

# Nominal types in Gitksan split-absolutive agreement

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This paper presents a study of a split absolutive-nominative agreement pattern in Gitksan (Tsimshianic) which co-occurs with ergative agreement. The split is conditioned on the basis of nominal type: alongside ergative agreement, a second type of agreement targets absolutes (S, O) when the subject is a participant or third-singular pronoun, or nominatives (S, A) when the subject is a full DP or third-plural pronoun. This results in what appears to be construction-dependent variation in the applicability of the Activity Condition, as some transitive subjects receive both ergative and nominative agreement.

It is proposed that DP arguments and third-plural pronouns are able to receive multiple instances of agreement by virtue of bearing D-features; in contrast to the situation with typical pronouns, these D-features remain active for agreement even if prior ergative agreement has already deactivated the argument's  $\phi$ -features. Both ergative and nominative agreement may target a single argument because different groups of features are targeted during the two operations. The D-feature property is ultimately linked to a structural DP/non-DP distinction amongst arguments, providing some insight into the role of D in pronominal systems. This analysis, which crucially relies on an approach to activity that explicitly allows incremental deactivation of an argument, accounts for the empirical facts in Gitksan more readily than a purely morphological approach or an approach that considers distinctions between  $\phi$ -features alone.

## 1 Introduction

The empirical focus of the paper is an unfamiliar nominal-type split in Gitksan (Tsimshianic; Canada), a language with predominantly ergative/absolutive agreement. It is well known that ergative languages frequently display a split in their grammar, with the ergative alignment of agreement or case commonly shifting to nominative or neutral in some context (Moravcsik 1978; Dixon 1994). However, the nominal-type split which I here explore instead affects absolutive agreement: it is an example of an *absolutive-nominative* split, illustrated below in (1). The agreement paradigm under investigation is bolded below, and the argument it indexes underlined in the gloss.

- (1) a. Neediit        iileni'y.  
      nee=dii=t    hilen-'y  
      NEG=FOC=3.I chase-1SG.II  
      'She didn't chase me.'

- b. Neediit      iilendiit      'nii'y.  
     nee=dii=t      hilen-**diit**      'nii'y  
     NEG=FOC=3.I chase-3PL.II 1SG.III  
     'They didn't chase me.'
- c. Neediit      iilens      Mark 'nii'y.  
     nee=dii=t      hilen-t      =t      Mark 'nii'y  
     NEG=FOC=3.I chase-3.II =PN Mark 1SG.III  
     'Mark didn't chase me.'
- (VG)<sup>1</sup>

Two types of agreement are present in these clauses. The agreement marker suffixed to the main predicate (referred to as Series II, here bolded) is the focus of investigation: it switches which transitive argument it agrees with, marking the object if the subject is a third singular pronoun (1a), but marking the subject if the subject is a third-plural pronoun (1b) or a full DP argument (1c) (Hunt 1993). At the same time, ergative agreement is consistently marked by a pre-predicative agreement marker (Series I), which tracks the transitive subject regardless of the behavior of the suffix. Because ergative agreement by the clitic remains consistent, the pattern is not 'split-ergative'; it is instead suffixal agreement which varies between an absolutive or nominative pattern, hence 'split-absolutive'.

This pattern is interesting for a variety of reasons. In this paper, I focus on a challenge that it poses to the Activity Condition (AC; Chomsky 2000, 2001). The AC was originally formulated to account for the tendency of arguments to only receive one kind of Case; once an argument has received Case, it is no longer a possible target for later Case assignment or movement to a later Case-position. *Activity*, as I discuss it in this paper, is the property that makes an argument an available target for a probe, originally equated with whether it bears uninterpretable Case features. Under the original AC, once an argument has been so targeted by a probe, its uninterpretable features are *deactivated* and cannot be targeted again. The according prediction is that arguments should be targets of only one case- or agreement-related valuation operation in any given construction. An example like (1a), where each instance of agreement targets a different argument, is consistent with the AC. Examples like (1b) and (1c), where both types of agreement target the same argument, are unexpected.

A myriad of authors have adopted, extended, and challenged the AC on the basis of complex case and agreement patterns in languages of the world. Baker (2008) incorporates a level of macro-parameterization to the AC, proposing that in some languages agreement (and an argument's status as 'active') is associated strictly with Case features, while in others agreement need not be associated with Case. In this latter group of languages, arguments are capable of receiving case/agreement multiple times. Oxford (2017) contributes a level of micro-parameterization, examining a single language (Plains Cree, Algonquian) and determining that the AC applies to agreement in certain constructions, forcing a one-to-one correspondence between probes and goals, but not others. The

<sup>1</sup>Examples are from the author's own fieldnotes, with consultant initials provided as attribution, unless otherwise cited. Abbreviations in glossing are as follows: 1 = first person, 2 = second person, 3 = third person, ABS = absolutive, ACC = accusative, ANIM = animate, ART = article, AX = agent extraction, CAUS = causative, CCNJ = clausal conjunction, CN = common noun, COM = comitative, COMP = complementizer, DAT = dative, DESID = desiderative, PN = proper ('determinate') noun, DUR = durative, DWID = domain widener, EPIS = epistemic, ERG = ergative, FOC = focus, INCEP = inceptive, INS = instrumental, IPFV = imperfective, IRR = irrealis, NEG = negative, NOM = nominative, OBJ = object, PL = plural, PREP = preposition, PROSP = prospective, PST = past, REPORT = reportative, SG = singular, SPT = spatiotemporal, SX = intransitive subject extraction, T = T-morpheme, TR = transitive.

Gitksan agreement pattern is seemingly an additional example supporting this latter conclusion; the AC seems to be construction-dependent.

Curiously, however, Oxford’s (2017) data and discussion suggests that the applicability of the AC varies on the basis of properties of the *probe*: in Plains Cree, C-agreement in a past-tense clause obeys the typical AC pattern, failing to target arguments that agree with T, while C-agreement in a present-tense clause contravenes it, doubling up on the target of T-agreement. This suggests that the different past/present varieties of T have behave differently with respect to their ability to deactivate arguments upon agreement. In contrast, the Gitksan pattern—a split based on nominal type—suggests that the applicability of the AC varies based on properties of the *goal*. Certain types of subjects are able to remain active after the first round of agreement, while others are not.

In this paper, I explore the specific properties conditioning this split in Gitksan agreement. I propose that probes in Gitksan consistently deactivate the agreement features they target (in contrast to what Oxford 2017 proposes for Plains Cree) and that the split can be attributed to an additional axis by which probes are known to vary: in the types of features that they search for. The apparent AC problem that this data presents can instead be re-evaluated as a case of two agreement probes seeking slightly different groups of features, sometimes finding them on the same DP target and sometimes on two different targets. I propose that the two groups of target features of relevance are  $\phi$ -features (here person and number), versus what I refer to as D-features, which I argue are consistently present on full DPs and third-plural pronouns in Gitksan.

The organization of the paper is as follows: §2 lays out the Gitksan agreement split data and paradigms in more detail. §3 presents my analysis of the split through incremental deactivation of an argument, based on a distinction between  $\phi$ -features and D-features and ordered application of Agree. §4 reviews the shortcomings of several possible alternatives, such as person-sensitivity or a morphological analysis relying on Fission, ultimately supporting the syntactic approach I propose. §5 reviews some comparative and diachronic data, demonstrating how the Gitksan system differs from related Coast Tsimshian, and tracing the difference in nominal types to the presence or absence of DP-level structure. Finally, §6 concludes, reviewing some implications of the analysis for our general understanding of the Activity Condition.

## 2 The morphosyntax of Gitksan agreement

Gitksan is an endangered language of the small Tsimshianic family, indigenous to the northern interior of British Columbia, Canada.<sup>2</sup> The Tsimshianic languages are all predicate-initial and predominantly VSO; they are also ergative and consistently head-marking (Davis & Forbes 2015; Davis 2018).<sup>3</sup> There are two sets of agreement: the preverbal clitics (Series I) and verbal suffixes (Series II), illustrated in Table 1 alongside the set of independent pronouns (Series III). Note that third ‘singular’ exponents are number-neutral for inanimates; this is discussed further in section 2.3.

<sup>2</sup>More properly, the language is referred to as Gitksanimx̱, Gitksenimx̱, or Gyaanimx̱, depending on the dialect of the speaker. I adopt the neutral spelling *Gitksan* for the name of the language following previous work (Rigsby 1989; Hunt 1993; Forbes et al. 2017), and note individual dialects by the name of the village where relevant. The agreement facts considered here are identical across all speakers I have consulted, regardless of dialect (5 of 6 villages).

<sup>3</sup>Modern Gitksan exhibits the strictest VSO ordering of arguments across the family. In the other varieties, VOS order commonly emerges when the object argument is a local person (Jelinek 1986; Peterson 2017; Forbes 2018).

Table 1: Gitksan person-marking series

	Pre-predicate clitics (I)		Predicate suffixes (II)		Independent (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

The Series I/II/III labels are given on the basis of each paradigm’s linear order in the VSO sentential template, following [Rigsby \(1986\)](#). This sidesteps the need to concretely associate any paradigm with a particular function such as ‘absolute’. A basic template for a sentence is given in (2). The clitics appear pre-predicatively (I), the suffixes appear after the predicate (II), and the full pronouns appear in the place of arguments, following the predicate (III).

(2) (Dep.Marker=I) Predicate-II DP/III<sub>Subj</sub> DP/III<sub>Obj</sub>

The suffixal paradigm is by far the most prevalent of the three; it can have multiple possible alignments based on properties of the clause, as the rest of this section will demonstrate, and also marks possessors on nouns and objects of some prepositions. This paradigm is clearly a component of the Series III independent pronouns in Table 1, which seem to involve a kind of pronominal base *’nii*; this is also true of oblique and locative pronouns.

For concreteness, I analyze the independent Series III set as true pronouns, and both the Series I clitic and Series II suffix sets as syntactic agreement. The Series I set are ‘clitics’ in the purely morphophonological sense; they are highly flexible in their choice of hosts, typically cliticizing onto any present dependent markers (through either pro- or en-clisis) or the left edge of the predicate complex, with certain placements conventionalized (see discussion by [Rigsby 1986](#); [Tarpent 1987](#); [Hunt 1993](#)).

The Interior Tsimshianic languages demonstrate a consistent ergative alignment in agreement, as illustrated in (3) with a bolded ergative suffix. Agreement is absent in intransitive (3a), and occurs targeting only the second-person ergative subject in transitive (3b).

- (3) a. Bax *’nii’y*.  
       bax *’nii’y*  
       run 1SG.III  
       ‘I ran.’ (VG)
- b. Iilenn *’nii’y*.  
       hilen-i-**n** *’nii’y*  
       chase-TR-2SG.II 1SG.III  
       ‘You chased me.’ (VG)

The ergative pattern holds across multiple syntactic splits, which I will lay out in this section (originally described by [Rigsby 1986](#) for Gitksan, and [Tarpent 1987](#) for mutually intelligible Nisga’a). The first, overarching split concerns *clause-type*; a secondary *nominal-type split* is found within only one of the two clause-types. In this paper, my focus is on the latter split, conditioned by nominal type, but my analysis is broadly able to accommodate agreement in both clause types.

This section first presents the broader context of the agreement split across clause-types, necessary to successfully contextualize the absolutive/nominative sub-split upon which the paper focuses; by so contextualizing the pattern I aim to provide a successful model of this split within the agreement system as a whole. After this context is provided, I narrow in to provide a detailed description of the absolutive/nominative agreement split. Finally, I provide details of the agreement paradigms themselves and some restrictions on their uses, before presenting the relevant generalizations in summary.

## 2.1 An overarching agreement split

The alignment of Gitksan’s person-marking paradigms is predominantly *ergative/absolutive*. However, there are two distinct clause types where the realization of this ergative marking differs. The first clause type, which I refer to as ‘independent’, are clauses that lack overt functional material such as negation, complementizers, aspectual operators, or other subordinators, and have only a bare predicate and its arguments. The second type, ‘dependent’ clauses, are those which do have functional morphemes preceding the predicate.<sup>4</sup> The functional morphemes that trigger this difference are broadly termed ‘dependent markers’ following [Hunt \(1993\)](#).

Examples of each clause type are provided in (4) and (5); the (a) examples are intransitive, and the (b) examples are transitive. (In each set, and throughout the paper, ergative-marking morphemes are bolded and absolutive-marking morphemes are italicized.) In both clause types, the ergative argument receives a unique kind of agreement, contrasting with the marking for absolutives. The primary difference between the clause types is in what the precise marking for ergative and absolutive arguments is.

(4) INDEPENDENT	(5) DEPENDENT
a. <b>Bax</b> 'nii'y. <b>bax</b> 'nii'y run 1SG.III 'I ran.'	a. Needii <b>bax</b> a'y. nee=dii <b>bax</b> -y NEG=FOC run-1SG.II 'I didn't run.'
b. Iileni'y 'nit. hilen-i-'y 'nit chase-TR-1SG.II 3.III 'I chased her.'	b. Neediin iilent. nee=dii= <b>n</b> hilen-t NEG=FOC=1.I chase-3.II 'I didn't chase her.' (VG)

In independent clauses (4), only one agreement marker is available, the verbal suffix (marked as Series II, [Rigsby 1986](#)), and it marks the ergative. Absolutive arguments are realized as free pronouns (Series III). By contrast, in the dependent clauses (5), that same verbal suffix is instead used to mark absolutives, and a second marker indexes the ergative. Ergative arguments receive agreement from a unique set of clitics that appear preverbally (Series I).<sup>5</sup>

<sup>4</sup>This ‘independent/dependent’ terminology is drawn from [Rigsby \(1986\)](#); I adopt it as an analysis-neutral set of labels. Alternate terminology for the clause-type split in the Tsimshianic literature includes ‘indicative/subjunctive’ ([Boas 1911](#)) and ‘predicate-focused/normal’ ([Tarpent 1987](#)).

<sup>5</sup>There are a few other cues to the clause type distinction. First, independent and dependent clauses differ in the patterning of certain nominal connective morphemes, which I analyze as K-level determiners introducing full DP arguments following [Forbes \(2013\)](#). [Davis & Forbes \(2015\)](#) and [Davis’s \(2018\)](#) argue that this difference follows directly from

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. This pattern can instead be described as partial ‘agreement reversal’ (Baerman 2007; Kalin & van Urk 2015) or ‘pivoting ergativity’ (Davis & Forbes 2015), with suffixal agreement *reversing* or *pivoting* with respect to its alignment. The suffixes (Series II) are either ergative or absolutive depending on the clause type. This basic pattern of partial ergative/absolutive agreement reversal is attested in all the Tsimshianic languages, and is illustrated in Table 2.

Table 2: Initial distribution of person paradigms

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

It is not the aim of this paper to delve into the details of modeling Gitksan agreement reversal, as it is more concerned with a sub-pattern found exclusively within the dependent clause type. However, the broader context of agreement reversal presents a level of complexity to agreement in Gitksan that makes it less amenable to an analysis in a dependent-case framework (Marantz 1991; Bobaljik 2008; Baker 2015), as argued by Forbes (2018:81).<sup>6</sup>

Important to note is the number of agreement probes available in any given clause. Regardless of clause type, transitive clauses always involve a dedicated ergative agreement marker, leading to the generalization in (6).

(6) *Transitive/ergative generalization:*

If the clause is transitive, introduce  $\varphi\theta$  to the derivation.

To differentiate the clause types, we see that dependent clauses always have more agreement probes than equivalent independent clauses. We might then say that the dependent markers also introduce an agreement probe, and formulate the generalization in (7).<sup>7</sup>

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the shift in suffixal agreement, which the connectives encliticize to, based on a morphophonological interaction. Transitive independent clauses also have an additional morpheme, which I gloss as TR ‘transitive’ (following Hunt 1993). This vowel can be seen in (4b).

<sup>6</sup>Hunt (1993) presents a late GB/early Minimalist account of agreement reversal where Series II agreement is the result of agreement by different heads in different contexts. Forbes (2018) provides a more recent approach in a probe-goal agreement framework (Chomsky 2000, 2001); in this analysis, agreement reversal is derived by the ergative Series I agreement head moving to the Series II agreement head in independent clauses, and transferring its agreement features to be realized there. Brown (2016) presents a contrasting analysis of independent clauses, but does not explicitly discuss the difference in agreement across clause types or the syntax of dependent clause agreement. I present a slightly more detailed take on how to derive agreement reversal in footnote 13.

<sup>7</sup>For the purposes of this paper, I remain neutral with respect to what precise property these morphemes have. Aside from their effect on the morphosyntax of the clause they introduce, they do not form a clear morphological or semantic class; some are derived from verbs, while others are not, and they encode a wide variety of meanings. The functional heads these morphemes could be associated with range from C to Aspect. Several formal correlates have been proposed for this contrast, including phonologically overt embedding (Hunt 1993),  $[\pm\text{finite}]$  (Brown 2016), and  $[\pm\text{matrix}]$  (Forbes 2018).

- (7) *Clause type generalization:*  
If there is a dependent marker, introduce  $u\phi$  to the derivation.

This results in a situation where there may be anywhere from 0-2 agreement probes in a given derivation, as illustrated in Table 3. In this paper, I focus specifically on contexts with *two* agreement probes: dependent clauses which are also transitive.

Table 3: Agreement probes by clause properties

	-TAM	+TAM
-TR	–	1 $\phi$
+TR	1 $\phi$	2 $\phi$

## 2.2 The absolutive/nominative sub-split

In transitive dependent clauses, two types of agreement are active, allowing for interaction between the two probes and the emergence of an additional split. The agreement split upon which this paper focuses—a secondary split based on *nominal type*—is conditioned based on the properties of the transitive subject. It affects the alignment of suffixal agreement (Series II) in dependent clauses. As a baseline, note that when a dependent clause is intransitive, the suffix marks the sole argument of the verb, as in (8) and (9):

- (8) Needii 'wihl goli'm.  
nee=dii 'wihl gol-'m  
NEG=FOC around run.PL-1PL.II  
'We didn't run around.' (BS)
- (9) Needii huutdiit.  
nee=dii huut-*diit*  
NEG=FOC flee.PL-3PL.II  
'They didn't run away.' (VG)

However, in a transitive clause, the target of suffixal agreement may either be the subject or the object. In other words, it alternates between an absolutive or a nominative distribution. This difference is conditioned by the properties of the ergative subject.

If the ergative argument is a participant or third-singular pronoun, as we have seen in examples from the previous subsection, it is marked exclusively with the preverbal clitic. The suffix in turn marks the object. This is exemplified in (10) and (11) for a participant subject and third-singular subject, respectively.

- (10) Needipdii iilent.  
nee=**dip**=dii hilen-*t*  
NEG=1PL.I=FOC chase-3.II  
'We didn't chase him/her.' (VG)



- (11) Neediit        iilent.  
       nee=dii=t    hilen-*t*  
       NEG=FOC=3.I chase-3.II  
       ‘He/she didn’t chase him/her.’ (VG)

As the suffix marks both intransitive subjects and transitive objects, its distribution is *absolute*, in contrast to the ergative preverbal clitic. I will refer to this transitive agreement pattern as the **ERGATIVE+ABSOLUTIVE** pattern.

If the transitive subject is a third-plural pronoun or a DP, a different pattern emerges. To mark a third-plural ergative pronoun, the number-neutral clitic =*t* ‘3’ is not sufficient; the third-plural suffix *-diit* from the suffixal paradigm must be used as well. With the suffix spoken for, the absolutive object is in some sense ‘bumped off’ the verb, and spelled out with an independent pronoun, as illustrated in (12) with the object *’nit* ‘him/her’.

- (12) Neediit        iilendiit    (’nit).  
       nee=dii=t    hilen-**diit**    *’nit*  
       NEG=FOC=3.I chase-3PL.II 3.III  
       ‘They didn’t chase him/her.’ (VG)

Likewise, when the ergative subject is a DP, regardless of number, the same agreement pattern is used, as demonstrated in (13) and (14). The preverbal clitic and the verbal suffix are here both third person, marking the subject, and the object follows as a full pronoun.<sup>8</sup>

- (13) Neediit        gya’as        Michael ’nidiit.  
       nee=dii=t    gya’a-**t** =t    Michael *’nidiit*  
       NEG=FOC=3.I see-3.II =PN Michael 3PL.III  
       ‘Michael didn’t see them.’ (Davis & Forbes 2015:168)
- (14) Neediit        iilens        Mark ’niin.  
       nee=dii=t    hilen-**t**    =t    Mark *’niin*  
       NEG=FOC=3.I chase-3.II =PN Mark 2SG.III  
       ‘Mark didn’t chase you.’ (VG)

In these cases, the distribution of the suffix is to mark both intransitive and transitive subjects: a *nominative* distribution. As the preverbal ergative clitic continues to mark the transitive subject, this result leaves the ergative argument targeted by both sets of agreement. This pattern of transitive agreement can be referred to as **ERGATIVE+NOMINATIVE**—or, because clitic and suffixal agreement jointly index the ergative, **DOUBLE ERGATIVE**.

What this paper considers is the variation between the two patterns: one in which two probes seek distinct arguments, in compliance with the Activity Condition, versus the other in which two probes converge on the same argument, in contravention of the Activity Condition. This variation is based on the nominal-type of the subject argument. I present a revised summary of Gitksan

<sup>8</sup>There is an additional layer of complexity to agreement that arises in situations where participant objects are acted on by DP subjects, as in (14). In these examples, agreement may optionally be with either subject or object. I discuss this data in section 4.2 and consider some possible alternative generalizations and analyses raised by this area of variation. Ultimately, I argue that the choice can be attributed to an additional constraint on participants that can be safely factored out, leaving the generalization presented in this section as the most basic pattern.



agreement as a whole in Table 4, with the sub-split highlighted. Within dependent clauses specifically, preverbal clitic agreement (I) has a consistent ergative alignment, while suffixal agreement (II) has a split absolutive-nominative alignment.

Table 4: Revised distribution of person paradigms (nominal-type split bolded)

Independent		Dependent	
		3PL or DP A	other A
A	II	I + <b>II</b>	I
S	III	<b>II</b>	<b>II</b>
O	III	III	<b>II</b>

The conditions governing the alternation are summarized in (15). These conditions refer exclusively to the character of the ergative subject.

- (15) *Generalizations of the nominal type split:*
- If A is DP/3PL: Probe<sub>I</sub> targets A, Probe<sub>II</sub> targets A.
  - If A is not DP/3PL: Probe<sub>I</sub> targets A, Probe<sub>II</sub> targets O.
  - If no A: Probe<sub>II</sub> targets S.

In the next section, I will discuss some properties of the agreement paradigms themselves and their behaviors.

## 2.3 On DPs and third-plural pronouns

In the agreement pattern we have just explored, DP and third-plural arguments pattern together with respect to the kinds of agreement they attract. In this section, I will review a few more properties about the interaction of agreement with DPs, and special restrictions on agreement versus pronouns. These facts provide additional basis for treating full DPs and third-plural pronouns as members of a natural class.

In general, free pronouns in Gitksan are in complementary distribution with both types of agreement; pronouns in core argument position do not co-occur with coreferent agreement, even for emphatic purposes.<sup>9</sup> Because ergative arguments always agree either via the clitic or suffix paradigm, free pronouns are never found in ergative subject position. The Tsimshianic languages resemble the Celtic languages in this respect, rather than standard *pro*-drop languages like Spanish. The only exception is that third-person agreement obligatorily and categorically co-occurs with full DP arguments, as demonstrated in (16) with the DP =*t Mark*; this is made more surface-apparent when there is a linear intervenor between agreement and the nominal clitic, as in the example in (17) featuring a second-position clitic (Tarpent 1987; Hunt 1993; Davis & Forbes 2015).

<sup>9</sup>Oblique pronouns in periphrastic oblique constructions, discussed in section 5.3, are a potential exception to this, though the agreement in such constructions is always third-person regardless of the person features of the pronoun. Quotatives are another possible exception, this time with true feature-matching agreement, though the status of the quotative particles as productively inflecting is unclear, and the degree to which they are clause-like or reduced is not well understood. See Tarpent (1987:284) and Forbes (2018:260) for more discussion.

- (16) Neediit iilens Mark 'nii'y.  
 nee=dii=t hilen-t =t **Mark** 'nii'y  
 NEG=FOC=3.I chase-3.II =PN Mark 1SG.III  
 'Mark didn't chase me.' (VG)
- (17) Gya'atgat ligit naa 'niin.  
 gya'a-i-t=gat ligi=t naa 'niin  
 see-TR-3.II=REPORT any=PN who 2SG.III  
 'I heard that someone saw you.' (BS)

Notably, the clitic and suffix paradigms differ in the contrasts they draw amongst third persons. The clitic series has only a neutral third-person exponent, while the suffixal series distinguishes third persons for number (and pronouns consequently do as well). The availability or non-availability of this number contrast in the agreement paradigms is critical to later discussion; this number contrast has been innovated relatively recently in only the Interior Tsimshianic branch, and is absent in the Maritime Tsimshianic languages, as will be discussed in section 5.

This third-plural agreement in the suffixal paradigm has some marked properties that in some respect seem more characteristic of a full DP or pronoun than simple agreement. As we have seen in the previous subsection, third-plurals trigger the Double Ergative agreement pattern just as DPs do. In addition, third-plural agreement cannot co-occur with a DP argument. The plural suffix *-diit* is banned when an overt plural argument like *=hl duus* 'the cats' is present; as shown in (18a), only neutral third-person agreement co-occurs with a full noun. Third-plural agreement on the verb with *-diit* may only appear alongside null *pro*, as in (18b).

- (18) a. Gapgaabidimahl duushl aats'ip.  
 gap~gaap-i-[t/\*diit]=imaa =hl duus =hl aats'ip  
 PL~scratch-TR-[3.II/\*3PL.II]=EPIS =CN cat =CN door  
 'The cats might have scratched the door.'
- b. Gapgaapdiidimahl aats'ip.  
 gap~gaap-i-[diit/#t]=imaa pro =hl aats'ip  
 PL~scratch-TR-[3PL.II/#3.II]=EPIS pro =CN door  
 'They might have scratched the door.' (BS)

In addition, both third-plural agreement and full pronouns seem to have a restricted animate reference. The third person independent pronouns *'nit* '3SG' and *'nidiit* '3PL' are not used to refer to inanimates; inanimates are instead typically pronominalized with demonstratives, or otherwise are null (Forbes 2019a). When third-person plural pronouns or agreement are used (*'nidiit* or *-diit*), these have exclusively animate reference (Rigsby 1986; Tarpent 1987; Forbes 2019a). Plural inanimates instead receive third-person 'singular' *-t* agreement, as shown in (19) (this morpheme might be more accurately described as number-neutral).

- (19) a. 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?'

- b. 'Nii'y ant gupt.  
 'nii'y an=t gup-[t/#diit].  
 1SG.III AX=3.I eat-[3.II/#3PL.II]  
 'I ate them.'

*Comment: I guess 'diit' is for people, not cookies.*

(BS)

In terms of its behavior in the agreement sub-split, complementarity with a full noun, and animate reference, third-person plural agreement in Gitksan patterns with full pronouns and DPs, contrasting in every area with the simple third-person agreement marker *-t*.<sup>10</sup> In all these respects it also differs from English number agreement on the verb, which strictly tracks an argument's count properties, not its animacy, nor its lexical versus pronominal character.

For these reasons, I suggest that in Gitksan third-plural pronominal arguments have some property which allows them to be classified in the same set as full DP arguments. I will assume that this property has featural status, and refer to it as a [D] feature; this is discussed further in section 5. We now turn to why the class of arguments bearing this feature in particular (DP arguments and third-plurals) should require agreement from both probes in the clause, when more than one is present.

### 3 An analysis of the nominal-type split

After exploring the full range of complexity in Gitksan agreement, we have seen that clauses may have anywhere from between zero and two agreement probes, based on their clause type and transitivity. Dependent clauses consistently include suffixal agreement, and transitive dependent clauses additionally include agreement on a set of preverbal clitics. In these situations where two agreement probes are present, we find the emergence of a nominal-type split: depending on what the ergative subject is, we sometimes find the two probes indexing different arguments, as in (20), or the same argument, as in (21).

- (20) ERGATIVE+ABSOLUTIVE

Needipdii iilent.  
 nee=**dip**=dii hilen-*t*  
 NEG=1PL.I=FOC chase-3.II  
 'We didn't chase him/her.'

(VG)

- (21) DOUBLE ERGATIVE (ERGATIVE+NOMINATIVE)

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

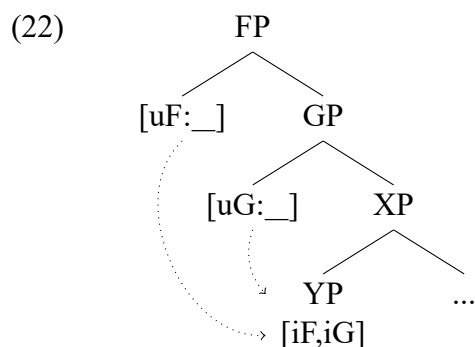
(BS)

<sup>10</sup>It should be noted that this motivated Hunt (1993) to propose an account of Gitksan agreement which contrasted 'strong' and 'weak' features (which required checking before or after transfer of the derivation to PF, respectively). While the present account, detailed in section 3, benefits from Hunt's (1993) prior work and draws a similar distinction between two types of features realized through a single morphological paradigm, it differs in that the contrast is made in a different place. I contrast agreement made with DP and third-plural arguments (D) from that made with other pronouns ( $\phi$ ); Hunt (1993) contrasts agreement with DPs (weak) from agreement with *pro* (strong).

This raises a question for our understanding of the Activity Condition (AC; Chomsky 2000, 2001). In the Ergative+Absolutive agreement pattern of (20), the two types of agreement choose distinct targets. On the face of it, this could be taken as a result arrived at through application of the AC: the subject is deactivated after ergative clitic agreement (with probe I), leaving only the object visible for suffixal agreement (with probe II). However, in the Double Ergative agreement pattern of (21), the two probes overlap in their choice of target. This seems to be a context where the AC is blatantly ignored; the AC mandates that arguments be deactivated after their features are used to value a probe, but in this construction the ergative subject remains a viable target for both probes.

Does the AC play a role in determining the final outcomes of agreement in this split, even though there are situations where it appears to be violated? I propose that the answer to this question is *yes*; the AC governs agreement operations in Gitksan across the board, in both the Ergative+Absolutive and Double Ergative constructions. However, I take seriously the idea that “activity” is a property of individual features, not arguments. If two probes seek valuation by different types of features, it would be possible for a single argument to remain active to value both of them, without violation of the AC.

That is, in considering two different types of features F and G, one agreement operation might find and deactivate feature F, while the second agreement operation finds and deactivates feature G, both present on the same argument, as illustrated in (22). The effective concept of *activity* and *deactivation* are therefore highly dependent on how a given probe is relativized, and the features present on the goal.



In Chomsky’s (2000; 2001) original formulation of the AC, the major feature under evaluation was [Case]. Under the assumption that verbal agreement was primarily concerned with this feature, and arguments only being able to bear a single Case feature, it was natural to assume that an argument could only receive agreement once. Baker’s (2008) later examination of agreement explicitly forwarded the idea that agreement in some languages was not dependent on Case in this way. However, this does entail that agreement should become a free-for-all, without reference to the concept of activity whatsoever. With respect to the Gitksan problem, I suggest that it is possible for two probes in a language to be relativized to different features: one to Case and another to  $\phi$ , or one to  $\phi$  and the other to some different group of nominal features. Under such conditions, we may expect patterns like that attested in Gitksan where two instances of agreement converge upon a single argument.

I propose that the difference between the two Gitksan patterns is not in whether or not agreement deactivates its target feature—I argue that in this language it always does—but in the number

of target features on the subject goal. The group of features I propose are relevant in the Gitksan case are the set of  $\phi$ -features, as well as the D-features raised in the previous section. I suggest that all arguments in Gitksan, including pronouns, *pro*, and full DP arguments, bear some  $\phi$ -feature denoting a person value (minimally a bare person feature e.g.  $[\phi]$ ,  $[3]$ , or  $[\text{Person}]$ , for third persons). I propose that members of the D-marked class additionally bear a feature  $[D]$ .<sup>11</sup> The role of  $[D]$ , including some motivation for including it specifically on third-plural pronouns and its relation to nominal structure, is explored in more detail in section 5. For now it allows us to draw a simple distinction between mono-featural pronouns and bi-featural DPs, including third-plural pronouns. The bi-featural arguments constitute ‘bigger’ targets, able to be potentially agreed with and deactivated multiple times.

We must also consider the position of the two agreement probes in the clausal structure. Each must occupy a position allowing it to target the ergative subject. I propose that the clitic-agreement probe (Series I), which across all contexts only ever targets the ergative subject, is located low in the head of the projection where the external argument is merged: transitive Voice (Kratzer 1996; Pylkkänen 2002; Harley 2013; Forbes 2019b). Voice conducts spec-head agreement with the ergative argument in its specifier, following Coon’s (2017) proposal for ergative agreement on *v* in Ch’ol (Mayan) as well as prior proposals regarding the low locus of ergative case (Woolford 2006; Legate 2017).<sup>12</sup>

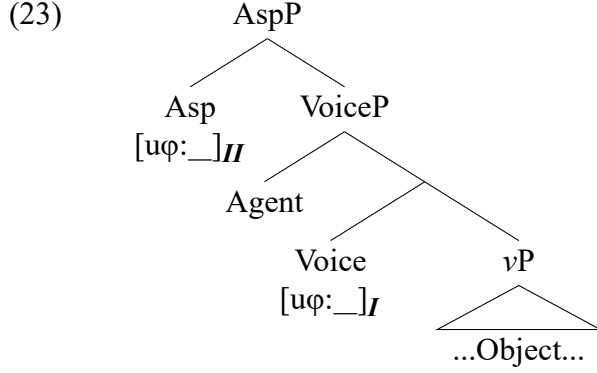
The suffix-agreement probe (Series II), which may have an absolutive, nominative, or ergative distribution, is located on some higher head, not being so closely linked to transitivity. The locus of suffixal agreement could then be anything ranging from Asp(ect), to T/Infl, to C; in the absence of any obvious finiteness sensitivities (the clause-type split from section 2.1 not obviously patterning as such), I simply assume here that it is located on the lowest of these, Asp.<sup>13</sup>

The proposed positions of agreement relative the transitive subject (A) and object (O) are illustrated in (23).

<sup>11</sup>The D-property I discuss here cannot be directly associated with a Case feature, as the D-property crucially must be absent from certain ergative subjects (simple pronouns) while present on others (DPs and third-plural pronouns). Ergative case is presumably present on all ergative arguments regardless of their nominal features. Case features do not obviously play a role in the Gitksan  $\phi$ -agreement system; rather, they become important in the domain of A'-extraction (Davis & Brown 2011; Brown 2016; Forbes 2017, 2018).

<sup>12</sup>This low locus for preverbal clitic agreement is seemingly inconsistent with its linear position near the beginning of the sentence; we might instead suppose that these elements, introduced only in dependent clauses, are introduced on C or some other high projection above suffixal agreement. I discuss this possibility in section 4.1; ultimately I demonstrate that it is necessary for clitic agreement to occur first in order to generate the proper pattern.

<sup>13</sup>Recall that in independent clauses, the ergative clitics are absent and the suffixes become strictly ergative. In other words, the ergative clitics disappear, but the suffixal paradigm takes on their ergative properties. Following Forbes (2018), I suggest this occurs due to some special relation that holds between the clitic agreement head (Voice) and the suffix agreement head (Aspect) in independent clauses only. For example, Voice might move to Aspect in independent clauses, and the first probe value the second due to this process (Forbes 2018); alternately, perhaps Voice is bundled with Aspect in the independent clause type (where no TAM-related morphology is present), and the two probes enter the derivation as a single unit with combined properties. There are multiple other feasible options for deriving the agreement reversal pattern; I leave the issue here.



With this as the base structure, both types of agreement initially target the ergative subject. Clitic agreement on transitive Voice proceeds first and engages in agreement with its specifier, getting the first shot at targeting the ergative subject; it consequently has the potential to block higher suffixal agreement on Asp from targeting the ergative, if it deactivates all of the ergative’s available features. This order of operations derives the alternation we are concerned with.<sup>14</sup>

I have proposed that DP and third-plural pronoun arguments are accessible to multiple rounds of agreement because they bear two types of features:  $\phi$  and D, while other arguments bear only  $\phi$ -features. It is next necessary to determine what features each probe is able to seek and deactivate. I propose that first, clitic agreement on Voice is relativized to  $\phi$ -features. It is always able to find features to agree with on the ergative subject, leading to its consistent ergative alignment.

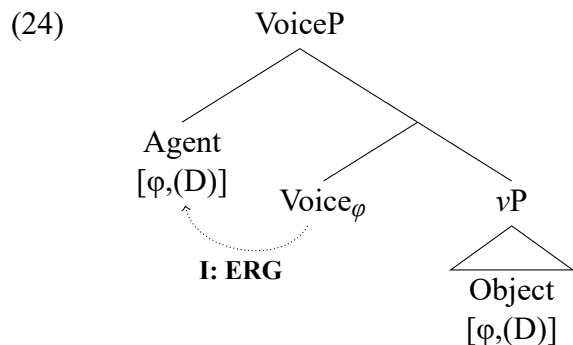
Second, I propose that suffixal agreement on Asp is able to target both  $\phi$ -features *and* D-features. After clitic agreement has taken place, suffixal agreement evaluates the subject for any active features. If the subject has D-features available, it becomes the target of suffixal agreement; the probe must then be sensitive to D-features. The suffix looks to the object only when the subject has no D-features, and if so, it targets the object. It always successfully finds the object, regardless of whether or not the object has D-features, suggesting that this probe is also sensitive to  $\phi$ -features. In sum, whether its final distribution is absolutive or nominative, the suffix agreement probe agrees with the argument bearing the highest active  $\phi$ - or D-feature. I summarize the proposed properties of the agreement probes in Table 5.

Table 5: Properties of Series I and II agreement probes

	Surface form	Syntactic head	Target features
I	Pre-predicate clitics (=n, =m, =t)	Voice <sub>TR</sub>	$\phi$
II	Predicate suffixes (-’y, -n, -t)	Aspect	$\phi$ , D

The stages of the dependent clause derivation proceed as follows. First, ergative clitic agreement on transitive Voice probes for a target in its specifier (Coon 2017). It is sensitive to  $\phi$ -features, which are borne by all arguments, and so always finds and agrees with the  $\phi$ -features on the ergative argument, rendering them inaccessible for future agreement probing. This is demonstrated in (24).

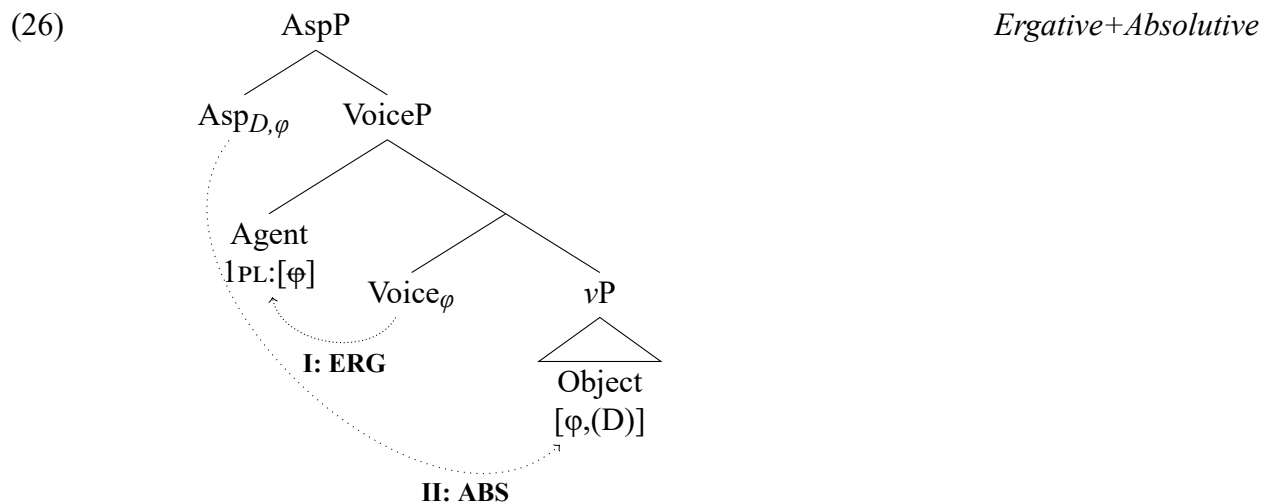
<sup>14</sup>van der Wal (to appear) presents a similar intervention-based analysis of object marking in Bantu languages for pronouns versus DPs, dealing with a slightly different configuration: two probes on a single  $v$  head, targeting two possible goals in its c-command domain.



Second, suffix agreement is merged on Asp and probes for a target. This agreement probe is sensitive to both D- and  $\phi$ -features, and enters into an agreement relation with the highest argument bearing an active feature of either type. The outcome of this agreement operation is therefore dependent on whether all the features of the transitive subject have been exhausted by prior clitic agreement.

In an **ERGATIVE+ABSOLUTIVE** sentence like (25), suffixal agreement targets the object, ignoring the 1st person ergative subject. Under my analysis the first-person A argument only has  $\phi$ -features, with no D-features remaining, and thus has been fully deactivated by clitic agreement. The suffix probe must look further down to the object to find an active set of either D- or  $\phi$ -features, as in (26).

- (25)    Needipdii        iilent.  
          nee=**dip**=dii    hilen-*t*  
          NEG=1PL.I=FOC chase-3.II  
          ‘We didn’t chase him/her.’ (VG)



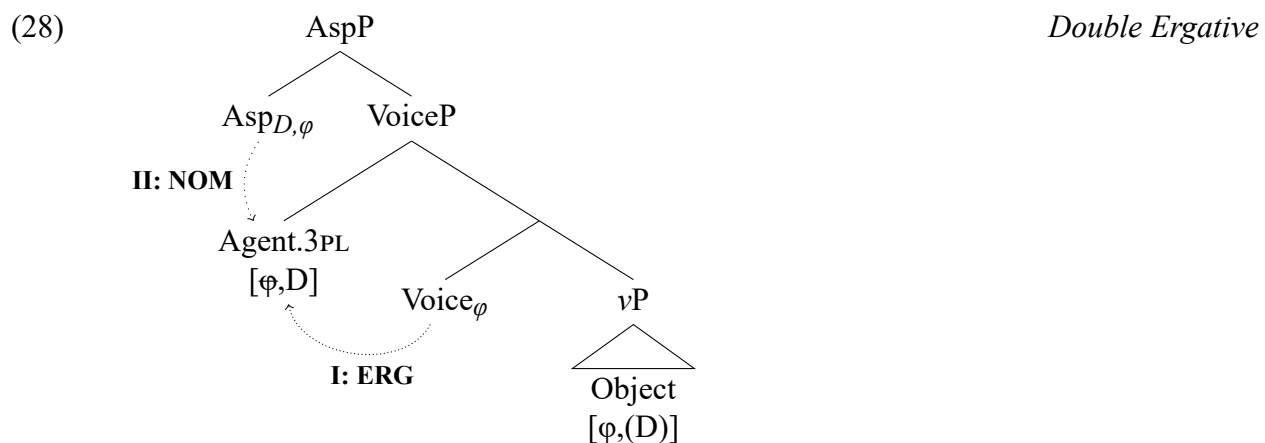
Note, crucially, that the suffix finds the object as a valid target regardless of whether it is first person, third plural, or a DP; the only time suffixal agreement fails to find a valid target is when there is simply no argument to agree with (as later demonstrated in section 4.3 with weather predicates). This demonstrates that it is unimportant whether the object bears D-features or only  $\phi$ -features;



suffixal agreement agrees with it regardless, and so I consequently propose that it is sensitive to both types of features.

In a DOUBLE ERGATIVE sentence like (27), I propose the A argument has both third-person  $\phi$ -features and a D-feature. I propose that the suffixal probe, sensitive to these D-features, may agree with this argument even though it has already been the target of a previous agreement operation, as illustrated in (28). Earlier clitic agreement only deactivates the  $\phi$ -features on the ergative argument, leaving its D-features still accessible.

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



This process cleanly links the alternation in the alignment of suffixal agreement to the features of the ergative A. Split absolutive-nominative alignment in Gitksan can be understood as highest-argument agreement, a typically nominative-patterning alignment, which surfaces as absolutive alignment when interrupted by intervening ergative clitic agreement.

To summarize, the crucial ingredients of the analysis are as follows. First, arguments are not deactivated wholesale after being agreed with, but are rather deactivated incrementally; only individual features are targeted for deactivation. Second, DP and third-plural arguments bear an additional feature not present on typical pronouns. Finally, the clitic probe agrees earlier, and is not sensitive to this extra feature; only the later-agreeing suffixal probe is. The presence of the additional feature on the ergative subject allows additional suffix agreement.

## 4 Considering some alternative analyses

The aim of this section is to consider some alternative models for the Gitksan split-absolutive pattern. I point out three alternatives and discuss the shortcomings of each. First, I review some different possible arrangements of suffixal and clitic agreement in the clausal structure, specifically configurations where suffixal agreement has the chance to agree first, motivated on the basis of the linear order of the agreement morphemes. Second, I consider some additional empirical data which suggests that certain object features might be preferred for agreement; however, I ultimately

argue that these effects must be attributed to a distinct factor. Finally, I consider a purely morphological alternative that utilizes Fission to produce Double Ergative agreement, and some challenges that face this view.

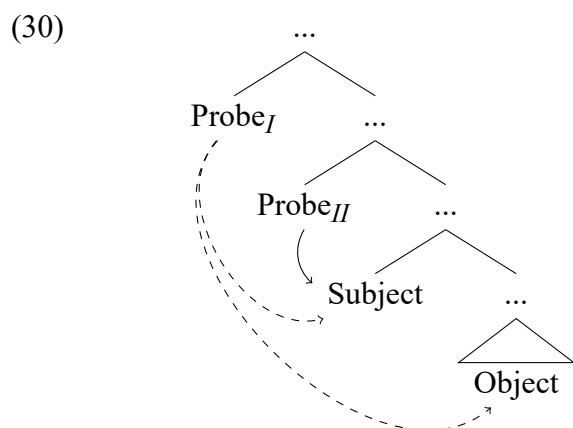
## 4.1 Reversing the order of agreement operations

I have proposed that the ergative clitics are located on transitive Voice, and agree with the ergative subject before the suffixes on Aspect have the opportunity to agree with either subject or object. This order of operations is somewhat contrary to the surface positions of the agreement markers themselves. As illustrated in (29), the clitics are located farther to the left, typically on the dependent marker, while the suffixes are located on the right edge of the verb itself.

- (29)    Neediit        iilens        Mark 'nii'y.  
           nee=dii=t    hilen-t    =t    Mark 'nii'y  
           NEG=FOC=3.I chase-3.II =PN Mark 1SG.III  
           'Mark didn't chase me.'  
(VG)

Both precede the subject and object argument, but this linear order suggests a potentially different structural configuration, whereby the verbal suffix is introduced to the derivation first and has the chance to agree with an argument before the ergative clitic. The aim of this section is to demonstrate the challenges of implementing such an approach.

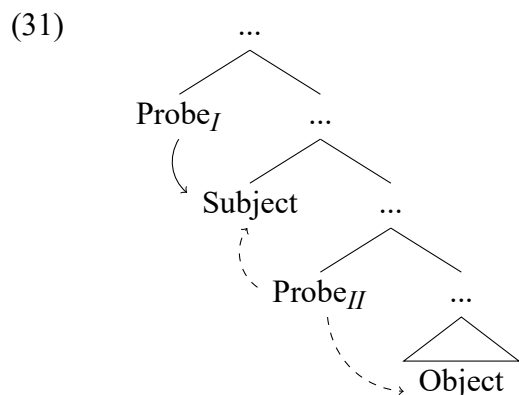
Taking the surface position of the agreement markers with respect to the available arguments entirely at face value, let us first consider a configuration where the suffix and clitic are both above the transitive subject, and are able to agree with either argument, but where the suffix (Probe<sub>II</sub>) agrees first. This is illustrated in (30). The higher clitic probe (Probe<sub>I</sub>) may here be introduced by a dependent marker as high as C.



In this configuration, the expected behavior would be for the suffixal probe to consistently find the more-local transitive subject. The expected behavior of the clitic probe then varies based on whether we would expect an already-agreeing argument to be a potential target for later agreement. If so, then both types of agreement should converge on the subject, as desired. However, if not,

then we would expect the clitic to target the next potential goal: the object. This is precisely the opposite of the actual behavior of the agreement probes: instead it is the clitic probe which consistently targets the subject, and the suffix probe which has the potential to vary its target. In the configuration in (30), the major problem is in how to get the suffixal agreement probe to ignore the subject, and instead target the object.

We might consider an alternative possible configuration to address this issue, illustrated in (31), where the object is the most local argument in the suffix probe's c-command domain.



Here, the suffix probe ( $\text{Probe}_{II}$ ) preferentially targets the more-local object, and the clitic probe targets the subject. At some point during the course of the verb's movement to pre-subject position, it would pick up the suffix agreement probe and move it there as well.

The issue with this configuration is in how to achieve the pattern where both probes target the subject. It would require some operation by which, upon reaching a configuration where the subject is available for agreement, the suffixal agreement probe could *re-agree* with the transitive subject, but only when that subject was a DP or third-plural argument. It is not obvious what would trigger such an operation, or how the clitic probe ( $\text{Probe}_I$ ) would then be able to access the subject afterward.

The structure I originally proposed in section 3, with the alternate order of probes, is able to more naturally account for the attested pattern. Although the clitic probe is further to the left edge, it agrees with the transitive subject first, leaving the suffixal probe to seek a target based on the remaining available features of the subject and object arguments. The issue then becomes one of properly linearizing the two series with respect to each other and the verb, particularly the 'low' Series I clitics in their leftward position.

This is a somewhat hairy issue that I will not explore in full detail here: the clitics can surface flexibly as pro- or enclitics, or sometimes even multiply-exponed circumclitics, usually on the dependent marker, and the full range of contributing factors and degree of optionality merit a close look. To generalize broadly, however, the clitics always linearize leftward of the verb and its modifying 'preverbs'. As a first stab, I suggest following Forbes (2018) that verb-initial order in Gitksan is derived by  $\nu\text{P}$ -raising (Massam 2000), and that the clitic probe on Voice has in its conditions for linearization a requirement to appear to the left of its  $\nu\text{P}$  complement. Although its syntactic association is with  $\nu\text{P}$  and its linear order calculated on that basis, it does not typically take the first  $\nu\text{P}$ -internal element as its actual prosodic host, but rather looks even further leftward, as illustrated in (32).

(32) Dep.Marker=**Voice** [<sub>VP</sub> ... ] Subj Obj **t<sub>Voice</sub>** t<sub>VP</sub>

This type of mismatch between syntactic and prosodic associations is characteristic of other Gitksan clitics, such as the nominal connectives.

## 4.2 Considering a participant object preference

In this section I consider the consequences of a further complication to the picture of agreement in dependent clauses. In situations where a full DP subject acts on a participant object, there is actually free variation: 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, as illustrated by the pairs in (33) and (34).<sup>15</sup>

- (33) a. Jidaat 'maji'mhl lo'op, ...  
 ji-daa=**t** 'mats-'*m* =hl lo'op ...  
 IRR-SPT=**3.I** hit-*IPL.II* =CN rock ...  
 'If a rock hits us ...'
- 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 *IPL.III* ...  
 'If a rock hits us ...' (BS)
- (34) 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** =PN Lisa]  
 'What will I do if Lisa makes me go home?'
- 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** =PN Lisa **1SG.III**]  
 'What will I do if Lisa makes me go home?' (BS)

Based on this we can provide a more complete description of the distribution of suffixal agreement, seen in Table 6. With this new data, it seems that the direct object's properties also play a role in determining the suffixal agreement target. If the ergative subject is a DP *and* the object is a participant, the agreement suffix optionally agrees with either subject or object. However, object features are not as strong a factor as subject features; they trigger free variation between the two possible patterns, rather than necessitating one or the other, in only this specific context.

I here consider and reject the alternate possible generalizations arising in the face of this data: that suffixal agreement should preferentially agree with participants, or that it should preferentially evaluate object features before determining its target. I demonstrate instead that this data is one piece of a collection of evidence that seems to suggest a surface preference for participants to be realized in a verb-adjacent position, whether as verbal suffixes or as pronouns, as also discussed by Forbes (2018).

<sup>15</sup>Speakers do not note any difference between the two options and appear to switch between them freely. No targeted analysis has yet been conducted on the conditioning properties for either possible pattern. A corpus-based or variationist investigation would be a suitable point of departure for further investigation.

Table 6: Possible targets of Series II suffixal agreement based on argument properties

		Ergative Subject			
		1/2	3	DP	3PL
Object	1/2	Obj	Obj	<b>Obj/Erg</b>	Erg
	3	Obj	Obj	Erg	Erg
	DP	Obj	Obj	Erg	Erg
	3PL	Obj	Obj	Erg	Erg

One possibility for deriving agreement with the participant object is that agreement preferentially targets participant features. That is, contrary to the picture of agreement previously painted, there is some kind of person split affecting agreement (e.g. Béjar 2003; Merchant 2006; Deal 2015). However, it is not the case that participant objects consistently attract suffixal agreement. First, the previous examples have shown that participants only *optionally* attract agreement under a DP subject; second, participants never attract agreement under a third-plural pronoun. Rather, clauses featuring third-plural ergative subjects always exhibit double agreement with the ergative, as illustrated in (35).

- (35) 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  
*\*Ergative+Absolute*

This provides additional evidence against a hypothesis whereupon objects features are referenced preferentially over a subject's: a third-plural subject always receives agreement rather than any potential competitor. The pattern would consequently be ill-modeled by a type of agreement system where object features are evaluated first and subject features later only if a preferred target is not found (as discussed in the previous subsection, or through e.g. Cyclic Agree, Béjar & Rezac 2009). I therefore maintain that Gitksan suffixal agreement is better modeled as preferentially evaluating subject features, not object features.

We might consider the possibility that the features of both arguments are referenced for agreement concurrently, and some ranking system (e.g. a nominal hierarchy) determines the final agreement target. However, any such system must crucially also evaluate the grammatical role of the arguments; else the only hierarchy that can be constructed is paradoxical, as I will demonstrate.

Without taking grammatical role into account, reconstruction of a nominal hierarchy would proceed as follows. Examples like (35) demonstrate that third-plural subjects are most preferred, outranking participant objects as in (36).

- (36) 3PL > 1/2

Suffixal agreement alternates freely between agreeing with a DP subject or participant object, so we might model these as having equal rank, as in (37).

(37) 1/2 = DP

The issue arises in considering the relative preference of DPs and third plurals. DP subjects are always preferred for agreement over third-plural objects, as illustrated in (38).

- (38) a. Neediit gya'as Mary 'nidiit.  
 nee=dii=t gya'a-t=s Mary 'nidiit.  
 NEG=FOC=3.I see-3.II =PN Mary 3PL.III  
 'Mary didn't see them.' *Double Ergative*
- b. \*nee=dii=t gya'a-diit Mary.  
 NEG=FOC=3.I see=3PL.II Mary  
 (Only 'They didn't see Mary.') *\*Ergative+Absolutive*

This would reduce to the preference in (39).

(39) DP > 3PL

When all of these isolated rankings are added together, the result is circular, as in (40).

(40) 3PL > 1/2 = DP > 3PL ...

This demonstrates the complexity of what it means to be a 'preferred' type of argument in this system. Features in a nominal hierarchy alone are inadequate to generate the agreement system in full; grammatical role plays a crucial part. Local person objects are optionally preferred for agreement over a DP subject, but never over a third-plural subject. Yet, third-plural objects are never preferred for agreement over any kind of subject. It really does seem to be *subject* properties which determine the course of Series II agreement, with participant objects *under a DP subject* being the sole exception.

What exactly is special about this configuration? Crosslinguistic trends demonstrate the markedness of participant objects, but how do third-plural versus DP subjects differ? Some property allows object features to become relevant only in the context of the latter, not the former.

It turns out that marked constructions involving full nouns and participants arise more broadly in the language, even outside of dependent clauses or the area of agreement. Rigsby (1986) remarks that in an independent clause, where objects do not agree, either VSO or VOS word order is attested when a DP subject acts on a participant pronoun. The VOS pattern is notably the older variant; it is only rarely volunteered but always accepted by the Gitksan speakers I have worked with, but is the only pattern attested in the literature on mutually intelligible Nisga'a (Jelinek 1986; Tarpent 1987). The typical VSO sentence used in Gitksan is presented in (41a). The older VOS option is given in (41b); the participant object is able to appear in a verb-adjacent position in contravention of typical VSO order.

- (41) a. Hlimooyis Mary 'nuu'm.  
 hlimoo-i-t =s Mary 'nuu'm.  
 help-TR-3.II =PN Mary 1PL.III  
 'Mary helped us.'
- b. Hlimooyit 'nuu'm t Mary.  
 hlimoo-i-t 'nuu'm =t Mary  
 help-TR-3.II 1PL.III =PN Mary

‘Mary helped us.’

(Rigsby 1986:263-4)

Word-order optionality also arises between direct and indirect objects in dependent clauses. Indirect objects (below: the goal *gawk’aw* ‘crows’) consistently receive agreement, and typically appear adjacent to the verb, with direct objects (below: the theme *’nuu’m* ‘us; 1PL’) appearing as obliques, as illustrated in (42a). However, when the direct object is a participant, it may appear adjacent to the verb instead, apparently forcing the indirect object DP to be introduced with a preposition, as in (42b).

- (42) a. *Nax’ni’y*      *wint*      *’nim* *ginhl*      *gawk’aw* *as*      *’nuu’m*.  
*nax’ni-i-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 =PN 1PL.III  
‘I heard that she wants to feed us to the crows (?feed the crows us).’
- b. *Nax’ni’y*      *wint*      *’nim* *gint*      *’nuu’m* *ahl*      *gawk’aw*.  
*nax’ni-i-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)

That is, both V-IO-DO order and V-DO-IO orders are possible, although agreement is consistently with IO. Whichever argument is not verb-adjacent requires introduction via the oblique preposition *a-*.

This data clearly demonstrates that participants have special properties regardless of clause type, and independently of whether they are the target of suffixal agreement. The context where optionality seems to emerge in Gitksan is between a higher DP argument and lower participant argument: the lower participant always seems to be able to optionally surface *preceding* the DP, with varying morphological consequences. I consequently suggest that the alternation between Ergative+Absolutive agreement and Double Ergative agreement specifically in the context of participant objects should be considered part of a separate factor, some condition on participants, and not play a major role in our analysis of the basic pattern of suffixal agreement. Forbes (2018) explores this additional factor in more detail, claiming that Gitksan exhibits a post-syntactic condition requiring participants to undergo licensing-by-adjacency. Given that this condition is evaluated and repaired post-syntax, the initial syntactic agreement operations are unaffected. The consequence is that the agreement pattern with both DP subjects and third-plural subjects is always underlyingly Double Ergative, as in our earlier generalizations, with surface free variation arising after syntax, at only a surface level.

### 4.3 Morphological accounts for doubled agreement

To restate the original pattern: DP subjects and third-plural subjects agree twice, while other types of subjects agree only once, allowing objects to receive the second instance of agreement. To consider this in a strictly morphological light, the following generalization in (43) holds:

- (43) Where the properties of the ergative subject are not fully realized by the preverbal clitic, then suffixal agreement with the subject is also required.

The pattern of third-plural subjects clearly demonstrates this generalization in action. The ergative



clitic paradigm has no third-plural exponent, as illustrated in Table 7; the third-plural suffix is consequently required to overtly denote the relevant contrast.

Table 7: Series I clitic agreement paradigm

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

This is fundamentally a morphological generalization. We might therefore be drawn to think that the optimal analysis is based in morphology and spellout, rather than through syntactic operations. I here outline a plausible way of accounting for the Double Ergative pattern without syntactic agreement, but raise some problems facing the proposal.

The essential idea is that Double Ergative agreement might be attributed to a morphological Fission operation that allows third-plural agreement to be realized with both a clitic and suffixal exponent (Noyer 1992; Halle 1997). Under this view, a clitic agreement probe which is valued by third-plural  $\phi$ -features undergoes Fission into two exponents, as illustrated in (44). As is crosslinguistically typical, the first of these is an exponent of person features only, and the second is an exponent of a combination of person-number features (Harbour 2008). Specifically, it is the third-plural suffix from the Series II paradigm, hosted on the verb.

$$(44) \quad [\phi_I:3PL] \rightarrow \text{Fission} \rightarrow \begin{array}{c} [\phi_I:3PL] \\ \swarrow \quad \searrow \\ [3] \quad [3PL] \\ t \quad diit \end{array}$$

There are two problems facing the strictly morphological analysis. First, Fission is quite probably already at play in the realization of the Series I clitics for *participant* plurals. As Table 7 demonstrates, second person and sometimes first person plurals are multiply expounded.<sup>16</sup> The second-plural is consistently marked via the double exponent *m=sim*, illustrated in (45). Note that both of these exponents are preverbal, in direct contrast to the multiple exponents of third-plural agreement, which take different positions with respect to the verb, as in (46).

$$(45) \quad \begin{array}{ll} \text{Nemsimdii} & t'ist. \\ \text{nee=m=sim=dii} & t'is-t \\ \text{NEG=2.I=2PL.I=FOC hit-3.II} & \\ \text{'You all didn't hit him.'} & \end{array} \quad (\text{VG})$$

<sup>16</sup>While most speakers I have consulted produce only *dip* for first-plural, others use both first-person *n* and first-plural *dip*. For example, HH from Gijigyukwhla consistently produces *n+dip* '1+1PL', as in (i):

$$(i) \quad \begin{array}{llll} \text{Hlisindip} & \text{saaytgoodinhl} & \text{dim} & \text{gubi'm...} \\ \text{hlis=n=dip} & \text{sagayt-gooda-in-t} & =hl \text{ dim} & \text{gup-i-'m} \\ \text{PFV=1.I=1PL.I together-empty-CAUS-3.II =CN PROSP eat-TR-1PL.II} & & & \\ \text{'After we've gathered what we're going to eat...'} & & & \end{array} \quad (\text{HH})$$

- (46)    Neediit            t'isdiit.  
           nee=dii=t        t'is-**diit**  
           NEG=FOC=3.I hit-3PL.II  
           'They didn't hit him.'  
(VG)

The output of an obvious Fission operation applying to the clitic agreement probe therefore seems to result in two *preverbal* exponents which maintain adjacency to one another. For the case of the third-plural in (46), an explanation is required for why plural exponent *diit* must still surface in in post-verbal position, rather than appearing before the verb.<sup>17</sup>

Second, a Fission analysis only accounts for the Double Ergative pattern in the context of a third-plural subject, in its attribution of the agreement pattern to the morphological realization of third-person plurality. It entirely fails to explain why the Double Ergative pattern is also used with DP subjects, as in (47).

- (47)    Neediit            iilens            Mark 'niin.  
           nee=dii=t        hilen-t        =s Mark 'niin  
           NEG=FOC=3.I chase-3.II =PN Mark 2SG.III  
           'Mark didn't chase you.'  
(VG)

These subjects need no additional morphological support the way third-plural pronominal subjects can be claimed to. It is certainly unexpected that agreement with them—simple third person agreement—should be subject to Fission if other, more marked agreement values are not, and the additional exponent fails to contribute any features not already cued by the first.

It might be supposed that the Series II probe does not in fact engage in agreement with DPs in examples like (47), but that instead the third-person *-t* morpheme that appears is a default value returned if agreement has somehow failed. This would leave the way open for a fully morphological view of the agreement pattern. However, we would expect an instance of 'default' agreement to be returned in other situations where agreement fails to find a target. Weather predicates are the typical instance of this, since no possible agreement target is present. If third-person suffixal agreement is a default, we would expect it to surface here. On the contrary, Gitksan weather predicates instead show *no* agreement, as illustrated in (48).

- (48)    Yugwimaa dim wis.  
           yukw=imaa dim wis  
           PROG=EPIS PROSP rain  
           'It might be going to rain.'  
(BS)

The suffix *-t* therefore cannot be a default realization; there is a distinction between DP-agreement (*-t*) and non-agreement (zero). This suggests that an Agree relation does hold between both agreement probes and the DP target in examples like (47); the suffix's agreement pattern is best explained syntactically, as I have argued.

<sup>17</sup>It is eminently possible that the second-plural Series I exponent *sim* was recruited from the Series II second-plural suffix, *-si'm*. If this is the case, that Vocabulary Item at some point shifted from a verbal suffix to its current placement in the preverbal field. The third-plural Series II suffix *-diit* has obviously not achieved this level of integration into the Series I clitic set.

## 5 Origins of contrasts and the feature [D]

Let us now consider in more detail the additional D-feature I have proposed characterizes DP arguments and third-plural pronouns. What more can be determined about this featural contrast, and how should it be represented in the nominal structure? In this section I explore the diachronic origins of the third person number contrast and its relation to the absolutive-nominative split. I present a rough account of the historical emergence of both properties based on comparative evidence elsewhere in Tsimshianic, and propose that the D-feature is broadly correlated with the presence of a DP layer within the nominal structure. Ultimately, I suggest that Gitksan third-person plural pronouns always pattern like strong pronouns, requiring a D-layer wherever they are used, and explore some consequences of this implementation.

### 5.1 Two innovations in Interior Tsimshianic

The Tsimshianic family is relatively small and closely related. It is composed of only two branches, Interior versus Maritime Tsimshianic; each of these branches contains two recognized languages, but is in practice a dialect continuum, with each of the varieties internal to each branch largely mutually intelligible with the others. The structure of the family is illustrated in (49).

- (49) a. *Interior*  
      (i) Gitksan (north/west)  
      (ii) Nisga'a  
     b. *Maritime*  
      (i) Coast Tsimshian<sup>18</sup>  
      (ii) Southern Tsimshian (Sgüüxs) (south/east)

Both the Interior and Maritime languages exhibit the clause-type split discussed in section 2.1, with dependent clauses involving both clitic and suffixal agreement. However, the two branches differ with respect to the split-absolutive pattern in that context. When naively considering how related languages might behave in the two-agreement-probe context, we might expect the existence of the split-absolutive pattern to correlate with the properties of the relevant nominal types involved in the split. Specifically, we might expect a difference in the split in the Maritime languages to be related to a difference in the existence of the relevant nominal types.

Indeed, one notable difference between the Maritime and Interior Tsimshianic languages is that only the latter have a third-person number contrast. Third-person plurality in the pronoun and suffixal agreement paradigms is a major distinguishing feature of the Interior branch; the Maritime Tsimshianic languages lack this contrast across the board, as demonstrated in Table 8.

It consequently follows that the third-plural category can play no role in the Maritime version of this split. We might then hypothesize that in the Maritime languages, the cognate context involves a simpler nominal-type split contrasting DPs and pronouns, or perhaps contrasting participants and third-persons.

<sup>18</sup>I adopt the term ‘Coast Tsimshian’ in this paper, following prior linguistic work (e.g. Dunn 1979; Sasama 2001; Davis 2018), even though the language is commonly referred to as Sm’algayax within the community. This is because the phrase *sm’algayax* (Maritime) or *sim alg(y)ax* (Interior) is ambiguous; it is an autonym meaning ‘true speech’ that all Tsimshianic varieties use.

Table 8: Series II suffix paradigms across Tsimshianic

	Gitksan (Interior)		Coast Tsimshian (Maritime)	
	SG	PL	SG	PL
1	-’y	-’m	-u	-m
2	-n	-si’m	-n	-sm
3	<b>-t</b>	<b>-diit</b>		<b>-t</b>

What we instead find is that the Maritime languages have no agreement split at all in this context, not even with DP arguments. Instead, dependent clauses in the Maritime languages uniformly exhibit the Ergative+Absolutive agreement pattern using cognate clitic and suffix agreement, as shown in (50) and (51).

- (50) ... dzida łan            didaalxt.  
       ... dzida ła=**n**        di-daalx-*t*  
       ... when INCEP=1.I COM-talk-3.II  
       ‘(I’ll ask Lucille) when I talk to her.’ Coast (Sasama 2001:69)
- (51) Łat            ts’inslooygm            gyat.  
       ła=**t**        ts’ins-looyk-*m*            =a gyat  
       INCEP=3.I away-move.away-1PL.II CN people  
       ‘People are moving away from us.’ Coast (Sasama 2001:151)

In example (51), ergative clitic agreement is with the first person subject, leaving the suffix to index the object, equivalent to the Gitksan pattern. However, example (52) with a full DP subject exhibits the exact same pattern. In Gitksan, this context would instead trigger Double Ergative agreement with the DP subject.

This demonstrates that the suffixes in Coast Tsimshian consistently track absolutive objects, with no reference necessary to the properties of the ergative subject. We can further compare two directly parallel examples in (52), one from each language. In both examples, a DP subject acts on a third person object; this is a context where Double Ergative agreement is mandatory in Gitksan. In both languages, the clitic indexes the ergative subject, but the behavior of the suffix differs. In Coast Tsimshian (52a), the suffix refers to the object; in Gitksan (52b), the suffix refers to the adjacent subject, (=t) *Mary*, and this coreference triggers a morphophonological change in the connective determiner introducing *Mary*, leaving =s (Hunt 1993; Davis & Forbes 2015; Davis 2018). It is then possible for the object, not targeted by agreement, to surface as a free pronoun.

- (52) a. Yagwat    łumoomdit    Meli.  
       yagwa=**t**    łumoom-*t*    =t    Meli  
       PROG=3.I help-3.II    =PN Mary  
       ‘Mary is helping him.’ Coast (Bach 2004)
- b. Yukwt    hlimoos    Mary (’nit).  
       yukw=**t**    hlimoo-**t**    =t    Mary (’nit)  
       PROG=3.I help-3.II    =PN Mary (3.III)  
       ‘Mary is helping him.’ Interior (Bach 2004)

Agreement in Coast Tsimshian, then, can be said to behave quite tamely with respect to the Activity Condition; each argument receives agreement a maximum of one time, even when two probes are present.

It is fair to suggest that the Interior languages have made two innovations causing them to diverge from the Maritime languages: they now exhibit a new contrast in the third-person pronominal system, and they now exhibit a pattern of split agreement that acts upon this contrast. The novel nominative agreement pattern in Gitksan is conditioned specifically by third plural arguments (which Coast Tsimshian does not distinguish), but also by DP arguments (which Coast Tsimshian obviously has).

In my analysis, I take the strong position that these two changes did not proceed as a matter of coincidence. Rather, I pursue the idea that the innovation of the third-plural verbal suffix *-diit* had knock-on effects elsewhere in the system: it allowed for the emergence of third-plural pronominal forms, and indirectly triggered the emergence of split-nominative agreement not only for third-plural subjects, but DP subjects as well.

## 5.2 Modeling the path of change

In the Interior languages, the plural contrast was most likely innovated first in the verbal Series II suffixes through recruitment of another verbal suffix reconstructed as *\*-deh* (Tarpent 1983:181), suffixed to the verb before third person *-t*. In all places that this suffix can now be traced, it seems to contribute both a sense of plurality and orientation to a human actor. Together, the two suffixes fused from *\*-deh-t* to modern *-diit*, through vowel shifts discussed by Tarpent (1983).

The contributing suffix *\*-deh* survives alone as modern *-da* in various places across Tsimshianic. In Coast Tsimshian, it seems to have incorporated further into the verb: it is found in some idiosyncratic verbal plural forms in conjunction with another pluralizer, as illustrated in (53). These forms may inflect for any person.

- (53) a. *waay* ‘paddle’, pl. *liwaayda* Coast (Sasama 1995:73)  
 b. *yaltk* ‘return’, pl. *yilyaltk, yilyalda* Coast (Sasama 2001:128)

In Gitksan, the shift has been in something of the opposite direction. The suffix *-da* here seems to have excorporated from the verb, now functioning as a weak pronominal counterpart of the full third-plural pronoun *’nidiit* (Rigsby 1986; Forbes 2019a).<sup>19</sup> The free alternation between the two can be seen in (54).

- (54) a. Gol *’nidiit*.  
           run.PL 3PL.III  
           ‘They ran.’  
 b. Gol-*da*.  
           run.PL-3PL  
           ‘They ran.’ (VG)

Unlike in Coast Tsimshian, Gitksan *-da* is exclusively compatible with a third person interpretation. It seems to have developed an intrinsic connection to third-plural semantics: it either functions as

<sup>19</sup>Plural *\*-deh* might also be traced to the contemporary impersonal suffix *-dii* ~ *-dix*.

a weak pronoun, or it survives inside the agreement suffix *-diit*.<sup>20</sup> While in the past the two pieces were presumably used compositionally, speakers today do not recognize third-plural *-diit* as related to the weaker *-da*, and strongly perceive *-diit* as a single unit. At some point, the two elements *\*-deh* and *\*-t* fused together into an atomic third-plural agreement marker: *-diit*. This marker was then able to be extended analogically from a verbal suffix into the pronominal system where the other suffixes already appeared, producing absolutive *'nidiit* and oblique *loodiit*.

How precisely did this change affect the system of clausal agreement? I suggest that the original form *\*-deh* bore plural semantics and at some point developed a pronominal [D] feature. On its own, I suggest the Interior suffix *-da* grew to become a weak pronoun in the sense of [Cardinaletti & Starke \(1999\)](#); like canonical weak pronouns it cannot be A'-fronted, and is prosodically phrased with the verb in non-agreeing contexts like (54b).

In time *-da* fused its properties (human plural reference and [D]) with the third person  $\phi$ -features of the third-person agreement marker *-t*. With the [D] feature eventually becoming an ingredient of the third-plural *-diit*, the formation of the single third-plural suffix triggered reanalysis of the suffixal agreement probe itself: I propose that the set of features which the suffixal probe was sensitive to *expanded*, from  $[\phi]$  to  $[\phi+D]$ . Consequently, suffixal agreement began to target not only the novel third plural pronouns, but also the D-feature that had always been active on full DPs.

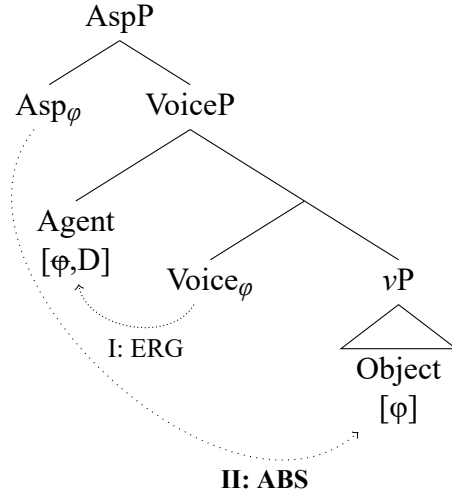
In sum, the path of change in the Interior was loosely as follows in (55); the precise order of the conditioning premises cannot be determined, but they both form the basis for Step 2.

- (55)
1. **Premises for change:**
    - (i) **Pronominal status:** *\*-deh* contains a [D] feature.
    - (ii) **Restriction:** Plural *\*-deh* begins to only be used in third-person contexts.
  2. **Fusion:** *\*-deh* fuses with the third-person suffix, forming *-diit*. The suffix probe expands to seek  $[\phi]$  and [D] features.
  3. **Agreement shift:** Probe targets [D]-bearing arguments in agreement.

Coast Tsimshian never progressed past step 1; if *\*-deh* ever had either a [D] feature or a third-person restriction, they are long lost. Coast Tsimshian thus retains the original  $[\phi]$  sensitivity for both its preverbal and suffixal agreement probes, and consequently exhibits only the agreement pattern used in Gitksan when subjects have only  $\phi$ -features. Essentially the feature [D] on DP subjects is totally ignored, as in (56); the two  $\phi$ -probes compete for the exact same features available in the derivation, and cannot double up on a target.

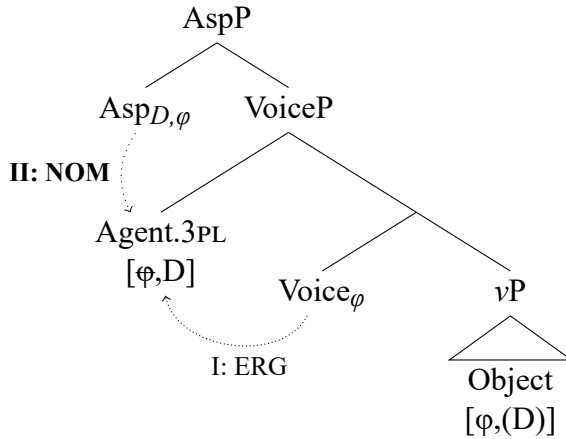
- (56) *Coast Tsimshian agreement with DP subject: absolutive*

<sup>20</sup>With the exception that *-da* is also used in plural quotatives, regardless of person. This pattern more closely resembles the Coast Tsimshian usage, in that the quotatives could be analyzed with a singular stem *ya* and plural stem *hiida*.



In Gitksan, by contrast, the increased sensitivity of the suffixal probe to [D] results in its ability to target D-features on an already-agreeing subject argument, as in (57). This leads to a split in the behavior of agreement when [D] is or is not available on the subject.

(57) *Gitksan agreement with DP subject: nominative*



The benefit of this proposal, whereby we trace the incorporation of [D] into the class of third-plural pronouns as well as into the suffixal agreement probe, is that we need say nothing novel about the representation of DPs themselves. We need not claim that anything specific has changed regarding the features borne by DPs in Coast Tsimshian versus Gitksan; the reason agreement with these types of arguments differs across Tsimshianic is exclusively due to a reanalysis of the probe that targets them, upon the innovation of the third-plural contrast.

### 5.3 Associating the D-feature with D-structure

This now raises the following questions: what is [D], what are pronouns, and what is the relation between the two? In the rest of this section I will explore the possibility that the feature [D] is associated with the presence of a D-projection. That is, I here take double agreement as a proxy



for identifying D-level structure in an argument.

By hypothesis, full noun DPs bear the feature [D], and third-plural elements such as *-da* and the *pro* associated with third plural *-diit* agreement bear [D]. Other pronouns do not and cannot bear [D], as they are never subject to doubled agreement. Setting third-plural pronouns aside for a moment, we then come to the following generalizations in (58):

(58) **Initial generalizations:**

- a. (Agreeing) nouns in Gitksan *have* a DP layer.
- b. Pronouns *lack* a DP layer.

The first prediction generally seems to be true. Where nominal structure is concerned, all argument DPs in Gitksan seem to surface with a semantically vacuous *connective*: morphemes which alternate exclusively on the basis of proper/common and ignore distinctions like definiteness or specificity (Rigsby 1986; Bicevskis et al. 2017). These have been analyzed as semantically light noun class markers at the level of K (Forbes 2013). Argument nouns with connectives contrast with bare nouns lacking connectives, as exemplified with *lekws* ‘firewood’ in (59). These bare nouns can be analyzed as Ns or NPs (pseudo-) incorporated into the verb; they neither agree nor contribute to transitivity.

- (59) Yukwhl hisyets lekws John.  
 yukw =hl [yets~yets-**lekws**]-t =t John  
 IPFV =CN [PL~chop-firewood]-3.II =PN John  
 ‘John was chopping wood (wood-chopping).’ (Forbes 2018:145)

This data is consistent with the idea that agreeing argument nouns are structurally larger than their bare, incorporated counterparts; the former can be analyzed as DP or KP structures while the latter cannot.

The second prediction, that all pronouns (other than third plurals) should lack a D-layer, is a bit harder to evaluate. Pronouns neither incorporate nor co-occur with an overt connective in typical circumstances,<sup>21</sup> so they cannot trivially be categorized alongside either incorporated NPs or argument DPs. However, there is a periphrastic prepositional construction where pronouns both agree and take a connective, parallel to a full DP noun; an example is shown in (60).

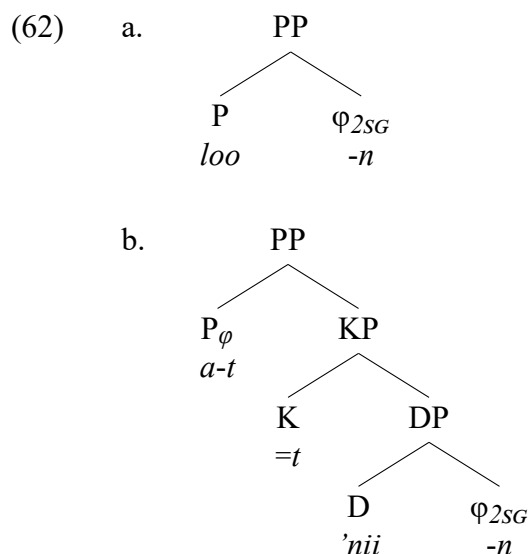
- (60) Ama ha’niisgyat as ’niin.  
 ama ha-’nii-sgyat a-t =t ’niin.  
 good INS-on-be.born PREP-3.II =PN 2SG.III  
 ‘Happy birthday to you.’

These are marked for several reasons: the agreeing pronoun here co-occurs with agreement, which does not happen anywhere else in the language, and it specifically requires third-person agreement rather than agreement matching its featural content—second person in (60). These periphrastic obliques contrast with the synthetic oblique pronouns (*loo* ‘y’ ‘1SG’, *loon/lun* ‘2SG’, *loot* ‘3(SG)’...) which have a more restricted distribution, described by Rigsby (1986:422) as ‘underlying datives, locatives, and instrumentals’. An example is given in (61); the two versions in (a) and (b) demonstrate that the synthetic pronoun is interchangeable with the periphrastic construction.

<sup>21</sup>Historically, pronouns did appear with the proper noun connective =t.

- (61) a. Mahldi'y      **lun**      dim wil ha'wi'y.  
 mahl-T-i-'y      loo-n      dim wil ha'w-'y  
 tell-T-TR-1SG.II OBL-2SG.II PROSP COMP go.home-1SG.II  
 'I told you (that) I would go home.'
- b. Mahldi'y      **as**      'nii dim wil ha'wi'y.  
 mahl-T-i-'y      a-t      =t 'nii dim wil ha'w-'y  
 tell-T-TR-1SG.II PREP-3.II =PN 2SG.III PROSP COMP go.home-1SG.II  
 'I told you (that) I would go home.' (Rigsby 1986:426)

I suggest that the synthetic pronouns in (61a) are  $\phi$ -feature bundles introduced directly by P in certain licensed positions (via the preposition *loo-*), while the periphrastic construction in (60) and (61b) consists of a pronominal  $\phi$ -bundle supported by an additional D-layer, corresponding to the pronominal base *'nii-*, then made oblique through the general preposition *a-*.<sup>22</sup> The proposed structures are illustrated in (62).



The synthetic oblique in (62a) is constructed simply from the inherent oblique pronominal base *loo* and its bare pronominal complement. The periphrastic oblique in (62b) involves the oblique *a-* and a more complex pronominal complement. The DP pronoun is constructed from the D-level base *'nii* and apparently requires support from a further K-layer corresponding to the connective *=t*. The preposition *a-* agrees with its complement DP/KP pronoun; however, the two layers D and K ultimately leave the embedded  $\phi$ -bundle impenetrable to proper feature-matching agreement by P, resulting in default third-person agreement on the preposition (*-t*).

The idea that the pronominal base *'nii* should correspond to a D-layer directly contradicts our prior hypothesis that pronouns—which typically involve *'nii*—are not DPs. At the same time however, it is consistent with a few additional facts. First, free pronouns composed with *'nii*, including

<sup>22</sup>It is unclear whether the Series II  $\phi$ -suffixes correspond directly to the  $\phi$ -bundle of the pronoun, or whether each time they occur they constitute agreement by P or D with a complement *pro*. Here, for simplicity, I assume they correspond directly with the atomic pronominal complements of D and P, though other instances of the Series II suffixes are certainly agreement, such as the default P-agreement in (ib).

the third-person singular *'nit*, are restricted to human referents; [Cardinaletti & Starke \(1999\)](#) argue that restrictions on semantic reference, such as a restriction to human referents only, are properties restricted to strong pronouns, typically analyzed with a D-layer. Second, the free pronoun *'nit* can be identified as a functional D-element in other constructions, contributing domain restriction in clefts ([Brown 2014](#)) and the D-type quantificational expression *walk'a 'nit* 'all' ([Bicevskis et al. 2017](#)).<sup>23</sup>

As I laid out in section 2.3, it is free pronouns which third-plurals truly seem to resemble. Not only does third-plural marking with *-diit* have obligatory human reference on par with a full pronoun, but it cannot co-occur with a coreferent lexical argument, although other agreement can. If third-plurals can be identified as bearing the [D] property, it might be most appropriate to model free pronouns the same way, to reflect their similarity. I consequently suggest a revision to the generalizations from (58) as follows:

(63) **Revised generalizations:**

- a. Agreeing nouns *and independent pronouns* in Gitksan have a DP layer.
- b. Third-plural pronouns always pattern as independent pronouns: they have a DP layer.
- c. All other pronouns lack a DP layer.

Table 9 illustrates the set of third person referential elements in Gitksan: pronouns, demonstratives, and agreement markers, with their associated semantic features.<sup>24</sup> The elements which I propose require the D-property are highlighted.

Following [Cardinaletti & Starke's \(1999\)](#) characterization of strong pronouns, I propose that the D-layer is obligatory when denoting a third-plural in Gitksan, which semantically has both a [+human] and [+plural] restriction. Both null *pro* and the agreement marker *-t* are ambiguous with respect to the human restriction and plural reference: both can be used with either human or non-human referents, and singular or nonsingular referents. That is, D is not a necessary ingredient to denote ambiguous third-person reference of this kind. Morphologically, the D-property correlates with the historical *\*-deh* present in all third-plural elements (including the weak pronoun *-da* and agreement *-diit*), the *'nii* base of the free pronouns, and demonstratives.

<sup>23</sup>The independent pronouns do not behave as D-type pronouns under the view forwarded by [Déchaine & Wiltschko \(2002\)](#), who predict that D-type pronouns should always be strictly referential. Counter to this prediction, pronouns in Gitksan (whether third-neutral *'nit* or third-plural *'nidiit* as in (i), or *pro* complementary with agreement as in (ii)) can freely function as bound variables.

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

I consequently suggest that the capacity for a D-element to be bound as a variable is dependent on some other factor than the presence or absence of a D-projection.

<sup>24</sup>The demonstratives can be used to refer to human or nonhuman entities; *tun/tust* refers to proximate/distal singulars, while *dipun/dipust* refers to proximate/distal plurals.

Table 9: Third person pronominal/agreement forms and associated features

		Strong	Weak	Agreement
+HUM	+PL	'nidiit/DEM	-da	-diit
	-PL	'nit/DEM	Ø	-t
-HUM	+PL	DEM	Ø	-t
	-PL	DEM		

Let us consider how this extends to the distribution of non-third-plural pronouns in Gitksan: what is the correlation between a pronoun's morphological type (as part of the independent Series III paradigm) and its strength (correlated with its salience and information structure)? A priori, it is reasonable to assume that a pronoun in any grammatical position could be inherently strong. If the correlation between strength (contributed by [D]) and morphological type (the presence of the base *'nii-*) is exact, we would expect that a free pronoun of any person value could be used in ergative position, and that its D-layer should make it available for double agreement just like DPs and third-plural pronouns.

However, other types of pronouns *never* agree twice. This suggests that, aside from third-plurals, ergative pronouns are never strong pronouns, but are always instead D-less  $\phi$ -feature bundles. Furthermore, we can also note the puzzling fact that pronouns in non-agreeing positions regularly appear in their *'nii-* form, as in (64).

- (64)    Yajit        'niin.  
           yats-i-t    'niin  
           hit-TR-3.II 2SG.III  
           'He hit you.' (BS)

This would suggest, rather counterintuitively, that pronouns in non-agreeing grammatical positions are always strong, while pronouns in agreeing grammatical positions (e.g. ergative) are never strong. The only other condition under which a core-argument pronoun can appear in its morphologically independent form is when it is explicitly A'-extracted and fronted, as in (66); fronting allows it to avoid  $\phi$ -agreement, as noted by Forbes (2018), and we independently expect arguments that have extracted to be strong.

- (65)    'Niin an yetst.  
           'niin an yats-t  
           2SG.III AX hit-3.II  
           'You hit him.' (HH)

Ultimately the capacity for *in situ* pronouns to be interpreted as strong, and the correlation of this with realization as an independent pronoun versus agreeing *pro*, will require further investigation into properties of Gitksan information structure to fully untangle. It might be determined that the morphological form of a pronoun, which has largely to this point been described as grammatically-mandated, indeed correlates directly with salience and strength. This is directly predicted by the proposed analysis, and would align with an old insight by Tarpent (1991) concerning the impact of clause type on object salience. Alternately, it might be found that not all morphological instances

of independent pronouns are interpreted as strong: that their distribution is simply grammatical. I here outline an approach to account for this more indirect relation between morphological form and the D-property, based in licensing.

Just as the oblique base *loo-* can be used as P to directly license a  $\phi$ -feature bundle in an inherent oblique position, I suggest that  $\phi$ -feature bundles in core argument positions are licensed by agreement from Voice (I) or Aspect (II). However, in the absence of agreement in contexts such as (64), a D-layer can be inserted onto a simple  $\phi$ -pronoun as a last resort, essentially as a means of licensing in situ.

Under this somewhat weakened version of our generalizations, many free pronouns built with the base *'nii-* are strong pronouns, including all fronted pronouns, but some others take on this form for licensing reasons. Under this analysis, the pronominal base *'nii-* is not a marker of absolutive case, as some have previously suggested (Rigsby 1986; Brown 2016), nor is it categorically a marker of strong pronoun status. Rather, in addition to being the spellout for strong pronouns, weak non-agreeing pronouns are able to ‘upgrade’ to their free pronoun form as a means of last resort licensing.<sup>25</sup> This produces the somewhat strange distribution of Series III free pronouns in core argument position: they appear as absolutive arguments in independent clauses, and as transitive objects in dependent clauses where both types of agreement have gone to the subject (the Double Ergative construction).

To summarize the analysis, then, full nouns in argument position are always full DPs, in contrast to incorporated nouns which lack a D-layer. Morphologically-marked third-plurals are also inherently constructed with a D-layer, which provides its strict [+human] reference, as in (66a). Other pronouns are most typically minimal  $\phi$ -bundles as in (66b); strong pronouns may also have a D-layer, or in the absence of agreement [+human]-denoting pronouns may have a D-layer inserted in-situ for licensing.

<sup>25</sup> An anonymous reviewer suggests a similar, but surface-based analysis whereby *'nii-* is essentially a nominal ‘auxiliary’, used when there is no space remaining on the verb for additional pronominal suffixes. A purely templatic analysis referring to an available suffix ‘position’ is not quite sufficient to account for the data, however; in intransitive independent clauses like (ia), there is a space available on the verb for a suffix, but the sole argument is realized as a free pronoun on the *'nii-* base instead. This contrasts with the pattern of dependent clauses in (ib), where the intransitive verb does host a suffix.

- (i) a. Bax 'nii'y.  
       bax 'nii'y  
       run 1SG.III  
       ‘I ran.’  
       b. Needii baxa'y.  
       nee=dii bax- 'y  
       NEG=FOC run-1SG.II  
       ‘I didn’t run.’

Some reference to the difference in agreement across the two clause types—what constitutes an agreeing versus non-agreeing position—is therefore required. For (ia), it is sufficient to say that suffixal agreement in independent clauses, which is only ergative, cannot target the sole intransitive argument, and that agreement is necessary for a  $\phi$ -bundle to surface on the verb. I suggest that the intransitive argument must be licensed in-situ instead, with the pronominal base *'nii-*.

- (66) a. *Third-plural pronoun*
- ```

graph TD
    DP --> D["D  
3PL, HUM"]
    DP --> phiP["φP  
△  
π:3, #:PL"]

```
- b. *Other pronouns*
- ```

graph TD
    DP["(DP)"] --> D["(D)"]
    DP --> phiP["φP  
△  
π,#"]

```

That third-plurals require a D-layer, in contrast to all other pronouns, is due to their recent innovation, composed from two distinct parts: the D-type plural marker *\*-deh*, and simple third person agreement. The fusion of these two elements triggered a change in the suffixal agreement probe to become sensitive to D-properties, resulting in a nominal-type split sensitive to the DP-pronoun distinction.

## 6 Conclusion and implications

In this paper, I have presented an analysis of split-absolutive agreement in Gitksan dependent clauses. This crosslinguistically unusual split, which references the nominal type of the subject, picks out third-plural pronouns and DPs and contrasts them with other pronouns, including simple third persons. As demonstrated throughout the paper, two types of agreement sometimes simultaneously target the ergative subject (DOUBLE ERGATIVE) and sometimes diverge to target the subject and object separately (ERGATIVE+ABSOLUTIVE). Third-plural pronouns and DP subjects trigger the former pattern, while other pronominal subjects trigger the latter.

I have argued that the optimal way to account for this behavior is to analyze doubly-agreeing subjects as bearing two distinct types of features,  $\phi$ - and D-features, each of which can be independently agreed with and subsequently deactivated in accordance with the Activity Condition. The first probe in the derivation, an ergative agreement probe on Voice, is sensitive to only  $\phi$ -features, leaving any D-features on an argument available to the second probe on Aspect. The alternation based on nominal type comes as a consequence of the proposal that the two probes do not seek identical sets of features, but rather overlapping sets: the first looks for a smaller subset ( $\phi$ ), and the second a superset ( $\phi, D$ ).

The features specifically relevant to the Gitksan nominal-type split are  $\phi$ -features which distinguish basic person and number values, and D-features which distinguish full DP arguments and are also a component of the recently innovated third-plurals. I link the differences between D-bearing versus D-absent arguments to some of the differences between strong and weak pronouns based on both language-internal and comparative/diachronic evidence. In my analysis I associate doubly-agreeing arguments with an inherent level of DP structure, which when composed with a pronoun has the additional effect of contributing a human-only restriction. The analysis I have developed might be of further relevance to languages which display an agreement split based on

pronominality, or which exhibit plurals or pronouns with specific interpretive restrictions such as animacy. This discussion may therefore have further relevance to work which investigates the behavior of newly developed pronouns or contrasts, and the stages by which they integrate into existing syntactic systems.

The crucial ingredient to understanding Gitksan’s nominal-type split is feature-sensitive application of the AC. This property allows arguments to be deactivated *incrementally*, with featurally smaller arguments being fully deactivated more quickly than featurally larger ones. Outside the domain of  $\phi$ -agreement, it could also extend to the idea that different types of agreement-like relations take place in different structural domains in Gitksan (and many other languages): number agreement with the verb might involve the feature  $[\#/NUM]$ ;<sup>26</sup>  $\phi$ -agreement with the verbal suffix and/or clitic involves the features  $[\phi]$  and/or  $[D]$ ; A'-agreement and movement might refer to features  $[WH]$  or  $[TOP]$ . That is, arguments are potentially required to enter multiple different relations over the construction of a single utterance. If it is believed that these relations are formed through Agree and its identification of target features on a goal, then an incremental approach to activity is independently necessary, and should be preferred to one that views a goal DP as an atomic unit for the purposes of Agree.

The proposal that the AC operates in a fundamentally feature-dependent way provides some consistency to its behavior in Gitksan. Regardless of whether an argument is overtly subject to agreement from multiple sources or only one, the convergence of multiple types of agreement on a single target still involves feature deactivation. This simply now fails to entail that the argument becomes fully inert to later agreement, something which depends on the remaining features borne by the DP and whether these are targeted by a later probe. The broad implication is that variation in the AC across languages might be attributed to probe-specific properties—to take an extreme view, potentially *exclusively* probe-specific properties.

One major point of crosslinguistic difference relevant to how the AC is parameterized across languages and/or across probes is the particular group(s) of nominal features targeted in agreement operations. Gitksan demonstrates that slight variation in probe relativization can result in the convergence of multiple agreement probes on the same goal or divergence to different goals. A second parameter, following Oxford (2017), is potentially whether or not a probe deactivates the features that it agrees with. This can result in the same surface outcome, and may be a better approach for languages where agreement with the same argument surfaces on numerous heads.<sup>27</sup> However, the Gitksan data demonstrates that in cases of multiple overt agreement it cannot be simply assumed that the initial agreement operation failed to deactivate any features on its target; such cases should be evaluated carefully to determine whether the same features have been targeted in each instance of agreement, or whether each probe targets subtly different, potentially overlapping properties.

I have distinguished several ‘sets’ of major nominal features that are all borne by typical nouns in argument positions:  $\phi$ , D, and Case. We might suppose that any of these three feature groups could be referenced in crosslinguistically common operations like subject-verb agreement, not Case

<sup>26</sup>Gitksan verbal number agreement is notably something of a hybrid between agreement for argument-number and marking for event-related pluractionality (Rigsby 1986; Corbett 2000). The former is something that might be generated through syntactic agreement (Hunt 1993 adopts something close to this in her analysis of Gitksan clause structure), while the latter is not typically analyzed this way. I leave this for future work.

<sup>27</sup>Alternate approaches to languages of this kind, where agreement might surface on multiple clausal heads as well as the verb itself, such as in Bantu, might be drawn from analyses of nominal concord which are explicitly generated without Agree (e.g. Norris 2017).



features alone. In many languages there may be scant basis to determine which of these sets are involved in canonical agreement; however in others, like Gitksan, this may be a crucial part of characterizing the system.

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