

DEDUCING CLAUSE STRUCTURE FROM THE RIGHT PERIPHERY IN TŁĪCHQ YATÌ

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Tłĭchq Yatì, a Dene language of the Northwest Territories, Canada, has a number of post-verbal auxiliaries and particles indicating categories such as futurity, mode, negation, information structure, and evidentiality. The interaction of these elements reveals that they occur in a strict order, which in turn illuminates the structure of the clause in this language, with positions for future, mode, negation, and focus as functional categories at the right edge.

[KEYWORDS: clause, Tłĭchq, Dogrib, post-verbal, particles]

1. Introduction. This article proposes a model of the clause structure of Tłĭchq Yatì (a.k.a. Dogrib) (ISO code: dgr), a Dene language of the Northwest Territories, Canada. It uses post-verbal auxiliaries and particles as diagnostics of this structure, showing that word order alternations and differences in grammaticality judgments paint a highly precise picture of the right periphery and, hence, in this head-final language, of clause structure itself.¹

1.1. Claims. I propose that clauses in Tłĭchq Yatì have several projections between the verb and C, including Future (Fut), instantiating an obligatory temporal distinction, a Modal (Mod) projection structurally distinct from either C or Fut, a Negation (Neg) projection, and Focus (Foc), marking propositional/clausal focus. I show that all these projections are instantiated by post-verbal particles. I further claim that several other post-verbal particles do not instantiate multiple functional heads but belong to the category C.

1.2. Assumptions. A word or two is in order about background assumptions. I assume a clause structure that includes at least the projections CP and VP. Given the head-final syntax and stem-final verb structure of this language, of which examples follow, and starting from the assumption that

¹ I am grateful to Marie-Louise Bouvier-White, Lianne Mantla, Mary Siemens, Archie Wedzin, and an anonymous consultant for sharing their knowledge of Tłĭchq Yatì with me; to Lisa Matthewson and two anonymous reviewers at *IJAL* for reviews of an earlier draft; and to Bronwyn Bjorkman, Elizabeth Cowper, Keren Rice, and Leslie Saxon for feedback and suggestions. The fieldwork for this article was supported by a University of Toronto Postdoctoral Fellowship, SSHRC Doctoral Scholarship 752–2010–2724, the Jacobs Research Funds, and the Phillips Fund for Native American Research.

clause structure can include multiple functional heads, I further assume that items that follow the verb are functional heads in the clausal spine, unless there is evidence to the contrary, such as variable position or optionality, and that ordering differences among these post-verbal items reflect the order of the heads that they instantiate. I formalize this idea in (1):

- (1) Structure-to-Surface Mapping: At the surface level, the order of obligatory and immovable morphemes at the right periphery reflects the order of functional heads that they instantiate.

By an obligatory morpheme, I mean one that yields an obligatory semantic contribution by either its presence or its absence. For example, one might be tempted to say that an adverb like *fortunately* is an obligatory element, since, if we wish to convey that a situation was fortunate, we must include the word *fortunately* or its equivalent.² However, the absence of the word *fortunately* does not yield an obligatory semantic interpretation: a bald declarative sentence without *fortunately* need not be interpreted as an *unfortunate* situation. By contrast, the absence of the future marker *ha* in Tłı̨ch̨o Yatı̀, for example, yields a clause that must be interpreted as non-future.

The statement of Structure-to-Surface Mapping in (1) explicitly refers to the right periphery, that is, to the post-verbal elements of the Tłı̨ch̨o clause rather than to the verb-internal morphology. Dene languages are famous for the complexity of their verbal morphology and for the typologically unusual ordering of that morphology within the verb word. The explication of this ordering is the subject of an entire book (Rice 2000), arguing that the verb word is syntactically formed and that principles of semantic scope underlie Dene morphological ordering. I assume that something like Rice's explanation of the structure of the verb word operates at the level of structure below FutP, but that structure is not the goal of the investigation in this paper.³

1.3. Methodology and sources. Most of the data in this paper come from my own traditional elicitation-based fieldwork with native-speaker consultants in the Northwest Territories. Some items are the consultants' Tłı̨ch̨o translations of English sentences proposed by me, while others are grammaticality judgments of my own constructed sentences in Tłı̨ch̨o Yatı̀. Where consultants wished to be identified and credited, I have identified examples by consultants' initials.⁴ Those who requested anonymity are credited as ANON.

² I am grateful to Lisa Matthewson for pointing out, in a review of an earlier version of this paper, the potential ambiguity associated with obligatoriness.

³ The one apparent exception to the semantic-scope principle in the morphological order of the verb is the position of the stem, which is considerably farther rightward than Rice's model would predict (Rice 2000:74–78). This position may be a result of competing phonological and semantic constraints (Keren Rice, personal communication, 2013) or the result of a move to a higher node (Rice 2000:77–78).

⁴ AW = Archie Wedzin; LM = Lianne Mantla; MLBW = Marie-Louise Bouvier White; MS = Mary Siemens.

Where such credits occur at the bottom of a list of examples under the same item number, they indicate that all examples under that number were provided by the same consultant; where items under a single number come from different sources, I have identified the source below each example.

Additional examples are drawn from the *TĪchq Yatì Multimedia Dictionary* (TĪchq Community Services Agency 2007 [henceforth TCSA 2007]); from the *Dogrib New Testament* (Dogrib Translation Committee 2003 [henceforth DTC 2003]), currently the longest published text that exists in TĪchq Yatì; from Lynda Ackroyd's "Dogrib Grammar" (1982), and from published stories in the language (cited by author/editor).

1.4. Structure of the article. This article consists of three sections after this introduction. The first gives a brief sketch of relevant characteristics of TĪchq Yatì, while the second explores the right periphery of its clause, projection by projection, beginning with Fut and ending with C. The third section concludes and identifies theoretical implications and remaining issues.

2. TĪchq Yatì. TĪchq Yatì ([tʰí.ʃʰó já.tʰí:], literally, 'Dog-rib Speech') is a language of the Dene (Athapaskan) family, spoken in a region between Great Bear and Great Slave lakes in the Northwest Territories. There are currently around 2,000 speakers (Statistics Canada 2011). It is endangered, though revitalization efforts are underway and have met with some success.

Like the rest of the Dene family, TĪchq Yatì is an SOV language, head-marking and synthetic, with strongly head-final syntax. Verbs show agreement in person and number with both subject and object. Verbal morphology is overwhelmingly prefixing: a verb, therefore, consists of a stem at the right edge, to which are appended numerous prefixes, including markers of subject and object agreement, viewpoint and situation aspect, indicative or optative mode, and causative or passive morphology as well as incorporated nouns, adverbs, and postpositions.⁵ In addition, numerous verbs contain, as part of their lexical entry, prefixes, some derivational and some no longer independently analyzable, that are collectively referred to as "thematic" in the literature, just as a verb's lexical entry is referred to as a "theme."

⁵ The literature on TĪchq Yatì typically refers to verb stems rather than verb roots. The distinction is largely etymological in this language: whereas in many other Dene languages, the verb stem consists of the root plus an aspectual/modal suffix, in TĪchq Yatì these have coalesced, and the suffixes are no longer predictable, productive, or, in most cases, detectable except as patterns of vocalic or tonal ablaut. (Derivational suffixes exist, however, that create nouns and adverbs from verbs [Saxon 2000]. I do not consider these under verbal morphology.)

When a postposition is incorporated into the verb word, its complement is either the direct or the indirect object of the verb. For discussion and examples, see Ackroyd (1991:154–59).

The head-final nature of the syntax of T̥ɬçq̥ Yatù is apparent in (2), where quantifiers (2a) and adpositions (2b) follow nouns, complementizers follow verbs (2c), and matrix verbs follow their complement clauses (2d).⁶

(2) T̥ɬçq̥ Yatù's head-final syntax

(2a) *Łıwe łq̥ gòhłı.*
 hwe łq̥ gòhłı
 fish lots exist
 'There are lots of fish'.

(2b) *Negolà Edzo gots'ò natłà.*
Negolà Edzo gots'ò na-θ-tłà.
 Nicholas Edzo to THM-IPFV.3.SBJ-walk.IPFV
 'Nick is walking to Edzo'.

(2c) *Detà hayedi ha gha natòmèehja.*
de-tà ha-ye-θ-di ha gha
 REFL-father THM-4.OBJ-IPFV.3.SBJ-tell.IPFV FUT to
na-tòmè-eh-ja
 back-THM-PFV.3.SBJ-run.PFV
 'He ran home to tell his dad'.

(2d) *Asìì eyı tıts'àadi nògha hq̥t'e k'ènezq̥?*
asìì eyı tıts'àadi nògha ha-t-t'e
 if DEM animal wolverine THM-IPFV.3.SBJ-be.IPFV
k'è-ne-zq̥
 THM-IPFV.2SG.SBJ-know.IPFV
 'Do you know if that animal is a wolverine?' (ANON 2013)

The morphological breakdown of a typical verb appears in (3).⁷

⁶ I use the following abbreviations in trees, glosses, and diagrams: AR = areal gender; EVID = evidential; Mod = Modal head; PROG = progressive; Asp = Aspect head; FOC = focus; NEG = negative; PROH = prohibitive; C = complementizer; FUT = future; OBJ = object; QN = question; CLAS = classifier; I/INFL = inflectional head; OPT = optative; SBJ = subject; CONT = continuous; INC = inceptive; PFV = perfective; SG = singular; DU = dual; IPFV = imperfective; PL = plural; T = Tense head; EPI = epistemic; JUSS = jussive; PNS = possessed noun suffix; THM = thematic (lexical) affix.

The examples of T̥ɬçq̥ Yatù are presented in the practical orthography, which is phonemic. With the exception of those shown below, all letters have their IPA values save that those that represent voiced stops and affricates in English represent unaspirated voiceless ones in T̥ɬçq̥ Yatù. An apostrophe represents glottalization, an ogonek (*ą*) nasalization, and a grave accent (*à*) low tone. The mora (*μ*) that appears in some glosses is a nominalizer/relativizer (Saxon 2000); it is represented orthographically by a double vowel. The low-tone mora (*̀*) marks possessed/modified nouns (Wilhelm and Saxon 2010). The values of the remaining letters are as follows: *ch* = [ç^h]; *j* = [j̥]; *ts* = [ts^h]; *dl* = [dl̥]; *kw* = [k^w]; *wh* = [w̥]; *dz* = [dz̥]; *t* = [t̥]; *y* = [j̥]; *gh* = [ɣ̥]; *sh* = [ʃ̥]; *zh* = [ʒ̥]; *gw* = [k^w]; *tl* = [t̥^l].

⁷ Morphological breakdowns in this paper are my own.

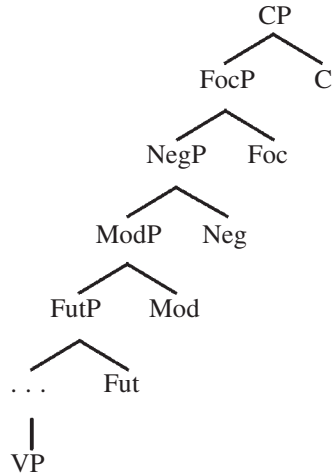


FIG. 1.— TĪchq clause structure.

- (3) *NatĪseèchì.*
na-tĪ-se-è-∅-chì
 back-dog-1SG.OBJ-PFV-3.SBJ-bring.PFV
 ‘Dogs brought me back’. (I.e., I came back by dogsled.) (TCSA 2007)

Here, working from the right edge leftward, we can see a stem, subject agreement (often null in the third person, as here), aspect marking (where the prefix *è-* is one instantiation of the combination of accomplishment situation aspect with perfective viewpoint aspect), object agreement, an incorporated noun (*tĪ* ‘dog’), and an incorporated adverb (*na-* ‘back’).⁸

3. Clause structure. The following sections are devoted to detailing the syntactic structure of clauses. Based on the evidence in this paper, I propose figure 1 as a model for the TĪchq clause.

Even if we grant that this model abstracts away from projections below Fut, and thus from verb morphology, the structure in figure 1 differs somewhat from Rice and Saxon’s (2005) model of the Dene-language clause (see figure 2), which does not include the projections Fut(ure), Mod(ality), Neg(ative), and Foc(us) that I posit below C(omplementizer).

⁸ Although the distinction between viewpoint and situation aspect was first delineated nearly two decades ago (Smith 1997), the two are still occasionally confused in discussions of temporal categories. For a discussion of the interaction of the two kinds of aspect, with examples from the Dene language Slave (ISO code: den), a close relative of TĪchq Yatì, see Rice (2000:246–70).

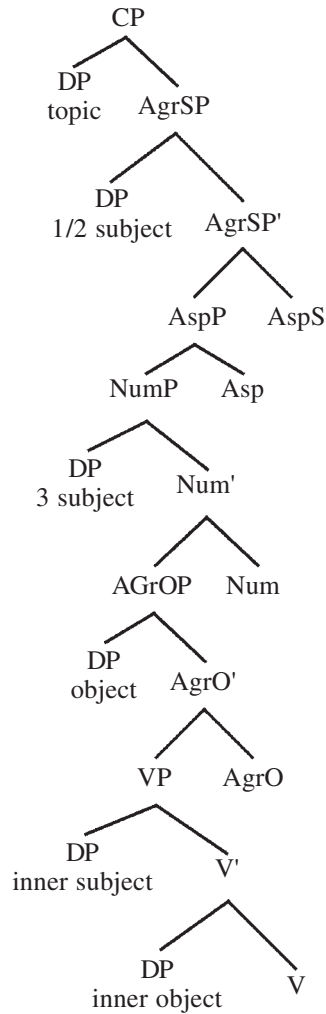


FIG. 2.—Dene verb structure (Rice and Saxon 2005).

These four projections also depart to a greater or lesser degree from standard Minimalist assumptions about clause structure. I justify them in 3.1–3.4 below, using evidence from word order and distribution.

Although the verb is the only obligatorily overt sentential constituent, and the constituent order is SOV, sentences in T̥ɬɬɬɬ Yat̥i are often not verb-final, as there are numerous post-verbal auxiliaries and particles marking categories such as futurity, modality, and evidentiality. It is these that I use to model clause structure and that I delineate in the next sections.

3.1. Future (Fut). TĪjchq Yatì shows an obligatory future/non-future distinction.⁹ Futurity is marked by the morpheme *ha*, which for some speakers has a reduced variant *-a*.¹⁰ This marker appears immediately to the right of the verb word, as in (4).¹¹

(4) Future marker *ha*

- (4a) *Sechi dzq nìtla ekò èt'ì, etexè nàdìzè ha.*
se-chi dzq nì-t-tla ekò
 1SG-younger.brother here TERM-PFV.3.SBJ-arrive.PFV when
èt'ì ete-xè nà-dì-zè ha
 as.soon.as RECIP-with THM-IPFV.1DU.SBJ-hunt.IPFV FUT

'As soon as my younger brother arrives, we're going to go hunting together'. (MLBW 2012)

- (4b) *Dzətanik'e nè xàehtlaa.*
dzətanì-k'e nè xà-e-h-tla-ha
 afternoon-at when out-IPFV-1SG.SBJ-go.IPFV-FUT
 'I'm going to go out this afternoon'. (AW 2012)

Material cannot intervene between the verb and the future marker:

(5) Inseparability of verb and future marker

- (5a) *Satsq nàhzè ha.*
satsq nà-h-zè ha
 tomorrow THM-IPFV.1SG.SBJ-hunt.IPFV FUT

'I'm going to hunt tomorrow'.

- (5b) *Satsq nàhzè ha sɔni.*
satsq nà-h-zè ha sɔni
 tomorrow THM-IPFV.1SG.SBJ-hunt.IPFV FUT DUB

'Maybe I'm going to hunt tomorrow'.

⁹ As I argue elsewhere (Welch 2015), *ha* marks a relative future, that is, one that refers to an eventuality subsequent to a contextually determined time, which is generally the time of utterance but need not be, as evidenced by sentences like *Kwe ghàts'eeda ha ɬè hɔt'e* 'we were supposed to look at the rock' (lit., 'it is that we were going to look at the rock'), where the combination of *ha* with the so-called past marker *ɬè* results in a past deontic interpretation, in which the eventuality of looking at the rock was to occur in a time subsequent to a contextually determined past time but not necessarily subsequent to the utterance time.

¹⁰ Ackroyd (1982:165–66) refers to this morpheme as an enclitic. Whether it is a full word, a clitic in the sense of Zwicky (1985), or simply an affix is a question beyond the scope of this paper, and the evidence is mixed: like a full phonological word, *ha* can bear stress (Jaker 2012:384) (and in the orthography of TĪjchq Yatì, it is written as a separate word), but it attaches only to the verb, has a reduced variant, and precedes all other post-verbal particles, like an affix.

¹¹ In numbered examples, forms under discussion are shown in boldface.

(5c) *Satsq nàhzè *sqni* ha.

satsq nà-h-zè *sqni* ha
tomorrow THM-IPFV.1SG.SBJ-hunt.IPFV **DUB** FUT

Intended: 'Maybe I'm going to hunt tomorrow'.

(5d) Dàanaà satsq nàhzè ha.

dàanaà satsq nà-h-zè ha
certainly tomorrow THM-IPFV.1SG.SBJ-hunt.IPFV FUT

'Certainly I'm going to hunt tomorrow'.

(5e) *Satsq nàhzè *dàanaà* ha.

satsq nà-h-zè *dàanaà* ha
tomorrow THM-IPFV.1SG.SBJ-hunt.IPFV **certainly** FUT

Intended: 'Certainly I'm going to hunt tomorrow'.

(5f) Ekwò nìde t'à, satsq nàhzè ha.

ekwò nì-t-de t'à
caribou THM-PFV.3.SBJ-arrive.PFV because

satsq nà-h-zè ha
tomorrow THM-IPFV.1SG.SBJ-hunt.IPFV FUT

'Because the caribou have arrived, I'm going to hunt tomorrow'.

(5g) *Satsq nàhzè ha ekwò nìde t'à ha.

satsq nà-h-zè ha
tomorrow THM-IPFV.1SG.SBJ-hunt.IPFV FUT

ekwò nì-t-de t'à ha
caribou THM-PFV.3.SBJ-arrive.PFV **because** FUT

Intended: 'Because the caribou will have arrived, I'm going to hunt tomorrow.' (MLBW 2013)

Therefore, this future marker, when it occurs, is always closer to the verb than any other post-verbal element. Unlike the English future *will*, it is obligatory for future readings. While (6a), (7a), and (8a) are grammatical sentences, the corresponding (b) sentences are not:

(6) Obligatoriness of *ha* for future interpretations

(6a) *Sechi dzq natla nè, nàdìzè ha.*

se-chi dzq ni-Ø-tla nè
1SG-younger.brother here THM-IPFV.3.SBJ-go when

nà-Ø-dì-zè **ha**
THM-IPFV-1.DU-hunt **FUT**

'When my younger brother arrives here, we're going to go hunting together'.

(6b) **Sechi dzq natla nè, nàdìzè.*

se-chi dzq na-Ø-tla nè
1SG-younger.brother here back-IPFV.3.SBJ-go when

nà-Ø-dì-zè

THM-IPFV-1.DU-hunt

Intended: ‘When my younger brother arrives here, we’re hunting together’. (AW 2012)

(7) Obligatoriness of *ha* for future interpretations

(7a) *Satsq, sa na?à kwe t’i, tàba ewaà k’èhtlo ha.*

satsq sa na?à kwe t’u tàba ewaà
tomorrow sun set before just shore sand

k’è-Ø-h-tlo

ha

around-IPFV-1 SG.SBJ-walk.IPFV FUT

‘Just before sunset tomorrow, I’m going to walk along the beach’.

(7b) **Satsq, sa na?à kwe t’i, tàba ewaà k’èhtlo.*

satsq sa na?à kwe t’i, tàba ewaà
tomorrow sun set before just shore sand

k’è-Ø-h-tlo

around-IPFV-1 SG.SBJ-walk.IPFV

Intended: ‘Just before sunset tomorrow, I’m walking along the beach’. (AW 2012)

(8) Obligatoriness of *ha* for future interpretations

(8a) *Ìdaà Dzaidzèk’eè nè, k’omqòdqò tqòtq nù?q nè, dq k’èè hànehtq ha.*

Ìdaà Dzaidzèk’eè nè k’omqòdqò tqòtq nù?q nè
next Monday when morning nine o’clock when

dq k’èè

hoghà-ne-Ø-h-h-tq

people according.to THM-2SG.OBJ-IPFV-1 SG.SBJ-CLAS-teach.IPFV

ha

FUT

‘I’m going to teach you our language at nine o’clock next Monday’.

(8b) **Ìdaà Dzaidzèk’eè nè, k’omqòdqò tqòtq nù?q nè, dq k’èè hànehtq.*

Ìdaà Dzaidzèk’eè nè, k’omqòdqò tqòtq nù?q nè
next Monday at when, morning nine o’clock when

dq k’èè

hoghà-ne-Ø-h-h-tq

people according.to THM-2SG.OBJ-IPFV-1 SG.SBJ-CLAS-teach.IPFV

Intended: ‘I’m teaching you our language at nine o’clock next Monday’.¹² (AW 2012)

¹² *Dq k’èè* ‘according to/in the way of the people’ and its cognates are common idiomatic ways of referring to Dene languages.

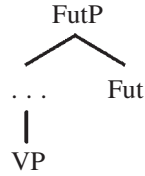


Fig. 3.—Future.

As the next sections demonstrate, *ha* occurs inside the modal auxiliaries, negation, and propositional focus. By the criteria discussed in 1.2—that is, obligatoriness and rigid position—we can declare it a functional projection (see figure 3).

3.2. Modals (Mod). Besides the optative mode, marked inflectionally, there are also periphrastic modal markers, which occur in the right periphery of the clause. In a position immediately following the future marker, modality can be marked by two auxiliaries that are identical to, and derived from, third-person copular forms inflected for optative mode.

There are two of them: *welì*, an epistemic which yields clauses that assert possibilities, and *welè*, which has jussive or hortatory force:¹³

(9) Epistemic modal *welì*

- (9a) *Ekwò ghò sègeze welì ahxò.*
Ekwò ghò sè-ge-ze welì ahxò
 caribou from THM-IPFV.3PL.SBJ-eat.IPFV EPI maybe
 ‘They might eat caribou’. (LM 2011)

- (9b) *Mishè Madlè wedòò elì welì.*
Mishè Madlè we-dò-μ Ø-lì welì
 Michel Madeleine 3-husband-PNS IPFV.3.SBJ-be.IPFV EPI
 ‘Michel may be Madlè’s husband’. (MS 2010)

(10) Jussive modal *welè*

- (10a) *Amù sets’ò elà de?ù sù, eyaelì welè!*
amù se-ts’ò elà de-Ø-?ù-μ sù
 who 1SG-belonging.to boat THM-IPFV.3.SBJ-steal.IPFV-NML FOC
eyaelì welè
eya-Ø-lì welè
 sick-IPFV.3.SBJ-COP.IPFV JUSS
 ‘Whoever steals my boat, let him be sick!’ (MS 2010)

¹³ Notice that *welì* conveys diminished confidence in the proposition denoted by the clause (epistemic modality), while *welè* asserts the speaker’s preference for the truth of the proposition (deontic modality). The significance of this fact is discussed in 4 below.

- (10b) *Amù wedzù gòhtù sù eèhk'q welè.*
amù we-dzù gòh-l-μ sù eèh-kw'q
 who 3-ear AR.IPFV.3.SBJ-COP.IPFV-NML FOC IPFV.3.SBJ-hear.IPFV
welè
JUSS

‘Whoever has ears, let them hear’. (DTC 2003: Matthew 13:9)

These modal markers occur outside the future *ha*:

- (11) Position of modals relative to future *ha*

- (11a) *Amù sets'q elà deṛù sù, eyaeli ha welè!*
amù se-ts'q elà de-ṛ-l-μ sù
 who 1SG-belonging.to boat THM-IPFV.3.SBJ-steal.IPFV-NML FOC
eya-ṛ-l ha welè
 sick-IPFV.3.SBJ-COP.IPFV FUT JUSS

‘Whoever steals my boat, let him get sick!’ (MLBW 2013)

- (11b) *Zhah at'ì ha welì.*
zhah a-ṛ-t'ì ha welì
 snow THM-IPFV.3.SBJ.do.PROG FUT EPI

‘It might be going to snow’. (MLBW 2013)

- (11c) **Amù sets'q elà deṛù sù, eyaeli welè ha!*
amù se-ts'q elà de-ṛ-l-μ sù,
 who 1SG-belonging.to boat THM-IPFV.3.SBJ-steal.IPFV-NML FOC
eya-ṛ-l welè ha
 sick-IPFV.3.SBJ-COP.IPFV JUSS FUT

Intended: ‘Whoever steals my boat, let him get sick!’ (MLBW 2013)

- (11d) **Zhah at'ì welì ha.*
zhah a-ṛ-t'ì welì ha
 snow THM-IPFV.3.SBJ.do.IPFV EPI FUT

Intended: ‘It might be going to snow’. (MLBW 2013)

The modals have scope over *ha* as well. A jussive clause with *welè* expresses the preference of the speaker for a possible world in which the complement of *welè* is true. Thus (10a) expresses the speaker’s present preference for a world in which the thief is sick. The similar (11a) expresses not a future wish for such a world but a present wish for a world in which the thief will eventually be sick. That is, the world of the thief’s future sickness is the content of the wish, just as the FutP headed by *ha* is the semantic complement of the modal *welè*. The ungrammaticality of (11c) indicates,

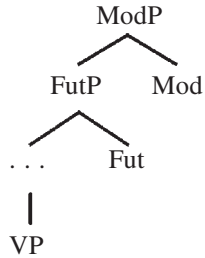


FIG. 4.—Modality.

in this head-final language, that the FutP is the syntactic complement of the modal as well (see figure 4).

3.3. Negation (Neg). Negation is expressed by an enclitic particle, *-le*. It is clearly a clitic rather than an affix or an independent word: it cannot bear primary stress, and it can attach either to a verb stem (12a), the future *ha* (12b), or a modal auxiliary (12c and 12d). If more than one of these is present, it attaches to the highest:

(12) Negative marker *-le*

(12a) *Satsq̄ nez̄q̄ ette-le.*
satsq̄ ne-θ-z̄-μ *θ-tte-le*
 engine THM-IPFV.3.SBJ-be.good.IPFV-ADV **IPFV.3.SBJ-work.IPFV-NEG**
 ‘The engine doesn’t work well’. (MLBW 2011)

(12b) *Hanì-ɪdè k’ach̄l̄ beb̄ià lats’ūt’e ha-le*
hanì-ɪdè k’ach̄l̄ beb̄ià la-ts’ū-t’e *ha-le*
 then again baby THM-IPFV.1PL.SBJ-be.IPFV **FUT-NEG**
 ‘Then we will no longer be like infants. . .’ (DTC 2003:
 Ephesians 4:14)

(12c) *Hagode wel̄i-le.*
ha-go-de *wel̄i-le*
 thus-AR.IPFV.3.SBJ-happen.IPFV **EPI-NEG**
 ‘It might not happen’. (MLBW 2013)

(12d) *Hagode wel̄è-le!*
ha-go-de *wel̄è-le*
 thus-AR.IPFV.3.SBJ-happen.IPFV **JUSS-NEG**
 ‘May it not happen!’ (MLBW 2013)

It must occur after the highest of these; it cannot, for example, intervene between the future and a modal:

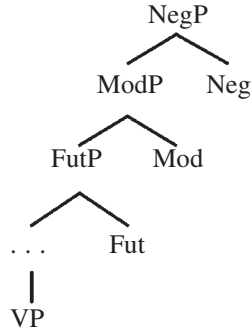


FIG. 5.—Negation.

(13) Position of negation outside modality

(13a) *Hagode ha welĹ-le.*
ha-go-de ha welĹ-le
 thus-AR.IPFV.3.SBJ-happen.IPFV FUT EPI-NEG
 ‘It might not be going to happen.’

(13b) **Hagode ha-le welĹ.*
ha-go-de ha-le welĹ
 thus-AR.IPFV.3.SBJ-happen.IPFV FUT-NEG EPI
 (Intended: ‘It might not be going to happen.’) (MLBW 2013)

We can therefore represent it structurally as in figure 5. It cannot, however, attach to the so-called past marker *ĹlĹ*, as we shall see.

3.4. Past: a red herring? This marker, *ĹlĹ*, is identical to and derived from a perfective third-person copula. As I argue elsewhere (Welch 2015), it is not an instance of tense, for several reasons. First, it is not obligatory for past interpretations; these may be recovered from either the default interpretation of perfective verbs (14a), explicit temporal adverbials like *ĹxĹĹ* ‘yesterday’ (14b), or *cheko ehĹ* ‘when I was a boy’ (14c), or discourse context (14d, which occurs in a narrative with a past setting):

(14) Optionality of *ĹlĹ*
 (14a) *EhtsĹ nezĹĹ ĹlĹ-le.*
ehtsĹ ne-Ø-zĹ-Ĺ
 grandmother THM-IPFV.3.SBJ-be.good.IPFV-ADV
ĹlĹ-le
 PFV.3.SBJ-sleep.PFV-NEG
 ‘Grandmother didn’t sleep well’. (MLBW 2013)

- (14b) *l̥x̥ɛɛ, sa naʔaa kwe, whaà-lea ts'ò taba k'eh̥t̥to (l̥l̥è).*
l̥x̥ɛɛ, sa nà-Ø-ʔa-μ kwe
 yesterday sun THM-IPFV.3.SBJ-set.IPFV-NML before
whaà-le-a ts'ò taba k'e-h-t̥to
 long.time-NEG-DIM for beach around-IPFV.1SG.SBJ-walk.IPFV
 (l̥l̥è)
 JLÈ

'Yesterday, before sunset, I walked along the beach for a little while'. (AW 2012)

- (14c) *Cheko eh̥l̥ ekò, sehtsèè xè nàhzè.*
cheko h-l̥ ekò, se-eh̥tsèè xè
 boy IPFV.1SG.SBJ-be.IPFV when 1SG-grandfather with
nà-h-zè
 THM-IPFV.3.SBJ-hunt.IPFV

'When I was a boy, I was going hunting with my grandfather'.
 (AW 2012)

- (14d) *Too ghàà hòt'ò h̥qetse.*
too ghàà hòt'ò h̥q-e-Ø-tse
 night during hard THM-IPFV-3.SBJ-CTY.IPFV

'All night he cried loudly'. (Football et al. 2009)

If tense is thought of as having an anchoring role, whereby it occurs in order to establish a necessary location of the event with respect to the utterance (Enç 1987; 1996, Ritter and Rosen 2009, and Ritter and Wiltschko 2005; 2010), we should not expect it to be optional in a clause. The English *will*, for independent reasons, is generally argued not to be an instance of tense (Abusch 1985; 1988; 1997 and Matthewson 2006). Combining this argument with an Ençian view of anchoring correctly predicts that *will* should be optional in clauses with future interpretation: if I intend to leave tomorrow, I can refer to this event by saying either *I will leave tomorrow* or *I leave tomorrow*. The English past markers (*-ed*, etc.), on the other hand, are obligatory for a past interpretation and are universally agreed to be true tense.

Another reason for rejecting *l̥l̥è* as a tense marker is that it can contribute more information than simple pastness or anteriority to a clause. It often yields a habitual interpretation, as in (15): the sentence in (15a) is ambiguous about whether it happened once or more than once, but (15b) is explicitly habitual (Archie Wedzin, personal communication, 2012):

- (15) Habitual readings of *l̥l̥è*

- (15a) *Cheko eh̥l̥ ekò, sehtsèè xè nàhzè.*
cheko h-l̥ ekò se-eh̥tsèè xè
 boy IPFV.1SG.SBJ-be.IPFV when 1SG-grandfather with

nà-h-zè
THM-IPFV.3.SBJ-hunt.IPFV

‘When I was a boy, I was going hunting with my grandfather’.

- (15b) *Cheko ehĭ ekò, sehtsèe xè nàhzè ɿlè.*
cheko h-ĭ ekò se-ehstseè xè
 boy IPFV.1SG.SBJ-be.IPFV when 1SG-grandfather with
nà-h-zè ɿlè
 THM-IPFV.3.SBJ-hunt.IPFV ɿLÈ

‘When I was a boy, I used to go hunting with my grandfather’.
(AW 2012)

Furthermore, while the negative *-le* follows *ha*, as demonstrated in 3.3 above, it must precede *ɿlè*, as demonstrated below, indicating that negation occurs in an intervening position:

- (16) Position of *ɿlè* outside negation

- (16a) *Mishè nezÿ nàzè-le ɿlè.*
Mishè ne-Ø-zĭ-μ
 Michel THM-IPFV.3.SBJ-be.good.IPFV-ADV
nà-Ø-zè-le ɿlè
 THM-IPFV.3.SBJ-hunt.IPFV-NEG ɿLÈ

‘Michel didn’t hunt well’. (MLBW 2011)

- (16b) **Mishè nezÿ nàzè ɿlè-le.*
Mishè ne-Ø-zĭ-μ nà-Ø-zè
 Michel THM-IPFV.3.SBJ-be.good.IPFV-ADV THM-IPFV.3.SBJ-hunt.IPFV
ɿlè-le
 ɿLÈ-NEG

Intended: ‘Michel didn’t hunt well’. (MLBW 2013)

Finally, *ɿlè* appears to have a somewhat flexible position with respect both to modal marking and to the clausal focus marker (of which more in 3.5). Normally, it occurs outside the modals (17a), but it is possible, though dis-preferred, to place it inside (17b), with a different interpretation:

- (17) Flexible position of *ɿlè* with respect to modals

- (17a) *Sets’q elà dè?ĭ welè ɿlè.*
se-ts’q elà de-è-?ĭ welè ɿlè
 1SG-belonging.to boat THM-PFV.3.SBJ-steal.PFV JUSS ɿLÈ

‘Let him/her not have stolen my boat.’

- (17b)?*Sets’q elà dè?ĭ ɿlè welè.*
se-ts’q elà de-è-?ĭ ɿlè welè
 1SG-belonging.to boat THM-PFV.3.SBJ-steal.PFV ɿLÈ JUSS

‘He really had to steal my boat’. (MLBW 2013)

When *ɬlè* occurs inside the clausal focus marker *hɔt'e*, the anteriority of the situation described by the predicate is what is focused; i.e., the emphasis is on the past, not on the situation itself (18a). When *ɬlè* occurs outside *hɔt'e* (18b), the focus does not include the anteriority but only what lies inside the focus marker:

(18) Flexible position of *ɬlè* with respect to clausal focus

(18a) *Kwe ghàts'eeda ha ɬlè hɔt'e.*

kwe ghà-ts'ee-da ha ɬlè hɔt'e
 rock THM-IPFV.1PL.SBJ-look.IPFV FUT ɬLÈ FOC

'We were supposed to look at the rock'.

(18b) *Kwe ghàts'eeda ha hɔt'e ɬlè.*

kwe ghàts'eeda ha hɔt'e ɬlè
 rock THM-IPFV.1PL.SBJ-look.IPFV FUT FOC ɬLÈ

'We were supposed to look at the rock'. (I.e., we were planning to look at it [Mary Siemens, personal communication, 2013])
 (MS 2007)

These properties of *ɬlè* contrast with those of widely agreed-upon instances of Tense, such as the English past. So in (19), past interpretations are not available in English without past marking (19a and 19b); the addition of past marking to a clause yields a past interpretation, not an explicit habitual (19c); future and past marking pattern alike with respect to negation (19d); and tense and modals such as *must* and *might* occur in a rigid order (19e and 19f).

(19) Obligatoriness of English past marking

(19a) **Yesterday I walk along the beach.*

(19b) **All night he cry loudly.*

(19c) *I am/was going hunting with my grandfather.*

(19d) *I will/did not go.*

(19e) *I must/might have gone.*

(19f) **I have must/might gone.*

Based on asymmetries in obligatoriness, word order, and interaction with other categories, we can conclude that *ɬlè* is not an instance of Tense.

The question remains as to what exactly *ɬlè* is, if not a tense marker. Two possibilities are that it is an adjunctive temporal adverbial or that it is a matrix verb in a higher clause, on the order of 'It was that Grandmother didn't sleep well' or 'That Grandmother didn't sleep well was the case'.

The latter possibility seems to be ruled out. *ɬlè* shows no paradigmatic variation: while its phonologically identical counterpart, the perfective third-person

copula, alternates with a full subject-agreement paradigm (*neèlè* ‘you (sg.) were’, etc.), *lè* shows no such alternations when it occurs in post-verbal position as a past marker. While we might expect that such paradigmatic variation would be ruled out in any case in a copula with an expletive (or clausal) subject, there is in fact evidence that in another Dene language such variation is possible. In Dene Dzage (a.k.a. Kaska [ISO code: kkz]), spoken in northern British Columbia and southern Yukon, there are attested sentences where an inflected copula apparently takes a clausal complement, with both the matrix copula (*unlé*) and the verb of the embedded clause (*gunyān*) exhibiting the second-person subject marker *n-* in agreement with the embedded clause’s subject:

- (20) “*Łá gunyān unlé t’é, eslé,*” *yéhdī.*
 really you’re smart you will be then, my dog,” she said to it.
 ‘Then she said to the squirrel, “Be really smart”’.¹⁴ (Moore 1999:211)

In addition, the facts of negation seem to indicate that we cannot analyze *lè* as a matrix verb. The minimal pair (16*a* and 16*b*) is unexpected: if *lè* were a matrix verb, there should be no reason to bar its negation by a postposed *-le* like the negated verb *lè* ‘slept’ in (21*a*). In fact, however, such usage is ungrammatical, as in (21*b*), while adding the past marker to the negated verb is grammatical, as in (21*c*). By contrast, true instances of *lè* as a matrix verb—in its use as a copula with a nominal complement—may indeed be negated like any other verb, as in (21*d*).

- (21) Incompatibility of *lè* with analysis as a matrix verb

- (21*a*) *Ehtsł nezłl tē-le.*
ehtsł ne-θ-zł-ł
 grandmother THM-IPFV.3.SBJ-be.good.IPFV.ADV
t-tē-le
PFV.3.SBJ-sleep.PFV-NEG
 ‘Grandmother didn’t sleep well’.

- (21*b*)**Ehtsł nezłl tē tē-le.*
ehtsł ne-θ-zł-ł t-tē
 grandmother THM-IPFV.3.SBJ-be.good.IPFV.ADV PFV.3.SBJ-sleep.PFV
lè-le
PAST-NEG
 Intended: ‘Grandmother didn’t sleep well’.

¹⁴ The squirrel, being a pet/companion in this story, is addressed by the term for the default pet, ‘dog’.

- (21c) *Ehtsɿ nezɿ ɿtè-le ɿlè.*
ehtsɿ ne-θ-zɿ-ɿ
 grandmother THM-IPFV.3.SBJ-be.good.IPFV.ADV
ɿ-tè-le ɿlè
PFV.3.SBJ-sleep.PFV-NEG PAST
 ‘Grandmother didn’t sleep well’.

- (21d) *Ehtsɿ kwet’ɿ ɿlè-le.*
ehtsɿ kwet’ɿ ɿ-lè-le
 grandmother white.person **PFV.3.SBJ-COP.PFV-NEG**
 ‘Grandmother was not a white person’. (ANON 2013)

For present purposes, then, I assume that *ɿlè* is an adverbial with semantics similar to the English *formerly* and exclude it from our picture of the clausal functional heads. Its position in the right periphery of the clause is somewhat puzzling, however, compared with more canonical temporal adverbials, as in (22), which tend to occur clause-initially.¹⁵

- (22) Unusual position of *ɿlè* compared to temporal adverbials

- (22a) *Whaà k’e gocho du nèk’e nàgɿdè.*
whaà k’ego-cho du nèk’e nà-gɿ-dè
long.ago at 1PL-ancestor DEM land THM-PFV.3PL.SBJ-live.PFV
 ‘Long ago our ancestors lived on this land’. (MLBW 2013)

- (22b) *ɿxèq chq ade ts’eniwì.*
ɿxèq chq a-θ-de ts’eni-wì
yesterday rain THM-IPFV.3.SBJ-OCCUR.IPFV PFV.1PL.SBJ-think.PFV
 ‘Yesterday we thought it was going to rain’. (TCSA 2007)

- (22c) *Du toò hwe ɿq gòhtɿ.*
du toò hwe ɿq gòh-lɿ
DEM night fish lots AR.IPFV.SBJ-COP.IPFV
 ‘Tonight there is lots of fish’. (MLBW 2013)

I intend to resolve this question in future work.

3.5. Clausal focus (Foc). The marker *hqt’e* is identical with a third-person imperfective copular form. It is evidently an independent word phonologically, as it can receive stress. Its cognates in the closely related language Slave have been described as “emphasis” (Rice 1989:1300–1301). It focuses the constituent immediately to its left.¹⁶ When it occurs immedi-

¹⁵ Leslie Saxon (personal communication, 2013) reminds me that there are, in fact, other adverbials that occur in the right periphery, such as *tahkò/ahkò* ‘maybe’.

¹⁶ The label “clausal focus” is used not because it focuses a clause but because it occurs in the clausal domain, unlike the nominal focus particle *sì*.

ately post-verbally, it puts the truth of the proposition in focus, contrasting it with its opposite truth-value.¹⁷

(23) Clausal focus *hqt'e*

(23a) *Setà nàzè hqt'e.*

se-tà nà-θ-zè hqt'e
1SG-father THM-IPFV.3.SBJ-hunt-IPFV FOC
'My father hunts.' / 'My father does hunt'.

(23b) *Kòt'a sewèè xè elegòht'e hqt'e!*

kòt'a se-weè xè ele-go-ìh-t'e hqt'e
already 1SG-death with RECIP-AR-IPFV.3.SBJ-be.same.IPFV FOC
'It's all the same if I die!' (Lit., 'It's already the same with my death'.)

(23c) *Edi hqt'e!*

edi hqt'e
hot FOC

'It is hot!' (MS 2007)

It follows future and negation, consistent with a position c-commanding these functional heads:¹⁸

(24) Position of *hqt'e*

(24a) *Satsq dzetani, Wekwèetì ts'ò dehtla ha hqt'e.*

satsq dzetani, Wekwèetì ts'ò de-h-tla
tomorrow afternoon Wekwèetì to INC-IPFV.1SG.SBJ-go.IPFV
ha hqt'e
FUT FOC

'Tomorrow at noon I will leave for Wekwèetì'.

(24b) *Mishè mòla k'èè gode-le hqt'e.*

Mishè mòla k'èè go-θ-de-le hqt'e
Michel French.person like THM-IPFV.3.SBJ-speak.IPFV-NEG FOC

'Michel isn't speaking French'. (MLBW 2013)

¹⁷ Mary Siemens (personal communication, 2007) mentions that she has often heard this marker used by children when arguing ('It is so!') and by politicians making speeches ('We're doing it!'), suggesting that the opposite truth-value is being denied. Her focus intonation (and that of the other consultants as well) in the English translations is indicated by underlining. Note that in some sentences it is difficult to detect exactly how *hqt'e* affects the interpretation; the semantics of this marker need to be more fully explored.

See Rooth (1992) and Gawron (2004) for definitions and discussion of propositional focus, and Koch and Zimmermann (2010) for instantiations of operators in a Salishan language that are sensitive to it.

¹⁸ There are two particles glossed as FOC in (24a). *Sì* is a nominal focus marker; as this paper concerns the structure of the clause rather than the noun phrase, I do not investigate *sì* here.

Although we might expect it to be able to focus any part of a clause, and thus to have some flexibility in its position within that clause, in fact we find that this is not so. In a similar manner to what we saw to be true of the negative particle, *hqt'e* must occur after the verb, the future marker *ha*, or negation (25c), whichever is highest; it cannot intervene between the verb and the future (25b) or between the future and negation (25d):¹⁹

(25) Rigidity of *hqt'e*'s position

(25a) *Satsq dzɛtani, Wekwèetì ts'ò dehtla ha hqt'e.*
satsq dzɛtani, Wekwèetì ts'ò de-h-tla
 tomorrow afternoon Wekwèetì to INC-IPFV.1SG.SBJ-go.IPFV
ha hqt'e
 FUT FOC

'Tomorrow at noon I will leave for Wekwèetì'.²⁰

(25b) **Satsq dzɛtani, Wekwèetì ts'ò dehtla hqt'e ha.*
satsq dzɛtani, Wekwèetì ts'ò de-h-tla
 tomorrow afternoon Wekwèetì to INC-IPFV.1SG.SBJ-go.IPFV
hqt'e ha
 FOC FUT

Intended: 'Tomorrow at noon I will leave for Wekwèetì'.

(25c) *Dzq nàhde-le hqt'e.*
dzq nà-h-de-le hqt'e
 here THM-IPFV.1SG.SBJ-live.IPFV-NEG FOC
 'I don't live here'.

(25d) **Dzq nàhde hqt'e-le.*
dzq nà-h-de hqt'e-le
 here THM-IPFV.1SG.SBJ-live.IPFV FOC-NEG

Intended: 'It's not that I live here'. (MLBW 2013)

On the grounds of its rigid position, then, we can assign it to a functional head above negation (see figure 6).²¹

The next section examines a set of discourse particles that occur in rigid clause-final position, arguing that they are instances of C.

3.6. Discourse particles and complementizers (C). There are four particles that all occur following any other post-verbal element and appear to be in complementary distribution both with each other and with

¹⁹ I have not been able to find or elicit examples of modals occurring with *hqt'e*.

²⁰ An idiomatic interpretation of (25a) is also available: '. . . I have to leave for Wekwèetì'.

²¹ Our other criterion for headship, obligatoriness, is difficult to test with respect to the focus marker, as syntactic material can also be focused by intonation, as in English.

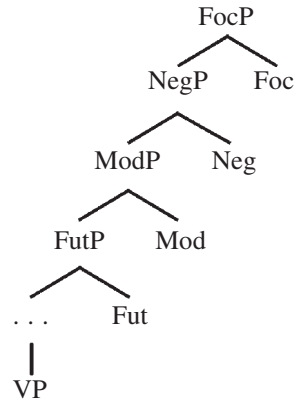


FIG. 6.—Clausal focus.

complementizers. They do not seem to form a readily discernable semantic class, given that they include an epistemic modal, an evidential, a force/deontic marker, and a question marker. I refer to them collectively as discourse particles, following Saxon, O’Neill, and Van Vliet (2013).

The dubitative marker *sɔni* conveys the speaker’s doubt or uncertainty that the proposition expressed by the clause is true:

(26) Dubitative marker *sɔni*

(26a) *Dɔ hànì gogede sɔni.*
dɔ hànì go-ge-de sɔni
 person thus THM-IPFV.3PL.SBJ-speak.IPFV DUB
 ‘Maybe people talk like that’. (MLBW 2013)

(26b) *Naɬta ha nì? — Sɔni.*
na-ɬ-tla ha nì — sɔni
 back -IPFV.2SG.SBJ-go.IPFV FUT QN DUB
 ‘Are you going?’ — ‘Dunno’. (MLBW 2013)

The evidential marker *nɔ̀ɔ̀* conveys the speaker’s possession or acquisition of evidence that the proposition is true rather than an absolute assertion of its truth. Thus the contexts for (27) were as follows: in (27a), the speaker may have been told that some people talk that way but has not actually heard them with her own ears, while in (27b), the speaker was about to fire in dim light at what he thought was a moose but then realized the shape was wrong—it was apparently a horse.²²

²² These contexts were both created by me to elicit clauses containing *nɔ̀ɔ̀*; upon hearing the second one, the consultant burst out laughing, saying that the situation that I described had actually happened to him once!

(27) Evidential marker *nɔ̀ɔ̀*

(27a) *Dɔ̀ hànì gogede nɔ̀ɔ̀.*

dɔ̀ hànì go-ge-de nɔ̀ɔ̀
 person thus THM-IPFV.3PL.SBJ-speak.IPFV EVID

‘Apparently people talk that way’. (MLBW 2013)

(27b) *Dedù wehk’è ha dehwhɔ̀ ɪlè, hanìhò tɪtso hɔ̀t’e nɔ̀ɔ̀.*

dedù weh-k’è ha de-h-wɔ̀
 moose OPT.1SG.SBJ-shoot.OPT FUT THM-IPFV.1SG.SBJ-want.IPFV
ɪlè hanìhò tɪtso ha-t’t’e nɔ̀ɔ̀
 ILE but horse THM-IPFV.3.SBJ-COP.IPFV EVID

‘I wanted to shoot a moose, but it seemed it was a horse’.
 (AW 2012)

(28) Question marker *nì*

(28a) *Gìghàɪda nì?*

gi-ghà-t-da nì
 3PL.OBJ-THM-IPFV.2SG.SBJ-see.IPFV QN

‘Do you see them?’ (AW 2012)

(28b) *Eyi nànedè nì?*

eyi nà-ne-dè nì
 DEM THM-IPFV.2SG.SBJ-live.IPFV QN

‘Do you live there?’ (MLBW 2013)

Sòò is a prohibitive marker, conveying the speaker’s strong preference for a world in which the complement proposition is NOT true:

(29) Prohibitive marker *sòò*

(29a) *Dɔ̀ hànì gogude sòò!*

dɔ̀ hànì go-gu-de sòò
 person thus THM-OPT.3PL.SBJ-speak.OPT PROHIB

‘Let people not talk that way!’ (MLBW 2013)

(29b) *Eyi wedò sòò.*

eyi we-dò sòò
 DEM OPT.3.SBJ-drink.OPT PROHIB

‘Make sure he doesn’t drink that’. (TCSA 2007)

All of these markers are barred from occurring before the clausal focus marker, *hɔ̀t’e*:

(30) Position of discourse markers with respect to clausal focus

(30a) *Dq hànì gogede hqt'e sqni.*

dq hànì go-ge-de hqt'e sqni
 person thus THM-IPFV.3PL.SBJ-speak.IPFV FOC DUB

'Maybe people do talk like that'.

(30b) **Dq hànì gogede sqni hqt'e.*

dq hànì go-ge-de sqni hqt'e
 person thus THM-IPFV.3PL.SBJ-speak.IPFV DUB FOC

Intended: 'Maybe people talk like that'.

(30c) *Dq hànì gogede hqt'e nqò.*

dq hànì go-ge-de hqt'e nqò
 person thus THM-IPFV.3PL.SBJ-speak.IPFV FOC EVID

'It seems people do talk like that'.

(30d) ??*Dq hànì gogede nqò hqt'e.*

dq hànì go-ge-de nqò hqt'e
 person thus THM-IPFV.3PL.SBJ-speak.IPFV EVID FOC

Intended: 'It seems people talk like that'.

(30e) *Eyi nànedè hqt'e nì?*

eyi nà-ne-dè hqt'e nì
 DEM THM-IPFV.2SG.SBJ-live.IPFV FOC QN

'Do you live there?'

(30f) **Eyi nànedè nì hqt'e?*

eyi nà-ne-dè nì hqt'e
 DEM THM-IPFV.2SG.SBJ-live.IPFV QN FOC

Intended: 'Do you live there?'

(30g) **Dq hànì gogede sqò hqt'e.*

dq hànì go-ge-de sqò hqt'e
 person thus THM-IPFV.3PL.SBJ-speak.IPFV PROHIB FOC

Intended: 'Let people not talk like that'.²³ (MLBW 2013)

Combinations of the discourse particles are ungrammatical. Note that some of the intended interpretations, such as (31b) and (31f), are semantically odd,

²³ The prohibitive *sqò* also appears to be barred AFTER *hqt'e*:

**Dq hànì gogede hqt'e sqò.*

dq hànì go-ge-de hqt'e sqò
 person thus THM-IPFV.1PL.SBJ-speak.IPFV FOC PROHIB

Intended: 'Let people not talk like that'.

I do not have an explanation for this fact at present.

which in itself might well bar those combinations. Others, however, such as (31a) and (31d), have more semantically plausible intended interpretations but are nevertheless ungrammatical.

(31) Complementary distribution of discourse markers

- (31a) **Dq hànì gogede sòò nì?*
dq hànì go-ge-de sòò nì?
 person thus THM-IPFV.3PL.SBJ.speak.IPFV PROHIB QN

Intended: ‘Should people not talk that way?’

- (31b) **Dq hànì gogede nì sòò.*
dq hànì go-ge-de nì sòò.
 person thus THM-IPFV.3PL.SBJ.speak.IPFV QN PROHIB

Intended: ‘Let it not be questioned whether people talk that way’.

- (31c) **Dq hànì gogede nòò sòò.*
dq hànì go-ge-de nòò sòò
 person thus THM-IPFV.3PL.SBJ.speak.IPFV EVID PROHIB

Intended: ‘Let it not seem that people talk that way’.

- (31d) **Dq hànì gogede sòò nòò.*
dq hànì go-ge-de sòò nòò
 person thus THM-IPFV.3PL.SBJ.speak.IPFV PROHIB EVID

Intended: ‘Apparently people shouldn’t talk that way’.

- (31e) **Dq hànì gogede nòò nì?*
dq hànì go-ge-de nòò nì
 person thus THM-IPFV.3PL.SBJ.speak.IPFV EVID QN

Intended: ‘Do people apparently talk that way?’

- (31f) **Dq hànì gogede nì nòò?*
dq hànì go-ge-de nì nòò
 person thus THM-IPFV.3PL.SBJ.speak.IPFV QN EVID

Intended: ‘Apparently, do people talk that way?’ (MLBW 2013)

This fact leads me to believe that their co-occurrence is barred for syntactic rather than semantic reasons, and that they are members of the same category.

These particles occur in clause-final position, following all other post-verbal particles:

(32) Clause-final position of *nòò*

- (32a) *Dq hànì gogede ha nòò.*
dq hànì go-ge-de ha nòò
 person thus THM-IPFV.3PL.SBJ.speak.IPFV FUT EVID

‘Apparently people will talk that way’.

- (32b) *Dq hànì gogede welì nqò.*
dq hànì go-ge-de welì nqò
 person thus THM-IPFV.3PL.SBJ-speak.IPFV EPI EVID
 ‘Apparently people might talk that way’.
- (32c) *Dq hànì gogede-le nqò.*
dq hànì go-ge-de-le nqò
 person thus THM-IPFV.3PL.SBJ-speak.IPFV-NEG EVID
 ‘Apparently people don’t talk that way’. (MLBW 2013)
- (33) Clause-final position of *sòò*
- (33a) *Dq yek’èezq welè sòò.*
dq ye-k’èe-Ø-zq welè sòò
 person 3.OBJ-THM-IPFV.3.SBJ.know.IPFV JUSS PROHIB
 ‘Let people not know about it’.
- (33b) *Wenaahdì-le sòò!*
we-na-ah-dì-le sòò
 3.OBJ-THM-IPFV.2PL.SBJ-remember-NEG PROHIB
 ‘Don’t you (plural) forget it!’ (MLBW 2013)
- (34) Clause-final position of *nì*
- (34a) *Naṭṭa ha nì?*
na-ṭ-ṭa ha nì
 THM-IPFV.2SG.SBJ-go.IPFV FUT QN
 ‘Are you going?’ (repeated from 26b)
- (34b) *Naṭṭa welì nì?*
na-ṭ-ṭa welì nì
 THM-IPFV.2SG.SBJ-go.IPFV EPI QN
 ‘Might you be going?’ (MLBW 2013)
- (34c) *Eyi nànedè hq’è nì?*
eyi nà-ne-dè hq’è nì
 DEM THM-IPFV.2SG.SBJ-live.IPFV FOC QN
 ‘Do you live there?’ (repeated from 30)
- (35) Clause-final position of *sqm*²⁴
- (35a) *Seza gots’àṭṭa ha sqm.*
se-za go-ts’à-Ø-ṭa ha sqm
 1SG-SON 1PL.OBJ-THM-IPFV.3.SBJ.visit.IPFV FUT DUB
 ‘Maybe my son will visit us’.

²⁴ In (35b), the combination of the verb stem *-wo*, which occurs with singular or dual subjects, with the third-person plural subject agreement marker *ge-* yields an interpretation where the subject must be dual.

- (35b) *Enɣhtl'è k'alagewo-le sɔni.*
enɣhtl'è k'ala-ge-wo-le sɔni
 paper THM-IPFV.3PL.SBJ-work.on-NEG DUB
 'Maybe they (dual) are not doing the paperwork'.

- (35c) *Enɣhtl'è k'alagewo hɔt'e sɔni!*
enɣhtl'è k'ala-ge-wo hɔt'e sɔni
 paper THM-IPFV.3PL.SBJ-work.on FOC DUB
 'Maybe they (dual) are doing the paperwork!' (MLBW 2013)

These particles also do not co-occur with complementizers. There are two ways of embedding complement clauses in Tɕhɔ Yatù, illustrated in (36): *ghalha* (36a), which introduces an embedded purposive clause, and simple concatenation without a complementizer morpheme (36b).

(36) Embedded clauses

- (36a) *Setà kawèehsɿ gha natɔmqehja.*
se-tà ka-we-èeh-sɿ gha
 1SG-father THM-3.OBJ-IPFV.3.SBJ-tell.IPFV in.order.to
na-tɔmq-eh-ja
 back-THM-PFV.1SG.SBJ-run.PFV
 'I ran back to tell my father'. (TCSA 2007)

- (36b) *Bebì k'ewehge newhɔ.*
bebì k'e-weh-ge ne-h-wɔ
 baby around-OPT.1SG.SBJ-pack.OPT THM-IPFV.1SG.SBJ-want.IPFV
 'I want to pack the baby'. (Ackroyd 1982)

Clauses in which *gha* co-occurs with discourse particles are ungrammatical:²⁵

(37) Complementary distribution of discourse markers and complementizer *gha*

- (37a) **Detà ts'è hadi nɔ̀ gha yets'è ek'èt'à natɔmqeja.*
de-tà ts'è ha-Ø-di nɔ̀ gha
 REFL-father to THM-IPFV.3.SBJ-tell.IPFV EVID in.order.to
ye-ts'è ek'èt'à na-tɔmq-e-ja
 4.OBJ-to back back-THM-PFV.3.SBJ-run.PFV
 Intended: 'He ran back to him, apparently to tell his father'.

²⁵ I do not at present have elicited sentences showing *gha* and the discourse particles in the reverse order to be ungrammatical as well. However, such examples are unattested in the texts that I have (DTC 2003 and various traditional stories). Further fieldwork should settle this detail.

- (37b) **Detà ts'ò hadi sɔni gha natɔmqeja.*
de-tà ts'ò ha-θ-di sɔni gha
 REFL-father to THM-IPFV.3.SBJ-tell.IPFV **DUB in.order.to**
na-tɔmq-e-ja
 back-THM-PFV.3.SBJ-run.PFV

Intended: 'He ran back, in order perhaps to tell his father'.

- (37c) **Elàehwhi sòò gha natɔmqehja.*
elà-eh-wi sòò gha
 THM-IPFV.1SG.SBJ-die.IPFV **PROHIB in.order.to**
na-tɔmq-eh-ja
 back-THM-PFV.1SG.SBJ-run.PFV

Intended: 'I ran back so that I should not die'. (MLBW 2013)

The discourse particles can, however, occur in clauses embedded under matrix verbs without the presence of a complementizer, as in (38), where prohibitive *sòò* (38a), dubitative *sɔni* (38b), and evidential *nòò* (38c) end clauses embedded under the verb 'think'. This fact is further evidence of their complementary distribution with complementizers.

- (38) Embedding of discourse markers under matrix verbs

- (38a) *Dɔ naxighɔyagu?à sòò dehwhɔ. . .*
 person 2PL.OBJ.3PL.SBJ.OPT-deceive **PROHIB** 1SG.SBJ.think
 'I think that people had better not deceive you [pl]. . .'

- (38b) *Dɔ xè naette sɔni guwɔ.*
 people with 3.SBJ.walking **DUB** 3PL.SBJ.think
 'They thought that we were walking with the people'.

- (38c) *Sarayi gĩa?ù ekò ts'èko sù wèdaat'ɛ*
 Sarayi 3.OBJ.3PL.SBJ.saw when woman very 3.beautiful
nòò guwɔ.
EVID 3PL.SBJ.think

'When they saw Sarayi they thought she was a very beautiful woman'. (Saxon, O'Neill, and Van Vliet 2013:11)

The complementary distribution of the discourse particles, their rigid position after all other post-verbal particles, and their semantic commonalities lead me to suggest that they are instantiations of a single functional head, which, because of their complementary distribution with complementizers, I propose is C (see figure 7), completing our picture of TĚchq YatĪ clause structure.

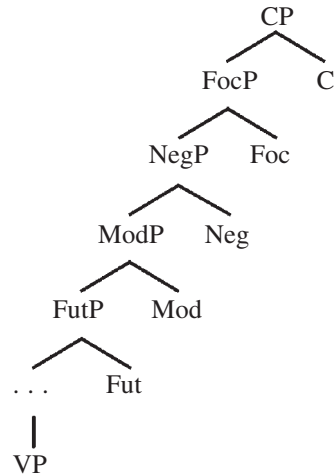


FIG. 7.—Complementizers and discourse particles.

4. Conclusions and implications. The ordering relations among post-verbal elements enable us to determine the structure of the Tɬɬɬ Yatɬ right periphery—and, by extension, the clause—with considerable precision. There are several facts in particular that stand out as a result.

First among these facts is the existence of at least two positions in which markers of modality appear: a Modal projection above Fut, and a position at the head of the clause where a dubitative marker, apparently some kind of epistemic modal, alternates with other discourse particles and complementizers. Contrary to the predictions of numerous researchers,²⁶ there appears to be no structural distinction between root modals (including deontic) and epistemic modals; we find markers of epistemic modality in both low (Mod) and high (C) positions, as well as finding both deontic and epistemic modals in the same low position (Mod).²⁷ A question thus raised is whether other semantic distinctions exist corresponding to the structural distinction between Mod and C and, if so, what these distinctions are.

The past marker *ɬlè* raises other questions. As remarked in 3.4 above, it is optional, unlike the future *ha*, and occurs in a different structural position.

²⁶ Structural distinctions between low (root) and high (epistemic) modals were postulated by Kratzer (1981; 1991) and Cinque (1999). For recent work on the topic, see Gergel (2009) and Hacquard (2009; 2010).

²⁷ The morpheme I have glossed as EVID may also be an epistemic modal; the difference between epistemic modality and evidentiality is subtle. Even if one admits the possibility that markers of root modality (like the prohibitive *sɬɬ*) exist in a high structural position due to movement from a low position, the question remains how epistemic modals (like *weli*) exist in a low structural position, contrary to the predictions in the literature.

The structure of the clause above Fut has cross-linguistic implications as well. It has been postulated that the structural location of negation varies across languages, being high in the clause structure in some and low in others (Ladd 1981 and Zanuttini 1991), while some languages allow both positions (Munshi and Bhatt 2010 and Haerberli 2011). Are other categories between T and C similarly parameterized? If so, is it mere coincidence that in some languages, low and high merge positions for modals seem to correspond to deontic and epistemic modality, since no such correspondence appears in T̥ɨchɔ Yatì? Or is it possible that structural distinctions of this kind may map to semantic distinctions in some languages but not in others?

The mapping of T̥ɨchɔ Yatì clause structure has thus raised several further questions, not only about the syntax and semantics of this language but also about their relationship in all languages.

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