to uninterpretable features only out of a formal

discourse-configurational languages, in that languages vary based on what is inherited from C° onto $\text{T}/\text{Infl}^\circ$. There are differences with respect to the specifics (e.g. a ϕ -probe existing on T° or not) that may be an interesting area for further investigation.

requirement for ϕ -agreement. A Series II probe linked to a matrix- C° , and therefore to these higher discourse-related projections, need not engage in argument licensing with an argument of its own, but merely adopts the uninterpretable ϕ -features of the v probe immediately below. In contrast, ϕ -probes on Infl° that are not linked to a matrix C° have no access to these discourse features, and must engage in full ϕ -agreement and argument licensing.

I leave the discussion here for now; there are several avenues through which this could be further explored.

7.2.3 Licensing in syntax and morphology

Finally, my analysis of alternate agreement patterns in Coast Tsimshian independent clauses arises from a consequence of my analysis of the clause-type split. In independent clauses, the Series II probe on Infl° agrees with the Series I probe, rather than an argument: this results in both probes agreeing with the ergative argument, and leaves absolutive arguments without ϕ -licensing. My work therefore falls in line with a number of proposals that suggest nominals in a clause do not inherently require abstract licensing for a derivation to go forward (Massam 2001; Danon 2006; Preminger 2012; Kalin 2018).

The lack of licensing on absolutive arguments was used to explain the emergence of alternate agreement and word order patterns when local-person arguments appeared in these positions. I adopted a Person Licensing Condition (Béjar and Rezac 2003) to model the need for additional licensing for local person arguments in independent clauses. More specifically, I identified two different person-licensing requirements. The first is a *syntactic* licensing requirement, which requires local person arguments to receive ϕ -agreement in the syntax. I proposed that in Coast Tsimshian, [PARTICIPANT] features must be copied onto a ϕ -probe within the narrow syntactic component or the derivation crashes. Two possible repairs could be used to address the licensing problem: either an added ϕ -probe, or if all agreement probes are already present in the derivation, then the activation of different relativization properties for one probe, so that the local person argument can receive agreement as necessary. I argued that both repairs occurred, corresponding to intransitive clauses (where the normally-ergative v -probe could be inserted) and transitive clauses (where agreement on Infl° proceeded as if the clause were dependent), respectively.

The second licensing requirement I identified is a *morphological* person-licensing requirement, which I have suggested is present in both Interior and Coast Tsimshianic. This morphological requirement is not satisfied by covert properties, but rather by overt ones: local persons must either receive overt ϕ -agreement, or be adjacent to the verb. I have proposed that this morphological requirement is responsible for the ‘word order inverse’ property of the

Tsimshianic languages, where local person objects trigger a VOS order. In Coast Tsimshian, the morphological licensing requirement is largely vacuously satisfied via the satisfaction of the syntactic licensing requirement in Coast Tsimshian, and in Gitksan, I have suggested that the morphological condition is slowly being lost as VOS word orders fall out of use.

Some debates in the field regard whether various processes should be located within the syntax or post-syntactically (for example, *case*: Stowell 1981; Marantz 1991; Travis and Lamontagne 1992; Bobaljik 1995; Baker 2015; Levin 2015). The relevance of adjacency to certain constructions has also been discussed in a variety of areas (e.g. closest conjunct agreement, case by adjacency). This discussion on Tsimshianic licensing serves to contribute the perspective that abstract licensing may actually be evaluated at multiple levels of the derivation even within a single language; argument licensing, even in the absence of overt case or agreement, is not a purely syntactic issue. The relevance of both syntactic and morphological factors may potentially confound an analysis that seeks to condense the analysis to a single area, but may be teased apart into distinct issues with distinct possible resolutions.

I suggest that this may be the case more generally, for other linguistic properties. We might, for example, reflect on the Tsimshianic ‘connective’ system, where the morphological marking on an argument is determined through reference to both agreement and linear adjacency. I have argued against referring to it as “case” (see section 2.4.3) due to the tight association of this term with syntactic relations, and the fact that Gitksan connectives are *not* reliant on exclusively syntax-internal information. However, we could instead consider it a ‘morphological’ case assigned very late in the derivation, post-syntax, where linearization has already taken place. This is possible if we adopt the idea that case can be *either* syntactically-determined or morphologically-determined, in the sense that I have discussed syntactic versus morphological conditions on abstract licensing. I believe this sense of “morphologically-determined case” is distinct from Marantz’s (1991) m-case, or dependent case, in that it may specifically make reference to linear position, as opposed to syntactic domains.

7.3 Reflections on ergativity

At this point, it becomes necessary to reflect on the properties of ergativity in Tsimshianic based on the description of verbal agreement and the syntactic analysis forwarded in this thesis. I do this first by reviewing the descriptive properties of the ergative agreement systems in the thesis (section 7.3.1), and then situating the proposed analysis of ergativity in the context of the broader literature on ergative case and agreement (section 7.3.2).

7.3.1 Descriptively: Persistent versus split ergativity

To summarize, the agreement patterns of Gitksan (Interior) across its clause type split and nominal type sub-split are presented in Table 7.1. In each split context, we see that there is a paradigm dedicated to agreement with the ergative argument specifically (the paradigm shifts from Series I in dependent clauses to Series II in independent clauses). We cannot therefore describe the Interior Tsimshianic languages as split-ergative; instead, it is *persistently ergative*.

	Dependent		Independent
	1/2/3SG A	3PL/DP A	
Series I (clitic)	A	A	
Series II (suffix)	O, S	A, S	A
Series III (pronoun)		O	O, S

Table 7.1: Gitksan agreement patterns

The agreement patterns of Coast Tsimshian (Maritime) across its clause type split and person split are presented in Table 7.2. In independent clauses, it is necessary to know the person features of both arguments in a transitive clause to determine what agreement paradigms to use; this means it is not obvious how transitive and intransitive clauses should be grouped together to determine the overall alignment system at work. For illustrative purposes, I here group intransitive clauses together with each of the three transitive constructions, where intransitive clauses involving local S arguments pattern together with transitive clauses involving local O arguments, and the same for third-person S and O arguments.²

	Dependent	Independent		
		LOCAL S/O		3RD-PERSON S/O
		Local A	3rd-person A	
Series I (clitic)	A	A, %S	A, %S	
Series II (suffix)	S, O	O		A
Series III (pronoun)		S	S, O	S, O

Table 7.2: Coast Tsimshian agreement patterns

From this distribution, we can see the emergence of an area *without* ergativity: in independent clauses where an absolutive (S/O) argument is a local person, the Series I clitics index both ergative subjects and, sometimes, intransitive subjects, in a nominative distribution (as pointed

²I refer the reader to the full description of the agreement patterns in Chapter 6, particularly Table 6.9, for a more carefully delineated summary.

out by Davis 2018). The picture is muddled somewhat by the optional nature of this marking for intransitive subjects (“with certain combinations of tense/aspect and person”, as Davis 2018 puts it; ms. page 36).³ However, this represents the beginning of a true split-ergative pattern that may in future grammaticalize to more obligatory status.

Contra descriptions and references in some previous work, Coast Tsimshian is not an example of split-ergativity on the basis of clause-type or tense/aspect; the primary factor at play in this circumstance is *person*. The misinterpretation of prior description originates from an emphasis on case marking, based on an analysis of the connective articles as morphological case. In this dissertation, I have adopted the recent proposal that Tsimshianic “case” alternations (in both IT and CT) are in fact a morphological effect derived from adjacency to coreferential agreement (Davis and Forbes 2015; Davis 2018) – essentially a morphological (rather than phonological) haplology-like effect. Drawing focus away from the supposed “case markers”, we see a very different typological picture of Coast Tsimshian. Split ergativity is due to the extension of Series I clitic agreements from a formerly pure ergative distribution, to the beginnings of a nominative one, doubling the Series III pronouns predominantly used for S.

7.3.2 Theoretically: Models of ergativity

In this thesis, I have adopted a probe-goal framework for ergativity, under which the ergative argument receives agreement from the head that merges it, a transitive v^o . This is in contrast to several other styles of analysis: first, analyses under which ergative case is assigned high in the clause by T/Infl^o, and absolutive lower, by v^o (Levin and Massam 1985; Bobaljik 1993; Laka 1993); and second, to dependent-case analyses, which do not utilize probes and goals to determine case and agreement alignments, but instead determine alignment in a language as a factor of the number of nominals in a domain. Languages vary parametrically whether two nominals in the same domain are differentiated by assigning ‘ergative’ dependent case to the higher, or ‘accusative’ to the lower (Marantz 1991; Bobaljik 2008; Baker and Bobaljik 2017). I briefly argued in Chapter 3 that a dependent case analysis would have a difficult time accounting for the switch between Gitksan’s absolutive and nominative-patterning Series II agreement in light of the constancy of Series I ergative agreement, and across the clause-type split.⁴

In my analysis, I have followed Woolford’s (1997; 2006) inherent-case model of ergativity, implemented through agreement (Coon 2017). The inherent-case approach has been noted

³To reflect this, I have chosen to model Series I marking in intransitives differently than in transitives, where it is obligatory, as discussed in section 6.4.2.1.

⁴However, I acknowledge that the dependent case model is quite flexible, and could certainly be leveraged in some way to accommodate these patterns. See Davis (2018) for an approach to Tsimshianic that adopts dependent case as a method of assigning abstract case.

by some as drawing heavily from theta roles, suggesting that it is a more appropriate analysis for ergative languages where ergative case/agreement can only target an animate or agentive subject. Gitksan is not one of these languages – ergative arguments in Gitksan may be inanimate causers. Ergative patterning results exclusively on the basis of formal transitivity. In my use of the ‘inherent’ style of ergative case assignment or agreement for Gitksan, I am forced to assume that the precise theta role of a subject – a more intricate distinction between agents and causers, for example – does not affect whether the ergative agreement probe appears, but that the appearance of the ergative probe is linked to a νP that contains a formal object (see e.g. discussion by Deal 2010; Sheehan 2017). It remains to be more fully explored whether the differences between agent-based ergative languages and transitivity-based ergative languages are due to a difference in the mode of ergative case assignment and agreement, or in how or where ergative subjects are merged. That is, there is a larger pressure regarding how crosslinguistic models of ergativity should adopt Baker’s (1988) Uniformity of Theta-role Assignment Hypothesis, and how finely-grained we should model the merge position of arguments based on their theta-roles.

The analysis I have proposed does not crucially rely on ergativity being a true ‘inherent’ or theta-related case, and is not necessarily directly connected to the merge position of the transitive subject. Ergativity in Gitksan might be considered more ‘structural’ than theta-related, with ergative case being assigned to inanimate, nonagentive subjects so long as there is an object in the clause. My analysis would also function appropriately under the alternate proposal that ergative case/agreement is assigned structurally (e.g. Deal 2010), so long as this structural ergative case/agreement occurs lower (or ‘earlier’) in the derivation than Series II agreement. It is crucial that ergative Series I agreement be the first type of agreement that probes for a goal, and that the Series II agreement target is determined partially based on the outcome of this process.

We can also consider the nature of ergativity in Tsimshianic from a theoretical perspective, based on the analysis I have presented in this thesis. In Table 7.3, I summarize the heads involved in argument licensing. Note that I have referred to a projection *Infl* in my discussion of Tsimshianic rather than *T*, following Ritter and Wiltschko (2009), since there is no obvious grammatical tense contrast in Tsimshianic. We may consider *Infl* to be equivalent to *T* elsewhere in the literature for the purposes of this discussion.

In my analysis of dependent clauses, I propose that ergative arguments are licensed by ν° (Series I agreement), while absolutive arguments are licensed by *Infl* $^\circ$ (Series II agreement).⁵

⁵This is so even when Series II agreement appears to agree with A arguments in the IT Double Ergative construction. I have proposed that while the Series II probe on *Infl* $^\circ$ copies the features of the A argument and sometimes spells them out, it also copies the features of the lower O argument, which has not received licensing. This consistent

		A	S	O
<i>Interior</i>	DEPENDENT	v	Infl	Infl
	INDEPENDENT	v	–	–
<i>Coast</i>	DEPENDENT	v	Infl	Infl
	INDEPENDENT (ABS is local)	v	v	Infl
	(ABS is 3rd pers.)	v	–	–

Table 7.3: Argument licensing heads in IT and CT, by context

In independent clauses, ergative arguments are licensed by v° , and absolutive arguments do not receive licensing – except in Coast Tsimshian, where a syntactic Person Licensing Condition triggers an exceptional shift in the available agreement probes for absolutive arguments. Local objects in CT are licensed by Infl° , while local intransitive subjects are licensed by an exceptionally added Series I/ v° probe. Considering things from this underlying syntactic perspective, we see that ergatives have a consistent licenser (v°), and that absolutive arguments may either be licensed (by Infl°), or not licensed at all, based on clause type.

According to Legate’s (2008) classification of ergative languages, under my analysis the Tsimshianic languages are the *absolutive=nominative* type: the absolutive arguments S and O have the same syntactic licenser. This is in contrast to *absolutive=default* languages, where S and O have different syntactic licensers; S is licensed by T/Infl° , while O is licensed by v° .⁶

This raises the question whether the Tsimshianic languages are consistent with the properties of Legate’s (2008) ABS=NOM type of languages, and if Series II agreement is consistent with the properties of agreement from T. Legate (2008) predicts that absolutive S and O arguments should pattern identically with respect to their availability in nonfinite contexts, in contrast to ABS=DEF languages, where S and O should exhibit differences in their behavior. That is, because agreement from T is expected to be defunct or unavailable in nonfinite clauses, we would expect T-agreement (absolutive) to be impossible in nonfinite clauses and nominalizations. For ABS=NOM languages, as I predict the Tsimshianic languages to be, this should mean neither S or O are available (with absolutive/Series II marking) in nonfinite contexts, while for ABS=DEF languages, there should be a split: absolutive O should be available, and absolutive S should not be.

I consider Gitksan as the example language here. It should first be noted that it is difficult to apply the nonfinite-clause test in Gitksan, because no clear example of nonfinite clauses have yet been identified: all embedded clauses, including those with and without complementizers,

absolutive licensing pattern for the Series II agreement probe allows me to explain why absolutive arguments consistently trigger distinct inflection in extraction contexts.

⁶Brown’s (2016) analysis of Gitksan extraction arrives at the same ABS=NOM classification, through different reasoning.

are identical with respect to the availability of inflection. Embedded clauses all inflect in the dependent style.

I have proposed that Series II agreement is based on Infl°. If any embedded clauses are determined by some diagnostic to in fact be nonfinite, this means that agreement from Infl is available in nonfinite clauses, and can be assigned to both S and O arguments. This is inconsistent with Legate's (2008) predictions for either ABS=NOM or ABS=DEF languages; she assumes that T-agreement (= Series II), assigned minimally to intransitive subjects, should not be available for assignment in a nonfinite clause. Yet both S and O receive Series II agreement without issue, and no restrictions have been noted regarding the availability of embedded intransitive clauses.

We may also consider nominalizations, but this too poses some difficulty. As discussed in section 4.2.2, all clear instances of nominalizations are intransitive, and have just one Series II-marked possessor. A verbal-nominal alternation is presented in (3): in particular, the possessor of the nominalized predicate *bisxw* 'expect' switches from a Series III pronoun *'nii'y* in the verbal context, to the Series II agreement form *-y* in the nominalization.

- (3) a. Ap lukw'il bisxw 'nii'y nim 'wahl hlgu gyuudan.
 ap lukw'il bisxw 'nii'y n=dim 'wa-t =hl hlgu gyuudan
 VER very expect 1SG.III 1.I=PROSP find-3.II =CN small horse
 'I really expect that I'll get a pony.' *Verbal*
- b. Ap lukw'il anbisxwi'y nim 'wahl hlgu gyuudan.
 ap lukw'il an-bisxw-'y n=dim 'wa-t =hl hlgu gyuudan
 VER very NMLZ-expect-1SG.II 1.I=PROSP find-3.II =CN small horse
 'I really expect that I'll get a pony.'
Lit: 'My expectation is very much that I'll get a pony.' *Nominalized*
 (BS)

On the face of it, this demonstrates the clear availability of absolutive S in nominalized contexts; the difficulty of eliciting formally transitive nominalizations might conversely indicate a restriction on absolutive O in nominalizations. However, this is the opposite of what Legate (2008) predicts of ABS=DEF languages: she suggests that in a nominalization, only O, licensed by *v*, should be able to receive absolutive case, and that S, licensed by Infl, never should. However, I suggest that the Gitksan restriction on transitive nominalizations is less about restrictions on absolutive O, and more about a restriction on ergative (Series I) agreement with A in the nominal context.

Legate's (2008) method for testing the availability of absolutive licensing in nominalization crucially relies on a distinction between *absolutive* versus *genitive or dative* case in the languages under investigation – but for Gitksan and the Tsimshianic languages, Series II suf-

fixal morphology is used both for absolutive arguments *and* for possessors (= genitive agreement). The ABS=NOM and ABS=DEF dichotomy obscures what I believe to be the case in Tsimshianic: the absolutive S and O arguments have the same syntactic licenser (Infl^o), as in an ABS=NOM type language, but the paradigm used for Infl-agreement is also the default morphological agreement paradigm (Series II), as in an ABS=DEF language. Series II agreement is used for absolutive agreement in dependent clauses, possessor agreement in nominal contexts, and prepositional agreement. Series I ergative agreement, in contrast, is the morphologically marked type of agreement. However, it is fair to say that no split has yet been identified in the syntactic behavior or availability of absolutive S versus O in Gitksan. For example, as I argued in Chapter 5, both types of absolutives crucially trigger Series II agreement switch when they are extracted.

We might wonder whether *unlicensed* absolutives, or the local-person absolutives of CT, licensed by Infl (O) versus *v* (S), have any distinct properties. Unfortunately, this type of licensing is only possible in independent clauses, so it is not possible to test the behavior of these arguments in embedded contexts or nominalizations.

7.4 Additional considerations for Tsimshianic

In this thesis, I have presented a wide-scale analysis under which agreement in the Tsimshianic languages is modeled in an overall similar way. There are differences in the method that the Series II agreement controller is determined in dependent clauses, resulting in a nominal-type split in IT but not CT; conversely, there are differences in the requirements on local person licensing in independent clauses, resulting in a person split in CT but not IT.

Beyond these two factors, however, I have argued that the clause type distinction, ergativity, and the general divisions between agreement paradigms work identically. In Chapter 6, I proposed some extensions in the degree to which the Interior and Maritime branches can be compared, by discussing the distribution of the transitive vowel cognate in Coast Tsimshian, and arguing that Coast Tsimshian's four surface paradigms can be interpreted as just three, where the independent pronouns may take a different, prosodically encliticized form when adjacent to the verb (resulting in the bound Series IIIa, CT 'marked absolutive'/'definite objective' paradigm). This allows both the Interior and Maritime branches to be examined as cognate systems with two verbal agreement paradigms (the Series I clitics, CT 'ergative'/'subjective'; and the Series II suffixes, CT 'absolutive'/'objective').

I have aimed to present an analysis here that is relatively complete in its empirical coverage, including all major agreement splits and also smaller areas of variation with respect to local person objects and word order (i.e. between VSO and VOS). Future work – particularly on

CT – may determine whether there are additional discrepancies between the main branches of the Tsimshianic family, or indeed between individual dialects, which motivate revision of this picture. In this section, I discuss some such areas for extension and additional research.

7.4.1 Variations on clause types

The primary novel contribution of this thesis to analysis of Tsimshianic is the idea that dependent markers should not be conceived of as *triggers* for dependent inflection, but rather as *blockers* of independent inflection. I have not here pursued in detail a precise analysis of individual dependent markers. I have simply assumed that these elements ‘count’ in one way or another as blockers or intervenors between the Series II agreement probe in Infl^o and a matrix C^o which through feature inheritance licenses a version of the Infl-probe that is capable of triggering agreement switch. It remains to be seen whether subsets of these elements should be analyzed as (for example) heads, modifiers, or other kinds of syntactic operators, and which should specifically be analyzed as instantiations of C^o, versus elements from other projections.

Overall, while I have presented a new suggestion regarding how the different clause types are conditioned in the syntax, room remains for alternate means of conditioning the same formal difference. That is, we might expect variation in the environments where agreement switch can be conditioned. Some variation of this kind has been presented by Dunn (1990a) in his description of Southern Tsimshian (Sgüüxs; Maritime branch). In Southern Tsimshian (ST), independent clause inflection⁷ is reportedly used not only with bare matrix clauses, but also in matrix clauses that contain *na* ‘PST’ or *dim* ‘PROSP’, even if a dependent marker is present as well. To illustrate, ST clauses that begin with *hla dim* ‘just about to’ have independent inflection, apparently conditioned by *dim*. In (4) below, Series II suffixal marking (-*u* ‘1SG’) goes to the ergative subject. There is no Series I ergative marking, as would be expected of a dependent transitive.

- (4) Hla dim lu ts'aky du luhk.
 hla dim lu ts'ak-T-ə-**u** =i luhk
 INCEP PROSP in extinguish-T-TR-1SG.II =CN fire
 'I'm just about to put the fire out' (Dunn 1990a: 84)

This is in contrast to the other Tsimshianic languages, where the presence of *hlaa/la* (a dependent marker) blocks the use of independent inflection in clauses starting with *hlaa dim/la dm*.

⁷Based on Dunn (1990b,a, 1991), the inflection used in independent clauses in Sgüüxs is consistent with the Coast Tsimshian pattern; that is, it exhibits a person split. In “you and me” clauses with two local persons as subject and object, agreement matches that expected of dependent clauses. In clauses with third person objects, agreement switch occurs; Series II is ergative. In inverse (3<1) contexts, the ergative argument is marked with Series I clitic agreement, and the local person object is a bound Series IIIa pronoun.

In (5) below, an example from Coast Tsimshian, the introduction of a clause by *la dm* triggers ergative Series I agreement =*t* ‘3; s/he’; the object receives Series II agreement (-*t* ‘3’, which coalesces with the determiner of the following object DP *t Doug* to produce =*s*.).

- (5) Ła dmt fimooms Doug.
 1a dm=t fimoom-t=s Doug
 INCEP PROSP=3.I help-3.II =DN Doug
 ‘S/he is about to help Doug.’ (Anderson and Ignace 2008)

It is unclear whether the properties of *na* ‘PST’ and *dim/dm* ‘PROSP’ differ between Southern Tsimshian and the other Tsimshianic languages, or whether these differing patterns are a result of a different licensing process for the agreement-switch probe on Infl°. Unfortunately, the scarcity of material and resources on Southern Tsimshian makes this a difficult question to investigate further, but we might investigate whether any speakers of Coast Tsimshian have a similar pattern.

7.4.2 Series III pronouns

In this section, I discuss some remaining issues regarding the realization of arguments as Series III pronouns. My original characterization of Series III forms was as last-resort or default spell-out forms for pronouns which have not undergone (successful) ϕ -agreement. I have proposed that in independent clauses, or *agreement-switch* constructions, ergative arguments receive ϕ -agreement by Series I agreement on a transitive v° , and that the Series II agreement probe on Infl $^\circ$ targets the ϕ -features on the ergative agreement probe, rather than the features of an unlicensed argument. Absolutives in these constructions truly receive no ϕ -agreement, and are spelled out as Series III pronouns. In contrast, in dependent clauses, or *canonical* agreement contexts, ergative arguments receive ϕ -agreement through Series I agreement on v° , and absolutive arguments are indexed by the Series II agreement head. This suffices to provide a basic picture of Tsimshianic argument licensing, illustrated in Table 7.4; the arguments that would surface as Series III pronouns are shaded.

	Dependent	Independent
A	ν	$(\text{Infl}+)\nu$
S	Infl	—
O	Infl	—

Table 7.4: Argument licensing across the clause type split (Series III shaded)

There are discrepancies to this picture. In Gitksan Double Ergative constructions, the *ergative*

tive A argument controls Series II/Infl-agreement on the surface, and the object O is a Series III pronoun. However, in order to account for the fact that absolutive extraction always triggers Series II agreement switch, I argued that dependent clause absolutives must always receive licensing from the Series II agreement head Infl°. I implement such this licensing through a probe-valuation process where the Series II agreement probe copies the features of the ergative argument that it first encounters while probing – thereby gaining access to its features at spellout – but subsequently moves on to the object’s active ϕ -features and is able to license it (Deal 2015b). Though the argument licensing process remains fixed across dependent clauses, in some situations the object controls Series II agreement, and other times the ergative subject does, leaving the object to be spelled out as a Series III pronoun. The overt surface realization of the dependent object as a Series III pronoun, coupled with the proposal that it is covertly targeted and licensed by Series II agreement, presents a conflict. This is illustrated in Table 7.5.

	Dependent		Independent
	<i>Erg/Abs</i>	<i>Double Erg</i>	
A	ν	ν	(Infl+) ν
S	Infl	Infl	–
O	Infl	Infl	–

Table 7.5: Proposed argument licensing in Gitksan (Series III shaded)

Elsewhere, for Coast Tsimshian, I have argued that local person arguments must be syntactically licensed even in independent clauses, through the exceptional insertion of a probe that will license the typically-unlicensed absolutive. In intransitives clauses, this means the insertion of a Series I agreement head. Yet even in the presence of Series I agreement, the S argument is realized as a Series III pronoun. In transitive clauses, a version of the Series II/Infl probe is inserted that agrees with interpretable features on arguments, rather than uninterpretable features on probes. Yet despite the absolutive objects receiving licensing from Infl°, some local person objects are spelled out with Series II suffixal agreement, and others are realized with Series IIIa pronouns. The latter occurs in local-object contexts (also ‘inverse’ or 3<1 contexts), where I have argued that conflict between third-person subject features and local-person object features on the Series II agreement head result in the post-syntactic deletion of the head. The syntactic licensers I propose for arguments in CT clauses are summarized in Table 7.6, again with shading where the argument is realized as a Series III pronoun.

In both languages, then, a consequence of my analysis is that surface realization as a Series III pronoun is dissociated from a failure to receive ϕ -agreement in the syntax. This results from how I have chosen to utilize ϕ -agreement as a licensing mechanism: ϕ -licensing by the Series II agreement probe is connected to the use of independent inflection in absolutive extraction,

Dependent		Independent		
		<i>All-Local</i>	<i>Local Abs</i>	<i>3rd Abs</i>
A	<i>v</i>	<i>v</i>	<i>v</i>	(Infl+) <i>v</i>
S	Infl	(n/a)	<u>%Asp/<i>v</i></u>	–
O	Infl	<u>Infl</u>	<u>Infl</u>	–

Table 7.6: Proposed argument licensing in CT (Series III shaded, repairs underlined)

and ϕ -licensing is used to generate the two alternate agreement patterns in Coast Tsimshian clauses with local-person absolutes. This allows for agreement patterns in multiple contexts to be linked together to a greater degree than they have in previous analyses, but obscures the original robust generalization regarding the complementarity of Series I/II agreement and Series III pronouns.

Reflecting specifically on my analysis of transitive objects, we can see from the tables above that an object realized as Series III pronoun may or may not have been licensed by Infl^o – but if it has been, then some postsyntactic process has occurred to shift the Series II agreement controller to a different argument, or delete the Series II morpheme entirely. This is in some ways similar to a recent proposal by Brown (2016), who also suggests Series III pronouns are abstractly split into two groups: some are licensed by T, and others are default or repair forms in lieu of agreement or syntactic licensing. However, Brown (2016) draws the distinction between the two types in a different place: the Series III arguments in independent clauses, licensed by T^o, versus Series III arguments in focus positions and IT Double Ergative constructions, which are repair forms. He proposes that the T^o in dependent clauses is nonfinite, and does not agree with any argument – T^o is not connected to Series II morphology.

Brown (2016) furthermore suggests that the two CT paradigms Series IIIa and IIIb directly mirror this distinction, with Series IIIa pronouns appearing when licensed by an independent T^o, and Series IIIb forms appearing elsewhere. This is not the distribution of the CT paradigms, however. Under Brown’s (2016) analysis, we would expect Series IIIa bound forms to appear in independent clauses, and Series IIIb full forms to be restricted to repair contexts (i.e. focus positions). However, in CT we actually find both Series IIIa and IIIb forms surfacing in independent clauses. Variation between the two is actually a function of *person* (as well as verbal adjacency).

While this could potentially be explained as a special person-sensitive property of the T-licensed Series III paradigm, we also find some absolutive arguments being marked with Series II agreement, and not surfacing as Series IIIa forms at all. This goes entirely unexplained under Brown’s (2016) proposal that independent clauses involve consistent T-agreement with absolutes.

In contrast, I have argued that there is *no* absolute licensing in independent clauses and no underlying difference between the Series IIIa and IIIb paradigms; it is exclusively person which conditions the difference.⁸ The lack of absolute licensing is then used to motivate the appearance of alternate agreement patterns in CT independent clauses (the person split), which Brown (2016) does not discuss.

A better generalization for the realization of pronoun arguments as Series III forms seems to be the following: an argument may surface as a Series III pronoun so long as it is *not* pronounced elsewhere as a Series II suffix (due to agreement with Infl°). As an interim proposal, I suggest that this can be understood in terms of a principle as presented in (6):

(6) Φ -COMPLEMENTARITY:

Pronounce at most 1 ϕ -complete copy of a unique ϕ -feature bundle.

Essentially, this leaves the issue to be determined in the morphology, just as the determination of which moved copies in a chain should be pronounced is an issue determined in the morphology. Bundles of ϕ -features are copied to different verbal heads over the course of agreement; this principle states that when an agreement head copies *all* the relevant features in the bundle, it may not be pronounced in two positions.

How this applies to Tsimshianic is as follows. Ergative arguments always have their features copied by the Series II agreement probe on Infl°, either through indirect agreement between the Series II probe on Infl° and the Series I probe on transitive v° (agreement switch; independent clauses), or by the Series II probe copying the features of multiple arguments, including the ergative, on its way to agree with the absolutive (dependent clauses). This goes some way to explaining why full Series III pronouns may not surface for ergative arguments.

For absolutive arguments, there is a greater variety of options. When Series II is required to spell out the ergative argument, a Series III realization is possible for the object, as the object's feature bundle is not pronounced elsewhere. The same is true when the Series II morpheme is deleted altogether (as I argue for CT inverse contexts). then the object may be pronounced as a pronoun. In summary, for absolutives, realization of a pronoun argument as either a Series II suffix or a Series III pronoun is possible, but never both at once. If the conditions for overt Series II agreement are met, realization as a pronoun is impossible.

Restrictions on Series II and III complementarity – pronoun/agreement complementarity, as we might think of it – were previously modeled by Hunt (1993) using the “Avoid Pronoun Principle” (Chomsky 1981; Jaeggli 1982). Like my proposed ϕ -complementarity principle in

⁸An outstanding issue with respect to this proposal is whether or not Series IIIa pronouns in CT actively alternate with Series IIIb full pronouns, for example when emphasized, as my analysis would seem to predict. I have found some data that I believe is suggestive of this (see section 6.3.1), but the issue requires dedicated investigation.

(6), this is essentially motivated on the basis that information about the pronoun is conveyed by the agreement; spellout of identical information in two places is redundant. However, I must point out that pronoun/agreement complementarity in Gitksan is not simply a matter of “avoiding pronouns”. There are places where Series III pronominal arguments can appear despite the presence of agreement – so long as this is only Series I clitic agreement.

Evidence for the lack of Series I and III complementarity surfaces in two places. First, in Coast Tsimshian intransitives, Series I can optionally agree with a local person argument. However, the local person argument must still be realized in the form of a Series III(a) bound pronoun. This results in Series I doubling Series III, as in (7).

- (7) Nam siipginsm.
 na=**m** siip-k =**nsm**.
 PST=2.I sick-INTR =2PL.IIIA
 ‘You (pl) were sick.’ (Sasama 2001: 78)

In Interior Tsimshianic, quotative particles involve Series I agreement, but *not* Series II agreement. The ‘sayer’ of a quotative construction is typically only referenced by Series I marking, but may also optionally surface as a Series III pronoun as well. Again, this results in doubling, as shown in (8).

- (8) Yugwimaa luu bagadilt niya ’niiy.
 [yukw=imaa luu- bagadil-it] **n**=ya **’nii’y**
 [IPFV=EPIS in- two.HUM-SX] 1.I=say 1SG.III
 ‘I said maybe there’s two in there (twins).’ (FW)

The apparent root *ya* of the quotative construction does not appear independently,⁹ but quotatives nevertheless seem to actively reflect the speaker through use of the Series I paradigm; there is a full paradigm of quotatives corresponding directly to all types of Series I agreement, provided in Table 7.7.

	SG	PL
1	niya	diphiida
2	miya	masimhiida
3	diya	diitda

Table 7.7: Full paradigm of quotatives (Gitksan)

From this, we can see that pronouns are not necessarily complementary with Series I agree-

⁹It is most likely related to the predicate *he* ‘say, feel’, which, as I demonstrate in Forbes (to appear), appears to inflect like a noun.

ment. Obligatory complementarity only holds between Series III pronouns and Series II agreement. That is, complementarity cannot be attributed to a general principle about avoiding redundancies across agreement and pronouns, but must be connected to some special property of Series II agreement specifically.

Series II agreement has two special properties: when the features of an argument are copied to Infl° and spelled out as Series II suffixes, they cannot be doubled in the form of a pronoun. DPs can be doubled, because third-person agreement is not an “identical copy” of all the features of a DP – the lexical content also needs to be pronounced. In addition, arguments licensed by Series II agreement are never extracted, as discussed in Chapter 5. In order to extract arguments that normally receive Series II agreement, the derivation must be altered such that the Series II agreement probe no longer targets those arguments (that is, agreement switch must occur). Series II agreement can be characterized as a special type of agreement that freezes an argument in place and realizes all features of that argument, including those features not registered by Series I agreement (such as third-person plurality, in Gitksan).

I leave it an open question as to the precise characterization of this special property. It may have something to do with the position of Series II agreement on Infl°, or the larger set of features to which Series II agreement is sensitive; perhaps it could be attributed to some sense of *φ-completeness*.

7.5 Conclusion

In this thesis, I have provided the reader with a complete picture of verbal agreement in the Interior and Maritime branches of Tsimshianic. Analysis of the Tsimshianic languages has struggled with the intricacies of nominal case marking. In this dissertation, I adopt Davis and Forbes’s (2015) and Davis’s (2018) proposal, based on Hunt’s (1993) initial insight, that this ‘case’ marking is in fact derived from the adjacency of arguments to verbal agreement; the Tsimshianic languages actually lack syntactic case (i.e. alternations in dependent marking as a function of the narrow syntax; Davis and Forbes 2015; Davis 2018). Adopting this assumption, the Tsimshianic languages are strictly head-marking. I provide a morphosyntactic analysis of verbal agreement in both the Interior and Coast branches, in contrast to prior analyses which involve varying degrees of reference to nominal case (Belvin 1990b; Hunt 1993; Baker 2015).

The primary goal of this work was to propose the first comprehensive, *cross-Tsimshianic* morphosyntactic analysis of these patterns, including shifts in agreement across a clause type split, nominal type split, and person split. Notably, each of these split conditions involves the persistence of morphological ergativity (with the exception of an emerging nominative pattern with Coast Tsimshian local S arguments in independent clauses). A key feature of these anal-

yses is that throughout all the contexts, ergative alignment arises through the same operation: inherent agreement between transitive *v* and the ergative subject. Although multiple paradigms are capable of realizing this agreement relation, ergativity is itself generated only a single way. Although ergativity has many different guises crosslinguistically (sometimes being restricted to animate subjects, or becoming available for the subjects of unergatives) its particular properties remain consistent across Tsimshianic, regardless of the split context. I achieve a consistent model of ergative agreement by attributing splits in agreement to properties of features and the relativization of probes, rather than differences in syntactic structure.

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Appendix A

Gitksan agreement sentences

In this appendix I lay out full sentences for 1SG, 2SG, 3/3SG, and 3PL pronominal arguments, as well as DP arguments, in different configurations of subject versus object. Table A.1 shows the examples which reference each type of argument in the sentences below.

		Subject				
		1SG: <i>I</i>	2SG: <i>you</i>	3: <i>she/he/it</i>	3PL: <i>they</i>	DP: (<i>any noun</i>)
Object	(no object)	(1)	(6)	(11)	(17)	(23)
	1SG: <i>me</i>	*	(7)	(12)	(18)	(24)
	2SG: <i>you</i>	(2)	*	(13)	(19)	(25)
	3: <i>her/him/it</i>	(3)	(8)	(14)	(20)	(26)
	3PL: <i>them</i>	(4)	(9)	(15)	(21)	(27)
	DP: (<i>any noun</i>)	(5)	(10)	(16)	(22)	(28)

Table A.1: Gitksan example sentences with each type of subject/object

The base intransitive sentence used is *SUBJECT fled* (flee: *k'ee~~k~~xw* SG, *huut* PL), and the base transitive sentence used is *SUBJECT chased OBJECT* (chase: *hilan* ~ *iilen*).¹ The (a) examples are all independent clauses. The (b) examples (and the (c) examples, where relevant) are all negative versions of the same sentence; that is, they are dependent clauses under *needii* ‘not, NEG’.

Examples are fully glossed as in the rest of the dissertation. A note on the agreement used for each argument is given on the right of each sentence.

¹ All the sentences in this appendix were provided by Vince Gogag (VG), a Western dialect speaker from Git-anyow. For this speaker, an unstressed vowel after an [n] is often produced as a syllabic [ŋ]. This means that words like /hilenit/ are frequently pronounced more like *iilennt*.

1sg subject (I)

- (1) 1SG.SUBJ – (no object) a. K'eekxw 'nii'y.
 (I ...) k'eekxw 'nii'y
 flee 1SG.III
 'I ran away.' [I_{III}]
- b. Needii k'eekxwi'y.
 nee=dii k'eekxw-'y
 NEG=FOC flee-1SG.II
 'I didn't run away.' [I_{II}]
- (2) 1SG.SUBJ – 2SG.OBJ a. Ileni'y 'niin.
 (I < you) hilen-ə-'y 'niin
 chase-TR-1SG.II 2SG.III
 'I chased you.' [I_{II}, you_{III}]
- b. Neediin iilenin.
 nee=dii=n hilen-n
 NEG=FOC=1.I chase-2SG.II
 'I didn't chase you.' [I_I, you_{II}]
- (3) 1SG.SUBJ – 3.OBJ a. Ileni'y 'nit.
 (I < her/him/it) hilen-ə-'y 'nit
 chase-TR-1SG.II 3.III
 'I chased her.' [I_{II}, her_{III}]
- b. Neediin iilent.
 nee=dii=n hilen-t
 NEG=FOC=1.I chase-3.II
 'I didn't chase her.' [I_I, her_{II}]
- (4) 1SG.SUBJ – 3PL.OBJ a. Ileni'y 'nidiit.
 (I < them) hilen-ə-'y 'nidiit
 chase-TR-1SG.II 3PL.III
 'I chased them.' [I_{II}, them_{III}]
- b. Neediin iilendiit.
 nee=dii=n hilen-diit
 NEG=FOC=1.I chase-3PL.II
 'I didn't chase them.' [I_I, them_{II}]

- (5) 1SG.SUBJ – DP.OBJ
(*I* < *noun*)
- a. Ileni’y t Mark.
hilen-ə-’y =t Mark
chase-TR-1SG.II =DN Mark
‘I chased Mark.’ [I_{II}, Mark]
- b. Neediin iilens Mark.
nee=dii=n hilen-t =s Mark
NEG=FOC=1.I chase-3.II =DN Mark
‘I didn’t chase Mark.’ [I_I, Mark_{II}]

2SG subject (you)

- (6) 2SG.SUBJ – (no object)
(*you* ...)
- a. K’eekxw ’niin.
k’eekxw ’niin
flee 2SG.III
‘You ran away.’ [you_{III}]
- b. Needii k’eekxwin.
nee=dii k’eekxw-n
NEG=FOC flee-2SG.II
‘You didn’t run away.’ [You_{II}]
- (7) 2SG.SUBJ – 1SG.OBJ
(*you* < *me*)
- a. Ilenin ’nii’y.
hilen-ə-n ’nii’y
chase-TR-2SG.II 1SG.III
‘You chased me.’ [you_{II}, me_{III}]
- b. Neemadii iileni’y.
nee=m=dii hilen-’y
NEG=2.I=FOC chase-1SG.II
‘You didn’t chase me.’ [you_I, me_{II}]
- (8) 2SG.SUBJ – 3.OBJ
(*you* < *her/him/it*)
- a. Ilenin ’nit.
hilen-ə-n ’nit
chase-TR-2SG.II 3.III
‘You chased her.’ [you_{II}, her_{III}]
- b. Neemadii iilent.
nee=m=dii hilen-t
NEG=2.I=FOC chase-2SG.II
‘You didn’t chase her.’ [you_I, her_{II}]

- (9) 2SG.SUBJ – 3PL.OBJ
(*you < them*)
- a. Iilenin 'nidiit.
hilen-ə-n 'nidiit
chase-TR-2SG.II 3PL.III
'You chased them.' [you_{II}, them_{III}]
- b. Neemadii iilendiit.
nee=m=dii hilen-diit
NEG=2.I=FOC chase-3PL.II
'You didn't chase them.' [you_I, them_{II}]
- (10) 2SG.SUBJ – DP.OBJ
(*you < noun*)
- a. Iilenint Mark.
hilen-ə-n =t Mark
chase-TR-2SG.II =DN Mark
'You chased Mark.' [you_{II}, Mark]
- b. Neemadii iilens Mark.
nee=m=dii hilen-t =s Mark
NEG=2.I=FOC chase-3.II =DN Mark
'You didn't chase Mark.' [you_I, Mark_{II}]

3 subject (she/he/it)

- (11) 3.SUBJ – (no object)
(*she/he/it ...*)
- a. K'eekxw 'nit.
k'eekxw 'nit
flee 3.III
'She ran away.' [she_{III}]
- b. Needii k'eekxwt.
nee=dii k'eekxw-t
NEG=FOC flee-3.II
'She didn't run away.' [she_{II}]
- (12) 3.SUBJ – 1SG.OBJ
(*she/he/it < me*)
- a. Iilenit 'nii'y.
hilen-ə-t 'nii'y
chase-TR-3.II 1SG.III
'She chased me.' [she_{II}, me_{III}]
- b. Neediit iileni'y.
nee=dii=t hilen-'y
NEG=FOC=3.I chase-1SG.II
'She didn't chase me.' [she_I, me_{II}]

- (13) 3.SUBJ – 2SG.OBJ
(*she/he/it < you*)
- a. Iilenit 'niin.
hilen-ə-t 'niin
chase-TR-3.II 2SG.III
'She chased you.' [she_{II}, you_{III}]
- b. Neediit iilenin.
nee=dii=t hilen-n
NEG=FOC=3.I chase-2SG.II
'She didn't chase you.' [she_I, you_{II}]
- (14) 3.SUBJ – 3.OBJ
(*she/he/it < her/him/it*)
- a. Iilenit 'nit.
hilen-ə-t 'nit
chase-TR-3.II 3.III
'She chased him.' [she_{II}, him_{III}]
- b. Neediit iilent.
nee=dii=t hilen-t
NEG=FOC=3.I chase-3.II
'He didn't chase her.' [he_I, her_{II}]
- (15) 3.SUBJ – 3PL.OBJ
(*she/he/it < them*)
- a. Iilenit 'nidiit.
hilen-ə-t 'nidiit
chase-TR-3.II 3PL.III
'She chased them.' [she_{II}, them_{III}]
- b. Neediit iilendiit.
nee=dii=t hilen-diit
NEG=FOC=3.I chase-3PL.II
'She didn't chase them.' [she_I, them_{II}]
- (16) 3.SUBJ – DP.OBJ
(*she/he/it < noun*)
- a. Iilenit t Mark.
hilen-ə-t =t Mark
chase-TR-3.II =DN Mark
'She chased Mark.' [she_{II}, Mark]
- b. Neediit iilens Mark.
nee=dii=t hilen-t =s Mark
NEG=FOC=3.I chase-3.II =DN Mark
'She didn't chase Mark.' [she_I, Mark_{II}]

3PL subject (they)

- (17) 3PL.SUBJ – (no object) a. Huut 'nidiit.
 (they ...) huut 'nidiit
 flee.PL 3PL.III
 'They ran away.' [they_{III}]
- b. Needii huutdiit.
 nee=dii huut-diit
 NEG=FOC flee.PL-3PL.II
 'They didn't run away.' [they_{II}]
- (18) 3PL.SUBJ – 1SG.OBJ a. Iilendiit 'nii'y.
 (they < me) hilen-ə-diit 'nii'y
 chase-TR-3PL.II 1SG.III
 'They chased me.' [they_{II}, me_{III}]
- b. Neediit iilendiit 'nii'y.²
 nee=dii=t hilen-diit 'nii'y
 NEG=FOC=3.I chase-3PL.II 1SG.III
 'They didn't chase me.' [they_{I,II}, me_{III}]

²In section 3.3.2 I reported that only sentences with this agreement pattern were possible, with third-plural subjects marked by both Series I and II agreement. Sentences where a local person object was marked by suffixal agreement were judged ungrammatical. When collecting sentences for this appendix, this failed to hold; sentences with local-person object agreement were sometimes deemed possible even with third-plural subjects, resulting in the following:

- (18) c. Neediit iileni'y 'nidiit.
 nee=dii=t hilen-'y 'nidiit
 NEG=FOC=3.I chase-1SG.II 3PL.III
 'They didn't chase me.' [they_I, me_{II}]
- (19) c. Neediit iilenin 'nidiit.
 nee=dii=t hilen-n 'nidiit
 NEG=FOC=3.I chase-2SG.II 3PL.III
 'They didn't chase you.' [they_I, you_{II}]

The speaker seemed to accept sentences of this kind about 50% of the time; some potential examples were judged ungrammatical. Two other speakers (HH and BS) uniformly reject this agreement pattern.

My generalization is this: when the subject is a DP, the pattern where the local object controls Series II suffixal agreement seems to be preferred; it is frequently the form volunteered by speakers. For third-plural subjects, conversely, speakers *never* volunteer the form where the local object controls agreement. Most seem to consider it ungrammatical, but it may be on the way to increasing in its acceptability. It is clearly more marginal, so I have only footnoted it here.

- (19) 3PL.SUBJ – 2SG.OBJ
(they < you)
- a. Iilendiit 'niin.
hilen-ə-diit 'niin
chase-TR-3PL.II 2SG.III
'They chased you.' [they_{II}, me_{III}]
- b. Neediit iilendiit 'niin.
nee=dii=t hilen-diit 'niin
NEG=FOC=3.I chase-3PL.II 2SG.III
'They didn't chase you.' [they_{I,II}, you_{III}]
- (20) 3PL.SUBJ – 3.OBJ
(they < her/him/it)
- a. Iilendiit 'nit.
hilen-ə-diit 'nit
chase-TR-3PL.II 3.III
'They chased her.' [they_{II}, her_{III}]
- b. Neediit iilendiit ('nit).
nee=dii=t hilen-diit 'nit
NEG=FOC=3.I chase-3PL.II 3.III
'They didn't chase her.' [they_{I,II}, her_{III}]
- (21) 3PL.SUBJ – 3PL.OBJ
(they < them)
- a. Iilendiit 'nidiit.
hilen-ə-diit 'nidiit
chase-TR-3PL.II 3PL.III
'They chased them.' [they_{II}, them_{III}]
- b. Neediit iilendiit 'nidiit.
nee=dii=t hilen-diit 'nidiit
NEG=FOC=3.I chase-3PL.II 3PL.III
'They didn't chase them.' [they_{I,II}, them_{III}]
- (22) 3PL.SUBJ – DP.OBJ
(they < noun)
- a. Iilendiit t Mark.
hilen-ə-diit =t Mark
chase-TR-3PL.II =DN Mark
'They chased Mark.' [they_{II}, Mark]
- b. Neediit iilendiit t Mark.
nee=dii=t hilen-diit =t Mark
NEG=FOC=3.I chase-3PL.II =DN Mark
'They didn't chase Mark.' [they_{I,II}, Mark]

- (26) DP.SUBJ – 3.OBJ
(*noun* < *her/him/it*)
- a. Iilenis Mark 'nit.
hilen-ə-t =s Mark 'nit
chase-TR-3.II =DN Mark 3.III
'Mark chased her.' [Mark_{II}, her_{III}]
- b. Neediit iilens Mark 'nit.
nee=dii=t hilen-t =s Mark 'nit
NEG=FOC=3.I chase-3.II =DN Mark 3.III
'Mark didn't chase her.' [Mark_{I,II}, her_{III}]
- (27) DP.SUBJ – 3PL.OBJ
(*noun* < *them*)
- a. Iilenis Mark 'nidiit.
hilen-ə-t =s Mark 'nidiit
chase-TR-3.II =DN Mark 3PL.III
'Mark chased them.' [Mark_{II}, them_{III}]
- b. Neediit iilens Mark 'nidiit.
nee=dii=t hilen-t =s Mark 'nidiit
NEG=FOC=3.I chase-3.II =DN Mark 3PL.III
'Mark didn't chase them.' [Mark_{I,II}, them_{III}]
- (28) DP.SUBJ – DP.OBJ
(*noun* < *noun*)
- a. Iilenis Markt Clarissa.
hilen-ə-t =s Mark =t Clarissa
chase-TR-3.II =DN Mark =DN Clarissa
'Mark chased Clarissa.' [Mark_{II}, Clarissa]
- b. Neediit iilens Markt Clarissa.
nee=dii=t hilen-t =s Mark =t Clarissa
NEG=FOC=3.I chase-3.II =DN Mark =DN Clarissa
'Mark didn't chase Clarissa.' [Mark_{I,II}, Clarissa]