Center for Advanced Study in Theoretical Linguistics

The Syntactic Effect of Head Movement
Wh and Verb movement in Malayalam

Rosmin Mathew
A dissertation for the degree of Philosophiae Doctor
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Abbreviations used in glosses

Acc: Accusative
Conj: Conjunction
Contr: Contrastive
Dat: Dative
Loc: Locative
N: Neuter
Neg: Negation
P: Person
Pl: Plural
Q: Question Particle
QC: Quotatival Complementiser
Rel: Relativising element
Sg: Singular
Abstract

This thesis takes the position that head movement is a narrow syntactic phenomenon that can affect locality constraints thereby forcing certain phrasal elements such as a phrase containing a Wh to undergo movement.

The basic proposal explored in the thesis dates back to Chomsky (1986) where the movement of a verb is proposed to be able to affect and alter a barrier. This idea is translated into contemporary technical apparatus in the thesis to capture locality conditions, with Wh movement in Malayalam providing the necessary data to make a case for it.

The two constructions studied in the thesis present a contrast in terms of the position of the Wh. While the verb-final construction does not allow a Wh any freedom of movement, the aanu construction demands obligatory movement of certain Wh phrases to the pre-auxiliary position.

It is shown that the pivotal structural difference between the verb-final construction and the aanu construction pertains to verb movement. The verb undergoes V-to-C movement in a verb-final construction whereas the verb remains within the IP in an aanu construction. Following the Phase Impenetrability Condition (Chomsky 2001) coupled with the concept that head movement can extend barriers (Chomsky 1986), it is argued that the V-to-C movement in the verb-final construction results in extending the Phase domain up to the C level as opposed to the phase boundary instantiated by the low verb in an aanu construction. Thus, in a verb-final construction, the in-situ Wh is already within the purview of the licensing C INT and does not need to move. However, in an aanu construction, the low verb creates a Phase boundary between the C INT and the Wh, thereby rendering an in-situ Wh within the IP domain ungrammatical, forcing the Wh phrase to move to the C-domain.

The thesis also shows that in the case of Malayalam, analysing Wh movement as a sub-case of Focus movement is problematic. In short, the thesis argues for verb movement, and shows that it has important syntactic manifestations.
Chapter 1

Introduction

The ways in which a Wh word is interpreted and takes scope have been an active point of discussion in linguistics. While some languages pronounce the Wh word in the position corresponding to the non-interrogative counterpart (eg. Japanese) some languages pronounce the Wh in a different position (eg: English) — the division usually described as Wh in-situ versus Wh movement languages. As the array of empirical observations makes obvious, both in-situ and movement classes are not monolithic; they include a variety of languages and structures. For example, there are languages where the Wh word is in-situ, but a question particle appears at a scope-indicating position (eg: Japanese), there are languages where adjunct Wh and argument Wh behave differently (eg: Chinese), languages where the Wh sometimes undergoes partial movement (eg: Malagasy) and so on.

One of the influential takes on Wh movement in languages like Hungarian was to reanalyse it as Focus movement. Also, a preverbal focus position seemed to be operative in the case of SOV languages in general. The Cartographic framework where element pertaining to information structure found their own place in the functional sequence lent strength to proposals in this vein. ‘Association with Focus’, thus, presented itself as one way to go while dealing with Wh.

Another series of discussions in syntactic circles was about the syntactic effects of Head Movement. Arguments went back and forth. Movement of a verb was posited to have syntactic consequences in Chomsky (1986). But a decade and a half later, it was relegated to the “phonological branch of computation” in Chomsky (2001). Although clear instances like Scandinavian Object Shift provided powerful points for viewing head movement as having definitive syntactic consequences, there were conceptual issues raised about the viability of it within the Minimalist Program (see Roberts (2011) for an overview). It is in the context of this background that we look at the behaviour of Wh in Malayalam in connection with verb movement.

Malayalam is a Dravidian language spoken mainly in the Southern state of Kerala in India with more than 33 million speakers. It is a Nominative-Accusative language with the word order being SOV.
What makes Malayalam interesting is that it has two constructions where the Wh exhibits different behaviours. In one type of constructions that we will call the verb-final constructions, the Wh is in-situ. A bare Wh in these constructions seems to be so immobile that it does not even undergo scrambling. The other construction – the *aanu* construction – calls for mandatory movement of the Wh to the C-domain\(^1\), without which the sentence is rendered ungrammatical. That is, we are faced with the surprising fact that Wh movement makes a verb-final construction ungrammatical while an *aanu* construction is ungrammatical without movement. It should be noted that the morphological shape of the Wh word does not change; so it is difficult to postulate something on the basis of any particular feature on the Wh needing to be licensed in one construction, but not in the other, as a featural account might attempt to do.

Thus, we are rather left to explore the pivotal differences between the two constructions and to seek an answer from that perspective. And we find that the major structural difference between the two constructions is the height to which the verb moves. Once we subscribe to the mainstream view that a Wh must get into a relation with the relevant C-domain element in order for the sentence to be grammatical, the observation about verb movement can be translated into a theoretical model where head movement has the syntactic consequence of altering the *a priori* Phase boundary at \(v\) to different heights giving rise to the differing strategies to achieve the Wh-C relation. This thesis attempts an analysis of the different strategies observed in Malayalam vis-à-vis Wh movement (or lack thereof) based on the Phase Impenetrability Condition proposed by Chomsky (2001).

The Phase Impenetrability Condition (PIC) proposes that assuming \(Z\) and \(H\) are phase heads, in a configuration such as

\[ [ZP \ldots [HP \alpha [H YP]]] \]

the domain of \(H\) is not accessible to operations at \(ZP\) (DbP version of PIC). Combining this with the proposal over the years in various guises that verb movement has the immediate effect of extending the barrier/phase boundary (Chomsky 1986, Baker 1988, Den Dikken 2007, Gallego 2010 a.o.), I propose that verb movement to different heights in the verb-final and the *aanu* construction in Malayalam is responsible for the different behaviour of Wh in these two constructions.

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\(^1\)This restriction is redundant in cases of Wh adverbials or reason clauses which can merge directly in the pre-auxiliary position in the C-domain.
To begin with, a bare Wh in Malayalam patterns more or less with indefinites, and does not have enough referential/quantificational force to undergo movement. This fact is made more pronounced by the observation that a Wh-Quantifier compound, on the other hand, is able to undergo movement, say, past an intervener. This lack of quantificational force renders the Wh in-situ. The possibility of covert LF movement is ruled out by using Intervention effects (a la Beck 1996) as a diagnostic tool following Pesetsky (2000). This Wh in-situ is the perfectly grammatical in a verb-final construction. However, an in-situ Wh leads to ungrammaticality in an aanu construction.

The question arises, then, as to what makes an otherwise legitimate in-situ Wh ungrammatical in an aanu construction.

We begin with the abstract proposal that the Wh needs to be in a relation with the relevant C-domain element – call it C\textsubscript{INT} – for an interrogative sentence to be grammatical. This proposal has been made in the literature in various forms. The proposal put forward by Cable (2010) that this relation is mediated universally by a Q element is endorsed in this thesis. Thus, it is the QP and not the Wh per se that responds to the legitimacy requirements. The effectiveness of Intervention Effects shows that this relation is not achieved via covert phrasal movement of the QP. We argue that this relation operates in a Phase-bound manner in that the QP and the licensing C\textsubscript{INT} need to be in the same domain for the licensing to happen.

In a verb-final construction the verb undergoes V-to-C movement. This prevents the universally proposed phase boundary at v from being operational; the verb movement extends the boundary up to C. This leaves the in-situ QP within the single Phase domain induced by the verb in C, making it accessible for C\textsubscript{INT}. As opposed to this, the verb in an aanu construction raises at most up to I, resulting in a Phase boundary at I. An Auxiliary spells out the C elements, leaving the feature represented by C\textsubscript{INT} and the in-situ QP within the IP in different domains. PIC is activated and an in-situ QP, say, in the object position, becomes inaccessible to the C\textsubscript{INT}.

To avoid this unfavourable outcome, the QP must be positioned within the purview of the C\textsubscript{INT}. As we saw in verb-final constructions, one way to achieve this is to extend the domain in which the in-situ QP is merged to include the C\textsubscript{INT}, thereby bringing all the relevant elements within a single Phase. This is not a possible option for the aanu construction since an Auxiliary spells out the C elements and the verb moves at most up to I. The second
option would be to move the QP to the higher Phase, thereby rendering it visible to the C\textsubscript{INT}. It is argued in this thesis that this is what happens in the \textit{aanu} construction. A QP left in-situ is invisible for the C\textsubscript{INT} because of the PIC and has to move to the C-domain. However, in a verb-final construction, V-to-C movement obliterates the otherwise plausible Phase boundary between C and an in-situ QP at, for example, the object position.

Thus, the thesis takes an explicit stand on the discussions mentioned in the beginning – the Wh movement in Malayalam, contrary to claims in the literature, is not an instance of Focus induced movement. The question is addressed explicitly in the context of both the verb-final construction and the \textit{aanu} construction. In case of the verb-final construction, what appears to be movement of a Wh to a preverbal focus position is shown to be a result of the indefinite Wh staying put while the other items that might otherwise appear between the Wh and the verb undergo movement. Although the \textit{aanu} construction is often interpreted as involving focus it will be shown in Chapters 3 (generally) and 5 (specifically in the case of Wh movement) that the movement to the putative focus position cannot be triggered by a focus feature. In other words, as Fanselow (2007, p.209) notes, “Results of syntactic processes can be exploited by distinctions of information structure, but this does not show that these processes are triggered by them”. It is the specific morphological/featural make-up of the Wh combined with the varying locality conditions arising as a direct syntactic effect of the head movement (verb movement in this case) that is responsible for the in-situ versus ex-situ behaviour of Wh.

The thesis is organized as follows: the second chapter presents arguments and data to show that V-to-C movement takes place in verb-final constructions. Chapter 3 discusses the \textit{aanu} construction. It addresses the debate whether these are monoclausal or biclausal constructions. The chapter argues that the \textit{aanu} construction form a subset of Categorical constructions (cf. Sasse 1987) and the strategy to mark the bipartite nature of Categorical readings by positioning the verb low are not exclusive to the \textit{aanu} construction. It is argued that the verb can move at most to I in such a construction. The chapter also examines whether the Auxiliary must head a Foc projection or not. Chapter 4 explores the behaviour of the Wh in these two constructions in general. It will be shown that the Wh is indeed in-situ, contra Jayaseelan (2001) in verb-final constructions; that the Wh does not move to a preverbal focus position. Similarities between the behaviour of Wh and indefinites as well as the lack of quantificational force of a bare Wh word are also discussed in this chapter. The next chapter examines the morphology of Wh words. Taking the paradigmatic relation
between elements in the pronominal system in general, it is shown that third person pronouns in Malayalam are pro-DPs in the sense of Déchaine and Wiltschko (2002), where the D part is spelled out by a deictic element. This deictic element is replaced by an unvalued element to make the pro-DP an open expression, yielding a Wh indeterminate pronoun. Different semantic properties can be derivationally achieved depending on the operator that takes this open expression as its complement to yield a QP. Chapter 6 attempts to give a bird’s eye view on the relevant strands of analysis. Chapter 7 puts forward two possible analyses – one based on the assumption that Wh movement is in response to a focus feature and the other based on locality. This chapter entertains the idea that Wh movement is a sub-case of Focus movement in Malayalam and shows the difficulties that such a proposal would face. The locality-based account is chosen as the simplest analysis with the least amount of ad hoc assumptions. The last chapter concludes the thesis.
Chapter 2
SOV via Head Movement

2.1 Introduction

The construction where a Wh exhibits in-situ behavior is of the form in (1) in the declarative format. We label them ‘verb-final constructions’.

1. Rajan Priyaye kandu
   Rajan Priya.Acc saw
   ‘Rajan saw Priya’

These constructions show a great deal of flexibility in the word order. The most important constraint on this freedom in the word order (though flexible under certain contexts) is that the verb has to occupy the clause-final position. For example, a sentence like 2 can have any of the following order in 3, 4, or 5. However, any order where the verb is not at the end of the clause leads to ungrammaticality.

2. Rajan Priayku a: pu:chaye koduthu
   Rajan Priya.Dat that cat.Acc gave
   ‘Rajan gave that cat to Priya.’
3. Priyayku Rajan a: pu:chaye koduthu
4. Rajan a: pu:chaye Priayku koduthu
5. a: pu:chaye Rajan Priayku koduthu
8. *koduthu Rajan Priayku a: pu:chaye

As shown in the above examples, as long as the verb is at the end of the sentence, all other elements in the sentence display a greater freedom of word order. Discussion of this kind of a relatively free word order known more commonly as ‘scrambling’ dates back to Ross (1967) who suggested that this is a stylistic operation. Apart from a movement approach, a base-generation account also was attempted. Based on examinations of “non-configurational” languages such as Warlpiri, Hale (1983) argued that free word order is base generated. However, some studies on languages like Japanese and German were more inclined to the movement approach and argued that scrambled orders are derived via
movement (e.g. Grewendorf and Sabel 1999). The base generation approach was brought back by Fanselow (2001) vis-à-vis German word order. In the literature on Japanese, the phenomenon was often deemed as optional movement (e.g. Fukui 1993) and Saito (1989) argued it to be “semantically vacuous”. This view has been problematized later – for example, Meinunger (1995) observed for German that the scrambled nominal often bears a Topic function. In fact, with the rise of the Cartographic framework, many has come to see scrambling as an operation related to information structure properties, mainly Topic/Focus (Grewendorf 2005, Sabel and Saito 2005 a.o.). Within the minimalist framework, the question of whether this operation is a PF phenomenon also has been a point of debate. Apart from these standpoints, Grewendorf (2005) has argued that what has been labelled as “scrambling” can be better described as a cover term for different kinds of movement. In short, there is not much agreement in the literature on where exactly are the arguments in scrambled sentences. So we are left to explore the data pertaining to Malayalam and draw our own conclusions. I will not go into the details of all scrambling phenomena in Malayalam. This chapter would stick to object scrambling and show that there are instances of object scrambling that can be shown to be A-bar scrambling, to the C-domain. This scrambled position of the object will, in turn, be employed in determining the position of the verb in the clause.

The chapter is organised as follows: Section 2.2 looks into the position of the Subject followed by a discussion of the position of the object scrambled to the left edge in the next section. It will be shown in section 2.3 that the object can undergo A-bar scrambling to a Topic position in the C-domain. Section 2.4 deals with the position of the verb in these constructions. The next sections, 2.5 and 2.6 respectively, discusses the alternative analyses and further evidence for a verb raising analysis. Section 2.7 addresses some concerns about using co-ordination as a diagnostic tool.

2.2 The Position of the Subject

The soft option would be to ‘assume’ that the subject is in [Spec, IP] following standard practice. However, there hasn’t been any explicit study that proves this to be the case for Malayalam. On the contrary, there is a proposal by Amritavalli and Jayaseelan (2005) that argues for the absence of TP as a distinct projection in the language. The scenario is complicated by the absence of overt evidence for A-movement. Malayalam is a radical pro-drop language (in the sense of Neeleman and Szendroi 2005) with no raising verbs like seem
or ECM verbs, all of which makes the EPP of TP a rather difficult notion to ‘assume’ a priori. Instead, I will show that the subject is necessarily outside the vP, without any commitment to the content of the projection at which it appears. The data comes from the licencing of an NPI.

Malayalam has two types of Negation – a negative auxiliary (be\textsubscript{Neg}) that immediately follows the verb (9) and a verbal affix (10).

9. Rajan uttharam paranj-illa
   Rajan answer said- be\textsubscript{Neg}
   ‘Rajan did not say the answer’

10. Rajan uttharam paray-aath-irunnu
    Rajan answer say-Neg-be\textsubscript{Past}
    ‘Rajan did not say the answer’.

That be\textsubscript{Neg} is higher than the subject can be surmised from its interaction with quantifiers:

11. a. ellaavarum vann-illa
    all came-be\textsubscript{Neg}
    ‘Not all came’ \hspace{1cm} Neg>all \hspace{1cm} *all>Neg

   b. ellaavarum vann-ill-engil
    all came- be\textsubscript{Neg} -if
    ‘If not all of them comes’ \hspace{1cm} Neg>all \hspace{1cm} *all>Neg

As opposed to this, when the Negation goes with the verb as in the following sentence, the quantifier scopes over negation.

12. ellaavarum var-aath-irunn-aal
    all come-Neg-be-if
    ‘If no one comes’ \hspace{1cm} All>Neg

Clearly, the be\textsubscript{Neg} takes scope over the Subject while the verbal affix does not, indicating that the be\textsubscript{Neg} is higher than the quantified subject whereas the Neg verbal affix is below the subject.

In the following example, onnum and arum are the Object and Subject NPIs that can be licensed with the be\textsubscript{Neg}; their behaviour does not tell us anything about their relative positions.

13. Rajan onnum paranj-illa
    Rajan nothing said-be\textsubscript{Neg}
    ‘Rajan said nothing’.
Chapter 2 SOV via Head Movement

14. a:rum uttharam paranj-illa
   Nobody answer said-\text{be}_{\text{Neg}}
   ‘Nobody said the answer’

The verbal affixal negation is more interesting since it appears in a less high position and thus has limited elements in its jurisdiction.

15. Rajan onnum paray-aath-irunnu
    Rajan nothing say-Neg-be_{\text{Past}}
   ‘Rajan did not say anything’

The object NPI is clearly licensed by the verbal negative affix.

16. *a:rum uttharam paray-aath-irunnu
    noone answer say-Neg-be_{\text{Past}}
   ‘No one said the answer’

17. *uttharam a:rum paray-aath-irunnu
    answer no one say-Neg-be_{\text{Past}}
   ‘No one said the answer’

As opposed to (15), the Subject NPI cannot be licensed by this negation, despite the word order evidencing that the subject is indeed at a higher position than the object (cf. 16–17). This verbal negation affix can be attached only to an uninflected verb, even aspectual inflection cannot appear between the negative suffix and the verb. Hence, I conclude that the Neg affix is immediately above the \( v \), and consequently, the subject which is outside this negation, is outside the \( vP \). Notice that scrambling of the object to a position to the left of the Subject does not affect the judgement. I will not go into the question whether it is TP or MoodP or some other projection that the Subject moves to – in other words, I will stay away from discussing the feature composition of the projection where the subject appears. For the ease of presentation, I will adopt the label IP in the following discussion without any commitment to the exact content of the projection.

2.3 The Left Edge

We saw in examples 2–5 that scrambling is possible in Malayalam. An important fact to be noted in these sentences is that the first element in the sentence may be interpreted as the Topic. This Topic reading is unmistakable in the case of a non-subject at the left edge.

A Topic is something that has already been introduced into the discourse or something that the speaker wishes to foreground in the narrative. Unlike Languages like Japanese, Malayalam, does not have a designated Topic marker. Asher and Kumari (1997; p.183) notes for Malayalam that “[…] the position for Topic is the beginning of the sentence.” This is
substantiated by the fact that non-specific indefinite NPs are not preferred at the left edge of the sentence regardless of the position of the rest of the words in the sentence.

18. *oru pu:chaye Rajan Priyayku koduthu

[\text{a cat}_{\text{non-specific indefinite}}].\text{Acc} Rajan Priya.Dat gave

‘Rajan gave a cat to Priya’

19. *oru pu:chaye Priyayku Rajan koduthu

[\text{a cat}_{\text{non-specific indefinite}}].\text{Acc} Priya.Dat Rajan gave

‘Rajan gave a cat to Priya’

If the subject is such a nominal, another nominal that is more referential is left dislocated to occupy the left edge:

20. *ora:l Priyaye kandu

[\text{a person}_{\text{non-specific indefinite}}].\text{Priya.Acc} saw

‘A person saw Priya’

21. Priyaye ora:l kandu

Priya.\text{Acc} [\text{a person}_{\text{non-specific indefinite}}] saw

‘A person saw Priya’

The leftmost edge of the clause is generally interpreted as the default Topic\(^2\). Thus in cases of zero copula sentences, the left nominal is interpreted as the Topic\(^3\).

22. Who is Rajan?

23. Rajan raajaavu.

Rajan king

‘Rajan is the king’

24. #raajaavu Rajan.

25. Who is the king?

26. raajaavu Rajan.

king Rajan

‘The king is Rajan’

27. #Rajan raajaavu.

\(^2\) A non-Topic element in the clause can be stressed to add emphasis.

\(^3\) In fact, there might even be some detailed story around the copula:

(i) 4um 3um 7 aanu

4.Conj 3.Conj 7 be

‘4 and 3 is 7’

(ii) 4um 3um aanu 7

(iii) *7 4um 3um aanu

(iv) *7 aanu 4um 3um

(v) 4um 3um 7

(vi) *7 4um 3um
It has been argued in the literature that the position to which elements scramble carry discourse-configurational features (see for eg. Grewendorf 2005) and in the case of scrambling to the left edge, it is unmistakably Topic as seen from the data presented above. Furthermore, cases where an indefinite nominal occupies the left edge, it gets the interpretation of a \([+\text{Specific}]\) or \([+\text{Contrastive}]\) or \([+\text{Partitive}]\) NP. For example, a sentence similar to example (18) can be construed as grammatical in the following context.

Context: There were two cats that were adopted the same day. A does not know who adopted the cats. B can inform A of the identity of the person with the following sentence, where ‘a cat’ gets a partitive specific interpretation.

28. oru pu:chaye Rajan kondupoyi a cat.Acc Rajan took away
   ‘Rajan took one cat’.

I will conclude that there is a position, TopP\(^4\), which hosts the leftmost argument in the examples above.

Now the issue is to determine the position of this Topic; i.e., whether this is A-scrambling or A-bar scrambling. First of all, not just nominal elements, but PPs, adverbs etc. also are perfectly grammatical in the left edge position indicating that this is A-bar scrambling. An example with a PP is given here:

   ‘Rajan met Priya at home’.

   ‘At home, Rajan met Priya.

That is, the left edge topic position is at the C-domain. This is illustrated with a C-domain adverb ‘fortunately’ (cf. Cinque 1999).

31. Priyaye bhagyathinu Rajan kandu Priya.Acc fortunately Rajan saw
   ‘Priya, fortunately, Rajan saw (her)’

In this example, the scrambled object precedes the high adverb, showing that it is moving to a C-level position.

\(^4\)We will not explore scrambling or the number of possible Topic positions here; the aim of the discussion here being to show that the scrambled object is dislocated to a Topic position at the C-domain. See for example, Frascarelli and Hinterholtz (2004) for a description of the available Topic positions in the C, T, and v domains.
This can be further substantiated using an explicit topic marker. Although there is no specific morpheme that marks a Topic in Malayalam, Asher and Kumari (1997; p.184) notes the following: “Thought the fact of a constituent of a sentence being in the initial position is sufficient to announce it as being the topic, a more explicit marker of topic is possible. In this case, the topic remains in the first place in the sentence but is followed by a reinforcing element [...].” One such element is *aanengil*.

32. *a: pu:chaye aanengil Rajan Priyayku koduthu
   that cat.Acc be.if Rajan Priya.Dat gave
   ‘As for that cat, Rajan gave (it) to Priya’

The ungrammaticality of the following example makes for a minimal pair.

33. *oru pu:chaye aanengil Rajan Priyayku koduthu
    a cat.Acc be.if Rajan Priya.Dat gave
    ‘As for a cat, Rajan gave (it) to Priya’

Now, it is impossible to place *aanengil* at a lower position in the clause, showing that this marker explicitly marks a C-domain Topic.

34. *Rajan Priyayku a: pu:chaye aanengil koduthu
    Rajan Priya.Dat that cat.Acc be.if gave
    ‘As for that cat, Rajan gave (it) to Priya’

    Rajan Priya.Dat be.if that cat.Acc gave
    ‘As to Priya, Rajan gave that cat (to her)

In other words, there is indeed a Topic position available in the left periphery of Malayalam, *a la* Rizzi (1997), that an object scrambled to the left edge can occupy. Thus, I would be assuming an *ad hoc* minimal clause structure in (37) for Malayalam for the time being:

36. Priyay Rajan kandu
    Priya.Acc Rajan saw
    Rajan saw Priya


This leaves us with the position of the verb in the clause. We explore this below.

### 2.4 The Position of the Verb

Clearly, word order facts pertaining to the position of the arguments do not tell us much about the position of the verb. We already saw in the beginning from examples 1 – 8 that
Malayalam is a strictly verb final language. This makes it impossible to use adverbial positions as a diagnostic for the position occupied by the verb. Hence we need to look for other, perhaps indirect, clues to determine the position of the verb. In the section below, we use co-ordination as a diagnostic.

Take the following example:

38. Priya \[\&P\] [Anupinu Rajaneyum] \[Meerakku Aniyaneum]\]
   
   Paricayappedutti
   
   Lit: Priya [to Anup Rajan and to Meera Aniyan] introduced
   
   ‘Priya introduced Rajan to Anup and Aniyan to Meera’

Assuming that only constituents can be co-ordinated, what we see above is the two internal arguments functioning as a constituent amenable to co-ordination to the exclusion of the verb and the subject. If we follow the canonical VP shell story (Larson 1988), this can happen only if the verb moves out of the VP, therefore, there should be at least predicate internal verb movement from V to \(v\) in Malayalam. The coordination of internal arguments and locative adjuncts further substantiate this point:

39. Rajan \[\&P\] [delhiyilekku penayum] [osloyilekku mazhiyum] ayachu
   
   Lit: Rajan [to Delhi pen and to Oslo ink] sent
   
   ‘Rajan sent pen(s) to Delhi and ink to Oslo’

So far, the picture seems to be as following:
Does the verb move to a position above the subject as well? The next example certainly suggests that.

40. \[\text{&P} \quad \text{[Rajan Priayeyum]} \quad \text{[Meera Aniyaneyum]} \quad \text{kandu} \]

Lit: Rajan Priya and Meera Aniyan saw
‘Rajan saw Priya and Meera saw Aniyan’

In the above example, the co-ordinated constituents have the subject and the object together, to the exclusion of the verb, suggesting that the verb moves to a position above the projection where the subject appears in the surface order.

Fig: 2

As we discussed in the beginning, scrambling is possible in Malayalam, which means an object can precede the subject in a sentence. We also saw that this movement to the left is not semantically vacuous or totally unconstrained. The leftmost argument in the examples obeyed the rules of Topicalisation, and as we surmised in the previous section, it is at TopP, above the Subject position. This leads us to the next example:

41. \[\text{[Rajane Priyum]} \quad \text{[Aniyane Meeryum]} \quad \text{kandu} \]

Lit: Rajan Priya and Aniyan Meera saw
‘Priya saw Rajan and Meera saw Aniyan’
Chapter 2 SOV via Head Movement

42. [Rajane aane:l Priyayum] [Aniyan aane:l Meeraum] kandu
   Rajan.Acc be.if Priya-Conj Aniyan.Acc be.if Meera.Conj saw
   Lit: As for Rajan Priya and as for Aniyan Meera saw
   ‘As for Rajan, Priya saw him and as for Aniyan, Meera saw him’
In (41 and 42), the objects have moved to TopP, crossing the subject, and it must be at least
the two TopPs that are co-ordinated here, further evidencing that the verb must have
moved beyond the IP level and into C for this to be possible5.
The coordinated phrase allows for movement, as in the following example, showing that it is
indeed a constituent and not a spurious surface phenomenon.
43. [&P [Priya Rajaneum] [Meera Aniyaneneum]] Anupinu
   paricayappedutti introduced
   ‘Priya introduced Rajan and Meera introduced Aniyan to Anup’
Thus the data presented above all point towards a V-to-C analysis. However, to be quite
sure of adopting that analysis, we need to rule out alternative analyses concerning
coordination of seemingly unobtainable constituents.

2.5 Alternative Analyses

2.5.1 Gapping

The Rule of Gapping (Ross 1967) refers to the process found in languages like English
where the redundant parts in the second conjunct can be deleted as exemplified by the
following pair of sentences:
44. Priya saw Rajan and Aniyan saw Meera
45. Priya saw Rajan and Aniyan, Meera.
A possible analysis of the sentences given in the previous section would be to show that they
are instances of gapping where the repeated verb in the conjoined clauses is deleted as
shown in the following hypothetical example (# is used to caution the reader that the
sentence is a hypothetical one):
46. [#[Priya Rajane kandum] [Aniyan Meeraye kandum]#]

5 It might be worth noting that the clauses that are coordinated must be of the same ‘type’ in that a clause with a
topicalised object and a clause with a non-topicalised object lead to ungrammaticality:
* Meera Rajanum Aniyan Priyayeyum kandu.
Chapter 2 SOV via Head Movement

to mean: Priya saw Rajan and Aniyan saw Meera
giving the following after deletion of identical elements:

47. #Priya Rajane kandum Aniyan Meeraye kandum #

Now, there are two problems with this argument. The first one is pretty obvious – in the hypothetical (46/47) the conjunction marker is affixed to the verb in the second conjunct whereas in the grammatical sentence below, there is no conjunction marker on the verb:

48. [Priya Rajaneum] [Aniyan Meerayeyum] kandu
to mean: Priya saw Rajan and Aniyan saw Meera

The conjunction marker in Malayalam always suffixes to the last element of the conjoined phrases; it does not have infixal properties. Consequently, the above example makes it amply clear that the verb is definitely outside the conjoined phrases.

The second issue with this or any other argument which angles for a verb deletion account is that the hypothetical sentence we got by simply conjoining the two clauses is plain ungrammatical.

49. *[Priya Rajane kandum] [Aniyan Meeraye kandum]

It has been observed in the literature that Dravidian languages do not allow the coordination of finite clauses (Anandan 1993; Asher and Kumari 1997, Jayaseelan 2001, Amritavalli and Jayaseelan 2005, Jayaseelan 2011). Thus, the question of conjunction of the two clauses followed by deletion of the repeated verb does not, in fact, arise at all.

Moreover, as Koizumi (2000) notes, if this indeed is a matter of deletion of identical elements, Gapping analysis would predict that any further movement operation involving the conjoined elements would invariably involve the verb in some way. Because, even though the verb is deleted in one of the conjuncts, it is still part of the other conjunct in a gapping/conjunction reduction analysis. So whatever happens to the conjoined phrase should affect the verb in a direct manner. This is definitely not the case in Malayalam, as the following example shows:

50. [&P [Priya Rajaneum] [Meera Aniyaneum]] Anupinu
   paricayappedutti
   introduced

‘Priya introduced Rajan and Meera introduced Aniyan to Anup’
Chapter 2 SOV via Head Movement

51. *\[ Priya\ Rajaneum \] \[ Meera \ Aniyaneum \] paricayappedutti

\[
\begin{align*}
\text{Priya Rajan.Acc.Conj} & \quad \text{Meera Aniyan.Acc.Conj} \quad \text{introduced} \\
\text{Anupinu} & \\
\text{Anup.Dat}
\end{align*}
\]

Priya introduced Rajan and Meera introduced Aniyan to Anup

In (50), the co-ordinated phrase undergoes movement as a whole, without affecting the verb in any manner. The sentence in (51) where the verb moves along the co-ordinated phrase is ungrammatical. This should not have been possible if the verb were part of either of the conjunct in the surface structure. The overt verb is clearly not a constituent of the conjoined phrases, deeming a verb raising analysis preferable. However, a sceptical reader can still act as the Devil’s advocate and point out that the examples above may not conclusively rule out a Right Node Raising analysis.

2.5.2 Right Node Raising

Right Node Raising (RNR) refers to constructions of the type where we find only a single overt instance of the element shared between two conjuncts.

52. Aniyan likes the university and Vipin hates the university

53. Aniyan likes, and Vipin hates, the university

(53) is an example of RNR where the repeated element, ‘the university’ appears only once in the sentence. Analyses of this phenomenon can be broadly categorised into three – ellipsis, movement and multidominance. Ellipsis based arguments (eg: Wexler and Culicover 1980) take (53) to be present at some point in the derivation, followed by the deletion (often argued to be phonological) of element(s) under an identity condition.

54. Aniyan likes the university and Vipin hates the university

Under a movement analysis, the repeated phrase undergoes rightward extraction and adjoins itself to the co-ordinated phrase\(^6\) (e.g: Ross 1967, followed by many).

55. \[ IP & IP an\text{iyan likes} t_i \] \[ IP \text{vipin hates} t_i \] the university\]

In the Multidominance approach (e.g. De Vos and Vicente 2005, Bachrach and Katzir 2008) there is only one instance of the “shared material” which is merged into both the conjuncts as shown in the figure below (adapted from Larson 2011)

---

\(^6\) RNR analyses that does not adjoin the verb to the conjoined constituent, but subscribe to an ATB type movement may be compatible with the analysis presented here.
In these approaches to RNR, it should be noted that the common element between the conjuncts is represented as part of the conjuncts, a point that came up earlier in our discussion of Gapping. As evidenced by the co-ordination affix explicitly marking the boundaries of the coordinated phrases excluding the verb and the movement of the coordinated phrase leaving the verb in its final position in the sentence (e.g. 46-49), the verb is not a part of either of the conjuncts, thus making a RNR analysis less preferred.

The Ellipsis account with PF deletion and the multidominance approach with the shared material are both out of question in analysing the co-ordination data presented in the previous section because such analyses have two finite clauses as the conjoined elements at some point in the derivation; a construction that is impossible in Malayalam as we saw in examples 46-47.

The movement approach cannot explain the data either even though it may seem more promising than the other two accounts because it predicts that the verb moves out of the conjoined phrases. However, the movement approach essentially argues for right adjunction to the coordinated phrase. This makes a prediction that movement operations that affect the co-ordinated phrase would find the verb being pulled along with the &P. However, this prediction turns out to be wrong, as we saw in example (51), reproduced below:

56. `[&P [Priya Rajaneum] [Meera Aniyaneum]] Anupinu
paricayappedutti introduced
‘Priya introduced Anup to Rajan and Aniyan to Meera’
2.5.3 Optionality of operations

Evidently, only a verb-raising analysis can account for the data. Moreover, Right Node raising and Gapping are, in the familiar examples, operations that are optionally possible in addition to the conjunction of two finite clauses. As we saw, conjunction of finite clauses is impossible in Malayalam. Thus neither RNR nor Gapping fit into the paradigm that Malayalam exemplifies.

2.6 Further Evidence

2.6.1 V+Argument constituents

Unlike English type languages where the verb and the object can form a constituent, we saw in the previous sections that the verb is always excluded from constituents that involved the arguments. In fact, the tense-inflected verb in Malayalam cannot form a constituent with its arguments. So constructions like the familiar (58) from English is impossible in Malayalam.

58. John ate a mango and drank milk

59. *John maanga thinnum paalu kudichum

This is explained effortlessly if we accept that the verb is no longer present in the \( vP \) to form a constituent with its object. Consequently, a rather immediate concern would be to see if there are instances in the language where the verb stays in the \( vP \) and if so, whether forming a constituent with an argument is a viable option.

Indeed it is. When the tense information is realised by \( do \) support or an auxiliary, the verb appears in a form uninflected for tense and is able to form a constituent with the relevant argument.
Chapter 2 SOV via Head Movement

60. Rajan maanga thinnukaum paalu kudikkukaum ceythu
Rajan mango eat.Conj milk drink.Conj did
Rajan ate a mango and drank milk

61. Rajane [Priya adikkukayum]
Rajan.Acc Priya hit\textsubscript{nonfinite}.Conj
[Aniyan idikkukayum] ceythu
Aniyan punch\textsubscript{nonfinite}.Conj did
‘Priya hit and Aniyan punched Rajan’

Do support is extremely degraded when both the conjuncts have the same verb:

62. ??/*[Priya Rajane kanukayum]
Priya Rajan.Acc see\textsubscript{nonfinite}.Conj
[Aniyan Meeraye kanukayum] ceythu
Aniyan Meera.Acc see\textsubscript{nonfinite}.Conj did
‘Priya saw Rajan and Aniyan saw Meera’

Notice that English, where the verb does not move to I, allows for sentences like (63) where the tense information is carried by do support:

63. John did go home

Not surprisingly, these constructions are ungrammatical in Malayalam. It is ungrammatical to have an uninflected verb outside the coordinated phrase with do carrying the tense information.

64. *John vi:ttil po:vuka ceythu
John home.Loc go\textsubscript{nonfinite} did

65. *[Priya Rajaneum]
Priya Rajan.Acc.Conj
[Aniyan Meerayeyum] kaanuka ceythu
Aniyan Meera.Acc.Conj see\textsubscript{nonfinite} did
‘Priya saw Rajan and Aniyan saw Meera’

When we have the verb forming a constituent with its argument(s), it mandatorily appears in a form uninflected for Tense. As a matter of fact, other forms of verb that are uninflected for tense also can be in a constituent relation with its argument(s).

66. Priya [Rajane adikka:rum]
Priya Rajan.Acc hit\textsubscript{habitual}.Conj
[Aniyane idikka:rum] undu
Aniyan.Acc punch\textsubscript{habitual}.Conj Auxiliary
‘Priya usually hits Rajan and punches Aniyan’
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Only the verb inflected for tense is unable to form a constituent with the arguments, providing further proof that the verb in a finite clause overtly rises to a position above the arguments.

2.6.2 Negation

We saw elsewhere that the Negative Auxiliary obligatorily takes scope over a quantified Subject. The example is reproduced below:

67. ellaavarum vann-illa
came-beNeg
Not all came
Neg>All *All>Neg

This, in itself, cannot constitute an argument for verb raising since the verb could be in a lower position with the Negative Auxiliary in a higher position, the linear adjacency being a red herring. To control for this, one can look at examples which involve constructions where the Auxiliary functions as the main verb of the sentence.

68. ella pusthakavum ee sanchiyil undu
all books this bag,Loc be
All books are in this bag.

69. ella pusthakavum ee sanchiyil illa
all books this bag,Loc beNeg
Not all books are in this bag
Neg>All *All>Neg

To get the meaning where there aren't any books in the bag, one has to resort to an NPI:

70. oru pusthakavum ee sanchiyil illa
any book this bag,Loc beNeg
There isn't any book in this bag

69 and 70 together shows that the verb, which in this case carries Negation also, is above the Subject.

7 Han, Lidz and Musolino (2007) points out that negation in Korean has been used to argue for V-raising by Choi (1999). They go on to point out counterarguments to this by Chung and Park (1997) where the Subject QP indeed takes scope over the Negation and proposes that ‘NPI licencing in Korean does not coincide with the scope of negation and so it has no bearing on the issue of V-raising’ (p.9). However, this argument does not apply for Malayalam since (i) NPI licensing coincide with the scope of Negation and (ii) unlike Korean where a Quantified subject scopes over a Neg Auxiliary, it is the Negation that scopes over the Quantified subject in Malayalam as shown in section 1.
2.6.3 Question-Answer Pairs

The answers to yes/no questions also suggest that the verb moves out of the vP and is very high in the clause. Consider the question-answer pairs below where the answer can be just the inflected verb.

71. Rajan innale viittil pooyoo?
    Rajan yesterday home.Loc went.Q
    Did Rajan go home yesterday?

72. pooyi.
    Went.

This kind of fragment answer is possible only if the verb moves o C, leaving behind all the arguments and the temporal adverb whereby the complement of C can be deleted. Of course, it could be argued that this is an extreme case of pro-drop where all the nominals in the sentence are realised as pro rather than whole phrases being deleted. Data from light verb constructions suggest that this may not be a case of pro-drop. Consider a negative answer to the question in (71). The answer can be given in two ways – with the verb moving to the Negation or just the Negation.

73. pooyilla.
    Went.beNeg
    Did not go.

74. illa.
    beNeg
    No.

Amritavalli and Jayaseelan (2005) have argued that illa in Malayalam encodes Finiteness\(^8\). Thus it seems that either the verb can move to the Fin projection, pick up the negative auxiliary illa and the rest of the sentence can be deleted as in (73). Alternatively, the verb can stay below and be in the phrase that is deleted, leaving only the negative auxiliary illa. Consider another example with a light verb. In a light verb construction, the finiteness and the temporal information are carried by the light verb (cf. 75-77).

75. Rajan Priyaykkku kadha paranju koduthu
    Rajan Priya.Dat story said gave.
    Rajan narrated a story to Priya.

---

\(^8\) Many thanks to K.A. Jayaseelan for suggesting this.

\(^9\) The paper is about the relation between Tense and finiteness in Dravidian.
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76. Rajan Priyaykku kadha paranju kodukkum
   Rajan Priya.Dat story said will give.
   Rajan will narrate a story to Priya.

77. Rajan Priyaykku kadha paranju kodukkunnu
   Rajan Priya.Dat story said give.
   Rajan is narrating a story to Priya.

Now, if the following question is asked, the fragment answer needs only the light verb.

78. Rajan Priyaykku kadha paranju koduthoo?
   Rajan Priya.Dat story said gave.Q
   Did Rajan narrate a story to Priya?

79. koduthu.
   Gave.
   Assuming that the light verb is at C, spelling out Fin, the data suggests that in the fragment answers that we saw above in (79), it is by virtue of its position at C that the inflected verb can function as a grammatical answer.

2.7 Addressing Concerns about Using Co-ordination as a Diagnostic Tool

The main diagnostic tool used here to detect verb movement is co-ordination, with the underlying assumption being only constituents can be co-ordinated. As mentioned before, Koizumi (2000) has used co-ordination as an argument for verb movement in Japanese. Fukui (2006), among other issues\(^\text{10}\), raised questions about the validity of Koizumi’s assumption that co-ordination at the surface level always indicates constituency in Japanese.

2.7.1 Some issues from Japanese


80. [Mary-ga John-ni ringo-o 2-tu] to [Nancy-ga
    [Mary-Nom John-to apple.Acc 2-CL] and [Nancy-Nom
    Bob-ni banana-o 3-bon]] ageta (koto).
    Bob-to banana.Acc 3-CL] gave
   Lit. ‘[Mary two apples to John] and [Nancy three bananas to Bob] gave.’
   (Mary gave two apples to John, and Nancy gave three bananas to Bob.)

\(^\text{10}\) The main argument of Fukui is whether functional categories are present in Japanese at all, and productive mechanisms to discover their existence instead of stipulating that functional categories are present in every language.
Fukui points out that other connective particles -mo and katu do not behave like to in that they cannot conjoin the phrases when the verb is not part of the coordinated phrases. Do-support is needed for mo to conjoin two VPs whereas katu can have the verb inside the conjoined phrases with the tense morphology outside the &P. Since Malayalam uses the same coordination marker\(^{11}\) in contexts where different connective particles are employed in Japanese, we cannot use these tests. However, Fukui brings up another problem that is connected to the case particle. He shows that the case particles can affix themselves to the outside of the coordinated phrases. This is problematic if the coordinated phrases are anything other than nominals and thus calls Koizumi’s analysis into question.

\[81. \text{Taroo}-\text{ga} \quad [\text{Hanako-ni ringo 3-tu}] \quad \text{to} \quad [\text{Kumiko-ni}
\text{Taroo-Nom Hanako.Dat apple 3-CL}] \quad \text{and} \quad [\text{Kumiko.Dat banana 2-hon (to)}] \quad \text{–o} \quad \text{ageta banana} 2\text{-CL (and)}] \quad \text{Acc} \quad \text{gave} \quad \text{(Fukui 2006, p.313)}
\]

Lit. Taro gave [three apples to Hanako] and [two bananas to Kumiko].

Fukui points out that in Japanese, the Accusative case particle can only be assigned to a noun phrase, and never to a VP; what is conjoined in the above example cannot be a non-nominal remnant verbal phrase.

A correct observation as this may be for Japanese, the case morphology in Malayalam behaves differently in that it always appears strictly on the relevant arguments and cannot be separated.

\[82. \text{Rajan} \quad [\text{Priya-kku oru pu:cca-e-} \text{um}] \quad [\text{Anupinu}
\text{Rajan} \quad \text{Priya.Dat a cat.Acc} \text{-Conj} \quad [\text{Anupinu.Dat oru pasuvine} \text{um} \quad \text{koduthu a cow.Acc} \text{-Conj} \quad \text{gave}
\]

Lit. Rajan gave [a cat to Priya] and [a cow to Anup]

\[83. \ast \text{Rajan} \quad [\text{Priya-kku oru pu:cca}] \text{um-e} \quad [\text{Anupinu}
\text{Rajan} \quad \text{Priya.Dat a cat} \text{-Conj.Acc} \quad [\text{Anupinu.Dat oru pasuv}] \text{um-e} \quad \text{koduthu a cow} \text{-Conj.Acc} \quad \text{gave}
\]

Lit. Rajan gave [a cat to Priya] and [a cow to Anup]

The next construction that Fukui discusses to argue for the unreliability of using the coordination as a test for constituents is the infinitival.

\[^{11}\text{The disjunction particle in Malayalam behaves exactly like the coordination examples given in the previous sections.}\]
84. Taroo-ga ⑥Hanako-ni ringo 3-tu] to ⑥Kumiko-ni
⑥Taroo-Nom Hanako.Dat apple 3-CL] and ⑥Kumiko.Dat
banana-o 2-hon ]  katte-kuru-yooni tanon-da
banana.Acc 2-CL] buy-bring-Aux asked (Fukui 2006, p.314)
Lit. Taro asked Hanako to buy and bring 3 apples and Kumiko to buy and bring 2
bananas.

The ‘constituent’ in the above example is made up of the object of the matrix verb and the
object of the embedded verb. Even if we assume V-to-C/T movement, the constituency is,
according to Fukui, left unexplained.

We see a similar structure in Malayalam as well:

oru pencilum]] kondu varaan paranju
a pencil.Conj bring-Inf said

Rajan asked Priya to bring a book and Anup to bring a pencil.

86. ⑥Rajan Priya:du oru pusthakavum] ⑥Aniyan
Anupino:du oru pencilum]] kondu varaan paranju
Anup-Soc a pencil.Conj bring-Inf said

Rajan asked Priya to bring a book and Aniyan asked Anup to bring a pencil.

Does this mean that we have to abandon our analysis so far or do we have an explanation for
this strange constituent? Indeed we do, as shown in the next section.

2.7.2  A Case for RNR

Based on our analysis so far, we have the following structure for an embedded infinitival like
the following:

87. ⑥Rajan Priya:du oru pusthakam kondu varaan paranju
Rajan Priya-Soc a book bring-Inf said

Rajan asked Priya to bring a book.
Now, if we were to coordinate the matrix vIs, we get the following sentence and corresponding structure:

88. Rajan [\[\_vP\_\_P\] Priyayodu oru pusthakam konduvaraanum\] 
    Rajan Priya-Soc a book bring-Inf.Conj 
    [\_dP Anupinodu oru pencil kondu varaanum\_\_] paranju 
    Anup-Soc a pencil bring-Inf.Conj said 
    Rajan asked Priya to bring a book and Anup to bring a pencil

Fig:3

Fig:4
We observed earlier that for the verb-inflected-for-tense constructions Right Node Raising was not a viable analysis primarily due to two reasons: (i) the base structure of conjoining two finite clauses was ungrammatical and (ii) the verb did not behave as part of the conjoined clauses at any point (see examples 46-51; section 2.5). We shall see below that exactly these characteristics define the coordination of embedded infinitivals. To begin with, we can have the same infinitival repeating inside the coordinated clauses as in the above example. In the next example we see that Malayalam allows for the infinitival to appear once instead of repeating in both the conjuncts and in such cases the single occurrence of the infinitival appears outside the coordination marker um.

Furthermore, we see that when the coordinated phrase undergoes movement, the infinitival obligatorily moves along:

More over, failure of the infinitival to be adjoined to the coordinated phrase results in ungrammaticality:

That is, all the tests that returned negative in the case of tensed verbs are now showing positive results in the case of embedded infinitivals; pointing to Right Node Raising. The structure we get is the following one where the repeated infinitival is adjoined to the coordinated phrase:
Thus, it turns out that Fukui’s counterexample involving embedded infinitivals do not hold for Malayalam, and we can, after all, trust the coordination examples to a greater extent than in Japanese.

2.8 Conclusion

Co-ordination facts from Malayalam shows that the arguments can function as a constituent to the exclusion of the verb. Furthermore, as we saw in section 3.5, if the verb is to be made a part of a constituent consisting of the argument, it must appear in a non-finite form, precluding any movement to higher positions. Gapping or Right Node Raising analyses fail to account for the data as well as the non-optionality of the construction. Thus, only a verb-raising analysis captures the range and nature of the data. We saw in the very first section that the constructions we are looking at exhibits strict verb final behaviour. This becomes entirely predictable if there is V-to-C movement in that even if there are right adjoining adjuncts, once the verb finishes its travel, it would invariably be at the final position since Malayalam is a head final language. Thus the verb is in the C domain in verb-final constructions.
Chapter 3  
*aanu* Construction

The construction type under discussion in this thesis where certain Wh words show mandatory ex-situ behaviour is of the form below:

1. `aare *aanu* Priya *kandathu?`
   
   Whom be Priya saw.Sg.N.
   
   ‘Who is it that Priya saw?’

2. `*Priya *aanu* aare *kandathu?`
   
   Priya be whom saw.Sg.N.
   
   ‘Who is it that Priya saw?’

We examine this construction in detail in this chapter. At first glance, the above example may appear to be reminiscent of optional Wh movement in the context of Focus\(^{12}\). Indeed, the construction in (2) has been described as Cleft (cf. Madhavan 1987, Asher and Kumari 1997, Jayaseelan 2001). The term ‘cleft’ immediately brings to mind a biclausal structure. I will argue later in this chapter that the type of constructions exemplified in (2) should be treated as monoclausal. For this reason, I refrain from using the term ‘cleft’ even though the information structure properties are easily translated into English using It-Clefts in most of the cases. As Matthewson (2004, p.377) warns, the reader should be wary of the fact that “[…] any difference between the systems of the source language and the translation language can serve to obscure the true meaning of the source language sentences.” Thus, the translation should not be taken to mean a one-to-one syntactic or semantic correlation between these constructions and the English It-Clefts. We examine the function, meaning and structure of the construction here.

The chapter is organised as follows: Section 3.1 explores the function of the construction and analyses them as Categorical constructions *a la* Sasse (1987). Section 3.2 explores the specific interpretations, especially the exhaustive reading. The section shows that the exhaustive interpretation is arrived by presupposition as opposed to exhaustive reading of Focus constructions attained via assertion. The next section 3.3 is about the clause structure. The argument that these constructions are biclausal is explored in detail and

\(^{12}\) The question whether the Wh movement in (1) is Focus movement will be directly addressed directly in Chapter 5, section 5.6
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refuted. We then move on to determining the position of the verb and the ends up with the structure of an *aanu* clause.

### 3.1 Function

Malayalam speakers tend to use this construction very prolifically which in itself might be slightly anomalous if this were a real cleft. As can be seen from the non-Wh example below, the sentences involve a bipartite structure with a clearly marked Predicate part and a clearly marked element the the predicate is about.

3. Rajane *aanu* Priya kandathu.
   
   Rajan.Acc be Priya saw.Sg.N.
   
   ‘It is Rajan that Priya saw.’

Although the interpretative similarities with cleft constructions makes it easier to label the projection headed by *aanu* as Focus, there are contexts where a continuing Topic (cf. Givon 1983) can appear quite naturally and felicitously in this position. The following conversation is an example of this.

   
   What.be everyone John.about talk.Sg.N.
   
   ‘Why is it that everyone talks about John?’

5. B: avan *aanu* innale ra:jane kandathu. athukondu *aanu*
   
   He be yesterday Rajan.Acc saw.Sg.N. because be.
   
   ‘He is who saw Rajan yesterday. That is why (they are talking about him).’

The felicitous answer in 5 elaborates on the topic that has been introduced in the question. Perhaps someone might feel inclined to propose that it is rather a case of contrastive focus than a continuing topic. Malayalam has a construction that is used to encode contrastive focus. However, a contrastive focus construction as in the following is less felicitous in this context, which shows that contrastivity is not really the point here.

6. B: #avane: innale ra:jane kandullu:
   
   
   ‘Only he saw Rajan yesterday’.

If we define Focus as ‘new information’, the expected sentence would have been the following with the information ‘[e saw Rajan yesterday]’ in the Focus position.
Chapter 3 \textit{aanu} Construction

7. innale rajane kandathu \textit{aanu} avan  
yesterday Rajan.Acc saw.Sg.N. be he.

However, this is not a felicitous answer to A’s question. This sentence is felicitous as an emphatic assertion that is equivalent to the English construction ‘He did see Rajan yesterday’. The felicitous answer in 5 is rather B’s judgment where the continuing topic ‘John’ hold true of the predicate [\textit{innale rajane kandathu}].

More over, a phrase marked as Topic can occur at the pre-\textit{aanu} position. Recall the \textit{aane:l} ‘as for’ topic phrases from last chapter. Phrases marked as topics by \textit{aane:l} can grammatically and felicitously appear in the pre-\textit{aanu} position.

Context: we need to gain entry to the club, but we are not members. So we plan to bribe the bouncer and are discussing the different bouncers the club usually employ.

8. Meera \textit{aane:l} kuzhappam illa;  
Meera be.if problem beNeg;
As for Meera, it is no problem;
Aniyan \textit{aane:laa} nammal kudungunnathu.  
Aniyan be.if.be we trapped.Sg.N.
Lit: It is as for Aniyan that we are going to be trapped.  
‘As for Aniyan, we will be trapped’.

That is, the typology is not simply about Focus constructions and non-Focus constructions. The distinction seems to be very clear along another aspect, that of thetic versus categorical sentences (Sasse 1987) in that the construction under discussion forms a subset of Categoricals.

\subsection{Sasse (1987)}

Sasse (1987) – following up on the proposals by the 19th century philosophers Brentano and Marty and revived later by Kuroda (1972) – examines the distinction between thetic and categorical statements. “Categorical sentences contain a predication base about which some state of affairs is predicated, while thetic sentences are simply nonpredicative assertions of states of affairs” (p.511). The classical Subject-Predicate bipartition is, in this system, a subcategory of categorical sentences. Kuroda (1972) attempted to show that this is the grammatical notion that distinguishes the \textit{wa} marked sentences from the \textit{ga} sentences in

\footnote{\textit{aane:l} is the contracted form of \textit{aanengil} used in spoken language.}
Chapter 3 *aanu* Construction

Japanese. Ironing out the creases in Kuroda’s arguments, Sasse provides a more tractable exposition of the thetic - categorical division. I follow Sasse (1987) here (Sasse, hereafter).

As Sasse points out, the distinction between thetic and categorical sentences are brought about through intonation in English. Japanese, according to Kuroda, exhibits this via the use of particles. As we saw in the previous chapter, the erb-final constructions can have a Topic reading which is one variety of Categoricals construction. Here we find another type of Categorical construction where the Predication base is marked explicitly. Below I reproduce some of the contexts in which the canonical unmarked verb-final word order of the thetic constructions contrast starkly with the *aanu* construction.

Q: What’s new?

9. #Rajan _aanu_ Priyaye kandathu
   Rajan be Priya.Acc saw.Sg.N.
   ‘It is Rajan who saw Priya’

10. Rajan Priyaye _kandu_
    Rajan Priya.Acc saw
    ‘Rajan saw Priya’

Q: How’s the weather?

11. #mazha _aanu_ peyyunnathu
    rain be pour.Sg.N.

12. mazha peyyunnu
    rain pour
    ‘It’s raining’

Q: What was that?

13. #patti _aanu_ kurachathu
    dog be barked.Sg.N.
    ‘It is the dog that barked’

14. patti kurachu
    dog barked
    A/The dog barked.

Q: What’s wrong with you?

15. #naduvu _aanu_ vedanikkunnathu
    back be ache.Sg.N.
    ‘It is my back that hurts’

16. naduvu vedanikkinnu
    back ache
    ‘(my) back hurts.

Q: Why are you so sad?

17. #ente pattikku _aanu_ sukham illaathathu
    my dog.Dat be well beNeg.Sg.N.
Chapter 3 *aanu* Construction

‘It is my dog that is unwell’

18. ente pattikku sukham-illa
   my dog.Dat well-beNeg
   ‘My dog is unwell’

Q: Who’s singing outside?

19. #John paadunnu
   John sings
   ‘John is singing’

20. John aanu paadunnathu
    John be sing,Sg.N.
    ‘It is John who’s singing outside’

Q: Who is absent today?

21. #John innu vannilla
    John today came- beNeg
    ‘John did not come today’

22. John aanu innu varaathathu
    John be today come-Neg,Sg.N.
    ‘It is John who did not come today’

Q: When did Rajan give you a book?:

23. #Rajan innale enikku oru pusthakam thannu
    Rajan yesterday to me a book gave
    ‘Rajan gave a book to me yesterday’

24. innale aanu Rajan enikku oru pusthakam thannathu
    yesterday be Rajan to me a book gave,Sg.N.
    ‘It is yesterday that Rajan gave me a book’

Q: How did Rajan get here?

25. #Rajan kaare:l vannu
    Rajan car.Loc came
    ‘Rajan came in a car’.

26. Rajan kaare:l aanu vannathu
    Rajan car.Loc be came,Sg.N.
    ‘It is in a car that Rajan came’.
Q: Why did Rajan meet Anup?

27. #Rajan Anup.business.inte kaaryam parayaan kandu
Rajan Anup.Acc business.Gen matter to say saw
Rajan met Anup to discuss business affairs.

28. business.inte kaaryam parayaan aau Rajan Anupine kandathu
business.Gen matter to say be Rajan Anup.Acc saw.Sg.N.
‘It is to discuss business affairs that Rajan met Anup’.

As shown in the above examples, the construction under discussion is used when there is a strong presupposition that an event happened. This corroborates the claim that the aanu construction is categorical in nature. A number of other properties dovetail with the argument that the aanu sentences are categorical statements. To begin with, the examples of this structure, with or without the Auxiliary, are of a bipartite construal where the V.athu.

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14 It has been observed in Anandan (1985) that it would be more explanatory to decompose the inflection athu on the verb not as the .SgN pronoun, but as a, the distal marker and thu, the phi morphology for Sg.N. He observes that the morpheme a appears as a Relativiser in Relative Clauses and on the handful of adjectives in Malayalam which are fossilised Relative Clauses (see also Menon 2012 for a detailed analysis of the lack of adjectives in Malayalam). He proposes that the inflectional morphology on the verb in the construction under discussion is composed of this modificatory morpheme a and phi features. Keeping that in mind, let us now examine the V.athu phrase. First we see examples of a Relative Clause and an adjective below and see the nominalisation pattern.

1. John kanunn-a kutti
   John see-a child
   ‘The child whom John sees’

2. velutth-a patti
   whitened-a dog
   ‘White dog’

Now, it is possible to add the phi morphology and nominalise the extended verbal phrase and the adjective:

3. [John kutti-ye kanunn-a-th-ine] Rajan ethirtthu
   John child.Acc see-a.Sg.N..Acc Rajan opposed
   ‘Rajan opposed John’s meeting the child’

4. velutth-a-thu enikku ve:nam
   whitePst-a.Sg.N. 1P.Sg.Dat want
   ‘I want the white one’

[John kutti-ye kanunn-a-thu] has been termed as a Headless Relative Clause in Asher and Kumari (1997). However, it is not so clear why it has been termed as a Relative Clause since the phrase does not behave like a Relative Clause. In (3), what is being opposed is not the Agent (Rajan) or the Patient (child), but the event. If we compare this to headless Relative Clauses in other languages, this becomes clear. For example, take the headless relativisation of an embedded subject in Imbabura, a Quechua II language spoken in northern Ecuador from Cole, Harbert and Hermon (1982):

5. [wambra wagra-ta randi - j] ali wambra - mi
   boy cow.Acc buy-pres nom good boy - validator
   ‘The boy who is buying the cow is a good boy’.

6. *[wambra wagra-ta randi - j] ali wagra - mi
   boy cow.Acc buy-pres nom good cow - validator
Chapter 3 *aanu* Construction

denotes a property, a predicate, that is ascribed to an entity, a predication base. Moreover, Sasse points out that “the grammatical relations of subject and predicate are not necessarily in a one-to-one relation to the more abstract notions of predication base and […] predicate” (p.564). This is shown to be the case where the subject, object or an adverb can appear as the predication base, as shown below.

29. Rajan *aanu* Priyaye *kandathu*
    Rajan be Priyaye.Acc saw.Sg.N.
    ‘It is Rajan who saw Priya’

30. Priyaye *aanu* Rajan *kandathu*
    Priyaye.Acc be Rajan saw.Sg.N.
    ‘It is Priya whom Rajan saw’

31. innale *aanu* Priyaye Rajan *kandathu*¹⁵
    yesterday be Priyaye.Acc Rajan saw.Sg.N.
    ‘It is yesterday that Rajan saw Priya’

Since the predication base is an entity to which a property is ascribed, it is logically impossible to have a non-specific element function as the predication base. This is borne out in Malayalam by the ungrammaticality of non-specific elements appearing with the Auxiliary or in the comment position.

32. *e:tho: ora:l *aanu* Priyaye *kandathu*
    someone be Priyaye.Acc saw.Sg.N.
    ‘It is someone who saw Priya’

    ‘As for who saw Priya, it is someone’

Probably the most interesting side effect of this categorical construction in Malayalam is the Focus effects it exhibits. Substantiating Sasse, it is not exclusively New Information that is

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7. [runa alcu-tajatu - j] ali runa } - mi
    man dog.Acc sell-pres nom good man - validator
    ‘The man who is selling the dog is a good man’.

As we can see in the above examples, even though all the arguments appear within the Relative Clause, we can identify a particular argument as the head in these sentences. Headless does not simply mean no heads at all; it rather means the head appears in a different position than the more familiar Relative constructions. Clearly, there is no particular argument that can be singled out like this in (3) making it problematic to label as a Relative Clause.

Also notice that there is no expletive in the construction. Thus, structurally, these constructions are very different from the biclausal It-clefts in English.

¹⁵ The OSV order in this example is not particularly significant. The arguments can come in any order.
emphasised in these categorical sentences. Moreover, Sasse states “sentences including constituent focus must necessarily be categorical because they represent underlying identity statements whose predication base is the nonfocalised part of the sentence” (p.572). This is exactly the case with the aanu sentences in Malayalam where this construction is the only available strategy to express constituent negation. For example, (34) exemplifies negation in Malayalam, which is a case of sentential negation. The only way to express constituent negation is to use an aanu sentence as in (35).

34. Rajan Priyaye kandilla
    Rajan Priya.Acc saw- benneg
    ‘Rajan did not see Priya’

35. Rajan alla Priyaye kandathu
    Rajan benneg Priya.Acc saw.Sg.N.
    ‘It is not Rajan who saw Priya’

It is also worth noting that there is no way to express constituent negation using a thetic construction. Conversely, a Categorical sentence does not lend itself to sentential negation.

3.1.2 An important difference

A categorical construction, by definition, can be of a Topic-Comment structure as well as a Focus-Background structure. We analysed in somewhat detail the Topic position in a verb-final construction in the last chapter. Those sentences also can be subsumed under the label Categorical. However, those topicalised constructions differ from the aanu construction in that the verb-final sentences do not presuppose the predicate whereas the aanu construction (also modal constructions of a similar format that we will see in section 3.3) does so. As will be argued later in the chapter, the verb stays low in the aanu construction, with aanu at the C-domain as opposed to the verb-final constructions where the verb moves all the way up to the C. In other words, it would appear that the bipartite information structure is syntactically represented in the aanu construction by employing different verbal elements to represent the different realms.

The point that I would like to bring to the fore is that the verb-final sentences lack this sense of a strongly presupposed predicate. As shown in the discussion on Sasse (1987) in the previous section, the verb-final constructions, in their unmarked word order, function as thetic. This is possible because of the lack of any inherent presupposition. Along with this,
the verb-final constructions lend themselves to have a topical structure as well. On the other hand, an *aanu* sentence can never act as a thetic precisely because of the inherently presupposed nature of the predicate. This presupposed nature of the predicate has certain ramifications. One of them pertains to the kind of exhaustivity that the construction encodes. We will see in the next section that the exhaustivity of the *aanu* construction is markedly different from the exhaustivity effect exhibited by, say, a contrastive focus construction.

### 3.2 Exhaustivity by Presupposition

#### 3.2.1 Testing for Exhaustivity

The most commonly used test for Exhaustivity is the co-ordination test from Szabolcsi (1981, p.519-520). This test involves a minimal pair where the first sentence has a co-ordinated phrase at the focus and the second sentence has only one of the co-ordinated phrase at the focus. The focus expresses exhaustive identification if the second sentence is NOT among the logical consequences of the first one. If we have a co-ordinated phrase at the focus in a categorical sentence, it is interpreted as exhaustively identifying all the members of the set that holds true for the predicate. Thus (37) is NOT a felicitous follow up of (36) although we can ‘infer’ (38) from (36):

36. Pailyum Karambium aanu vannathu
   Paily.and Karambi.and be came.Sg.N
   ‘It is Paily and Karambi who came.’

37. Paily aanu vannathu
   Paily be came.Sg.N.
   ‘It is Paily who came.’

38. Paily vannu
   Paily came.
   ‘Paily came.’

If one is to follow up with the information in (37), then (36) needs to be negated first (39), evidencing that (37) is not a logical follow up of (36):

39. alla, Paily aanu vannathu
   no, Paily be came.Sg.N.
   ‘No, it is Paily who came.’
Gryllia (2008) shows that collective and distributive interpretations of the co-ordinated phrase in a minimal pair like in the above test is crucial in determining whether the second sentence with only one of the co-ordinated phrase at the focus is a logical entailment of the first or not. Recalling Gamut (1991) she points out that the entailment pattern for co-ordination test is similar to the entailment pattern of test for collectivity. Consider the following minimal pairs.

40. Cheech and Chong are fun at parties
41. Cheech is fun at parties

In the above pair, (41) can be a logical consequence of (40) under a distributive reading of (40) where Cheech and Chong are fun at parties independent of each other. However, notice that under a collective interpretation of the co-ordinates phrases, (41) is not entailed by (40). This is the interpretation that Cheech and Chong are fun only when they together. Gryllia points out that in the test for exhaustivity, it is the exhaustive nature of the second sentence that blocks the entailment whereas in the test for collectivity, it is the collective nature of the first sentence with the coordinated phrases that blocks the entailment. An example that has a dominant collective reading of the coordinated phrases can bring out this point:

42. I like clotted cream and jam with scones.
43. I like jam with scones.

‘Clotted cream and jam’ is interpreted collectively and this results in (43) not being a logical consequence of (42). However, this does not mean that (40) and (42) are structures that obligatorily encode exhaustivity. This rather means that one should tease apart the instances of collectivity from exhaustivity. In order to do that, I employ a construction that has an obligatory distributive reading in Malayalam and use it in a categorical sentence.

44. Karambi Devi.kk.um Paily.kk.um o:ro: pustakam koduttu
   Karambi Devi.Dat.and Paily.dat.and a book each gave
   ‘Karambi gave a book each to Devi and Paily.’

Now using this in a categorical sentence we get the following:

45. Devi.kk.um Paily.kk.um aanu Karambi o:ro: pustakam koduttathu
    Devi.Dat.and Paily.Dat.and be Karambi a book each gave.Sg.N.
    ‘It is to Devi and Paily that Karambi gave a book each.’

Here we get the obligatory distributive interpretation where a total of two books have been given and Devi and Paily got a book each. However, (46) is still not a logical consequence of (45), showing that it is not a collective reading of the coordinated phrases that gives rise to the entailments.
However, Matthewson (2004) points out to some of the pitfalls of the above diagnostic procedure. She recommends a follow-up procedure, which actually weakens the exhaustivity reading in our case. To illustrate the point, it is infelicitous to follow up an utterance like in (42) above with the following utterance:

47. #Rajanum Karambi pustakam koduthu
    Rajan.Dat.and Karambi book gave

‘Karambi gave a book to Rajan, too.’

But, in carefully constructed contexts, the follow up becomes more felicitous. The one that I could come up with involves question-answer pairs. Consider the following context. My flatmate knows that I had visitors last night. Generally she greets my guests. But last night she was asleep and did not meet the people. So she asks me:

48. Q: aaraa innale raathriyil vannathu?
    Who.be yesterday night.Loc came.Sg.N.

‘Who all came last night?’

A: Rajanum Priyayumaa vanne.
    Rajan.Conj Priya.Conj.be came.Sg.N.

‘It is Rajan and Priya who came’.

Aniyanum vannu. pakshe pettenu thirichu poyi.
    Aniyan.Conj came. but soon back went

‘Aniyan also came. But (he) went back soon’.

This should not have been possible if the exhaustive focus was the defining factor of the aanu construction. As it turns out, the exhaustive reading is derived from the presuppositional nature of the predicate rather than by assertion as one sees in a Focus construction.

### 3.2.2 Emphasis, Focus and Exhaustivity

The predication base in a Categorical construction receives an emphatic interpretation that is very much conducive to attributing it as a Focus construction. However, as we saw earlier, a continuing topic can function as the predication base. More importantly, the emphasis that the predication base derives is from the judgment being made about the
proposition (in the sense of Kuroda 2005) rather than focusing a particular element in the backdrop of possible alternatives.

The purpose of this section is to show that it is not prudent to assume \textit{a priori} that \textit{aanu} is a Foc projection. We examine the Focus reading obtained for a predication base in this construction; compare the reading with the mainstream definitions of Focus, and contrast it with a Focus construction that is in accordance with all the definitions that we saw. We conclude that while the Aux might have the interpretation of Foc in various contexts, it cannot be straightforwardly spelling out a Foc head.

3.2.2.1 Focus

Consider the context of selection of Ph.D. candidates. A and B are talking about it, and A makes the following statement with a Categorical construction:

\begin{verbatim}
49. avar Johnine a:nu select ceythathu
they John.Acc be select did.Sg.N.
'It is John whom they selected'
\end{verbatim}

As a response to this, it is totally felicitous for B to come up with the following response:

\begin{verbatim}
B: appol, vereaarum illaayirunnu, alle?
then, different nobody beNeg.be, beNeg.Q
'Then there wasn't anyone else, right?'
There might not have been any other applicants.
\end{verbatim}

Not only does the Focus in Categorical constructions not presuppose an alternative set, it does not necessarily entail a subset of a presupposed alternative set either.

This is important to note since most of the mainstream definitions of Focus involve the notion of an alternative set. For example, After examining focus effects in five empirical domains in English – questions and answers, focusing adverbs, scalar implicatures, contrastive configurations, and bare remnant ellipsis – Rooth (1992) invokes the idea of an alternative set that

\textit{“[…] intonational focus in English has a uniform semantic import, which can be related to the intuitive notion of contrast within a set of alternative elements. The key to a uniform interpretation for focus is an interpretation principle which introduces a variable, thought of as a contrasting element or set of contrasting elements” (p.112).}

Similarly, for the preverbal Focus position in Hungarian, É. Kiss (1998: 245) states that
“[identificational focus] represents a subset of the set of contextually or situationally
given elements for which the predicate phrase can potentially hold; it is identified as
the exhaustive subset for which the predicate phrase actually holds”.
Thus, the existence of an alternative set is important to the definition of Focus. The
presence of an alternative set is a crucial property in the definitions of
explicitly states that
“The notion of exhaustive identification involved has an additional property (observed
by Kensei, 1986): there must be at least one member in the contextually relevant set of
alternatives that the predicate does not apply to. In other words, the operation
attributed to EI crucially involves exclusion of a complementary subset.” (p.1360).
Krifka (2008) gives the following definition for Focus:
“Focus indicates the presence of alternatives that are relevant for the interpretation of
linguistic expressions.” (p.247)
As we saw above, the presence of an alternative set is not particularly obligatory for a
categorical construction. What’s more, there are contexts when the subset of a potential set
is not felicitous as the predication base.
Imagine a context where 5 published articles would make John eligible for promotion.
Unfortunately, John has only 3 published article and hence cannot get a promotion. It is the
Contrastive Focus that one would use naturally in this context.

50. John 3 article-e: publish ceythitt-ull-u:
   John 3 article-e: publish done-be-u:
   'John has published only 3 articles'
It is infelicitous to use the Categorical construction here:

51. #John 3 articles a:nu publish ceythitt-ullathu
   John 3 articles be publish done-be.Sg.N.
   'It is 3 articles that John has published'
Despite the Exhaustive nature, a:nu sentences contradict not just a Focus definition, but it runs counter to the definition of an Exhaustive Identificational-Operator (EI-Op) also. Horvath (2010) argues that Exhaustive Focus constructions involve an EI-Op, which is responsible for movement.

"Exclusion by Exhaustive Identification (EI) (modified version of É. Kiss’s (1998:249) characterization of identificational focus):"
EI operates on a set of contextually or pragmatically given elements for which the predicate phrase can potentially hold; it identifies the exhaustive proper subset of this set for which the predicate phrase actually holds." (p.1360).

The emphasized phrase (the predication base) in Categorical constructions is incompatible with the alternative set made up of potential holders of the proposition. This can be made clear by the following example – let’s get back to the football matches. As an answer to the question where an explicit potential set for which the proposition can hold is given, Categorical construction is infelicitous.

52. Quarter final-il Germanyum Brazilum undo:?
   QF-Loc Germany.Conj Brazil.Conj be-Q
   'Did Germany and Brazil make it to the QF'?

53. #illa, Brazil a:nu ullathu
   no Brazil be be.Sg.N.
   'No, it is Brazil who made it'

That is, what the *aanu* construction does is to have a presupposed predicate and select as predication base those elements for which the predicate holds without contrasting it with a potential set. The Exhaustivity of a Categorical Construction is obtained by presupposition while the Exhaustive reading of a truly contrastive construction is obtained via assertion. Thus, a Categorical construction presupposes the fact that there exists a set of elements that holds true for the predicate, and this set is the emphasized element(s) in the predication base. On the other hand, Focus in a Focus construction *asserts* Exhaustivity by asserting the exclusion of everything else i.e., it requires an alternative set that contrasts with the focused set.

3.2.2.2 A Focus Construction

An empirical exposition of this distinction could be brought to light using Contrastive Focus constructions in Malayalam. According to Rizzi (2013), “Contrastive focus introduces new information that contrasts with some natural expectation imputed to the interlocutor.” An example is given below.

54. Rajan ninne-e: kand-ull-u:
    Rajan you.Acc-e: saw-be-u:
    'Rajan saw only you'
Here, the natural expectation imputed to the interlocutor is that Rajan must have seen someone else or more than just the interlocutor. That expectation is contrasted in the above example. These sentences have a structure that is different from the two constructions we discussed so far. The focused item is suffixed with /-e:]. The suffix /-u:] appears affixed to the root form of the auxiliary ul- whereas the inflected verb precedes the auxiliary. The auxiliary is obligatory because the suffix /-u:] never affixes to an inflected verb.

55. *Rajan ninne-e: kand-u:
   Rajan you.Acc-e: saw-u:
   'Rajan saw only you'

56. ninne-e: Rajan ka:nuka-ull-u:
    You.Acc-e: Rajan see nonfinite-be root-u:
    'Rajan sees/will see only you'

57. *avan-e: vannu:
    he-e: came-u:
    'Only he came'

58. avan-e: vann-ull-u:
    he-e: came-be-u:
    'Only he came'

However, if the verb is uninflected, the suffix /-u:] can be affixed directly to the verb:

59. ninne-e: Rajan ka:n-u:
    You.Acc-e: Rajan see root-u:
    'Rajan will see only you'

This construction encodes contrastivity. It means the existence of a membership set of relevant elements that identification operates on, identifying a proper subset for which the predicate holds, while excluding other members of the set (Horvath 2010).

For example, in the context of a Football Championship, the above construction is perfectly felicitous as an answer to the question below:

The reader is cautioned that this interpretation differs from the interpretation of 'only' even though the sentences are translated using 'only'. Malayalam has a word mathram, corresponding to 'only', with similar semantics.
60. Quarter final-il Germanyum Brazilum undo:?  
   QF-Loc Germany.Conj Brazil.Conj be-Q  
   'Did Germany and Brazil make it to the QF'?

61. illa, Barzil-e: ullu:  
   no, Brazil-e: be_root-u:  
   'No, only Brazil made it'.

That is, contrastive focus demands a set of alternatives to operate upon\(^{17}\). What’s more, Contrastive Focus constructions always imply that there is a set of potential alternatives that are excluded by the identification.

Consider a context where A and B are talking about the selection of new Ph.D. Students and A makes the following statement:

62. avar Johnine-e: select ceyth-ull-u:  
   they John.Acc:e: select did-be-u:  
   'They selected only John'

Here, it is completely infelicitous for B to come up with the following comments since the use of Contrastive Focus clearly implies that there indeed was a set made up of other candidates who did not get selected.

63. #Were there other applicants?  
   #There might not have been any other applicants.

Furthermore, this constraint of having a set from which to choose might also be responsible for the inability of non-specific elements to appear in the contrastive focus position. For example, it is infelicitous to use the Contrastive Focus in a context where I am circling a parking lot, looking for just any parking space:

64. #njaa:n oru parking space-e: no:kkunn-ull-u:  
   I one parking space-e: look for-be-u:  
   'I am looking for only a parking space'

In short, this construction is a text-book case of Focus, true to the definitions we have examined in the previous section.

\(^{17}\) This is generally in line with Rooth (1996). However, for a different view, see Zimmerman (2008).
3.2.2.3 Exhaustivity and Contrastive Focus

An exhaustive reading means that the proposition holds true exactly for the entire set identified; partial answers are considered false. This peculiarity has led Szcabolsci (1991) to formulate the co-ordination test for Exhaustivity as we saw earlier in the context of Categorical sentences. We apply these tests along with the distributional restrictions that É. Kiss (1998) has pointed out.

We have an identified set of two people in the following example for whom the Contrastive Focus applies and the proposition holds true, namely, Paily and Karambi.

65. ninne [Pailyum karambiyum]-e: kandullu:
   You.Acc [Paily and Karambi] e: saw-be-u:
   'Only Paily and Karambi saw you'

Now, if Contrastive Focus involves an exhaustive reading, this would entail that any subset of the set identified by the Contrastive Focus would be contradictory to the above sentence.

66. ninne Paily-e: kandullu:
   you.Acc Paily-e: saw-be-u:
   'Only Paily saw you'

This prediction is borne out in that example 65 contradicts example 64; hence Contrastive Focus construction indeed involves exhaustivity.

É. Kiss (1998) discusses the distributional restrictions pertaining to exhaustive focus in Hungarian in that universal quantifiers and certain other phrases cannot appear at the exhaustive focus position. This is tested positive for Contrastive Focus in Malayalam as shown below.

67. *ella:vareyum-e: John kandullu:
   all people.Acc-e: John saw.be-u:
   'John saw only all people' [Universal Quantifier]

68. *Johnum-e: Mary-e kandullu:
   John-also-e: Mary.Acc saw-be-u:
   'Only John also saw Mary' [Also phrase]

69. *John po:lum-e: Mary-e kandullu:
   John even-e: Mary.Acc saw-be-u:
   'Only even John saw Mary' [Even phrase]

Thus, Contrastive Focus in Malayalam does encode Exhaustivity, just like the Categorical Constructions.
3.2.3 **Exhaustivity – by assertion and by presupposition**

Now we can return to our claim that a Categorical construction presupposes the fact that the emphasized element(s) in the predication base form an Exhaustive set for which the predicate holds, whereas Focus in a truly Focus construction *asserts* Exhaustivity by asserting the exclusion of potential members i.e., it requires an alternative set that contrasts with the focused set.

We saw that the *aanu* construction does not need an alternative set; there are contexts where the presence of an alternative set is infelicitous for an *aanu* construction. Contrastive Focus, on the other hand, mandatorily needs an alternative set. A prediction based on this would be that Contrastive Focus is incompatible with predicates that force single membered sets – i.e., with predicates where the uniqueness of the selected set is presupposed – while Categorical constructions make natural choices to express such information. This can be substantiated through the following examples.

The *aanu* construction is used talking about a winner, or one who arrived first. Contrastive Focus is infelicitous in these contexts.

70. Euro cup Spaininanu a:nu kittiyathu
    Euro cup Spain.Dat be got.Sg.N.
    'It is Spain who won the Euro cup'

71. #Spain-in-e: kitti-ull-u:
    Spain.Dat-e: got-be-u:
    'Only Spain won'.

72. John a:nu a:dyam ettiyathu
    John be first arrived.Sg.N.
    'It is John who arrived first'

73. * John-e: a:dyam etti-ull-u:
    John-e: first arrived-be-u:
    'Only John arrived first'

The same holds true for authors of books.

74. Blacklist a:ruđe pusthakam a:nu?
    Blacklist whose book be
    Lit: Whose book is Blacklist?
    Who is the author of Blacklist?
Chapter 3 *aanu* Construction

75. Sara Paretsky *aanu* Blacklist eZhuthiyathu
Sara Paretsky *be* Blacklist wrote.Sg.N.
'It is SP who wrote Blacklist'

76. #Sara Paretsky-*e:* Blacklist eZuthi-ull-*u:*
Sara Paretsky-*e:* Blacklist wrote-be-*u:*
'Only SP wrote Blacklist'

In fact, the restriction on single membered set is so strong that it could result in blasphemy if one is not careful. To use the Contrastive Focus in the following sentence is tantamount to saying that the inclusion of 'Mary' in the focused set is asserted as exhaustive because there was a set of eligible women who could have given birth to Jesus.

77. #Mary-*e:* yesu-vinu janmam nalki-ull-*u:*
Mary-*e:* Jesus.Dat birth gave-be-*u:*
'Only Mary gave birth to Jesus'

A Categorical construction is most felicitous in this context.

78. Mary *aanu* yesu-vinu janmam nalkiyathu
Mary *be* Jesus.Dat birth gave.Sg.N.
'It is Mary who gave birth to Jesus'

That is, although both the Categorical construction under discussion and the Contrastive Focus construction exhibit Exhaustivity effects, the effects are derived via different routes. The above set of data makes it amply clear that whereas the Focus construction explicitly asserts the that the focused element is the True answer in the context of a set of alternative answers, what the predication base in Categorical constructions does is to merely identify that unique set of elements for which the presupposition encoded in the predicate holds. In other words, we have come full circle in that there is nothing peculiar about this, we are discussing a Categorical construction where the predication base identifies those and only those elements which gives the truth value True for the predicate.

The predication base is emphasised, however, this need not automatically translate into a Focus projection either. This is NOT to argue that the Aux cannot be at a Foc projection. The Auxiliary may manifest one or more cartographic projections in the articulated left periphery of the clause. The point that I wish to make is that I will not be committing myself to a position where the Auxiliary *aanu* or other Auxiliary sequences that are permissible in this position is invariably taken to represent a Foc projection.
3.2.4 Movement to the pre-aanu position

The discussion above showed that exhaustivity is a side effect of being a Categorical construction, which, by definition, identifies those elements that are TRUE for the presupposed predicate. We saw some discrepancies between the aanu construction and the contrastive focus construction. There are additional reasons to be skeptical of an analysis of movement in the aanu construction as driven by a Foc feature. Fanselow and Lenertová (2011, p.178) note that idioms bear interpretation only as a whole; “since the moved element in such cases is meaningless, it cannot be a topic, a focus, or be particularly salient”. Hence, the movement of parts of idioms to these positions refutes the idea that the movement is triggered by a pragmatic property of the moved item in a direct way. In the following minimal pair, I show that parts of idiom chunks can be moved to the pre-auxiliary position, thus questioning the assumption that this pre-auxiliary position triggers focus movement.

79. the:diya valli ka:le:l chutti
    searched creeper foot.Loc caught.
    ‘Found the item that one was searching for’

80. the:diya valiyaa ka:le:l chuttiyathu
    searched creeper.be foot.Loc caught.Sg.N.
    ‘It is the item that one was searching for that was found’

The meaning of the idiom is not lost in this construction, unlike the English It-Clefts where a sentence like ‘It is the bucket he kicked’ does not have the idiomatic meaning of ‘He kicked the bucket’. Even if one were to argue that ‘kick the bucket’ is an idiom that is especially resistant to such manoeuvres, idioms like ‘pull strings’ or ‘pull wool over ones eyes’ etc. also result in ungrammaticality if clefted:\textsuperscript{18} *"It was (Devious) strings that she pulled to get him the job". *"It was (thick) wool that they pulled over our eyes".

\textsuperscript{18} Thanks to Peter Svenonius for the arguments from English

Pied-piping is another diagnostic tool when faced with the question if a particular movement is induced by a focus feature (see Horvath 2007). Fanselow and Lenertová (2011) point out that in the case of Topic or Focus movement, it should be the exact topic/focus that gets displaced, as opposed to movement triggered by an edge feature of Comp (p.199). The edge feature of Comp is unspecific in nature and can trigger movement of any category. Thus, a category that is bigger than the focused element can be moved by an edge feature. Following this logic, movement to the pre-auxiliary position could be argued to be induced by an edge feature:
Chapter 3 *aanu* Construction

81. *pusthakam* nii *aarudeyaa*\textsuperscript{19} *meediche*\textsuperscript{20}?

Book you whose be bought Sg.N.

Lit: Whose is it that you bought a book?

‘Whose book did you buy?’

82. Anandinte *pusthakamaa* me:diche.

Anand’s book be bought Sg.N.

It is Anand’s book that (I) bought.

The larger phrase ‘Anand’s book’ is in the pre-*aanu* position here, instead of the exact answer to the question, which is what must carry the focus feature. Perhaps this is a case of pied-piping? Quoting Heck (2004) Fanselow and Lenertová argue that “pied-piping is restricted to categories that are syntactic islands for the attracted category” (p.200). The next example shows that this is not the case here, since the possessor can undergo movement to the pre-*aanu* position independently of the possessed.

83. Anandinteyaa *pusthakam* me:diche.

Anand’s be book bought Sg.N.

It is Anand’s book that (I) bought.

Apart from these, recall the data that shows a topical element marked by *aanel* appearing in the pre-*aanu* position (example 8 reproduced here):

Context: we need to gain entry to the club, but we are not members. So we plan to bribe the bouncer and are discussing the different bouncers the club usually employs.

84. Meera *aanel* kuzhappam illa;

Meera be if problem be Neg;

As for Meera, it is no problem;

Aniyan *aanelaa* nammal kudungunnathu.

Aniyan be if be we trapped Sg.N.

Lit: It is as for Aniyan that we are going to be trapped.

‘As for Aniyan, we will be trapped’.

I will not go into a detailed analysis on this here; my primary concern being the behaviour of

\textsuperscript{19} The example is given in the contracted spoken form where the auxiliary *aanu* is contracted to *aa* and appears affixed to the pre-auxiliary element; the Sg.N. ending on the verb *athu* is contracted to *e*. We will see this in many examples in the rest of the thesis.

\textsuperscript{20} The intervening subject shows that this is not a case of internal topicalisation within the DP ‘Whose book’ followed by the entire DP moving to the pre-*aanu* position.
Chapter 3 \( \text{aanu} \) Construction

I just want to reiterate the point I made in the previous section that it is not prudent to assume \textit{a priori} that the \textit{aanu} construction involves a Focus head that triggers Focus movement and to extrapolate that assumption to Wh. The behaviour of Wh in the \textit{aanu} construction will be explicitly dealt with later in the thesis.

3.2.5 \textit{Auxiliaries, Modals and Bipartite Information Structure}

This section shows that Categorical constructions are, in fact, not restricted to the \( [XP \text{aanu} \ldots \text{Vathu}] \) strings that we discussed so far. A categorical reading can be created in many other cases, too, for example with Modals. Thus, unless one adopts a viewpoint that every time a Modal or an Auxiliary shows up in a sentence, they are indicators of a different clause, the simplest assumption would be that the clausal spine (or the extended projection of the verb \textit{a la} Grimshaw 2000, see also Brokehuis 2013) is spelled out in these constructions by two (or more as the case may be) verbal elements\(^{21}\).

People arguing for a biclausal structure might be tempted to point to data where the Auxiliary appears to be suffixed with temporal information like the following:

\begin{center}
85. avan aayirunnu\(^{22,23}\),
\end{center}
\begin{center}
\text{he be}_{2}\text{.Past}-\text{be}_{2}\text{.Past came.Sg.N.}
\end{center}

It was he who had come.

\(^{21}\) Also worth mentioning is the observed fact that the C-head in all these contexts tends to appear in a head-initial position.

\(^{22}\) The Auxiliaries will be glossed as follows:

\begin{itemize}
  \item \textit{aanu} : be \( \text{ul} \) : be\(_{1}\), \( \text{ir} \) : be\(_{2}\), \( \text{aak} \) : be\(_{3}\),
  \item \textit{aay-irunnu} or \textit{aayi-irunnu}
  \item \text{be-}be\(_{2}\text{.Past} \quad \text{be}_{2}\text{.Past}-\text{be}_{2}\text{.Past}
\end{itemize}

Both of these could give \textit{aayirunnu}.

However, my dialect shows a clear difference between the two.

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<td>John</td>
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<td>John</td>
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<td>John</td>
<td>is</td>
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Past:

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<td>\text{annu}</td>
<td>John-aa-runnu</td>
<td>mantri</td>
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<tr>
<td>that day</td>
<td>John-\text{be-}be(_{2})\text{.Past}</td>
<td>minister</td>
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<td>John</td>
<td>was</td>
<td>the</td>
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<td>John</td>
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The form of ‘\text{be}’ is different in context of a transient, become-like use:

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<tr>
<td>John</td>
<td>orikkal</td>
<td>mantri</td>
</tr>
<tr>
<td>John</td>
<td>once</td>
<td>minister</td>
</tr>
<tr>
<td>John</td>
<td>became</td>
<td>a minister</td>
</tr>
</tbody>
</table>

This distinction is not in any way crucial to the points made in the dissertation. Hence I refrain from teasing apart the nuances and simply gloss \textit{aayirunnu} as ‘\text{be}_{3}\text{.Past}-\text{be}_{2}\text{.Past}’. 
It should be noted that Malayalam may use a number of auxiliaries in various combinations to express fine distinctions related to temporality of events in addition to modality as a sentence like the following shows:

\[
86. \text{avan avide und-aay-irikk-anam-aay-irunnu} \\
\text{he there be}_{1}\text{-be}_{3}\text{.Past-be}_{2}\text{-must- be}_{3}\text{.Past -be}_{2}\text{.Past}
\]

If only he were there.

Such a construction is not amenable to be predicatised.

\[
87. *\text{avide a:nu avan und-a-y-irikk-anam-a:y-irunnathu} \\
\text{there be he be}_{1}\text{-be}_{3}\text{.Past-be}_{2}\text{-must- be}_{3}\text{.Past -be}_{2}\text{.Past.Sg.N}
\]

It was there where he should have been.

The reading is conveyed by predicatising at the deontic Modal as in the following example:

\[
88. \text{avide a:y-irunnu avan und-a-y-irikk.andathu} \\
\text{there be}_{3}\text{.Past-be}_{2}\text{.Past he be}_{1}\text{-be}_{3}\text{-must.Sg.N.}
\]

It was there that he should have been.

In fact, this strategy of creating a bipartite structure to emphasize a selected constituent by splitting the verb morphology into verb+auxiliary is not restricted to the constructions discussed above alone. We see the same strategy employed, to cite an example, in Modal constructions. Deontic Modals are usually able to take infinitival complements. In Malayalam, there are two ways a deontic modality can be expressed – (i) via an inflected verb or (ii) via Auxiliary taking an infinitive as complement. When the Modality is expressed through verbal morphology, it is akin to a Verb-final expression in that the entire proposition falls into focus. However, when the modality is expressed through a bipartite Auxiliary + Infinitive structure, the element that immediately precedes the Auxiliary is emphasized.

89. Rajan Priyaye ka:nanam
   Rajan Priya.Acc see.Mood
   Rajan must see Priya.

90. Rajan ve:nam Priyaye ka:nan
   Rajan must Priya.Acc see\text{\textit{infinite}}
   It is Rajan who must see Priya.
Chapter 3 *aanu* Construction

To use terminology that is consistent with the discussion so far, example 90 involves a predicate and a predication base marked out using a Modal. Furthermore, 90 is interpretatively equivalent to 91 where the bipartite structure is attained using *aanu* so much so that they can be felicitously used interchangeably.

91. Rajan a:nu Priyaye ka:nandathu

Rajan be Priya.Acc see.Mood.Sg.N.

It is Rajan who must see Priya.

The similarity does not end here. Like any categorical construction, the bipartite structure in 90 is amenable to having any other semantically compatible element being emphasized.

92. Priyaye ve:nam Rajan ka:na:n

Priya.Acc must Rajan to see

It is Priya who Rajan must see.

93. Priyaye a:nu Rajan ka:nandathu

Priya.Acc be Rajan see.Mood.Sg.N.

It is Priya who Rajan must see.

94. naale ve:nam Priyaye Rajan ka:na:n

tomorrow must Priya.Acc Rajan to see

It is tomorrow that Rajan must see Priya.

95. naale a:nu Priyaye Rajan ka:nandathu

tomorrow be Priya.Acc Rajan see.Mood.Sg.N.

It is tomorrow that Rajan must see Priya.

Thus, the temporal morphology only goes to substantiate the claim that *aanu* and the verb forms a single functional sequence assuming that one does not take examples 86, 88, 90 etc. to argue for as many clauses as there are auxiliaries.

Copula or Auxiliary

In the light of these examples, we can take a second look at example 85, reproduced below:

96. avan a:yirunnu vannathu

he be3.Past-be3.Past came.Sg.N.

It was he who had came.

This has the interpretation of past perfect. Past Perfect in Verb-final would be expressed as follows:
Chapter 3 *aanu* Construction

97. avan vann-a:yirunnu

he came- be₂.Past-be₂.Past

He had come

The following sentence where one attempts to predicatise the verb+a:yirunnu is ungrammatical:

98. *avan a:nu vann-a:yirunnathu

he be came- be₂.Past-be₂.Past

It is he who had come.

However, predicatising at the level of the inflected verb is grammatical and gives exactly the construction that could be pointed out as a counterargument:

99. avan a:yirunnu vannathu

he be₂.Past-be₂.Past came.Sg.N.

It was he who had come.

This point can be further substantiated by the fact that the so-called temporal morphology on the *aanu* is restricted by the verb. For example, the copular use of *aanu* has the future form *a:kum*. This is incompatible with a verb in its Auxiliary usages. Instead, the a combination of two auxiliaries *ayirikkum* is used as shown below.

100. avan vann-a:yirikkum

he came- be₂.Past-be₂.Fut

‘He may have come’

101. *avan vann-ckum

he come-be₂.Fut

‘He may have come’

This pattern is reproduced in the categorical constructions.

102. avan a:yirikkum vannathu

he be₂.Past-be₂.Fut came.Sg.N.

‘It might be he who came.’

103. *avan a:kum vannathu

he be₂.Fut came.Sg.N.

‘It may be he who came.’
If *aanu* is functions here as a copula that can take temporal morphology independently, it is inexplicable why 103 is ungrammatical.

The verb and the Auxiliaries form a single functional sequence with no specifically marked predication base. It appears that a certain portion of this functional sequence can be modified into a predicate and the Auxiliaries can, then, mark the predication base, with *aanu* being the default option when no Auxiliaries are present.

### 3.3 Clause Structure

#### 3.3.1 Monoclausal or Biclausal?

This section looks closely at the global structure of the Categorical construction and addresses the debate whether it is a monocluasal or biclausal construction. Categorical constructions were sometimes argued to be Clefts and this has lead to the assumption and/or argument that they are necessarily biclausal.

Jayaseelan (2001) and Madhavan (1987) have argued that this is a cleft construction and has a biclausal structure. According to Jayaseelan (2001) (Jayaseelan hereafter in this section), the construction involves a CP, which functions as an argument to *aanu*, which functions as a copula in these constructions. We begin with taking a closer look at Jayaseelan (2001) and pointing out some of the problems with that proposal alongwith general arguments against a biclausal proposal. From there we move on to constructions that involve modals. The sentences where the verb spells out the modal morphology behaves like Verb-final constructions whereas constructions with [a separate modal + infinitive form of the verb] can yield a bipartite Categorical reading, just like the [XP aanu ... V.athu] sentences showing a wider range of Categorical constructions, and underlining the monoclausal nature of it. The temporal interactions between the Auxiliary and the verb is explored followed by evidence in support of labelling *aanu* as the Auxiliary.

Jayaseelan (2001)

Jayaseelan’s analysis is contingent on his proposal for a left periphery of vP with Topic and Focus positions between the IP and vP in the thetic construction. He extends the argument for this clause medial focus position to include the categorical construction. This is done by proposing that *aanu* is a copula that takes a CP as its complement. Consequently, *aanu* instantiates a clause medial Focus position. He argues that “The Malayalam copula, like other verbs, does not raise to I. We suggested that it adjoins to Focus, when Focus is
present. Malayalam being a pro-drop language, the subject position can be filled by an expletive pro.” (p.63). The schematic representation is given below in figure 1.

There are a number of reasons to Deviate from this proposal. To begin with, the aanu construction encodes Exhaustivity. However, the preverbal position in thetic constructions does not give rise to such a reading at all. For example, take the following pair of sentences in 104 and 105. According to Jayaseelan’s proposal, the co-ordinated elements would be occupying the vP-peripheral Focus position.

104. Priyaye Rajanum Aniy num kandu
   ‘Rajan and Aniyan saw Priya’

105. Priyaye Rajan kandu
    Priya.Acc Rajan saw
   ‘Rajan saw Priya’

(105) straightforwardly follows from (104), showing that this preverbal Focus position does not have any Exhaustive reading. If the structure of the categorical construction is made up of a copula instantiating the same preverbal focus position in a thetic sentence, then the fact that the aanu construction alone encodes Exhaustivity remains unexplained.

In addition to the drawback that the above data are unexplained in a Jayaseelan’s analysis, the proposal also makes a prediction that if there are indeed two full CPs in the categorical construction, then it should be possible to have a grammatical sentence with two sentence level adverbs. However, this is not borne out:

106. *oru pkashe Priyaye aanu [CP ullathu paranjaal Rajan kandathu]
    probably Priya.Acc be frankly speaking Rajan saw.Sg.N.
   ‘Probably it is Priya that frankly Rajan saw’
Both the adverbs are fine at the left periphery of an *aanu* construction.

107. oru pkashe Priyaye aanu Rajan kandathu
    probably Priya.Acc be Rajan saw.Sg.N.
    ‘Probably it is Priya that Rajan saw’

108. ullathu paranjaal Priyaye aanu Rajan kandathu
    frankly speaking Priya.Acc be Rajan saw.Sg.N.
    ‘Frankly, it is Priya that Rajan saw’

Another piece of data that is in line with a monoclausal analysis comes from the behavior of the Long Distant Anaphor (LDA) *taan* in Malayalam. *Taan* is obligatorily a LDA as can be seen from the examples below:

109. *mantri tanne kandu
    minister LDA.Acc saw

110. [mantri tanne kandu ennu] ra:javu paranju
    minister LDA.Acc saw comp king said
    ‘The king said that the minister saw him’

That is, the LDA needs two clauses to make meaningful a reference. It is telling that the behavior of an LDA in a simple categorical sentence is exactly parallel to the verb-final constructions in 109-110 above.

111. *mantri a:nu tanne kandathu
    minister be LDA.Acc saw.Sg.N.
    ‘It is the minister who saw LDA’.

Just like the verb-final sentence, embedding makes the LDA grammatical.

112. [mantri tanne kandu ennu] ra:javu a:nu paranjathu
    minister LDA.Acc saw comp king be said.Sg.N.
    ‘It is the king who said that the minister saw him’

In addition, it may be noted that *taan* is functional in monoclausal sentences if it is inside a bigger DP, in this case, a possessive and yields a reflexive meaning.

113. mantri tante bharyaye kandu
    minister self’s wife.Acc saw
    ‘The minister, saw his, wife’.
This being the case, if the analysis of Categoricals as biclausal constructions involving a CP, one would predict that the LDA would yield a reflexive interpretation at the very least in a Categorical sentence. As the following example shows, this is not the case.

114. *mantri a:nu [tanne kandathu]
minister be LDA.Acc saw.Sg.N.
‘The minister saw himself’

3.3.2 Position of the Verb

We saw in the last chapter that there are sufficient reasons to believe that the thetic constructions involve V-to-C movement. What happens in an a:nu construction? For starters, there is a verb and an Auxiliary in this monoclausal construction. Where are these elements placed? It will be shown that the verb remains lower than a:nu in these constructions.

We start with Negative Polarity Items (NPI) – NPIs cannot be licensed if they appear above the negation; the example below shows the Negation on the verb fails to asymmetrically c-command the NPI indicating that the verb is below a:nu.

115. *a:rum a:nu [innale vara:thathu]
nobody be yesterday come.Neg.Sg.N
‘It is no one who came yesterday’

116. innale a:nu [a:rum vara:thathu]
yesterday be nobody come.Neg.Sg.N
‘It is yesterday that nobody came.’

Note that that the predicate part in an a:nu construction can be coordinated:

117. Aniyane kandathum Anupine vilichathum Rajan a:nu
‘It is Rajan who saw Aniyan and called Anup.’

This suggests that the verb may not rise up to Fin since finite clauses in Dravidian resists coordination.

However, the verb must be leaving at least the Asp Phrase as the inability to make a predicate out of it reveals. The root form of the verb and aspectual forms do not lend themselves to function as predicates in a:nu construction.
Chapter 3 *aanu* Construction

118. *avan a:nu varathu
    he be come\_root.Sg.N.

119. *avan a:nu var\-a:raithu
    he be come\_habitual.Sg.N.

120. avan a:nu vannathu
    he be came.Sg.N

He is who came.

If the verb indeed stays low, then it is not easily explained as to why AspP cannot function as the predicate. Data suggests that verb can rise up to deontic Mood in categoricals.

121. avan a:nu vara\-ndathu
    he be come\_must.Sg.N.

He is who must come.

However, Epistemic Mood does not seem to be amenable to this.

122. Rajan Priyaye kanda:yirukkum
    Rajan Priya.acc saw.epistemic possibility
    Rajan may have seen Priya.

123. *Rajan a:nu Priyaye kanda:yirukkunnathu
    Rajan be Priya.acc saw.epistemic possibility.Sg.N.

Rajan may have seen Priya.

Instead, the Auxiliaries above the inflected verb act as the marker of the predication base.

124. Rajan a:yirikkum Priyaye kandathu
    Rajan be\_3.Past-be\_2.possibility Priya.acc saw.Sg.N.

It may be Rajan who has seen Priya.

Assuming that deontic Mood is in the IP level and epistemic Mood is in the CP level (Cinque 1999), this suggests that the verb rises to IP in categorical constructions, continuing to subscribe to head-movement. As evidenced by examples 109 and 110 above, it is impossible to produce an *aanu* construction at phrases below the IP level\(^24\). Thus it can be safely concluded that the verb is within the IP in categorical constructions.

This phenomenon is not restricted to *aanu* construction; certain modals also allow for such behavior. An example that involves the Modal *\-enam* is given below. Either the verb can

\(^{24}\)This data is relevant also for the argument that in Verb-final sentences the verb is in C, but in Categorical sentences the verbs moves only up to TP, the uninterpretable phi features of C being inherited by T and valued by the Sg.N. morpheme *athu*, dovetailing with proposals like Alexiadou and Angnostopoulu (1998) synchronically and Simpson and Wu (1999, 2002) diachronically.
rise to C and appear in the inflected form or rise only up to IP and appear in the infinite form with the modal auxiliary *veṇam* above the verb, creating a bipartite emphatic structure.

125. Rajan Priyaye kaːnːam
    Rajan Priya.Acc see.Mood
    ‘Rajan must see Priya.’

126. Rajan veːnam Priyaye kaːnː
    Rajan must Priya.Acc to see
    ‘It is Rajan who must see Priya.’

Further more, as we saw in examples 100-103, the Auxiliary that can mark the predication base is dependent on its compatibility with the respective inflected verb. Generalizing, we get the following pattern of creating a Categorical construction:

- In the presence of an Auxiliary sequence that appear with the inflected verb to express various Modalities, the Auxiliary sequence is employed to mark the predication base.
- In the absence of such Auxiliaries, *aanu* is used to mark the predication base.

This is further substantiated by the interaction between the temporal encoding on the verb and the auxiliaries in that it is ungrammatical to have the auxiliary sequence indicating [+past] and the verb indicating [−past] in a Categorical construction, just as it is ungrammatical in an indisputably monoclausal Verb-final construction.

127. Priya urangi
    Priya slept
    ‘Priya slept’

128. Priya aːnu urangiyathu
    Priya be slept.Sg.N.
    ‘Priya is the one who slept’

129. Priya urangunnu
    Priya sleep
    ‘Priya sleeps/is sleeping’

130. Priya aːnu urangunnathu
    Priya be sleep.Sg.N.
    ‘Priya is the one who sleep/is sleeping’

In these minimal pairs, the Verb-final sentence is without any Auxiliary. Thus, the default minimally marked Auxiliary *aanu* is used to mark the predication base. On the other hand,
Chapter 3 *aanu* Construction

when the verb takes an Auxiliary sequence, it is that specific Auxiliary sequence that acts as the Predication Base.

131. Priya urangi-a:runnu  
    Priya slept-be₂Past-be₂Past  
    ‘Priya had slept’

132. Priya a:runnu urangiyathu  
    Priya be₂Past-be₂Past slept.Sg.N.  
    ‘Priya was the one who slept’

Auxiliary complex that may contradict the temporal information on the verb makes the sentence ungrammatical in a Verb-final construction as shown in the following example:

133. *Priya urangunn-a:runnu  
    Priya sleep-be₂Past-be₂Past

This is transferred straightforwardly into the corresponding categorical construction as well making the relation between the verb and the Auxiliary sequence that marks the predication base clear.

134. *Priya a:runnu urangunnathu
    Priya be₂Past-be₂Past sleep.Sg.N.

We will be exploring only those categorical constructions with *aanu* in the rest of this thesis.

3.3.3 Position of the Auxiliary: Evidence from A-bar movement.

If the predicate is an IP with the verb in it, then what is the position of *aanu* in these constructions? Here we explore movement of elements to the pre *aanu* position in an attempt to see the kind elements it can host.

135. Rajan innale Priyayevitiil vechu kandu  
    Rajan yesterday Priya.acc home.Loc at saw  
    Rajan saw Priya yesterday at home.

Any of the elements in the above sentence can be hosted by *aanu*, including the PP and the adverb, showing that this constitutes A-bar movement, and hence, *aanu* must be at the C-

---

25 The reading we are talking about here is only [-past]. A habitual reading as in the following example is compatible with [+past] at the CP level.

Priya a:runnu eppo:zhum urangunnathu.  
Priya be.be always sleep.Sg.N.  
It was Priya who used to sleep.
domain. Moreover, *aanu* can appear above the temporal adverb ‘yesterday’, providing further evidence to its being a C-head.

136. Rajan *aanu* innale Priaye kandathu
    Rajan be yesterday Priya.acc saw.Sg.N.
    ‘It is Rajan who saw Priya yesterday.’

137. Priyay *aanu* innale Rajan kandathu
    Priya.acc be yesterday Rajan saw.Sg.N.
    ‘It is Priya who Rajan saw yesterday.’

138. innale *aanu* Rajan Priaye kandathu
    Rajan be Rajan Priya.acc saw.Sg.N.
    ‘It is yesterday that Rajan saw Priya.’

139. Vi:ttil vechu *aanu* Rajan Priaye kandathu
    Home.Loc at be Rajan Priya.acc saw.Sg.N.
    ‘It is at home that Rajan saw Priya.’

It should be mentioned that all elements hosted at this position need not necessarily be dislocated. For example, there is no reason why reason clauses should be prohibited from being base generated at this position in the following example:

140. [*manthri nirbandhicathu kondu*] *aanu* police avane arrest cheythathu.
    minister force.Sg.N with be cpolice he.Acc arrest did.Sg.N
    ‘It is because the minister forced (them) that the police arrested him.’

Earlier we saw that elements that are overtly marked as Topic also can occur at the pre-*aanu* position. This should not be possible if *aanu* is not a C-head. Therefore, *aanu* will be treated as occupying C in this thesis.

### 3.3.4 Structure

A categorical construction involves a Predicate (that contains the Verb), a Predication Base (the phrase that the predicate is about), and an Auxiliary that marks the Predication Base. We saw that the verb is in the IP and the Auxiliary is at the C-level. That leaves only the Predication Base.

One of the facts relevant here is that the predication base obligatorily occupies the position immediately before the Auxiliary or Auxiliary sequence. In all of the examples we discussed so far, the Predication Base is the phrase immediately before the Auxiliary. On the other hand, once the bipartite structure is created by the Auxiliary- V-to-I combination, it is
Chapter 3 aunu Construction

obligatory that an overt phrase occupy the immediately pre Auxiliary position; otherwise, the sentence becomes ungrammatical as shown in the following example:

141. *Ø aunu Priyaye kandathu
    be Priya.Acc saw.Sg.N.

This points in the direction that the Predication Base and the Auxiliary are in a Spec-Head relation.

Arguments originating inside the vP moves to the predication base, they are not base generated at the position. This is evident from the verbs that assign dative case to their arguments. Categorical constructions retain these cases, evidencing that the element that functions as the predication base moves there from within the vP.

    Rajan.Dat hunger.Past
    ‘Rajan became hungry’.

143. Rajan.Dat a:nu visannathu
    Rajan.Dat be hungered.Sg.N.
    ‘It is Rajan who became hungry’.

However, as shown in the discussion about the position of aunu, C-level adjuncts may be merged as the predication base directly. We will not explore this in detail as we are focusing on the relation between the predication base and the Auxiliary.

Abstracting away, the following structure is adopted for categorical constructions. The auxiliary is in the C domain and the verb is in the I-domain. The verb is shown in the following diagrams as positioned at I, assuming head movement. However, the exact position of the verb inside the IP does not affect the analysis of Wh that I would be arguing for. The crucial fact that matters for the analysis is that the verb is lower than C, within the IP, with aunu at C in the construction.

144. \[ CP \text{ Predication Base } C \text{ Auxiliary } \]

To exemplify, a sentence like (145) is proposed to have the syntactic representation in (146).

145. Priyaye aunu Rajan kandathu
    Priya.Acc be Rajan saw.Sg.N.
    ‘It is Priya who Rajan saw’
3.4 Summary

The Categorical constructions were explored in some detail in this chapter. Categoricals are exhaustive by presupposition. It was shown that the verb in these constructions is inside the IP domain. An auxiliary carries the temporal and finiteness information encoded in the C level. The predication base appears at the specifier position of this auxiliary with the following abstract representation:

$$\left[ \text{CP Predication Base} \left[ \text{C Auxiliary} \left[ \text{IP} \left[ \text{VP,athu} \left[ \text{vP, ... t_i} \right] \right] \right] \right] \right]$$.
Chapter 4
Wh in Malayalam – Morphology

This chapter aims to provide a morphological break down of the Wh word in Malayalam. First, the place of a Wh word in the pronominal paradigm is shown. The paradigm makes it imperative that the pronominal system be understood for an in-depth understanding of the Wh. Hence, a somewhat detailed analysis of the third person pronouns are given in section 4.2. It is shown in section 4.4 that the pronominals in Malayalam are pro-DPs a la Dechaine and Wiltchko (2002). The deictic part in the pronoun is the D part of the DP and makes it inherently referential, as argued in section 4.5. It is this part that is altered in making a Wh word. Thus, a Wh word is made by changing the part that gives the DP definite reference into one which leaves it open. Section 4.6 deals with this issue and the next section follows it up with the question whether an open expression means a pure variable. Applying the diagnostics employed by Cole and Hermon (1998), it is argued that Malayalam Wh is not a variable similar to the Chinese Wh words.

4.1 Wh and the Pronominal Paradigm

Malayalam is generally described as an Agglutinating language. This makes a lot of the morphological features overtly visible and concrete. Consequently, Malayalam Wh words tend to wear explicit morphology on their sleeves to distinguish themselves. Some examples are given below:

<table>
<thead>
<tr>
<th>Malayalam</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-nthu</td>
<td>What</td>
</tr>
<tr>
<td>e-thu</td>
<td>Which</td>
</tr>
<tr>
<td>e-vide</td>
<td>Where</td>
</tr>
<tr>
<td>e-ngane</td>
<td>How</td>
</tr>
<tr>
<td>e-ppo:l</td>
<td>When</td>
</tr>
<tr>
<td>e-nnu</td>
<td>Which day</td>
</tr>
<tr>
<td>e-thra</td>
<td>how much</td>
</tr>
<tr>
<td>a-thu</td>
<td>that</td>
</tr>
<tr>
<td>i-thu</td>
<td>this</td>
</tr>
<tr>
<td>a-vide</td>
<td>there</td>
</tr>
<tr>
<td>i-vide</td>
<td>here</td>
</tr>
<tr>
<td>a-ngane</td>
<td>thus</td>
</tr>
<tr>
<td>i-ngane</td>
<td>thus</td>
</tr>
<tr>
<td>a-ppo:l</td>
<td>then</td>
</tr>
<tr>
<td>i-ppo:l</td>
<td>now</td>
</tr>
<tr>
<td>a-nnu</td>
<td>that day</td>
</tr>
<tr>
<td>i-nnu</td>
<td>today</td>
</tr>
<tr>
<td>a-thra</td>
<td>that much</td>
</tr>
<tr>
<td>i-thra</td>
<td>this much</td>
</tr>
</tbody>
</table>

As can be seen from the examples here, the morpheme /e-/ appears with all of these Wh words consistently. In fact, the only exception seems to be the word for ‘who’. ‘Who’ in Malayalam is a:ru which is not marked for gender and the number encoded is Singular.
However, the /e-/ morpheme is part of all other Wh words and seems to somehow embody the interrogate-ability of the Wh word. Malayalam uses a distinction between proximal versus distant when it comes to the pronominal system. /a-/ is the marker for distant and /i-/ is the marker for proximal.

Interrogative words in Malayalam exhibit a very productive paradigmatic relation with the pronominal system in general. As shown in the table, the morphological boundaries are impressively consistent and explicit. The Wh pronouns are part of a larger paradigm together with other pronominals in many languages and this, in turn, leads us to explore the paradigm.

4.2 GoPro – Pronominals and Binding

What is generally referred to as ‘Pronouns’ in mainstream literature in Malayalam are given in the third and fifth columns in the above table. They are, as mentioned, all marked with ‘deictic features’ (Ducceschi 2012). They follow the general abstract morphology of |deictic feature + place/time/phi/…|. Though they are generally given as examples of pronouns (eg. Asher and Kumari 1997), they differ from typical English type pronouns in many respects. I begin below with an illustration of the consistent pattern that the third person pronoun in Malayalam exhibits that fall out of the canonical Binding theory principles.

Binding Theory attempts to understand the conditions under which a Name, a pronoun or a reflexive can occur. For example, the sentence ‘John saw him’ could only mean that John saw someone else other than John. However, ‘John saw himself’ cannot mean that John saw someone else. It is this type of properties that a referring expression (R-expression), pronoun or reflexive exhibit that the binding theory lays out as three Conditions – Condition C rules R-expressions, Condition B rules pronouns and Condition A, anaphors. We go into them in detail in this section and show the anomalies w.r.t. Malayalam.

4.2.1 Condition C

Before going into the domain specific behavior of R-expressions, it might be a good idea to plot the features of R-expressions in Malayalam in general. Malayalam R-expressions, particularly names, seem to encode different features than their more familiar counterparts.

26 Only the distal ones are used for co-reference in Dravidian languages. For a detailed description and elaborate data set, see Ducceschi 2012.
Chapter 4 Wh in Malayalam – Morphology

in other languages. For example, a name may be used not only to refer to a third person, but also to address someone, i.e., to refer to second person.

Condition C states that R-expressions should be free everywhere. However, similar to Thai (Lee 2003), Hmong (Mortensen 2003) Vietnamese (Narahara 1995), San Lucas Quiavini’ Zapotec (Lee 2003) etc., Malayalam allows for violation of this. In (1) the language uses the same R-expression in both the argument positions, a domain that is traditionally known to allow only reflexives.

1. Sivanᵲ Sivanᵲ vote ceythu
   Sivan Sivan.Dat vote did
   ‘Sivan voted for himself’

2. Sivanᵲ Sivaneᵲ pukazhthi
   Sivan Sivan.Acc praised
   ‘Sivan praised himself’

3. John Johnine-ppatti kure ne:ram samasaarichu
   John about John for a long time talked
   ‘John talked about himself for a long time’

4. Sivane orikkal Rajan sahaayichathaanu ennu Sivan orthu
   John once Rajan helped-be comp Sivan remembered
   Sivan, remembered that Rajan had once helped himᵲ.

Not only proper names, but other R-expression like titles such as doctor and kinship terms like father also can be used in the same way as Proper nouns.

5. vaidyarᵲ vaidyareᵲ cikitsikku
   doctor doctor.Acc heal
   Doctor, heal yourself.

6. achanᵲ [achante; kaaryam] no:kki po:kum (amma ottaykaakum)
   father father-gen affairs look after
   Father will look after his affairs (and mother will be left alone)

Like many other Asian languages, Malayalam also encodes social hierarchies into the pronominal system. Hence, even if a pronominal substitute is grammatically available to replace the second occurrence of the R-expression (as we will see in the next section), most people would prefer sentences like 5 and 6 where the R-expressions are used consistently.
4.2.2 Condition B

Condition B imposes restriction on the domains where Pronouns can appear in that a pronoun cannot have its antecedent in its local binding domain; one generally finds an anaphor in those contexts. However, Malayalam allows for the appearance of pronouns as coreferred coarguments:

7. adýam ni: ninne cikitsikkku
   first  you  you.Acc  heal
   ‘First, you heal yourself’

8. ennittu njān enne cikitsikkam
   then   I    me  heal-Future
   ‘Then I will heal myself’

These are the same forms of personal pronouns that appear in non-reflexive contexts as we can see below:

9. adýamSivan ninne cikitsiccu
   first  Sivan you.Acc  healed
   ‘First, Sivan healed you’

10. ennittu avan enne cikitsiccu
    then  he   me  healed
       ‘Then he healed me’

The same holds for third person pronoun as well:

11. Who did he see in the mirror?

12. avan  avan-e kandu!
    he    him  saw
    ‘He saw himself’

With an R-expression or epithet as the antecedent, the use of a pronoun shows greater acceptability if the pronoun is marked in some way\(^{27}\). Thus, the unmarked 14 is degraded

\(^{27}\) A similar pattern is reported for Japanese in Nakao (2004)

a. *?Taro-wa  Taro-o  tatai-ta.
   Taro-Top  Taro.Acc  hit-past
   ‘Taro hit Taro.’

b.  Taro-wa TARO-O tatai-ta.
   ‘Taro hit TARO (and not anyone else).’

In (a), the object Taro is bound by the subject Taro. Although (a) is not completely ungrammatical, it is highly awkward unless the second occurrence of the R-expression has a contrastive focus, which is indicated by capitalization, as in (b).
compared to 15 where the pronoun is stressed, or morphologically marked in some way as in 16 and 17.

13. Who will John see in the mirror?
14. John e-\( \text{e} \)\( _\text{e} \)/i\( _\text{e} \) ka:na:mu!
   he him see-future
   ‘John will see him/himself’
15. John e-\( \text{e} \)\( _\text{e} \)/\( _\text{e} \) ka:na:mu!
   he him see-future
   ‘John will see him/himself’

The acceptability increases with the presence of overt contrastive focus morphology.

16. John e-\( \text{e} \)\( _\text{e} \)/\( _\text{e} \) ka:nu:
   he him-focus see-focus
   ‘John will see only him/himself’
17. John e-\( \text{e} \)/\( _\text{e} \) ma:thra:ma:ka:na:mu!
   he him only see-future
   ‘John will see only him/himself’

And the sentences below in 18 and 19 are quite grammatical and natural.

18. John e-\( \text{e} \)/\( _\text{e} \) ma:thra:ma:ka:nu:ka u:lu:!
   John him only-foc see be-foc
   ‘John will see only him/himself’
19. a: thendi e-\( \text{e} \)/\( _\text{e} \) ma:thra:ma:ka:nu:ka u:lu:!
   that bugger him only-foc see be-foc
   ‘That bugger will see only him/himself’

The emphatic marker *tanne* also makes the sentences natural.

20. John e-\( \text{e} \)/\( _\text{e} \)\( _\text{e} \) tanne ka:na:mu!
   he him emph see-future
   ‘John will see only him/himself’

Now, *tanne* needs special mention among the other markers shown above since this element has sometimes been dubbed as a reflexivising element (Jayaseelan 1989). Before going on to *tanne*, notice that none of these strategies is able to force obligatory binding. When we have a real reflexive, like in the English sentence ‘John saw himself’, the reflexive makes coreference between the two NPs obligatory and coreference with any other NP results in ungrammaticality. This does not happen in any of the examples we discussed here. The emphatic marker or focus just makes it more conducive for a coreference reading between the relevant NPs, but the coreference in not obligatory.
4.2.3 *Condition A and the emphatic marker tanne*

Condition A is about the contexts where pronouns and R-expressions cannot appear. Only Anaphors can occur in these contexts. Worded differently, anaphors force obligatory coreference with another NP, and bars coreference with any other NPs. However, as shown above, Malayalam allows both pronouns and R-expressions in domains where they are barred in languages like English. The language does not have dedicated local anaphors. The emphatic marker *tanne* is what one would find if a Malayalam speaker were to translate an English sentence with a reflexive.

21. Sivan kannadiyil avane-tanne kandu  
   Sivan in the mirror him-tanne saw  
   Sivan saw himself in the mirror

22. Devi kannadiyil avale-tanne kandu  
   Devi in the mirror her-tanne saw  
   Devi saw herself in the mirror

23. Sivanum Deviyum kannadiyil avare-tanne kandu  
   Sivan and Devi in the mirror them-tanne saw  
   Sivan and Devi saw themselves in the mirror

Again, as we saw earlier, *tanne* is one of the many contexts where a pronoun coreferring with an R-expression in the same local domain sounds natural. Apart from that, there are a number of reasons to think that *tanne* does not force obligatory coreference in any way, and hence cannot be treated as a reflexiviser which makes coreference obligatory. All that *tanne* does is, like Focus in the examples we saw earlier, is to make a coreferring reading possible. Some of the most striking examples in favour of not considering *tanne* as a reflexiviser are given here.

We already noted in the last subsection that *tanne* does not make coreference obligatory, like a normal reflexive. Also, unlike familiar reflexives, N-*tanne* can appear in the subject position. In fact, N-*tanne* can appear as the only argument. i.e., without an antecedent:

24. avan-tanne avane kandu  
   he-tanne him saw  
   ‘He saw himself’

25. oduvil avan-tanne vannu  
   Finally he-tanne came  
   ‘Finally, he himself came’.
Chapter 4 Wh in Malayalam – Morphology

It is not even necessary that N-tanne has to be mandatorily bound by the subject when it appears in the object position. The sentence below simply emphasizes that ‘it was indeed he himself that the queen saw in the mirror’.

26. raːni kannaːdiyil avane-thanne kandu
   queen in the mirror he-tanne saw
   ‘The queen saw he himself in the mirror’.

The NP that is associated with tanne can optionally corefer to any appropriate NP in the sentence regardless of whether the antecedent c-commands it.

27. meːriyude amma kannaːdiyil avale-thanne kandu
   mary’s mother in the mirror herself saw
   Mary’s mother saw herself in the mirror.

Unlike more familiar reflexives, tanne can go with any NP regardless of argumenthood.

28. Sivan-tanne Sivane kandu
    Sivan-tanne Sivan.Acc saw
    ‘Sivan saw himself’

These examples show that tanne can perform as an emphatic marker. But how can we rule out an analysis where the emphatic tanne might be homophonous with a possible reflexive marker tanne? In other words, examples 21-23 are actually instances of a pronominal transformed into a reflexive by tanne whereas the rest of the examples shows contexts where tanne functions as an emphatic marker?

The answer is indeed pretty straightforward. If the example in (21) is a reflexive, it means that it is a bound form and it had better behave like one. Unfortunately, it doesn’t. The pronominal form that tanne attached to continue to have its pronominal behavior which can be brought to light through contexts of ellipsis where the NP-tanne receives only the strict reading:

29. Mary avale-tanne kandu; Meeraːyum
    Mary her-tanne saw Meera.Conj
    ‘Mary saw her/herself in the mirror, and Meera too’ (saw whoever Mary saw, but, crucially, not Meera herself)

30. raːni avale-tanne kuttappeduthi; mantriyum
    queen her-tanne blamed minister.Conj
    ‘The queen blamed her/herself, and the minister too’.
If *tanne* could enforce binding, one would expect it to be bound in the elided context as well, giving rise to a sloppy reading. Clearly, this is not the case. Hence, it is incorrect to assume that *tanne* is any more than an emphatic marker.

Also, it can be shown that the NP suffixed with *tanne* obeys rules that pertain to it in the absence of *tanne*. For example, a pronoun in Malayalam cannot corefer with an R-expression that follows it. Thus, coreference is impossible in 31 and 32 where the pronoun, although suffixed with *tanne* precedes the R-expression. We would not expect this if *tanne* is a reflexiviser.

```
31. avane-tanne Sivan kannadiyil kandu
    him-self Sivan in the mirror saw
    ‘Sivani saw him in the mirror’
32. avan-tanne Sivane kannadiyil kandu
    him-self Sivan in the mirror saw
    ‘He himself saw Sivan in the mirror’
```

Thus, we can safely conclude that *tanne* is not a reflexiviser. The language lacks local anaphors.

### 4.2.4 Constraints on antecedents

The data so far has shown that pronouns and R-expressions which are traditionally characterized by a requirement to be free in a defined local domain can be bound in Malayalam, like Thai, Vietnamese, Zapotec, Salish, Hmong etc. (cf. Lee 2003, Narahara 1995) when they have a definite reference\(^\text{28}\). However, the behavior of these elements vis-à-vis coreference is constrained by certain requirements on what can count as a legitimate antecedent. Lasnik (1986) attempted to describe this by proposing Referential Hierarchy Condition (RHC) that forbids a less referential element from binding a more referential one.

At first sight, this seems to hold cross-linguistically, but various languages has been since shown not to follow RHC (Hmong, for example). Malayalam is no exception. For example, a name is more referential than an epithet and hence should be able to bind it. However, this is not the case, although RHC holds to certain extend in that a pronoun which is less

\(^{28}\) Furthermore, it seems to imply that all R-expressions should be able to bind R-expressions, but again, this is not the case. Certain R-expressions—notably bare nouns that are not names or kinship terms—are resistant to binding. And quantified nouns may not be bound at all. This could be because bare nouns are generic in Malayalam, and thus lack a definite reference.
referential than a Name cannot bind a name. Unlike the Thai and Vietnamese examples that Lasnik (1986) talks about\textsuperscript{29}, a proper noun cannot corefer with an epithet in Malayalam.

33. 
\text{Sivan} a: thendikkuj\textsubscript{i}/*\textsubscript{i} vote ceythu
Sivan that bugger.Dat vote did
Sivan voted for that bugger.

34. 
\text{avan} Sivane\textsubscript{i} kuttappeduthi
he Sivan.Acc blamed
‘He blamed Sivan’.

35. 
\text{Sivan} a: thendiye\textsubscript{i} kuttappeduthi
Sivan that bugger.Acc blamed
‘Sivan blamed that bugger’.

Lee (2003) has shown that in Thai and Zapotec, the coreference is determined by the Identical Antecedent Requirement which states that R-expressions and pronouns can only be bound by identical elements (p.85). This holds true for Malayalam R-expressions as well. This explains why Sivan cannot have the pronoun as its antecedent in 33 or 35. This holds true for titles, kinship terms and epithets coreferring with proper nouns.

36. 
\text{avan} Sivun\textsubscript{j}/*\textsubscript{i} vote ceythu
he Sivan.Dat vote did
‘He voted for Sivan’

37. 
\text{mantri} Sivun\textsubscript{j}/*\textsubscript{i} vote ceythu
minister Sivan.Dat vote did
The minister voted for Sivan.

38. 
\text{a: thendi} Sivun\textsubscript{j}/*\textsubscript{i} vote ceythu
that bugger Sivan.Acc vote did
That bugger voted for Sivan.

39. 
\text{mantri} a: thendikkuj\textsubscript{i}/*\textsubscript{i} vote ceythu
minister that bugger.Dat vote did
The minister voted for that bugger.

This confirms the Identical Antecedent requirement for R-expressions in the language. However, this is not true for pronouns, which can take an R-expression including an epithet that is a coargument as its antecedent as we saw in 15-19. However, as Narahara (1995) notes, referentiality alone cannot give a full picture of coreference. For example, in

\textsuperscript{29}see Narahara (1995) for a different account of Thai and Vietnamese.
Malayalam, names can be used instead of second person pronouns while addressing someone.

40. (ennittu) Rajan Rajane ye: kandullo?:
    and then Rajan Rajan.Acc-foc see-foc
    addressed to Rajan: ‘And then? you saw only yourself?’
    if not directly addressed to Rajan: ‘And then? Rajan saw only himself?’

However, even when directly addressed to Rajan, the following sentence is ungrammatical with a coreference interpretation:

41. (ennittu) Rajan ninne ye: kandullo:
    and then Rajan you.Acc-foc see-foc
    ‘And then? Rajan saw only you?’

To summarise, Identical Antecedent Requirement and Reference Hierarchy Condition holds true for Malayalam although not unconditionally.

4.3 Bound Variable Readings

One of the early proposals on how to deal with the violations of binding conditions was by Lasnik (1986) who argued for parametrising Condition C. As opposed to this view, Lee (2003) argued that the bound R-expressions in Thai and Zapotec in fact do not pose a problem for Condition C. Her point was that “the semantic behavior of “bound” R-expressions and pronouns shows that they should not be treated as true referential arguments. Bound copies of R-expressions and pronouns behave semantically as bound variables.” (p.89). She substantiates her argument by showing that the locally bound copies allow only sloppy reading in VP-deletion contexts:

42. B-gwi’ih Gye’eihlly lohoh Gye’eihlly ze’cy cahgza’ Li’eb.
    perf-look Mike at Mike likewise Felipe
    ‘Mike looked at himself, and Felipe did too.’ (i.e., Felipe looked at himself/*Mike)

A sloppy reading for elliptical constructions indicates the presence of a bound variable.

Taking a look at example in 43 below in this light, we see that it receives only the strict reading indicating that the second R-expression retains its potential for independent reference. If the second R-expression were the manifestation of a truly bound copy of the

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30 Also, perhaps worth noting is that the two R-expressions can display disjoint reference as well. So in the context where C.P. John was being interviewed by John Brittas in a TV channel, the following sentence makes perfect sense with the two Johns referring to different persons:
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first R-expression, the reading would have been ‘Mary voted for herself’ which is not what we get in Malayalam. The same strict reading is obtained in example (44) as well:

43. Sivan  Sivanu  vote ceythu;  maryum  
    Sivan  Sivan.Dat  vote did;  Mary-comj  
    ‘Sivan voted for Sivan; Mary, too’ (meaning: Mary voted for Sivan)

44. Priya  Priyaye  kuttappeduthi;  Rajanum  
    Priya  Priya.Acc  blamed  Rajan.Conj  
    ‘Priya blamed herself; and Rajan too’ (i.e., Rajan blamed Priya)

Thus, in Malayalam, the second R-expression does not behave like a bound variable. What about quantified NPs?

Lee (2003) observes that quantified NPs and bare nominals resist bound readings. She argues that this supports the bound variable status of bound copies.

45. *B-guhty  cho’nn ra bxuuhahz  cho’nn ra bxuuhahz  
    perf-kill  three pl priest  three pl priest  
    ‘Three priests killed themselves’.

I do not know if the sentence itself is ungrammatical or if a reading that makes reference to the individual members of the group referred to by the quantified NP is unavailable. This distinction might be important. In Malayalam, for example, a bare singular nominal like the one in the following sentence can be used generically.

46. kuthira  budhiyulla  ji:vi  a:nu  
    horse  intelligence  have-relativiser creature be  
    ‘Horses are intelligent animals’

As expected, not all bare singular nominals are interpreted generically:

47. a:san  kalariyil  undu  
    Master  school-loc be  
    ‘The Master is in the school’

31 However, once we believe that the R-expressions in the above relevant examples retain their potential for independent reference, the Identical Antecedent Requirement demands an explanation. For, if ‘Rajan’ and the epithet ‘that bugger’ refer to the same individual, then why can’t they be referring to the same person in the following example?

Rajan  a: thendi-e  kuttappeduthi  
    Rajan  that bugger.Acc  blamed  
    ‘Rajan blamed that bugger’
Consequently, we get two different readings when the a bare singular nominal is repeated depending upon whether the nominal refers to a generic collective reading or a definite individual:

48. manushyan manushyane thinnunna nadu
   human human.Acc eat-relativiser country
   ‘Country where humans eat humans’
49. a:san a:sane kuttappeduthi
   Master master.Acc blamed
   ‘The Master blamed himself’

48 cannot have a reflexive reading that they eat themselves. The bare singular nominal here refers to a generic group ‘human kind’; the ‘reflexivity’ can be mapped only to the kind referred to as a single undifferentiated whole as opposed to 49 where the reference is to a definite individual. Similar reading obtained for bare plurals:

50. naykkal naykkale thinnunna nadu
    dogs dogs.Acc eat-relativiser country
    ‘Country where dogs eat dogs’
    politicians politicians.Acc-focus help-focus
    ‘Politicians help only politicians’

In all three sentences above (viz. 48, 50 and 51) humans, dogs, and politicians have a generic reading in Malayalam and the actions are defined over the unindividuated collective class they belong to, and not to the definite individual members of the class. Thus, the group is referred back to itself as a property rather than as individual entities possessing that property. Now, if we can obtain a reflexive reading with a referential name, logically speaking, there is no reason why we should be unable to get a reflexive reading for a definite description that is not constrained by a generic reading and hence can be individuated. We do get a reflexive reading in the following context:

52. Who did that child vote for?
53. a: kuttikku a: kuttikku vote ceythu
    that child that child.Dat vote did
    ‘That child voted for him/herself’.

Interestingly, this observation is carried over to other quantified NPs as well. As we saw, a quantified NP refers to a collectively defined group and cannot obtain a reflexive reading over the individual members of the group.
54. *mu:nnu ammama:r mu:nnu ammama:re kuttappeduthi
   three mothers three mothers.Acc blamed
   ‘Three mothers blamed three mothers’

The sentence cannot be salvaged even with emphatic elements of focus.

55. *mu:nnu ammama:r mu:nnu ammama:re tanne kuttappeduthi
   three mothers three mothers.Acc tanne blamed

To get a reading where the action is defined over the individual members, a distributive construction should be used where reference is made to all the individuals denoted by the group, thus individuating the generic reference:

56. 3 ammama:r avaravare kuttappeduthi (all others blamed the teachers)
   3 ammama:r they-them blamed
   3 mothers blamed themselves

57. ra:shtri:yakkar avaravare ma:thrame: pukazhthukayullu:
   politicians they-them only-foc praise-be-foc
   ‘Politicians praise only themselves’

In both the above examples, reference is made to the individual members of the kind referred to by the bare nominals. Apart from the distributive reading, making the group into a definite description produces a reflexive reading in a somewhat non-local context.

Context: There is a bunch of people going on a hike. Everybody has been assigned to carry something except three persons. Someone new to the group asks “what about those three?”

48 is a grammatical answer.

58. a: 3 per a: 3 pe:rude sa:dhannangal ma:thrame: edukkukayullu:
   that 3 people that 3 people-gen things only-focus take-be-focus
   ‘Those three people carry only their stuff’.

The fact that definiteness has some important role to play in such constructions seems to be responsible for the inability of the same indefinite NP to appear twice in a sentence such as below, even when the two NPs refer to two different entities.

59. *oru na:ya oru na:yaye kadichu
   a dog a dog.Acc bit
to mean: ‘A dog bit another dog’

Like in English, one has to use ‘another dog’.

60. oru na:ya mattru/ve:roru na:ya:yeye kadichu
   a dog another dog.Acc bit
   ‘A dog bit another dog’
The reading improves considerably in the following example where an indefinite is forced into a definite description through a demonstrative that can then function as an antecedent for a definite NP referring to the same entity:

61. a: oru kochu a: kochinte ma:thram sa:dhannangale: edukkukayullu: that one child that one child’s only stuff-focus carry-be-focus

‘That one child carries only his/her stuff’.

This goes against the Identical Antecedent Requirement, in a narrow sense. As we noted earlier, Malayalam does not have local lexical anaphors. Apart form the same R-expression, a pronoun also can be used in less local contexts such as the following:

62. a: 3 pe:r avar-ude sa:dhannangal ma:thrme: edukkukayullu: that 3 people they-gen things only-focus take-be-focus

‘Those three people carry only their stuff’.

63. a: 3 pe:rum avar-ude sa:dhannangal ma:thrme: edukkukayullu: that 3 people.Conj they-gen things only-focus take-be-focus

‘Those three people carry only their stuff’.

We saw that unlike Thai or Zapotec, R-expressions and pronouns exhibit different behaviour in Malayalam. How do pronouns fare against a bound variable reading? In sentences like the following, is the second pronoun an instance of a bound copy?

64. avan avan-u vote ceythu
He he.Dat vote did

‘He voted for him/himself’

Applying VP ellipsis test, we see that the elided pronoun follows exactly the reference of the overt one.

65. avan avan-u vote ceythu; avalum
He he.Dat vote did she.Conj

Meaning: She voted for whomever he voted for. If he voted for himself, then she voted for him; if he voted for another person, then she voted for that person.

Thus, the second pronoun is not a bound variable. This can be tested by other tests as well.

For example, in the example 66, the sentence does not have the interpretation (as we obtain in English) that ‘nobody else did their homework’. Similarly, none of the other examples 66-69 show a bound variable interpretation supporting the argument that the second occurrence of the NP retains its potential for independent reference32.

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32 To obtain a bound variable reading in these constructions one has to use a covert pronoun. Considering the fact that Malayalam does not have Subject-Verb agreement, this is in line with Holmberg and Roberts (2013).
Perhaps the argument that the pronouns always retain their potential for definite reference and hence cannot act as a bound variable, just like R-expressions, can be supported by the fact that variable binding by Wh or by quantifiers is not possible:

1. nja:n-e: ente homework ceythullu:
   I-Foc my homework did-Foc
   ‘Only I did my homework’

2. φi vanna vazhi ella:varum₁ marannu
   came-rel way all forgot
   ‘Everybody forgot the way he/John came’

3. φ manasila:kunn-a oru codyam enikke: kittiyullu:
   understand-rel a question I-Foc got-Foc
   ‘Only I got a question that I understand’

4. φ manasila:kunn-a oru codyam avane: kittiyullu:
   understand-rel a question him-Foc got-Foc
   ‘Only he got a question that he understands’

5. φ manasila:kunn-a oru codyam Karambikke: kittiyullu:
   understand-rel a question Karambi-Foc got-Foc
   ‘Only Karambi got a question that she understands’
72. avane\textsubscript{i} ni: kandu ennu a:ra\textsubscript{si} nu vicha:richathu?
    Him you saw comp who.be thought
    ‘Who thought that you saw him?’

73. ni: avane\textsubscript{i} kandu ennu vicha:rikkunna kutti/\textsubscript{si} you him saw comp think-Rel child
    ‘The child who thinks you saw him’

74. a:rr\textsubscript{k}i a:nu avante\textsubscript{i} ammaye ishtamullathu?
    Who be his mother love.has.Sg.N.
    ‘Who loves his mother?’

75. a:rr\textsubscript{i} a:nu avante\textsubscript{i} ammaye kandathu?
    Who be his mother saw.Sg.N.
    ‘Who saw his mother?’

76. ella:varum avane (tanne) kuttappeduthi all/everyone him emphatic blamed
    ‘Everyone blamed him/*himself’

77. ella:varum avare kuttappeduthi all/everyone them blamed
    ‘Everyone blamed them/*themselves’

Again, distributive forms are the only way to induce an individuated reading:

78. ella:varum avanavane/avaravare kuttappeduthi all/everyone themselves blamed
    ‘Everyone blamed themselves’

79. ella:varum\textsubscript{i} avante\textsubscript{i} ammaye kuttappeduthi all/everyone his mother blamed
    ‘Everyone blamed his mother’

80. ella:varum\textsubscript{i} avarude\textsubscript{i} ammaye kuttappeduthi all/everyone their mother blamed
    ‘Everyone blamed their mother’

81. ella:varum\textsubscript{i} avar-avarude\textsubscript{i} ammaye kuttappeduthi all/everyone they-their mother blamed
    ‘Everyone blamed their mother’

82. a:rum avane kuttappeduthi illa nobody him blamed be\textsubscript{Neg}
    ‘Nobody blamed him’
Thus, it is clear that although pronouns can corefer with an antecedent, they behave more like definite descriptions and pattern with R-expressions than standard pronouns where binding is concerned. Obviously, all the pronouns above carry the distal morpheme and can be used indexically. Being inherently referential in nature, the distal pronouns can function as E-type donkey pronouns as well.

### 4.4 Pro-noun, Pro-Φ or Pro-DP?

The previous sections presented data to show that Malayalam does not have a pure Reflexive pronoun, the nominal used as pronouns are resistant to function as bound variables and finally, R-expressions can be used repeatedly to express coreference. Combined with the fact that there seems to be a proliferation of third person ‘pronouns’ in the language\(^33\), these nominals incline towards definite descriptions with rigid references. In this context, it is worth introducing the proposal by Déchaine and Wiltschko (2002) (hereafter D&W) that problematizes taking ‘pronoun’ as a primitive of linguistic theory. The following section describes the proposal and shows that the so-called third person pronouns in Malayalam are pro-DPs.

D&W argues that “[…] it is necessary to recognize (at least) three pronoun types: pro-DP, pro-ΦP, and pro-NP.” (p.409). They mainly draw evidence from the internal structure of pro-forms, ability to function as argument/predicate, and the binding-theoretic properties. The three possibilities and their properties are given below (p.410):

\(^{33}\) see Jayaseelan (1999), pages:39-40
The typologically assigned names are pretty much explicit vis-a-vis their internal structure. Thus, a pro-DP behaves in ways similar to a definite description or an R-expression, a pro-ΦP corresponds to a “standard Condition B pronoun” and a pro-NP is expected to show the "same syntax as lexical nouns" (p.411).

If there are different types of pronominals, then it makes sense to talk about different type of phonetically null pronominals as well. Indeed, D&W mentions this possibility. Holmberg (2005) suggests that while the null subject pro in Spanish and Greek are D-less ΦPs while null first and second person subjects in Finnish are DPs that are deleted.

As we saw in the previous section, third person pronouns do not behave like standard Condition B pronouns. However, pro indeed function as a bound variable and is used in positions where one expects to find a bound variable. This suggests the obvious conclusion that third person pronoun and pro in Malayalam differ in their internal structure according to a distinction that D&W propose.
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**Malayalam third person pronouns are pro-DPs**

It has already been shown in the previous section that the third person pronoun in Malayalam does not lend itself to variable binding and behave like a definite description. Some relevant data is reproduced below:

86. ella:varum avane kuttappeduthi  
   all/everyone him blamed  
   ‘Everyone blamed him/*himself’

87. ella:varum avare kuttappeduthi  
   all/everyone them blamed  
   ‘Everyone blamed them/*themselves’

Not only that the pronoun cannot be bound, there are instances where an R-expression and a third person pronoun behave the same, as in the following sentences where a language like English employs a reflexive pronoun:

88. Rajan Rajan-u vote ceythu; Priyaum  
    Rajan Rajan.Dat vote did Priya.Conj  
    Rajan voted for Rajan; Priya, too.  
    Meaning: Priya voted for Rajan.

89. avan avan-u vote ceythu; avalum  
    He he.Dat vote did she.Conj  
    Lit: He voted for him; she too.  
    Meaning: She voted for whoever he voted for. If he voted for himself, then she voted for him; if he voted for another person, then she voted for that person.

Binding-theoretically, the third person pronoun in Malayalam patterns with an R-expression or a definite description rather than getting its reference from an antecedent, making it a pro-DP as per D&W. Furthermore, as shown in the ellipsis examples above, the elided pronoun invokes only the strict reading, making it a definite description rather than a bound pronoun.

The third person pronoun in Malayalam, as noted before, is made up of two morphemes – a distal morpheme and a morpheme that manifests the relevant number/gender feature. The latter morpheme can be seen in certain other contexts as well. Nominalised clauses provide such a context:

90. innale vanna-(v)an  
    yesterday came.Sg.M.  
    The man/boy who came yesterday.
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However, the morpheme cannot appear independently in an argument position:

91. *an innale vannu
   Sg.M. yesterday came.
   He came yesterday.

This gives us the following structure that D&W proposes for pro-DPs:

92. a–(v^3)an

\[
\begin{array}{c}
\text{DP} \\
\text{D} \quad \text{\(\phi\)P} \\
\text{a} \quad \text{an} \\
\text{Distal-Sg.M.}
\end{array}
\]

4.5 Third Person Pronouns as Inherently Referential

Pro-DPs have something inbuilt in them that prevent them from functioning as a bound variable. Obviously, pro-\(\phi\)Ps have no such burden to bear and hence can be bound. This makes it inevitable that we delve a little deeper into the composition of a pro-DP. In order to do this, I follow Elbourne (2005) for a semantic explanation of definite descriptions.

If pro-DPs cannot be bound and pro-\(\phi\)Ps can, then the reason that suggests itself is that it is the D part that makes a difference. This seems to be morphologically substantiated as well since taan, swayam, and pro-\(\phi\)P all lack the deictic part of the pro-DP in Malayalam. Also, we saw that the third person pronoun and an R-expression can appear in unexpected domains in Malayalam, sometimes in the same domains of coreference, presenting conventional Binding Theory with an anomaly.

Elbourne (2005) does not iron out those anomalies; it is not the purpose of the theoretical model suggested in the work either. Elbourne (2005) is relevant in the discussion here because it attempts to point out the similarities between R-Expressions, definite descriptions and pronouns in English. According to this model:

“ […] pronouns, definite descriptions, and proper names can profitably be viewed as having a common syntactic structure \([([\text{THE } t] \text{ NP}] […]\)” (p.185).

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34 v shows up as a phonetic insertion of a glide between two vowels.
While this model does not argue that pronouns, R-expressions and definite descriptions all should exhibit the same behavior, it does imply that there may be more similarities between pronouns and R-expressions than the predictions of traditional binding principles. This is indeed what we see in Malayalam.

As we saw in the earlier sections, both R-expressions and pronouns behave the same w.r.t. Identical Antecedent Requirement and an R-expression can appear in the place of a pronoun while binding into a complement domain:

93. Rajan Rajan. Acc praised
   Rajan praised himself
94. avan him praised
   He praised himself.
95. Rajan thought he/Rajan win. Fut comp
   Rajan thought that he will win.

Elbourne (2005) explores the Japanese pronouns *kare* and *kanozyo* which display behaviour similar to Malayalam pronouns we explored above in that in certain dialects these pronouns can be referential but not bound (Japanese data from Elbourne 2005, p.162).

96. John-Nom he-Gen daughter-Gen new photo.Acc has
   John, has a new photo of his, daughter.
97. *Dono titioya-mo,kare- no musume-no atarasiisyasin-o motteiru
   Every father he-Gen daughter-Gen new photo.Acc has
   Every father, has a new photo of his, daughter.

Malayalam third person pronoun behaves the same in similar contexts in that it cannot be bound by a quantifier:

98. John.Dat his daughter.Gen a new picture got
    John; got a new picture of his, daughter
99. *ella: achanum avante makalude oru puthiya padam kitti
    Every father.Dat Conj his daughter.Gen a new picture got
    Every father, got a new picture of his, daughter
It is further noted in the discussion that “[…] Japanese nouns can quite generally be used with no overt determiner and receive an indefinite interpretation (‘an N’), but this is completely impossible with kare.” (p.163). This holds true for Malayalam data as well.

100. A: What happened to Rajan?
    B: Rajane patti kadichu.
       Rajan.Acc dog bit

Here, the bare noun patti ‘dog’ can be used as an indefinite. However, this is not an available use for the third person pronouns like avan ‘he’, aval ‘she’ etc. in Malayalam. There are no contexts where these words can be used as indefinites.

Discussing these properties of what he calls the ka-series pronouns in Japanese, Elbourne (2005) proposes the following: “There is one type of expression in the standard logical languages we use which could be referential, could be applied to many people indiscriminately like a pronoun, and yet would not be capable of being bound, and that is a bland definite description. I suppose, then, that [kare] = ix male(x), and [kanozyo] = ix female(x).” (p.163). These, it is argued in the book, cannot be bound because there are no free variables in them.

Extending this model to Malayalam, we get the semantic description [avan] = ix male(x), [aval] = ix female(x) and so on for what is subsumed under the blanket term third person pronoun. In other words, they are definite descriptions – DPs – with the description [THE i NP] that finds an overt morphological instantiation as [a an], [a al] etc. In fact, this NP finds a range of possibilities in Malayalam in that the NP could be aal ‘person’ as in ayal ‘that person’, kaaryam ‘matter’ as in akkaaryam ‘that matter’ etc. where the overt deictic component /a-/ or /i-/ manifests the referential element and the latter half manifests the NP component.

Apart from this we already saw that in the Dechaine and Wiltchko (2002) framework also predicted independently that the overt third person pronouns in Malayalam are pro-DPs as

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35 Elbourne (2005) also makes a prediction that the lack of this individual variable is no hindrance to these pronouns being used in the donkey anaphora context. This prediction is true for Malayalam, just like Japanese.

penpille:r ulla ella:varkkum avare skoolil vidanda chumathayum undu.
Girl children have all.Dat.Conj them school.Loc send duty.Conj have.
Everyone who has daughters also has a duty to send them to school.
opposed to the null pro in bound contexts, which are pro-ΦPs. As we saw, a third person pronoun in Malayalam cannot appear in a context where it is interpreted as an indefinite expression. Elbourne (2005) makes it clear that these pronominals have no free variables that can be bound, they are inherently referential, owing to the deictic element in them. As the data from Malayalam clearly shows, pronominals that lack this deictic anchoring, viz. taan, and swayam do not have the capacity for independent reference substantiating the proposal above about where third person pronouns derive their referentiality from.

Of course, one would expect, then, R-expressions to show more similarities to definite descriptions and pronouns if one subscribe to Elbourne (2005). If pronominals like aval, avan etc. can have overt manifestation of the presumable D part, can R-expressions do the same?

Since Malayalam does not have definite articles, we need to use demonstratives and indefinite articles to see if there is always mandatory N to D movement in the case of R-expressions (see Longobardi 1994).

It turns out that R-expressions in Malayalam can and do appear with demonstratives and the indefinite article to tweak the reference.

Context: Talking about someone who the speaker does not know well (he has met the person only once) and the addressee does not even know the existence of.

101. Priyayude bharthaavu oru Rajan undu. (He did that.)
Priya.Gen husband one Rajan be.
There is a Rajan who is Priya's husband.

R-expressions appear with demonstratives as well as can be seen from the following example. In such cases, the demonstrative somehow emphatically picks out the person and also somehow distancing oneself from the person.

102. a: Rajan anu ithokke paranju parathunnathu
that Rajan be this.all said spread.SgN
It is that Rajan who spreads all these (rumours).

In this example the speaker expects that the addressee knows Rajan as opposed to the use of R-expression with the indefinite article in the previous example. The demonstrative functions rather as an overt marker in establishing the reference of the nominal Rajan. This is even more palpalbe in the following example where Rajan must be someone that the speaker and addressee have talked about before.
103. a: Rajan innale vanna:yirunnu
    that Rajan yesterday came.be.be.
    ‘That Rajan had come yesterday.’

In this example, the use of the demonstrative is infelicitous if the addressee does not know Rajan. Moreover, this would be uttered most naturally in a situation where Rajan is not closely associated with the speaker at all, implying a distance between the speaker and Rajan. Thus kinship terms resist being used with a demonstrative, as shown below\(^36\), indicating that probably there are situations where N to D movement is obligatory.

104. #* a: achchan innale vanna:yirunnu
    that father yesterday came.be.be.
    That Father had come yesterday.

Nevertheless, the data is clear in pointing to the fact that R-expressions, pronouns and definite descriptions all share a similar abstract relation.

How, then, is the pronominal _ayaal_ ‘He\(^\text{honorable}\)’ different from _aa aal_ ‘that person’? Elbourne (2005) makes it explicitly clear that the underlying similarity does not mean that definite descriptions and pronouns and R-expressions will have the same syntax and semantics (p.18). What we are concerned with here is rather the pronominal structure and how that can be altered to yield a DP that can be varyingly employed to produce interrogative, negative polarity, existential and other interpretations?

### 4.6  Making an Indeterminate Pronoun

As we saw in the beginning, Wh words in Malayalam falls into a paradigm that consists of third person pronominals. The table is reproduced below:

<table>
<thead>
<tr>
<th>e-nthu</th>
<th>What</th>
<th>a-thu</th>
<th>that</th>
<th>i-thu</th>
<th>this</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-thu</td>
<td>Which</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e-vide</td>
<td>Where</td>
<td>a-vide</td>
<td>there</td>
<td>i-vide</td>
<td>here</td>
</tr>
<tr>
<td>e-ngane</td>
<td>How</td>
<td>a-ngane</td>
<td>thus</td>
<td>i-ngane</td>
<td>thus</td>
</tr>
</tbody>
</table>

\(^36\) May be the reader is tempted to argue that this is because of the presence of a null possessor that turns Father into My Father. However, this may not be a profitable way of going because one can have sentences like the following where the Modifier-Demonstrative-NP order is perfectly natural.

Rajante a: pattiye nj:an kandu
Rajan’s that dog.Acc I saw
I saw that dog of Rajan.
Is straightforwardly obvious from the table that it is the deictic part that is being altered in forming a question word. As we saw, it is precisely this part that manifests the referential nature of the DP in a third person pronoun, transforming the word into a DP that leaves the reference open and not definite, to borrow a well-known terminology from the Japanese linguistic tradition, a DP of indeterminate reference aka “indeterminate pronouns” (Kuroda 1965).

What we have here is a DP of no fixed reference created by substituting the referential deictic part of the DP with an indeterminate reference. In other words, this transforms the referential pronominal DP into an open expression with unspecified reference that is in a complement relation to its restrictor, the phi/place/time part, and is amenable to be bound by an operator. Thus, *vide ‘where’ is literally e-ide ‘e-at place’ or, to paraphrase, ‘at --- place’.

As Shimoyama (2006) points out, these pronominals do not have an inherent interrogative meaning; the interpretation is dependent on the operator and hence, can participate in different types of quantification depending on the operator that is associated with it. All that the indeterminate pronoun does is to make an open expression along with a restrictor available for different operators.

Similar to Japanese, these indeterminate DPs can make use of a number of operators to form quantifiers. For example, a Wh word, when appearing with the conjunction marker behaves as a polarity item. Some examples are given below.

<table>
<thead>
<tr>
<th>e-ppo:1</th>
<th>When</th>
<th>a-ppo:1</th>
<th>then</th>
<th>i-ppo:1</th>
<th>now</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-nnu</td>
<td>Which day</td>
<td>a-nnu</td>
<td>that day</td>
<td>i-nnu</td>
<td>today</td>
</tr>
<tr>
<td>e-thra</td>
<td>how much</td>
<td>a-thra</td>
<td>that much</td>
<td>i-thra</td>
<td>this much</td>
</tr>
</tbody>
</table>

105. aarum vanilla
    Wh.Conj came.beNeg
    Nobody came

106. *aarum vannu
    Wh.Conj came.

107. aar-o: vanilla
    Wh.Conj came. beNeg
    Someone did not come

108. aar-o: vannu
    Wh.Conj came.
    Someone came
However, it should be noted that, unlike Chinese, the Wh words in Malayalam needs an operator to turn it into an indefinite expression similar in reading to ‘someone’ or ‘nobody’. Thus, it is more appropriate to describe the Wh as an open expression or an indeterminate pronoun rather than an indefinite although the movement options of both are marked by a lack of quantificational force. The parallels between a Wh and indefinite expression are discussed in the next chapter, in section 5.2.

4.7 Wh = Variable? Cole and Hermon (1998)

As we saw, a Wh in Malayalam is formed by substituting the D with the morpheme |e-| which turns a pro-DP into an open expression. The question that is pertinent here is that if being an open expression necessarily means being a variable.

Cole and Hermon (1998), while discussing interrogatives in Malay have proposed various possibilities for a Wh-variable to combine with an operator that binds it. Subscribing to the idea of “unselective binding (in the spirit of Heim 1982 and Reinhart 1993)” (p.224), they proposed that “unselective binding is possible only if the language allows a pure variable to occur in-situ” (p.248). English had the Operator and the Variable fused into a single lexical item whereas Chinese made up the other extreme where the Wh word is a pure variable. Two diagnostics from Cheng and Huang (1996) is employed to show that the Wh arguments are pure variables in Chinese (p.238):

Chinese bare conditionals

110. Shei xian lai, shei jiu xian chi
    Who first comes who then first eats
    ‘If x comes first, x eats first’.

Ability to combine directly with non-question operators

111. Wo shenme dou bu zhidao
    I what all not know
    ‘I don’t know anything’

Applying these tests to Malayalam, we find that such bare conditionals are not possible in Malayalam; in constructions where conditional with a Wh is possible, an overt operator is required.
112. aaru aadyam varunn-o: avarkku aadyam kazhikkaam
   Who first come-Disj they.Dat first eat.may
   Whoever comes first may eat first

113. aadyam varunnathu aar-aan-o: avarkku aadyam kazhikkaam
   First come.Sg.N. who-be-Disj they.Dat first eat.may
   Whoever comes first may eat first

The disjunction operator is mandatory in both the constructions although, the place where
the operator can appear vary along the lines we saw vis-à-vis the attachment cites for Q.
As for negation, we again see that a bare Wh is ungrammatical.

114. *aaru wannilla
    who came- beNeg

The sentence is ungrammatical as a content question; neither does it get the interpretation
of ‘Nobody came’. For the latter interpretation, the Wh needs to be turned into an indefinite
with the help of the Conjunction operator as follows:

115. aarum wannilla
    who.Conj came- beNeg
    Nobody came.

Thus Malayalam Wh words, although open expressions, are not independent variables at
par with Chinese Wh words.

4.8 Summary

This chapter analysed the make up of a Wh word in Malayalam where they fall into a
paradigmatic relation with third person pronominals. This lead to anayse the rpronominal
system first, and was proposed that the so-called third person pronouns in the language are
pro-DPs in the sense of Dechaine and Wiltchko (2002). The agglutinative nature of
Malayalam made a decomposition of these pronouns easier and it was shown that the
referential D part of the DP is encoded by deictic affixes. It is this referential D part that is
substituted with a non-referential non-definite affix in a Wh word, effectively turning the
DP into an open expression.
Chapter 5
Wh in Interrogative Constructions

So far we discussed the two constructions that are most relevant to form a content question in Malayalam, namely, verb-final and the categorical aanu construction. We explored the morphology of the Wh. However, apart from brief mentions of empirical data, we have not discussed the behavior of Wh in these constructions. This is the theme of this chapter.

The blanket division vis-à-vis the overt position of Wh in an interrogative construction is derived from the English-type languages where the Wh obligatorily occupies a sentence initial position regardless of the position of the same argument/adjunct when it is a non-Wh word. In other words, there are languages that can be described as exhibiting Wh-movement. The theoretical developments account for this by modeling this in terms of a licensing element at the C-domain, with the Wh moving to be in a very local configuration with the licensing element, thereby bringing the entire CP/clause within its scope.

However, there are many languages that do not find the need to overtly place the Wh in such a local configuration, assuming the simple Universalist position that the Wh is licensed by a C-level element. Mostly, these languages could leave the Wh in the same position as a non-Wh word and still interpret the sentence as a content question. This leads to the descriptive label Wh-in-situ languages. Japanese, Chinese etc. were categorized this way. It will be argued in this chapter that Malayalam verb-final constructions are wh in-situ. As opposed to this, the aanu construction involves Wh ex-situ whenever the Wh is base-generated within the IP.

We begin by exploring the position of Wh in verb-final and categorical aanu constructions in little more detail in section 5.1. A bare Wh is canonically described as in-situ in verb-final constructions (Asher and Kumari 1997). Yet, a bare Wh cannot appear in the canonical subject position in the unmarked SOV order in certain sentences, for example in a sentence with a transitive verb. Section 5.2 delves into this and shows that a bare Wh patterns with indefinites; indefinites are not amenable to movement. Section 5.3 shows that a Wh is amenable to scrambling when associated with an element that renders it partitive specific or with quantificational force in some way. Section 5.4 explores the argument by Jayaseelan
(2001) that Malayalam verb-final constructions are in fact Wh ex-situ constructions. Drawing data from the parallels between indefinites and Wh as well as intervention effects, it is argued in this section that the simplest assumption is one in which we apply Occum’s razor and stick to an in-situ analysis. As opposed to this, aamu construction needs the Wh to be the predication base for it to be grammatical, as shown in Section 5.5. Thus, both in-situ and ex-situ are strategies used in Malayalam to form an interrogative construction. The issue whether this movement is focus movement or not is discussed in the next sections, 5.6. and 5.7 whereas 5.8 concludes the chapter.

5.1 Wh in the Verb-final Construction

Malayalam is traditionally described as a Wh-in-situ language (Asher and Kumari 1997). Some examples of content questions are given below:

1. a. Rajan Priyaye kandu.
   Rajan Priya.Acc saw
   Rajan saw Priya.
b. Rajan aare kandu?
   Rajan whom saw
   Whom did Rajan see?

2. a. Rajan vi:ttil po:yi
   Rajan to home went
   Rajan went home
b. Rajan evide po:yi?
   Rajan where went
   Hre did Rajan go?

   Rajan Priya.Dat a cat.Acc gave
   Rajan gave a cat to Priya.
b. Rajan Priyayku enthu koduthu?
   Rajan Priya.Dat what gave
   What did Rajan give Priya?

As seen in the above examples, simple substitution of the relevant linguistic item with a Wh word forms a content question in a verb-final construction.
Chapter 5 Wh in Interrogative Constructions

The unmarked word order in Malayalam is SOV. However, as shown in the following example, a subject Wh cannot appear in the canonical word order.

4. *aaru Rajan.kandu?
   Who Rajan.Acc saw?
   Who saw Rajan?

5. Rajan.aaru kandu?
   Rajan.Acc who saw?
   Who saw Rajan?

Malayalam is a language that employs scrambling, as shown below.

6. Rajan Priya.yku a:pu:chaye koduthu
   Rajan Priya.Dat that cat.Acc gave
   Rajan gave Priya that cat.

7. Priya Rajan a:pu:chaye koduthu

8. a:pu:chaye Rajan Priya.yku koduthu

9. Rajan a:pu:chaye Priya.yku koduthu

Any argument can appear in the beginning of the sentence as can be seen from the above examples. This freedom of word order is, however, not available to a Wh. A Wh is uniformly bad in the beginning of a question.

10. *a:ru Priya.yku pu:chaye koduthu?
    who Priya.Dat cat.Acc gave
    Who gave Priya (a) cat?

11. *a:rkku Rajan pu:chaye koduthu?
    whom Rajan cat.Acc gave
    Whom did Rajan give (a) cat to?

12. *enthu Rajan Priya.yku koduthu?
    what Rajan Priya.Dat gave
    What did Rajan give Priya?

13. *a:ru pu:chaye Priya.yku koduthu?
    who cat.Acc Priya.Dat gave
    Who gave Priya (a) cat?

On the other hand, the following examples where the Wh is not in the sentence initial position are grammatical.

14. Priya.yku a:ru pu:chaye koduthu?
    Priya.Dat who cat.Acc gave
    Who gave Priya (a) cat?
Thus it seems that Wh is ungrammatical when it occurs in the sentence initial position. Yet, proposing a strict ‘Left Edge Condition’ is bound to fall flat immediately as seen from the following data:

18. a:ru vannu?
   Who came
   Who came?

19. enthu sambhavichu?
   What happened
   What happened?

Yet, as examples 10-13 shows, it is ungrammatical for the subject Wh to precede the other arguments in an interrogative sentence. It will be shown in the next section that this restriction is a more general one regarding the interaction between indefinite and definite expressions.

5.2 Parallels between Wh and Indefinites

The restriction rather pertains to the freedom of movement of different lexical items in Malayalam, regardless of the fact whether they appear in declarative or interrogative constructions. Consider the following pair of declarative sentences:

20. Rajan onniladhikam pusthakam me:dichu.
    Rajan more than one book bought
    Rajan bought more than one book.

21. *onniladhikam pusthakam Rajan me:dichu
    more than one book Rajan bought
    Rajan bought more than one book
Chapter 5 Wh in Interrogative Constructions

We see the same effect with other indefinites as ‘some’, and ‘many’. Look at the following examples.

22. avane palaru kandu
   he.Acc several people saw
   Several people saw him
23. *palaru avane kandu

24. njaan chilathu kandu
   I something saw
   I saw something
25. *chilathu njaan kandu

Again, just like the Wh constructions we saw earlier, it is not the sentence initial position that is problematic for an indefinite as the following examples show:

26. chilaru vannu
   some people came
   Some people came.
27. chila muTTa virinju
   some egg hatched
   Some eggs hatched.

It has been argued in the literature that indefinites lack quantificational force and remains in situ as opposed to definite phrases that can undergo movement (Deising 1992, Berman 1991 a.o.). Thus it seems more prudent to explain the above examples as instances where the indefinites stays in-situ while the definite expressions move to higher positions, leading to the surface effect that the indefinites rarely appear in the sentence initial position in the presence of another definite expression in the same clause.

This is in fact, in line with what we explored in Chapter 2 vis-à-vis the left edge of a verb-final construction. We saw that there exists a left edge Topic position in the language. A Topic position is characterized by its aversion to indefinite non-specific elements. Thus it seems that what happens in minimal pairs like 22-25 is that whenever there is a suitable phrase in the clause, this Topic position is invoked, and the definite/specific phrase must occupy this position. However, the indefinites are grammatical in the beginning of the clause when there are no other definite/specific phrases in the clause. In these cases, it can be shown that the indefinites are below the Topic position:
Chapter 5 Wh in Interrogative Constructions

28. bhagyathinu chilaru vannu
   fortunately, some people came
   Fortunately, some people came.
29. *chilaru bhagyathinu vannu
   some people fortunately came
   Fortunately, some people came.
30. avan bhagyathinu vannu
    he fortunately came
    Fortunately, he came.

As seen in the above example, the high adverb ‘fortunately’ is grammatical when it occurs above the indefinite. Movement of an indefinite beyond this adverb results in ungrammaticality. On the contrary, a definite phrase is perfectly legitimate in this position. Now, the examples 22-25 can be explained as this: in the example 22, the definite expression avane moves out of the vP, leaving the indefinite Subject lower. In 25, the indefinite object has moved to a higher position past the definite subject, resulting in ungrammaticality.

Indefinites may appear at the left edge in Malayalam; however, these indefinites are interpreted as Specific, rendering them amenable to the Topic position.

31. Rajane ora:l kandu
   Rajan.Acc a person saw
   Someone saw Rajan
32. ora:l Rajane kandu
    a person Rajan.Acc saw
    Someone saw Rajan
    Meaning: There is a specific person who saw Rajan
33. njaan Rajanu kaashu koduthu
    I.Nom Rajan.Dat money gave
    I gave money to Rajan
34. kaashu njaan Rajanu koduthu
    money I.Nom Rajan.Dat gave
    I gave the money to Rajan

*ora:l in 31 is interpreted as a non-Specific indefinite person whereas in 32, the same word when it appears at the left edge gets the meaning of a Specific person. Similarly, in 33, *kaashu means just ‘money’ and not any specific amount or money that has been talked about.
However, in 34, kaashu refers to the specific token of money that is under discussion, the Specificity making the indefinite amenable for movement.

In other words, the hypothesis that the indefinites cannot occupy the left edge because the left edge Topic position requires a referential element makes a prediction that if there is a way to render an indefinite somehow more referential, it can move past a definite expression to the left edge Topic position. There is indeed evidence that this is possible. Consider the weak indefinite that we encountered earlier:

35. njaan chilathu kandu
   I something saw
   I saw something
36. */chilathu njaan kandu

chilathu is infelicitous when it appears in a higher position than the definite subject. It is possible to make it more referential by making it partitive specific by adding the suffix okke to the indefinite, producing chilathokke, ‘some of the things’. Now the indefinite is able to move past the definite subject.

37. chilathokke njaan kandu
   something.okke I saw
   I saw some of the things.

Assuming that Wh words pattern with indefinites and hence the ban on Wh occurring at the left edge, the prediction is that making a Wh partitive specific should make it possible for the Wh to occupy the left edge. The prediction is borne out as we find the same results as in the case of indefinites where the element okke attaches to the Wh as contrasting the following example with example (4) will show.

38. a:r-okke Rajan.e kandu?
   Who-all Rajan.Acc saw?
   Which people saw Rajan?

Presupposition as in the case of ‘how many’ also is enough to topicalise a Wh to the left edge:

39. ethra pe:r Rajane kandu?
   How many people Rajan.Acc saw?
   How many people saw Rajan?
Chapter 5 Wh in Interrogative Constructions

Tirumalesh (1996) has observed that a linguistic item displaced to the right edge of a clause is a Topic. For example, Rajan in the following sentence is a Topic.

40. avan kandu, Rajane.
    he saw Rajan.Acc

He saw Rajan.

‘He’ is the ‘Topic’ in the following sentence even though it is in the sentence final position:

41. Rajane kandu, avan
    Rajan.Acc saw he

‘He saw Rajan’

The proposal I made here would predict that a Wh should not be able to appear in this position. This prediction is borne out, a Wh cannot appear in this position:

42. *avan kandu, a:re?
    he saw Who.Acc

Who did he see?

43. *Rajan kandu, a:ru?
    Rajan.Acc saw who

Who saw Rajan?

We explore the in situ nature of bare Wh in Malayalam further in the next section.

5.3 Wh and Quantificational Force

In the examples below we can see that substituting the co-arguments with nominals of differing definiteness affects the positions where a bare Wh can appear.

44. Rajan a:rkku pu:chaye koduthu?
    Rajan whom cat.Acc gave

Whom did Rajan give (a) cat to?

45. *Rajan a:rkku a: pu:chaye koduthu?
    Rajan whom that cat.Acc gave

Whom did Rajan give that cat to?

46. Rajan a: pu:chaye a:rkku koduthu?
    Rajan that cat.Acc whom gave

Whom did Rajan give that cat to?
Chapter 5 Wh in Interrogative Constructions

Examining the examples above, we see in 44 that a Wh can appear in the canonical word order of S IO DO V when the subject is definite and the DO is generic. 45, where the DO is definite, the canonical word order results in ungrammaticality. In 46, the position of the IO and DO are inverted and the sentence is grammatical. This could be because the Wh moves to the right or the DO moves past the Wh to a higher position. The simplest explanation would be that the DO is definite in example (46), which makes it amenable to scrambling. The DO mandatorily moves past the Wh, making the Wh appear in the immediately preverbal position creating the illusion that the Wh has moved to the right. In brief, a definite expression mandatorily occupies a position higher than a bare Wh.

All these examples point to the fact that a bare Wh in Malayalam may not have the necessary quantificational force to undergo movement; it is in-situ in verb-final constructions. This can be further explored using intervention effects.

5.3.1 Scrambling

Intervention effects refer to the phenomenon where certain quantifiers, when appearing between an in-situ Wh and its licensing complementiser, produce ungrammaticality. This will be discussed in more detail in Chapter 6.

As has been noted in the literature, certain quantifiers can act as interveners (Hoji 1985, Beck 1996). A minimal pair is given below.

47. Rajan a:re kandu?
   Rajan whom saw
   Whom did Rajan see?
48. *Rajan ma:tram a:re kandu?
   Rajan only whom saw
   Whom did only Rajan see?

Languages like Korean circumvent the intervention effects by scrambling the Wh to a position to the left of the intervener (example from Beck and Kim 1997, p.339).

49. * Amuto muôs-ûl sa-chi anh-ass-ni?
   anyone what.Acc buy-CHI not do-Past-Q
   What did no one buy?
Chapter 5 Wh in Interrogative Constructions

50. Muôs-ûl̂i amuto t̂i sa-chi anh-ass-ni?
    whta.Acc anyone buy-CHI not do-Past-Q
    ‘What did no one buy?’

In contrast, Malayalam does not offer any such options as 51 below shows.

51. *a:re Rajan ma:tram kandu?
    whom Rajan only saw
    Whom did only Rajan see?

On the face of it, this may be explained away as due to the ungrammaticality of a Wh occurring in the sentence initial position. However, the following example shows that that is not the case.

52. *Rajan pu:chaye ma:tram a:rkku koduthu?
    Rajan cat.Acc only whom gave
    Whom did Rajan give only (a) cat to?
53. *Rajan a:rkku pu:chaye ma:tram koduthu?
    Rajan whom cat.Acc only gave
    Whom did Rajan give only (a) cat to?

This might come as a surprise because like Malayalam, Korean is an SOV language with a relatively free word order derived by scrambling. Moreover, Korean is a Wh in-situ language as well. Thus, the expectation would be that Malayalam would pattern with Korean and the intervention effect can by overcome by moving the Wh. However, unlike Malayalam examples we saw above, Wh phrases can optionally be scrambled in Korean, which makes a difference (examples from Beck and Kim 1997, p.339).

54. Suna-ka muôs-ûl̂i sa-ss-ni?
    Sun-Nom what-cc buy-Past-Q
55. Muôs-ûl̂i Suna-ka t̂i sa-ss-ni?
    whta.Acc Suna-Nom buy-Past-Q
    ‘What did Suna buy?’

As discussed in the backdrop of examples 44–46, the assumption that the Wh is indeed in-situ is substantiated by this contrast. In Malayalam, a bare Wh is incapable of moving, even optionally, to escape the intervener.
Chapter 5 Wh in Interrogative Constructions

Recall from Chapter 4 that we analyzed the composition of a Wh word in Malayalam to be an open deictic component taking a ΦP as its complement. Demirdache (1987), while discussing Salish nominal expressions, alludes to a possible correlation between deictically marked DPs and lack of quantificational force, strengthening our assumption above. If this is in the right track, we should be able to convert a Wh word into an element with quantificational force by adding a quantifier to it; and thereby enable it to escape an intervener.

5.3.2 Wh+suffix

It is possible to add the quantificational elements ellaam or okke (roughly translated as ‘all’) to a Wh word in Malayalam.

56. Rajan a:reokke kandu?
     Rajan whom together saw
     Whom all did Rajan see?

In this case, it is completely grammatical to have an otherwise intervener in the question:

57. a:reokke Rajan ma:thram kandu?
    whom together Rajan only saw
    Whom all did only Rajan see?
58. Rajan a:rkku ellaam pu:chaye ma:tram koduthu?
    Rajan who.Dat all cat.Acc only gave
    Whom all did Rajan give only a cat?

Interestingly, the options where the Wh-all succeeds the quantifier are ill formed, similar to the Korean examples given earlier. In other words, induced with sufficient quantificational force, Malayalam patterns with Korean.

59. ??Rajan ma:thram a:reokke kandu?
    Rajan only whom all saw
    Whom all did only Rajan see?
60. */Rajan pu:chaye ma:tram a:rkku ellaam koduthu?
    Rajan cat.Acc only who.Dat all gave
    Whom all did Rajan give only a cat?

Furthermore, the Wh gains more freedom in terms of scrambling, again similar to Korean, when occurring with a quantificational element:
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61. Rajan a:re kandu?
   Rajan whom saw
   Whom did Rajan see?

62. Rajan a:reokke kandu?
   Rajan whom together saw
   Whom all did Rajan see?

63. *a:re Rajan kandu?
   who Rajan saw
   Whom did Rajan see?

64. a:reokke Rajan kandu?
   whom together Rajan saw
   Whom all did only Rajan see?

65. Rajan a:rrkokke pu:chaye ma:tram koduthu?
   Rajan who.Dat together cat.Acc only gave
   Whom all did Rajan give only a cat?

The simplest assumption that suggests itself seems to be that the Wh in Malayalam is really \textit{in situ} in its overt position in the sense that it does not \textit{move} at any point in the derivation to be in a Spec-Head relation with C\textsubscript{INT} as is often proposed for Wh movement languages. Neither does the Wh seem to move covertly since it seems to lack the necessary quantificational force to move on its own. Intervention effects bear evidence to this.

The point can be further substantiated by examining the explicitly quantificational Wh phrase 'how many'. As shown below, \textit{ethra} is capable of appearing anywhere in the sentence as well as being able to circumvent intervention effects.

66. Rajan-nu ethra pe:r vote ceythu?
   Rajan.Dat how many people vote did?
   How many people voted for Rajan?

67. ethra pe:r Rajan-nu vote ceythu?
   how many people Rajan.Dat vote did?
   How many people voted for Rajan?

Thus, a quantificational 'how many' is perfectly grammatical appearing at the beginning of the sentence, providing evidence to the proposal that the Wh words that we have examined
so far lacks the necessary quantificational force. A cursory examination of the interaction of ‘how many’ with an intervener shows that the Wh phrase *ethra per* is able to circumvent intervention effects.

68. Rajan-nu ma:tram   ethra vote    katti?
    Rajan.Dat   how many votes   got?
    How many votes did Rajan alone get?

69. *ethra per*    Rajan-nu ma:tram   vote ceythu?
    how   many people   Rajan.Dat only   vote did?
    How many people voted only for Rajan?

Berman (1991) has argued that a Wh word signifies a variable, which needs to be bound by an operator. However, as we saw in Chapter 4, Malayalam Wh words are more like an open DP rather than a variable that can be used independently like the Wh words in Chinese. (We discussed this in Chapter 4, section 4.7). Coupled with a lack of quantificational force, the Wh remains *in situ* in verb-final constructions.

### 5.4 A Differing View: Jayaseelan (2001)

Jayaseelan (2001) has argued that the Wh phrases undergo obligatory movement to a Focus phrase at the left periphery of the vP in Malayalam. The paper examines interrogative constructions like the following (examples 1-4, p. 40 in Jayaseelan 2001) where the canonical SOV order cannot be followed. For example, as shown in Jayaseelan (2001), the sentence where the Subject Wh appear before the object (example 70b below) is ungrammatical:

70. a. ninn-e aaru   aTiccu?
    you.Acc   who   beat-past
    ‘Who beat you?’

    b. * aaru ninn-e aTiccu?

71. a. iwiTe aaru   uNTu?
    here   who   is
    ‘Who is here?’

    b. * aaru iwiTe uNTu?

37 Earlier, we briefly mentioned Demirdache (1987) to point out a plausible connection between a diectically marked DP and lack of quantificational force. This seems to be on the right track since *e-thra*, although it does have a dietic component, does not take a phi-complement like the other Wh words do. *ethra* modifies the nominal. In other words, this is in line with Wiltschko (2009) who shows that a dietic feature can be associated with a DP by modifying the phi/N phrase or by taking the same as a complement. Malayalam Wh seems to show that this distinction could make a difference on the quantificational force of the DP.
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72. a. awan  ewiTe pooyi?
    he where went
   'Where did he go?'

   b. * ewiTe  awan  pooyi ?

73. a. nii  aa pustakam  aar-kku  koDuttu?
    you that book who.Dat gave
   'To whom did you give that book?'

   b. * nii aar-kku  aa pustakam koDuttu ?

Based on such data, Jayaseelan (2001) proposed that the Wh in Malayalam is not in situ as has been assumed; it undergoes mandatory movement to an IP internal Focus position at the left periphery of the vP.

A crucial piece of data in Jayaseelan (2001) is that a Subject Wh cannot appear in the SOV word order as we saw in 70 (a,b). Jayaseelan (2001) analyses this in terms of movement of Wh to a Foc phrase (cf. fig:1).

![fig:1](image)

Both Jayaseelan (2001) and the proposal in this thesis subscribe to movement of the definite object; unlike Jayaseelan (2001), I propose that a bare Wh is in situ, lacking quantificational force (fig: 2).

![fig: 2](image)
Appealing to the observation that “Many languages have a requirement that a question word should be contiguous to V” (p.39), Jayaseelan gives examples like the following:

74. a. nii aa pustakam aar-kku koDuttu?
you that book who.Dat gave
‘To whom did you give that book?’
b. * nii aar-kku aa pustakam koDuttu?

74 b is ungrammatical. However, a fact that is not considered in Jayaseelan (2001) is that, as we saw in the previous section, this ungrammaticality is a byproduct of the interaction between the bare Wh indefinite and the definite 'that book'. Once we remove the demonstrative from the direct object nominal, 74 b becomes grammatical with the object nominal intervening between the bare Wh and the verb as shown in 75 a.

75. a. nii aar-kku pustakam koDuttu?
You whom book gave
Whom did you give (a) book to?
b. nii pustakam aar-kku koDuttu?
You (the) book whom gave
Whom did you give the book to?

I propose that the canonical S IO DO V order is grammatical by virtue of the fact that both IO and DO are indefinite expressions and they stay in-situ. As 75b shows, pustakam can appear before the bare Wh. However, note that in this sentence, the meaning we get is one where pustakam is interpreted as ‘the book’, substantiating the proposal.

We can see similar data in other places as well. Wh, when occurring with a quantificational element, need not be obligatorily in situ since the quantificational element imparts quantificational force to the Wh, making it amenable for movement. As a result, it can move to higher positions just like any definite expression. This can be explained using the following examples.

76. *a:ru Rajane kandu?
Who Rajan.Acc saw
Who saw Rajan?
77. *a:re Rajan kandu?
who Rajan saw
Whom did Rajan see?
Chapter 5 Wh in Interrogative Constructions

The ungrammatical sentence in 76 can be derived in two ways: (i) the bare Wh indefinite expression rises beyond the already moved definite expression or (ii) both the definite and indefinite expressions remain in-situ. Both the derivations run afoul of the mainstream understanding of quantificational force of (in)definite expressions, and the ungrammaticality can be explained. The same holds true for 77; the indefinite Wh cannot rise past the definite Subject and hence the construction is ungrammatical. On the other hand, when the Wh is quantificational, there is no restriction on movement and we get the following grammatical examples.

78. a:rokke Rajane kandu?
   Who all Rajan.Acc saw
   Who all saw Rajan?
79. Rajan a:re kandu?
   Rajan whom saw
   Whom did Rajan see?
80. Rajan a:re okke kandu?
   Rajan whom all saw
   Whom all did Rajan see?
81. a:re okke Rajan kandu?
   whom all Rajan saw
   Whom all did only Rajan see?

As a counterpart to the examples where the Subject Wh could not precede the Object, example 81 shows that an Object Wh can move past the Subject resulting in OSV order when it gains sufficient quantificational force, even though the unmarked word order in Malayalam is SOV. Thus, it is the lack of quantificational force of a Wh rather than obligatory movement to a Foc position that affects the word order variations that we see.

Now, it can still be argued that the Wh still moves to a Foc position in 75 b; in 78 and 81 the LI under consideration is not a ‘real’ Wh or that Wh.okke should be treated differently. We can control for this by using a Wh that is inherently quantificational, namely, ‘how many’.

82. Rajan-nu ethra pe:r vote ceythu?
   Rajan.Dat how many people vote did?
   How many people voted for Rajan?
Chapter 5 Wh in Interrogative Constructions

83. ethra pe:r Rajan-nu vote ceythu?
   How many people Rajan.Dat vote did?
   How many people voted for Rajan?

As seen above, the interrogative ‘how many’ is amenable to movement and in example 83 it appears in a position that is above the object; the definite object intervening between the Wh and the verb. Furthermore, if the argument that Wh mandatorily occupies the vP-peripheral Focus position were right, then this would mean that nothing leaves the vP in Malayalam in this sentence.

Furthermore, one might have to propose some downward movement when it comes to Wh-adverbials like the following if one were to adhere dogmatically to the idea that all Wh need to be in the pre-verbal Foc position:

84. avan enthinu Rajane kalanam?
   He what.for Rajan.Acc see.must?
   Why should he meet Rajan?

‘Why’ is a high adverb (Cinque 1999), usually positioned above IP. In order to fulfill the argument that the Wh obligatorily occupies an IP-internal position, the Wh adverbial must undergo downward movement. Also, notice that unlike the examples that appear in Jayaseelan (2001), the Wh is not immediately preverbal.

In fact, the Wh adverb appears in the same position as the corresponding non-Wh adverb, as following minimal pair shows:

85. avan janal.il.koode Rajane kandu.
    he window.Loc.through Rajan.Acc saw.
    He saw Rajan through the window.

86. avan engane Rajane kandu?
    he how Rajan.Acc saw.
    How did he see Rajan?

38 It is possible to argue that Wh adverbials and Arguments may exhibit different syntactic behaviour (see for eg. Reference). However, as the next set of data in the chapter shows, the point is actually that definite expressions rise past a bare Wh than the fact that it usually appears in the preverbal position.
This pattern is repeated in the following pair of sentences involving a temporal Wh adverb, showing additionally that there is more than one position where a Wh adverb can appear in an interrogative sentence:

87. avan eppo:l Rajane kandu?
   he when Rajan.Acc saw?
   When did he see Rajan?

88. avan Rajane eppo:l kandu?
   he Rajan.Acc when saw?
   When did he see Rajan?

89. *eppo:l avan Rajane kandu?

Again, the position where the Wh appear in the above sentences are the same as the positions where a temporal adverb may appear; the main difference being, a temporal adverb can appear at the left edge of the matrix clause (being referential, they are amenable to being topicalised (Rizzi 2013)), whereas a Wh temporal adverb cannot; as a comparison of the examples in 87-89 with the examples below will show.

90. avan innale Rajane kandu.
   he yesterday Rajan.Acc saw
   He saw Rajan yesterday

91. avan Rajane innale kandu.
   he Rajan.Acc yesterday saw.
   He saw Rajan yesterday.

92. innale avan Rajane kandu.
   Yesterday he Rajan.Acc saw
   Yesterday, he saw Rajan.

Lastly, consider the following example where, in conjunction with an intervener, a construction where the Subject Wh has presumably moved to a vP-peripheral Focus position is still ungrammatical.

   Rajan.Dat cat.Acc only who gave
   Who give Rajan only a cat?

If the IP internal Focus position licenses a Wh in Malayalam, it is inexplicable why example 93 is ungrammatical – presumably the Wh is at its licensing position and thus nothing
Chapter 5 Wh in Interrogative Constructions

should be able to intervene. In short, one can point out a slew of empirical facts that can challenge the assumption that Wh in Malayalam obligatorily moves to an immediately preverbal Focus position.

I would adhere to the proposal that a bare Wh (with the exception of 'how many') lacks quantificational force and is in situ in Malayalam in a verb-final construction.

5.5 The aanu Construction

On the other hand, an aanu construction demands that a Wh be in the C-domain. It will be shown below that a Wh in such a construction needs to be the Predication base for it to be grammatical; that is, all Wh base-generated inside the IP must be ex-situ in the aanu construction.

94. aare aanu Rajan kandathu?
   Who be Rajan saw.Sg.N-
   Who is it that Rajan saw?

95. *Rajan aanu aare kandathu?

96. evide aanu Rajan po:yathu?
   Where be Rajan went.Sg.N-
   Where is it that Rajan went?

97. *Rajan aanu evide po:yathu?

98. enthu aanu Rajan Priyaykku koduthathu?
   What be Rajan Priya.Dat gave.Sg.N-
   What is it that Rajan gave Priya?

99. *Rajan aanu enthu Priyaykku koduthathu?

100. * Priyaykku aanu Rajan enthu koduthathu?

5.6 Focus Movement?

As opposed to verb-final constructions, it might seem to be easier to argue that there is Focus-associated Wh movement in these constructions for the simple reason that many a literature assumes that these constructions are cleft constructions (see for example Asher and Kumari 1987, Jayaseelan 2001, Madhavan 1987 a.o.). However, as shown in Chapter 3,
section 3.2, it is not straightforwardly obvious that *aanu* exclusively manifests a Foc head in the C-domain.

Nevertheless, one can entertain the assumption hypothetically and explore the idea that the predication base marker *aanu* may, in some cases spells out a Foc head. This would mean that whenever a Wh is the predication base, it is moving to a Foc projection. Now, whenever there is a Wh in the construction it has to move to the Focus/Predication base position, otherwise the sentence is ungrammatical. Not only that, the movement of the Wh is similar to the movement of a normal focused phrase (see chapter 6 for some crucial differences), be it extraction out of an embedded clause or pied piping of a Relative Clause with a Wh in it (focused item appears in bold).

101. a:re, a:nu [ellavarum t, kandennu] Rajan paranjathu?
whom be eveyone saw.Comp Rajan said.SgN
‘Who is it that Rajan said that everyone saw?’

Anup.Dat be eveyone saw.Comp Rajan said.SgN
‘Anup is the one that Rajan said that everyone saw.’

When an element inside a Relative Clause is focused, the entire RelC needs to be pied piped to the Focus position.

103. [Anup ezhuthiya pusthakam] a:nu Rajan kandathu
Anup wrote.Relativiser book be Rajan saw SgN
It is a book written by Anup that Rajan saw.

This is the same for a Wh inside a RelC as well.

104. [a:ru ezhuthiya pusthakam] a:nu Rajan kandathu?
Who wrote.Relativiser book be Rajan saw SgN
A book written by whom did Rajan see?

Moving the Wh alone to the focus position results in ungrammaticality, just like extracting a focused element does.

105. *a:ru, a:nu Rajan [t, ezhuthiya pusthakam] kandathu?
Who be Rajan wrote.Relativiser book saw SgN
A book written by whom did Rajan see?

106. *Anup, a:nu Rajan [t, ezhuthiya pusthakam] kandathu
Anup be Rajan wrote.Relativiser book saw SgN
It is a book written by Anup that Rajan saw.
Thus it seems that when there is an overtly manifested Focus position, the Wh undergoes obligatory movement to that position. There have been many semantic proposals regarding the connection between Wh and Focus. For example, Beck (2006) argues that Wh-questions are interpreted by the same mechanism as focus in order to explain the intervention effects.

On the syntactic front, Sabel (2000, 2002, 2003) attempted to tackle the issue by assuming that

“[..] the position of wh-words in wh-questions is universally determined by [Wh]- and [Focus]-features” (Sabel 2003, p.235).

Discussing the case of Malagasy with both Wh in situ and Wh ex situ constructions, along with the mention of a number of other languages that exhibit similar patterns w.r.t. question formation, Sabel shows that

“[..] checking of [+Focus]-features is involved if overt wh-movement takes place” (p.237).

In fact, this line of argument could appear to be substantiated in Malayalam. We saw earlier that extraction of a Wh from an embedded clause patterns with Focus movement. Crucially, this extraction is impossible in constructions where the matrix clause is verb-final. In the following example, the matrix clause is an aanu construction and provides a position to which the Wh in the embedded clause can be moved.

107. a:re; a:nu Rajan paranjathu [Anup t; kandennu]? whom be Rajan said.SgN Anup saw.Comp

‘Who is it that Rajan said that Anup saw?’

Now look at the verb-final counterpart. A declarative sentence is given below followed by the interrogative counterpart for explicatory purposes.


110. *a:re; Rajan paranju [Anup t; kandennu]? whom Rajan said Anup saw.Comp ‘Who did Rajan say that Anup see?’
Chapter 5 Wh in Interrogative Constructions

111. *Rajan a:re paranju [Anup tī kandennu]? Rajan whom said Anup saw.Comp Who did Rajan say that Anup see?


The only grammatical option is to leave the Wh as in situ as in the following example where depending on the intonation the Wh is interpreted as having matrix scope or narrow scope.

113. [Anup a:re kandennu]Rajan paranju Anup whom saw.Comp Rajan said Who did Rajan say that Anup saw?

Rajan said who Anup saw.

We had already seen that movement of a bare Wh is not a grammatical option in verb-final sentences. We see the same again with overt movement of Wh into the matrix clause here. Sabel (2003) has suggested “[…] checking of [+Focus]-features is involved if overt wh-movement takes place” (p.237). In an aanu construction we see overt Wh movement and if we take the aanu construction to be a Focus construction since all aanu sentences involve a Focus reading by definition (see Chapter 4), then it appears that Malayalam corroborates Sabel’s proposal. (See Boskovic (2002), Muriungi (2004), Horvath (1986) a.o. for similar arguments). The verb-final constructions show that, dovetailing with Sabel’s proposal, the Wh feature in Malayalam is not strong enough to obtain movement of a Wh whereas an overt Focus feature in aanu sentences forces Wh movement.

However, there are a couple of empirical points that need to be taken into account which points in the direction that the picture is more complex than a straightforward adaptation of Sabel (2002 et al.) might allow. The first point is that despite the similarities enumerated above, Wh movement, as we saw elsewhere in this chapter, is absolutely possible in verb-final constructions when the Wh has sufficient quantificational force to do so. That is, Wh movement may be constrained by factors other than overt Focus. While this does not contradict Sabel (2002) or similar proposals right away, it clearly shows that the Focus feature is only one of the features that can help a Wh to move. As a corollary, one would like to see when exactly a Focus feature can be of assistance in licensing a Wh. This leads us to different kinds of Focus discussed in the literature, where we encounter the second datum.
that shows that only the purported Focus feature in an *aanu* construction allows the Wh to be moved to the focus position, thereby weakening the argument further.

## 5.7 Wh Movement in *aanu* Construction is Not Triggered by a Focus Feature

In Chapter 3 we saw that the *aanu* construction is not the only one that involve explicitly manifested Focus. There is a Contrastive Focus construction that encodes exhaustivity. We also saw that this contrastive focus demands a set of alternatives to operate upon. Recalling the semantic arguments like Beck (2006) and similar ones that attempt at a unification of Hamblin (1973) and Rooth (1992), the contrastive focus construction here with its obligatory need for a set of alternatives would be predicted to be ideal for obtaining interrogative readings. This, however, is not the case. Wh fares poorly in the context of contrastive focus; it is an intervener in the sense of Beck (2006).

\[114. \quad *\text{John-e: } a:re \quad \text{kand-ull-u:}\]
\[\text{John-e: who.Acc saw-be-u:}\]
\[\text{'Only John saw who'}?\]

\[115. \quad *\text{a:re-e: John kandullu:}\]
\[\text{Whom-e: John saw-be-u:}\]
\[\text{'Only who did John see'}?\]

More over, if we recall the syntactic arguments by Sabel (2003), Boskovic (2002) and others, here we have an overtly manifested Syntactic Focus feature that is incompatible with Wh let alone capable of inducing any Wh movement.

The next two points pertains directly to the structure and meaning of the *aanu* construction. The following example shows that there can be only one putative Focus position in an *aanu* sentence.

\[116. \quad *\text{Rajan aanu Priyaye aanu kandathu}\]
\[\text{Rajan be Priya.Acc be saw.Sg.N.}\]

However, in stark contrast to this, it is possible to have the following multiple question:

\[117. \quad \text{aaraa, aareyaa kande?}\]
\[\text{Who.be whom.be saw.Sg.N.}\]
\[\text{‘Who saw whom’}\]

This is inexplicable if the movement of the Wh is the same as the putative Focus movement, since there cannot be two Focus positions in the clause. Not only the structure, but the meaning also is not in line with putative Focus movement when a Wh is involved. As we
Chapter 5 Wh in Interrogative Constructions

saw in detail, the *aanu* construction encode exhaustivity, and consequently, it can be argued that the construction is an exhaustive focus construction. This means that it should not be possible for the sentence to have a ‘mention-some’ interpretation since the exhaustive focus constructions would demand an exhaustive set of elements to occupy the focus position. Hence, as Cable (2012) argues, if the Wh movement in these constructions is indeed Focus movement, then it should be impossible to use them in mention-some questions as in the following exemplary context:

*Context:* You are trying to design a menu for a child’s party. You have no idea what food children these days like, and would like to get some suggestions from a friend (from Cable 2013):

```
118. pille:rrkk enthaanu kodukkunnathu?
    children.Dat what.be give.Sg.N.
    What is it that (we) can give the children?
```

Similar results were obtained vis-à-vis other mention-some questions39 such as below:

*Context:* You are in a new place, and would like to buy a newspaper. The most natural way a Malayalam speaker from my region ask the question is by using a Type II sentence:

```
119. evideya: oru pathram kittunne?
    Where.be a paper get.Sg.N.
    Where is it that (one) can get a newspaper?
```

In short, it is not straightforward to assume that the Wh movement we see in the *aanu* construction in Malayalam is Focus movement. If one subscribes to Horvath (2010), it could be seen as brought about by an Operator rather than an overt Focus feature. However, the data presented here shows that it is not a general Exhaustive Identification Operator either. Either ways, it does not seem to be an interrogative feature/head/projection in the C-domain that makes the Wh move in an *aanu* construction since the Wh occupies the usual Predication Base position of a categorical construction.

Horvath (2007) employs the behavior of the focus sensitive particles *only* and *even* to diagnose focus induced movements. *Only* seems to undergo focus movement in Hungarian while *even* does not, giving rise to a contrast and calling for an explanation: if a focus feature is responsible for movement, then why a focus feature on certain items and not others? In Malayalam, phrases with these particles may or may not appear at the pre-*aanu* position.

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39 thanks to Julia Horvath (p.c.) for this example.
Chapter 5 Wh in Interrogative Constructions

120. Priya aːnu Rajane mathram kandathu
    Priya be Rajan.Acc only saw.Sg.N.
    'It is Priya who saw only Rajan'

121. Priya mathram aːnu Rajane kandathu
    Priya only be Rajan.Acc saw.Sg.N.
    'It is only Priya who saw Rajan'

If a focus feature triggers movement to a focus position, then it is unclear as to why it is grammatical for only to appear in a non-focus position. And if we argue that a focus feature might trigger movement to a Focus position, then it is unclear as to why a Wh appearing anywhere other than the pre-aanu position results in ungrammaticality.

I will not go any deeper in this chapter into what causes the movement of the Wh in an aanu construction since this is the theme of Chapter 7. The important point for my purposes here in this chapter is that an aanu construction functions as a well-formed content question only when a Wh is the predication base; this movement is not equivalent to Focus movement.

5.8 Summary

This chapter provided data to show that a bare Wh phrase is in situ in a verb-final construction. Contrary to the proposal by Jayaseelan (2001), the Wh in a verb-final interrogative construction does not need to move obligatorily to an IP-internal Focus position; the overt movement of the Wh in a categorical construction is not to a position where it is licensed, as intervention effects reveal (see Chapter 6, section 6.5). Moreover, the empirical data points to a lack of quantificational force when it comes to a bare Wh word (except for ‘how many’) in Malayalam. Coupled with the similarities between Wh words and indefinites in the language, it seems prudent to attach some merit to the traditional assumption that Malayalam is a Wh in situ language in the sense that the Wh phrase does not, overtly or covertly, enter into a Spec-Head relation with a licensing C-head in a verb-final construction. On the other hand, a Wh generated inside the IP undergoes overt movement in aanu construction; a Wh has to be the Predication Base for an aanu construction to be a well-formed content question. In short, Wh is in-situ in verb-final constructions and ex-situ in the aanu construction.
Chapter 6
Positioning the Wh

As Cheng (2009, p. 767) puts it, “One of the most fascinating aspects of *wh*-in-situ is that the in-situ *wh*-items, though in-situ, can take wide scope, on a par with moved items.” Thus, in (2), the *wh* word remains in the same position as its non-interrogative counterpart; yet the sentence is interpreted as a question.

1. Rajan Priyaye kandu.
   Rajan Priya.Acc saw
   Rajan saw Priya.
2. Rajan aare kandu?
   Rajan whom saw?
   Whom did Rajan see?

Not only that, the two types of languages – where a *wh* can remain in-situ and where the *wh* moves to C-domain – behave in the same manner vis-à-vis selectional restrictions.

4. Rajan Priya enthu vaangi ennu aalochichu
   Rajan Priya what bought QC wondered
   Rajan wondered what Priya bought.

5. What did Rajan think Priya bought?
6. Rajan Priya enthu vaangi ennu vicharichu?
   Rajan Priya what bought QC thought
   What did Rajan think Priya bought?

3 and 4, regardless of the overt position of the *wh* is interpreted as an indirect question while 5 and 6 are content questions.

There have been a number of proposals over the years to account for the range of data like the above that one encounters when looking at interrogative constructions. We briefly go through the most relevant ones for this thesis, keeping Malayalam data in mind.
One of the attempts in the early days to unify the differences in the overt position of the Wh in content questions was to suggest that the surface structure differences are only in the surface; at the LF, all languages are the same. The apparent in-situ effect is due to the fact that the Wh is a kind of quantifier that moved covertly to the same position as its overt counterpart in Wh movement languages. Section 6.1 describes this idea. However, it was soon found out that not all in-situ Wh languages employ the exact same mechanisms to produce the surface effect. For example, Chinese and Japanese, though both are in-situ Wh languages, were pointed out to be different in the modus operandi involved. Section 6.2 discusses this; the question particle was suggested to play an important role in yielding the kind of in-situ in these languages. This leads us to the recent proposal by Cable (2010) that a Q particle mediates the relation between a Wh and its licensing C-domain feature in all languages. Section 6.3 offers a description of this proposal and section 6.4 offers an examination of Malayalam data with the aim of figuring out the structure of the QP. It is suggested that Malayalam QPs are a result of a phonologically null Q taking a Wh containing phrase as its complement. The next section, 6.5, examines the QP is interrogative sentences to determine if there is covert movement. After investigating intervention effects in the language, it is concluded that there is no covert phrasal movement of QP to a licensing C head.

### 6.1 Wh as Quantifier

Looking at similar constructions in Chinese, Huang (1982, 2010) proposed a movement analysis for Chinese that was based on “the treatment of wh-words as a kind of quantifier” (2010, p.12). Huang gives the following examples (7-9) and their proposed logical forms (10-12):

7. [Zhangsan wen wo [shei mai-le shu]]
   Zhangsan ask me who bought books
   ‘Zhangsan asked me who bought books’

8. [Zhangsan xiangxin [shei mai-le shu]]
   Zhangsan believe who bought books
   ‘Who does Zhangsan believe bought books?’

9. [Zhangsan zhida [shei mai-le shu]]
   Zhangsan know who bought books
   a. ‘Who does Zhangsan know bought books?’
   b. ‘Zhangsan knows who bought books.’
Chapter 6 Positioning the Wh

10. [Zhangsan wen wo [shei [x mai-le shu]]]
   Zhangsan ask me who bought books
   ‘Zhangsan asked me for which x, x bought books’

11. [shei [Zhangsan xiangxin [x mai-le shu]]]
    who Zhangsan believe bought books
    ‘For which x, Zhangsan believes x bought books?’

12. [Zhangsan zhidao [shei [x mai-le shu]]]
    Zhangsan know who bought books
    ‘Zhangsan knows for which x, x bought books.’

13. [shei [Zhangsan zhidao [x mai-le shu]]]
    who Zhangsan know bought books
    ‘For which x, Zhangsan knows x bought books?’

In other words, the proposal is that the Wh word undergoes movement at LF, similar to the overt movement of Wh in English. Furthermore, this implicates a wh-operator where “[…] the formal interpretation of a wh-operator involves singling out the feature [+WH] as the quantifier proper and leaving the leftover features of a wh-word in a predication indicating its extension.” (p.20), in the same way a quantifier phrase is proposed to undergo Quantifier Raising. This Wh-movement was situated in the GB framework as a covert version of Move-α.

This covert version of Move-α was theorized to be free from certain constraints of the overt version in that islands did not seem to matter to in-situ argument Wh phrases as shown below (example from Aoun and Li 1993a):

14. Ta yinwei ni shuo shenme shengqi?
    He because you say what very angry
    ‘What (x) such that he was angry because you said x words?’

It was argued that although covert movement was subject to Empty Category Principle (ECP), it did not obey Subjacency. This view was thought to be undesirable by many since it imposed different rules for covert and overt operations whereas the optimal scenario would be a single set of rules that any movement operation has to obey. This discontent found theoretical expression in the suggestion that the violation of Subjacency was an apparent phenomenon that masked the large-scale pied-piping of the entire island at LF (cf. Nishigauchi 1986, Pesetsky 1987a a.o.).
While these analyses attempted to derive the relation between a Wh in-situ and a licensing Comp by phrasal or category movement, other proposals argued for feature movement based accounts. Although not the first in this category, Pesetsky (2000) who proposed that at least some Wh in-situ actually involve feature movement rather than phrasal movement turned out to be an influential one. Japanese, according to him, employed feature movement while Chinese was conjectured to possibly have covert phrasal movement. According to Pesetsky, intervention effects pointed to feature movement.

This approach, thus, attempted to account for the differences between Chinese and Japanese.

### 6.2 Chinese is not Japanese.

Despite both being in-situ languages, Chinese and Japanese differ in some aspects like Wh-islands and Intervention effects. While Chinese in-situ Wh phrases do not obey Wh-island constraint, Japanese yields Deviant constructions under the same conditions. Aoun and Li (1993b) addresses the question directly in the squib “On Some Differences Between Chinese and Japanese Wh-elements” and focuses on Intervention effects, summarizing the facts in the following table (p.367). QP stands for quantificational phrase, and QP/QP shows the surface order, in this case, a QP followed linearly by another QP. Thus, (a) in the table shows that when there are two QPs in the clause, the first one takes scope over the second one, a phenomenon usually dubbed as surface scope where the scope relations respect the surface linear order of the scope taking elements in a clause. Surface scope is respected by both Japanese and Chinese in (a) in the table below, as indicated by the comment “no crossing”. However, when we come to (b) where a QP interacts with a Wh, we get different results for Chinese and Japanese.

<table>
<thead>
<tr>
<th></th>
<th>Chinese</th>
<th>Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) QP/QP</td>
<td>no crossing</td>
<td>no crossing</td>
</tr>
<tr>
<td>(b) QP/Wh</td>
<td>crossing OK</td>
<td>no crossing</td>
</tr>
<tr>
<td>(c) Wh/QP</td>
<td>no crossing</td>
<td>no crossing</td>
</tr>
<tr>
<td>(d) Wh/Wh</td>
<td>crossing OK</td>
<td>no crossing</td>
</tr>
</tbody>
</table>

As can be seen from the table, Chinese shows no intervention effects whereas the grammaticality of Japanese Wh is bound by the overt hierarchical position. Aoun and Li (1993a) surmised from the absence of intervention effects and the absence of Wh-island...
effect that in-situ Wh in Chinese is not licensed by movement. Rather, they argued, Wh in Chinese employs unselective binding (a la Heim 1982). Tsai (1994) developed the idea further and suggested that while the unselective binder are generated at the clausal level in Chinese, they are generated at the DP level in Japanese. Thus, the operator-variable relation is immune to blocking in Chinese since it is not created by movement. Aoun and Li (1993b) explores the idea of binders generated at different positions and gives the following diagnostic table (p.371).

<table>
<thead>
<tr>
<th></th>
<th>Chinese</th>
<th>Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) A <em>wh</em>-element can cross and have scope over a c-commanding QP</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>(b) Head-internal Relative Clauses occur</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>(c) Morphologically, particles are attached to <em>wh</em>-elements to form quantificational elements</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>(d) Quantifier floating occurs</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

These differences in the morphological behavior oh the Wh words, they argued, reflects a difference in the way the quantificational system in the language is organized. Facts like the above tell one where the language in question generates the operators that bind the variable; whether the binders are base generated alongside the variable (Japanese) or base generated in a clausal position (Chinese).

In the same vein, Watanabe (1992) proposed that there is overt movement in Japanese, in the sense that a phonologically invisible operator undergoes overt movement. This line of analysis was a taken another step forward with Hagstrom (1998) who, on the basis of data from Sinhala and Japanese among other languages, proposed that the question particle in these languages originate next to the Wh and moves to higher positions in the clause. In the same vein, Kishimoto (2005) argued that “[…] that it is Q-movement, rather than movement of a wh-phrase which is used to form an operator-variable structure in a wh-question, and that a Q-element, while delimiting a wh-constituent in its Merge position, serves as an operator that assigns scope to its host wh-in-situ.” (p. 2).

All the proposals discussed above work their way around the idea that for a Wh to be functional, it has to form an operator-variable association. Languages seem to be varying as to how they form this association. However, alongside these proposals, there have been
proposals that suggested that some of the Wh in-situ is licensed by feature movement rather than phrasal movement of any sort. Pesetsky (2000) has argued that while some Wh in-situ involves covert phrasal movement, there exist instances of in-situ Wh that are licensed via feature movement. He establishes this claim through a set of data involving Antecedent Contained Deletion and D-linked phrases. The presence of Intervention Effects also is put forward as a diagnostic tool for feature movement. Cheng and Rooryck (2000) also have used Intervention effects as a tool to detect feature movement in French. Following up on a proposal by Takahashi (1997), Nakamura (2002) has argued that null operator movement can be analyzed as feature movement.

Thus, there seems to be two strands of arguments – one pertaining to the idea of the need for a ‘logical variable’ for question interpretation and the other based on the need for an un/interpretable feature i.e., a ‘syntactic variable’ to enter into a relation with its counterpart.

As Bayer (2005, p.377) explains it,

“ The wh-phrase is semantically an operator which binds the trace, which in turn is interpreted like a logical variable. [...] Once the operator in in Spec, CP, it has scope over the proposition expressed by the IP. The proposition contains a trace, and is thus an ‘open’ position. [...] Strictly speaking, the feature [wh] is not itself an operator that could bind a variable. According to standard assumptions, the wh-phrase also involves an existential operator. This operator is actually responsible for variable binding.”

This leaves us with two relations, which are not very often teased apart in the literature. First, we have the Wh feature part, which, needs to enter into a licensing relation with a C-head; and second, the scope taking part of a Wh, which, logically speaking, depends on the operator part of it. For example, Chomsky (2000) proposes that there is an interpretable Q feature iQ on the Wh which enters into an Agree relation with an uninterpretable feature uQ on C, effecting convergence of the derivation. An EPP feature on C may demand that the Agree-d element be displaced to C, thus providing an account for Wh movement.

On the other hand, Aoun and Li (1993b), who investigated the differences between Chinese and Japanese vis-à-vis intervention effects noticed certain other differences as well, which they considered as related and attempted to derive all these differences from the way the operator part and the Wh-Restrictor part interacted.
Cheng (1991) seems to weave together these two strands and argues that the movement of a question particle and the movement of a Wh in English type languages basically achieve the same goal of ‘typing’ the clause as interrogative. However, there are languages where the Wh words, by virtue of their morphology, are in need of licensing and these are instances where multiple Wh-fronting occurs. Continuing on this theme, Brandner (2000) has argued that partial Wh movement as a scope marking strategy in German could be seen as a clause-typing operation. In other words, what Cheng argues for could be rephrased into the two themes that we saw run through the major proposal regarding Wh – the logical variable that deals with issues of scope and the syntactic variable that deals with the narrow syntactic properties.

As pointed out in the beginning, the core question that many found interesting is the same: how does an interrogative sentence indicate scope? Huang’s answer was to move – overtly or covertly – the Wh to the scope taking position. Others thought it unnecessary to move the entire Wh to the scope taking position since scope-taking or the operator-ness was deemed as only one part of the Wh phrase. Cheng (1991) proposes that either a Wh word or a question particle need to move to C to indicate that it is an interrogative construction – in other words, to indicate the scope of the Wh.

### 6.3 Cable (2010)

Such analyses stumbled on the issue that has generally come to be known as Pied-piping: where a phrase containing a Wh is moved instead of the Wh alone. “Pied-piping occurs when an operation that targets the features of a lexical item L applies to a phrase properly containing LMAX” (Cable 2010 p.6) as in the following question where instead of just the Wh Whose, the phrase whose mother is fronted.

15. [Whose mother] did you meet?

The question is why would additional lexical items be moved along with the lexical item that contains the relevant feature.

Cable (2010) put forward an explanation for this puzzle by arguing that it is not a feature on the Wh that undergoes Agree with the C, thus rendering the issue moot. The relation between the Wh and C, in Cable’s analysis, is Wh-externally mediated through a question
Chapter 6 Positioning the Wh

particle Q and it is this Q Phrase that ends up being displaced. Tlingit is the language he uses mainly to describe this analysis.

Interrogative sentences in Tlingit show Wh fronting, and overtly manifest a question particle:

16. Daa sá i éesh al’ón?

What Q your father he.hunts.it

What is your father hunting? (Cable 2010 p.13)

Fig:1

He further draws data from Japanese and Sinhala, two languages with overt question particles, to extend as well as substantiate this proposal. In both Sinhala and Japanese, the Wh word could be shown to be in-situ with overt question particles. Interestingly, the possible overt positions in which the Q particle can appear in these two languages differ systematically.

In Sinhala, the question particle Da cannot appear at the right edge of a matrix clause when the verb ends in -e although Da can appear at the right edge of a subordinate clause:

17. Chitra monawa da gatte?

Chitra what Q buy

What did Chitra buy? (Cable 2010, p.87)

18. *Chitra monawa gatta da?

19. Ranjit [kauru aawa kiyala] da danne?

Ranjit who came that Q know

Who does Ranjit know came?
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Updating the mainstream analysis of such constructions that the Wh undergoes covert movement, Cable suggests that the Q takes the relevant larger phrase as its complement and the resulting QP undergoes covert movement.

Japanese does not corroborate this analysis. In Japanese, the question particle Ka does appear at the right edge of the matrix clause in interrogative sentences, leaving the Wh in-situ.

20. John-ga nani-o kaimasita ka?
John-NOM what.Acc bought.polite Q
What did John buy (Cable 2010, p.89)

This is explained by a structure where the question particle simply adjoins to the relevant phrase instead of taking it as a complement. The matrix-final position of Q is derived via subsequent Q movement instead of a QP (Cable 2007, p.32).

Fig:2
Thus, in the Japanese example above, the Wh is in-situ while the question particle appears at the right edge of the matrix clause.

These were all languages with overt Q. What happens in languages like English that are Wh-fronting, but does not have an overt Q? Cable proposes to extend the QP analysis to these languages as well. According to him, English is a Q-projection language like Tlingit
or Sinhala, albeit a phonologically null Q. Thus we get the following typology of languages\(^{40}\) (Cable 2010 p.103):

<table>
<thead>
<tr>
<th>Language</th>
<th>Movement of Q-projections:</th>
<th>Q-particle Takes Sister as Complement:</th>
<th>Phonology of Q-particle:</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>Overt</td>
<td>Yes</td>
<td>Null</td>
</tr>
<tr>
<td>Tlingit</td>
<td>Overt</td>
<td>Yes</td>
<td>Pronounced</td>
</tr>
<tr>
<td>Sinhala</td>
<td>Covert</td>
<td>Yes</td>
<td>Pronounced</td>
</tr>
<tr>
<td>Japanese</td>
<td>Overt</td>
<td>No</td>
<td>Pronounced</td>
</tr>
</tbody>
</table>

Cable (2010) concludes that

“[…] in no language – not even English – do wh-words bear a direct syntactic relationship with interrogative C […] Rather, in all languages, interrogative C probes and Agrees with the Q-particles accompanying the wh-words […]” (p. 102).

Thus, for Cable 2010, the relation between a Wh and an interrogative C is \textit{always} mediated through Q whenever there is such a relationship. Of course, this presents us also with the possibility of languages where no such syntactic relation exists between a Wh and an interrogative C. Cable addresses this by proposing a type of languages, Japanese being the prime example, where the Q is not in Agree with the Wh, but only semantics holding them together in an s-selectional relation. Thus Japanese makes it clear that the Wh can and do exist without entering into a direct syntactic Agree relation with an interrogative C. Given the more nuanced classification of languages on the basis of the interaction between the three elements we have been talking about so far – C, Wh feature, and Q – it is time now to see where does Malayalam belong to in the scheme of Cable (2010).

\(^{40}\)Interestingly, there is another typology that Cable does not entertain here. If we divide languages into two Q-projecting versus Q- adjoining branches, we get the following tree:

This gives rise to the interesting theoretical possibility of a language with an adjoined phonologically null Q particle. Cable (2007) suggests that Tibetan might be such a language.
6.4 In search of the Q

As the reader might have already observed in the data above, Malayalam does not have an overt question particle like Tlingit or Japanese. Also, we have already seen that the Wh need not undergo mandatory overt movement in these sentences. So following Cable’s logic, we can see the following possibilities for Malayalam:

(i) Malayalam has a null Q that adjoins to the relevant phrase
(ii) A null Q takes the relevant phrase as a complement

As we saw, the Wh is in-situ in a Verb-final construction. However, in an aanu construction, Wh needs to be ex-situ and this arms us with a vantage point from which we can explore the nature of the relation between a null Q and the phrase containing the Wh. It will be shown that extraction of a Wh out of a larger phrase like a Relative Clause that contains it is not possible in Malayalam; the entire Wh-containing phrase need to be pied-piped. This, in Cable’s scheme of things, leads us to an analysis where the null Q takes the Wh-containing phrase as its complement. We begin below with morphology and then go on to an examination of island effects to show that the Q does not necessarily take just the Wh as its complement, but larger phrases that contain the relevant Wh can be complements to a Q.

6.4.1 Morphology

Sinhala questions, apart from having a question particle, also exhibit special morphology on the verb. Verbs in neutral declarative sentences end in –A while interrogative sentences end in –E, exhibiting ‘particle-predicate concord’ (Kishimoto 2005):

21. chitra monawe de gatte
   Chitra what Q bought.E
   What did Chitra buy?

22. chitra pota gatta
   Chitra book bought.A
   Chitra bought the book.

In Japanese, there is no such overt morphology on the verb that distinguishes Interrogative sentences from Declarative sentences41.

23. Taro-ga hon-o yon-da
   Taro-nom book.Acc read-past
   Taro read a book

41 Data: Kaori Takamine, p.c.
Chapter 6 Positioning the Wh

24. dare-ga hon-o yon-da no?  
   who-nom book.Acc read-past Q  
   Who read a book?

25. dare-ga sono hon-o yon-da no?  
   who-nom that book.Acc read-past Q  
   Who read the book?

26. Taro-ga nani-o yon-da no?  
   Taro-nom what.Acc read Q  
   what did Taro read?

However, the question particle appears in clause final position in Japanese in contrast with Sinhala where the question particle appearing in the clause final positions in direct questions is fairly restricted (Kishimoto 2005).

Malayalam Interrogative sentences do not have overt question particles or special morphology. Questions are formed with the same linear order and the same verbal morphology as a declarative sentence, as discussed above. Although the Wh word in Malayalam can act as the base for making indefinite pronouns similar to Sinhala and Japanese, direct questions do not manifest any overt morphology on the Wh word or on the verb whereas an absence of the overt question particle renders the interrogative sentences ungrammatical in both Japanese and Sinhala.

Cable proposes that every language does have a Q particle, overt or covert. This means that even in covert cases like Malayalam, one should be able to figure out the position of Q by looking at its effects. Islands is an area that comes handy in this regard because if the attachment site of the Q is inside the Island, the relation between C_INT and QP would be blocked, resulting in ungrammaticality. This could lead to a need to extract the Wh out of the island. On the other hand, if the Q attaches to the periphery of the island, the QP would be visible to the C_INT, obliterating potential island effects.

6.4.2 Island Effects: Tool for Identifying the Attachment Site of Q

Like many Wh in-situ languages, Malayalam shows insensitivity towards certain islands such as Relative Clauses. Relative clauses are islands for overt extraction of elements from within them as can be seen in the example below. A sentence with a RelC in the object position is given in 27.
Chapter 6 Positioning the Wh

27. Rajan [Priya varacha padam] kandu
Rajan Priya drew-Rel picture saw
Rajan saw the picture that Priya drew.

An attempt to displace ‘Priya’ to the Topic position, extracting it from the RelC results in ungrammaticality:

Priya Rajan drew-A picture saw
Rajan saw the picture that Priya drew.

This is not because of a distinctness condition forbidding two nominals with the same case marking from appearing next to each other (a la Richards 2001). It is evident from 27 that such a condition does not affect the sentence when the subject of the matrix clause and the nominative NP inside the RelC are linearly adjacent in the surface structure. We can see another example below where the two nominal that appear adjacent are case marked differently:

29. Rajanu [Priya varacha padam] ishtappettu
Rajan.Dat Priya drew-A picture liked
Rajan liked the picture that Priya drew.

Even in this case extraction out of a RelC is ungrammatical.

30. *Priyai Rajanu [ti varacha padam] ishtappettu
Priya Rajan.Dat drew-A picture liked
Rajan liked the picture that Priya drew.

Extraction of a Wh is ungrammatical as well:

31. *a:ru Rajan [ti varacha padam] kandu?
who Rajan drew-A picture saw?
‘Who is X such that Rajan saw a picture that X drew?’

32. *a:ru Rajanu [ti varacha padam] ishtappettu
who Rajan.Dat drew-A picture liked
‘Who is X such that Rajan liked the picture that X drew?’

However, Wh inside the RelC receives a wide scope interpretation:

33. Rajan [a:ru varacha padam] kandu?
Rajan who drew-A picture saw?
Lit: Rajan saw picture that who drew?
‘Who is X such that Rajan saw a picture that X drew?’
This is not because of [-Specific] nature of the Wh since making the Wh partitive does not improve its chances of extraction:

\[34. \text{*a:rokke, Rajanu [t, varacha padam] ishtappettu who Rajan.Dat drew-A picture liked}

‘Who are the set S of people such that Rajan liked the picture that S drew?’

Different case marking added to partitivitv-inducing suffix also does not work:


‘Who are the set S of people such that Rajan liked the child who drew S?’

Thus the only means to get a wide scope reading out of a Wh inside a RelC is to leave it inside.

In languages with overt Q, there are clear restrictions on the attachment site for obtaining wide scope for the Wh it is associated with. For example, in Tlingit, “a wh-question may contain a wh-word inside a Relative Clause island, as long as the Q-particle is located outside of the island”. (Cable 2010, p.8)

\[36. \text{[Waá kwligeyi cp] xát NP sá i tuwáa sigóo? How it.is.big.Rel fish Q your spirit it.is.glad}

‘How big a fish do you want?’

(A fish that is how big do you want?) (Cable 2010, p.7)

It is the locality of the question particle sá that determines the scope of the Wh inside the Relative clause and consequently, if the Q is inside the Relative Clause, the Wh loses wide scope interpretation. Similar patterns are observed in Sinhala and Japanese as well.

\[37. \text{oyaa [Chitra kaa-te dunna pota] da kieuwe? You Chitra who.Dat gave book Q read-E}

‘You read the book that Chitra gave to whom?’ (Kishimoto 1992)

\[38. \text{John-wa [nani-o katta hito]-o sagasite iru no? John-TOP what.Acc bought person.Acc looking-for Q}

‘What is John looking for the person who bought?’ (Cheng 2003, eg. 43b)

In Sinhala, the Q immediately follows the Relative Clause, just like Tlingit. The Japanese example shows the Q at the end of the matrix clause\(^\text{42}\) – again, outside the Relative Clause.

\(^{42}\text{The clause final position of the Q in Japanese is argued to be a result of movement where the base position is argued to be similar to that of the Sinhala and Tlingit examples, next to the Relative Clause (see Hagstrom 1989, Cable 2010).}\)
that contains the Wh. In both these languages, the Wh loses wide scope if the Q is placed inside the Relative Clause.

As we saw above, Malayalam Relative Clauses are not islands when it comes to wide scope interpretation for a Wh contained inside a Relative clause. Following from the behavior of the Q where it is overtly manifested, we can safely propose that the null Q in Malayalam must have its attachment site outside the Relative Clause. In other words, the purported null Q need not attach to the Wh directly.\(^\text{43}\)

However, this still leaves another important question: What is the nature of the relation between the purported null Q and the Relative Clause that contains the Wh? Does it take the Relative Clause as a complement or is it an adjunction relation? Of course, it might be a little strange to say that there is a null Q adjoined to the Relative Clause in Malayalam. Luckily, we do not have to take recourse to an argument based on the beauty of the proposal; we do have a construction type that involves mandatory movement of phrases.

### 6.4.3 The Nature of the Relation Between Q and Wh

So far we have examined the behavior of Wh only in Verb-final constructions where they can be in-situ. In contrast, an aanu construction exhibit mandatory movement of the Wh to a Focus position.

\[\text{39. a:ru a:nu Rajane kandathu?} \]
\[\quad \text{Who be Rajan.Acc saw.Sg.N} \]
\[\quad \text{‘Who is X such that X saw Rajan?’} \]

Constructions with a Wh that is not at the Focus position are ungrammatical.

\[\text{40. *Rajan. Acc a:ru a:nu kandathu?} \]
\[\quad \text{Rajan.Acc be who saw.Sg.N} \]
\[\quad \text{‘Who is X such that X saw Rajan?’} \]

This pertains to all Wh words in the construction, regardless of argument/adjunct division.

\[\quad \text{41. a:re a:nu Rajan kandathu?} \]
\[\quad \text{Who.Acc be Rajan saw.Sg.N} \]
\[\quad \text{‘Who is X such that Rajan saw X?’} \]

\[\text{43 I do not want to commit to the idea that the Q cannot attach directly to a Wh at all for reasons that will become clear later.} \]
Chapter 6 Positioning the Wh

42. eppol a:nu Rajane Priya kandathu?
   When be Rajan.Acc Priya saw.Sg.N
   ‘When did Priya saw Rajan?’

43. enganea:nu Priya Rajane kandathu?
   How be Priya Rajan.Acc saw.Sg.N
   ‘How did Priya saw Rajan?’

When it comes to Wh contained inside islands, the entire island is moved to the focus position.

44. [a:ru ezhuthiya pusthakam] a:nu Rajan kandathu?
   Who wrote.Rel book be Rajan saw.Sg.N
   ‘Who is X such that Rajan saw a book written by X?’

Extracting the Wh out of the island and moving it alone to the Focus position results in ungrammaticality.

45. *a:ru a:nu [t i ezhuthiya pusthakam] Rajan kandathu?
   Who be wrote.Rel book Rajan saw.Sg.N
   ‘Who is X such that Rajan saw a book written by X?’

This would not have happened if the null Q in Malayalam simply adjoins to the Relative Clause as in Japanese. The movement of QP here involves movement of the entire Relative Clause which is possible only if the Q takes the Relative Clause as its sister. Similar effects are obtained in adpositional constructions as well.

46. [a:re-kkuricchu] a:nu Rajan paranjathu?
   Who.Acc-about be Rajan said.Sg.N
   ‘Who is X such that Rajan talked about X?’

47. *a:re a:nu [t i kuricchu] Rajan paranjathu?
   Who.Acc be about Rajan said.Sg.N
   ‘Who is X such that Rajan talked about X?’

Thus, a QP in Malayalam is a result of the null Q particle taking the relevant Wh-phrase as its complement. To give an example, the QP involved in the example (44) above could be represented as below:

```
      QP
     /   \
    Q    RelC
       /   \
  [aaru ezhuthiya pusthakam]
```

Fig:3
Now, if we are to take a universalist position for the relation between a null $Q$ and the Wh phrase, the optimal option is to say that the $Q$ takes the Wh Phrase as its complement in Verb-final as well as $aanu$ constructions. Cable (2010) does not offer any alternative proposals about movement of Wh phrases; his contribution pertaining exclusively to what is being moved. Hence, covert movement as explicated in traditional analyses of Wh *in-situ* that involve covert movement of the Wh phrase are perfectly fine options for Cable. Thus, following the logic in cable (2010), we get the following structure for Malayalam (Cable 2010 p.85,86):

QP in Verb-final constructions

![Diagram of covert movement in Verb-final constructions](image1)

QP in $aanu$ construction

![Diagram of overt movement in $aanu$ construction](image2)

However, as we will see in the next section, this does not seem to be the case for Malayalam. Intervention Effects will be explored in the next section to show that there is no covert phrasal movement. Furthermore, despite being able to generate the $Q$ away from the Wh word, Malayalam still does not have the option of base generating the $Q$ at C like Chinese. Again, intervention effects come handy in establishing this.

### 6.5 Intervention Effects

Hoji (1985) noticed that a scope-bearing element appearing between a single Wh and a Complementiser that licenses it produces Deviant constructions in Japanese. Beck and Kim (1996) explored such effects in detail for Korean. It is well-known since then that the
combination of a wh-phrase and a quantificational or focusing element results in ungrammaticality in certain configurations. To illustrate, the interrogative sentence in (48) is grammatical. As shown in (49), a combination of Wh and the particle only leads to ungrammaticality when the Wh is left in-situ. Moving the Wh past the particle only as shown in (50) renders the sentence grammatical. The examples are from Beck (2006).

48. Minsu-nun nuku-lul po-ass-ni? (Korean)
   Minsu-Top who.Acc see-Past-Q
   ‘Who did Minsu see?’

49. *Minsu-man nuku-lul po-ss-ni?
   Minsu-only who.Acc see-Past-Q
   ‘Who did only Minsu see?’

50. nuku-lul Minsu-man po-ass-ni?
    who.Acc Minsu-only see-Past-Q
    ‘Who did only Minsu see?’

This kind of ‘intervention effects’ has been shown to hold for a number of languages although there is cross-linguistic variation in the specific interveners. Beck (2006) gives an example from Malayalam where intervention is effected by the particle also in an aanu construction. In this section I explore intervention effects in some detail. Kim (2002) has proposed the core set of interveners that are cross-linguistically stable consists of the focusing operators only, even, and also. Pesetsky (2000), while discussing feature movement versus phrasal movement argued that the presence of Intervention Effects can be used as a diagnostic for feature movement. This section shows that intervention effects hold for Malayalam; hence the QP does not undergo covert phrasal movement to C_{INT}.

6.5.1 Verb-final Constructions

Negation causes intervention effects in Verb-final constructions in Malayalam. As shown in the following examples, Wh and Negation are grammatical when they occur separately. However, a combination of the two leads to ungrammaticality.

51. Rajan a:re kandu?
   Rajan whom saw
   Whom did Rajan see?

52. Rajan Anupine kandilla

44 See Eilam (2008) for data from Amharic that do not show intervention effects
Chapter 6 Positioning the Wh

Rajan Anup.Dat saw. be\textsubscript{Neg}
Rajan did not see Anup.

53. *Rajan a:re kandilla?
Rajan whom saw. be\textsubscript{Neg}
Whom did Rajan not see?

We saw in the Korean examples above that moving a Wh past an intervener removes the intervention effect. Since a bare Wh in Malayalam is \textit{in-situ} and resists movement, moving the Wh past an intervener is not a strategy available in the language. This is shown below w.r.t. the particles \textit{even}, \textit{also}, and \textit{only}.

54. *Rajan ma:tram a:re kandu?
Rajan only whom saw
Whom did only Rajan see?
55. *Rajan po:lam a:re kandu?
Rajan even whom saw
Whom did even Rajan see?
56. *Rajanum a:re kandu?
Rajan also whom saw
Whom did Rajan also see?
57. *a:re Rajan ma:tram kandu?
whom Rajan only saw
Whom did only Rajan see?
58. *a:re Rajan polum kandu?
whom Rajan even saw
Whom did even Rajan see?
59. *a:re Rajanum kandu?
whom Rajan also saw
Whom did Rajan also see?

Adverbial quantifiers like \textit{mikkava:rum} (often) and \textit{eppo:zhum} (always) cause intervention effects.

60. *Anup mikkava:rum/eppo:zhum a:re ka:na:rundu?
Anup often/always who see.habitual.be
Who does Anup usually see?
As for nominal quantifiers, strong nominal quantifiers do not act as interveners while weak quantifiers do.

61. Rajan Anupinu samma:nam koduthu
Rajan Anup.Dat prize gave
Rajan gave a prize to Anup

62. Rajan cila kuttikalkku samma:nam koduthu
Rajan some children.Dat prize gave
Rajan gave prizes to some children

63. Rajan aupinu enthu koduthu?
Rajan Anup.Dat what gave?
What did Rajan give Anup?

64. *Rajan cila kuttikalkku enthu koduthu?
Rajan some children.Dat what gave
Hat did Rajan give to some children?

A sentence with some children is fine (62), as is a sentence with a Wh in it (63). When they co-occur, the sentence is ungrammatical (64). Co-occurrence of a strong quantifier like everyone with a Wh does not result in ungrammaticality (65-66).

Rajan everyone.Dat prize gave
Rajan gave a prize to everyone

66. Rajan ella:varkkum enthu koduthu?
Rajan everyone.Dat what gave
What did Rajan give everyone?

In short, we obtain intervention effects in in-situ Wh constructions, showing that there is no covert phrasal movement. This can be contrasted with Chinese, a language which is immune to intervention effects. It has been argued for Chinese that the Q is base generated in the C position (Aoun and Li 1993b). That is, even though it is possible for Malayalam to merge the Q to a larger phrase like a Relative Clause that contains a Wh, it cannot merge the Q directly to the C-domain in a content question.
6.5.2 *aanu* Construction

It was shown in Chapter 3 that the predication base in an *aanu* construction encodes Exhaustivity. This makes it unsuitable for particles like *even* and *also* to appear in the Focus position of *aanu* construction since these particles presupposes the existence of elements for which the proposition in the predicate holds true, but not included in the set of elements of the focused set. That is, particles like *even* and *only* contradict the Exhaustive interpretation and are ungrammatical at the Exhaustive position of the *aanu* construction. On the other hand, the particle *only* is amenable to Exhaustive interpretation and is fine in the predication base position. As É. Kiss (1998) points out, a universal quantifier appearing at the predication base position also makes an *aanu* construction with Exhaustive reading ungrammatical.

67. *Anup mätram a:nu * Rajan e kandathu
   Anup only be Rajan.Acc saw.Sg.N
   It is only Anup who saw Rajan.

68. *Anup po:lum a:nu * Rajan e kandathu
   Anup even be Rajan.Acc saw.Sg.N
   It is even Anup who saw Rajan.

69. *Anupum a:nu * Rajan e kandathu
   Anup also be Rajan.Acc saw SgN
   It is Anup also who saw Rajan.

70. *ella:varum a:nu * Rajan e kandathu
   Everyone be Rajan.Acc saw SgN
   It is everyone who saw Rajan.

These elements are OK in other positions, as shown below.

71. Rajan e a:nu *Anup mätram* kandathu
   Rajan.Acc be Anup only saw SgN
   It is Rajan who only Anup saw.

72. Rajan e a:nu *Anup po:lum* kandathu
   Rajan.Acc be Anup even saw SgN
   It is Rajan who even Anup saw.

73. Rajan e a:nu *Anupum* kandathu
   Rajan.Acc be Anup also saw SgN
   It is Rajan who Anup also saw.

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74. Anup matram Rajane a:nu kandathu
   Anup only Rajan.Acc be saw SgN
   It is Rajan who only Anup saw.

75. Anup polum Rajane a:nu kandathu
   Anup even Rajan.Acc be saw SgN
   It is Rajan who even Anup saw.

76. Anupum Rajane a:nu kandathu
   Anup also Rajan.Acc be saw SgN
   It is Rajan who Anup also saw.

Negation is fine with the aanu construction. There are two places in an aanu sentence where Negation can appear – on the auxiliary (77) or on the verb (78) corresponding to the scope of Negation.

77. Rajane alla Anup kandathu
   Rajan.Acc be.Neg Anup saw SgN
   It is not Rajan who Anup saw.

78. Rajane a:nu Anup ka:naattathu
   Rajan.Acc be Anup see.Neg.SgN
   It is Rajan who Anup did not see.

The negation on the verb has the verb phrase as its domain whereas the negation on the auxiliary cannot take scope over NPIs below it. This can be illustrated via licensing of NPIs – the sentences are grammatical as long as the Polarity Item is within the domain of verbal negation. onnum is a strong NPI in Malayalam that always requires Negation.

79. avan anu [onnum kazhikkaathathu]
   he be NPI eat.Neg.SgN
   He is the one who did not eat anything

The sentence is ungrammatical without Negation on the verb.

80. *avan anu [onnum kazhichathu]
   he be NPI eat.SgN
   He is the one who ate anything

The negation on the auxiliary cannot license an NPI below it in the sentence.

81. *avan alla [onnum kazhichathu]
   he be.Neg NPI eat.SgN
   He is not the one who ate anything
NPIs are ungrammatical as the predication base in *aanu* sentences despite the position of Negation.

82. *onnum a:nu avan kazhikka:thathu

     NPI  be  he  ate.Neg.SgN

83. *onnum alla avan kazhichathu

     NPI  be.Neg  he  ate.SgN

This seems to be similar to the incompatibility of universal quantifiers in the predication base position.

84. *ella:varum a:nu avane kandathu

     everyone  be  him  saw:SgN

     It is everyone that saw him

The construction become grammatical with the following addition:

85. ivar/avar ella:varum a:nu avane kandathu

     all these/those people  be  him  saw:SgN

     It is all these/those people that saw him

The same holds in the case of NPIs too.

86. ithu/athu onnum alla avan kazhichathu

     this/that  NPI  be.Neg  he  ate.SgN

     It is none of these/those that he ate.

Even with this modification, an NPI, when it appears at the predication base position, cannot be licensed if the negation is on the verb.

87. *ithu/athu onnum a:nu avan kazhikka:thathu

     this/that  NPI  be  he  ate.Neg.SgN

Having observed the behavior of these elements in general, we can now move on to their compatibility with Wh in an *aanu* construction. Recall that the Wh has already moved to the predication base position in an *aanu* sentence.

88. a:re1 a:nu Anup t1 kandathu?

     Who  be  Anup  saw:Sg.N

     Who is it that Anup saw?

Also recall that moving a Wh over the intervener made the sentences grammatical in Korean (examples 48-50). Transposed to *aanu* sentences, this would mean that whenever an intervener is left below the Focus position, there would not be any intervention effects. The
behavior of negation and NPIs corroborate this prediction. Thus, (89) below where negation appears on the verb, which is below the predication base, does not lead to ungrammaticality.

89. a:re  a:nu  [Anup kanaathathu]?
   who  be  Anup  see.Neg.Sg.N
   Who is it that Anup did not see?

We saw that the auxiliary and negation on the auxiliary take scope exclusively on the focused item. Negation on the auxiliary appearing with a Wh results in ungrammaticality.

90. *a:re  alla  [Anup kandathu]?
   who  be.Neg  Anup  saw.SgN
   Who isn’t it that Anup saw?

NPIs do not cause intervention effects either since, as shown above, they are licensed only below the predication base position.

91. a:ru  a:nu  onnum  kazhikkaathathu?
   who  be  NPI  eat.Neg.SgN
   Who is it who did not eat anything?

Particles like only, even, and also trigger differing effects when combined with a Wh. Only does not cause any intervention effect when it appears below the Wh-aanu pair.

92. a:re a:nu  Anup ma:tram kandathu?
   who be  Anup only  saw SgN
   Who is it that only Anup saw?

Although not ungrammatical, Wh-only-be combination is degraded.

93. ?Anup  a:re  ma:tram  a:nu  kandathu?
   Anup  who only  be  saw SgN
   Who is it that only Anup saw?

Only, when placed above Wh-be, results in ungrammaticality.

94. *Anup  ma:tram  a:re  a:nu  kandathu?
   Anup only  who  be  saw SgN
   Who is it that only Anup saw?

A universal quantifier is grammatical with a Wh regardless of its position.

95. avane  a:nu  ellaavarum  kandathu.
   him  be  everyone  saw.SgN
   It is him that everyone saw.

96. a:re  a:nu  ellaavarum  kandathu?
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whom be everyone saw. SgN
Who is it that everyone saw?
97. ellaavarum are a:nú kandathu?
everyone who be saw. SgN
Who is it that everyone saw?

In short, the pattern observed in Beck (1996) that overt movement of the Wh over an intervener annihilates intervention effect is borne out.

6.5.3 A unified interpretation of the data

The data we discussed in the above section can be summarized as follows:

- Intervention effects are observed both in verb-final and *aanu* constructions.

The intervention effects in verb-final construction patterns with Korean or Japanese where such interveners cause an interrogative sentence with an *in-situ* Wh to crash. There have been various attempts to account for this phenomenon, for example, Pesetsky (1997), Beck (2006) a.o.

Pesetsky (1997) employs the phenomenon to motivate the proposal that Wh *in-situ* in certain contexts involve feature movement rather than covert phrasal movement. For Beck (2006), the interveners and the Wh involve operators that employ similar mechanisms, viz. alternative semantics. Hence, when a tilde operator invoked by an intervener appears between the Wh and its associated operator, the construction crashes because the tilde operator ends up having to evaluate a phrase with a Wh in it. Thus, configuration like the following invariably leads to a crash:

98. *[Q_i [... [ intervener [... wh-phrase... ]]][[ ]]](Beck 2006:5)

The common denominator for both the accounts above is that a Wh *in-situ* needs to be licensed by something that c-commands it, positioned at the C level. I would like to subscribe to this minimal assumption here and explain the pattern we saw in the previous section with the combination of a Wh and an intervener. Thus, I adopt the following representation adapted to a more theory-neutral terminology of C_{INT}.

99. *[C_{INT} [... [ intervener [... wh-phrase... ]]][[ ]]]

Recall that in a verb-final construction all four interveners that we looked at cause ungrammaticality. This is very much like the standard examples we see in Japanese and Korean. However, unlike Korean and Japanese, moving Wh across the intervener is not a
grammatical option. This could be straightforwardly explained by the incapability of Wh in Malayalam to scramble to a higher position – they cannot occupy Topic positions where most of the scrambled elements go and a bare Wh in Malayalam is in-situ. Thus, the Wh is always below the intervener, and the combinations always ungrammatical.

100. *[^C\text{INT}[\text{Rajan ma:tram} \text{ a:re kandu}]]?

\text{Rajan only whom saw}

Who did only Rajan see?

Recall that a Wh appearing at the Topic position is bad, ruling out the following construction on independent grounds.

101. *a:re Rajan ma:tram kandu?

whom Rajan only saw

Whom did only Rajan see?

102. a:re a:nu Anup ma:tram kandathu?

who be Anup only saw SgN

Who is it that only Anup saw?

\text{Only, when placed above Wh-be, results in ungrammaticality.}

103. *Anup ma:tram a:re a:nu kandathu?

Anup only who be saw SgN

Who is it that only Anup saw?

This data is explained by the assumptions that the Wh needs to be licensed by a relevant element in C, call it C\text{INT} without making any specific theoretical commitments; and that a focus sensitive operator, when placed between C\text{INT} and Wh blocks the association between them.

104. *[^C\text{INT}[^{\text{... [intervener [... wh-phrase... ]]}]}]]

Thus, we have the representation of 61 as below where the element only blocks the association between Wh and C\text{INT}:

105. [C\text{INT}[^{*Anup ma:tram a:re a:nu t_{i} t_{j} kandathu}]]?

Anup only who be saw SgN

Who is it that only Anup saw?

This issue is absent in the grammatical sentence where the element only is placed below the Wh by overtly moving the Wh to a higher position than the one occupied by the intervener.
106. \[ \text{C}_\text{INT} \left[ \text{a:rei} \quad \text{a:nu} \quad \text{t} \quad \text{Anup ma:tram kandathu} \right] \] ?

Who is it that only Anup saw?

Thus we see that neither in verb-final nor in aanu constructions the QP moves to the \text{C}_\text{INT}. Even in the ex-situ aanu construction, we still observe intervention effects evidencing that the QP does not undergo further covert movement to \text{C}_\text{INT}.

### 6.6 Conclusion

Various analyses aimed at explaining the Wh in-situ was briefly looked at in this chapter. From there, the discussion moved on to Cable (2010) and to an account where a Q particle mediates the relation between a Wh and a \text{C}_\text{INT}. A null Q takes a phrase containing a Wh as its complement in Malayalam. The array of intervention effects presented above shows that the Wh in Malayalam obligatorily enters into a relation with \text{C}_\text{INT} which does not have a morphological reflex and which does not induce overt phrasal movement. To summarise the discussion so far:

I. The null Q particle in Malayalam takes the relevant phrase containing the Wh as its complement, yielding a QP.

II. QPs in Malayalam enter into a relation with the Interrogative C (a la Rizzi) via feature movement if we subscribe to Pesetsky (2000) or unselective binding (Heim 1992, Pesetsky 1997 a.o.). I would not take a stand on this; instead, I would like to subscribe to the bare minimum assumption that the QP needs to be in a relation with the Interrogative C, \text{C}_\text{INT}.

III. Movement of the QP in an aanu construction amounts only to partial movement since intervention effects are observed even after the movement; i.e., even though movement of the QP is to the C-domain, it is not yet in a direct relation with the \text{C}_\text{INT}.

In the next chapter we address the issue as to why the QP/Wh behave differently in verb-final and aanu constructions.
Chapter 7

In-situ versus Movement

Unselective binding, feature movement and such proposals were developed taking into account the empirical observation that in-situ Wh does not seem to obey islands, subjacency etc. Hence, the data pertaining to the aanu construction given below where a Wh phrase mandatorily needs to be ex-situ is rather an anomaly.

1. John aare kandu?
   John whom saw
   Who did John saw?
2. John aare aanu kandathu?
   John whom be saw.Sg.N.
   Who is it that John saw?
3. *John aanu aare kandathu?
4. *aare John aanu kandathu?

An argument Wh is in-situ in a Verb-final construction; however, it undergoes obligatory movement to the predication base in aanu construction as shown in the above examples. With the possible exception of C-level adjunct Wh phrases, which may be base-generated as the predication base, all other Wh undergo movement to the predication base position in the aanu construction. In other words, any Wh phrase that is not base generated as the predication base is ex-situ in an interrogative aanu sentence.

If we follow the idea that a Wh word needs to enter into a syntactic relation with the C\textsubscript{INT}, then in examples where a Wh phrase is left in situ in an aanu construction it is easy to assume that this relation is blocked resulting in ungrammaticality.

Depending on the theoretical model one would like to adopt, there are two plausible analyses the can explain the data – (i) a feature-based account and (ii) a derivational account. The feature based account would make use of the predominantly Focus nature of the predication base in an aanu construction and would argue that the ex-situ Wh is a result of Foc-feature driven movement. The derivational account, on the other hand, would argue
that the lower position of the verb in an aanu construction creates an opaque domain for an
in-situ Wh which forces the QP containing the Wh to move. We explore both the options
test here. Section 7.1 explores the feature-based account while section 7.2 proposes the locality-
based account. It will be shown that there are problems with analysing the Wh movement in
aanu construction as triggered by a focus feature. Hence an analysis that doesn’t require a
commitment to wh-movement being a subcase of focus movement will be more desirable.
Since the constructions involved have verb movement as a crucial difference, the analysis
where verb movement plays an important role – the locality based account – will be favored.

7.1 Feature Driven Movement

The predication base position in the aanu construction could be, hypothetically, assumed to
be encoding Focus. If we subscribe to that premise, then the ex-situ Wh in the aanu
construction becomes a subcase of Focus-induced movement.
One way to go about the issue would be to assume that a [+Foc] feature is associated with
the Predication Base and that this feature attracts the Wh word resulting in mandatory
movement (cf. Boskovic 2002, Jayaseelan 2001, Sabel 2003 a.o.) with the following starting
premise:
• The Auxiliary is a Foc head.
• The Foc head obligatorily attracts a FocXP
Now the question arises as to what counts as a FocXP. Our starting point of the discussion
(that a Wh cannot be left in-situ in the aanu construction) makes it somewhat obvious that a
phrase containing Wh aka QP must count as a FocXP in this context.

To refresh the memory, I give the following examples to show that the entire clause needs
to be obligatorily moved to the Focus'; any other derivation is ungrammatical.
5. Rajan [QP aaru vilichathukondu] aanu vannathu?
   Rajan who invite.because be came.Sg.N.
   It is because who invited (him) that Rajan came?
6. [QP aaru vilichathukondu] aanu Rajan vannathu?
7. *Rajan aaru aanu [QP t\_ vilichathukondu] vannathu?
8. *aaru aanu [QP t\_ vilichathukondu] Rajan vannathu?
9. *[QP aaru vilichathukondu] Rajan aanu vannathu?
As shown in the above examples, only the first two sentences where the entire phrase acts as the predication base are grammatical. Movement of Wh out of the adjunct clause or placing a different phrase at the predication base result in ungrammaticality. Thus, the whole QP is counted as a FocXP.

There are many proposals that associate Wh words/phrases with Focus (see Jayaseelan 2003 specifically for Malayalam). However, what we see here is that it is not necessarily just the Wh word that might be counted as carrying a Foc feature. If this were the case, the Wh word would be able to be extracted out of the phrase that contains it to the putative Focus position. As shown in example (8) above, this results in ungrammaticality. The entire phrase containing the Wh needs to be pied-piped. That is, this relation also is mediated via the presence of a QP, in line with Cable (2010) that we have assumed so far. Cable (2010) surmises that

“… although its name calls to mind the notion of a ‘Question-Particle’, our Q-element (and Q-feature) really has no deep connection with interrogativity per se. Let us expand on this view, and further adopt the position that ‘Q’, as we have been using the term, is simply a syntactic category label. Consequently, the Q which we have been studying throughout this work might simply be a single instance of a more general category. For example, we might hypothesize that the syntactic category ‘Q’ also contains heads that we may dub ‘Q_{FOC}’ and ‘Q_{REL}’. Consequently, let us rename the Q-particle found in wh-questions and wh-indefinites as ‘Q_{Q}’” (p.201)

Cable goes on to point out the similarity between the Exhaustive Identification Operator proposed by Horvath (2007) as responsible for Focus movement and the Q_{FOC}. Thus, we get a Q_{FOC}P that gets attracted to the Focus position marked by aanu. This explains the legitimacy of the Q_{FOC}P’s presence at the Foc position as well as the ungrammaticality of examples 7 and 8 where the Wh is extracted out of the Q_{FOC}P. It is Q_{FOC}P that is targeted by the Foc head, and not the Wh. Hence, extracting the Wh out of the Q_{FOC}P results in ungrammaticality.

What renders the next two examples (9&10) ungrammatical?

The sentences are ungrammatical even if the phrase ‘Rajan’ is stressed or emphasized to obtain an unmistakable Focus interpretation. This points to the following possibility:
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The Foc head has an EPP feature that instantiates only a single Specifier; consequently only one FocXP can be licensed in the derivation.

This might be the case as it is ungrammatical to have two phrases receiving Focus interpretation in the *aanu* construction:

11. *Rajan aanu Priyaye aanu kandathu
   Rajan be Priya.Acc be saw.Sg.N.
12. Rajan Priyaye aanu kandathu
   Rajan Priya.Acc be saw.Sg.N.
   ‘Rajan, it is Priya that he saw’.

11 is ungrammatical; 12 has only the reading where the first phrase is interpreted as a Topic and only the phrase right in front of the Auxiliary is interpreted as Focus pointing to the fact that the Auxiliary/Focus head allows for a single Specifier position.

So we have a feature driven analysis that seems to explain the data. Except for one problem. Thus far, we have operated by tacitly assuming the following procedure:

• There is a Foc head that attracts a QFOCP
• QFOCP moves to the Specifier of the Foc Head
• Only one QFOCP can move to the Specifier.

The underlying assumption here can be either of the following:

(i) A QFOCP that is not in a Spec-Head relation with the Foc head leads to crash
(ii) There can be only one QFOCP in the numeration

Assumption (i) could be proven wrong without much ado by the fact that a phrase containing a Wh can be in-situ in a verb-final construction. That is, if a phrase containing a Wh can be interpreted as a QFOCP due to its ‘association with Focus’, then it is unclear as to why this association is not operational in a verb-final construction. Unless one is ready to believe in an *ad hoc* solution that the QFOC is not activated in the absence of a Foc head

45 It is possible to add –okke to a Wh and have a sentence like the following to get a pair-list answer:
   aarokke enthokke aanu vaangiyathu?
   Who all what all be bought.Sg.N.
   Who bought what?
This need not be taken as evidence against the argument made here against multiple specifiers for the Auxiliary – see Richards (2001), Grewendorf (2001) for plausible explanations.
(which would arguably be a case of ‘look ahead’ (Chomsky 1998) in this case), or something similar. The simplest deduction would be that a Wh containing phrase may not necessarily be a QFOCP.

As we saw in section 6.5, intervention effects in verb-final constructions serve to provide evidence that there isn’t any covert phrasal movement of the Wh in-situ. That is, even if with continue with the “association with focus” line, the putative QFOCP in a verb-final construction does not require to be moved to a [Spec, Foc] to be legitimized. Section 5.4 in Chapter 5 discussed and discarded the idea that the Wh could be moving overtly to an IP-internal Focus position. Thus, we find no empirical basis to continue with assumption (i) above.

Moreover, even if one accepts the ad hoc solution for the sake of argument, we are stuck with issues related to intervention effect. In order to see why this is the case, let us look at the QFOCP. Presumably, it has the following structure

\[
[\text{QFOCP} \ [\text{QQP} \ldots \text{Wh} \ldots ]]\]

where the \text{QQ} that needs to enter into a relation with the licensing C head C\text{INT} is inside the QFOCP. Now, recall that Focus related particles and operators give rise to intervention effects (Beck 2006). Then, we need further ad hoc assumptions as to why the QFOC does not intervene between the \text{QQ} and the licensing C head.

That leaves us with the second assumption that there is place for only one QFOCP in a numeration. This also, as it turns out, is a problematic assumption. To begin with, Focus is a cover term used to indicate different information structure notions such as contrastive focus, information focus, verum focus etc. That means, by virtue of assumption (ii) we are dealing with here, there can be only a phrase that is interpreted as exhaustive or a phrase that carries Information Focus or a phrase with Contrastive Focus. No two of these may co-occur in a construction. While structurally represented Contrastive Focus is indeed incompatible with an \textit{aanau} construction, Contrastive Focus expressed through stress is fully compatible with a QP as shown below:

Context: Rajan and Priya are talking about the interactions of people at a party. Rajan tells Priya that Aniyan saw Meera. However, Priya is interested in news about Anup and can ask the following question with ‘Anup’ being contrastively focused.
13. aare aanu **Anup** kandathu?
    Whom be Anup saw.Sg.N.
    ‘Who did Anup see?’

However, notice that this variety of Focus relies primarily on stressing the word and not on Syntax. Thus, it might be the case that there are two different mechanisms operating here and thus, not a problem for the featural analysis.

On the other hand, when a QP appears along with a syntactically Focused phrase, it receives a narrow scope interpretation. When a Wh appears inside a finite complement clause it is possible to have a phrase other than the one containing the Wh to act as the predication base; the complement clause being interpreted as an indirect question, suggesting that a Focus-driven movement analysis may hold water.

14. [Rajan aare kandu ennu] Priya aanu paranajthu
    Rajan whom saw QC Priya be said.Sg.N
    It is Priya who said whom Rajan met.

How do we know that the entire complement clause can be perceived as a QP visible to the matrix Foc? We know it because it is possible to move the finite complement clause containing a Wh to the Foc and derive a wide scope interpretation for the embedded Wh.

15. Rajan aare kandennaa Priya paranajthu?
    Rajan whom saw.QC.be Priya said.Sg.N.
    Who did Priya say Rajan met?

On the other hand, it should be noted that syntactically encoded Contrastive Focus constructions that we discussed in Chapter 3 section 3.2.2.1 are not amenable to content questions at all as discussed in Chapter 5, section 5.7. The relevant datum is repeated below:

16. ??/*Rajan aare-e: kand-ullu:?
    Rajan whom-Contr saw-be.Contr
    Who is the only one that Rajan met?
If the Wh phrase is a Q_{FOC}P, then it is not entirely clear why it is incompatible with a syntactically encoded focus construction while compatible with another.

Finally, recall arguments from the Chapter 3 that *[aanu may not be assumed to be a Foc head. Furthermore, it was shown in Chapter 5 that movement of Wh in the aanu*
construction is not an instance of Focus movement. I would like to remind the reader especially of the grammaticality of a “mention-some” question with the *aanu* construction:

**Context:** You are in a new place, and would like to buy a newspaper. The most natural way a Malayalam speaker from my region ask the question is by using a Type II sentence:

```
17. evideya: oru pathram kittunne?
   Where.be a paper get.Sg.N.
```

Where is it that (one) can get a newspaper?

If one still believes that the *aanu* sentences are exhaustive focus constructions and hence the movement of a Wh in such a sentence is Focus movement, then the grammaticality of the above example provides a strong counter-argument.

Syntactically, recall again a point raised in Chapter 5: The following example shows that there can be only one putative Focus position in an *aanu* sentence.

```
   Rajan.be Priya.Acc.be saw.Sg.N.
```

However, in stark contrast to this, it is possible to have the following multiple question:

```
19. aaraa enthaa paranje?
   Who.be what.be saw.Sg.N.
```

‘Who said what?’

This thesis would adhere to the second alternative, viz. a locality based analysis that doesn’t require a commitment to wh-movement being a subcase of focus movement, for the following reasons:

(i) as we saw in chapter 3 section 3.2, the Auxiliary that marks the predication base cannot *a priori* be assumed to be a Foc head as we did in this section; furthermore, as shown in Chapter 5, section 5.7, assuming *a priori* that Wh movement in the *aanu* construction is Focus movement cannot be supported empirically.

(ii) Focus, as mentioned elsewhere in this section, is often used as an amorphous blanket term. For example, while the *aanu* construction is amenable to interrogative readings, syntactically encoded Contrastive Focus constructions do not lend themselves to content questions, providing at least one anomaly against using the term Focus without qualifications.

(iii) the verb movement facts that we discovered independently of QP movement in the two constructions under analysis provide a pivotal difference that can be argued to be crucial in defining the licensing domain for a QP (as we will see in the next section).
7.2 Being in the Right Domain: An Alternative Based on Locality

We saw in Chapter 2 that the Verb-final construction has the verb moving to C whereas the *aanu* construction, as examined in Chapter 3, has the verb moving only up to I. Assuming that head movement is syntactic, one can look for syntactic effects of this movement. We will restrict ourselves to content questions in this chapter and explore the conditions that make the relation between a QP and the licensing interrogative C possible. As we saw in the previous chapter, unless aided and abetted by external factors such as an operator/Focus or quantifier elements, a bare Wh in Malayalam is in-situ. It will be argued that the relation between a QP and its licensor in Malayalam respects Phase Impenetrability Condition (Chomsky 2005 et al). In the verb-final constructions where Wh is in-situ, the verb is in C, displacing the barrier to C in line with Chomsky (1986). To translate into contemporary terminology, the verb movement to C extends the Phasal domain whereby the C-level licensing element and the Wh are in the same phase. However, as shown in earlier discussions, the verb does not raise all the way up to C in the *aanu* construction. This predicts that there will be a barrier, a phase boundary, between an in-situ Wh and the C-licensor. Hence, an in-situ Wh will be rendered ungrammatical, as evidenced by data. This can be overcome by making the Wh ex-situ; by moving it into the same phase domain as its licensor. Which is exactly what we see in an *aanu* construction.

**Barriers and Phases**

To recap, we have the following wh in-situ (eg.20) and ex-situ (eg.22) constructions in Malayalam:\[46\]:

20. Rajan aare kandu?

Rajan whom saw

Whom did Rajan see?

21. [CP [VC [IP Rajan t_i aare t_k] kandu]]

22. aare aanu Rajan kandathu?

Whom be Rajan saw.Sg.N.

Who is it that Rajan saw?

23. [CP aare_j [C aanu [IP Rajan_t [ Vi [vP t_i t_j t_k] kandathu]]]]

\[46\]The notation used in the bracketed structure shown here is adopted from Chomsky (1986) where a chain formed by the movement of V to I was represented as (V_i, t). In more current terminology, V_i and V_C here indicate the position where V is pronounced in the relevant sentence.
The idea that head movement is an operation that takes place in Narrow Syntax is a much-debated issue (see Roberts 2011 for a brief overview). One of the most explicit proposals about the syntactic effect of this movement can be seen in Barriers (Chomsky 1986, p.72) where the discussion adopts "[…] the fairly standard assumption that the relevant properties of the raised V, including index, ‘percolate’ to V₁, V₁ being the ‘amalgamated inflected verb’. One of the main features that percolated was barrierhood of the VP. In other words, the V-to-I movement extended the domain of the barrier upwards. It was further proposed that "If an element of I raises to C — say, a modal […] — then the VP retains its status as a barrier […]"

It, then, straightforwardly follows from our analysis of the two constructions that there is only a single barrier in the verb-final construction in (20), whereas there are two barriers in the aanu construction in (22) by virtue of the facts that (a) V moves only up to I and (b) aanu occupies a C head. In the aanu construction V is in I, hence the barrier is at IP, rather than VP.

The parallels between barriers and Phases have been noted in the literature (see for eg: Boeckx and Grohmann 2004). Reinterpreting the effects of head movement, especially verb movement in terms of Phases also has been attempted (see Den Dikken 2007, Gallego 2010 a.o.; for a critique of Den Dikken 2007, see Pesetsky 2007). Gallego (2005, 2010) has proposed that verb movement to T pushes the \( \nu^*P \) phase up to TP. Thus, "[…] \( \nu^* \), the strong phase head, can still be said to be the center of the resulting structure, and, in principle, it should be able to trigger any syntactic operation from its derived position.” A similar approach is taken here, where the canonical \( \nu^*P \) phase will be assumed to have extended all the way up to C in verb-final constructions and up to IP in the aanu construction. However, the analysis here crucially differs from Gallego (2010) in that Gallego (2010) proposes that although V-to-T movement extends the \( \nu^* \) phase, T to C movement cannot extend the Phase again (p.110. fn:47). It will be argued in the following section here that the movement of the verb in Malayalam verb-final constructions brings everything other than the Specifier of C within the C-commanding domain of V_C and for all practical purposes, the clause behaves as if there is no barrier/intermediate phase.

Applying this, we get the following representation for the sentences (17) and (19):

24. \[ \[CP \] \[V_C \] \[IP Rajan, [\nu_P t_i aare t_k],] \] \] \] kandu

25. \[ \[CP aare_j \] \[C aanu [\nu_P Rajan, [V_i, [\nu_P t_j t_k],] \] \] \] \] kandathu
Thus, in (24), the construction is expected to behave effectively as if it has a single-phase head \( V_C \). This phase head is the highest head in the structure and hence every element except the Specifier is in its c-commanding domain. We will come back to this point later. The aanu construction, on the other hand, has two different phase heads, namely, \( C \) and \( V_1 \). Hence we expect to see an active barrier aka Phase Impenetrability Condition in an \( aanu \) construction. The behavior of Wh in these two constructions is explained in the next section based on this premise.

### 7.2.2 Verb-final Construction

Let us begin with the domains of \( C \), \( T \) and \( v \) with no verb movement beyond \( v \).

Chomsky (2001) proposes that assuming \( Z \) and \( H \) are phase heads, in a configuration such as

\[
\begin{array}{c}
ZP \\
\vdots \\
HP \alpha \\
HYP
\end{array}
\]

the domain of \( H \) is not accessible to operations at \( ZP \) (DbP version of PIC). That is, the domain of \( v \) is unavailable for operations of \( C \).

26.

\[
\begin{array}{c}
CP \\
\uparrow \\
IP \\
\Updownarrow \\
vP \quad \text{Accessible to operations at the C domain} \\
v \\
\end{array}
\]

That is, if a Wh is to enter into a relation with a interrogative \( C \), then it has to be \( [\text{Spec, IP}] \) or at \( [\text{Spec, } vP] \). Thus it follows straightforwardly that a subject Wh is in the domain of \( C_{\text{INT}} \) and any movement might be what could be characterized as ‘string vacuous movement’.
What happens with an object Wh? The object Wh is inside the domain of $v$ and thus inaccessible to $C_{\text{INT}}$. The standard story would be that it uses the edge of $vP$ as an escape hatch to be available for movement to a licensing C. However, Wh in Malayalam does not have sufficient quantificational force to move on its own (cf. Chapter 6); $C_{\text{INT}}$ does not – to use an old jargon – ‘attract’ the Wh to its specifier inducing movement. We get the following representation:

28.

Yet, we find that an Object Wh in situ is perfectly grammatical in Malayalam.

I would like to argue that this is possible by virtue of V-to-C movement in verb-final constructions. We saw in Chapter 2 that the verb moves all the way to the C domain in verb-final constructions. We also saw in the previous section that once we subscribe to the idea that head movement is syntactic, the V-to-C movement must have syntactic effects. One such effect is characterized as a direct impact on the barrier imposed by the moving head, if any. In the case of Malayalam, this would be the barrier imposed by $v$. Translated into contemporary terminology, this would mean an extension of the Phase boundary (see
Boeckxxx and Grohman 2004 for a comparison between barriers and phase boundaries) and we get the following derivation instead of the representation given in 26.

\[ \text{Accessible to operations at the C domain} \]

The verb moves to C, instantiating a C-T complex where the features that are proposed to be on C e not transferred to lower heads (see Biberauer 2005, Miyagawa 2010 for proposals in this vain). This is in line with Amritavalli and Jayaseelan (2005) where it is argued that Dravidian languages do not project a distinct TP in the clause. The moved V becomes the locus of the Wh feature with the interrogative interpretation is given voice by the intonation. As noted before, the word order need not differ from the declarative counterpart to yield an interrogative interpretation – the Wh can appear exactly in the same place as its non-Wh counterpart. Nor does Malayalam have an overt question particle to indicate the scope of the Wh or the type of the construction (a la Cheng 1991). Thus, we get the two factors that distinguish an interrogative sentence from a declarative sentence in Malayalam: (i) a Wh word and (ii) intonation – (i) the in-situ Wh word licensed by the interrogative Vc and (ii) the interrogative Vc being signaled by intonation.

How can one be sure that the Vc is the derived locus of the interrogative feature? Recall that the question particle itself does not have a phonological reflex in Malayalam and the verb remains in the same clause final position in both declarative and interrogative sentences (modulo topicalisation etc.). Hence we have to resort to circumferential evidence to assert that Vc is the locus of the interrogative features. This can be done by examining the overt Question Particle that is mandatory in Yes/No questions.

30. avan Rajane kandu.

He Rajan.Acc saw

He saw Rajan.
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31. avan Rajane kando?
   He Rajan.Acc saw.Q
   Did he see Rajan?

The question morpheme has to go with the verb obligatorily, appearing at any other place results in ungrammaticality.

32. *avan o Rajane kandu?
   He.Q Rajan.Acc saw
   Did he see Rajan?

33. *avan Rajane(y)o kandu?
   He Rajan.Acc.Q saw
   Did he see Rajan?

The examples 32-33 are ungrammatical only in a Y/N question interpretation; they are perfectly grammatical with other non-interrogative interpretations, lending support to the argument that the Vc carries the interrogative feature in an interrogative construction.

Coming back to the point under discussion, V-to-C movement extends the Phase boundary, with the effect of bringing the in-situ QP within the purview of the interrogative C.

7.2.3 aanu Construction

We saw in Chapter 3 that the verb does not move to the C domain in aanu construction. Instead, the auxiliary spells out the C-domain projections while the verb raising maximally to T\(^47\). What effect does this have on the syntax?

The immediately visible effect of this is that now we get distinct and split C and T projections\(^48\), the separate C projection being occupied by the auxiliary, giving rise to a criterial position.

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\(^{47}\) The section will proceed under the assumption that V-to-I movement happens in the aanu construction.

\(^{48}\) A split C-T also could mean that some of the features that are assumed to originate in the C domain are transferred to T, the most commonly inherited feature being uninterpretable phi-features (Chomsky 2008). In some languages this inheritance manifest as an EPP feature on T, which needs to be satisfied by an overt element at [Spec TP] while in other languages this finds expression as a D-feature on T that may be satisfied by moving the verb to T (Alexiadou and Anagnostopoulou 1998). It is possible to argue that Malayalam falls into the latter type, where the verb moving to T and satisfying the inherited phi-features. This finds a phonological reflex in the appearance of the Sg.N. morpheme affixed to the verb as suggested by Alexiadou and Anagnostopoulou 1998.
“A “Criterion” (Topic Criterion, Focus Criterion, etc.) is the requirement demanding the
creation of a local Spec-head configuration which is then passed on to the interface systems
where the relevant interpretive instruction is triggered” (Rizzi 1997, 2007). Thus, whenever
this position is manifested, it demands its Specifier to be filled and the element at the
specifier is frozen in this position.

As mentioned, although a radical pro-drop language, the element at the Focus position can
never be a pro.

34. *pro a:nu innale vannathu.
       Pro be yesterday came.Sg.N.
       Pro is who came yesterday.

Even when the auxiliary is optionally dropped in the context of topicalisation of the
background, the focused element cannot be dropped.

35. innale vannathu Rajan (a:nu).
       yesterday came.Sg.N.  Rajan be
       Rajan is who came yesterday.
36. *innale vannathu pro (a:nu).
       yesterday came.Sg.N.  pro be
       pro is who came yesterday.

This is ungrammatical even in the context of a direct question like the following:

37. Rajan a:ru a:nu?
       Rajan who be
       Who is Rajan?
38. *pro a:nu innale vannathu
       pro be yesterday came.Sg.N.
       Pro is who came yesterday.
       yesterday came.Sg.N.  pro be
       Pro is who came yesterday.

The predication base is frozen in this place and extraction is ungrammatical. In the minimal
pair below, the object of the embedded verb-final clause is in the predication base position of
the matrix clause. Extracting this element in an embedded clause results in ungrammaticality.
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40. Rajane, a:nu [Anup t, kandennu] Aniyan paranjathu
Rajan.Acc be Anup saw.Comp Aniyan said.SgN
Rajan is who Aniyan said that Anup saw.

Rajan.Acc be ti be Anup saw.Sg.N.Comp Aniyan said.SgN
Rajan is who Aniyan said that Anup saw.

42. *[ti a:nu Anup kandathennu] Aniyan paranjathu Rajane, a:nu
be Anup saw.Sg.N.Comp Aniyan said.SgN Rajan.Acc be
Rajan is who Aniyan said that Anup saw.

Thus the predication base position in aanu sentence appears to be a criterial position – the element appearing at this position may get a Focus interpretation as we saw in Chapter 3 and is frozen in that position.

This proposal where the auxiliary is at C and the verb at T is further strengthened by the behavior of two constructions w.r.t a wide scope reading of Wh inside them; a Wh inside a subordinate aanu construction cannot have wide scope regardless of the nature of the matrix clause. Examples are given below.

Verb-final complement clause; verb-final matrix clause: wide scope possible for Wh.

43. Priya aaru vannennu paranju?
Priya who came.QC said
Who did Priya say came?

Verb-final complement clause; aanu matrix clause: wide scope possible for Wh.

44. aaru vannennaa Priya paranje?
Who came.QC.be Priya said.Sg.N.
Who is it that Priya said came?

aanu complement clause; verb-final matrix clause: wide scope not possible for Wh.

45. aaraa vanneennu Priya paranju.
Who.be came.Sg.N.QC Priya said.
Priya said who came.

aanu complement clause; aanu matrix clause: wide scope not possible for Wh.

46. aaraa vanneennaa Priya paranje.
Who.be came.Sg.N.QC.be Priya said.Sg.N.
It is who came that Priya said.

Thus, in (45) and (46), the embedded clause is an aanu construction and the sentences cannot have an interrogative interpretation – the auxiliary in C creates an opaque domain for operations from the matrix C.
The verb moving only to T would also mean that a Phase boundary is induced at T.

As we saw earlier, the idea is that when a head moves, “the relevant properties of the head” moves with it or “percolates” to the new head. In the case of V_T, what we have is a phase head moving, so we expect the phase to expand as well (see Gallego 2010 for an extensive discussion of this, what he calls phase sliding). In other words, once V_T comes into being, it becomes the new phase, the barrier instantiated by the \( v^* \) is rendered void (Chomsky 1986).

In terms of phases, this would mean that the operation transfer that would normally make the VP inaccessible once T is merged would not take place in the eventuality of V-to-T movement. This expands the erstwhile domain of T as we see in the above diagram to the new domain of V_T. Thus, the entire derivation upto this point is accessible for the position instantiated by the Auxiliary. Empirically, this is exactly what we see in an aanu construction – any element in the clause can appear at the predication base position (cf. Chapter 3).

However, notice that if there is a head above the the Auxiliary, say, C_INT, the phase boundary at V_T makes anything below the Specifier of the Auxiliary inaccessible for C_INT by virtue of Phase Impenetrability Condition:
A straightforward prediction of this derivation would be the following: If a Wh is left in its in-situ position, the licensing $C_{\text{INT}}$ which is at the C-domain cannot get into a relation with the Wh, since the Phase Impenetrability Condition would make it unavailable to the $C_{\text{INT}}$.

This prediction is borne out, a Wh left in-situ is ungrammatical when it comes to the *aanu* construction:

50. *Rajan aanu aare kandathu?
    Rajan be whom saw.Sg.N.

The only grammatical way to do this is to move the Wh at the predication base position, thereby placing it within the accessible domain of $C_{\text{INT}}$:

51. aare aanu Rajan kandathu?
    Whom be Rajan saw.Sg.N.
    Who is it that Rajan saw?

52.
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However, this raises another question: How do we know that the QP is not moving to the specifier of C_INT?

Cardinaletti (2006) has shown that in the case of Italian interrogatives, this type of Wh movement is not to a position where it is in a Spec-Head configuration with the interrogative licensor. In other words, the movement of the Wh merely places it within the domain of the licensing head. This is true for the Malayalam "aanu" construction as well, as is evidenced by the Intervention effects we discussed in the previous chapter (eg. 94, ch. 6). Even after moving the QP to the predication base position, interveners can make the sentence ungrammatical showing that the QP is not yet in a Spec-Head local relation with the C_INT (eg. 103&105, ch.6).

It can be argued that in line with Rizzi (1999) the C_INT is not equivalent to a Force projection that is proposed to be highest in a clause. It appears that a Topic projection can appear above the C_INT in Malayalam, giving rise to island effects.

The "aanu" construction can instantiate a Topic position as shown in the following example:

53. Rajan Aniyane aanu kandathu
Rajan Aniyan.Acc be saw.Sg.N.
Rajan, it is Aniyan that (he) saw.

54. [\TopP Rajan; [\AuxP Aniyane; [\TP t; t; kandathu]]]

Topicalisation is possible out of a verb-final structure as well.

55. Aniyane Rajan kandu
Aniyan.Acc Rajan saw
Aniyan, Rajan saw (him).

56. [\TopP Aniyane; [\VcP Rajan t; kandu]]

An empirical fact pertaining to the Topic position in both verb-final and "aanu" constructions is that a Wh is uniformly ungrammatical in that position.

57. *aaru Aniyane aanu kandathu?
who Aniyan.Acc be saw.Sg.N.
Who is it that saw Aniyan?

58. [\TopP aaru; [\AuxP Aniyane; [\TP t; t; kandathu]]]

59. *aaru Rajane kandu?
Who Rajan.Acc saw
Who saw Rajan
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60. \([\text{TopP} \text{ aaru}; [\text{VeP} \text{ Rajane t; kandu}]]\]

This can be further illustrated with the Topic island effect that is obtained in Malayalam. Like many other Wh in situ languages, a Wh can be inside a Relative Clause and an embedded verb-final clause in Malayalam and still receive wide scope. However, a Wh inside a *because* clause is ungrammatical.

61. \([\text{manthri nirbandhicathu kondu}]\) police avane arrest ceythu
   minister force.Sg.N with police he.Acc arrest did

   Police arrested him because the minister forced (them to act).

62. *\([\text{a:ru nirbandhicathu kondu}]\) police avane arrest ceythu?*
   who force.Sg.N with police him arrest did

   Who is X such that the police arrested him because X forced them to do so?

63. *police \([\text{a:ru nirbandhicathu kondu}]\) avane arrest ceythu?*

   The only rescue comes in the guise of *aanu* construction:

64. \([\text{a:ru nirbandhicathu kondu}]\) a:nu
   who force.Sg. with be
   police avane arrest ceythathu?
   police he.Acc arrest did.Sg.N

   Who is X such that the police arrested him because X forced them to do so?

Reason clauses are argued to be adjoined at the C-domain (see Tsai 2008 among others). Assuming that the only available position that can be added to a verb-final construction is Topic, it would mean that a Topic position is instantiated when a reason clause is merged. Evidently, this Topic position is outside the purview of the interrogative C head C\text{INT} and a QP in this position cannot enter into a relation with the C\text{INT}, rendering the sentence ungrammatical.

As opposed to this, when placed at the predication base position, the QP is well within the purview of C\text{INT} since the Aux projection where the QP appears is c-commanded by C\text{INT}. This makes the sentence grammatical. In short, a QP containing a Wh needs to be within the accessible domain of a C\text{INT} for the sentence to receive an interrogative reading. In the case of verb-final constructions where the Wh is in-situ, this is achieved by the V-to-C movement that extends the Phase boundary; in the case of the *aanu* construction, the QP undergoes movement so that it can be within the domain of C\text{INT}. 

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7.3 Summary

This chapter put proposed two alternative analyses, namely, a feature-based analysis and a locality-based analysis in an attempt to account for the in-situ versus ex-situ behavior of the QP/Wh in verb-final versus *aanu* constructions. The featural analysis started from the hypothetical premise that *aanu* construction is essentially a Focus construction, and a QP/Wh belongs to the family of Focus-associated elements. While intervention effects might endorse placing a Q element along with Focus associated operators, it was not entirely clear how far can one go in assuming a definitive syntactic Focus head in an *aanu* construction, as discussed in Chapter 3 earlier. Besides, the two constructions under discussion showed one difference that could be argued to be crucial when it comes to locality constraints – the verb moved to C in verb-final, but moved only to I in the *aanu* construction. This independent factor motivates the locality-based analysis, which is promoted in this thesis. The V-to-C movement in the verb-final construction extends the \( v \) phase all the way up to C and leaves a QP/Wh in its base position anywhere below the verb in a clause within the accessible domain of the \( C_{\text{INT}} \), making in-situ QP/Wh grammatical. As opposed to this, in an *aanu* construction the verb moves only to I, resulting in a Phase Boundary at I and the C is spelled out by an Auxiliary. This makes a QP/Wh obligatory move to the C-domain to escape Phase Impenetrability Condition, and the position available for such movements is the Predication Base position marked by the Auxiliary in C. This is not a movement to the licensing \( C_{\text{INT}} \) as evidenced by the fact that intervention effects are still active even after this movement. This movement brings the QP/Wh into the accessible domain of the \( C_{\text{INT}} \) and is, therefore, obligatory. Thus, this chapter argues for an analysis of the in-situ versus ex-situ QP/Wh in Malayalam where locality conditions play a crucial role.
Chapter 8

Conclusion

The phenomenon that linguistic items can be pronounced in places different from their origin has been a point of great interest in the syntactic literature. While it is fairly uncontroversial that phrasal elements undergo movement, the idea that heads also can do so was met with mixed response. This thesis takes the position that head movement is a narrow syntactic phenomenon that can affect locality constraints thereby forcing certain phrasal elements such as a phrase containing a Wh (QP) to undergo movement.

The basic proposal explored in the thesis is neither new nor exceptionally original. In fact, it dates back to Chomsky (1986) where the movement of a verb is proposed to be able to affect and alter a barrier. This idea is translated into contemporary technical apparatus in the thesis to capture locality conditions, with Wh movement in Malayalam providing the necessary data to make a case for it.

The two constructions studied in the thesis present a contrast in terms of the position of the Wh. While the verb-final construction does not allow a Wh any freedom of movement, the aanu construction demands obligatory movement of a Wh to the pre-auxiliary position. That is, Wh movement makes a verb-final construction ungrammatical while an aanu construction is ungrammatical without movement.

One way to unify the two seemingly inconsistent requirements is to postulate that the feature that causes overt dislocation does indeed effect covert or masked (by movement of other elements) movement in the apparent in-situ sentences. This is exactly what has been argued for Malayalam where the Wh in a verb-final construction was analysed as moving to a preverbal focus position (Jayaseelan 2001). It was shown in chapter 5 that this movement-to-preverbal position is the effect of the Wh behaving like an indefinite and thus lacking the necessary force to undergo scrambling. In the case of the aanu construction, it was shown that, empirically, the movement of elements to the pre-auxiliary position cannot be conclusively shown to be a case of movement triggered by a focus feature, apart from the fact that topical elements also can occupy this position. The obstacles to an analysis in terms of focus movement are more pronounced in the case of Wh elements as we saw in chapter 5. Theoretically, the thesis attempted to formalize the idea that Wh is associated with focus by
adopting Cable (2010) and positing a $Q_{FOC}$ mediating the movement. However, this attempt fails, too, as shown in chapter 7. Therefore, in the case of Malayalam, an analysis that doesn’t require a commitment to wh-movement being a subcase of focus movement is favoured over proposals for movement induced by a focus feature (such as Sabel 2003).

The alternative proposal argued for in the thesis takes verb movement to be a syntactic phenomenon with syntactic effects. It is shown that the pivotal structural difference between the verb-final construction and the aanu construction pertains to verb movement. The verb undergoes V-to-C movement in a verb-final construction whereas the verb remains within the IP in an aanu construction. Following the Phase Impenetrability Condition (Chomsky 2001) coupled with the old concept that head movement can extend barriers, it is argued that the V-to-C movement in the verb-final construction results in extending the Phase domain up to the C level as opposed to the phase boundary instantiated by the low verb in an aanu construction. Thus, in a verb-final construction, the in-situ Wh is already within the purview of the licensing C$_{INT}$ and does not need to move. In fact, it cannot move since the scrambling positions require elements that are more referential. However, in an aanu construction, the low verb creates a Phase boundary between the C$_{INT}$ and the Wh, thereby rendering an in-situ Wh within the IP domain ungrammatical. Now the only option for the Wh is to get into the C-domain, and as we saw in the case of verb-final construction, the Wh lacks the necessary quantificational force to effect movement using the usual scrambling positions. The only option left for the Wh to be licensed is to find an edge feature that will trigger its movement to the C-domain. This position is provided by the auxiliary at C, aanu. The Wh undergoes mandatory movement to this position, and the sentence is saved.

In short, the thesis argues for verb movement, and shows that it has important syntactic manifestations. The thesis also shows that at least in the case of Malayalam, tying up Wh movement with movement induced by a focus feature is not a straightforward assumption. The case study in the thesis is limited to Malayalam; generalizing the proposal to include other similar languages is an area that is not explored here. I leave it for future research.
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