The syntax of Q in Manipuri *wh*-questions

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Abstract

Abstract: This paper investigates the syntax of Q-particle(s) in three basic, yet structurally distinct, types of Manipuri questions and proposes an account based on feature valuation of a high probe head FOC, and a lower phase head Top – both of which are discourse opposites in terms of their feature matrixes. Drawing evidence from the paradigm of multiple *wh*-questions as well as cleft constructions, the crucial claim in the paper is that what looks like *wh*-movement is actually just focus movement, and what looks like cleft constructions are the result of a biphrasal structure born out of pragmatic/discourse needs of separating new from old information. This proposal, centered around the extremely understudied language Manipuri, thus departs from most analyses of Q-particles in the *wh*-questions literature as well from most analyses in the clefts literature.

1 Introduction

Manipuri, also called Meiteilon, is an agglutinative, pro-drop, SOV language belonging to the Tibeto-Burman family of languages, and is spoken primarily in the North-East Indian state of Manipur. Very few formal theoretical linguistic studies exist of this language. This paper looks at the paradigm of *wh*-questions and Q-particles in the language. Thangjam (2003) notes that Manipuri *wh*-questions are formed by leaving the *wh*-words in situ, shown in the simple declarative vs. question comparison in below:

(1) a. *Tomba ca thək-i*
Tomba tea drink-IND
'Tomba drinks tea.'

b. *Tomba kəri thəki?*
Tomba what drinkə-IND
'What does Tomba drink?'

However, as Manipuri is a relatively free word order language and does allow significant amounts of scrambling, the interaction of Q-particles with such configuration quickly lead to complicated empirical paradigms. The nature of the problem to be pursued in this paper is described below.

1.1 Manipuri Q-particle paradigm

There are essentially three ways to ask a *wh*-question in Manipuri:

(2) *Kəna kəythel-də cət-li?* TYPE 1
who market-LOC go-PROG
'Who is going to the market?'

(3) *Kəna kəythel-də cət-li-**no**?* TYPE 2
who market-LOC go-PROG-NO
'Who is going to the market?'

(4) *Kəna-**no** kəythel-də cət-li-**do**?* TYPE 3
who-NO market-LOC go-PROG-DO
'Who is it (that is) going to the market?'

The question in (2), which I term the TYPE 1 question, has no particles marking it as a *wh*-question, and both the presence of the *wh*-word and sentence final rising (question) intonation serve here to distinguish it from an assertion. In the question in (3), which I term the TYPE 2 question, the particle *no* is present clause- finally. This particle has been labeled as the Q-particle in the language (Thangjam 2003), and I will refer to it as the same.[1]. This Q-particle only appears in *wh*-questions in the language, and never in polar or other forms of canonical or non-canonical questions. The question in (4), which I term the TYPE 3 question, crucially differs from the TYPE 2 question in that the Q-particle *-no* is on the *wh*-phrase here, and there is a particle *-do* on the verb. Before we investigate the nature of the particle *-do* in Manipuri, one crucial observation needs to be made: *-no* cannot be present on the *wh*-phrase if the *-do* is omitted on the verb, shown below:

(5) *Kəna-**no** kəythel-də cət-li-*(**do**)?*
who-NO market.LOC go.PROG-DO
'Who is it (that is) going to the market?'

This dependency between the particles is seen only in TYPE 3 questions, when the Q-particle is on the *wh*-phrase. In the TYPE 2 question, when Q-particle is on the whole question, *-do* is not required to be present, and its presence on the verb results in ungrammaticality.In Section 2, I will show that *-do* marks familiarity or givenness in the language.

Thus, the question of importance here is: why does the presence of the Q-particle on the *wh*-phrase mandatorily trigger the presence of a familiarity marker (which canonically occurs on DPs) on the verb, and why does the presence of the Q-particle on the whole question not do the same?

TYPE 3 questions have another important property, in contrast to the other two types. A TYPE 3 question such as (4) is always accompanied by a cleft-like interpretation: 'Who is it (that is)

[1]Note that the language has different particles for polar questions – *ra*, *bara* – none of which will be under the purview of this paper

going to the market?' Native speakers consistently judge this sentence as having a strong existence presupposition that is not present in the other two variants of the question.

There have been numerous analyses that claim the *it*-cleft declarative equivalent in English 'It is Sally who is going to the market' is a bi-clausal structure, with one clause containing the expletive pronoun, while the second clause is a headless/free relative (Heggie 1990, Percus 1997, Kiss 1998, Pavey 2008, Den Dikken 2013). I will depart from all of these analyses in claiming that what looks like the cleft construction in Manipuri is not actually a division between a relative and non-relative clause, but an information structure-driven bipartite structure – where the sentence is divided into a [FOCUS phrase][GIVEN phrase]. This analysis might remind the reader of Meinunger 1998's monoclausal analysis of English *it*-clefts; however, the analysis in this paper will depart from Meinunger's analysis in crucial respects.

The paper is organized as follows: Section 2 explores the function of the *-do* particle in the language. Section 3 lays out the main proposal with respect to a theory of feature inheritance, and outlines the derivation of each type of question within this theoretical framework. Section 4 explores multiple *wh*-questions and their interaction with Q-particles in-depth. Section 5 undertakes a discussion of the parallels with declarative clefts and how the current analysis can account for them. Section 6 explores pertinent questions relating to embeddability and selection. Section 7 compares the current analysis with previous analyses of Q-particles and Section 8 concludes.

2 The Status of *do*

To better understand the *-no -do* questions, an investigation of the status of the *-do* particle itself is in order. Presented below are some diagnostic tests (adopted from Gundel and Fretheim 2004, Yeo 2010) as evidence for my claim that *do* has an independent status of being a familiarity or givenness marker in Manipuri. A question such as in (6) can be answered with (7), where *-do* is on the discourse-old element *bharot* 'India':

(6) *bharot cricket WC final kənagə sa-nəj?*
India cricket WC final who-with play-PAST
'Who did India play in the Cricket World Cup final?'

(7) *bharot-do Australia-gə sa-nəj*
India-DO Australia-with play-PAST
'India played Australia.'

But the answer to the question cannot be (8), where *-do* is on the answer, or the new element in the discourse 'Australia':

(8) ?? *bharot Australia-do sa-nəj*
India Australia-DO play-PAST
'India played Australia.'

Another test is Left Dislocation. Left dislocation of the *-do* marked constituent is possible, shown below:

(9) *əj-gi ice-do, ma-di school-gi oɟa ni*
I-GEN sister-DO, 3P-top school-GEN teacher COP
'My sister, she's a school teacher.'

-do cannot occur attached to indefinite NPs, or to non-referential NPs:

(10) * *thoŋnaw əmə-do, həwjik-phok haŋ-li*
window one-PROG, now-still open-PROG
'A window, its still open.'

(11) * *ŋəsi kəna-əmətə-do lakte*
today some-one-NEG-DO come-NEG.
'Nobody came today.'

-do can appear on entities that usually have the highest degree of referential givenness or definiteness:

(12) *Bharot-ki cricket team-do, mə-khoj Australia-gə sa-nə-bərə?*
India-GEN cricket team-DO, 3P-COL Australia-with play-act.verb-polar
The Indian cricket team, did they play Australia?'

Lastly, as we will see more of in Section 5 5, the declarative cleft-like construction in Manipuri is formed with the *-do* particle on the non-specificational part of the structure:

(13) *Tombə-nə-ni jum ləj-r-i-do*
Tomba-NOM-COP house buy-PERF-IND-DO
'It is Tomba (who) bought a house.'

All these tests provide compelling evidence that the particle *-do* is a topic/familiarity marker in Manipuri. While a full investigation of all the presuppositional contexts that *-do* can or cannot appear in would be interesting, it is beyond the purview of this paper. The fact that *-do* can mark discourse-old information will be sufficient to aid us in understanding its presence in *wh*-questions, along the lines of the analysis presented in this paper.

The main crux of the analysis to be pursed in this paper can be summed up as follows. It has been widely assumed in the literature that *wh*-words are inherently focused or F-marked, and thus carry, in addition to a [+wh] feature, a [+FOCUS] feature (Jayaseelan 1996, Sabel and Wolfgang 2001, Sabel and Zeller 2006, Haida 2012). Following that assumption, I claim that Manipuri *wh*-words carry the interpretable feature matrix [*i*Wh, *i*F]. Redefining traditional theories of *feature percolation* (cf. Webelhuth 1989, Ortiz de Urbina 1990, Moriz and Valois 1994, Yoon 2000), which allowed transfer of features from a dominated element to its maximal projection in a rigidly local (Spec-Head)

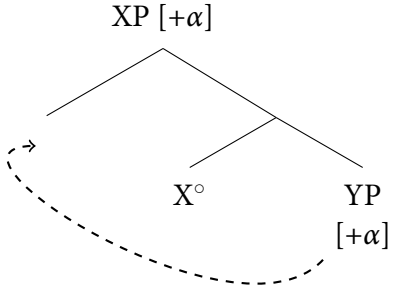
configuration, I propose a new system of feature percolation where an XP containing an element Y with the feature [+α] becomes [+α]. The transfer of the relevant features [iWh, iF] is obligatory from the original element bearing it to the till the next strong phase projection. Thus, the claim is that in Manipuri *wh*-questions, the CP always carries the feature matrix [*i*Wh, *i*F] by feature percolation from the *wh*-word, which stops at the CP, given its phase-bound nature. Keeping this system in mind, the entire paradigm of *wh*-questions described above is derived as resulting from the feature valuation (via AGREE) of either one probes, two probes or no probes being present at all. Cleft-like interpretations as well as the empirical facts encompassing multiple *wh*-questions can all be captured by this analysis.

I first begin by exploring and outlining the proposed theory of feature inheritance, contrasting it with previous formulations, and then outline the derivation of the relevant patterns.

3 A theory of feature inheritance

Feature Percolation (Webelhuth 1989, Ortiz de Urbina 1990, Moriz and Valois 1994, Yoon 2000) traditionally has been a theory of transfer of features from a dominated element to its maximal projection in a rigidly local configuration. The mechanism is illustrated in (14) below:

(14)



The element YP originally has the feature [+α]. When this element moves to the specifier of some XP, it agrees with X° via Spec-Head Agreement. This agreement allows the whole XP to get the feature [+α], by a transfer of features from the spec to the XP, termed formally as *percolation*. This XP now can move to higher positions to check the [α] feature of other heads.

This mechanism, therefore, allows for large XPs to get a feature that an element in their specifier has, by agreement of that element with the head of the XP. This mechanism has been particularly fruitful in accounting for pied-piping phenomena - where larger structures containing an operator display the same syntactic behavior as the operators themselves. For example, a structure larger than just the original element Y with a relevant feature can move to a position reserved for Y. The grammaticality of all the sentences in (15), where it is not just the *wh*-word which has moved to [Spec, CP], have been analyzed to be a result of feature percolation of the [wh] feature to the entire maximal projection containing it:

(15) a. Which man did you see? — whole DP pied-piped

b. Whose problem did he solve? — whole possessive DP pied-piped

c. With whom did you go? — whole PP pied-piped

(Ortiz de Urbina 1990; 1-3)

Crucially, though, all the accounts of pied-piping that posit such a system of feature percolation, have two stringent constraints on percolation:

(16) a. Percolation is quite strictly forbidden from any structural position, i.e. any argument position. It has to be from a specifier position.

b. Once the feature has been percolated from the element Y in the Spec of an XP to the XP, the relevant feature on Y is no longer syntactically active or accessible.

The theory of transfer of features presented in this paper shall differ from traditional theories in both these conditions. I undertake a brief review of the previous theories of feature percolation below, and then outline my main proposal.

3.1 Previous theories of Feature Percolation

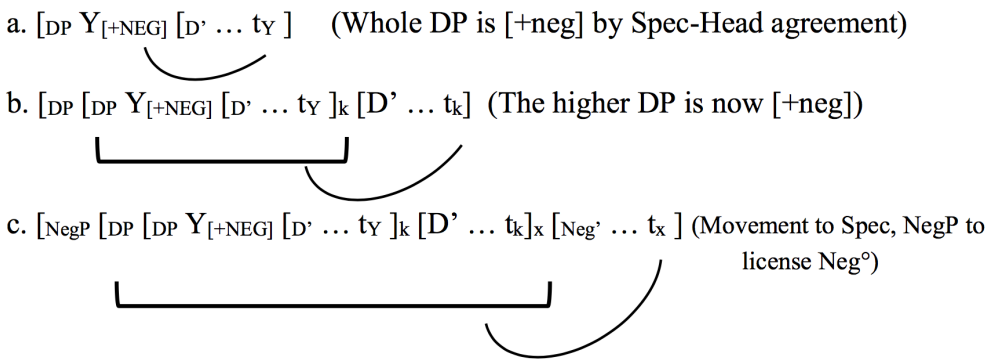
While Webelhuth's (1989) proposal made the claim that only non-θ-marked specifiers could be pied-pipers, i.e. percolators of features, Ortiz de Urbina (1990) and Moriz and Valois (1994) both allow for specifiers of all projections to be legitimate percolators of features. Thus for Webelhuth, possible percolators of features are only specifiers of DP, AdjP and AdvP, but not of IP, while the other two analyses allow specifiers of any XP (even functional ones) to transfer features up to the immediately dominating XP. A critique of Webelhuth's account found in Ortiz de Urbina (1990) is the existence of an important gap - the fact that although the specifier of CP is a non-θ-marked specifier, it does not seem to be a percolator. Thus, Webelhuth's theory cannot account for the ungrammaticality of (17) :

(17) *What John said do you know?

Webelhuth ascribes the ungrammaticality of (17) to the presence of a phonologically inert WH-complementizer in Germanic languages in embedded questions such as (17), which blocks feature percolation from taking place from the specifier to the whole clause. Ortiz de Urbina (1990), however, finds this argument unappealing and posits a theory where all specifiers, including [Spec, CP] can be pied-pipers, i.e. *wh*-words can percolate their operator feature up to CP. This crucial assumption helps derive the the ungrammaticality of (17).

Moriz and Valois' (1994) theory of feature percolation has a condition which states that a functional head Y carrying a given feature α must be licensed by an XP that bears the same feature. Like the analyses before them, Moriz and Valois allow for transmission of the proper feature to an XP obligatorily via specifier-head agreement. This XP can then move to the spec of a higher projection to check the relevant feature on the head of the higher projection, resulting in a pied-piping structure. Crucially, their theory also allows the possibility of recursive applications of both specifier-head and pied-piping in the following manner:

(18)



In this analysis, therefore, specifier-head agreement and consequently pied-piping is crucially cyclic in nature. In my analysis, laid out below, I retain this recursive nature of the process of feature inheritance, but depart from the mechanism of cyclic application.

3.2 Proposal

The main tenets of my proposal (which are also the crucial points of departure from traditional theories of feature percolation) are enumerated as follows:

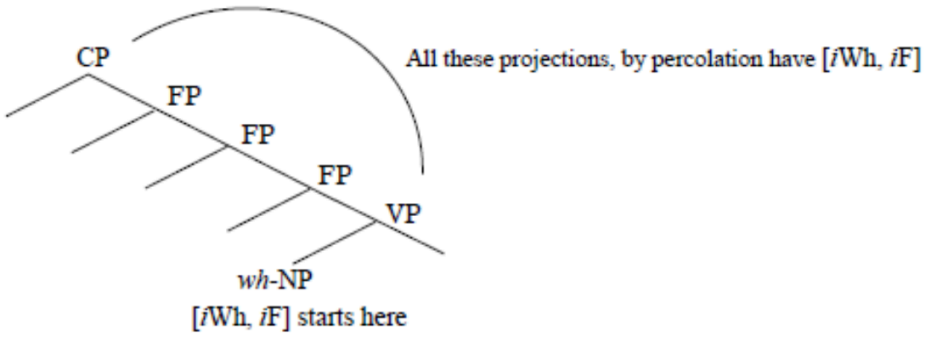
- In this system, the transfer of the features [iWh, iF] is obligatory from the original element bearing it – i.e. the *wh*-phrase inside the VP to the maximal CP.
- There are no configurational constraints such as Specifier-Head agreement on the transfer of operator features from an element Y to a maximal projection properly containing it.
- Even after an element Y has transferred its features to the maximal projection(s) containing it, the features remain syntactically accessible on it.

Thus, in effect, the claim here is that as soon as an XP contains an element Y with the feature [+α] on it, the XP automatically becomes [+α]. This transfer of features is not a mechanism of cyclicity as in (19), but is a mechanism of containment. So, crucially, just by containing, or dominating an element with a feature (and not just immediate domination), an XP can get the relevant feature. This feature inheritance appears to be, in principle, unbounded. However, I present evidence below justifying all three claims above and also showing that this system of transfer of features is bounded in that it is sensitive to phase boundaries in a language.

It has been widely assumed in the literature that *wh*-words are inherently focused or F-marked, and thus carry, in addition to a [+wh] feature, a [+FOCUS] feature (Jayaseelan 1996, Sabel and Wolfgang 2001, Sabel and Zeller 2006, Haida 2012). Following that assumption, I claim that all *wh*-words in Manipuri have a feature matrix consisting of two interpretable features:– an interpretable *wh*-feature [*i*Wh], and an interpretable Focus feature [*i*F]. One important assumption of a theory of feature percolation as outlined above is that feature percolation, in essence, is obligatory. There is

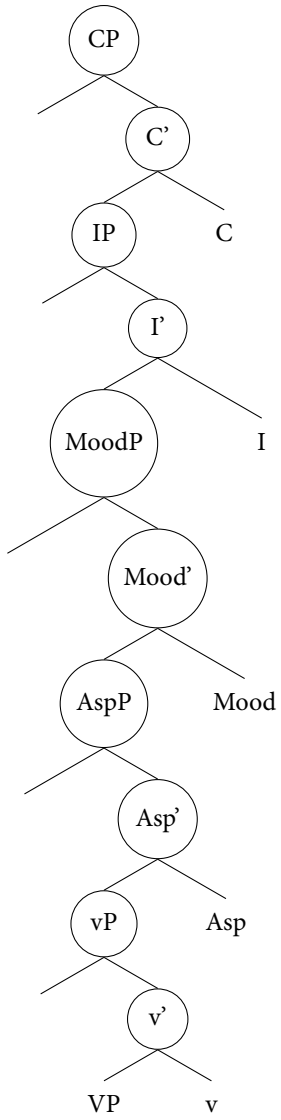
no mechanism in the system that stops the feature bundle from percolating from the *wh*-word word that originally has it to all the projections that dominate it and form its extended projection. So, for example, in a structure such as the one below, all the functional heads in between the *wh*-NP and the CP have the feature matrix [*i*Wh, *i*F]:

(19) Feature Percolation



I will assume the following structure to be the basic spine of a Manipuri sentence:

(20)



This structure is in accordance with results from previous investigations of the Manipuri left periphery in Kidwai (2010), Oinam (2011). What is important to us here, in terms the central question in this paper, is: where does the percolation of features start from and where does it stop?

Assuming that the *wh*-phrase is base-generated inside the vP, the immediately dominating XP is the vP, and it inherits the feature matrix [*i*Wh, *i*F] by the process of feature percolation. This happens irrespective of whether it's a subject *wh*-question (*wh*-word generated in [Spec, vP]), or an object *wh*-question (*wh*-word generated as complement of V), or an adjunct *wh*-question. The circled nodes mark the extended projection of the V, given Grimshaw (1991)'s definition of an extended projection – the larger projections of a head providing categorial identity is preserved, and the elements in the projection have a particular relationship in terms of functional values (F-values). The circled nodes in the tree match these criteria and form a single verbal extended projection. If the *wh*-question is an object *wh*-question, then the VP gets the feature matrix [*i*Wh, *i*F] first, from the *wh*-word it contains, and then feature percolation happens along the whole extended projection, i.e., along Asp',

AspP, Mood', MoodP, I', IP, C', CP. The whole CP then gets a feature matrix identical to that of the *wh*-word. If the *wh*-question is a subject *wh*-question, then, assuming that the little *v* introduces the subject, the *v*P gets the *wh* feature matrix, and the same process of feature percolation just described, follows.

However, there is one important distinction that needs to be made between all the projections that have the feature versus those that are movable. Following Chomsky (2001)'s formulation of phases, where, if a phrase is a phase, i.e. an opaque interface unit, then it has the freedom to be movable – I will claim that in this system only the original *wh*-DP and the CP projections are movable. None of the intervening F projections are movable. This claim then essentially amounts to saying that the DP and the CP projections are phases, and that additional property will not make much of a difference to the analysis proposed in this paper. The property of movability, however, will have some interesting consequences in terms of grammaticality contrasts in the language.

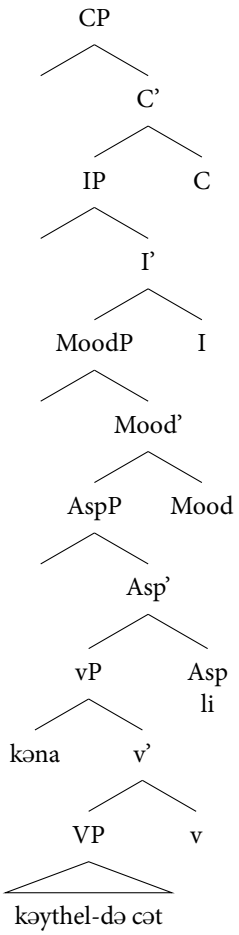
Now that the framework of feature percolation has been outlined, we can proceed to the derivation of the 3 types of questions that form the central focus of investigation of this paper. In essence, the main claims can be described as follows. The different possible syntactic positions of the Q-particle *-no* are a result of different chunks of structure Agree-ing with a interrogative FOC head with the uninterpretable feature matrix [*u*Wh, *u*F]. These different chunks of structures are legitimate goals of the FOC Probe because of the *wh*-word with the matrix [*i*Wh, *i*F] which transfers its features to the XPs above it until they encounter a strong phase projection, i.e. the CP. There are no strong phases intervening between the *wh*-word and the CP, and thus no mechanism in the syntax to stop the features from getting transferred. The Q-particle *-no* is thus a morphological marker of this Agree relation between the probe $\text{FOC}_{[uWh,uF]}$. and the goal $\text{CP}_{[iWh,iF]}$.

3.3 TYPE 1 Questions

The TYPE 1 question is the basic structure of *wh*-questions in Manipuri. There are no Q-particles, and no movement. So the structure of a TYPE 1 question, as in (21), is shown below:

(21) *Kəna kəythel-də cət-li?*
who market.LOC go.PROG
'Who is going to the market?'

(22)



Given the theory of feature percolation proposed in this paper, the whole CP would have the same feature matrix as the *wh*-word in [Spec, vP]. That result would in no way be inconsistent with traditional assumptions of *wh*-questions in general. The more interesting cases are the TYPE 2 and TYPE 3 questions.

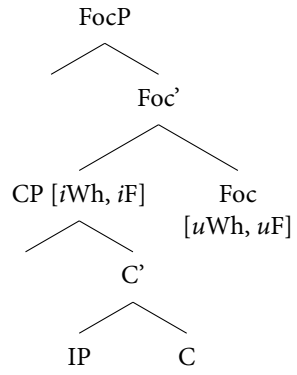
3.4 TYPE 2 Questions

Both the TYPE 2 and TYPE 3 questions differ from TYPE 1 question in that there is a high clause-external FocP in the derivation. Lets first examine the TYPE 2 questions (the one with the clause-final Q-particle *-no*) in detail. All TYPE 2 questions in the language have this focus projection.

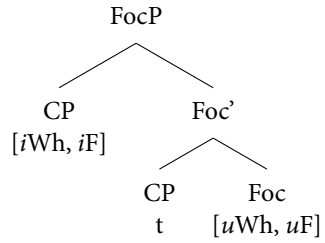
This high Focus head, is special in that it is an *interrogative focus* head, as opposed to regular FOC heads that languages have which have familiar information structural properties like exhaustivity, exclusivity, etc. The interrogative FOC head that dominates the CP has a feature matrix composed of two uninterpretable features – an uninterpretable Wh feature and an uninterpretable Focus feature :- [*u*Wh, *u*F]. These strong uninterpretable features must be deleted/checked by LF (Chomsky 2001). This property of its feature matrix makes this FOC head a probe that looks down its c-command domain for potential goals that can value its uninterpretable features.

This FOC probe would find the *wh*-word as its goal, except, by the mechanism of feature percolation in the system described above, the whole CP has the features of the *wh*-word - [*i*Wh, *i*F]. Thus, the FOC head finds the whole CP as its goal in the structure shown in (23a). This results in a MATCH of features between the probe and the goal, and an AGREE operation takes place (Chomsky 2001). The FOC head then moves the whole CP into its Spec to check its unvalued features, resulting in the structure shown in (23b).

(23) a.



b.



Crucially, as a result of this AGREE operation, followed by MOVE, the moved element, i.e. the CP in [Spec, FocP] gets marked with the particle *-no*.

Thus, the claim here is that *-no* (which, diachronically, has been argued to be an amalgamation of the copular element *n* and the interrogative mood *o* in the language (cf. Chelliah 1997) is just a morphosyntactic strategy that Manipuri employs to mark agreement with a high interrogative Focus head, and consequent movement of the goal to the Spec of this probing projection.

By this structural analysis, a TYPE 2 question such as (24) would have the derivation just outlined in (23) above, shown in bracketed notation in :

(24) *Kəna kəythel-də cət-li-no?*
who market.LOC go.PROG-NO
'Who is going to the market?'

(25) [$_{FocP}$ kəna kəytheldə cətli$_j$-**no** [$_{CP}$ t$_j$][$_{Foc}$ ~~[*u*Foc, *u*Wh]~~]]

3.5 TYPE 3 Questions

The final type of *wh*-questions in Manipuri, is of the form shown below:

(26) *Kəna-no kəythel-də cət-li-do?*
who-NO market.LOC go.PROG-DO
'Who is it (that is) going to the market?'

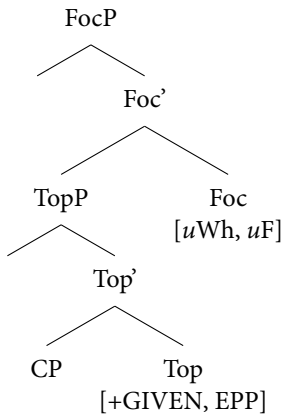
One can observe that the Q-particle is only on the *wh*-word, as opposed to it being on the whole question (as in the TYPE 2 question in the previous section). The crucial observation here is that as soon the Q-particle appears on the *wh*-word, another particle *-do* (argued to be a familiarity marker in Section 2), has to obligatorily show up on the rest of the clause. The analysis of this type of question outlined below explains why the claim is that *-do* is on the whole clause, and not just on the verb itself.

That obligatory presence of *-do* is deduced from the ungrammaticality of (5), repeated below:

(27) *Kəna-**no** kəythel-də cət-li-**(do)?*
who-NO market.LOC go.PROG-DO
'Who is it (that is) going to the market?'

The structure of TYPE 3 questions is similar to TYPE 2 in that there is a high clause-external interrogative Focus head above the CP. However, the crucial difference between the two types lies in the existence of a second strong phase head - TopP - that intervenes between the FocP and the CP. The postulation of this projection is not novel - a whole host of studies have argued for such information-structural projections in the left periphery (Rizzi 1997, Jayaseelan 2001, among others). This higher structure is shown below:

(28)



In the spirit of the featural analysis pursued in this paper, I assume that a defining property of the TOP head is that it has the feature [+GIVEN]. This feature postulates that all the information contained within the domain of this projection is information that has already been established in the discourse, and possibly exists in the common ground of the discourse participants.

In addition to having a [+GIVEN] feature, by virtue of being a phase head, TOP also has an EPP feature (cf. Chomsky 2008's *edge feature*). Thus the Top head has the feature matrix [+GIVEN, EPP],

as depicted above. The EPP feature requires the specifier position of the projection be filled, and this property plays an important part in the derivation of TYPE 3 questions.

TOP looks down into its c-command domain to find a goal that can satisfy its EPP feature, and the closest goal it can find is the whole CP. The whole CP, containing the base-generated *wh-* question, then moves to [Spec, TopP] to satisfy EPP. Crucially, as a result of this feature checking, the whole moved element gets suffixed with the particle *-do*. This appearance of *-do* in particular is by no means coincidental. The feature matrix on TOP essentially marks it as a projection that houses discourse-old information, and predictably, the goal that is moved to the specifier of this projection would be the particle that independently overtly marks familiar/discourse- old information in the language.

The resulting structure we get after these operations is the following:

(29) $[_{FocP}\ [_{TopP}$ kəna kəytheldə cətli$_j$-**do** $[_{CP}\ t_j\ [_{Top}$ ~~[+Given, EPP]~~ $[_{Foc}\ ]]]]]$

However, this structure is not the complete structure of a TYPE 3 question. The Q-particle on the *wh*-phrase is missing.

Crucially, we have another probe still looking down, needing to check and delete its uninterpretable features, namely the interrogative FOC head, on top of the TopP. Since TopP is a phase, the whole projection except its specifier position gets sent to Spell Out. The probe then can only see [Spec, TopP]. And in this specifier position the entire CP, containing the *wh*-question, is sitting after having moved there to check TOP's EPP feature. The FOC probe then pulls up the whole CP to its Spec, and marks it with *-no*, shown below:

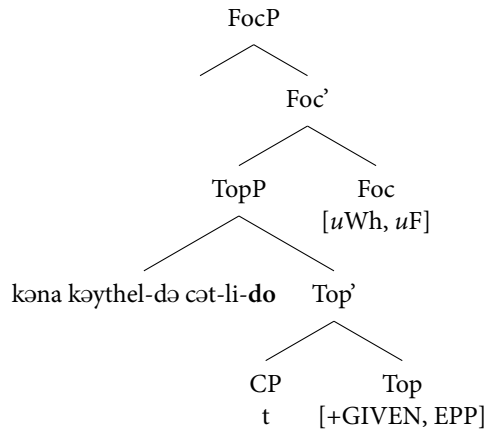
(30) $[_{FocP}$ kəna kəytheldə cətli$_j$-**do-no** $[_{TopP}\ t_j\ [_{CP}\ t_j\ [_{Top}$ ~~[+Given, EPP]~~ $[_{Foc}$ ~~[uWh, uF]~~$]]]]]$

However, such form of a *wh*-question - **kəna kəytheldə cətli-do -no* – is strictly ungrammatical in Manipuri.

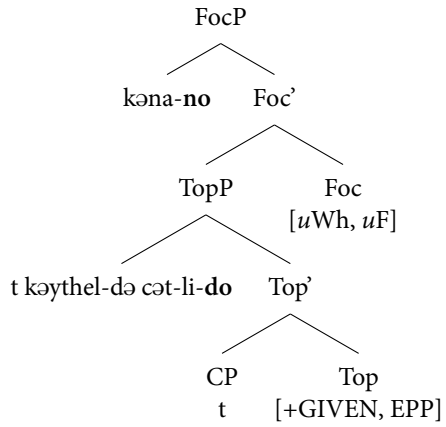
I claim that such ungrammaticality is a result of basic feature incompatibility between the Probe and the purported goal. (30) would be the result of the whole already *-do* marked CP acting as the goal of the FOC Probe. However, given the claim that *-do* marks a clause as +GIVEN, and the fact that the feature on the FOC probe is [*u*F] – there is a crucial incompatibility there. FOC cannot accept the *-do* marked CP as its goal, because it has already been typed as discourse-old information.

All is not lost, yet. The *wh*-word, even after percolating its features up to its dominating projections, still retains its [*i*Wh, *i*F] feature matrix, as per the tenets of the system of feature percolation (laid out in Section 3). Thus, it is a perfect match for the FOC head that is probing to value its uninterpretable Wh and F features. This perfect MATCH results in just the *wh*-word agreeing with FOC, and moving up to [Spec, FocP]. As we saw in the derivation of the TYPE 2 question, the results of such AGREE + Move is the overt morphological marking of the *wh-* word with *-no*. This is shown in the structures below:

(31) a.



b.



As seen in (31b), only the *wh*-word *kəna* 'who' raises to [Spec, FocP] position, leaving a trace in the [Spec, TopP] position, and gets inflected with *-no*, while the rest of the structure in [Spec, TopP] still remains marked with *-do* as a result of the previous step in the derivation.

Thus, the presence of the TopP projection turns the clause into an information-structure-driven bipartite clause of the following resulting form:

(32) [Who]$_{FOC}$ [going to the market]$_{GIVEN}$

And this structure is the exact structure in TYPE 3 questions. The cleft-like interpretation comes from juxtaposing a specificational variable against already specified information – and in this, the current analysis differs from most analyses of clefts in the literature (Section 5 will revisit this claim).

While this idea of the original element Y still retaining its features after transfer has happened is novel with respect to traditional feature percolation theories, the idea of such 'inexhaustible' features are certainly not new to theories of grammar. Chomsky (1995)'s conception of interpretable features which included categorical and nominal phi-features was basically a set of features which remain visible after checking, and cannot be deleted due to their link with the interpretive component. This is the reason an NP can move cyclically and provide phi-features along the way (Chomsky 1995: 282f). The *wh* and the focus features have the same properties in the current analysis. Even after these features have been 'transferred' or 'percolated' up such that the maximal projections containing

them all share that feature matrix, the *wh*-word itself, which comes from the lexicon bearing the interpretable *wh* and focus features still retain them and are syntactically accessible as goals for these feature probes.

An important disclaimer that needs to be made at this juncture is about the proposed properties of the features used in the current analysis and their differences from other interpretable features such as phi features. There seems to be a very fundamental disjunction between 'operator' features such as WH or Focus vs. features belonging to the inflectional system or phi-features in that the latter does not seem to be transferrable along the spine of maximal projections containing it. For example, if a DP contained in a CP is [+fem], the maximal CP will never be conceptualized to be [+fem], and neither will it syntactically behave as a constituent marked with a phi-feature. Thus, operator features seem to be more amenable to be shared by chunks of structure that are bigger than the original carrier of the feature – i.e. whole clauses can be interrogative, or focused, or given, etc. While most scholars would possibly acknowledge this non-trivial difference between the two sets of features, this difference is not formally defined in syntactic theory. I would like to stress here that the theory of feature inheritance presented here is purported to be applicable only to non-phi operator features.

3.6 Additional support for the current analysis

The system of feature percolation outlined above was shown to differ in many crucial respects from traditional theories of feature percolation. This system could capture the entire paradigm of the three types of *wh*-questions in Manipuri. In this section, I provide additional support for the current proposal over traditional theories by demonstrating that the former can correctly capture crucial empirical facts the latter cannot.

As described in Section 3, traditional theories of feature percolation require a Spec-Head configuration for the transfer of features, while the current proposal assumes dominance of the relevant heads with the relevant features is a sufficient condition for feature transfer. The ungrammaticality of sentences such as in (33) rules out a system of transfer of features along the lines of traditional theories, whereby a Spec-Head configuration is necessary.

(33) a. * *Kadai-da* *Tomba-na* *catli?*
where-LOC Tomba-NOM go-Prog.
Intended: 'Where is Tomba going?'

b. * *Kadai-da* *Tomba-na* *catli-NO?*
where-LOC Tomba-NOM go-Prog-NO
Intended: 'Where is Tomba going?'

This paradigm tells us that Manipuri does not allow the *wh*-word to raise to [Spec,CP] and thus feature transfer cannot happen from the specifier position of the CP to the maximal CP. To still keep alive the argument that the transfer can happen only from the Spec, one would have to claim that for a TYPE 2 question to be grammatical, the whole IP raises to Spec, CP first – an argument that would be hard to motivate. The *wh*-in situ versions of (33) are given below, and both are grammatical:

(34) a. *Tomba-na kadai-da catli?*
Tomba-NOM where-LOC go-Prog.
'Where is Tomba going?'

b. *Tomba-na kadai-da catli-NO?*
Tomba-NOM where-LOC go-Prog.NO
'Where is Tomba going?'

The question in (b) is a TYPE 2 question, where the whole CP is a goal for the FOC probe. Thus, features got transferred from the *wh*-word to the CP properly containing it without requiring a Spec-Head relationship. Thus, the current analysis, which rules out the need for any locality based constraints such as a Spec-Head configuration for transfer of features, makes correct empirical predictions.

Further evidence for the proposed system of feature inheritance can also be found in possessive DP constructions containing a *wh*-word in a possessor position:

(35) a. *nəŋna [kəna-gi ləirik-no] pa-ri-do*
you-NOM who-GEN book-NO read-PERF-DO
'Whose book is it (that) you read?'

b. *nəŋna [kəna-gi-no ləirik] pa-ri-do*
you-NOM who-GEN-NO book read-PERF-DO
'Whose book is it (that) you read?'

While the construction in (b) where just the *wh*-word AGREEs with FOC and gets *-no* marked is possible, the construction in (a) shows us that the Wh and F features can get transferred from the *wh*-word to the whole DP, thus allowing the latter to be *-no* marked[2].

However, Manipuri does have some restrictions on the distribution of Q – it is not allowed in between a postposition and its complement nor between Ds and their NP complements, shown below:

(36) a. *Tombənə [kana-ga-no] wari sanakhrido*
Tomba-NOM who-with-NO conversation talk.PAST.DO
'Who is it (that) Tomba spoke to?'

b. * *Tombənə [kana-no-ga] wari sanakhrido*
Tomba-NOM who-NO-with conversation talk.PAST.DO
Intended: 'Who is it (that) Tomba spoke to?'

[2]The piece of data in (b) however seems to suggest that feature inheritance is not phase-bounded in this language at all, because the FOC probe can look inside a possessed DP, which has been treated as a phase in various accounts. I claim however, that in Manipuri, possessive DPs are weak phases and thus do not block agreement, while in Sinhala (more discussion in Section 7) they are strong phases which block agreement.

(37) a. *Tombənə [kərəmbə lajrik no] ləjkhrido*
Tomba-NOM which book NO buy.PAST.DO
'Which book is it (that) Tomba bought?'

b. * *Tombənə [kərəmbə-no lajrik] ləjkhrido*
Tomba-NOM which-NO book buy.PAST.DO
Intended: 'Which book is it (that) Tomba bought?'

Till now, we explored the syntax of single *wh*-questions, and saw how the three types of questions are derivationally distinct. The same paradigm of TYPE 1, TYPE 2 and TYPE 3 can be found in multiple *wh*-questions in the language, discussed in the following sections. Data from multiple *wh*-questions will also be crucial in justifying the position taken in this paper that what looks like clefts in the language are just discourse-driven bi-clausal structures.

4 Multiple *wh*-Questions

The data below are examples of multiple *wh*-questions in Manipuri which are of the TYPE 1 variety, i.e. they are the base structure without any of the particles we have been looking at so far.

(38) a. *kəri kənanə lot-khi?*
what who-NOM hide-PERF
'What who hid?'

b. *kənanə kəri lot-khi?*
who what hide-PERF
'Who what hid?'

One can observe in the data that Manipuri, like other free word-order languages, seem to lack any kind of Superiority Effects. I assume that the orders in (38) (and possibly more orders when more *wh*-words are present) are achieved by some kind of local A' movement – either focus movement or short-distance scrambling of *wh*-words.

In terms of the answerhood statuses of the scrambled vs. base-generated questions in (38), native speakers allowed both pair-list readings as well as single pair readings, and judged no distinction in the answers in terms of which *wh*-word comes first in each question. The set of pair-list answers in (39) and the single pair answers in (40) are both felicitous for both questions, with no difference in intonation or prosody. The form of the answers should however, match the form of the question.

(39) a. *Tomba-nə lairik lotkhi, Thoibi-nə pen lotkhi, Mary-nə bag lotkhi*
Tomba-NOM book hide-PERF Thoibi-NOM pen hide-PERF, Mary-NOM bag hide-PERF

b. *Lairik Tomba-nə lotkhi, pen Thoibi-nə lotkhi, bag Mary-nə lotkhi*
book Tomba-NOM hide-PERF, pen Thoibi-NOM hide-PERF, bag Mary-NOM hide-PERF

(40) a. *Thoibi-nə pen lotkhi*
Thoibi-NOM pen hide-PERF

b. *Pen Thoibi-nə lotkhi*
pen Thoibi-NOM hide-PERF

This set of facts leads us to believe that both questions in (38) are equal in terms of information structure as well as semantics, even if one of them constitute a difference from the 'base syntactic SOV form. Of greater interest to us are multiple *wh*-questions of TYPE 2 and TYPE 3, where the position of *wh*-words in the syntax interact with the presence of Q-particles, leading to interesting results.

4.1 TYPE 2 Multiple *wh*-questions

The data below show us that multiple questions can be marked with the particle *-no*, yielding grammatical results.

(41) a. *kəri kənanə lot-khri-no?*
what who-NOM hide-PERF-NO
'What who hid?'

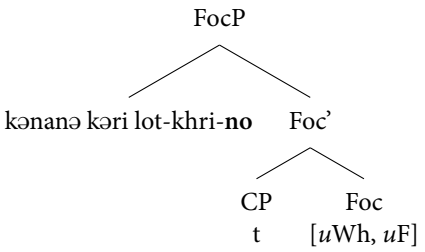
b. *kənanə kəri lot-khri-no?*
who what hide-PERF-NO
'Who what hid?'

As with the TYPE 1 variants of the same questions above, there are no distinctions in meaning or prosody between the two *-no* marked questions in (41). Derivationally, we do not need to make any auxiliary assumptions to generate them. They can be generated by the system outlined for the TYPE 2 single *wh*-questions.

The derivation would run as follows: There is a high clause-external FocP, which is a probe for the interpretable features Wh and F. It finds the whole CP as its goal, because by the mechanism of feature percolation, the CP has the feature matrix [*i*Wh, *i*F]. A clarificational comment about the nature of feature percolation when there are two source percolators, i.e. two *wh*-words, are in order. Even when there are two *wh*-words which could both transfer their features upwards, imaginably the whole extended projection gets the feature matrix from one *wh*-word. This follows from the inherent principles of economy present in grammar – features simultaneously percolating up from two *wh*-words would not result in double instances of the feature matrix in question on the extended projection. Also, even after their features have percolated, they still remain active on the *wh*-words, as assumed by the system of feature percolation laid out in this paper. Thus, it is not crucial for us to go into the details of which *wh*-word percolates its features, and which ones do not, in a multiple *wh*-question scenario – it is sufficient to know that the features percolate to the highest projection in the extended projection, and that projection then becomes a possible goal for relevant probe(s).

Returning to the question of derivation of TYPE 2 multiple *wh*-questions, after the FOC head finds the CP as its goal, the CP moves to [Spec, FocP] to value FOC's uninterpretable features, and gets inflected with the particle *-no*, as a morphological realization of AGREE and MOVE. This is shown below; the resulting structure is for the *wh*-question in (41b) above:

(42)



Thus, the TYPE 2 multiple *wh*-questions are in principle, generated no differently than the TYPE 2 single *wh*-questions.This brings us to our 3rd type of question.

4.2 TYPE 3 Multiple *wh*-questions

The crucial difference between TYPE 2 and TYPE 3 questions, lies in the position of the Q-particle *-no* on the whole question in the former type, and on just the *wh-* word in the latter type and the consequent obligatory appearance of the particle *-do* on the rest of the clause. The data in (43) demonstrates the TYPE 3 construction when there is more than one *wh*-phrase in the question:

(43) a. *kəna-no kəri-no lot-khri-do?*
Who-INQ what-INQ hide-STILL/PERF-DO
'Who is it that what is it hid?'

b. *kəri-no kəna-no lot-khri-do?*
What-INQ who-INQ hide-STILL/PERF-DO
'What is it that who is it hid?'

As can be observed in the data above, both the *wh*-words can be inflected with the Q-particle, and there is only one occurrence of *-do* on the verb. The interpretation that arises in these questions is akin to *nested clefts*, as the glosses show. If more data is examined where the number of *wh*-phrases are more than two, one can observe that all of the *wh*-phrases can be inflected with the Q-particle there too. Conversely, only one *wh*-phrase can be marked with the Q-particle, while the other(s) are left bare. This type of multiple *wh*-questions is the purview of the discussion in Section 4 below. The important fact to bear in mind is that no matter how many *wh*-words get inflected with the Q-particle, or do not, there is only one occurrence of *-do* on the rest of the clause.

The analysis of TYPE 3 single *wh*-questions laid out in Section 3.5 claims that it a result of the presence of the projection TopP between the high FOC head and the CP. This theoretical assumption will remain constant in the derivation of TYPE 3 multiple *wh-* questions too, as will the assumption about the presence of the FocP. The novel idea here will be the adoption of the theoretical mechanism

of *Multiple Agree* from Hiraiwa (2005). This mechanism will be shown to be crucial in deriving the various (un)grammaticality facts in Manipuri multiple *wh*-questions.

4.3 Multiple Agree (Hiraiwa 2005)

Hiraiwa (2001, 2005)'s theory of Multiple Agree attempts to capture the widespread occurrences of multiple case and agreement phenomena that exist in the world's languages, specifically focussing on the one-to-many relations in the case/agreement systems of Icelandic, Japanese, Hindi and Malagasy. Traditional Agree (Chomsky 2000, Chomsky 2001, Chomsky 2008) which considers Agree to be a one-to-one relational operation is limited in that it cannot explain empirical evidence in favor of more than one agreement licensing more than one case and vice versa. Hiraiwa (2001, 2005) proposes derivational simultaneity in syntactic operations as an answer to such challenges, and defines the mechanism of Multiple Agree as the following:

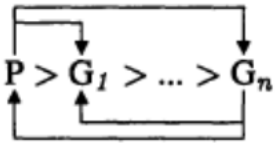
(44) Multiple Agree (multiple feature checking) with a single probe is a single simultaneous syntactic operation; AGREE applies to all the matched goals at the same derivational point derivationally simultaneously.

(Hiraiwa 2001, 69)

Graphically then a Multiple Agree mechanism with a single probe looks like the following:

(45) (Hiraiwa 2005, 2.8)

MULTIPLE AGREE (P, $_{\forall}$G)
Agree is a derivationally simultaneous operation AGREE (P, $_{\forall}$G).



This powerful notion of Agree where the Agree relation holds between one Probe and numerous goals simultaneously will be crucial in the derivation of TYPE 3 multiple *wh*-questions in Manipuri. Two more related important ideas from Hiraiwa's account should be mentioned here, as they will be very relevant to the discussion in later sections.

Firstly, while the motivation for Multiple Agree comes from languages which show one-to-many relationships between case and agreement (as well as in other syntactic phenomena), what about the languages that show only a one-to-one relationship, such as English agreement? Hiraiwa considers them to be subcases of Multiple Agree. Thus, irrespective of whether agreement is singular or multiple, he uses the term Multiple Agree. This leads the reader to the idea that while, theoretically, the option

of Multiple Agree exists, there are cases in the world's languages where one-to-one correspondence is chosen as optimal. Related to this is the non-trivial idea of covert multiple feature checking, where Multiple Agree can take place, but not Multiple Move (Hiraiwa 2001a).

Secondly, and very crucially, to limit the inefficiency of Multiple Agree in large domains with numerous goals, the search space is limited to phase domains, respecting the Phase Impenetrability Condition (PIC) (Chomsky 2000, 2001, 2004). Thus, the probe with the [+multiple] feature cannot look beyond phase boundaries to MATCH with goals inside the phase.

Given this framework, and our assumptions about the structure in TYPE 3 questions (presence of the phase TopP, as well as a high FocP), we can move on to derive TYPE 3 multiple *wh*-questions.

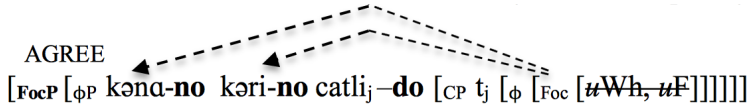
My main claim is going to be that the high clause-external FOC head is a probe with the feature [+multiple] on it, making it sensitive to the possibility of Multiple Agree. However, as outlined earlier, before this [+multiple] FOC probe can begin probing, the intervening phase projection TopP with the feature matrix [+GIVEN, EPP] begins a probe. The CP (containing both the *wh*-words) below the TopP moves to [Spec, TopP] to satisfy its EPP, getting morphologically inflected with *-do* in the process. Till now, this derivation is exactly the same as the in the TYPE 3 single *wh*-question.

After the *-do* marking on the whole CP is achieved, there is still one more crucial step left in the derivation. The higher FOC probe, with its uninterpretable feature matrix [*u*Wh, *u*F] looks into its c-command domain and sees only the specifier position of the TopP projection, because the rest of the phase has been spelt out. Although the two *wh*-words inside the CP would also be perfect goals for the probe, and could be simultaneously found – that possibility is obliterated by the PIC and its limitation of the probe's search domain.
FOC now sees in [Spec, TopP] the following structure:

(46) [$_{CP}$ who what hide-PERF]

Here, Multiple Agree happens with both the *wh*-s because they are both active goals with the perfect feature matrix for the probe. The whole CP is not an active goal for the probe because it has been already been marked with the opposite feature *-do*, while the both the *wh*-s retain their original feature matrices. Consequently, both *wh*-s move to [Spec, FocP] position to check FOC's uninterpretable features and both get overtly marked with *-no* in the process. This is shown below:

(47)



And this resulting structure is the exact structure we see in a TYPE 3 multiple *wh*-question, as in (43).

4.4 Single *-no* marking in multiple *wh*-questions

As mentioned before, Manipuri allows only one *wh*-phrase to be marked with the Q-particle *-no* in multiple *wh*-questions, while the other *wh*-word(s) are left bare. However these constructions have

important (un)grammaticality contrasts that will be of significance to us. Given below, the reader can observe the contrast between the examples in (48) vs. (49) :

(48) a. *kəri-no kənanə lot-khri-do?*
What-NO who-NOM hide-PERF-DO
'What is it (that) who hid?'

b. *kənanə-no kəri lot-khri-do?*
Who-NO what hide-PERF-DO
'Who is it (that) hid what?'

(49) a. **kənanə kəri-no lot-khri-do?*
who what-NO hide-PERF-DO

b. **kəri kənanə-no lot-khri-do?*
what who-NO hide-PERF-DO

In (48), the 'first' *wh*-word get marked with *-no* and other one remains bare, while in (49), the 'second' *wh*-word gets marked with *-no*, and that leads to ungrammaticality.

The data in (48) can be straightforwardly explained using the central tenets of Hiraiwa's Multiple Agree framework (as discussed in Section 4). He considers one-to-one cases of agreement to be subcases of Multiple Agree. I utilize this idea in claiming that, in (48), although Multiple Agree does take place between the FOC probe and the two *wh*-words, still Multiple Move does not happen[3]. And crucially, in the system of Q-particle marking we have explored in this paper, *-no* appears on a *wh*-DP only after it has AGREE-d + MOVE-d to the Spec of the probe. In the two questions in (48), both Agree with the probe, but only the higher one moves to the spec of the probe, getting marked with *-no*, while the non-moved remains bare. It will be pertinent to recall at this point my claim about why there are no superiority effects in this language – there is some kind of local scrambling that allows lower *wh*-s to scramble over higher ones. A combination of these facts gives us the paradigm in (48).

However, this does not explain why the questions in (49) are ungrammatical. Observably, one can see that some principle of intervention is at play – because the language is disallowing a lower goal from participating in AGREE + MOVE (i.e. in getting *-no*marked) while the higher, still active goal is ignored. And this is precisely the idea behind the Defective Intervention Condition (Chomsky 2000, Hiraiwa 2001):

(50) *The Defective Intervention Constraint* (DIC)
A syntactic operation AGREE must obey a strict locality condition. AGREE(α, γ) is prohibited if there is a closer matching goal that is already inactive at the point of the derivation where the probe is merged; thus the DIC is restricted to a case where a probe for γ and a probe for intervening β are derivationally distinct.

[3]Insight due to Mark Baker. This kind of optionality will show up at various places and I return to it in Section 6.2

The ungrammaticality of (49) is a direct result of this constraint – in (a), *kənanə* 'who' is a closer matching goal that is not inactive, thus AGREE with *kəri* 'what' is prohibited. In (b), *kəri* 'what' is a closer matching goal that is not inactive, thus AGREE with *kənanə* 'who' is prohibited.

We have, thus, covered all the logical possibilities in the domain of both single and multiple *wh*-questions and all three types. This brings us to the conclusion of the analysis. In the following sections, I discuss some related pertinent issues.

5 Parallels with Declarative Cleft-like sentences

The TYPE 3 question structure that we saw in the preceding sections, where the Q-particle on the focused element – the *wh*-word – resulted in the marking of the rest of the clause as +GIVEN, has a non- trivial parallel with declarative sentences with cleft-like interpretations in the language. An example is given below:

(51) *Tombə-na-ni* *jum* *ləj-r-i-do*
Tomba-NOM-NI house buy-PERF-IND-DO
'(It is) Tomba (who) bought a house.'

The element in the sentence which specifies the value of the variable is the specificational/focused constituent. In this sentence, it is the constituent 'Tomba-NOM.' This constituent is marked with the particle *–ni*, which I claim is a focus marker in the language. Before we look at data justifying that claim, one more parallel with the TYPE 3 question counterpart of the declarative above is the obligatory presence of the familiarity marker *-do* on the rest of the (non- focused) clause. Making *-do* optional, as shown below, results in ungrammaticality:

(52) * *Tombə-na-ni* *jum* *ləj-r-i*
Tomba-NOM-NI house buy-PERF-IND
'(It is) Tomba (who) bought a house.'

It is not hard to imagine how the derivation would proceed to generate this sentence. It would be the exact same structure as we postulated for the TYPE 3 question with a high FocP, an intervening phase TopP, and the CP below that. The only important difference would be in the feature composition of this FOC head – it would lack the uninterpretable *wh* feature which its interrogative counterpart had. So it would only have [*u*F]. Everything about TopP remains the same. The whole sentence would first raise to [Spec, TopP], get marked with *-do*. Following that, the DP 'Tomba-NOM' would raise to [Spec, FocP] and get marked with *ni*, in an exactly parallel derivation to the one we saw for TYPE 3 questions.

Thus again, the crucial claim here is that what looks like a cleft in both declaratives in this language is just a bipartite discourse-driven structure comprised of : [FOC phrase][GIVEN phrase].

5.1 Comments on the particles *–ni*, *-no*

Following Thangjam (2003), I claim that the *–ni* vs. *-no* distinction is the manifestation of Indicative (*-i*) vs. Solicitive (Interrogative) (*-o*) mood in the language. (see the Appendix for relevant mood examples.). The root that these two moods attach is a copula-like element 'n' – and depending on which mood attaches, we get a regular focus marker (*-ni*) vs. the interrogative focus marker (*-no*). I will claim that this is a piece of diachronic information that does not enter into the synchronic analysis in a very significant way, except to appear as morphosyntactic reflexes of AGREE + MOVE with the regular FOC head vs. the interrogative FOC head, as seen above.

Given its presence on the focused element in declarative cleft-like constructions, one may deduce that the particle *-ni* is a copula or a Pred head, which have been claimed to exist in various analysis of clefts cross-linguistically (Heggie 1990, Percus 1997, Kiss 1998, Pavey 2008, Den Dikken 2013). In support of my claim that *-ni* is a focus marker, and not a copula or Pred head, I present the following data:

(53) *mə-hak oɟa oj-gə-ni*
she-DIR teacher be-POSS-NI
'She will be a teacher.'

(54) *mə-hak məsək phəɟə-gə-ni*
she-DIR appearance beautiful-POSS-NI
'She will be beautiful.'

(55) *phurit ədu baks mənuŋ-də jaw-rəm-bə-ni*
shirt DET box inside-LOC contain-PAST/EVID-NZR-NI
'The shirt was in the box.'

In all the three sentences, no matter how the tense/aspect is varied, we never see *-ni* bearing any inflection as copulas typically do. One can observe that its always some other predicate that bears the inflection – in (53), it's the verb 'be', in (54), it's the adjective 'beautiful', in (55), its the verb 'contain'. This leads me to posit that *-ni* is more a focus marker (given its appearance on the focused element in cleft-like sentences) rather than an actual copula. This particular apparent duality of function has been attested in other languages (see Green 1997 for an analysis of the Hausa copula as a focus marker.)

This discussion is pertinent to my analysis of TYPE 3 questions, and of declarative clefts in general. Most analyses of *it*-clefts such as *It is Sally who bought a house* regards the overt copula as a pivot that holds a biclausal structure (composed of a relative and a non-relative clause) together. However, the special nature of the Manipuri copula-like element observed above that makes it akin to a focus marker leads one away from traditional analyses of clefts. Additionally, the obligatory presence of the topic/familiarity marker *–do* whenever the focus marker appeared, pointed to a discourse-driven analysis, where the crucial division lay in distinguishing between new versus old information.

This brings us to another pertinent question – can the post *-ni* be a relative clause of some kind? If yes, then we still have reason to defend a traditional cleft analysis.

5.2 Nature of the clause post *-ni*

Numerous past analyses have argued that the post-copular clause in English *it*-clefts - 'It is Sally [who bought a house]' - is a head(less)/free relative clause (Heggie 1990, Percus 1997, Kiss 1998, Pavey 2008, Den Dikken 2013). These analyses have most often been motivated by the overt presence of a relative pronoun such as 'who', 'that', etc. While Manipuri clefts lack both the overt presence of a relative pronoun, as well an expletive element like 'it', one could posit that both those are covert, and the structure is still akin to the ones English is claimed to have. That claim might be supported by the following examples of relative clauses in Manipuri:

(56) Restrictive Relative Clause
nəŋ.nə ŋəraŋ ukhibə mi.do ŋəsi.su laki
you.NOM yesterday saw-NLZ man.DO today.also come-IND
'The man that you saw yesterday came today too.'

(57) Non-Restrictive Relative Clause
party-də suŋcət cəttəbə , tombə.do ŋəsidi lak.i
party.LOC never.go go.NEG.INF tomba.DO today come.IND.
'Tomba, who never goes to parties, did come today.'

(58) Free Relative Clause
tombənə thoŋŋəm.bə.do.dum thoibiinə caj
Tomba.NOM cook.NLZ.DO.just Thoibi.NOM eat.IND.
'Thoibi eats what Tomba cooks.'

The presence of *-do* is not obligatory here. It is in complementary distribution here with another determiner in the language *ədu* 'that'. However, the presence of *-do* in each case does seem to suggest that we might be dealing with some sort of a relative clause here. However, as established in the previous discussion in Section 2, *–do* is a familiarity marker in the language. Given that property of *-do*, its presence in the data above is not surprising – it can be argued to be a strategy of identifying/familiarizing the addressee to the referent in the discourse.

Additionally, the data from multiple *wh*-questions also pushes us against the relative clause analysis. All *wh*-phrases in a multiple *wh*-questions can be marked with the Q-particle while *-do* has to appear on the verb:

(59) *kəna-no kəri-no lot-khri-do?*
Who-INQ what-INQ hide-STILL/PERF-DO
'Who is it that what is it hid?'

The declarative parallel of this sentence is given below, which some speakers judged as possible in restricted contexts:

(60) *Tombə-na-ni* *jum-ni* *ləj-r-i-do*
Tomba-NOM-NI house-NI buy-PERF-IND-DO
'(It is) Tomba (who) bought a house.'

Multiple instances of the focused elements in both (59) and (60) gives us compelling reason to argue against the relative clause position. Traditional accounts of relative clauses do not involve multiple gaps/variables inside the clause that the data above contain. Rather, multiple occurrences of the particles in question make the analysis of them being just morphosyntactic reflexes of agreement much more viable.

Given the left periphery oriented analysis of these constructions defended in this paper, one might wonder about their embeddability and its interaction with the mechanism of feature percolation. These questions form the purview of the discussion in the next section.

6 Embeddability and selection

The idea that verbs such as *know, wonder, ask* differ crucially in their c-selection and s-selection of complements is an agreed upon albeit an old one, going back to Karttunen (1977), Grimshaw (1979), Groenendijk and Stokhof (1984), among others. While predicates of the *know*-type have been argued to select propositions as well as questions, predicates of the *wonder*-type have been argued to select only questions. Given the paradigm of *wh*-questions in Manipuri, one can wonder about the embeddability of all the three types under verbs of both kinds mentioned above – specially under the *wonder*-type verbs to see if TYPE 2 and TYPE 3 questions are possible, and whether the analysis in this paper is successful in predicting the results.

The analysis claims that the particles that appear in Manipuri *wh*-questions are a result of Agree with the FOC head or the TOP head. This FOC head is merged above the CP, in that it takes the CP as its complement. This raises pertinent questions about the subcategorization frames of rogative predicates – would predicates such as *wonder* which only select questions (i.e. $CP_{[+wh]}$) then syntactically select a FocP in TYPE 2 and TYPE 3 embedded questions, and a CP in TYPE 1 embedded questions? I will argue in this section that such a story of selection is indeed the case.

6.1 Embeddability

Both TYPE 2 and TYPE 3 questions can be embedded under verbs that select +WH complements. The data in (61)-(62) shows the ability of the Q-particle to appear on the embedded CP (narrow scope reading), as well as on the matrix verb (wide scope reading):

(61) *Mary-nə* *[Tomba-nə* *kəri* *ləi-ri-no]* *khəŋ-i*
mary-NOM Tomba-NOM what buy-PROG-NO know-IND
'Mary knows what Tomba is buying.'

(62) *Mary-nə [Tomba-nə kəri ləi-ri] khəŋ-i-no*
mary-NOM Tomba-NOM what buy-PROG know-IND-NO
'What does Mary know Tomba is buying?'

(Thangjam 2003 : 34-35)

The data in (63)-(64) shows the embeddability of TYPE 3 questions as well, with the particle *-do* differentially on the embedded as well as the matrix verb:

(63) *Mary-nə [Tomba-nə kəri-no ləi-ri-do] khəŋ-i?*
mary-NOM Tomba-NOM what-NO buy-PROG-DO know-IND
'What is it that Tomba bought that Mary know?'

(64) *Mary-nə [Tomba-nə kəri-no ləi-ri] khəŋ-i-do?*
mary-NOM Tomba-NOM what-NO buy-PROG know-IND-DO
'What is it that Mary knows that Tomba bought?'

This paradigm of embeddability does not pose a challenge to the left periphery oriented analysis presented in this paper. The claim here would be that the whole projection consisting of the clause-external FocP, TopP and CP can be taken as the complement of a +WH verb. It has to be a verb capable of taking a interrogative complement because the nature of the FocP, whose specifier position being filled results in *-no*-marked DPs, is that of an interrogative focus head. When [Spec, FocP] is filled by the embedded question, then we get the TYPE 2 embedded question in (61). When there is an intervening TopP projection between the FocP and the CP, and the embedded question moves to [Spec, TopP] to satisfy its EPP, then we get the structure in (63) above. No auxiliary assumptions need to be made here – the results fallout from the now familiar analysis of *-no* and *-do* marking as laid out in this paper.

But this does predict that an embedded CP containing a *wh*-word should be a potential goal for the FOC head (because of the feature matrix it has inherited from the *wh*-word), and be marked with *-no*. And this prediction is borne out in the example below, which is a minimal variation from the example in (64):

(65) *[Tomba-nə kəri ləi-ri]-no Mary-nə khəŋ-i-do?*
[Tomba-NOM what buy-PROG]-NO mary-NOM know-IND-DO
'What is it that Tomba is buying that Mary knows?'

The property of movability that CPs are assumed to have allows the embedded CP to be a matched goal for the probe and be Moved to its Spec, resulting in *-no* marking. This would also predict that in possessive DP constructions, when the possessor is the *wh*-word, the whole DP containing the possessor can be a potential goal for the FOC probe and thus be marked with *-no*. And this prediction too is borne out, as shown in the following example:

(66) *nəŋna [kəna-gi ləirik-no] pa-ri-do*
you-NOM who-GEN book-NO read-PERF-DO
'Whose book did you read?'

And, as usual, the *wh*-word can be the goal too.

However, one important disclaimer needs to be made here – in (64), when the *wh*-word is in [Spec, FocP] and given the assumption that this FOC head is high in the left periphery, the appearance of the constituents Mary and Tomba at levels higher than the FOC head requires some explanation. I claim that these constituents are topicalized to TOP positions higher in the left periphery than our interrogative FOC head. This is in keeping with Rizzi (1997)'s postulation of the left periphery which allows a proliferation of TOP heads, but limited FOC heads. One would expect then that these TOP positions would not allow non-referential elements, and that is indeed the case as demonstrated by the ungrammaticality of the following example:

(67) **kəna-əmətə [kəna-gi ləirik-no] pa-ri-do*
nobody who-GEN book-NO read-PERF-DO
Intended: 'Whose book did nobody read?'

The data below shows that *wonder* can embed all three types of questions in Manipuri:

(68) a. *tombənə thoibinə kədajdə cətkhi hajnə ŋəkkhi*
Tomba-NOM Thoibi-NOM where-LOC go-PERF that wonder-PERF
'Tomba wondered where Thoibi went.'

b. *tombənə thoibinə kədajdə cətkhri-**no** hajnə ŋəkkhi*
Tomba-NOM Thoibi-NOM where-LOC go-PERF-NO that wonder-PERF
'Tomba wondered where Thoibi went.'

c. *tombənə thoibinə kədajdə**no** cətkhəri**do** ŋəkkhi*
Tomba-NOM Thoibi-NOM where-LOC-NO go-PERF-DO wonder-PERF
'Tomba wondered where is it (that) Thoibi went.'

This would mean that the verb has an argument structure where it can choose between selecting a CP or FocP as its complement. The interrogative FocP makes it compatible with the argument structure schematization of a rogative predicate like *wonder*. As argued by Lahiri (2002), who cites Grimshaw (1979), a theory of s-selection allows predicates to select complements categorized as Q (Question), P (Proposition), etc. The nature of its head would then make the FocP be categorized as Q.

Grimshaw 1979's *Canonical Structural Realization* (CSR) made the claim that every semantic type has associated with it a certain syntactic category; for e.g. the CSR of the semantic type Q is CP, and therefore every predicate that s-selects Q must subcategorize for CP. Extending this idea to our current analysis - the main claim is therefore, that every predicate that s-selects Q has two options it has to choose to subcategorize from – CP or FocP. When just the CP is selected, we get TYPE 1 questions, while selection of the FocP results in either TYPE 2 or TYPE 3, depending on whether the TopP projection is present or not. The first round of probing is done by Top, and it finds the whole CP as

its goal, marking it with *-do*. The next Probe is the FOC head, which does not find the CP as its goal because the CP has already been marked as [+Given] by agreement with Top. So the FOC Probe finds the *wh*-word (with the feature matrix [*i*Wh, *i*F]) as the goal and marks it with *-no*.

In the case of an embedded TYPE 2 question, as given in (68b), the derivation would be differing only minimally in that the TopP projection would be absent. Then FOC would Agree with the CP, which would have the required interpretable features after having inherited them from the *wh*-word, and thus the whole CP would be marked with *-no*.

Thus, this analysis of *wh*-questions in Manipuri which treats Q-particles as morphological reflexes of Agree successfully accounts for the embeddability facts with respect to the three types of questions. With respect to matters of selection, the claim is that rogative predicates always have two options in their subcategorization frames – either FocP or CP. The categorical requirement of a [+wh] complement is satisfied by both, and the choice of one over the other is what leads to TYPE 1 vs. TYPE 2/3 questions being able to be embedded.

6.2 Optionality in choosing Goals

We saw several instances in the sections above where, sometimes when the FOC probe has established Agree relations with various goals, Move only applies to one of them. I claimed there, following Hiraiwa (2005), that even if Multiple Agree happens, Multiple Move does not need to happen; and like Hiraiwa, treated them as sub-cases of Multiple Agree. This option that the syntax has of Agreeing with multiple goals, but not moving all of them to the Spec of the probe is the reason for the grammaticality of the following sentences, some repeated here from previous sections:

(69) *kəri-no kənanə lot-khri-do?*
What-NO who-NOM hide-PERF-DO
'What is it (that) who hid?'

(70) *kənanə-no kəri lot-khri-do?*
Who-NO what hide-PERF-DO
'Who is it (that) hid what?'

Both *wh*-words are goals which are Agree-d with, the higher one is moved to [Spec, FocP] and thus gets *-no* marked.

(71) [belowexskip=0.25em] Narrow scope reading
Mary-nə [Tomba-nə kəri ləi-ri-no] khəŋ-i
mary-NOM Tomba-NOM what buy-PROG-NO know-IND
'Mary knows what Tomba is buying.'

(72) Wide scope reading
Mary-nə [Tomba-nə kəri ləi-ri] khəŋ-i-no
mary-NOM Tomba-NOM what buy-PROG know-IND-NO
'What does Mary know Tomba is buying?'

(Thangjam 2003 : 34-35)

Both the embedded CP and the matrix CP are goals which are Agree-d with, but either one (due to scope reasons) can be moved to [Spec, FocP] and thus get *-no* marked.

(73) *nəŋna [kəna-gi ləirik-no] pa-ri-do*
you-NOM who-GEN book-NO read-PERF-DO
'Whose book is it (that) you read?'

(74) *nəŋna [kəna-gi-no ləirik] pa-ri-do*
you-NOM who-GEN-NO book read-PERF-DO
Lit.: 'Whose is it book (that) you read?'

Both the DPs containing the *wh*-word, as well as the possessor *wh*-word, are goals which are Agree-d with, but it is optional as to which one moves to [Spec, FocP].

The syntactic optionality visible in all of these cases, actually results in pragmatic differences between each pair of sentences. When presented with each pair, apart from (71)-(72) which have actual visible scope differences, speakers consistently judged the constituent marked with *-no* as having great 'emphasis', compared to the rest of the sentence. The optionality of Move, even when Agree has happened, can therefore be seen as a result of which constituent carries relatively more emphasis in the discourse. The syntax allows multiple goals, but pragmatic constraints come into play when choosing which goal to move to [Spec, FocP] and thus mark with *-no*.

7 Broader implications for Q-particle languages

The theory of Q-particles presented in this paper treated these particle(s) as morphological expressions of the phenomenon of Agree taking place between a high interrogative Focus probe with [*u*Wh, *u*F] features and the goal constituent with [*i*Wh, *i*F] features. This analysis has interesting broader consequences for grammatical theory of Q-particles in general. The claim would be that all Q-particles in the world's languages are morphological reflexes of Agree with a high FOC head of the kind seen in Manipuri. The relative position of this FocP may vary from language to language. To validate this claim, one can turn to attested Q-particle languages such as Sinhala and Tlingit (Kishimoto 2005, Cable 2010).

Sinhala is a Q-particle, *wh*-in-situ language; the data here is from Kishimoto (2005), as cited in Cable (2010). Sinhala does not allow its Q-particle *da* to appear between a postposition and its complement (75), nor between a possessor and the possessed NP (76), nor between a D and its NP complement (77):

(75) a. *Chitra* [*kauru ekka*] *da kataa kalee?*
Chitra who with Q talk did
'Who did Chitra talk with?'

b. **Chitra* [*kauru da ekka] kataa kalee?*
Chitra who Q with talk did
Intended: 'Who did Chitra talk with?'

(76) a. *Chitra* [*kaa -ge amma*] *da daekke?*
Chitra who-GEN mother Q saw
'Whose mother did Chitra see?'

b. **Chitra* [*kaa -ge da amma*] *daekke?*
Chitra who-GEN Q mother saw
Intended: 'Whose mother did Chitra see?'

(77) a. *Chitra* [*mona pota*] *da gatte?*
Chitra what book Q bought
'What book did Chitra buy?'

b. **Chitra* [*mona da pota*] *gatte?*
Chitra what Q book bought
Intended: 'What book did Chitra buy?'

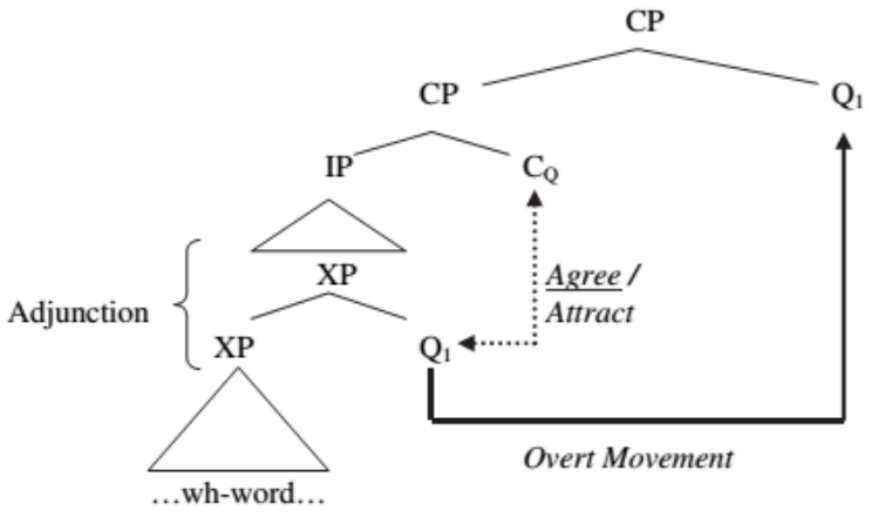
This paradigm can be quite clearly explained with the theory of feature inheritance proposed here. Feature transfer is also obligatory in Sinhala, just as in Manipuri. Assuming the same feature matrix for Sinhala *wh*-words - [*i*Wh, *i*F], and the presence of the same interrogative FOC head as in Manipuri, the derivations would be almost identical - the whole postpositional phrase in (75a) gets the feature matrix from the *wh*-word and is a goal for the FOC Probe, thus getting marked with *-da*. In (76a), the whole possessed DP gets the feature matrix and is a goal for FOC, and its the same story in (77a). Sinhala does not allow the *wh*-word to be a goal in any case, as evidenced by the (b) sentences in (75)-(77). This may be due to two reasons – either Sinhala parametrically does not allow the *wh*-word to retain the features it passes on, or that all of the phrases that are Q-marked are strong phases in the language – thus disallowing the FOC Probe from looking inside by the PIC. I will go for the second option here, as that will allow the theory of feature inheritance proposed here to have an universal flavor in its claim that features on an original bearer element Y remain accessible throughout the derivation in all languages.

This would validate the claim made earlier that what looks like unbounded feature inheritance is in fact, sensitive to strong phase boundaries. While Manipuri is not the best example to demonstrate this phase-boundedness, given the differences in which categories form strong phases in it, Sinhala is, and so is Tlingit – in which the Q-particle *sa* has the same pattern of distribution as Sinhala in (75)-(77) (cf. Cable 2010).

7.1 Alternative analyses

Cable (2010), following Hagstrom (1998), distinguishes between 'Q-Adjunction languages' and 'Q-Projection languages' based on the following structures.

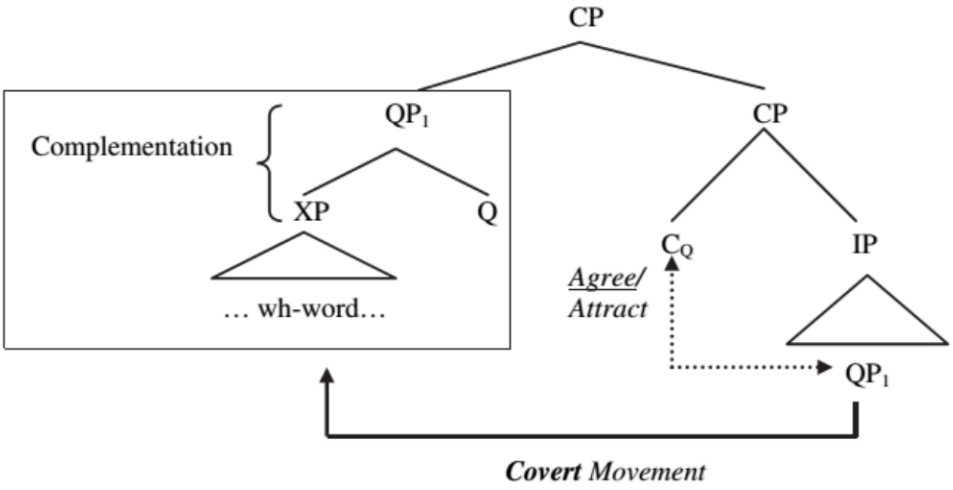
(78) Q-Adjunction



In languages where the Q morpheme is seen at the right edge of the whole sentence (Japanese, Korean) – the postulate is that Q is adjoined to the *wh*-containing XP, and thus only Q moves to CP as a result of Agree with C, leaving the *wh*-insitu. This results in the order: [.....*wh*-word.....] Q?

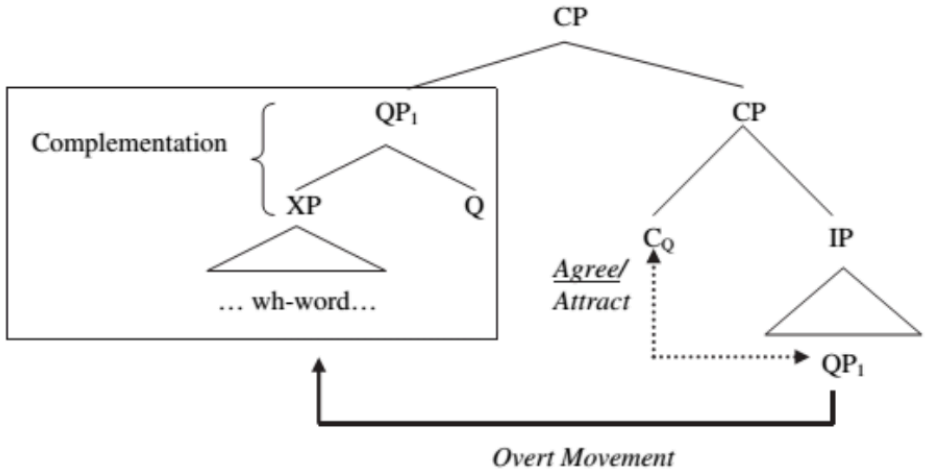
Cable also posits the possibility of covert QP movement in the so-called 'Q-Projection' languages (Sinhala) where both the Q morpheme and the *wh*-word (are in a complement relation) are pronounced in their base position but have moved covertly.

(79) Q-Projection



The third type of language is the *wh*-fronting language (Tlingit) where the Q takes the phrase containing the *wh*-word as a complement, and the whole QP is fronted as a result of AGREE between C and Q, as shown below:

(80) QP-Fronting



If we attempt to frame the current problem – TYPE 2 (have the Q on the *wh*-word) and TYPE 3 (have the Q on the whole question) questions in Manipuri along Hagstrom/Cable lines, we would have to go with the following line of explanation.

That, in certain cases the Q takes the whole IP as its complement (TYPE 2), and in certain cases it takes just the *wh*-word as its complement (TYPE 3); OR that, in certain cases the Q adjoins to the whole XP containing the *wh*-word (TYPE 2), and sometimes it adjoins to just the *wh*-word

(TYPE 3). Even if we keep aside the additional important concerns of the dependency with the *-do* particle and the multiple Q-marked *wh*-words aside, these different optionalities in adjunction or complementation does not strike one as the most economical solution.

Additionally, the data below, repeated here from above, can be seen as arguments against Cable's analysis:

(81) *nəŋna [kəna-gi ləirik-no] pa-ri-do*
you-NOM who-GEN book-NO read-PERF-DO
'Whose book is it (that) you read?'

(82) *nəŋna [kəna-gi-no ləirik] pa-ri-do*
you-NOM who-GEN-NO book read-PERF-DO
Lit.: 'Whose is it book (that) you read?'

According to Cable (2010), given that the features on C Attract Q, the whole possessive DP has to be 'taken along' or pied-piped, assuming that Q takes the phrase containing the *wh*-word as its complement. Under that analysis then, (81) would be predicted to be strictly ungrammatical. This prediction is not borne out - (81) perfectly grammatical in Manipuri.

My claim here is that this is again a case of Multiple Agree, but not Multiple Move, i.e. an instance of the optionality that was claimed to be a result of pragmatic constraints in Section 6.2. Assuming that the whole DP has the feature set of the *wh*-word, given the mechanism of feature percolation – both the *wh*-word itself and the whole DP can act as goals for the FOC probe. However, although Multiple Agree happens with both goals, Multiple Move only applies to the *wh*-word, and the latter gets morphologically marked with *-no*.

Thus, this paper argues that choosing the feature percolation analysis over Q-particle adjunction/complementation/projection analyses yields better results in terms of both empirical coverage as well as theoretical explication.

8 Conclusion

This paper looked at a three-way paradigm of *wh*-questions in Manipuri – one without any Q particles, one with an interrogative focus Q particle, and one with both the interrogative focus Q particle as well as an obligatory familiarity marker. The paper had two central foci: (i) propose a theory of feature inheritance that differs from traditional theories in crucial respects, and (ii) derive the interaction of the Q-particles and the distinct structures of Manipuri *wh*-questions within the framework of this new theory. The differential positioning of the Q particle was shown to be a result of which projection moves to the specifier position of a high Focus head due to Agree and Move, and in a parallel configuration, the familiarity marker was a result of Agree and Move to the spec of the phase head Top. Both particles then, in this analysis, are morphosyntactic reflexes of agreement. Multiple *wh*-questions exhibit the same paradigms, and Hiraiwa's (2005) system of Multiple Agree was adopted and modified to account for the generalizations. One of the central claims pursued was

that *wh*-questions with cleft-like interpretations in Manipuri are not really biclausal with a Pred linker (contra previous analyses of clefts) but an information-structure driven biphrasal configuration with a [FOCUS phrase] and a [GIVEN phrase], embodying an interface relationship between syntax and discourse.

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Appendix

- 2 Moods in Manipuri:

INDICATIVE	SOLICITIVE
əi æplə ca-i I apple eat-IND 'I eat apples.	tʰəbək əsi tʰuna təur-o work this soon do-COM 'Do this work soon.'
əi nuŋtigi æplə ca-i I apple eat-IND 'I eat apples.	lairik əsi pa o book this read SOL '(did you) read this book?'

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