

## On A'-Dependencies in Gitksan

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On first examination, the syntax of WH-questions in Gitksan (Interior Tsimshianic) shows a pattern characteristic of the Pacific Northwest Sprachbund: an initial, predicative WH-phrase takes an argument DP, which may be simple (in identificational contexts) or complex: in the latter case the DP appears to be a ‘headless’ (*pro*-headed) relative clause containing a – possibly long range – A'-dependency. However, closer investigation reveals a rather more complex picture. To start with, Gitksan WH-phrases show up unexpectedly in intermediate positions in long-range dependencies (thus resembling cases of ‘copy-movement’) and – as in English, but not other Pacific NW language families – clause-initially in both headed and ‘headless’ relatives. Furthermore, though focus movement shows an identical morphological profile to WH-questions, and also involves a (possibly long-range) A'-dependency, it crucially does *not* allow intermediate or clause-initial WH-phrases. These facts support the following conclusions: first, WH-pronouns undergo overt movement in Gitksan relative clauses to clause-initial position; and second, focusing in Gitksan does not involve relativization (as would be predicted by an ‘indirect movement’ analysis), but direct movement of the focused constituent to clause-initial position. The result is that the surface similarities between Gitksan A'-dependencies and their counterparts in other NW Coast languages conceal different underlying syntactic mechanisms; a result which highlights both the superficiality of shared characteristics in the NW Sprachbund and the more profound structural differences which they conceal.

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## 1 Introduction

This paper examines the syntax of A'-dependencies in Gitksan (Interior Tsimshianic, henceforward IT).<sup>2</sup> While both major grammars of IT (Rigsby 1986 on Gitksan and Tarpent 1987 on Nisgha) provide information on the morphology and core syntax of A'-dependencies, and Hunt (1993) contains some important preliminary findings on long-range dependencies, this is the first in-depth comparison of the syntax of the three major types of A'-dependency in IT: WH-questions, relative clauses, and focus constructions.

After presenting some background information on the basic syntax and morphology of the language in 2.1, and introducing WH-questions in 2.2, in Section 3 we lay out an analysis in which all three types of A'-dependency contain a relative clause. According to this analysis, familiar from research on other NW languages, WH-questions and focus structures consist of a base-generated nominal predicate and a DP argument: the latter may be simple, giving rise to identificational structures, or may contain a relative clause, in which movement of a null operator creates a (possibly long-distance) A'-dependency. Under this 'indirect movement' analysis, there is no direct WH-movement or focus movement: instead, all movement-related properties derive from an A'-dependency inside the relative clause which serves as argument to the nominal predicate.<sup>3</sup>

We show that there is considerable evidence for the indirect movement analysis of both WH-questions and focus movement structures in IT: first, bare nominal predicates are independently attested; second, as shown in 3.2, WH-words are nouns; third, the A'-extraction morphology characteristic of relativization also shows up in WH-questions and focusing structures; and fourth, all three types of dependency show the same typical A'-movement profile: they form long-distance dependencies which are subject to standard island constraints.

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<sup>2</sup> Together with Nisgha, Gitksan forms the Interior branch of the Tsimshianic language family, spoken in NW British Columbia along the watersheds of the Nass and Skeena rivers. Nisgha and Gitksan are mutually intelligible, and have in the past been treated as dialects of the same language, 'Nass-Gitksan'. However, these days, for political and cultural reasons, it is the usual practice to treat them as separate languages (see Rigsby 1986, 1989). Gitksan itself has two major dialect groups, one in the west, referred to as Gyanim̄, the other in the East, referred to as Gitksanim̄. Since the entire language (excluding Nisgha) also goes by the latter term, we retain the linguistic name 'Gitksan' here in order to avoid confusion.

<sup>3</sup> We avoid the term 'cleft' in favour of 'indirect movement', because we reserve the former for what Kroeber (1999), discussing Salish, describes as 'introduced clefts': that is structures in which a focused argument is introduced by a clefting particle. Though (introduced) clefts are themselves a type of indirect movement structure, they need to be distinguished from the cases we are discussing here, which lack an introductory particle and feature a bare nominal predicate. IT does have clefts, introduced by the third person singular Series III pronoun *'nit*. For present purposes, we set them aside; they are an important topic for future investigation.

However, in Section 4 we present some previously unreported observations which are quite puzzling for the indirect movement account. In particular, Gitksan appears to have an analogue of ‘copy movement’, in which WH-words in long-range questions show up optionally in intermediate COMP positions, in addition to their normal sentence-initial position. This is unexpected on the indirect movement account of WH-questions, where the initial predicative WH-phrase is base-generated externally to the relative clause containing the A'-dependency: since the WH-phrase itself does not move, it is hard to see how it can leave an intermediate copy.

A solution to the problem posed by copy movement is provided by another new observation, which we present in 4.2: in Gitksan, WH-pronouns occur in clause-internal fronted positions in relative clauses. Though WH-words are particularly frequent in ‘headless’ relatives, they are also optionally present in headed relatives, showing that they cannot themselves be relative clause heads, but instead play the role of relative pronouns: that is, they undergo direct WH-movement within the relative clause.

Given the existence of WH-relative pronouns, we show in 4.3 that the copy movement properties of long-distance dependencies can be accounted for without abandoning the indirect movement account of WH-questions: the intermediate WH-phrases are copies of the WH-relative pronoun within the relative clause, not of the external predicative WH-phrase.

In Section 4.4, we reveal a further important finding: while relative clauses and WH-questions may contain WH-relative pronouns, focus-movement structures may not. This indicates that focus movement is *direct*, not indirect: a surprising conclusion both within the grammar of Gitksan (since in other respects, focus movement parallels WH-questions and relative clauses) and more broadly, for the typology of A'-dependencies across the NW Sprachbund, where indirect movement is the rule for focusing structures. We then reconsider in 4.5 the possibility that WH-questions might also involve a direct dependency, concluding tentatively that they can be formed either by indirect or by direct movement.

We conclude by considering two issues which arise from our investigation. First, the existence of an English-like WH-relative pronoun in a grammar so unlike that of English in so many other respects raises inevitable questions about the possibility of English influence on what Tarpent (1987) refers to as ‘younger fluent speakers’ (YFS). Though we are sceptical as to whether English influence alone could account for the particular pattern of A'-dependencies we find in Gitksan, we observe that the distribution of WH-relative pronouns parallels that of the particle *hli/hla*, termed ‘definite’ by Rigsby (1986: 399) and ‘restrictive’ by Tarpent (1987: 471); we consider the possibility that the WH-relative pronoun may have partially replaced *hli/hla* in the grammars of YFS.

Finally, we consider the implications of our findings for the relationship of Tsimshianic languages to the rest of the NW Sprachbund (see Beck 2000, 2002). Our conclusion here is that superficial similarities between A'-dependencies across unrelated language families in the Sprachbund (where

focusing, relativization and WH-questions appear to follow an identical pattern) conceal important underlying differences.

## 2 Background

In this section, we provide some necessary preliminaries to the main investigation. In 2.1 we give a brief overview of major relevant features of IT clausal syntax, drawing largely on the work of Rigsby (1986), Tarpent (1987), and Hunt (1993), before providing an introduction to the basic morphosyntax of WH-questions in 2.2.

### 2.1 A very brief overview of the IT clause

Clausal syntax in IT syntax is organized around a fundamental split between what we will refer to as *independent* and *dependent* clauses, following Rigsby (1986). The distinction roughly corresponds to a main/subordinate clause distinction, though dependent clauses are sometimes used as main clauses in narrative contexts, and are generally viewed as the ‘unmarked’ member of the pair; a better analogy is probably to the independent and conjunct modes in Algonquian (see Cook 2008 and references therein). Inflectional morphology in the two clause-types is organized quite differently, though there is overlap in the elements involved, and in both types, morphological alignment is thoroughly ergative. There are three sets of pronouns, sharply distinguished by morphological type as well as distribution.

*Series I* pronouns are ergative clitics which precede the main predicate in transitive dependent clauses. *Series II* pronouns are suffixes which occur in both independent and dependent clauses but with different functions: in independent clauses, they are ergative, whilst in dependent clauses they are absolutive. In addition, they serve as possessors in NP and as the objects of prepositions. *Series III* pronouns are independent words, which occur mainly in independent clauses as absolutives. See Appendix II.B for a summary of these patterns.

The distribution of pronominal inflection also interacts with a somewhat mysterious morpheme  $-(y)\partial$  variously referred to as ‘transitive’ (Rigsby 1986), ‘control’ (Tarpent 1987), and ‘ergative’ (Hunt 1993), which surfaces in transitive independent clauses between the verb stem and Series II pronominal suffixes; as such, it is in complementary distribution with Series I pronominals, which only occur in dependent clauses. The analysis of this element is controversial, but need not particularly concern us here: see the references above.

Oblique arguments as well as non-clausal adjuncts are introduced by prepositions, generally the all-purpose preposition *a-*, which has suppletive pronominal forms beginning with *lo-*. For an inventory of the pronoun series and a summary of their distribution see Appendix II.B.

A second major component of IT morphosyntax is the *connective* system. Connectives are semantically vacuous determiner-like elements which introduce all non-clausal arguments as well as certain subordinate clauses. They

come in two flavours, whose distribution is determined by a distinction between *determinate* and *non-determinate* marking (the term is from Tarpent 1987: 165).

Determinates include proper names, the WH-pronoun *naa* ‘who, someone’, demonstratives and (at least historically) Series III (independent) pronouns; non-determinates include everything else. Determinate marking is complex, because it consists of two elements, a suffix *-s*, which attaches to the predicate (though it is associated syntactically with the following argument) and a (typically) proclitic *t* (singular) or *dip* (plural).<sup>4</sup> Determinate *t* deletes after *-s*, so the two never co-occur when associated with the same argument: *-s*, however, is limited to environments immediately following a Series II pronominal suffix on the predicate, so *t* shows up elsewhere. There is disagreement in the literature over whether *-s*, *t* or both should count as connectives: Rigsby (1986) identifies both as connectives, Tarpent characterizes *-s* as the connective and *t/dip* as determinate markers, and Hunt (1993) claims that *t/dip* are the connectives and *-s* is a case marker. We will not attempt to choose between these options here: we simply gloss *-s* as ‘proper noun’ (PN) and *t/dip* as ‘determinate markers’ (DM).

In contrast to determinates, all non-determinates are marked by a simple enclitic *=hl*, which like *-s*, attaches to the previous prosodic word, but is otherwise unrestricted in its distribution; the same enclitic *=hl* is also used in absolutive extraction environments and to introduce certain kinds of dependent clause. The distribution and shape of connectives are summarized in Appendices II.C and II.D.

Finally, word order in IT is characterized by quite rigid Predicate-Subject-Object-Adjunct order, with one minor exception, involving Series III object pronouns in transitive clauses, which at least in the speech of older speakers typically precede overt nominal subjects (see Appendix II.E).

## 2.2 Basic Description of IT WH-words

The morphosyntax of WH-questions in IT is described by Rigsby (1986: 296-302) and Tarpent (1987: 319-330). In both Gitksan and Nisgaha, there are

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<sup>4</sup> Rigsby, Tarpent and Hunt all treat *-s* as an enclitic rather than a suffix. However, *-s* is always morphologically bound to the lexical head immediately preceding the determinate nominal with which it is associated, and therefore shows none of the variable positioning typical of clitics. In contrast, the common noun connective *=hl* attaches indiscriminately to the previous prosodic word, showing typical clitic-like behaviour. Though they do not give explicit reasons, Rigsby, Tarpent and Hunt are likely basing their analysis of *-s* as an enclitic on the fact that it follows the evidential markers *=gat* and *=(y)ima(a)* in the verb-string. These markers attach to the first predicative element in the clause (either an auxiliary or the main predicate), and therefore meet the morphological criteria for clitic-hood. By transitivity, if evidentials are enclitics, so should *-s* be. However, this conclusion only follows on the assumption that all clitics must attach outside all affixes; if the two may be interspersed, then morpheme order does not directly reflect morphological status, and *-s* can be treated as suffix even though it follows bona fide clitics in the verb string.

three basic WH-pronouns:<sup>5</sup>

- (1) a. *naa* 'who, someone'<sup>6</sup>  
b. (*a*)*gu/gwi* 'what, something'<sup>7</sup>  
c. (*hi*)*nda* 'where, which, how, somewhere, somehow'<sup>8</sup>

There is an important difference in argument-marking status between *naa*, which is determinate, and thus may be introduced by the determinate markers *t* (singular) and *dip* (plural), and the other WH-pronouns, which are non-determinate and are therefore introduced by =*hl* in appropriate contexts.

The equivalents of other WH-phrases are built by combining these basic WH-words with various subordinators, including *wil*, *wilaa*, and *gan* (see (10) – (13) below for examples).

The canonical use of WH-pronouns is in information questions, where the WH-word is obligatorily clause-initial. There are two basic types of information question, which we refer to as *simple* and *complex*. Simple questions consist of an initial WH-word followed by a referential expression, typically a proper name, independent (Series III) pronoun, or demonstrative, as shown in (2)-(4) respectively:

- (2) Hinda t Tyler?  
where DM Tyler<sup>9</sup>  
'Where is Tyler?'

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<sup>5</sup> A fourth WH-pronoun, *gaxgwi/gaxgu/axgwi/daxgwi* 'when' is built from the word for 'what': see Rigsby (1986: 301), Tarpent (1987: 374).

<sup>6</sup> Examples are given in the practical orthography devised by Bruce Rigsby and Lonnie Hindle in the 1970s and now used by all literate Gitksan speakers (see Hindle and Rigsby 1973). A conversion chart to the APA is provided in Appendix I.

<sup>7</sup> The different forms for 'what' possibly reflect a dialect division. While Rigsby (1986: 301) lists all of the forms in (1) for Gitksan, one of our consultants (from the Eastern dialect area) prefers (*a*)*gwi*, while the other (from the Western dialect area) uses (*a*)*gu*, which is also the form given by Tarpent 1987: 320) for Nisgha. The *a*- accretion on these forms (which is frequently omitted in WH-questions) is of obscure provenance; Tarpent (1987: 567) treats it as a prefix, but one whose meaning is so diffuse as to be virtually undefinable.

<sup>8</sup> The form *hinda* is the one used by both our consultants. Though it is not reported in Rigsby (1986) or Tarpent (1987), it is given as an alternate form for 'where' in Hindle and Rigsby (1973: 50).

<sup>9</sup> Abbreviations are as follows: I = Series I person marker, II = Series II person marker, III = Series III person marker, AFF = affirmative, ATT = attributive, AX = A (transitive subject) extraction marker, CN = common noun connective, CNTR = contrastive, COMP = complementizer, DM = determinate, DIST = distal, EMP = emphatic, FUT = future, IRR = irrealis, PL = plural, PN = proper noun connective, PREP = preposition, REL = relative, RSTR = restrictive, SG = singular, SX = S (intransitive subject) extraction marker, T = 'T' suffix, TRA = transitive, YNQ = yes-no question. A dash (-) marks an affix boundary and an equals sign (=) a clitic boundary.

(3) Naa (t) 'niin?  
 who (DM) 2SG.III  
 'Who are you?'<sup>10</sup>

(4) Gwi tust?  
 what that  
 'What is that?'

As can be inferred from the translations of (2)-(4), simple questions are used to ask about the identity or location of individuals.

Complex WH-questions are information questions in which a sentence-initial WH-element triggers distinctive extraction morphology on its clausal sister. There is a three-way contrast in extraction morphology, depending on whether an object, an intransitive subject, or a transitive subject has been extracted.<sup>11</sup>

In object extraction cases, the clause from which extraction has taken place remains in the independent order, as can be seen from the absence of a pre-predicative Series I clitic and the presence of transitive marking on the predicate in (5). Object extraction is further marked simply by the CN connective *=hl* preceding the clause from which extraction has taken place:

- (5) a. Gwihl gubis John?<sup>12</sup>  
 what=CN eat-TRA-PN John  
 'What did John eat?'
- b. Gwihl ga'an?  
 what=CN see-TRA-2SG.II  
 'What did you see?'

Intransitive subject extraction is similarly marked by *=hl*, with the addition of a suffixed *-Vt* on the predicate (the vowel is a schwa whose value is determined by the preceding consonant). The correct analysis of this suffix has been the subject of much debate, which we do not address here: we simply gloss it as SX for 'S-extraction'. See Tarpent (1987), Hunt (1993) and Peterson (2006) for competing analyses. Examples are given in (6):

<sup>10</sup> The consultant who volunteered this sentence remarked that "Today, they would leave the *t* out."

<sup>11</sup> See Appendix II.F for a summary of extraction-related morphology.

<sup>12</sup> The verb in this example (and any other ending in the proper noun suffix *-s*) actually contains a deleted third person Series II suffix *-t*. The morphophonology of this suffix is quite opaque: it deletes immediately before *-s* and the connective *=hl*, so it only shows up when the latter are either non-adjacent to it or absent. See Tarpent (1987) and Hunt (1993: 116) for discussion. In order to maintain a reasonably transparent morpheme-by-morpheme gloss, we do not represent the 3SG.II suffix unless it surfaces overtly; nothing in the present article hinges on its distribution.

- (6) a. Naahl limit?<sup>13</sup>  
who=CN sing-SX  
'Who sang?' (cf. Rigsby 1986: 303)
- b. Dip naahl simgigidist  
PL.DM who=CN chief(PL)-SX-AFF  
'Who are the chiefs?'

Transitive subject extraction is marked by a proclitic sequence *an-t* (sometimes *t-an* or just *an*, though these are not used by our consultants: see Rigsby 1986: 288), which introduces the clause containing the extraction site. The sequence consists of a complementizer-like element *an* and a *t* which is most likely the third person Series I clitic; however, we simply gloss the whole sequence as AX (where A stands for a transitive subject). The clause itself is dependent, as can be seen from the lack of transitive marking on the verb. Examples are given in (7).

- (7) a. Naa [ant guphl suusiit]?<sup>14</sup>  
who [AX eat=CN potato]  
'Who ate the potato?'
- b. Naa [ant ga'ahl 'ul]  
who [AX see=CN bear]  
'Who saw the bear?'

'Which' questions are formed from *(hi)nda* plus a nominal restriction, accompanied (in the speech of one of our consultants) by the restricting element *alp'a*.<sup>15</sup>

- (8) Hindahl alp'a suusiithl gubis John  
where=CN RSTR potato=CN eat-TRA-PN John  
'Which potato did John eat?'

'How many/much' questions are also formed with *(hi)nda*, together with a measure word modifying the restriction:

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<sup>13</sup> One of our consultants pronounces this word as *limixit* (the stem is *limx*).

<sup>14</sup> The word for 'potato' differs between dialects: *suusiit* is the Eastern form, as used here, *sgusiit* the Western version (also used by Nisgha speakers: see Tarpent 1987: 90). Note that our Eastern dialect consultant pronounces the word with a long *u*, unlike the dictionary entry in Hindle and Rigsby (1973: 37).

<sup>15</sup> As far as we are aware, this is the first time this element has been documented: there is no mention of it in Rigsby, Tarpent or Hunt. It is only used by our Eastern dialect consultant.



- (9) Hindahl      gabiihl      suusiithl      gubis      John?  
 where=CN    so.many=CN    potato=CN    eat-TRA-PN    John  
 ‘How many potatoes did John eat?’

Adjunct questions (i.e., questions involving constituents with functions other than S, A, and O) always involve a subordinator, most frequently the complementizer *wil* (*win* in the Western dialect), which induces dependent order inflection in the following clause.<sup>16</sup> The use of these complementizers is illustrated in (10)-(13) below, showing ‘where’, ‘how’, ‘why’, and ‘when’ questions:

- (10)a. Hinda    wil      ‘nim    yin?  
 where    COMP    want    go-2SG.II  
 ‘Where do you want to go?’
- b. Hinda    wilt                      gubis                      Johnhl                      suusiit?  
 where    COMP=3SG.I            eat-TRA-PN              John=CN                      potato  
 ‘Where did John eat the potato?’
- (11) Hinda    wilaat                      gups    Johnhl                      suusiit?  
 where    COMP2=3SG.I            eat-PN    John=CN                      potato  
 ‘How did John eat the potato?’
- (12) Hindahl      wilt              gan      wilt                      guphl    suusiit  
 where=CN    COMP=3SG.I    reason    COMP=3SG.I            eat=CN    potato  
 ‘Why did he eat the potato?’
- (13) Daxgwi    wilt                      gups    Johnhl                      suusiit?  
 when    COMP=3SG.I            eat-PN    John=CN                      potato  
 ‘When did John eat the potato?’

The use of the all-purpose complementizer *wil* also characterizes WH-questions involving indirect objects. In (14) we give WH-questions with the verb *gi’nam* ‘give’, which, like other ditransitives in Gitksan, realizes its theme argument as direct object and its goal argument as a prepositional object, marked by the all-purpose preposition *a-*.

- (14)a. Gwihl                      gi’namin                      as      Alyssa?  
 what=CN                      give-2SG.II                      PREP-PN    Alyssa  
 ‘What did you give to Alyssa?’

<sup>16</sup> We use ‘adjunct’ here in its standard sense; this is not to be confused with the usage of Tarpent (1987) who adopts a version of the Pronominal Argument Hypothesis for Nisgaha, according to which Series I and Series II pronouns are arguments, and therefore any covalued nominals must be treated as adjuncts. We do not adopt Tarpent’s analysis here: see Hunt (1993) for counter-arguments from Gitksan.

- b. Naam                 wil         gi'namhl                 gwila?  
     who=2SG.I           COMP    give=CN             blanket  
     ‘Who did you give a blanket to?’

It is important to point out that exactly the same extraction patterns which characterize WH-questions in Gitksan and Nisgaha also hold for both relative clauses and focusing structures; for this reason, in fact, Rigsby (1986: 296) terms complex WH-questions ‘focus constituent questions’. In (15-17), we give focused answers which match the questions in (5a), (6) and (7) respectively, and which exhibit the same extraction morphology.<sup>17</sup>

- (15) Suusiithl                 gubis                   John.  
       potato=CN           eat-TRA-PN           John  
       ‘It was a potato that John ate.’
- (16) Tylerhl                 limit.  
       Tyler=CN           sing-SX  
       ‘It was Tyler who sang.’                                 (Rigsby 1986: 303)
- (17) (t)     John     ant     guphl   suusiit.  
       (DM)   John   [AX     eat=CN potato]  
       ‘It was John that ate a potato.’

And in (18)-(20) we give relative clauses based on (5a)-(7a), again, exhibiting identical extraction morphology.

- (18) Ixstahl                 suusiithl                 gubis                   John.  
       tasty=CN           potato=CN           eat-TRA-PN           John  
       ‘The potato John ate was tasty.’
- (19) Wilaayinhl                 gathl                   limita.  
       know-TRA-2SG.II=CN    man=CN           sing-SX=YNQ  
       ‘Do you know the man who sang?’
- (20) Ga'a'yhl                 gat     ant     guphl   suusiit.  
       see-TRA-1SG.II=CN    man   AX     eat=CN potato  
       ‘I saw the man that ate the potato.’

With these facts in mind, we are now in a position to make a first pass at a syntactic analysis of WH-questions.

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<sup>17</sup> Rigsby (1986: 302) and Hunt (1993: 248) both claim that the only felicitous response to a complex (‘focus constituent’) question is one where a phrase in focus position matches the focused WH-constituent. We have not found this to be the case for either of our consultants. Indeed, one of them strongly prefers ordinary declarative clauses over focus constituent clauses as answers to WH-questions.

### 3 WH-words as nominal predicates: the indirect movement analysis

In this section, we lay out an indirect movement account of WH-questions in IT. This analysis is based on the following claims:

- (i) WH-words are nouns.
- (ii) In simple WH-questions, WH-words head nominal predicates whose subjects are DPs.
- (iii) In complex WH-questions, WH-phrases are predicated of a subject DP which contains a relative clause. A'-movement of a null operator takes place within the relative clause contained in the complex DP subject.
- (iv) 'Focus movement' works in exactly the same way as complex WH-questions.

We provide evidence for each of these claims in the following four subsections; bear in mind, however, that the conclusions we reach at the end of the section will be revised rather drastically in the next.

#### 3.1 WH-words are nouns

There are two principal pieces of evidence for the claim in (i) that WH-words are, as Tarpent (1987: 319) puts it, 'nouns with indefinite meaning and specialized properties'. The first is that WH-words with indefinite meaning may occur freely in argument positions, preceded by an appropriate connective/determinate marker (*t/dip* in the case of *naa*, =*hl* in the case of (*a*)*gwi/gu*) and usually (but not always) accompanied by the domain-widening element *ligi* 'about, any'.

- (21)a. Neema            ga'ahl    ligit<sup>18</sup>    naaya?  
           NEG=2SG.I    see=CN    any=DM    who=YNQ  
           'Did you see anyone?' (Literally 'Did you not see anyone?')
- b. Neediin            ga'ahl    ligit    naa.  
           NEG=CNTR=1SG.I see=CN    any=DM    who  
           'I didn't see anyone.'
- c. Ee'a,    ga'a'yhl            ligit    naa.  
           yes    see-1SG.II=CN    any=DM    who  
           'Yes, I saw someone.'

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<sup>18</sup> The *t* which occurs between *ligi* and *naa* is the singular determinate marker (see Tarpent 1987: 329); recall that *naa* patterns as a determinate noun, as opposed to (*a*)*gwi/gwi*, which lacks *t* in the same environment and patterns otherwise as a non-determinate noun.

Note that unlike English *anyone*, *anything*, the WH-indefinites (*ligit naa* and (*ligi*) (*a*)*gu/gwi*) are not polarity items: they occur in non-affective environments in all argument positions, including intransitive (22) and transitive (23) subject positions:

- (22)   Witxwhl           ligit    naa.  
           come=CN           any=DM who  
           ‘Someone came.’
- (23)   Ga’ahl   ligit    naa    ‘nii’y .  
           see=CN  any=DM who   1SG.III  
           ‘Someone saw me.’

Second, like other nouns, WH-words may be directly modified by adjectives (see Tarpent 1987: 321):

- (24) a.   Gwihl   dii       da’witxwin?  
           what   CNTR   bring-2SG.II  
           ‘What did you bring?’
- b.   Da’witxwi’yhl   ixsta-m           ligi    agwi.  
               bring-1SG.II=CN   good.tasting-ATT   any    what  
               ‘I brought something tasty.’
- (25) a.   Iit<sup>19</sup>   naahl   dii       da’witxwin?  
           and=DM who   CNTR   bring-2SG.II  
           ‘And who did you bring?’
- b.   Da’witxw’yhl   simgit           ligit    naa.  
               bring-1SG.II=CN   important       any=DM who  
               ‘I brought someone important.’

We conclude that Tarpent’s characterization of WH-words as nouns is correct.

### 3.2 WH-Phrases may be predicative

Recall that like other languages in the Pacific NW Sprachbund, IT languages are predicate-initial. Since in WH-questions, WH-phrases are always clause-initial (there is no interrogative WH-in-situ in Gitksan), an analytical possibility arises which should be quite familiar to students of NW Coast languages: namely, that WH-phrases are simply specialized predicate nominals

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<sup>19</sup> The determinate marker *t* here is encliticized to the conjunction *ii* ‘and then’, but syntactically associated with *naa*. This is significant in that it indicates that *naa* is *non-predicative* here: *t* is never associated with a (main) predicate. For discussion, see 4.5 below.

whose range is represented by their DP arguments (see Jelinek 1998 and Davis 2008 for two versions of this approach to Salish WH-questions).

The most compelling evidence for this hypothesis is to be found in simple questions such as those in (2-4) above. Recall that these questions consist of an initial WH-phrase followed by a determinate element: that is, a proper name, independent pronoun, or demonstrative. Now, at least two of the three sets of determinates (proper names and independent pronouns) have a crucial property: *they cannot serve as main predicates in Gitksan*.<sup>20</sup> This is shown below:

(26) a. Si'moogit            t Cathy  
           chief                DM=Cathy  
           'Cathy is a chief.'

b. \* Cathyhl            si'moogit  
       Cathy=CN        chief

(27) a. Si'moogit            'nidist  
           chief                3SG.III=AFF  
           'S/he is a chief.'

b. \* 'nithl                si'moogidist  
       3SG.III=CN        chief=AFF

In simple identificational sentences such as those in (26a)-(27a), predicates can be distinguished from arguments in two ways. First the predicate always precedes its argument; and second, the argument but not the predicate may be introduced by a connective (*t* in the case of determinates). Based on these criteria, it can be

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<sup>20</sup> For at least one of our consultants, this is (surprisingly) *not* always true of the third class of determinates: demonstratives. Either (i) or (ii) is acceptable:

(i) Os            tustist.  
       dog        that=AFF  
       'That is a dog.'

(ii) Tusthl    osist.  
       that=CN dog=AFF  
       'That is a dog.'

On the other hand, the same consultant rejects the equivalent of (ii) with the plural demonstrative *dipust*, as shown in the contrast between (iii) and (iv) below:

(iii) Gitksan dipusdist.  
       Gitksan those=AFF  
       'Those are Gitksan people.'

(iv) \* Dipusthl Gitksanist  
       those=CN Gitksan=AFF

It's hard to know what to make of this pattern. It is certainly unexpected for demonstratives to function as nominal predicates, since they are usually taken to be the most directly referential of all nominal expressions; in Salish languages, for example, which are notoriously flexible in terms of what can serve as predicate or argument, demonstratives are the least likely elements to function as predicates.

seen that in (26b)-(27b), the determinate element may *only* occupy an argument position.

The implication of this finding for the simple WH-questions in (2)-(4) is clear: since they consist of an initial WH-phrase and a determinate element, and the latter must be an argument, the WH-phrase in these cases *must* be the predicate.

What about simple WH-questions with ‘non-determinates’ (that is, nominals which take the ‘common noun’ connector =*hl*)? Unlike determinates, non-determinate nouns can freely act as predicates: Rigsby (1986: 284) gives the following pair of examples involving a pair of non-determinate nouns alternating between predicate and argument position.

- (28) a. Hlgutk’ihlxwhl gat.  
 small-child=CN male  
 ‘The boy is a child.’
- b. Gathl hlgutk’ihlxw.  
 male=CN small-child  
 ‘The child is a boy.’<sup>21</sup>

However, as observed above, WH-nominals *must* be in initial position in WH-questions. Therefore, it is a reasonable assumption, given that in simple WH-questions with determinates the initial element is the predicate, that in simple questions with non-determinate subjects the initial WH-element is also predicative. This makes a prediction: since by assumption determinate markers do not occur on predicates, it should be ungrammatical for a determinate marker to precede initial *naa* in simple questions. This prediction is borne out:

- (29) a. (\*t) naahl si’moogidist?  
 (\*DM) who=CN chief=AFF  
 ‘Who’s a chief?’
- b. (\*dip) naahl simgigadist?  
 (\*PL.DM) who=CN chief(PL)=AFF  
 ‘Who are the chiefs?’

We conclude (confirming a speculation in Rigsby 1986: 302) that in simple WH-questions, WH-phrases are nominal predicates.

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<sup>21</sup> Although (at least according to Rigsby’s translations) there is a meaning difference between (28a) and (28b), it does not arise from the connective =*hl* on the argument, which is semantically vacuous. It is possible that the difference is an artifact of translation, or it could be an information structural effect arising from word order. We will not attempt to choose between these possibilities here.

### 3.3 Complex WH-Questions are simply WH-questions with a complex subject

Recall from Section 2.2 above that complex WH-questions can be distinguished from simple WH-questions in IT by their distinctive morphological profile. Since this profile is also characteristic of relativization, there is an obvious way in which the two types of question can be unified: in both cases, the WH-phrase itself is predicative, but whereas the subject of simple WH-questions is an ordinary (determinate or indeterminate) nominal, the subject of complex WH-questions contains a relative clause. This provides a ready solution to an apparent contradiction: whereas the WH-phrase itself is base-generated as a nominal predicate (so that there is no English-style WH-movement), complex WH-questions in Gitksan can otherwise be shown to exhibit typical characteristics of WH-movement (or more broadly, A'-movement): they may occur long-distance and are sensitive to island constraints.

As first observed by Hunt (1993: 121), long-range WH-extraction is possible in Gitksan over bridge predicates.<sup>22</sup> Intransitive subjects, objects, and transitive subjects may all undergo long-range movement, as shown in (30b), (31b), and (31c) respectively. (The extraction site is marked by underlining, for ease of interpretation.)

(30) a. Ha'nigoots            James   dim        limxs   Tyler.  
          think-PN James        FUT     sing-PN   Tyler  
          'James thinks Tyler sang.' (Literally: 'James's heart is that Tyler sang.')

      b. Naahl   ha'nigoots   James        dim   limit?  
          who=CN think-PN   James        [FUT   sing-SX \_\_\_\_ ]  
          'Who does James think sang?'

(31) a. Ha'nigoots   James    jit            gups   Tylerhl            anaax.  
          think-PN    James    IRR=3SG.I eat-PN   Tyler=CN        bread  
          'James thinks Tyler ate the bread.' (Literally: 'James's heart is that Tyler ate the bread.')

<sup>22</sup> For ease of exposition, we uniformly employ the predicate (*h*)*an'igoots* 'think', more literally '(according to) one's heart' as the "bridge" in long distance extraction cases. This predicate is actually a nominal, so the question might arise as to whether long range extraction is possible only over predicate nominals. It is not: we have examples of long range extraction with *ga'a* 'see' and *he* 'say', (see (56) and (58) in section 4.1 below), as well as *da'ak(hl)xw* 'be able to', and *anook* 'permit', as shown (i)-(ii) below. All of these are verbs.

- (i)        Gwihl    da'akxws            James   dim        da'witxwit?  
          what   be.able-PN        James   FUT        bring-TRA-3SG.II  
          'What was James able to bring?'
- (ii)        Gwihl    anoogan            dim        da'witxws            James?  
          what=CN allow-TRA-2SG.II   FUT        bring-PN            James  
          'What did you allow James to bring?'

- b. Gwihl ha'nigoots James ji gubis Tyler?  
 what=CN think-PN James [IRR eat-TRA-PN Tyler \_\_\_ ]  
 'What does James think Tyler ate?'
- c. Naahl ha'nigoots James ji ant guphl anaax?  
 who=CN think-PN James [IRR AX eat=CN \_\_\_ bread]  
 'Who does James think ate the bread?'

And as also first observed by Hunt (1993: 121) with respect to the Adjunct Island Condition, long-range WH-movement is subject to strong island effects. In (32)-(34) below we show the effects of the Coordinate Structure Constraint, the Complex Noun Phrase Constraint, and the Adjunct Island Condition; the constituent which corresponds to the island is bracketed.

(32)a. Gubis Henryhl [smax ganhl miyup].  
 eat-TRA-PN Henry=CN meat and=CN rice  
 'Henry ate meat and rice.'

- b.\* Gwihl gubis Henryhl [smax gan?  
 what=CN eat-TRA-PN Henry=CN [meat and \_\_\_]  
 \* 'What did Henry eat meat and?'<sup>23</sup>

(33)a. Guwis Johnhl smax hla ant jagwis Bill.  
 shoot-TRA-PN John=CN [bear REL AX kill-T-PN Bill]  
 'John shot the bear that killed Bill.'<sup>24</sup>

<sup>23</sup> There is an interesting wrinkle in the data on Coordinate Structure Constraint (CSC) violations. The ungrammatical example in (32b) involves extraction of a right conjunct, stranding the conjunction *gan* phrase-finally; but *left* conjunct extraction is grammatical, as shown in (i).

- (i) Gwihl gubis Henry ganhl miyup.  
 what=CN eat-TRA-PN Henry [ \_\_\_ and=CN rice]  
 'What did Henry eat and rice?'

This accords with observations of Tarpent (1987: 451), who notes that in focus constructions in Nisgha, only the first (left) conjunct of a coordinated expression is fronted, as in the following sentence she cites from Boas (1902):

- (ii) Ksax̄ haxwadakwhl dii jabit, ganhl hawil.  
 only bow=CN CNTR make-TRA-3SG.II [ \_\_\_ and=CN arrow]  
 'He did nothing but make bows and arrows.'

Tarpent also observes that YFS allow the whole coordinated expression to be fronted, perhaps under English influence. In any case, it is clear that *gan* does not work in exactly the same way as English 'and': an interesting topic for further investigation, but not one which directly bears on the issue at hand, given that *right* conjunct extraction is ungrammatical, as predicted by the CSC. See also Hunt (1993: 62).

<sup>24</sup> The morpheme glossed -T- here characterizes a number of transitive verbs stems ending in a long vowel as well as stems derived by various prefixes (Tarpent 1987: 725-30). In independent clauses, it surfaces as *-di-*, and in dependent clauses as *-(y)i-/-(y)a-* (i.e.,



- b. \* Naahl guwis Johnhl [smax hla ant  
 who=CN shoot-TRA-PN John=CN [bear REL AX  
 jagwis ?  
 kill-T-PN \_\_\_]  
 \* ‘Who did John shoot the bear that killed?’  
 Consultant’s comment: “Jagwis who?”

(34) a. Ha’w t James wilt boogabaagas  
 go.home DM James [COMP=3SG.I kiss-PN  
 Jane t Bill]  
 Jane DM Bill].  
 ‘James left because Jane kissed Bill.’

- b. \* Naahl ha’ws James wilt boogabaagas Jane?  
 who=CN leave-PN James [COMP=3SG.I kiss-PN Jane \_\_\_]  
 \* ‘Who did James leave because Jane kissed?’

Clearly, then, there is movement in complex WH-questions in Gitksan; but according to the indirect movement account, the moving element is not the WH-word itself, but a (null) operator inside a (headless) relative clause, which is in turn embedded inside the DP subject of the predicative WH-phrase. In other words, the structure of a complex WH-question should be represented by the indirect movement schema in (35a), not the direct movement schema in (35b):

- (35) a. [<sub>IP</sub> WH-PRED [<sub>DP</sub> pro [<sub>CP</sub> O<sub>i</sub> [<sub>IP</sub> ...t<sub>i</sub>...]]]]  
 b. [<sub>CP</sub> WH<sub>i</sub> [<sub>IP</sub>...t<sub>i</sub>...]]

The schema in (35a) makes a number of further predictions. First, Gitksan should independently allow ‘headless’ (or more likely, *pro*-headed) relative clauses. Second, complex WH-questions should be possible with *headed* relative clauses in the subject position of the WH-predicate. And third, (non-WH) relative clauses should show the same diagnostic properties of ‘WH-movement’ as those that characterize complex WH-questions.

As far as the first prediction is concerned, ‘headless’ relative clauses are reported by both Tarpent for Nisgha and Hunt for Gitksan. The following examples from Hunt (1993: 224) have been confirmed by our consultants:

- (36) Hlaa (gukws) bakwhl ga’aadit.  
 now (back) return=CN fish(PL)-SX  
 ‘The ones who went fishing have come back.’

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schwa) ; its form thus overlaps with and its distribution parallels the ‘transitive’ morpheme *-(y)i-/(y)a-*, but it cannot be reduced to the latter, at least synchronically. Tarpent (1987: 634) comments that “In fact, unravelling the conditions of its occurrence and the guises under which it occurs is probably the thorniest problem of Nisgha morphological analysis.” We will not attempt to unravel this problem here.

- (37) Ga'a'yhl jabit.  
 see-1SG.II=CN make-TRA-3SG.II  
 'I saw what s/he made.'
- (38) Ga'a'y ant jagwihl smax.  
 see-1SG.II AX kill-T=CN bear  
 'I saw the one who killed the bear.'

The second prediction also holds up: headed relative clauses are possible as the arguments of WH-predicates:

- (39) Naahl t'ihlxw-um haanak'hl daa'whlit?  
 who=CN [young-ATT women=CN [leave-SX]]  
 'Who are the young women that left?'
- (40) Gwihl alp'a smaxhl gubis John?  
 what=CN RSTR [meat=CN [eat-TRA-PN John]]  
 What (exactly) is the meat that John ate?'
- (41) Naahl gat ant jagwihl smax?  
 who=CN [man [AX kill-T=CN bear]]  
 'Who is the man that killed the bear?'

And again as predicted, relativization shows the same set of movement properties as 'WH-movement'. Long-range relativization is possible over a bridge predicate:

- (42) Wilaayinhl hanak'hl ha'nigoots Jameshl  
 know-TRA-2SG.II=CN woman=CN think-PN James=CN  
 limita?  
 sing-SX=YNQ  
 'Do you know the woman who James thinks sang?'
- (43) 'Nithl anaax tunhl ha'nigoots James dim  
 3SG.III=CN bread this=CN think-PN James FUT  
 gubis Tyler.  
 eat-TRA-PN Tyler.  
 'This is the bread that James thinks Tyler will eat.'
- (44) 'Nithl gat tunhl ha'nigoots James dim  
 3SG.III=CN man this=CN think-PN James FUT  
 ant guphl anaax.  
 AX eat=CN bread  
 'This is the man who James thinks ate the bread.'

Moreover, long-range relativization is subject to the same range of island effects as long-range WH-movement. In (45)-(47) below we show the effects of the Coordinate Structure Constraint, the Complex Noun Phrase Constraint, and the Adjunct Island Condition, respectively.

- (45) a. Nithl smax ganhl miyup dim gubis Henry.  
 3SG.III=CN meat and=CN rice FUT eat-TRA-PN Henry  
 ‘This is the meat and rice Henry will eat.’
- b. \* Nithl miyup dim gubis Henry smax gan.  
 3SG.III=CN rice FUT eat-TRA-PN Henry [meat and \_\_\_ ]  
 \* ‘This is the rice Henry will eat meat and.’
- (46) a. Guwis Johnhl smax hla ant jagwis Bill.  
 shoot-TRA-PN John=CN bear REL AX kill-T-PN Bill  
 ‘John shot the bear that killed Bill.’
- b. \* Wilaayinhl gathl guwis Johnhl  
 know-TRA-2SG.II=CN man=CN shoot-TRA-PN John=CN  
 smax hla ant jagwis?  
 bear [REL AX kill-T-PN \_\_\_ ]  
 \* ‘Do you know the man that John shot the bear that killed?’  
*Consultant’s comment: ‘Incomplete.’*
- (47) a. Ha’w t James wilt boogabaagas  
 go.home DM James COMP=3SG.I kiss-PN  
 Jane t Bill.  
 Jane DM Bill  
 ‘James left because Jane kissed Bill.’
- b. \* Wilaayinhl gathl ha’ws James  
 know-TRA-2SG.II=CN man=CN go.home-PN James  
 wilt boogabaagas Jane?  
 [COMP=3SG.I kiss-PN Jane \_\_\_ ]  
 \* ‘Do you know the man that James left because Jane kissed?’

All in all, then, a strong case can be made that complex WH-questions have the same structure as simple WH-questions: a base-generated WH-predicate takes a DP argument as its range. The only difference is that in the complex cases, the DP argument contains a relative clause, in which (possibly long-range) movement of an empty operator has taken place.

### 3.4 ‘Focus movement’ works like ‘WH-movement’

The last component of a unified indirect movement account of A'-dependencies in Gitksan involves focusing structures. The basic idea here is

simple: ‘focus movement’ works just like ‘WH-movement’, with a base-generated nominal predicate taking a complex DP containing a relative clause as its argument.

In support of this hypothesis, note first of all that focus movement shows the same extraction morphology as both WH-movement and relativization (see (5)-(7) above). Furthermore, like WH-movement and relativization, focus movement operates at long range, and shows island sensitivity. Long-range focus movement over a bridge predicate is shown in (48)-(50):

- (48) Tylerhl ha'nigoots James ji limit.  
 Tyler=CN think-PN James [IRR sing-SX \_\_\_\_ ]  
 ‘It is Tyler who James thinks sang.’
- (49) anaaxhl ha'nigoots James ji gubis Tyler.  
 bread=CN think-PN James [IRR eat-TRA-PN Tyler \_\_\_\_ ]  
 ‘It is bread that James thinks that Tyler ate.’
- (50) Tylerhl ha'nigoots James ji ant guphl anaax  
 Tyler=CN think-PN James [IRR AX eat=CN \_\_\_\_ bread]  
 ‘It is Tyler who James thinks ate the bread.’

Island effects with long-range focus movement are given in (51)-(53), which show Coordinate Structure Constraint effects, Complex Noun Phrase Constraint effects, and Adjunct Island Condition effects, respectively.

- (51) a. Smax ganhl miyuphl dim gubis Henry.  
 meat and=CN rice=CN FUT eat-TRA-PN Henry  
 ‘It is meat and rice that Henry will eat.’
- b. \*Miyuphl dim gubis Henryhl smax gan.  
 rice=CN FUT eat-TRA-PN Henry=CN [meat and \_\_\_\_ ]  
 \* ‘It is rice Henry will eat meat and.’
- (52) a. Guwis Johnhl smax hla ant jagwis Bill.  
 shoot-TRA-PN John=CN bear [REL AX kill-T-PN Bill]  
 ‘John shot the bear that killed Bill.’
- b. \*Billhl guwis Johnhl smax  
 Bill=CN shoot-TRA-PN John=CN bear  
 [hla ant jagwis.  
 [REL AX kill-T-PN \_\_\_\_ ]  
 \* ‘It was Bill that John shot the bear that killed.’

(53) a. Ha'w t James wilt boogabaagas  
 go.homeDM James COMP=3SG.I kiss-PN  
 Jane t Bill.  
 Jane DM Bill  
 'James left because Jane kissed Bill.'

b. \* Billhl ha'ws James wilt  
 who=CN leave-PN James COMP=3SG.I  
 boogabaagas Jane.  
 kiss-PN Jane

\* It was Bill that James left because Jane kissed.'

Given this parallel behaviour, it appears that focus movement, too, can be treated as a subcase of the indirect movement strategy.

### 3.5 Interim summary

We have now made the case for an indirect movement account of all three A'-dependencies in IT. Under such an account, there is really only a single case of A'-movement, which holds between an empty operator and the gap it controls inside a relative clause. Interrogative WH-phrases and focused phrases are both predicate nominals which embed this dependency within their DP argument: thus there is no WH-movement or focus-movement per se, and all A'-dependencies are reduced to relativization.

In spite of its apparent success, however, in the next section we present data from Gitksan that pose a series of challenges for the indirect movement account, and that will ultimately cause us to introduce some major revisions to our analysis of A'-dependencies in IT.

## 4 Gitksan has direct movement, too!

The organization of this section is as follows. We begin in 4.1 by showing that in long-distance WH-questions, additional copies of the clause-initial WH-phrase sometimes show up unexpectedly in intermediate COMP positions. In 4.2 we present another unexpected finding: WH-phrases are available in both headed and headless relative clauses, forcing us to the conclusion that, like European languages but quite unlike other NW coast language families, Gitksan has WH-relative pronouns. However, taken together, these findings actually allow us to rescue the indirect movement account: as we show in 4.3, if we simply replace the empty operator in the relative clause with a WH-operator which may be optionally spelled out in intermediate COMP positions, we can account for the WH-copy pattern while maintaining that there is no direct relationship between the predicative WH-phrase in absolute initial position and the WH-relative pronouns inside its DP argument.

A more serious challenge to the indirect movement account arises, however, when we attempt to extend this analysis to focus structures in 4.4. It

turns out that in contrast to WH-questions, WH-relative pronouns are never allowed in focus movement cases, showing that focus cannot be assimilated to the indirect movement strategy, but must be derived by *direct* A'-movement.

An interesting issue now arises: if direct A'-movement is permitted for focused arguments in Gitksan, then there should be no principled reason why direct WH-movement should not also be permitted. In 4.5, we use the distribution of the determinate markers *t* and *dip* on clause-initial *naa* 'who' (which recall, acts as a determinate noun) to argue that WH-questions in fact make use of *both* indirect and direct A'-movement strategies.

#### 4.1 The 'WH-copy' pattern

Recall that one of the main components of the indirect movement analysis of A'-dependencies in IT is the lack of actual WH movement: instead, a null operator moves inside the relative clause, and the clause-initial WH-predicate is predicated of the whole relative clause, as in (54) (repeated from (35a) above).

(54) [IP WH-PRED [DP pro [CP O<sub>i</sub> [IP ...t<sub>i</sub>...]]]]

Now, it should be clear that under this analysis, we don't expect to find WH-phrases *inside* the relative clause (unless, of course, they are indefinite pronouns licensed independently of the WH-question: see 3.1 above). But curiously, this is exactly what we *do* (optionally) find in Gitksan:

(55) Gwihl han'igoots Jameshl (gwihl) gubis Tyler?  
 what=CN think-PN James=CN [(what=CN) eat-TRA-PN Tyler \_\_\_\_ ]  
 'What does James think Tyler ate?'

(56) Gwihl ga'as Maryhl (gwihl) gubis John?  
 what=CN see-PN Mary=CN [(what=CN) eat-TRA-PN John \_\_\_\_ ]  
 'What did Mary see John eat?'

(57) Hinda wilt ga'as Mary (hinda) wilaa  
 where COMP-3SG.I see-PN Mary [(where) COMP  
 daa'whls John?  
 leave-PN John \_\_\_\_ ]  
 'Where did Mary see John go?'

And we can get multiple copies in cases of long-range extraction, too:

(58) naahl anhes Tyler a=hl (naahl) ga'as  
 who=CN say-PN Tyler PREP=CN [(who=CN) see-PN  
 John a=hl naa ant t'is Bill?  
 John PREP=CN [who AX punch-PN \_\_\_\_ Bill]]  
 'Who did Tyler say that John saw hit Bill?'

Notice that the ‘WH-copies’ here are not in argument positions, and are thus not separate instances of indefinite WH-words. Rather, they are in the left periphery of CP, exactly where we would expect to find them in cases of copy-movement of a WH-phrase *inside* the clausal remnant of WH-movement.

Now, recall that the initial WH-phrase under the indirect movement account is outside of the relative clause in which movement takes place. This immediately raises the question of how the operator in the relative clause (by assumption, *not* a WH-phrase) is able to copy the WH-features of the WH-PRED down into the relative clause, or alternatively, of how a WH-phrase is able to escape *out* of the relative clause into predicate position without violating various well-motivated constraints on movement, including the Complex Noun Phrase Constraint, which we have already seen is uniformly respected in A'-dependencies in Gitksan.

We take it neither operation is possible. In other words, we now have evidence *against* the indirect movement account; and, by assumption, *for* the direct movement account. But in the last section, we saw quite strong evidence for indirect movement: we are thus left with conflicting types of evidence for both the direct and indirect accounts of WH-questions.

However, it turns out that a further unexpected finding can help us to resolve this paradox: *Gitksan has WH-relative pronouns*.

#### 4.2 WH-relatives in Gitksan

Though to our knowledge it has not been reported before for IT, our consultants allow WH-pronouns to appear in clause-initial position in both headed and ‘headless’ relative clauses. Cases of headed relatives with WH-pronouns are given in (59)-(61).<sup>25</sup>

(59) Ixstahl    suusiithl    agwihl gubis    John.  
 tasty=CN [potato=CN [what eat-TRA-PN John \_\_\_\_ ]]  
 ‘The potato which John ate was tasty.’

(60) Wilaayinhl            gathl            naahl            limita.  
 know-TRA-SG.II=CN [man=CN [who=CN sing-SX \_\_\_\_ ]]=YNQ  
 ‘Do you know the man who sang?’

(61) Ga’a’yhl            gat    naa    ant    guphl            suusiit.  
 see-TRA-1SG.II=CN [man [who AX eat=CN \_\_\_\_ potato]]  
 ‘I saw the man who ate the potato.’

Headless relative clauses with WH-pronouns are given in (62)-(64),

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<sup>25</sup> One of our consultants disprefers the use of overt WH-pronouns in headed relatives, particularly when these are object-centred, and will often delete the nominal head, yielding a headless object-centred relative. The same consultant *prefers* WH-pronouns in headless relatives.

corresponding to the non-WH headless relatives in (36)-(38) above:

- (62) Hlaa guxws bakwhl naahl ga'iwit.  
 now back come=CN [who=CN PL-fish.with.rod-SX]  
 'The ones who went fishing have come back.'
- (63) Ga'a'yhl guhl jabit.  
 see-1SG.II=CN [what=CN make-TRA-3SG.II]  
 'I saw what s/he made.'  
*Consultant's comment: 'Better' [than without gu].*
- (64) Ga'a'y naa ant jagwihl smax.  
 see-1SG.II [who AX kill-T=CN bear]  
 'I saw the one who killed the bear.'  
*Consultant's comment: 'Better with naa than without.'*

We conclude that WH-words in Gitksan can act as relative pronouns, quite unlike their equivalents in any other language family in the NW Sprachbund, but in a fashion very reminiscent of WH-pronouns in European languages.

Not entirely so, however: WH-pronouns in European languages are most plausibly analyzed as determiners, as shown, for example, by their ability to take nominal restrictions in e.g., *which man*, *what problem*. On the other hand, as shown for example by their ability to take adjectival modifiers and determiners, WH-pronouns in IT are nouns (see 3.1 above).<sup>26</sup>

This difference is an interesting one, but does not jeopardize our main point that Gitksan has WH-relative pronouns. In fact, the difference can easily be accommodated to a standard theory of WH-movement via a simple lexical parameter. Assuming (as is usual) that what moves in a WH-dependency is a WH-phrase (more specifically, a DP), the parameter simply says that in European languages, the WH-feature is carried on the head of DP, whereas in Gitksan, it is carried on the head of NP. Assuming further that the WH-feature must be spelled out, European languages will end up with an overt WH-determiner and a possibly null NP restriction, and Gitksan will end up with a possibly null (non-WH) determiner and an overt WH-nominal.<sup>27</sup>

<sup>26</sup> This raises the question of how 'which' questions are constructed in IT: see (8) above for an example from Gitksan, formed with the WH-word (*hi*)nda 'where, how, which' and a nominal restriction. There are a number of possible ways to analyze structures such as this: one is to treat (*hi*)nda as an adjectival modifier rather than a head, as appears to be the case for parallel structures in Salish (Davis 2008). More work is needed here.

<sup>27</sup> With respect to the second claim, note that the determinate markers *t* and *dip* (the IT equivalents of determiners) do optionally show up on the determinate WH-pronoun *naa* in fronted positions (see 4.5 below). The common noun connective =*hl*, however, never surfaces on the non-determinate WH-pronouns (*a*)gu/(*a*)gwi and (*hi*)nda in fronted position. This is most likely due to the fact that =*hl* is strictly an enclitic, and cannot surface without a host to its left, whereas the morphophonological status of the determinate



Note further that on standard approaches to the interpretation of relative clauses, the identity requirement that holds between the head of a restrictive relative and the moved element within the relative clause is between *NPs*, not between *DPs*. It is thus entirely natural for the WH-feature to be associated with N, as in Gitksan, rather than D, as in English. The usual assumption about English relatives (on the ‘matching’ analysis: Safir 1999, Bhatt 2002, Hulseley and Sauerland 2006) is that an NP moves to the left periphery of the relative clause, where it must match the external head of the relative clause. This analysis is schematized below, where movement is represented by a strike-through and matching by bolding:

(65) [the [**potato**] [~~*D<sub>WH</sub> pro*~~] [John ate [~~*D<sub>WH</sub> pro*~~]]]]

The role of the WH-determiner in English is to trigger movement within the relative clause: semantically, the determiner is vacuous, and either has to be deleted (as in the treatment in Heim and Kratzer 1998) or reconstructed into the position of the trace (as in Sauerland 1998, 2002).

Continuing to treat Gitksan WH-pronouns as nouns, the equivalent structure in Gitksan will be as in (66):

(66) [hl [suusiit] [~~*D gwi<sub>WH</sub>*~~] hl [gubis John [~~*D gwi<sub>WH</sub>*~~]]]]  
 [=CN [potato] [=CN [D what ]=CN [eat-TRA-PN John [D what ]]]]  
 ‘the potato John ate’

In this structure, a +WH DP moves to a left peripheral position in the relative clause, exactly as in English. From there, an identity relationship is established between the head noun *suusiit* ‘potato’ and the WH-pronoun *gwi* ‘what, something’, meeting the same matching requirement as the head noun ‘potato’ and the empty NP *pro* in the English case in (65) above. The difference between the two structures is simply in the location of the WH-feature: on the D in English, on the N in Gitksan.<sup>28</sup>

We conclude that Gitksan has WH-relative pronouns of category N. Given that relative pronouns as a class are typologically unusual, and more or less geographically restricted to Europe (cf. Comrie and Kuteva 2011), this is a surprising and interesting finding, which we will return to briefly in 5.1.

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markers is more ambiguous: *t* may procliticize to a following noun, and *dip* may not be a clitic at all. Note also that whereas the determinate markers carry semantic information (singular versus plural), the common noun connective is semantically vacuous, and can be deleted without any loss of information.

<sup>28</sup> There is an interesting corollary to this analysis: since the identity relation between the head noun and the moved element within the relative clause is anaphoric, the prediction is that Gitksan relative clauses *must* be of the ‘matching’ type rather than of the ‘raising’ type (see Sauerland 1998, 2002, Bhatt 2002, Hulseley and Sauerland 2006 for the distinction). Furthermore, if ‘matching’ itself is construed as a form of NP ellipsis, NP ellipsis in Gitksan must be interpreted as a form of pronominal anaphora (Hardt 1993) rather than as deletion under identity (Merchant 2001).

### 4.3 WH-copying as relative pronoun copying

It turns out that the existence of WH-relative pronouns also gives us a straightforward way of dealing with apparent cases of WH-copying in questions, without abandoning the indirect movement hypothesis. This is because we can now reanalyze the ‘WH-copy’ as a spell-out of the WH-relative pronoun *inside* the relative clause.

(67)a. *without copy*

Naahl ga’ahl daa’whlit?  
 who=CN see-2SG.II=CN [leave-SX \_\_\_\_ ]  
 ‘Who did you see leave?’ (More literally, ‘Who was it that you saw leave?’)

b. *with copy*

Naahl ga’ahl ahl naahl daa’whlit?  
 who=CN see-2SG.II=CN PREP=CN [who=CN leave-SX \_\_\_\_ ]  
 ‘Who did you see who left?’ (More literally: ‘Who was it that you saw who left?’)

Under this analysis, there is still no direct dependency between the initial, predicative WH-pronoun and the WH-relative pronoun spelled out inside its argument. This predicts that the two should be able to co-occur: and this is indeed the case, as seen in (67b) above and in (68)-(70) below:

(68) Naahl t’ihlxwum haanak’ naahl saksit?  
 who=CN [young-ATT women [who=CN left(PL)-SX \_\_\_\_ ]]  
 ‘Who are the young women who left?’

(69) Naahl gat naa ant jagwihl smax?  
 who=CN [man [who AX kill-T=CN \_\_\_\_ bear]]  
 ‘Who is the person who killed the bear?’

(70) Gwihl alp’a wineexhl gwihl gubis John?  
 what=CN [RSTR food=CN [what=CN eat=PN John \_\_\_\_ ]]  
 ‘Which foods exactly are the ones which John ate?’

Note that these examples all involve headed relative clauses, with the head intervening between the initial, predicative WH-phrase and the second, relative clause-internal one. Employing headless relative clauses in this structure would yield sequences of string-adjacent identical WH-phrases (*naahl naahl, gwihl gwihl*), which are judged ungrammatical, presumably because of a ‘haplological’ filter blocking such sequences.

#### 4.4 Focus movement

Given our revised indirect movement analysis of WH-questions in Gitksan, in which a WH-predicate is base-generated in initial position and a WH-relative pronoun moves inside its argument, and assuming that ‘focus movement’ and ‘WH-movement’ are structurally parallel, we make another prediction: we should expect to find WH-pronouns in the clausal remnant of focus structures, just as we do in WH-questions.

We do not. WH-pronouns are ungrammatical in cases of focus movement, as shown in (71)-(73).

(71) Savannahl (\*naahl) etxwis Henry.  
 Savanna=CN [( \*who=CN) call-TRA-PN Henry \_\_\_\_ ]  
 ‘It was Savanna who Henry called.’

(72) Alyssahl (\*naahl) yokxwit.  
 Alyssa=CN [( \*who=CN) eat-SX \_\_\_\_ ]  
 ‘It was Alyssa who ate.’

(73) Henry (\*naa) ant etxws Savanna gi.  
 Henry [( \*who) AX call-PN \_\_\_\_ Savanna=DIST]  
 ‘It was Henry that called Savanna.’  
*Speaker’s comment on the version with naa: ‘No – the whole sentence doesn’t say what you say in English.’*

In fact, we should have anticipated this discovery. Recall from 3.2 that certain nouns (notably proper names and pronouns) *cannot be predicative*. This means that indirect movement is not an option for cases with a proper name in initial position: yet they are still grammatical. There is only one remaining alternative: for at least these cases, *focus movement must be direct*.

Further support for this contention is provided by the distribution of the determinate markers *t* (singular) and *dip* (plural). These markers, by hypothesis, occur only on arguments, never predicates: yet they show up on focused proper names, as shown in (74):

(74) a. T John (\*naa) ant guphl suusiit.  
 DM John [( \*who ) AX eat=CN \_\_\_\_ potato]  
 ‘It was John who ate the potato.’  
 b. Dip John (\*naa) ant guphl suusiit.  
 PL.DM John [( \*who ) AX eat=CN \_\_\_\_ potato]  
 ‘It was John and them who ate the potato.’<sup>29</sup>

<sup>29</sup> When used with a singular noun, *dip* forms an associative plural, translated here as ‘x and them’. See Tarpent (1982).

Another argument can be constructed based on nominal predicates with a proper name or Series III pronoun as argument. Recall that these are cases of ‘asymmetrical predication’: the non-determinate noun must be the predicate, as shown in the (a) cases in (75)-(76) below, because the determinate noun cannot be, as shown by the ungrammaticality of the (b) cases. What is interesting for the question under discussion is the grammaticality of the (c) cases, which have the determinate in initial position, and display (intransitive subject) extraction marking on the non-determinate noun.

- (75) a. Simgigat dip Bill gan Fred.  
 chief(PL) PL.DM Bill and Fred  
 ‘Bill and Fred are chiefs.’
- b. \* Dip Bill gan Fred simgigat.  
 PL.DM Bill and Fred chief(PL)
- c. Dip Bill gan Fred simgigadit.  
 PL.DM Bill and Fred [chief(PL)-SX \_\_\_\_ ]  
 ‘It’s Bill and Fred who are chiefs.’
- (76) a. Simgigat ‘niidiidist  
 chief(PL) 3PL.III=AFF  
 ‘Bill and Fred are chiefs.’
- b. \* ‘Niidiit simgigadist.  
 3PL.III chief(PL)=AFF
- c. ‘niidiit simgigadidist.  
 3PL.III [chief(PL)-SX \_\_\_\_ ]=AFF  
 ‘It’s them who are chiefs.’

The (c) cases are only readily derivable by direct movement. The predicate in these cases is still *simgigat* ‘chiefs’, and the extraction marking indicates that its argument, the proper name/pronoun, has been fronted by focus movement to a clause-initial but *non*-predicative position.

We conclude that focus movement in Gitksan must be direct, not indirect, and therefore that A'-dependencies in IT employ *both* direct *and* indirect movement strategies. In the next section we return once again to our examination of WH-questions in order to explore the consequences of this new finding for our previous analysis of questions as indirect movement structures.

#### 4.5 Can WH-questions involve direct movement?

Given the necessity for a direct movement account of focused arguments, the possibility now re-emerges of a direct movement account of WH-questions. Notice that such a direct movement strategy cannot *replace* an indirect

one: we have seen enough evidence that at least some WH-questions must be analyzed as cases of indirect movement. Rather, we need to consider the possibility that WH-questions exploit *both* strategies.

In this light, consider the following examples:

- (77) a. (\*Dip)                naahl    simgigadist  
 (\*PL.DM)                who=CN chief(PL)=AFF  
 ‘Who are the chiefs?’
- b. Dip    naahl    simgigadidist  
 PL.DM    who=CN [chief(PL)-SX \_\_\_\_ ]=AFF  
 ‘Who are the chiefs?’

These cases are precisely parallel to the non-WH cases of nominal predication in (75)-(76) above. The (a) case shows the WH-word *naa* acting as a predicate nominal: as such it cannot be preceded by the plural determinate marker *dip*. In contrast, when subject extraction (SX) morphology is attached to the predicate nominal ‘chiefs’ in (b), *dip naa* can front directly, like a focused argument. Tarpent (1987: 477) gives a number of parallel examples from Nisgha where initial *naa* is preceded by a determinate marker: and in every case, the predicate is suffixed with subject extraction morphology.

We tentatively conclude that *both* indirect *and* direct movement strategies are employed in IT WH-questions. However, more work here is clearly in order.

## 5 Implications

In this final section, we address two issues that arise from our investigation. The first, alluded to above in 4.2, is the surprising finding that relativization in Gitksan shows a ‘Standard Average European’ (SAE) pattern, and the possibility that it derives from the influence of English. The second is the place of the IT pattern of A'-dependencies within the Pacific NW Sprachbund.

### 5.1 English influence and relativization in IT

Before proceeding further, let us anticipate one possible question about our findings with respect to relativization in Gitksan. These findings are robust, and have been independently corroborated by two expert first language speakers of Gitksan, from either end of the territory, who grew up with the language, speak it with friends and relatives to this day, and had never met each other before working with us. There is no question, then, of the relativization pattern we have described being the product of imperfect acquisition.

Furthermore, one should always be suspicious of claims that a particular English-like pattern in an unrelated language must be due to the direct influence of English. In our experience with first language speakers of several First Nations languages of British Columbia, all of whom are fluent in English, we have found

the influence of English on their first languages to be confined largely to lexical replacement within structures independently sanctioned by the grammars themselves.

This does, however, raise an interesting possibility for the source of WH-relativization in Gitksan. Though WH-relatives are not mentioned in the literature on IT, and – as far as we can tell – are not attested in textual material, the literature *does* mention another element which behaves (amongst other things) suspiciously like a relative pronoun.<sup>30</sup> This is the particle *hla/hli*, glossed by Rigsby (1986: 399) as ‘definite’ and Tarpent (1987: 471) as ‘restrictive’. (We have glossed it as REL in several examples above). Both authors mention that the particle is used by their consultants semi-obligatorily to introduce object-centred relative clauses, and Tarpent also gives an example (based on Boas 1902) where *hli* introduces a subject-centred relative. Examples of relatives with *hli/hla* are given below:

- (78) Mahldi’y            loodit            dim            guwis    Johnhl  
 tell-T-TRA-1SG.II    PREP-3PL.II    FUT            shoot-PN    John=CN  
           smax            hli    ga’an.  
           [bear            [REL see-TRA-2SG.II \_\_\_\_ ]]  
 ‘I told them John shot the bear you saw.’ (Rigsby 1986: 407)
- (79) Wilaayin            hlit            an    guuhl            hlguhlgwina?  
 know-TRA-2SG.II [REL=3SG.I AX take=CN \_\_\_\_ child-2SG.II]=YNQ  
 ‘Do you know who took the child?’ (Tarpent 1987: 473)
- (80) Guwis            Johnhl    smax            hla    ant    jagwis            Bill.  
 shoot-TRA-PN    John=CN [bear            [REL AX kill-T-PN \_\_\_\_ Bill]]  
 ‘John shot the bear that killed Bill.’
- (81) Wilaayis            Johnhl    gyat    hla    jakwdihl            smax gi  
 know-TRA=PN    John=CN [man [REL kill-T-TRA=CN \_\_\_\_ bear DIST]  
 ‘John knew the man who the bear killed.’

Aside from its use in relatives, *hla/hli* has a number of other functions, including as a marker of alienable possession, as a nominalizer, and – in combination with the complementizer *daa* – as a marker of temporal adjunct clauses. It is likely that historically it was a general purpose nominalizer, whose original function has fragmented into the separate uses that we see in

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<sup>30</sup> Note that in his grammar of Sm’algyax (Coast Tsimshian), Dunn (1995: 68) states bluntly that ‘The relative pronoun is *naa*.’ He then gives the following example:

(i) Naa            dmt                            inbaa’n    boot.  
       REL            FUT=3SG.I                    run        boat  
 ‘He is the one who will run the boat.’

However, the *naa* in this example does not appear to be acting as a relative pronoun, but rather as a non-interrogative predicative pronominal. More investigation is needed.

contemporary IT.<sup>31</sup> For our purposes, however, what is relevant is that one of these uses is as a relative pronoun. This tells us that, possibly prior to the innovation of WH-relative pronouns, IT already had structural precursors, in the form of *hli/hla* relative pronouns; and it is these structural precursors which we hypothesize might have allowed relexification by WH-pronouns to yield the current system.

The above remarks are speculative, and further work needs to be done to establish the current distribution of *hli/hla*, particularly in relation to WH-relative pronouns. Nonetheless, the major point still holds that IT did not simply graft an English construction onto an otherwise non-English syntax: it already had a close structural analogue to the English system of WH-relatives, which allowed it to adapt its own WH-words to function as WH-relative pronouns.

## 5.2 A'-dependencies in IT and the NW Sprachbund

Finally, we turn to the issue of how the IT system of A'-dependencies as elucidated here fits more generally into the picture of A'-dependencies across the NW Sprachbund. Of particular relevance here is Beck's (2002) 'trial balloon' (his description) which constitutes the first attempt to assess the Tsimshianic family from the point of view of its position within the 'Central NW Coast' (CNW) sub-area of the Pacific NW Sprachbund. The latter includes the Chimakuan, Wakashan and Salish families, which though clearly unrelated (at least in the case of Wakashan and Salish) share a number of superficial properties in common, including predicate-initial word order, extensive use of non-verbal predicates with 'headless' relative clauses, and large inventories of lexical suffixes.

Interestingly, Beck identifies what we have referred to as indirect movement as one way in which Tsimshianic resembles other language families of the sub-area: he notes the existence in Nisgha of structures consisting of

... a nominal predicate and a subject formed from a subordinate clause introduced by a determiner. These structures seem to follow a pattern familiar from a number of CNW languages in which a rhematic element is made the sentential predicate, irrespective of its lexical class, and the topical portion of the sentence is realized as subject (Beck 2002: 42)

As far as it goes, this observation is accurate: as we have seen, IT allows nominal predicates to take (headed and headless) relative clauses as arguments. But it glosses over some rather fundamental differences in the mechanisms responsible for indirect movement.

In Salish, for example, relative pronouns are systematically absent, and relativization is effected by the movement of determiners within the relative clause (Davis 2010). Furthermore, both WH-questions

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<sup>31</sup> It is also quite plausibly the source of the non-determinate connective *=hl*, which has no cognate in Coast Tsimshian (unlike the determinate markers).

and focus structures are *always* indirect (Davis 2008), whereas, as we have seen, IT makes use of a direct movement strategy for focus as well as optionally for WH-questions.

A'-movement in Northern Wakashan is quite distinct from both IT and Salish. Only subjects are accessible to relativization, questioning and focusing, unlike anywhere else in the CNW area (Anderson 1984); and neither relative pronouns nor determiners appear to play any part in the mechanics of A'-movement, in spite of a notoriously elaborate determiner system. And as for Southern Wakashan, it is not at all clear that it actually *has* A'-movement (Davis and Sawai 2001).

While many of the details have yet to be worked out, the overall picture is clear: superficial similarities in the typology of A'-movement across the CNW area only partly conceal quite drastic differences in underlying syntactic mechanisms.

More generally, as work progresses and deepens on the individual language families within the Pacific NW Sprachbund, it is becoming increasingly clear just how different they are; in many ways, in fact, it is remarkable how *little* language families which have enjoyed such a long period of apparently continuous contact have grown to resemble each other.

## 6 Conclusion

While we have left many issues unresolved, we hope to have made some progress in this paper in elucidating the syntax of A'-dependencies in IT. Our principal findings are the following:

- (i) Relative clauses in Gitksan involve clause-internal A'-movement of a WH-phrase, which may be spelled out CP-initially in both headed and 'headless' relatives.
- (ii) Long-range WH-movement within relative clauses can optionally also spell out a WH-copy in intermediate [SPEC, C] positions.
- (iii) There are two A'-movement strategies in Gitksan: an indirect one, where a base-generated nominal takes a DP argument containing a relative clause, and a direct one, where a focused DP moves directly to a clause-initial position.
- (iv) Focus movement structures only employ the direct strategy.
- (v) WH-questions may involve either the direct or indirect movement strategy.

We believe these results are of some significance for the study of Tsimshianic, for the place of Tsimshianic within the Pacific NW Sprachbund, and more generally for the typology of A'-dependencies. Within Tsimshianic, the discovery of European-like WH-relative dependencies is a new one, as is the distinction between direct and indirect movement structures, particularly as it relates to focus movement. For the NW Sprachbund, the results of our investigation reinforce the



superficial nature of syntactic resemblances between geographically contiguous but unrelated language families. On the other hand, from a wider perspective, we would like to emphasize that the system of A'-dependencies we have been exploring in IT has fundamental affinities with WH-movement structures in better-known but geographically remote and genetically distant languages – evidence, we would suggest, of the operation of deeper (and universal) principles of grammatical organization.

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#### **Appendix I: Conversion chart from the Hindle and Rigsby practical orthography to APA**

Note that the Hindle-Rigsby orthography is broadly phonetic rather than phonemic: it distinguishes voiced and voiceless stops, for example, which are non-contrastive in IT (the voiced allophones occur before vowels). Likewise, schwa is realized as *i*, *a*, and sometimes *u*, depending on its consonantal environment. See Rigsby (1986: 122-132) for exposition. For our (syntactic) purposes, the practical orthography is quite adequate, and so for reasons of space we have not included an additional phonemic line when glossing examples.

Orth.	APA	Orth.	APA	Orth.	APA	Orth.	APA	Orth.	APA
a	a	hl	ł	l	l	s	s	x	x
aa	a:	i	ə	‘l	l’	t	t	<u>x</u>	<u>χ</u>
b	b	ii	i:	m	m	t’	t’	xw	x <sup>w</sup>
d	d	j	dz	‘m	m’	tl’	λ’	y	y
e	e	k	k	n	n	ts	c	‘y	y’
ee	e:	k’	k’	‘n	n’	ts’	c’	‘	?
g	g	<u>k</u>	q	o	o	u	u		
<u>g</u>	G	<u>k’</u>	q’	oo	o:	uu	u:		
gw	g <sup>w</sup>	kw	k <sup>w</sup>	p	p	w	w		
h	h	kw’	k <sup>w</sup> ’	p’	p’	‘w	w’		

## Appendix II: Basic clausal morphosyntax of Gitksan/Nisgha

The following draws primarily on Rigsby (1986), Tarpent (1987), and Hunt (1993).

### II.A Basic verb morphology

[Proclitics [[[Preverbs [(Redup) Root]] Valence-marking] Pronominal suffixes] Enclitics]

### II.B Pronoun Series

#### *SERIES I (PREVERBAL CLITICS)\**

	<i>SINGULAR</i>	<i>PLURAL</i>
<i>FIRST PERSON</i>	=n, ni=, na=	dip
<i>SECOND PERSON</i>	=m, mi=, ma=	=m, mi=, ma=...=sim
<i>THIRD PERSON</i>	t	t

\* The position of Series I clitics relative to preverbal elements is complex: sometimes they act as proclitics and at other times as enclitics. See Rigsby (1986: 279).

#### *SERIES II (SUFFIXES)*

	<i>SINGULAR</i>	<i>PLURAL</i>
<i>FIRST PERSON</i>	-‘y	-‘m
<i>SECOND PERSON</i>	-n	-si’m
<i>THIRD PERSON</i>	-t*	-diit**

\*3<sup>rd</sup> person singular *-t* deletes immediately preceding PN *-s*

\*\*3<sup>rd</sup> person plural *-diit* replaces the ‘transitive’ morpheme *-(y)i-* in independent order transitive verbs.

*SERIES III (INDEPENDENT PRONOUNS)*

	<i>SINGULAR</i>	<i>PLURAL</i>
<i>FIRST PERSON</i>	‘nii’y	‘nuu’m
<i>SECOND PERSON</i>	‘niin	‘nisi’m
<i>THIRD PERSON</i>	‘nit	‘nidiit

*DISTRIBUTION OF PRONOUN SERIES*

	<i>SERIES III*</i>	<i>SERIES II**</i>	<i>SERIES I</i>
<i>independent intransitive</i>	S	-	-
<i>independent transitive***</i>	O	A	-
<i>dependent intransitive</i>	-	S	-
<i>dependent transitive (except 3pl. A)</i>	-	O	A
<i>dependent transitive (3pl. A only)</i>	O	-	A

\* Also used whenever a pronoun is focused.

\*\* Also mark possessors, prepositional objects

\*\*\* independent transitive verbs are suffixed with a ‘transitivizing’ morpheme *-(y)i-/(y)a-* before SERIES II A suffixes (except 3PL). The same morpheme appears in object extraction contexts: see section 5 below.

**II.C -s Marking**

*DISTRIBUTION OF -s WITH PROPER NOUNS\**

<i>independent intransitive</i>	-
<i>independent transitive</i>	A
<i>dependent intransitive</i>	S
<i>dependent transitive</i>	immediately adjacent PN (A or O)

\*Only following 3<sup>rd</sup> person Series II pronoun on predicate; determinate *t* deletes following *-s*

‘Hunt’s Condition’ (Hunt 1993: 200): /s/ case is assigned to an NP iff

- (i) it is adjacent to a lexical head and
- (ii) it is coreferent with the Series II suffix on that head

## II.D Argument marking

### DETERMINATE/NON-DETERMINATE MARKING\*

	<i>Non-Determinate</i>	<i>Determinate Subject</i>	<i>Determinate Object</i>
<i>independent intransitive</i>	=hl NP	t/dip NP**	-
<i>independent transitive</i>	=hl NP	=s NP	=s NP (if 1 <sup>st</sup> /2 <sup>nd</sup> person subject) t /dip NP (otherwise)
<i>dependent intransitive</i>	=hl NP	=s NP	-
<i>dependent transitive</i>	=hl NP	=s NP	=s NP (if 1 <sup>st</sup> /2 <sup>nd</sup> person subject) t/dip NP (otherwise)

\* 'Determinates' include names of people and animals, demonstratives (transparently in Nisgha; less so in Gitksan), and historically independent pronouns, which get no connective in contemporary IT.

\*\* The determinate marker *t* sometimes procliticizes to the following nominal.

## II.E Clausal Word Order

PREDICATE (> ERGATIVE) > ABSOLUTIVE (> OBLIQUE)

- There is only one exception to this otherwise rigid sequence: in a transitive clause with an independent (Series III) absolutive pronoun and an ergative nominal, either (i) or (ii) is available:

(i) PREDICATE > ABSOLUTIVE PRONOUN > ERGATIVE (> OBLIQUE)

(ii) PREDICATE > ERGATIVE > ABSOLUTIVE PRONOUN (> OBLIQUE)

- According to Rigsby (1986: 263), (i) is the older, more conservative pattern, which is being replaced by younger speakers with (ii), presumably by analogy with the canonical word order for transitive clauses.

## II.F Extraction Morphology

	<i>extracted A</i>	<i>extracted S</i>	<i>extracted O</i>	<i>extracted OBL</i>
<i>preceding predicate</i>	=t an*, an=t	=hl	=hl	wil + Series I (A)
<i>on predicate</i>	Series II marking O	-it, -at	Series II marking A	Series II marking (S or O)

\* Dispreferred by Gitksan speakers; apparently more freely available in Nisgha.

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