Clause typing and clitic linearization in Gitksan*

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Abstract: Gitksan, like all Tsimshianic languages, distinguishes between *independent* and *dependent* clauses, a contrast that broadly corresponds to the matrix/embedded clause distinction. However, certain matrix clauses — those introduced by *dependent markers* such as negation or aspectual markers — exhibit the morphosyntactic profile of dependent clauses. I present novel evidence from clitic linearization, linear ordering paradoxes, aspectual and irrealis doubling, and other reflexes, arguing that a subset of these clauses is biclausal. I propose a more fine-grained distinction between two types of dependent clause trigger: those that appear within dependent clauses (including complementizers, subordinators, and coordinators) and those that select dependent clause complements (including negation and aspectual markers).

Keywords: clause typing, linearization, aspect, negation, clitics, Tsimshianic

1 Introduction

In this paper, I provide a novel analysis of linearization paradoxes in Gitksan (ISO 639-3: `git`; Interior Tsimshianic; British Columbia) that arise from the interaction of certain functional elements in the clausal left periphery. I illustrate the puzzle with the prospective aspectual element *dim*, which surfaces in clause-initial position in examples like (1), preceding the predicate:[1]

(1) Preverbal *dim*:
Dim hadiks 'nii'y.

dim	hadiks	'nii'y
PROSP	swim	1SG.PRON

'I will swim.' (HH)

Prospective *dim* also linearizes before a number of left-peripheral functional elements, including the complementizer *wil*. The linearization of an aspectual element before a complementizer is typo-

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[1] 1 = first person, 2 = second person, 3 = third person, ATTR = attributive, AX = agent extraction morpheme, CAUS = causative, CCNJ = clausal coordinator, CN = common noun connective, COMP = complementizer, DEM = demonstrative, DIST = distal, DUR = durative, DWID = domain widener, FOC = focus, I = series I clitic, II = series II suffix, INCEP = inceptive, IRR = irrealis, LOC = locative, MANR = manner clause subordinator, NEG = negative, PFV = perfective, PL = plural, PN = proper noun connective, PREP = preposition, PROG = progressive, PRON = independent pronoun, PROSP = prospective, PROX = proximal, Q = question particle, REAS = reason clause subordinator, SG = singular, SX = subject extraction morpheme, T = transitive control suffix, TR = transitive, VAL = valency changing suffix, VER = verum.

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logically rare for a language such as Gitksan, which otherwise generally exhibits head-initial syntax (Hunt 1993).[2]

(2) *dim* precedes complementizer *wil*:
     Luu amhl g̲oodi'y dim wil wis.

     luu am   =hl goot-'y   [**dim** **wil** wis]
     in   good =CN heart-1SG.II   PROSP   COMP   rain
     'I am happy that it will rain.'   (BS)

However, this ordering of *dim* before *wil* is not categorical. The presence of certain elements in the preverbal field, such as progressive aspectual *yukw*, appears to block *dim*'s ability to precede *wil*.

(3) *wil* precedes progressive *yukw*, which precedes *dim*:
     Luu amhl g̲oodi'y wil yukwhl dim wis.

     luu am   =hl goot-'y   [**wil** **yukw** =hl **dim**   wis]
     in   good =CN heart-1SG.II   COMP   PROG   =CN PROSP   rain
     'I am happy that it will be raining.'   (BS)

The linearization paradox is as follows:

  1. *dim precedes wil,*

  2. *wil precedes yukw, but*

  3. *yukw precedes dim*

In the discussion that follows, I show that this paradox falls out from the interaction of two independent grammatical processes. The first concerns the Tsimshianic-internal clause type distinction between *independent* and *dependent* clauses (Rigsby 1986). While independent clauses function as matrix clauses, dependent clauses may function as matrix or embedded clauses and are typically associated with a closed class of elements, which includes both progressive *yukw* and the complementizer *wil*, known in the Tsimshianic literature as *dependent markers* (Rigsby 1986). I propose that these markers fall into two distinct types. Type 1 dependent markers (DEP₁), which include progressive *yukw*, introduce a biclausal structure by selecting a dependent clause complement. Type 2 dependent markers (DEP₂), which include the complementizer *wil*, appear internal to the dependent clause and yield a monoclausal structure.

(4) Two kinds of dependent marker
     a. Type 1 (e.g. *yukw*) selects dependent clause complement:
         [DEP₁ [DepP ...]]   → **biclausal**

     b. Type 2 (e.g. *wil*) restricted to occurring within dependent clause:
   [DepP DEP₂ ...]   → **monoclausal**

The second process involves the behaviour of a class of clitics (CL), including *dim*, that prepose to the clause-initial position, but whose movement is clause-bounded.

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[2] E.g., head nouns precede relative clause complements, determiners precede NPs, the presence of prepositions (rather than postpositions), declarative VO ordering, etc.

(5)   a.   Cʟ movement: Cʟ (e.g., *dim*) base generated below α, but linearly precedes it.

$$[_{CP} \text{ Cʟ } \alpha \underline{\quad} \beta]$$
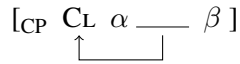
     b.   Cʟ movement cannot cross clause boundary.

$$[_{YP} \text{ Cʟ } \alpha [_{CP} \underline{\quad} \beta]$$
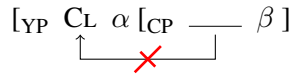
These two ingredients — biclausality introduced by some dependent markers, and clause-bounded clitic fronting — together account for the apparent paradoxes in preverbal linearization introduced above. A broader implication of this analysis is that all dependent clauses in Gitksan — whether embedded or matrix — can be reduced to subordination.

The remainder of this paper is organized as follows. Section 2 provides background on independent and dependent clauses and argues for a division between two types of dependent marker. Section 3 turns to the linear ordering of elements in the preverbal field, focusing primarily on the behaviour of the prospective marker *dim*, whose position is argued to result from movement to the clausal periphery. Section 4 addresses the *doubling* of certain elements in the preverbal field, and argues that these phenomena fall out from the proposal that some dependent clauses have biclausal structure. Section 5 concludes.

2   Gitksan clauses and dependent markers

Gitksan is a predicate-initial, ergative, head-marking language (Rigsby 1986; Hunt 1993; Forbes 2018, 2023). This section outlines the independent/dependent clause distinction and the morphosyntactic triggers of dependent clauses. I argue that what appear to be matrix dependent clauses are in fact subordinated structures (cf. Rigsby 1986:273).

2.1   Independent vs. dependent clauses

Gitksan distinguishes between independent and dependent clauses — a feature shared across Tsimshianic languages (Forbes 2023). While independent clauses function as matrix clauses, dependent clauses may surface in both embedded and matrix environments.[3] In matrix contexts, dependent clauses are marked by a *dependent marker* such as *yukw* ('progressive') or *nee* ('negation'); independent clauses lack such markers.[4]

The following examples show the characteristic morphology that distinguishes between these clause types. Starting with clauses featuring intransitive predicates, independent clauses are characterized by the lack of overt person agreement, while dependent clauses feature suffixal (Series II) agreement marking the intransitive subject (S-argument). The dependent clauses below are triggered by the propositional negation marker *nee*, a dependent maker.

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[3] Ā-constructions targeting direct objects exhibit independent clause-like morphology (Rigsby 1986; Davis and Brown 2011; Brown 2016; Forbes 2018); these are excluded from the present discussion.
[4] Gitksan exhibits a type of insubordination where dependent clauses appear without an overt dependent marker (Rigsby 1986:273). While intriguing, these cases appear to be discourse-conditioned and will not be the focus of this paper.

(6) a. Independent intransitive: no agreement
        Ba<u>x</u> 'nii'y.
        ba<u>x</u> 'nii'y
        run 1SG.PRON
        'I ran.'   (Hunt 1993:130)

     b. Dependent intransitive: Series II marks S
        Nee dii baha'y.
        nee dii ba<u>x</u>-**'y**
        NEG FOC run-1SG.II
        'I didn't run.'   (Hunt 1993:152)

Turning to clauses featuring a transitive predicate, independent clauses have a Series II suffix marking the transitive subject (A-argument), as in (7a). Dependent clauses have a (Series I) clitic marking the A-argument, and a Series II suffix marking the object (O-argument), as in (7b). Independent clauses additionally feature the *transitive suffix* -ə, as in (8a). Dependent clauses lack the transitive suffix, as in (8b).[5]

(7) a. Independent transitive: Series II marks A
        T'isi'yt Henry.
        t'is-ə-**'y**   =t   Henry
        hit-TR-1.II =PN Henry
        'I hit Henry.'   (Brown et al. 2020:15)

     b. Dependent transitive: Series I marks A; Series II marks O
        Nee diit t'isi'yt Henry.
        nee dii=**t**   t'is-**'y** =t   Henry
        NEG FOC=3.I hit-1.II =PN Henry
        'Henry didn't hit me.'   (Brown et al. 2020:15)

(8) a. Independent clause: transitive suffix -ə
        Jebis Cindyhl ha'niit'aa.
        jep-**ə**-t   =s   Cindy =hl ha'niit'aa
        make-TR-3.II =PN Cindy =CN chair
        'Cindy made a chair.'   (Brown et al. 2020:16)

     b. Dependent clause: no transitive suffix
        Nee diit jeps Cindyhl ha'niit'aa.
        nee dii=t   jep-t   =s   Cindy =hl ha'niit'aa
        NEG FOC=3.I make-3.II =PN Cindy =CN chair
        'Cindy didn't make a chair.'   (Brown et al. 2020:16)

The morphological reflexes of both clause types are given below, adapted from Brown et al. (2020).[6]

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[5] The presence or absence of the transitive suffix is often difficult to diagnose, due to a number of morphophonological processes; see Brown et al. (2020).

[6] Both clause types show *ergative* alignment (S- and O-arguments pattern together to the exclusion of A-arguments). See Hunt (1993); Forbes (2018) for analysis.

(9) Independent clause

    a.   Intransitive: $_V$[prefixes-Root-suffixes]

    b.   Transitive: $_V$[prefixes-Root-suffixes]**-ə-Agr.II$_A$**

(10) Dependent clause

    a.   Intransitive: $_V$[prefixes-Root-suffixes]**-Agr.II$_S$**

    b.   Transitive: **Agr.I$_A$** $_V$[prefixes-Root-suffixes]**-Agr.II$_O$**

There are multiple ways to trigger a dependent clause. A non-exhaustive list of triggers, including complementizers and subordinators, aspectual elements, and negation is given in Table 1.

Type	Examples
Clausal subordination	wil/win 'COMP', wila 'MANR', g̲an 'REAS'
Aspectual markers	yukw 'PROG', hlaa 'INCEP', hlis 'PFV'
Other	nee 'NEG, Q', ii, 'and/then, CCNJ'
Syntactically determined	embedding, imperatives, focus

Table 1: Dependent clause triggers (Rigsby 1986; Tarpent 1987; Brown et al. 2020)

The next section argues that some dependent markers select clausal complements, while others are restricted to appearing within dependent clauses.

2.2 Two kinds of dependent marker

This section examines four preverbal dependent markers in Gitksan — *yukw* 'PROG', *nee* 'NEG', *wil/win* (henceforth *wil*) 'COMP', and the clausal coordinator *ii* 'and/then/so, CCNJ' — and argues for a fundamental split in their syntactic behaviour.[7] I propose, building upon intuitions in Rigsby (1986:273), that *yukw* and *nee* are predicative elements that select dependent-clause complements.[8] Supporting evidence for this analysis comes from the fact that these markers are synchronically derived from intransitive predicates, and retain core predicative properties in their grammaticalized forms.[9] *Yukw* and *nee* contrast with *wil* and *ii*, which lack such predicative properties and are better analyzed as clause-internal elements. For expository purposes, I refer to *yukw* and *nee* as *Type 1 markers* and *wil* and *ii* as *Type 2 markers*. The core syntactic distinction between Type 1 and Type 2 markers is given in (11).

(11) Two kinds of dependent marker:

    a.   Type 1 selects dependent clause complement: [*yukw/nee* [$_{Dep}$ …]]

    b.   Type 2 restricted to occurring within dependent clause: [$_{Dep}$ *wil/ii* …]

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[7] See (Schwan 2019) and Matthewson et al. (2022) for analysis of the semantics of *yukw*.

[8] Rigsby (1986:273), in his descriptive grammar of Gitksan, asserts that *yukw* and *nee* are intransitive predicates that select sentential complements. This intuition is considered and ultimately rejected in later theoretical work; see footnote 9.

[9] Hunt (1993) and Forbes (2018) both note the similarities between clauses with dependent markers such as *yukw* and clear-cut clausal embedding contexts. However, both ultimately opt for monoclausal analyses of these matrix dependent clause constructions.

Rigsby (1986) and Hunt (1993) show that a subset of dependent markers are derived from intransitive predicates; these elements have functional uses as dependent markers and lexical uses as intransitive predicates. The following examples show *yukw* and *nee* functioning as intransitive predicates, selecting DP arguments:

(12) Intransitive predicate *yukw* 'to work/be busy'
Hiyukwt Mary ahl jamhun.

    hi-yukw   =t   Mary a-t   =hl jam-hun
    DUR-work =PN Mary PREP-3.II =CN cook-fish
    'Mary is busy cooking fish.'   (Hunt 1993:138)

(13) Intransitive predicate *nee* 'to not exist'
Neehl hun.

    nee   =hl hun
    not.exist =CN fish
    'There's no fish.'   (Hunt 1993:139)

In the following examples, *yukw* and *nee* function as dependent markers. In this functional role, they retain predicate-like characteristics. As we see in (14) and (15), complements of dependent *yukw* and *nee* are often introduced by the connective determiner =*hl*.[10]

(14) *Yukw* selects complement headed by =*hl*
Yukwhl dim wis.

    yukw [**=hl** dim   wis]
    PROG =CN PROSP rain
    'It's going to rain.'   (BS)

(15) *Nee* selects complement headed by =*hl*
Neehl ama 'masdaa?

    nee [**=hl** ama   'mas-t]=aa
    NEG =CN good grow-3.II=Q
    'Is he good looking?'   (Matthewson 2024)

This is structurally parallel to the use of =*hl* in complements of embedding predicates such as *aam* 'to be good':

(16) Connective =*hl* introducing clausal complement
Amhl dim t'aan.

    aam [**=hl** dim   t'aa-n]
    good =CN PROSP sit-2SG.II
    'You better sit down.'
    lit. 'It is good that you will sit down.' (Hunt 1993:148; Gitksan; Tarpent 1987:219; Nisg̲a'a)

Type 2 elements do not select complements headed by the connective =*hl*, as shown in (17), where the variation with the complementizer co-occuring with the connective =*hl* was rejected:

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[10] In embedding contexts, the connective only surfaces with intransitive complements; with transitive complements the connective is replaced by a Series I ergative clitic (Rigsby 1986; Tarpent 1987; Hunt 1993).

(17) *Wil* does not introduce complement headed by =*hl*

Luu aam g̲oodi'y win(*hl) wis.

luu	aam	g̲oot-'y	wil	(*=hl)	wis
in	good	heart-1SG.II	COMP	(*=CN)	rain

'I'm happy that it rained.' (VG)

Further predicate-like behaviour of Type 1 dependent markers occurs in extraction configurations. Previous work on long-distance extraction in Gitksan (Davis and Brown 2011; Brown 2016, 2018; Forbes 2017) shows that dedicated extraction morphology appears in every clause along the path of movement. As noted in Forbes (2018), some dependent markers, including *yukw*, may host extraction morphology, mirroring the behaviour of long-distance extraction over intransitive predicates. In the examples below, both the intransitive predicate *aam* 'to be good', and progressive *yukw* bear the same intransitive extraction suffix -*ət*.[11,12]

(18) Long-distance movement over *aam* triggers subject extraction suffix -*ət*

Guhl aamit ji japxwit?

gu	=hl	aam-**ət**	[ji	jap-xw-ət ___]
what	=CN	good-SX	IRR	make-VAL-SX

'What would be good if it were made?' (Forbes 2018:118)

(19) Extraction over *yukw* triggers subject extraction suffix -*ət*

Guhl yugwit jebin?

gu	=hl	yukw-**ət**	[jep-ə-n ___]
what	=CN	PROG-SX	make-TR-2SG.II

'What are you making?' (Forbes 2018:118)

Type 2 elements do not bear extraction morphology. The following example shows that *wil*, which appears in oblique extraction configurations, cannot host the subject extraction suffix -*ət*:

(20) *Wil* does not host extraction morphology

Naa win(***it**) na gi'namhl hlit?

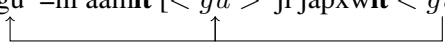| naa	wil(***-ət)**	n	gi'nam-t	=hl	hlit
who	COMP(*-SX)	2.I	give-3.II	=CN	ball

'Who did you give the ball to?' (VG)

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[11] The structurally lower predicates, by hypothesis occupying an embedded clause, bear the subject extraction suffix -*ət* (18) and the transitive suffix -*ə*, which is characteristic of O-argument extraction (19).

[12] More work is needed to determine whether extraction over the negation marker *nee* also triggers subject extraction morphology, or whether it is permitted at all. However, extraction across other proposed Type 1 markers, such as the perfective *hlis(xw)*, patterns like *yukw* in triggering subject extraction morphology:
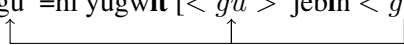
(i) Sdi'monhl honhl hlisxwit k̲'ohlin.

sdi'mon=hl	hon=hl	hlisxw-**ət**	[k̲'ohl-ə-n ___]
humpback.salmon=CN	fish=CN	PFV-SX	cut-TR-2SG.II

'The fish that you dressed is a humpback salmon.' (VG)

These data support the analysis presented here: *yukw*, like *aam*, selects a clausal complement. Extraction out of that complement proceeds cyclically, registering extraction morphology in every clause along the path of movement. This cyclic movement is sketched below in (21) and (22), with extraction morphology given in bold (see Davis and Brown 2011; Brown 2016, 2024; Forbes 2017, 2018 for data and analysis of extraction morphosyntax in Tsimshianic).

(21) Cyclic movement over intransitive *aam* 'to be good' (=example (18))
      gu =hl aam**it** [< *gu* > ji japxw**it** < *gu* >]?

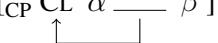(22) Cyclic movement over progressive *yukw* (=example (19))
      gu =hl yugw**it** [< *gu* > je**bin** < *gu* >]?

To conclude this section, Type 1 dependent markers are synchronically derived from intransitive predicates, and even in their functional uses, retain predicative behaviours. These facts are compatible with the analysis in (11) that Type 1 markers select clausal complements, yielding biclausal structures (cf. Rigsby 1986:273). Type 2 dependent markers, on the other hand, do not exhibit these predicative behaviours, and are better analyzed as being dependent clause internal elements. In addition to accounting for the morphosyntactic differences discussed in this section, adopting this two-way distinction between dependent markers also resolves the linearization and doubling puzzles in Sections 3 and 4, respectively.

3   Linear order and the preverbal field

This section introduces a class of elements — including the future marker *dim*, irrealis marker *ji* and first- and second-person ergative agreement markers — which I analyze as *special clitics* (Zwicky 1977; Zwicky and Pullum 1983). That is, they undergo displacement to a distinct linear position in the clause.[13] I suggest these clitics (CL) shift postsyntactically from their base-generated position to a high, clause-peripheral position. This is sketched in (23).

(23) CL movement:
      [CP CL α —— β]

Interestingly, these clitics linearize to the *right* of Type 1 dependent markers such as *yukw* and *nee*, but to the *left* of Type 2 dependent markers like *wil* and *ii*. This contrast follows from the proposal developed here: Type 1 markers select clausal complements; clitics are trapped within the clausal complement. This is schematized in (24). Type 2 markers, on the other hand, occur within the dependent clause; clitics freely shift past these elements. This is schematized in (25).

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[13] Special clitics contrast with *simple clitics*, which surface in their base-generated position; i.e., they do not undergo displacement.

(24) Cʟ movement with Type 1 dependent markers (Dᴇᴘ₁)

[Dᴇᴘ₁ [_CP Cʟ α ⎯⎯ β]]
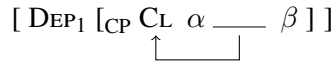
(25) Cʟ movement with Type 2 dependent markers (Dᴇᴘ₂)

[_CP Cʟ Dᴇᴘ₂ α ⎯⎯ β]
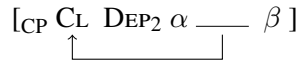
In the discussion that follows, I illustrate these linearization facts primarily using prospective *dim* as a case study. However, I also show that other elements — specifically the irrealis marker *ji* and the ergative clitics — exhibit similar behaviour.

3.1 Ordering in the preverbal field: *dim* observations

Strong evidence for the proposal that at least some dependent clauses are biclausal comes from the unexpected linearization of the prospective aspect marker *dim*.[14] Unlike other preverbal aspectual elements in Gitksan, *dim* is not a dependent marker, and freely occurs in both independent and dependent clauses.

(26) Independent clause:
Dim didalga'yt Lisa

dim	didal<u>k</u>-ə-'y	=t	Lisa
ᴘʀᴏsᴘ	talk.to-ᴛʀ-1sɢ.ɪɪ	=ᴘɴ	Lisa

'I will talk to Lisa.' (BS)

(27) Dependent clause:
Ha'niigood'iy dim wis.

ha'niigoot-'y	[**dim**	wis]
think-1sɢ.ɪɪ	ᴘʀᴏsᴘ	rain

'I think that it will rain.' (BS)

Prior work on Gitksan shows that *dim* occupies a high linear position (Rigsby 1986:279), linearizing before elements like the complementizer *wil* and the clausal coordinator *ii*. Progressive *yukw* and negative *nee*, on the other hand, must follow those functional elements. That is, we observe the following orderings:

(28) a. *dim* > {*wil, ii*}

b. {*wil, ii*} > {*yukw, nee*}

The following examples show that *dim* linearly precedes the complementizer *wil* (29) and clausal coordinator *ii* (30).

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[14] The majority of work on *dim* has focused on its semantics (e.g., Matthewson 2013; Matthewson and Todorovic 2018; Rullmann and Matthewson 2018; Aonuki 2021; Matthewson et al. 2022), rather than its linearization.

(29) *dim > wil*
Luu amhl g̲oodi'y dim wil wis.

luu am	=hl	g̲oot-'y	[**dim**	**wil**	wis]
in good	=CN	heart-1SG.II	PROSP	COMP	rain

'I am happy that it will rain.' (BS)

(30) *dim > ii*
Dim yets'indi'yt Michael dim iit jephl g̲yemgm aks.

dim	yets'n-t-ə-'y	=t	Michael	[**dim**	**ii**=t	jep-t	=hl	g̲yemk-m aks]
PROSP	call/hit-T-TR-1SG.II	=PN	Michael	PROSP	CCNJ	make-3.II	=CN	hot-ATTR water

'I will call Michael and he will make coffee.' (HH)

Unlike *dim*, progressive *yukw* must follow *wil* and *ii*:

(31) *wil > yukw*
Luu amhl g̲oodi'y win yukwt jeps Michaelhl g̲yemgm aks.

luu am	=hl	g̲oot-'y	[**wil**	**yukw**=t	jep-t	=s	Michael	=hl	g̲yemk-m aks]
in good	=CN	heart-1SG.II	COMP	PROG=3.I	make-3.II	=PN	Michael	=CN	hot-ATTR water

'I am happy that Michael is making coffee.' (HH)

(32) *ii > yukw*
Yets'indi'yt Michael ii yukwt jephl g̲yemgm aks.

yets'n-t-ə-'y	=t	Michael	**ii**	**yukw**=t	jep-t	=hl	g̲yemk-m aks
call/hit-T-TR-1SG.II	=PN	Michael	CCNJ	PROG=3.I	make-3.II	=CN	hot-ATTR water

'I called Michael and he's making coffee.' (HH)

Like *yukw*, and unlike *dim*, propositional negation *nee* also follows *wil* and *ii*:

(33) *wil > nee*
Wilaayi'y win nee dii wis.

wilaax-ə-'y	[**wil**	**nee**	dii	wis]
know-TR-1.SG.II	COMP	NEG	FOC	rain

'I know that it didn't rain.' (VG)

(34) *ii > nee*
Yets'indi'yt Michael ii nee diit jephl g̲yemgm aks.

yets'n-t-ə-'y	=t	Michael	**ii**	**nee**	dii=t	jep-t	=hl	g̲yemk-m aks
call/hit-T-TR-1SG.II	=PN	Michael	CCNJ	NEG	FOC=3.I	make-3.II	=CN	hot-ATTR water

'I called Michael and he didn't make coffee.' (HH)

These data, taken in isolation, might point to *dim* occupying a surprisingly high structural position in the clausal periphery, while *yukw* and *nee* are positioned lower, under *wil* and *ii*:

26

(35)   Hypothetical structure of Gitksan left-periphery (to be rejected)

```
                    Asp1P
                 ___/    \___
               Asp1        CoordP
                |        ___/   \___
               dim    Coord        CP
                       |        ___/  \___
                       ii      C        NegP
                               |      __/   \__
                              wil   Neg        Asp2P
                                     |        _/   \_
                                    nee     Asp2    vP
                                             |      /\
                                           yukw    …
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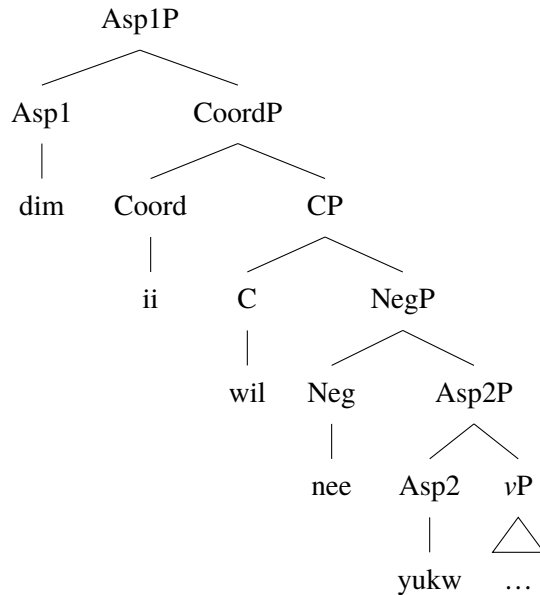
If (35) is correct, and *dim* is structurally higher than {*wil, ii*}, and {*yukw, nee*} are structurally lower than {*wil, ii*}, then by transitivity we expect *dim* to precede {*yukw, nee*}. This is not borne out: when these elements co-occur, *dim* must follow {*yukw, nee*}. This is illustrated in the following examples:

(36)   *yukw > dim*
    a.   Yukw dim ba<u>x</u>t.

       yukw dim   ba<u>x</u>-t
       PROG   PROSP   run-3.II
       'S/he's going to run.'

    b.   *Dim yukw ba<u>x</u>t.

       dim   yukw ba<u>x</u>-t
       PROSP   PROG   run-3.II
       Intended: 'S/he's going to run.'   (Matthewson et al. 2022:31)

(37)   *yukw > dim*
    a.   Hlaa yukw dim hlisxwi'y.

       hlaa   **yukw dim**   hlis-xw-'y
       INCEP   PROG   PROSP   finish-VAL-1SG.II
       'I'm very close to finishing.'

    b.   *Hlaa dim yukw hlisxwi'y.

       hlaa   **dim   yukw** hlis-xw-'y
       INCEP   PROSP   PROG   finish-VAL-1SG.II
       Intended: 'I'm very close to finishing'   (Hunt 1993:147)

(38) *nee > dim*

    a. Nee dim diin yee<u>x</u>s Betty.

        nee dim dii=n   yee<u>x</u>s-t=s Betty
        NEG PROSP FOC=1.I visit-3.II=PN Betty
        'I didn't visit Betty.'   (VG)

    b. *Dim nee diin yee<u>x</u>s Betty.

        dim   **nee** dii=n   yee<u>x</u>s-t=s Betty
        PROSP NEG FOC=1.I visit-3.II=PN Betty
        Intended: 'I didn't visit Betty'   (VG)

We additionally see that in clauses that contain *wil* or *ii*, alongside *yukw* or *nee*, there is a fixed order of {*wil, ii*} > {*yukw, nee*} > *dim*:

(39) *wil > yukw > dim*
      Luu amhl <u>g</u>oodi'y wil yukw dim wis.
      luu am=hl   <u>g</u>oot-'y   [**wil yukw dim** wis]
      in good=CN heart-1SG.II COMP PROG PROSP rain
      'I am happy that it is going to rain.'   (BS)

(40) *ii > yukw > dim*
      Didal<u>g</u>a'yt Henlii, ii yukw dim sikofiit.
      didal<u>k</u>-ə-'y=t   Henlii, [**ii** **yukw dim** si-kofii-t]
      speak.with-TR-1SG.II=PN Henry CCNJ PROG PROSP make-coffee-3.II
      'I talked to Henry and he's going to make coffee.'   (BS)

(41) *wil > nee > dim*
      Wilaayi'y wil nee dim dii wis.
      wilaax-ə-'y   [**wil nee dim** dii wis]
      know-TR-1SG.II COMP NEG PROSP FOC rain
      'I know that it won't rain.'   (BS)

(42) *ii > nee > dim*
      Ii nem dii bekwhl get.
      ii   **nee=dim** dii bekw-t=hl   get
      CCNJ NEG=PROSP FOC arrive.PL-3.II=CN people
      'And the people won't come.'   (Forbes et al. in prep.:HH: *Before the people die*)

    The linearization paradoxes that arise in the positioning of *dim* with respect to {*wil, ii*} and {*yukw, nee*} are schematized below:

(43) a. *dim* > {*wil, ii*}   See examples (29), (30)

      b. {*wil, ii*} > {*yukw, nee*}   See examples (31), (32), (33), (34)

      c. {*yukw, nee*} > *dim*   See examples (36), (37), (38), (39), (40), (41), (42)

3.2 *Dim* moves to its clausal periphery

In this section I propose that *dim* moves to a clause-peripheral position. This analysis accounts for the ability of *dim* to precede a number of high, functional elements (including the dependent markers *wil* and *ii*). The fact that *yukw* and *nee* always precede *dim* arises from those elements selecting (dependent) clausal complements which *dim* occurs within. These two processes taken together account for the linearization paradoxes schematized in (43).

Matthewson et al. (2022) argues that *dim* is generated in a relatively low syntactic position in the scope of a (null or overt) modal operator and a (null) tense operator:

(44) Position of *dim* in the preverbal field (Matthewson et al. 2022:22)
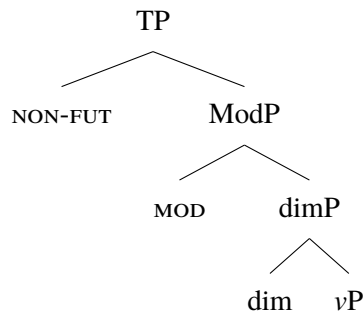
If *dim*'s base position in (44) is correct, *dim* must be displaced to a higher linear position to account for cases such as (45), where *dim* linearly precedes the complementizer *wil* (by hypothesis above TP in CP). The placement of *dim* therefore exhibits a mismatch between syntax and linear order.[15]

(45) Luu amhl g̲oodi'y dim wil wis.

luu	am	=hl	g̲oot-'y	[**dim**	**wil**	wis]
in	good	=CN	heart-1SG.II	PROSP	COMP	rain

'I am happy that it will rain.' (BS)

I model this displacement as postsyntactic movement to the clausal periphery. For concreteness, I adopt the analysis in Davis and Huijsmans (2024) and Huijsmans (2023), which assumes that the lexical entry for morphemes can include a morphological clitic feature. This feature encodes the direction of cliticization (pro- vs. en-cliticization), and in Brown and Davis (2024a); Davis and Brown (2024); Brown and Davis (2024b), this is extended to also specify the category of the host. The proposed lexical entry for *dim* given in (46) states that the prospective element PROSP has the phonological form *dim* and includes a feature specifying that it is proclitic to C^0.

---

[15] The proposal that *dim* moves from a lower position is supported by the fact that this movement is not categorical: in rare cases, *dim* surfaces in a lower linear position, as seen in the following example, where *dim* follows *wil*.

(ii) Nem dii giihlt g̲oohl gat, wag̲ayt wil dim nakst.

nee=dim	dii	giihl-t	g̲oo-t=hl	gat	[wag̲ayt	**wil**	**dim**	naks-t]
NEG=PROSP	FOC	lie.down-3.II	LOC-3.II=CN	man	all.the.way	COMP	PROSP	spouse-3.II

'She should not lie with men until she gets married.' (Forbes et al. in prep.:BS: *Siipxum Hlox̲s*)

(46)   Lexical entry for *dim*: [PROSP] $\Longleftrightarrow$ $\left\{ \begin{array}{c} \text{/dim/} \\ \underline{\quad\quad}\text{=C}^0 \end{array} \right\}$

I assume that the complementizer *wil*, the clausal coordinator *ii*, alongside other Type 2 dependent markers such as the manner subordinator *wila* and the reason subordinator *gan* occupy the C projection, and are thus possible hosts for *dim*.[16] I additionally assume that matrix clauses, as well as some embedded clauses (i.e. those that merge as clausal arguments rather than as adjuncts) feature a null C^0 that can still act as a morphological host for *dim* cliticization.
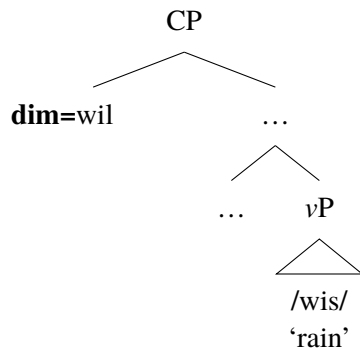
 The derivation for *dim* linearization proceeds as follows, using the embedded clause in (45) as a baseline. The syntax generates a structure that acts as an input for clitic linearization (47). According to *dim*'s lexical requirements in (46), it must linearize before C^0 before spell-out (modelled as morphological procliticization); this step of linearization is sketched in (48), which provides the surface ordering where *dim* precedes *wil*. I assume, following Davis and Huijsmans (2024) and Huijsmans (2023) that the linearized string in (48) is then shipped off to the phonological component of the grammar where processes such as allomorph selection take place.

(47)   Structure provided by the syntax

---
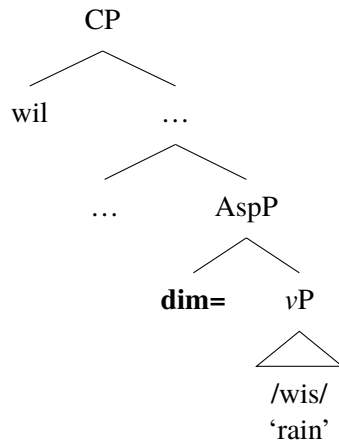
[16] While it may seem surprising to analyze the clausal coordinator *ii* as occupying the C projection — typically associated with complementizers — this analysis is motivated by several empirical facts. First, *ii* does not appear to co-occur with complementizers like *wil*, which is consistent with the idea that they compete for the same structural position. Second, the presence of *ii* systematically correlates with dependent clause morphosyntax. Finally, *ii* coordinates full clauses, not DPs, the latter requiring a distinct coordinator, *gan* (Forbes 2013).

(48) Postsyntactic clitic linearization

```
                    CP
             ┌───────┴───────┐
          dim=wil           …
                      ┌───────┴───────┐
                     …               vP
                                  ┌───△───┐
                                   /wis/
                                   'rain'
```
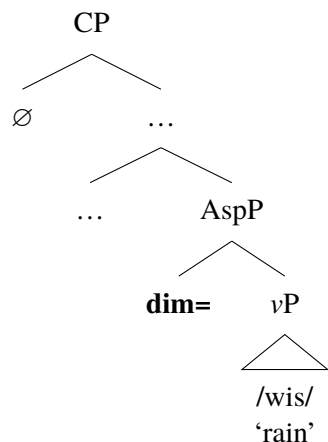
This process of *dim* displacement accounts for the fact that *dim*, generated in a relatively low position, linearly precedes higher functional elements like *wil* (classified as Type 2 dependent markers).

   Dim's inability to shift past Type 1 dependent elements follows if those elements select clausal complements, as proposed in Section 2. The derivation for the example featuring *yukw* in (49) proceeds as follows: first, the syntax generates the embedded clausal structure that serves as the input to clitic linearization (50); then *dim* procliticizes to the null C^0 (51). The CP [$_{CP}$ dim wis], taken to be a *phase* (Chomsky 2000, 2001) and thus inaccessible to further (post)syntactic process, functions as the argument selected by *yukw* (52).
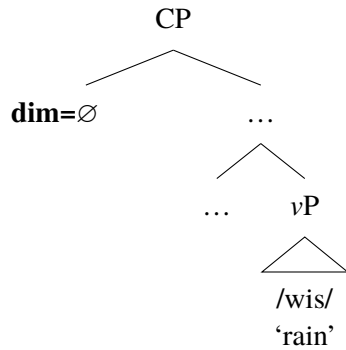
(49)   Yukw dim wis.
       yukw dim   wis
       PROG PROSP rain
       'It's going to rain.'   (BS)

(50)   Structure provided by the syntax

```
                 CP
           ┌──────┴──────┐
          ∅             …
                   ┌──────┴──────┐
                  …            AspP
                          ┌──────┴──────┐
                        dim=            vP
                                    ┌───△───┐
                                     /wis/
                                     'rain'
```

(51) Postsyntactic clitic linearization (vacuous)

```
              CP
           ┌──┴──┐
        dim=∅    …
               ┌─┴──┐
              …     vP
                   ╱◣
                 /wis/
                 'rain'
```

(52) *Yukw* selects CP complement

```
          YukwP
        ┌───┴───┐
      yukw      CP
               ╱──◣
             /dim wis/
           'it will rain'
```
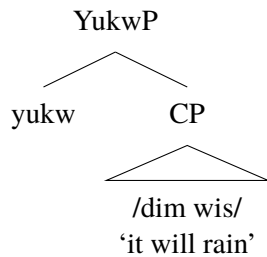
The analysis sketched here captures the mismatch between *dim*'s syntax and linear positioning, as well as the linearization paradoxes exhibited by *dim* when combining with Type 1 dependent marking elements.

Before turning to doubling behaviour, I quickly note here that *dim* is not the only functional head that exhibits these linearization properties. First- and second-person ergative clitics (Series I) also linearize before Type 2 dependent markers (53), and after Type 1 dependent markers (54):[17]

(53) Series I 1st/2nd > *wil*
Luu amhl g̲oodi'y mi dim wil ts'ilaayxws Michael.

luu am =hl g̲oot-'y   [**mi** dim **wil** ts'ilaayxw-t =s Michael]
in good =CN heart-1SG.II 2.I   PROSP COMP visit-3.II   =PN Michael
'I am happy that you will visit Michael.'   (BS)

(54) *yukw* > Series I 1st/2nd
Yukw na japhl kofii.

yukw [**n** jap-t=hl   kofii]
PROG   1.I make-3.II=CN coffee
'I am making coffee.'   (BS)

---

[17] This shifting of Series I clitics does not hold for all speakers. For instance, in the following example, *dim* linearizes before *ii* (as expected, given the discussion in the previous section), while the Series I clitic *na* follows *ii*.

(iii) Dim yets'indis Michael 'nii'y, dim ii na jephl gyemgyem aks.

dim   yets-'n-t-ə-t   =s Michael 'nii'y   **dim ii** n jep-t   =hl gyemk-m   aks.
PROSP hit-CAUS-T-TR-3.II =PN Michael 1SG.PRON PROSP CCNJ 1.I make-3.II =CN hot-ATTR water
'I will talk to Michael and he will make coffee.'   (HH)

32

The irrealis marker *ji* also appears to exhibit similar linearization behaviours. In (55) *ji* precedes two Type 2 dependent markers: *an*, the A-argument extraction particle, and *wila*, the manner subordinator.[18] In (56), *ji* follows the Type 1 marker *yukw*.

(55) *ji > {an, wila}*
       Nee diit naa ji ant wilaaxhl ji wila daa'wihlt.

       nee dii=t   naa [**ji an**=t   wilaax [=hl **ji wila** daa'whl-t]]
       NEG FOC=3.I who IRR AX=3.I know   =CN IRR MANR leave-3.II
       'No one knew where it went.'   (Forbes et al. in prep.:VG: *Raven's Nest*)

(56) *yukw > ji*
       Yukw ji alga<u>x</u>an, nee diin <u>x</u>a'nin.

       yukw [**ji** alga<u>x</u>-n]   nee dii=n   <u>x</u>a'ni-n
       PROG IRR speak-2SG.II NEG FOC-2.I hear-2SG.II
       'If you're speaking, I can't hear you.'   (HH)

Pending future work, I suggest that these elements, prospective *dim*, participant Series I person markers, and irrealis *ji*, form a class of clitics that move to a clause-initial position.

4 Doubling and the preverbal field

The previous sections argued that by appealing to a split between Type 1 and Type 2 dependent markers, and assuming a mechanism for clitic movement to a clause-peripheral position, we can resolve apparent linearization paradoxes in the preverbal field. This section considers an additional empirical puzzle — the doubling of prospective *dim* and irrealis *ji* — that is explained if we assume that Type 1, and not Type 2, markers create biclausal structures.

In certain dependent clauses, prospective *dim* and irrealis *ji* may be doubled. This doubling occurs exclusively in contexts with Type 1 markers like *yukw* or *nee*. In such cases, the doubled elements bookend the Type 1 marker: one instance linearizes above it and another below it. This is illustrated in the following examples, with the (relevant) proposed clausal boundaries indicated in the second line.

(57) *ji*-doubling with *yukw*:
       Ji yukw ji algya<u>x</u>in ii nee diin 'na<u>x</u>'nin.

       [**ji** yukw [**ji** algya<u>x</u>-n]]   ii   nee dii=n   'na<u>x</u>'ni-n
       IRR PROG IRR speak-2SG.II CCNJ NEG FOC=2.I hear-2SG.II
       'If you're speaking, I can't hear you.'   (VG)

(58) *ji*-doubling with *nee*:
       Ji neem ji yo'okshl gwila dim ii 'nii'y dim an yo'okst.

       [**ji** nee [m **ji** yo'oks-t=hl   gwila]] dim ii   'nii'y   dim   an yo'oks-t
       IRR NEG 2.I IRR wash-TR-3.II=CN blanket PROSP CCNJ 1SG.PRON PROSP AX wash-3.II
       'If you don't wash the blankets, I'll wash them.'   (HH)

---

[18] Irrealis *ji* does not seem to co-occur with the complementizer *wil*.

(59) *dim*-doubling with *nee*:

Ii hes 'Niigyemkshl gahliguutxw, "Dim nee ma dim dii sim jegwihl ligit naa go'osun, hlaa k'ap 'niiwin jogo'y. go'osun."

ii	he-t	=s	'Niigyemks	=hl	ga-hliguu-xw	[**dim**	**nee**	[m	**dim**	dii
CCNJ	say-3.II	=PN	'Niigyemks	=CN	DIST-relative-VAL	PROSP	NEG	2.I	PROSP	FOC

sim	jekw-T-t	=hl	ligi	=t	naa	go'o=s=un]]		hlaa	k'ap	'nii-win
2PL/I	kill-T-3.II	=CN	DWID	=PN	who	LOC-3.II=PN=DEM.PROX		INCEP	VER	on-COMP

jok-'y	go'o=s=un
dwell-1SG.II	LOC-3.II=PN=DEM.PROX

'And 'Niigyemks said to all her relatives to not kill anyone here. "This is where I live now."'
(Forbes et al. in prep.:VG: *Frog Phratry*)

Doubling is not possible with a Type 2 dependent marker alone:

(60) *Luu amhl goodi'y dim win dim wis.

luu	am-t	=hl	goot-'y	[**dim**	**wil**	**dim**	wis]
in	goot-3.II	=CN	heart-1SG.II	PROSP	COMP	PROSP	rain

Intended: I'm happy that it will rain. (VG)
Comment: *Too many dims!*

The restricted distribution of doubling — occurring only with Type 1 markers — aligns directly with the biclausal analysis developed in Section 2. Each instance of the doubled element occupies a distinct syntactic domain; this is schematized in (61).

(61) *Dim/ji* doubling in biclausal structures:
[CP *ji/dim* DEP₁ [CP *ji/dim* …]]

5 Conclusion

This paper examined two empirical puzzles in the Gitksan preverbal field: apparent linearization paradoxes and doubling phenomena. I argued that both puzzles can be explained by the proposal that certain dependent clauses — specifically those introduced by a Type 1 dependent marker — are in fact biclausal. I also outlined a preliminary analysis addressing the mismatch between the syntactic position and surface linearization of prospective *dim* and related functional elements, proposing that this mismatch results from movement to the edge of a phrasal domain.

Future work should include a closer examination of dependent markers not discussed in this paper. Preliminary evidence suggests that additional markers derived from intransitive predicates, such as *hlis(xw)* 'to be finished, *perfective*', can also be classified as Type 1. For instance, like *yukw* and *nee*, *hlis(xw)* consistently precedes the prospective marker *dim*, as illustrated in (62).

(62) Hlis dim dip amajebihl jixts'ik, dim yeexsi'm Lisa.

hlis	**dim**	dip	ama=jep-ə-t=hl	jixts'ik	dim	yeexs-ə-'m	(t)	Lisa
PFV	PROSP	1PL.I	good=do/fix-T-3.II=CN	car	PROSP	visit-TR-1PL.II	PN	Lisa

'After we've fixed the car, we'll visit Lisa.' (VG)

Another subgroup of dependent markers, including *hlaa* 'now, *inceptive aspect*' and *k'ay* 'still, just' (referred to as *predicative particles* in Rigsby (1986:273)) are more adverbial in nature, and require further investigation to determine whether they can also be unified with Type 1. While they lack the intransitive-verb-like properties of markers like *yukw* and *nee* (see Section 3), like *yukw* and *nee*, they consistently precede prospective *dim*, as shown in (63). This behaviour suggests, if the analyses presented here are correct, that *hlaa*, like, *yukw* and *nee*, triggers a biclausal structure.

(63)   Hlaa dim maadim.
       hlaa   [**dim**   maadim]
       INCEP PROSP snow
       'It's going to snow soon.'   (Rigsby 1986:276; bracketing my own)

While this work is preliminary and ongoing, the analysis presented here supports the view that most, if not all, matrix dependent clauses can be analyzed as involving subordination.

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