Current theories on clause architecture are divided in two main approaches: (i) the cartographic project, with its rich articulation of the functional and substantive components of clause structure (Rizzi 1997; Cinque 1999); and (ii) the spare economy driven phase-based account of Chomsky (2001, 2004, 2005, 2007). Although it is standard to assume that the two approaches are not at fundamental variance with each other, and that a reconciliation of the two is inevitable, it is not obvious what form such mutual accommodation may take.

To begin with, there is the question of how the relation between cartographic and phasal heads (C and v*) is to be modeled. Is cartography essentially a finer delineation of the nature of the phasal heads, (and therefore largely irrelevant to the inquiry into the properties of phasal heads), or do the results of the cartography bear more directly on an understanding of phase-based computation and derivation? Which cartographic head(s), if any, can be identified as the phasal heads C and v*?

The questions become even more complex in the light of recent proposals for a fundamental connection between the phasal head C and the inflectional head T, by which T inherits its uninterpretable features from C (Chomsky 2005, 2007). What is the implication for cartography? Does this transfer entail the wholesale relocation of a cartographic projection to T? Which heads are the most amenable to such transfer/inheritance?

Additionally, there is also a set of questions pertaining to clausal complementation. For example, in terms of cartography, the Cinque hierarchy has not been adequately investigated with respect to the distinctness of root and embedded left peripheries, an asymmetry that has been widely discussed in the literature. Is Cinque’s hierarchy implicated in selection in the same way as Rizzi’s left periphery? In terms of a phase-driven syntax, where the selection relation consists of a head-head relation, which cartographic heads are selected for in the complement clause? Are all the aspects of the selection (in particular, for factive versus propositional complements) amenable to such a formulation?

In this paper, I will investigate these questions in the light of evidence from Meiteilon, an agglutinating tenseless language of the Tibeto-Burman family, spoken in North-Eastern India. My objective is to determine whether a phase-based approach to computation can enrich cartographic theories of syntax, and vice-versa. I do this with a
specific theoretical question in mind: Does feature transfer/inheritance between functional heads apply across phasal boundaries?

The paper is structured as follows. In section 1, I develop the basic idea that cartographies provide evidence for the transfer of features between functional heads, and I show how an awareness of phase and their boundaries enriches the descriptive value of cartographies. In section 2, I present the cartography of Meiteilon root clauses, and argue that the departure(s) that Meiteilon instantiates from Cinque’s hierarchy (namely, Mood\textsubscript{EVIDENTIAL} appears to dominate VoiceP) is suggestive of a C-v* connection, in that C transfers its indirect evidentiality feature to v*. In section 3, I consider Meiteilon factive and propositional complement clauses, and argue that the differences in the cartography, syntactic behavior and distribution of these clauses require a more restrictive approach to feature transfer/inheritance (namely, it is a relation that holds only within phases).

Section 4 concludes with some brief speculations on the way cartographies could map onto a syntax of phases.

1. Phases: The view from cartographic syntax

Based on a wide-ranging comparison of cross-linguistic data, Cinque (1999: 106) proposes a universal clause structure with the representation in (1).

\begin{enumerate}
\item [1] \text{Mood\textsubscript{IRREALIS}} \text{Mood\textsubscript{EVALUATIVE}} \text{Mood\textsubscript{EVIDENTIAL}} \text{Mod\textsubscript{EPISTEMIC}} \text{T\textsubscript{PAST}} \text{T\textsubscript{FUTURE}}
\end{enumerate}

The importance of the representation in (1) consists not only in its strong claim to universality but also in the indication that the core features required to build the natural language clause reduce to just four sets: the set of Moods, the set of Modalities, the set of Tenses, and the set of Aspects. The hierarchical arrangement of these features operates largely at two levels: at one level, the sets are ordered in relation to each other; at another level, the members of each set are ordered in relation to other members of the same set.

Interestingly, this general strategy comes under pressure when: [Mod\textsubscript{EPISTEMIC}] [T\textsubscript{PAST} \text{T\textsubscript{FUTURE}}] intervene to split up the set of Moods; and [T\textsubscript{ANTERIOR}] and, later, [Voice] intervene to separate the set of Aspects into two. If the general strategy of keeping the sets together is of relevance, then two explanations stand out for the pressure points created in the hierarchy: either the intervening element is “sent up” from below, or it is “sent down”. Inferences on such displacements are possible for sets with more than two elements, but inconclusive for singleton or dual member sets like [Voice]. For example, since most members of the [T] set precede the [Asp] set, [T\textsubscript{ANTERIOR}] must be sent down. However, the majority criterion cannot always guarantee descriptive adequacy.

Consider the case of [Mod\textsubscript{EPISTEMIC}]: as the majority of its members follow the set of Tenses, which follow the set of Moods, it could have been sent up; on the other hand,
given that the majority of Moods precede Tenses, and therefore Aspects, it could be that [Mood(IRREALIS)] has been sent down.

The problem of displacements suggests that the chief question we can ask of this ordering is a theoretical one. Certainly, there must be other possible orderings, as the data from Meiteilon will show. Nevertheless, as long as any alternative ordering also reflects displacements of the same sort attested in (1), we must seek a principled reason for this “disorder”. I would like to suggest that such justification may lie in Chomsky’s (2005, 2007) proposal that the organizing principle is the transfer of uninterpretable features from phasal heads to members of their domain. Note that at least two of the pressure points to the location of the two core functional categories – Voice or v*, and Tense or T; however, C seems to be largely exempt from such pressures. This is significant, given Chomsky’s recent conjectures that it is C that bequeaths features to T. Chomsky (2005: 9) proposes that the core functional categories, C and T function as a unit, and that T’s uninterpretable Agree features and edge features are inherited from C. Cinque’s hierarchy reflects this, as the dislocation of Tense heads into the Mod domain lends cross-linguistic empirical support to what is a theoretically motivated conjecture.

Thus, cartographic inquiry poses interesting challenges and evidence for Chomsky’s transfer/inheritance proposals. Meiteilon is particularly interesting in this regard, because it lacks tense morphology altogether (Kedvai & Mathew 2005, 2006) instead, temporal reference is marked through the use of a variety of moods/modal markers in combination with evidential and directional affixes. Although I will not dwell on this property of Meiteilon, a few examples will serve to illustrate the point.1

1 Abbreviations used: ADVR adversative; AGN agentive; ASRT assertive; ATM

The examples in (2) show that [past] and [present] are not morphologically marked. In

a. Tombi (gerang) kayethel go
Tombi (yesterday) bazaar go
‘Tombi was going to the market (yesterday).’

b. Tombi kaythel go
Tombi bazaar go
‘Tombi is going to the market (now).’

(3) a. #t–l–m–g–ni
#t–l–m–g–ni
‘(He) probably has gone.’

b. #t–l–m moy
#t–l–m moy
‘(He) has probably not gone.’

The examples in (2) show that [past] and [present] are not morphologically marked. In

cativative; CAUS causative; CNTR contrastive; CONF confactive; COP copula; CTE contrary to expectation; DIST distal; DLMT delimitative; EPIST epistemic; EVID evidential; EXASP exasperative; HON honorific; IMP imperative; IND indicative; INST instrumental; INT interrogative; IRR irrealis; LOC locative; NEG negation; NMZ nominalizer; NPOT potential; OBLG obligatory; OPT optative; PAT patient; PERF perfect; PERM permissive; POT potential; PROG progressive; PROHB prohibitive; PROSP prospective; PROX proximate; RECIP reciprocal; SHI shared information; SOLC solicitative; CONT continuative; SUP suplicative; VOL volitive.
(3a) one may mistakenly see a future versus non-future tense distinction in morphological marking; however, (3b) and (3c) show that the morphology represents a modal (versus tense) category, that Chelliah (1997) calls "potential" and "non-potential mood". The table in (4) summarizes the basic system by which combinations of mood and modality markers and aspects yield temporal deixis.

(4) MORPHEMES FORM TIME REFERENCE

| POT.OBLG.COP | ka-tam-ni | distant future |
| POT.VOL.COP | ka-tay-ni | immediate future |
| NPOT.OBLG/VOL/FPast.COP | lay-(tam/tay+tam)-ni | necessarily unrealized past |
| POT.FPast.COP | ka-ta-ni | necessary future |
| POT.COP | ka-ni | possible future/present |
| EVID.POT.COP | lam-ka-ni | unconfirmed future/past |
| EVID-NPOT.COP | lam ley-ni | possibly unrealized past |
| PERF.ASRT | tō-e | past |
| PROG.INDS | -i | present |

Meiteilon thus challenges the understanding of the C-T connection, particularly in the light of Chomsky’s (2007) discussion of whether this connection entails that all of T’s features, including interpretable [tense], are inherited from C. Noting that this would require T to be a radically empty head, and in effect unlistable in the lexicon, Chomsky proposes that [tense] be construed as essentially a property of T, which, unless selected by C, receives only “some residual interpretation” (2007: p. 19). Taken together with Richards’s arguments (also cited by Chomsky) that computational requirements force C to transfer at least some of its uninterpretable features to T, this entails that (something like) T must exist in all languages.

This further entails that something like [Spec, TP] must also exist across languages. If Internal Merge (≠ Move) is an operation that piggyback on the Agree relation, then the Agree relation involved in the valuation of the uninterpretable features of T will always provide the necessary condition for such movement. Here too, however, Meiteilon seems to challenge these proposals insofar as it shows no evidence of a Spec,TP at all: there is no subject raising to [Spec, TP], no verb agreement, no raising predicates, no passives, and no expletives. In fact, there is only some evidence of DP displacement to Rizzi’s left periphery. As Bhat (1991) and Chelliah (1997) observe, Meiteilon animate arguments are marked by three thematic role markers: Agentive –na, Experience/Goal/Locative –ds, and Patient –bu. Examples are provided in (5a) with ‘give’ and in (5b, c) with a morphological causative.

(5) a. Tomba-za Tombi-da layik pi
   Tomba-za, Tombi, book give

\[\text{personal communication to Noam Chomsky, August 2005, as cited in Chomsky (2007: p. 19)}\]
“Tomba gave the book to Tombil.”

b. Tomba -na daskar-bu mäcá nupiši lay-yep-hall-i
Tomba:gen doctor:rec his daughter disease:look
‘Tomba made the doctor treat his daughter.’

c. Tomba -na daskar-du mäcá nupiši lay-yep-hall-i
Tomba:gen doctor:rec his daughter disease:look
‘Tomba made his daughter be treated by the doctor.’

Additionally, there is an exclusive focus marker $t^*$, as in (i) below; however, it is not clear to me at this point whether this is indeed a left periphery element. Unlike $-d$ that appears in final position in conditionals and counterfactuals, I have not come across similar instance for $t^*$, to confirm its left periphery status.

(i) ay-khol-t$^*$, Tombala nupi

L- UPTO-t$^*$, Tomba-LOC loves

‘It is exclusively me who loves Tomba’

Interestingly, these heads also combine to form COMP elements: - $adu$ “but” is in

Either as Case or theta-role marking, this distribution is inexplicable: no conceivable principles should enable checked uninterpretable features like [Case], or LF-relevant interpretable features like theta-role to be irrecoverably deleted in the course of the derivation. Bhat (1991), the first to remark upon these facts, draws similar conclusions. He recognizes these markers as “redundant” in two main types of contexts: (a) contexts in which the semantic relations are predictable; and (b) contexts in which no suffixes are required (i.e. with stative predicates or equational sentences). He, then, concludes that the use of these elements as pragmatic markers (e.g., to mark contrastive focus, specific/definite reference, “adversely affected” noun phrases) means that the relevant grammatical relations are not universal in nature. The facts become even more complex since both sets of marking may co-occur:

initial COMP that signals an adversative relationship between two clauses, and $adu$:

‘therefore’ conjoins two clauses to indicate that the first clause is the purpose or reason for the second; $-modu$ is also such an initial COMP, whose semantics is less clear.
In Kidwai (in prep.), I argue that these markers signal Merge in edge positions of the v* phase – as patient marking is a signifier of animacy and/or definiteness. Agentive marking is also an edge phenomena, with specific/definite agents preferentially marked as such. Once at the edge of v*, these arguments may further raise to the edges of the root left periphery, and hence the (contrastive) focus and (adversative) topic interpretations. Meiteilon’s agglutinative properties make visible the path of such raising; in (7), for example, an external argument moves through the specifiers marking contrastive focus to end up in an (adversative) Topic specifier, to ultimately receive a contrastively focused adversative topic reading.\footnote{As Virginia Hill (personal communication points out, it is unusual to postulate movement relating specifiers in the left periphery, as this seems to defy the theory on operator-variable chains. In Kidwai (in prep), I show that the Meiteilon cases do not actually contradict standard assumptions, as the adversative topic must necessarily locate a variable in another specifier of the left periphery. There are thus two, and not one, operator-variable chains here.}

Meiteilon’s lack of Spec, TP (and T, if T=Tense) effects could, however, also be taken as arguments for a claim that in this language, v*, and not T, is the locus of transfer/inheritance of C’s uninterpretable features. Chomsky (2007: p.19) has explicitly argued against this possibility for a transfer/inheritance of features from T to v*, but the possibility of transfer/inheritance from C to v* remains an option, in principle. However, this would require us to treat agent, patient, and specific/definite interpretations as uninterpretable and C-phase related, a decision that would be, at the very least, questionable, and impossible to justify. Moreover, if C did indeed transfer its uninterpretable specifier-related features to v*, external arguments could never be licensed, as the external argument would be outside the search space of v*. It therefore is extremely improbable that transfer/inheritance does indeed relate the heads of two distinct phases.

Thus, what we are left with is the T/Spec, TP challenge that Meiteilon poses: If there is no evidence for a T-projection in the language, the transfer/inheritance theory flounders at its first crosslinguistic challenge. However, I shall show that even in a tenseless language like Meiteilon, there is reason to believe that C transfers its uninterpretable features to a T-like category, and that such transfer makes itself visible only in contexts equivalent to non-finite control complementation. This argument requires a cartographic representation of the Meiteilon clause, which will be proposed in the next section.

2. Meiteilon root clauses

Although a full discussion of the evidence that Meiteilon provides for Cinque’s hierarchy is interesting in itself, I will restrict my attention to the heads above Voice, as in (8), on the assumption that this head marks the region of the v* phase.
I will begin by presenting the evidence for the existence of these heads in the language, and then move on to discuss Meiteilon’s deviations from the universal order.

2.1 Meiteilon in Cinque’s (1999) hierarchy

2.1.1 Speech Act (henceforth SA) Moods

According to Chelliah (1997), there are a variety of SA moods in Meiteilon. Indicative is marked by -í (9a) and by the copula -ni (9b). Assertive is marked by -e (9c), solicitive by -o (9d), and suppositive by -si (9e). Interrogative is marked by -l (10a), and by -no (10b). Finally, imperative is marked by -u (11a), prohibitive by -nu (11b), and permissive by -snu (11c).

---

(9)

a. ay élik éá -í
   I       rice      eat
   ‘I ate the rice.’

b. ay éja  ní
   I       teacher   cop
   ‘I am a teacher.’

c. kóyba  éši  -álok –to –é
   book     this to.me give
   ‘Please give this book to me.’

d. káyma  nónínda  pí  -bi  -é
   tomorrow  holiday   INT
   give
   ‘Is tomorrow a holiday?’

e. kóyba  éši  -álok –to –é
   book     this to.me give
   ‘Let’s go to see a film together.’

---

(10)

a. høyng  éánt  -é
   tomorrow       holiday  INT
   ‘Is tomorrow a holiday?’

b. kóyba  éši  -snu
   book     you who
   ‘Who are you?’

---

(11)

a. pa -w
   read

---

Chelliah (1997: 228) glosses this as a non-hypothetical mood, and therefore putatively an Evaluative Mood. However, she also notes its incompatibility with negation. I analyze it to instantiate indicative mood.
The morphology suggests that quite a number of these different SA moods are
the product of agglutination. The forms in (11) suggest that the basic imperative marker
is -u, and that the prohibitive and permissive are lower heads that raise to
Mood\textsubscript{SA}\textsubscript{IMPERATIVE}. If (9b) is taken to instantiate a copula (-\texttt{n}) raised to Mood\textsubscript{SA}\textsubscript{INDICATIVE}, then the interrogative -\texttt{no} can be analyzed as a copula raised to Mood\textsubscript{SA}\textsubscript{SOLICITATIVE}.

Similarly, the copula is involved in the formation of permissive -\texttt{sonu}, with the
prohibitive indicating the existence of a layer of negation distinct from the sentential
negation marked by -\texttt{t}. I therefore consider there to be two layers of SA Moods, the
topmost layer being Mood\textsubscript{SA}\textsubscript{INDICATIVE}, and the next Mood layer hosting
solicitative/assertive/imperative/supplicative/interrogative (all these moods being in
complementary distribution).

2.1.2 Evaluative Mood

Chelliah (1997) reports “attitude markers” that encode shared information (-\texttt{ne}), contrary
to expectation (-\texttt{ta}), confirmation (-\texttt{ye}), and exasperation (-\texttt{hé}), as illustrated in (12).

(12) a. \texttt{nay phirôn sêt -\texttt{t} -\texttt{ri} -\texttt{b} -\texttt{ra} -\texttt{me}}
you dress wear\textsubscript{past}\textsubscript{past}\textsubscript{past}\textsubscript{past}\textsubscript{past}
‘Can it be that you aren’t dressed yet?’
b. \texttt{ada árthí} \texttt{yum -\texttt{ni} -\texttt{d} o}
there see\textsubscript{past}\textsubscript{past} this house COP CTE
‘From what I see that thing over there is a house (rather than a temple).’
c. \texttt{thi-\texttt{ak} -\texttt{ni} -\texttt{ye}}
motion\textsubscript{past}\textsubscript{past}\textsubscript{past}
‘So, she is returning? (lit. Returning you say?)’
d. \texttt{tu -\texttt{w} -\texttt{d} -\texttt{hé}}
\textsubscript{do}\textsubscript{past}\textsubscript{past}
‘I didn’t do it, OK!’

2.1.3 Deontic Modality

Rather than being a SA Mood, the permissive is a cohortative modal, an instance
of Mod\textsubscript{ABILITY}/PERMISSION. Other modalities distinctly marked in Meiteilon are

outside them and marks a request for a response. Second, evaluative markers affect whscope: a w-h-phrase used in a sentence marked by the shared information marker must
Mod\textsubscript{OBLIGATION} (\textdagger), illustrated in (13a) and Mod\textsubscript{OBLIGATION} (\textdaggerdbl) and (\textdaggerdash) as in (13b-c)\textsuperscript{8}.

\begin{enumerate}
\item \textit{a. ay-khoy si hay-\textdaggerdash\textdaggerdash bo-\textdaggerdash ni \\
\quad \textit{we\textsuperscript{the} this say\textsuperscript{Mod\textsubscript{OBLG}}} \text{‘We must say this.’} \textsuperscript{9}}
\item \textit{b. i - go \textdaggerdash\textdaggerdash ho \\
\quad \textit{will\textsuperscript{not} \textsuperscript{Mod\textsubscript{OBLG}}} \text{‘The one that you will write.’} \textsuperscript{9}}
\item \textit{c. ay layrik pa \textdaggerdash\textdaggerdash ga \\
\quad \textit{I book read\textsuperscript{OPT}}} \text{‘I want to read the book.’} \textsuperscript{9}
\end{enumerate}

\textsuperscript{8} Chelliah (1997) glosses this as the optative; however, this appears to be a volitive modal.

\textsuperscript{9} The use of the copula is allowed only with the potential mood; non-potential marked verbs cannot be employed with the copula (*\textsuperscript{Kidwai~(in prep.)} I suggest that the semantic properties of the non-potential mood conflict with those of the indicative.

2.1.4 Alethic Modality

Mod\textsubscript{ALETHIC} is also marked in Meiteilon, for both positive (\textdagger) and negative (\textdaggerdbl) values, as illustrated by the examples in (14). For ease of exposition, I will follow Chelliah (1997) in labeling these two values as “potential” versus “non-potential” mood\textsuperscript{9}.

\begin{enumerate}
\item \textit{a. n\textsuperscript{\#}o\textsuperscript{\#}u \textdaggerdash\textdaggerdash ni \\
\quad \textit{rain fall\textsuperscript{Mod\textsubscript{OBLG}}} \text{‘It will rain (today).’}}
\item \textit{b. n\textsuperscript{\#}o\textsuperscript{\#}u \textdaggerdoublequote \\
\quad \textit{rain fall\textsuperscript{Mod\textsubscript{OBLG}}} \text{‘It will not rain.’} \textsuperscript{9}}
\end{enumerate}

2.1.5 Epistemic Modality

Mod\textsubscript{EPISTEMIC} is marked by (\textdagger), (and its alternant /\textdaggerdash/) and (\textdaggerdash), shown in (15a) and (15b), respectively.

\begin{enumerate}
\item \textit{a. \textdagger\textdaggerdash\textdaggerdash ra \textdaggerdash\textdaggerdash ne. \\
\quad \textit{eat \textsuperscript{CONT}} \text{‘Will (you) still eat?’/‘Will you really eat more?’}}
\item \textit{b. m\textsuperscript{\#}h\textsuperscript{\#}a\textsuperscript{\#}k \textdagger\textdaggerdash\textdaggerdash ne. \\
\quad \textit{go \textsuperscript{PERF}} \textit{here \textsuperscript{Mod\textsubscript{ASRT}}} \text{‘He must have gone.’}}
\end{enumerate}

Just as (\textdagger) has a Mod\textsubscript{ALETHIC} use (compare with 13a), so does -\textdagger, as in (16).

\begin{enumerate}
\item \textit{a. n\textsuperscript{\#}h\textsuperscript{\#}a\textsuperscript{\#}h \textdagger\textdaggerdash\textdaggerdash ga \textdaggerdash\textdaggerdash bo-\textdaggerdash ni \\
\quad \textit{here medicine this eat\textsuperscript{Mod\textsubscript{OBLG}}} \text{‘You must take this medicine, OK?’}}
\end{enumerate}
For expository ease, I shall consider these two sets of markers as distinct, although they may well instantiate a single projection.

2.1.6 Evidential Mood
Meiteilon overtly marks indirect (inferred) sources of evidence by the morph -m.

Example (17a) is used when the speaker is at best witness to the result or the final stages of the event, and (17b), when the speaker’s knowledge is based on evidence that is no longer available to the hearer. Finally, (18) can be used when the speaker infers that the event/state denoted by the verb will come into being.

(17) a. "y-n in t-khi-ba-da má čā-k-zaa-m-i.

Chelliah (1997) also cites the evidence in (i) below to indicate that epistemic modals are merged higher than prospective aspect, but obligatives merge below.

(i) a. on-tha-kh-ro-tn-wi

fall.down<ACT>POT 3P
time

"(We) may have fallen down"

b. phā-ga-dw-ro-ba-wi

3P<REL>follow<REL>POT 3P

"(You) should be beaten."

As I have not been able to confirm this data, I do not consider the ordering PROSP<REL>IND in the text below and consistently order prospective aspect as lower than the other two aspects.

(18) ma-ne-khay-da čā-k-ba-da čā-k-khām-go-si.

3P<REL>that go<REL>COP

"On going to her paternal aunt’s house, she will (be made to) eat."

2.1.7 Aspects
The three Meiteilon aspects - AspPERFECT(-l), AspPROGRESSIVE(-li), and AspPROSPECTIVE(-l)- are illustrated in (19 a-c). (19d) illustrates what is possibly an AspCONTINUATIVE (Chelliah 1997 glosses it as “still”) although other meanings also obtain to complicate a definitive identification.

(19) a. satr-si!-n in-ga-dw-ri-ba-wi

students<CNTR>follow<REL>POT 3P

b. 3r rice eat<REL>

'I went there, he was eating dinner.'

c. nām-a-ma-da nā-hāk yam-ne phāro-romm-i.

time ATT.PLACE.LOC there 3P pretty EVID IND

'Once upon a time, she was very beautiful'

11 Bhut & Ningomba (1986) and Singh (2000) analyze -khi to be a member of the set of directional markers that are so ubiquitous in Tibeto-Burman. As in other Tibeto-Burman languages, these directionals are extended to cover aspectual distinctions such as perfectivity and duration. Even if this is the case, -khi still requires special treatment as it can co-occur with the other directional markers.

10 Chelliah (1997)
b. *mahal či-t-wa-e*
   *in* here *gO* nominalize *gO*
   *‘He must have gone.’*

c. *nykhoy Ukhrul či-kh-ep-ni*
   *to* Ukhrul *gO* nominalize *gO*
   *‘He must have gone to Ukhrul.’*

d. *či-kh-er-d-wa-e*
   *eat* nominalize *gO*
   *‘He still had not eaten.’*

2.1.8 Mood IRREALIS

Let us dwell on (19), considering, this time, the head -po in (19a), which is referred to as a nominalizer (NMZ) in descriptive grammars of Meiteilon. In Tibeto-Burman languages (as indeed in the macro-family of Sino-Tibetan), the requirement for a nominalizer is traditionally linked to the copula, on the view that the copula subcategorizes for nominals alone. Since Chelliah (1997) adopts this analysis for Meiteilon, she has to expand the class of nominalizers, because, in this language, -po does not always precede the copula (i.e., -ni); for example, there is no -po preceding -ni in (19d), (18), and (17a). Chelliah claims that in these instances, epistemic, alethic and deontic modality markers in Meiteilon also function as nominalizers; however, there is no independent evidence for this.

Thus, a revision of the nominalization analysis is needed, but this is possible only if -po is consistently defined as a syntactic head rather than a morphological/lexical suffix. As Chelliah (1997: 168) observes, modal and aspectual predicates (e.g., start, finish, fast, slow, fall) subcategorize for -po headed complements, as in (20).

(20) a. *ay čis-nu haw-e*
   *I eat* nominalize *gO*
   *‘I have started eating an apple.’*

        b. *ma Dili čis-po hay-e*
   *he Delhi go* nominalize *gO*
   *‘His trips to Delhi are going to be over.’*

        c. *yoxi ma phun-d to-e*
   *today he beat nominalize *gO*
   *‘Today, he’ll be beaten.’*

The examples in (20a-b) show what kinds of aspectual meanings the selecting predicates may have (e.g., inception of an event and its prospective completion), whereas (20c) displays modality of possibility. What unifies these meanings? The answer I suggest is the irrealis reading that all these complements achieve in relation to their selector; that is, a reading where the situation is non-actual or less than actual (rather than related to the truth value of the proposition). Note that the English glosses also display selection restrictions in order to achieve the irrealis/non-actual interpretation – namely, only non-finite complements are allowed in such contexts. Hence, I re-define -po as a marker for Mood IRREALIS and gloss it IRR instead of NMZ. Empirical support comes from the
where the hierarchically higher element is in bold. The table in (22) summarizes the ordering of functional heads in Meiteilon root clauses, where the hierarchically higher element is in bold.

(21) a. nakhya-na ći-go-da-da ay-ni yâir-go
  2EN.CONTR  goMINDLOC  book carry
  ‘When you go, I will go too.’

b. skal ći-da-da-na ay-ni layrê pê-y
  1PL-COMNLOC  goMINDLOC  book carry
  ‘When I go to school, I carry my books.’

Such data indicate that an irrealis phrase/clause is visible to Agree that probes for interpretable nominal features. This may follow from the fact that in a language without Tense, valuation as irrealis entails that the category so produced is deverbal, given that there are no Tense features to remove.

2.1.9 Hierarchical arrangement
The table in (22) summarizes the ordering of functional heads in Meiteilon root clauses, where the hierarchically higher element is in bold.

<table>
<thead>
<tr>
<th>ORDER</th>
<th>EXAMPLE</th>
<th>REFERENCE</th>
</tr>
</thead>
</table>

2.2 Phrasal connections in Meiteilon

According to Cinque’s (1999) universal hierarchy, Meiteilon should have the arrangement in (23a) above Voice.

(23) a. [MoodAspect] [MoodEvidential] [MoodSubjunct] [MoodInterrog] [MoodIrrealis] [Moodindicative] [ModAgreement] [ModInterrogative] [ModEvidential] [AspIrrealis] [AspInterrogative] [AspEvidential] [Voice.......]

However, the hierarchy in Meiteilon is the one in (23b).
How do we account for this variation? When we focus our attention on re-orderings that relocate heads quite high on the universal hierarchy to regions closer to Voice (i.e., to the v* region), two cases stand out: (i) the rightward shift of Mod_{ALETHIC POSSIBILITY}; and (ii) the rightward shift of Mood_{IRREALIS} to the region of Voice. I shall address these re-orderings one by one.

### 2.2.1 Shifting Mod_{ALETHIC POSSIBILITY}

In order to understand the position of Mod_{ALETHIC POSSIBILITY} we must consider further uses of irrealis -po, which, as seen in the previous section, equates non-finite categories in tensed languages. The examples in (24) show that -po-As occurs with aspects, causatives and evidential markers. In (24a) -po appears in a complement clause, in (24b-c) in participial relatives.

(24) a. ay čē-lom ho jamm-i

I eat_4.open like_4

‘I like to make (people) eat.’

b. čē-ri ho māy

‘The boy who eats.’

c. nārîsâh  p̪-en- ho nguills

basket.of.fish given_4-woman

‘The woman who was given the basket of fish.’

In their use as complements, phrases/clauses headed by Mood_{IRREALIS} like -po cannot be marked for aspect or for Mod_{ALETHIC POSSIBILITY}; hence, a Meiteilon “infinitival” may not bear potential/non-potential mood. Therefore, we would expect these phrases/clauses to be the equivalents of control infinitivals in tensed languages, which is empirically correct. So, although tenseless, Meiteilon must have something that acts like T insofar as it determines the distribution of overt vs. non-overt subjects. I identify this element as the Mod_{ALETHIC POSSIBILITY}; Mood_{IRREALIS} does not qualify for this function because it occurs with overt subjects, as in (19a).

Mod_{ALETHIC POSSIBILITY} can be suppressed, which indicates that the transfer/inheritance of features has been blocked in this context. Now recall that Mood_{IRREALIS} features are of two types: (i) V-related, which appear in all non-actual or less than actual situations (19a); and (ii) D-related ones that make the categories so marked nominal in nature and, therefore, capable of being Case-marked and extractable to the left periphery (20-21). Hence, the relation between Mood_{IRREALIS} and Mod_{ALETHIC POSSIBILITY} can be formalized in relation to the transfer of the D feature from the former to the latter: if the transfer takes place, we get the equivalent of finite T; if the transfer is blocked, we get the equivalent of a control infinitival.

---

12 In addition, other lower categories, like directionals and aktionsart, may be marked.
If this analysis is on the right track, it is Mood\textsubscript{IRREALIS} that counts as the phasal head C for Meiteilon, rather than the higher Mood heads. Furthermore, as Mod\textsubscript{ALETHIC POSSIBILITY} is interpretable, it must exist \textit{ab initio} in the derivation, and therefore must be listed in the lexicon. Hence, the fact that Meiteilon lacks various Spec, TP effects may get now different explanations: the language does not exhibit raising and ECM because “T” is always selected by “C” (i.e., Mood\textsubscript{IRREALIS} always transfers its feature to Mood\textsubscript{ALETHIC POSSIBILITY}) with the consequence that there are no defective categories in the language. The lack of expletives and passives, on the other hand, follows from the fact that Mood\textsubscript{ALETHIC POSSIBILITY} does not require displacement to the edge.

2.2.2 Shifting Mood\textsubscript{EVIDENTIAL}

Turning now to the case of Mood\textsubscript{EVIDENTIAL}, note first the orderings in (22): they are all fixed except for those that contains Mood\textsubscript{EVIDENTIAL}, where the order may be reversed. This suggests to me that Mood\textsubscript{EVIDENTIAL} is a v*-level phenomenon in the language, where at the edge of the phase, either the evidential or the causative may merge first, and the other later; alternatively, the evidential may tuck-in below the Voice head. If this is correct, then the fact that evidentiality is a v* related phenomenon is intriguing, because crosslinguistic observations have shown evidentiality is a C related phenomenon -- languages have evidential/quotative ‘complementizers’ as well as sentential tags that appear at the CP-level. Abstracting this observation to the theoretical level, one could conceive of evidentiality as a feature of the phasal head C, which when assembled in the lexicon of a language, manifests itself as a Mood\textsubscript{EVIDENTIAL} affix within the CP.

Then, under a feature transfer/inheritance theory, the first account for the Meiteilon deviation -- by which evidentiality is a v* level phenomenon rather than a C-level one -- could be that Mood\textsubscript{IRREALIS} in this language transfers its [evidential] features to v*, and that such transfer is morphologically reflected by the Spell-out of the evidential affix on the verb.

At first blush, this proposal seems to work quite well, particularly because the Phase Impenetrability Condition (PIC) in (25) ends up predicting the behavior of the Meiteilon evidential. By the time the [evidential] feature is transferred to v*, the PIC also comes into effect, entailing that such transfer/inheritance can only be a v* edge-related phenomenon.

(25) The Phase Impenetrability Condition (PIC)

\begin{itemize}
  \item [\textbullet{} (i)] The domain of H, for strong phase HP, is not accessible to operations at ZP, but only H and its edge (where edge is the residue outside of H).
  \item [\textbullet{} (ii)] Interpretation/Evaluation/Spellout for PH1 is at PH2, where PH2 is a strong phase.
\end{itemize}

The data in (26) could then be produced in support of this conclusion: in (a), the evidential scopes over the causative, while in (b), the reverse scope relation holds. On the assumption that relative scope is an edge-based relation, (26) argues that both the evidential mood and the continuative aspect markers must merge at the edge.

\begin{itemize}
  \item [\textbullet{} (a)] The domain of H, for strong phase HP, is not accessible to operations at ZP, but only H and its edge (where edge is the residue outside of H).
  \item [\textbullet{} (ii)] Interpretation/Evaluation/Spellout for PH1 is at PH2, where PH2 is a strong phase.
\end{itemize}
However, attractive as this analysis may seem, it has one serious, if not potentially fatal, flaw: it necessarily involves look-ahead, and therefore greater computational complexity. If Mood\textsubscript{IRREALIS} transfers its [evidential] feature to v*, the Spellout of v* phases will have to be delayed until Mood\textsubscript{IRREALIS} is merged. Moreover, as I show in the next section, the evidence from clausal complementation in the language actually argues against the interphusal transfer of the [evidential] feature.

3. Meiteilon clausal complements

3.1 Root versus embedded cartographies

To begin, let us consolidate the picture that emerges of Meiteilon root clauses, by considering the shape of their left periphery when compared to Cinque’s hierarchy. From the evidence presented, it appears that the left periphery simply sits, as a whole, upon Cinque’s hierarchy, as raising to the left periphery neither requires any particular order of heads in Cinque’s hierarchy, nor is verb-raising implicated; for example, in (19a) and in (21a), contrastive focus does not correlate with a particular height that the verb can raise to. Thus, in (28), I put the two cartographies together for both root and embedded clauses, marking the positions that are unavailable in embedded contexts with an asterisk.

In Meiteilon, the cartography of a complement clause differs from a root clause in two respects. First, the left periphery is relatively impoverished. In (29a), bot-\textsubscript{i} and ma-\textsubscript{a} are respectively the simple topic and contrastively focused constituents. However, as (29b) shows, an adversative topic interpretation is not available for the –bu marked DP. Recalling that DPs so marked are superficially ambiguous between a Patient and an adversative topic interpretation, note that only a Patient interpretation position is available for this –bu marked DP here.

Second, the embedded hierarchy in Cinque’s system is different as well: Mood\textsubscript{EVALUATIVE} and Mood\textsubscript{EVIDENTIAL} are proscribed, although both higher and lower Mood projections are preserved in finite contexts; compare (29a), in which the embedded verb is in the interrogative mood, with (29b), where the verb is indicative.
b. [Tomba bon  yen-go ni háyna/háyba] háy

Tomba tomorrow see vyen c say

‘It is said that Tomba will be looked at tomorrow.’

*‘It is said that Tomba will be looked at/seen to tomorrow.’

In section 2.2.1, I argued that the location of C in Meiteilon must correspond to MoodIRREALIS in Cinque’s hierarchy, but as the tree in (28) shows, there is some more structure in (the analogues of) finite complements. Singh (2000) and Chelliah (1997) dub háyba/háyn as “complementizers”, and argue that their distribution is determined by the factive versus propositional distinction. Singh (2000: 177 ff) observes that the selection of these complementizers identifies three classes of finite clause embedding predicates in the language: factive predicates that take háyba complements; propositional predicates that take háyn complements; and a third class that takes both, as shown in (30).

(30) a. [moshák thobok ni tzw-ga-da-ba ni háyba/háyn] cumm-i
he work this dRefDirectCop c true

‘It is true that he did this work.’

b. [moshák parikha gana ni *háyba/háyn] ay kholl-i
he exam pass dCop c I think

‘I think that he will pass the exam.’

c. [moshák hidak ama ca-ko da-ba ni háyba/háyn] ay nípsí-i
he tablet one takeRefCop vyen vyen c I remember

(a) ‘I remember that he should take a tablet.’ (C = háyba)

(b) ‘I reminded him that he should take a tablet.’ (C = háyn)

(from Singh 2000)

The contrast in (30a, b) demonstrates the sensitivity of these “complementizers” to the factive versus propositional nature of the embedding predicate, and (30c) illustrates the contribution the complementizer makes to fixing the denotation of ambiguous predicates. In section 2.2.1 I argued that the core distinction between root finites and non-finites was that in the latter MoodIRREALIS does not transfer its uninterpretable D feature to MoodALCOTION. If háyba and háyn are indeed Cs, then a further distinction between finite and non-finite complements emerges: the latter type does not allow the háyba/háyn layer at all. Therefore, háyba/háyn must instantiate a higher head than MoodALCOTION in Cinque’s embedded hierarchy. Finally, given that these Cs are grammaticalized forms of the report verb ‘say’ (the canonical indirect/hearsay markers), MoodEVIDENTIAL would be a good candidate as the merge site for them. In such embedded contexts, the MoodEVIDENTIAL feature must not be transferred to vy.*

Accommodating háyba/háyn as Cs seems to require an extension of the foregoing analysis, by which root and embedded hierarchies are held to be different. However, this simple extension turns out to impose enormous theoretical costs. First, in terms of the economy of computation, a suggestion that root and embedded transfer/inheritance relations differ requires that right at the point of (independent) assembly, a clause somehow “knows” that it is going to be a complement versus root clause. Suppose that such knowledge arises from a numeration that contains háyba/háyn; then, we expect that
the complementizers should be the sole locus of marking indirect evidence in Meiteilon.

However, that is not true, as main clauses can be marked for indirect evidence as well, as shown below in (37b-c).

Furthermore, this extension denotes a departure from the current methodology: we must no longer take Meiteilon’s agglutinative morphology as seriously as we have done so far. What the morphology signals is that the -ño in háybó must not be accidentally homophonous with that of the irrealis, and that the -ño in háyño may be related to the argumental (external argument or instrument) marker, or to V/v* adjunct (adverbials), or to contrastive focus marking -ño in the language. In the next section, I will elaborate on these points further, to make the argument that háybó/háyño (and others) are not Cs in Meiteilon.

3.2 Inference and fact

Descriptive grammars of the language, especially Chelliah (1997), note that besides háybó and háyño, there also exist a host of other “subordinating” uses of say-Cs, as listed in (31).

<table>
<thead>
<tr>
<th>FORMS</th>
<th>GLOSS: SAY +</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. háybóbu</td>
<td>say:FACT:ADVERBATIVE</td>
<td>although that is</td>
</tr>
<tr>
<td>b. háybódo</td>
<td>say:FACT:LOCATIVE</td>
<td>from what S. rightly says</td>
</tr>
<tr>
<td>c. háybódní</td>
<td>say:FACT:ABLATIVE</td>
<td>as a result of what was said</td>
</tr>
<tr>
<td>d. háybóda</td>
<td>say:FACT:DISTAL-DETERM</td>
<td>that fact</td>
</tr>
<tr>
<td>e. háybógní</td>
<td>say:FACT:GENITIVE</td>
<td>regarding what was said</td>
</tr>
<tr>
<td>f. háybóma</td>
<td>say:FACT:INSTR/AGN/CONT13</td>
<td>because of what being said</td>
</tr>
<tr>
<td>g. háybómina</td>
<td>say:FACT:INSTR/AGN/CONT</td>
<td>because it is thus said</td>
</tr>
<tr>
<td>h. háybní</td>
<td>say:FACT:PROXIMAL</td>
<td>this fact</td>
</tr>
<tr>
<td>i. háydóno</td>
<td>say:LOC:INSTR/AGN/CONT</td>
<td>by saying so then</td>
</tr>
<tr>
<td>j. háydína</td>
<td>say:DISTAL:INSTR/AGN/CONT</td>
<td>having said so</td>
</tr>
<tr>
<td>k. háyngá</td>
<td>say:PERF:ASSOCIATIVE</td>
<td>after saying that</td>
</tr>
<tr>
<td>l. háyñó</td>
<td>say:INSTR/AGN/CONT</td>
<td>that</td>
</tr>
</tbody>
</table>

The list in (31) illustrates two important points about these alleged complementizers: the first is a significant difference in the distribution of the háybó vs. the plain háy and háyño forms: Only the háybó forms agglutinate with Case-markers, demonstratives, and topic markers (e.g., háybóda, háybógní). The multitude of forms suggests that háybó clauses behave like nominals, just as MoodIRREALIS complements do. Second, the glosses suggest that, except for háybó, háynó, háybógní, and háybóda, the report meaning of the “say”-Cs is not equally bleached in all contexts. Consider (31 i-4), where such Cs retain some of the report flavor. Chelliah (1997: 185ff) notes that háydó no, háydína, and háyñó establish a relation between direct quotes and other clauses, where the first two “link a direct quote with the narrator’s description of subsequent action and/or comment

13 I have departed from Chelliah’s glosses in that I do not make the unsubstantiated conclusion that -ño in these examples must be the instrumental. I gloss the morpheme in all three of its functions here, leaving the task of determining what exactly the gloss should be to future research.
on the quote”, the latter “links together two pieces of a direct quote.” (32a) illustrates this with háydún, and (32b) with háyraga.

(32) a. mọpú xe pumu-x háydúnu yóo čín-kho-x-e grandpa this rotten-ing saying thus monkey run-ing

‘(He said:) “This grandpa is rotten”, so saying, the monkey ran away.’

b. kheí-i-x háyragá čégba zmô-do phé jìmu púuchápy-x-e cut-inf after saying pot that nice boil-inf-inf

“Cut”; after saying that (he said), “Boil them well in a pot.”

I will not consider háydún and háyraga any further; I mentioned them here to emphasize the predicative nature of this alleged complementizer. In fact, even háyno retains some of this flavor, as it may also be used with report verbs, “where the speaker reports the words of someone else but cannot be sure of their truth value” (Chelliah 1997: 301). (33) illustrates the point in that háybo may only be used if the event of beating is indisputably going to take place; otherwise, háyno is preferred.

(33) Tomba huøy phú-go-xi häymo??háybo háy Tomba tomorrow beat-inf pot say-inf

‘It is said that Tomba will be beaten tomorrow.’

Forms based on háybo, on the other hand, entirely bleach the reportative meaning.

Intuitively, this is not because the clausal indirect evidential has changed its category, but because of the factive interpretation induced by -bo. That is to say, it would not be correct to conclude that the chief difference between the háyma/háybo forms is in terms of indirect and direct evidentiality, as it is definitionally of the latter that the speaker has some sort of sensory evidence for the action or event he/she is describing. In (34) the use of háybo does not obliter the indirect nature of the source of information; all it says that this fact is known by inference/indirect evidence.

In other words, factivity and direct evidentiality do not coincide in Meiteilon: while an interpretation as ‘fact’ is determined by the selection relation between the predicate and the head of its complement, the relation of direct versus indirect evidence is the assessment of the source of information by the speaker. Such assessment is always a root phenomenon. In this, I adopt the insights of Speas’ (2004) important proposals in this regard: pointing to the central role of the speaker in defining the categories of (logophoricity and) evidentiality, Speas suggests that the four top functional categories of Cinque’s hierarchy are each associated with an implicit argument (marking pragmatic roles), that is in effect the subject of that phrase and bears the pragmatic roles defined in terms of the phrase with which it is associated, as in table (34).

(34) Speas (2004): pragmatic roles

<table>
<thead>
<tr>
<th>Position</th>
<th>Role name</th>
<th>Role description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Spec, Speech Act Phrase]</td>
<td>Speaker</td>
<td>the utterer of the sentence</td>
</tr>
<tr>
<td>[Spec, Evaluative Phrase]</td>
<td>Evaluator</td>
<td>the one responsible for judgements of quality or value of the situation</td>
</tr>
<tr>
<td>[Spec, Evidential Phrase]</td>
<td>Witness</td>
<td>the one who has the evidence regarding the truth of the proposition</td>
</tr>
</tbody>
</table>
Arguing that these subjects are null pronouns (pros), Speas’ elegant account captures vital correlations between evidentiality and logophoricity that I cannot go into here. I will only focus on her proposal that these specifiers/subjects instantiate four binding configurations that map onto the four types of evidential interpretations in natural language. This proposal is summed up in (35).

(35)

a. Witness bound by Evaluator binds Perceiver:  
   (Speaker is Evaluator, Witness and Perceiver) = personal experience  
   [SAP [EVAL [EVID [EPIST ...]]]]

b. Witness bound by Evaluator does not bind Perceiver:  
   (Speaker is Evaluator & Witness but not the Perceiver) = direct evidence  
   [SAP [EVAL [EVID [EPIST ...]]]]

c. Witness is not bound by Evaluator but binds Perceiver:  
   (Speaker is Evaluator but not Witness & Perceiver) = indirect evidence  
   [SAP [EVAL [EVID [EPIST ...]]]]

d. Witness bound by Evaluator binds Perceiver:  
   (Speaker is not Evaluator, Witness & Perceiver) = no evidence (hearsay)  
   [SAP [EVAL [EVID [EPIST ...]]]]

If Meiteilon marks only indirect evidence, then this basic configuration must never change, irrespective of whether the evidence in question is a simple noun phrase or a clause. Therefore, Speas’ roles should not embed, or if they do, they must be strictly anaphoric, as any change will lead to a different evidential system. If this is correct, then whereas factivity relates to selection and embedding, evidentiality must always be a root property, and must be evaluated at the root. In fact, the absence of Mood_EVIDENTIAL and Mood_EVALUATIVE as V-related heads in the cartography of Meiteilon embedded domains clearly signals this. We also expect this basic difference to be preserved in terms of marking, that is, evidentiality on the root and factivity on the complement, rather than both on the complement, as it was suggested earlier. Thus, the háy-elements in (31) cannot be complementizers, but rather verbal counterparts of the indirect evidential suffix found in simplex clauses. Concretely, I propose that háy be analyzed as a light verb in the head of v*.

3.3 The distribution of Meiteilon complements

This section argues that the ‘say’ elements in (31) spring from the merging of “say” in v*. In order to understand their status, we must understand the mechanism for the selection of factive/propositional clausal complements. In this, Barbiers’ (2000) analysis proves useful.

3.3.1 The factive versus propositional distinction

Barbiers argues that it is fallacious to hold that all CP complements constitute a uniform syntactic class in Dutch, because propositional complements, factive complements and
quotes are merged in structurally distinct positions. He observes that in the abstract underlying order \([S Y V S V O V]\), direct merging in Y applies only to factive CPs, in X only to propositional CPs, and in O only to quotes. On the basis of substantial evidence, Barbiers identifies X to be the right-hand sister of the matrix verb, Y to be an adjunct position to an extended projection of V, and O to be \([\text{Spec, AgrOP}]\), the position of DP complements. He further proposes that the true argument of the factive CP (\(\text{Spec, AgrOP}\), in his terms, updatable to the edge of v* in current formulations) is taken by an empty pronoun that is interpreted as an element of the set denoted by the root of the verb. Thus, the factive interpretation of *John said that Mary would call* may be described as “John said it, that Mary would call.”

On the face of it, none of this has much relevance to Meiteilon, where both propositional \(\text{háyn}\) and factive \(\text{háyb}\) complements, as well as quotative uses \(\text{háyn}\), appear to surface in identical positions – generally, the preference is for initial position, although a medial position (between the external argument and the embedding predicate) is also available. Yet, looking at the morphology of these *say* elements and at its interaction with other morphology in root clauses leads us to conclusions similar to Barbiers’: factive complements end up higher than propositional and quotative complements.

Consider, first, the distinction between the propositional use of \(\text{háyn}\) and \(\text{háyb}\). As already mentioned, \(\text{háyb}\)-complements have the ultimate distribution of DPs and can raise out of v* into the left periphery, whereas \(\text{háyn}\) complements cannot. The data in (36) confirm this conclusion.

In (36a) (resuming (28b)) the lexical verb *say* allows either \(\text{háyb}\) or \(\text{háyn}\) complements; however, when the matrix verb is also marked for indirect evidentiality, as in (36b–c) only \(\text{háyn}\) complements are allowed. The problem is that \(\text{háyb}\) complements tolerate a double marking of indirect evidentiality. Intuitively speaking, this restriction must be traced to Agree: if v* is already specified as indirect evidence, it cannot probe for the external merge of a \(\text{háyb}\) complement. Then if \(\text{háyn}\) complements are acceptable in a context in which the matrix v* is specified for indirect evidentiality, they must not merge as high as v*.

As Chelliah (2007: 305) points out, (36b) instantiates a quotative use of \(\text{háyn}\), where the speaker makes it clear that she does not claim direct perceptual evidence for the report. As (37) shows, such distancing can be further extended.

(37) **Tomba-na** ([Tombi í táb-r-e háyn] háy-romm-i háy-ve

In (36a) (resuming (28b)) the lexical verb *say* allows either \(\text{háyb}\) or \(\text{háyn}\) complements; however, when the matrix verb is also marked for indirect evidentiality, as in (36b–c) only \(\text{háyn}\) complements are allowed. The problem is that \(\text{háyb}\) complements tolerate a double marking of indirect evidentiality. Intuitively speaking, this restriction must be traced to Agree: if v* is already specified as indirect evidence, it cannot probe for the external merge of a \(\text{háyb}\) complement. Then if \(\text{háyn}\) complements are acceptable in a context in which the matrix v* is specified for indirect evidentiality, they must not merge as high as v*.

As Chelliah (2007: 305) points out, (36b) instantiates a quotative use of \(\text{háyn}\), where the speaker makes it clear that she does not claim direct perceptual evidence for the report. As (37) shows, such distancing can be further extended.
This second remove from the evidence is implemented by the addition of another layer of complementation by a lexical reportative predicate. The quotative use is thus built upon the propositional one: the selection of the háyn complement is determined by the propositional nature of the main predicate say; so the háyn clause is externally merged in the VP of the matrix predication. Further removes, on the pattern in (37), are built up by recursive merging of the lexical report verb.

3.3.2 The distribution of háy-

Consider now the distribution of háy-. The first issue here is to account for the fact that háy- ends up marked on the complement rather than on the head that ultimately substitutes into the matrix v*. The solution originates, once again, in Chomsky’s (2007) proposals of transfer/inheritance of features from phasal heads to other heads in its domain, relying on a v*-V connection, as “we would expect the inheritance mechanism to apply not just to C, but to phase heads generally, hence also v*” (Chomsky 2007). Suppose, then, that in háyb and háyn constructions, a transfer of evidentiality features from v* to V (or root) takes place. What exactly is the evidentiality feature? To understand this, I turn to Klamer (2000), who analyses the semantic bleaching of report verbs in terms of a loss of argument structure. She sees the trajectory of grammaticalization as the change from a lexical entry such as in (38) to a functional entry as in (39), where (39) is a “lexical impoverished element, a generic item REPORT only - a category-neutral item without derivational or inflectional morphology” (Klamer 2000: 945).

In a minimalist framework, (39) displays a lexical item with a [V] feature and an edge-feature (EF) that trigger merging with a C-phase. By virtue of its impoverishment under grammaticalization, this element retains only its categorical features, having lost all the inflectional (uninterpretable) features; hence, this element is not a probe. Along these lines, háy simply merges with the complement clause, resulting in the form [CP háy].

Furthermore, since no Agree relation takes place in such merger, constituents in the CP complement remain active for further Agree relations. Then, the difference between the two complements reduces to the fact that the matrix v* requires Agree and internal Merge for háyb, but not for háyn. In other words, when a háy-CP is the complement of a factive predicate it must raise to the v* edge and be valued as háyb, but when the selecting predicate is propositional, the háy-CP merges in the VP domain, and is valued as háyn.

3.3.3 Final analysis

The first issue is to identify the source of this differential treatment of propositional and factive complements. Since Kiparsky & Kiparsky (1970) through to Ormazabal (1995), it has been known that this basic distinction in selection has deep syntactic consequences. Viewed from a minimalist perspective, the distinction quite consistently relates to what
we would now construe as both v* and C phase-edge phenomena: factive predicates are incompatible with ECM and null complementizers (as in (40)) and show weak island effects (as in (41)), while pure propositional complements do not exhibit these restrictions.

(40)

a. I regret *(that) he did this.
b. I believe (that) he did this.

(41)

a. *Who do you regret likes this book?
b. Who do you believe likes this book?

A proposal that factive complements in general require displacement to the edge of v* seems plausible, particularly as it can derive the cluster of properties just mentioned. From what essentially reduces to an object shift analysis for factive complements, a presuppositional interpretation is expected along the lines in Diesing (1992), as such raising (ultimately) moves the complement out of the nuclear scope. Weak island effects may also accrue, as presumably this involves extraction from within a clausal category at the left edge of v*. Further, the obligatoryness of a lexically filled complementizer can also be accounted for if what v* probes for is a particular feature on C in the case of factive complements.

Meiteilon morphology signals quite clearly that the selection is for a feature on C, as it can be no accident that -háyb is homophonous with the irreals -p, identified in the previous sections as the head of Mood_{IRRREALIS}, which is the C-head in Meiteilon and so, it is responsible for transfer/inheritance of features. I therefore conclude that (42)

must hold quite generally.

(42) Factive complements undergo object shift.

Now, if (42) is indeed correct, we have a problem: if, as I suggested in section 2.2, the Meiteilon v* inherits its evidentiality feature from C, the merger of the factive complement must wait until C is merged, and such transfer/inheritance to take place before it merges. However, by the PIC, this would be impossible, because as soon as the v* phase is complete, all members of its domain are rendered inert with respect to operations. The háyb complement clause, merged in the complement domain of v, will simply be invisible, and cannot actually raise to the edge of v*.

Therefore, (42) and the proposal that the evidentiality feature is transferred from C to v* are incompatible. Accordingly, the earlier supposition that C may actually transfer features to v* cannot hold. Note also that what the Meiteilon facts indicate is simply that Meiteilon locates Mood_{EVIDENTIAL} in the v*, but not that transfer/inheritance is necessarily implicated (as it is in cases of phase-internal transfer of the evidentiality feature from v* to V). Then, this wholesale relocation of a projection of Cinque’s hierarchy must take place in the assembly of the Meiteilon LEX from the universal feature set, rather than in the syntax. Although a wider range of languages need to be evaluated before a conclusive answer is to be found, it seems to me that the constraints imposed by the PIC would require (43) to hold cross-linguistically.

(43) Transfer/inheritance of features may not cross phase boundaries.
4. Conclusion

I began this paper with a set of questions about how the relation between cartographic heads and phasal heads (C and v*), as well as heads between the Rizzi and Cinque cartographies is to be modeled. The analysis here suggests that cartographies, even as they are finer delineations of the feature structure of the phasal heads, also bear more directly on phase-based computation, as they turn out to be the elements manipulated by feature transfer/inheritance processes that hold internal to phases.

References

(39) S → S
   S → NP VP NP VP
   NP: He REPORT
   VP: go

(40) S → S
    S → REPORT NP VP
    NP: I
    VP: go