## CLEFTS IN MALAYALAM

Dissertation submitted to the Jawaharlal Nehru University in partial fulfillment of the requirements for the award of the degree of

## MASTER OF PHILOSOPHY

## LIZA JOSEPH

CENTRE OF LINGUISTICS AND ENGLISH
SCHOOL OF LANGUAGE, LITERATURE AND CULTURE STUDIES JAWAHARLAL NEHRU UNIVERSITY NEW DELHI -110067


## CENTRE OF LINGUISTICS \& ENGLISH

SCHOOL OF LANGUAGE, LITERATURE \& CULTURE STUDIES
जवाहरलाल नेहरू विश्वववद्यालय
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI-110067 INDIA
Professor R.S. Gupta
Chairperson

Date: 21.7-2m

## Certificate

This Dissertation entitled "Clefts in Malayalam" submitted by Ms. Liza Joseph, Centre of Linguistics \& English, School of Language, Literature \& Culture Studies, Jawaharlal Nehru University, New Delhi, for the award of the degree of Master of Philosophy is an original work and has not been submitted so far in part or in full for any other degree or diploma of any other University.

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Any shortcomings that might have remained are solely my own.


## LIST OF ABBREVIATIONS

| 1 | : | $1^{\text {st }}$ Person |
| :---: | :---: | :---: |
| 2 | : | $2^{\text {nd }}$ Person |
| 3 | : | $3{ }^{\text {rd }}$ Person |
| S | : | Singular |
| P | : | Plural |
| M | : | Masculine |
| F | : | Feminine |
| $\mathbf{N}$ | : | Neuter |
| PRE | : | Present |
| PST | : | Past |
| FUT | : | Future |
| NOM | : | Nominative |
| ACC | : | Accusative |
| DAT | : | Dative |
| EMP | : | Emphatic |

## CONTENTS

Chapter 1 Introduction ..... 1
Chapter 2 Theoretical Background and a Critical Appraisal of Existing Research ..... 8
Chapter 3 Empirical Issues ..... 27
Chapter 4 Deriving Clefts ..... 38
Chapter 5 Conclusion ..... 57
Bibliography ..... 59

## CHAPTER ONE

## INTRODUCTION

This dissertation proposes to investigate cleft-construction in Malayalam within the minimalist program as set out in Chomsky ( $1995,1998,1999$ ) and Uriagereka (1999). Malayalam, an SOV language, belongs to the Southern sub-group of the Dravidian family of languages. It has wh-in-situ, rich case-marking, no overt agreement and a free word order.

A cleft-construction is standardly assumed to consist of a cleft-clause and a clefted phrase, with the latter bearing focus.
(1) ninakkə oru katto a:ఇə vannnirikkunnnata you-DAT one letter be-PRE come-PRE-3SN "It is a letter that has arrived for you."
oru katto 'one letter' in (1) is the clefted phrase bearing contrastive (Rochemont 1986) or identificational (Kiss 1998) focus. However as Jackendoff (1972) observes it is not necessarily the entire clefted phrase that bears focus as for example in (2).
(2) enikkə ñi:lə ñitəm ulla uduppə a:nə vendațə 1S-DAT blue colourhave dress be-PRE want-PRE-3SN "It is the dress with the blue colour that I want.
(3) enikkə ni:lə nitəm ulla uduppa a:nə vendatə 1S-DAT blue colourhave dress be-PRE want-PRE-3SN
"It is the dress with the blue colour that I want."

In (2) the focus bearing constituent is ni:la 'blue' while in (3) it is uquppa 'dress'. Rochemont (1986) terms it as the cleft focus. The cleft-clause and the non-focused material in the clefted phrase contain information that is "under discussion" or contextually identified (directly c-construable in Rochemont's (1986) sense defined in (6)). This makes a cleft infelicitous as a discourse initiator. For example, imagine A meeting B and saying (1). It will be felicitous only if it is assumed that it is known to $B$ that something has arrived. That the cleft cannot form a response to (4), a neutral focus question (Kidwai 1999), also indicates that the non-focused part of the cleft has to be information shared by the participants in discourse.
(4)A: ejṭə samb ${ }^{\text {haviccu? }}$

What happen-PST
"What happened?"

B: \#ravi a:nə kollappettatıo
Ravi be-PRE murder-PST-3SN
"It is Ravi that was murdered."

By virtue of the fact that the constituents of a cleft, apart from the cleft focus, are "presupposed", the cleft focus receives a contrastive focus or identificational focus interpretation. Rochemont (1986) defines contrastive focus as follows.
(5) $P$ is a Contrastive focus iff $S / P$ is directly $c$ construable, where $S / P$ is the
result of extracting $P$ from the sentence $S$ containing $P$.
(6) (a) An expression P is c-construable in a discourse $\delta$ if, and only if, P is either directly or indirectly c-construable in $\delta$.
(b) an expression P is directly c-construable in $\delta \mathrm{if}$, and only if,
(i) $P$ has a semantic antecedent $P$ ' in $\delta$, or
(ii) the intended antecedent of $P$ has been brought to the attention of the participants in $\delta$.

Kiss (1998) defines identificational focus as follows.
(7) An 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 of this set for which the predicate phrase actually holds.

There is an assumption involved that the predicate does hold for a subset of the set identified. For instance, imagine A meets B on his way home and asks (8).
(8) A: a:renkilum vi:ttil undo?
anyone home-in be-Q
"Is there any one at home?"

B: \#hari a:nə vi:ttil ullate

Hari be-PRE home-in be-PRE-3SN
"It is Hari who is at home."

C: hari vi:ttil undo
Hari home-in be-PRE
"There is Hari at home."

In (8), unlike C, B is infelicitous in response to A. A does not assume that the predicate necessarily holds for a subset of a contextually or situationally identified set. Consider (9).
(9)A: a:reŋkilum vi:ttil undo

Anyone home-in be-Q

Is there anyone at home?

B: ravi vi:ttil undo

Ravi home-in be-PRE
'Ravi is there at home."

C: alla hari a:ñ vi:ttil ullata
no Hari be-PRE home-in be-PRE-3SN
"No, it is Hari who is at home."

In (9), $C$ is felicitous as $B$ asserts that someone is at home. $C$ refutes the subset that B identified and identifies a different subset. That the predicate should hold for a subset and not for the entire set is revealed by the unacceptability of the universal quantifier, negative quantifier, etc. as clefted phrases. See (10).
(10) \#ella:vərum a:ఇə varuñnat̃ə
everybody be-PRE come-PRE-3SN
"It is everybody who are coming."

### 1.2 Empirical Issues to be investigated

A detailed description of the empirical facts that need to be analysed and explained, is given in Chapter 3. However, in this section we make a brief mention of these issues.
(a) Malayalam clefting is clause bound. The clefted phrase and the cleftclause should belong to the same clause. Clefting is also recursive. The embedded clauses and the matrix clause can be clefted successively.
(b) Clefts allow scrambling patterns similar to those of non-clefts.
(c) WH-phrases assumed to be inherently focussed occur obligatorily in the precopular position in clefts. WH-phrases in embedded clauses can receive wide-scope if the whole clause is in the precopular focus position. (d) The nature of the particle ata suffixed to the verbal element in the cleft-clause needs to be investigated, which is putatively homophonous to the third person singular neuter pronominal but is standardly analysed as nominal features in $\mathrm{C}_{\mathrm{o}}$.
(e) Across languages, clefts are generally marked by the presence of the copula. The nature of the copula and its role in assigning focus too needs to be investigated.

### 1.3 Theoretical issues to be investigated

An examination of the existing research on clefts in Malayalam and on clefts in general reveal two distinct standpoints or approaches-a monoclausal approach and a biclausal approach. Srikumar (1992, 1994a) adopts the former approach in analysing Malayalam clefts while Madhavan (1987) adopts the latter approach. As we shall see in Chapter 2, while the biclausal approach of Madhavan (1987) fails to explain Case and related facts, the monoclausal approach of Srikumar $(1992,1994$ ) is untenable within the current confines of the theory and it also produces empirically undesirable results.

This dissertation adopts and develops a version of the monoclausal approach to clefts. Assuming the base-generation of the clefted phrase in its $\theta$-position within the cleft-clause, clefting involves movement as the clefted phrase and the copula necessarily occur adjacent to each other. The question arises as to what moves in order to derive this adjacency - the clefted phrase or the copula. The movement being visible at PF , there are two options regarding the component where the movement has taken place--(a) the narrow syntax before Spell-Out or (b) in the PF component. The target of movement and the motivation for movement too need to be investigated.

The pre-copular position in Malayalam has been mentioned earlier as the focus position. The notion of a focus position needs to be captured.

Jayaseelan (1989, 1995) and Srikumar(1994a) propose the projection of a Focus Phrase with the head F checking the focus feature. Not only does this lead to the proliferation of functional projections that is not countenanced by the current minimalist considerations, it also produces empirically undesirable results. In any case this strategy gives an account of what is essentially a phenomenon of linear adjacency in terms of hierarchical structure, in the face of very little supporting evidence. We explore the possibility of a PF-movement account for clefts.

Further we observe focusing to be determined by discourse. Clefting which involves focusing is argued to be driven by discourse-pragmatic factors. A question that naturally suggests itself is how and where the discourse phenomena are encoded in language.

### 1.4 Organisation of the Text

Presenting the theoretical background, in Chapter 2, we examine the minimalist framework we adopt. Also developed in this chapter is a version of the theory of Multiple Spell Out and the details of PF-movement. Existing analyses of Malayalam clefts is also reviewed in this chapter. In Chapter 3 we examine in detail the empirical issues involved in the study of clefts. Chapter 4 proposes an analysis of clefts in Malayalam within the theoretical framework presented in Chapter 2.
In the Conclusion the main results are summarised.

## CHAPTER TWO

## THEORETICAL BACKGROUND AND A CRITICAL APPRAISAL OF EXISTING RESEARCH

Studies on clefting have adopted either a monoclausal approach or a biclausal approach in describing clefts. Madhavan(1987) adopts a biclausal approach in analysing Malayalam clefts while Srikumar (1992, 1994a) adopts a monoclausal approach. Before reviewing the two approaches, an overview of the theoretical background to the analysis proposed in Chapter 4 is undertaken in section 2.1. Apart from the organisation of the language faculty (2.1.1), and the operations of $\mathrm{C}_{\mathrm{HL}}$ (2.1.2), we discuss the notion of core functional categories and phases (2.1.3). Section 2.1.4 examines the theory of Multiple Spell-Out. In section 2.1.5 we discuss linearization in PF and PF- movement/re-ordering.

### 2.1. Theoretical Background

### 2.1.1. Organisation of the language faculty

Generative grammar assumes a modular mind/brain with an independent module of language. Performance systems assumed to be external to language access the module of language or the language faculty and put it to use. A minimalist approach to language as formulated in Chomsky (1992, 1995, 1998, 1999) assumes the Articulatory-Perceptual and ConceptualIntentional systems as "unitary and distinct" and as the only systems which access the language faculty. The former relates to the sound and the latter to
the meaning part of language. Language, in other words, is a device which generates expressions, each a pairing of information about sound and meaning. Assuming a derivational approach to language, the output of the language faculty should be in a form interpretable by these external systems. In other words, the external systems impose certain legibility conditions on the output of the language faculty for language to be usable at all. The strongest minimalist thesis as proposed in Chomsky (1998) is given in (1).
(1) Language is an optimal solution to legibility conditions.

As mentioned above, the generative procedure of language is assumed to be derivational. Chomsky $(1992,1995,1998)$ however, weakens the assumption by positing two levels of representation - the interface levels PF (Phonetic Form) and LF (Logical Form). A stronger derivational approach is proposed in Chomsky (1999) and Uriagereka (1999) which will be discussed in section 2.1.4

Assuming a derivational approach leads to the question of economy considerations. One category "seeks to eliminate anything unnecessary:
(i) superfluous elements in representations (ii) superfluous steps in derivations". Legibility conditions require that nothing uninterpretable to the external systems remains in the derivation when it reaches the interface. For a derivation to converge it has to converge at LF and PF separately. Operations which form steps of a derivation are allowed only if the derivation would crash otherwise. Effects at the interface generally constitute the reasons for an operation to apply. Another notion of economy is computing costs of the operations of $\mathrm{C}_{\mathrm{HL}}$. Less costly operations supercede costlier ones when possible. Operations with more components -
e.g. Move- is costlier than simpler operations like Merge or Agree as we will see in section 2.1.2.3. Limiting the "search space" for computation and "local determinability" conditions also reduce computational complexity. To the former category belong notions of c-command or minimal domains, shortest move, etc. "Local determinability" conditions bar look ahead properties and back tracking. Also assumed is the inclusiveness condition which "bars introduction of new elements (features) in the course of computation: indices, traces, etc." (Chomsky 1999). This condition is however, violated in the phonological component where it is an empirical fact that features are introduced in the course of a derivation. In short, a derivation should not only converge but do so optimally.

Universal Grammar (UG) is assumed to make available a set of features $\{\mathrm{F}\}$ apart from a computational system $\mathrm{C}_{\mathrm{HL}}$ which generates expressions (Chomsky 1998). The feature set consists of both features interpretable at the interface and those that are uninterpretable. Interpretable features include the $\phi$-features of DPs/NPs while the $\phi$-features of T , the Structural Case of DPs/NPs and the EPP feature assigned to heads of strong phases (to be discussed in section 2.1.3) are features uninterpretable at the interface. For reducing the operative complexity it is assumed that each language makes a one time selection of a subset $[\mathrm{F}]$ of $\{\mathrm{F}\}$ which is then assembled into a lexicon. Each lexical item is a selection of phonological, semantic and formal features, with the latter two intersecting (Chomsky 1999). The lexicon consists of items which fall into two categories-substantive and functional. The functional categories along with uninterpretable features play a major role in deriving the property of displacement which is a unique feature of human language. Selection of a set of features and there
organisation into lexicon are loci of language variation apart from parameter settings modifying the computational procedure.

Access to the lexicon by $\mathrm{C}_{\mathrm{HL}}$ is restricted by a one time selection of lexical items (LI) for each linguistic expression. $\mathrm{C}_{\mathrm{HL}}$ maps this lexical array or numeration on to PF and LF. The computational procedure from the lexical array to LF is assumed to be uniform at a certain stage in the derivation, the features relevant to PF separate those relevant at LF. This operation-Spell-Out-is stipulated to take place once in the course of the derivation of an expression in Chomsky ( 1995,1998 ). However, a version with multiple Spell-Out is developed in Chomsky (1999) and Uriagereka (1999) which we examine in section 2.1.4.

In short any explanation of phenomena should ideally proceed from legibility conditions or design specifications such as general considerations of economy.

### 2.1.2 $\mathrm{C}_{\mathrm{HL}}$-Operations

Chomsky (1998) specifies three operations of $\mathrm{C}_{\mathrm{HL}}$-Merge, Agree, and Move.

### 2.1.2.1 Merge

An unavoidable operation of any language like system is the operation Merge which puts together syntactic objects. More specifically Merge takes two syntactic objects ( $\alpha, \beta$ ) and forms the new syntactic object $\mathrm{K}(\alpha, \beta)$ from them. Syntactic objects are either drawn from the lexicon or formed by the prior application of Merge. For the new syntactic object formed by Merge to undergo further Merge, it needs a label which $\mathrm{C}_{\mathrm{HL}}$ can access. This label is
determined by the category of the syntactic object which projects when Merge has taken place. In other words, $\alpha$ or $\beta$ projects to form the label of $K$ $(\alpha, \beta)$. Merge establishes the relations Sister and Immediately Contain among constituents. The relations Contain, Identity, and C-command are derived via the operation of transitive closure (Chomsky 1999). A bare phrase structure is assumed with no non-branching projections and stipulated relations. "A category that does not project any further is a maximal projection XP, and one that is not a projection at all is a minimal projection $\mathrm{X}^{\mathrm{min}}$; any other is an $\mathrm{X}^{\prime}$..." (Chomsky 1995). A category $\mathrm{X}^{\mathrm{min}}$ is a terminal element. Chomsky 1995 does away with the X-bar theory deriving the properties and relations expressed in a phrase marker from the way operation Merge applies.

### 2.1.2.2 Agree

We mentioned earlier, that displacement is a unique feature of human language. It involves uninterpretable features of functional heads and Structural Case of DPs/NPs which is also assumed to be uninterpretable at the interface. The uninterpretable features need to be checked and deleted for a derivation to converge. The operation Agree establishes a relation "between $\alpha$ and $\beta$, where $\alpha$ has interpretable inflectional features and $\beta$ has uninterpretable ones which delete under Agree" (Chomsky 1999). This operation has replaced the earlier covert movement. A head with uninterpretable features probes its domain for a goal with matching features. Matching is defined as "feature identity", i.e., "identity of the choice of feature, not of value". The domain of a probe is its sister. To induce Agree the matching pair has to satisfy locality constraints which reduces to "closest c-command". "If probe $\alpha$ matches inactive $\beta$ which is closer to $\alpha$ than
matching Г" Agree is barred (Chomsky 1999). However, "the terms of the same minimal domain are "equidistant" to the probes". The minimal domain of a head H is defined as follows.
(2) The minimal domain of a head H is the set of terms immediately contained in projections of H .

The goal is active only if it has some uninterpretable feature to be checked and deleted. The goal, in checking the uninterpretable features of the probe, gives values to the features, and its own uninterpretable feature is valued and deleted. Matching is an all or nothing phenomena. Chomsky 1999 states "Maximise matching effects." Let us examine (3) an example from Chomsky (1998).
(3) There was elected an unpopular candidate.

In (3) the probe $T$ finds a matching goal in "an unpopular candidate". The $\phi$ features of the goal value and delete the uninterpretable features of the probe T. On the other hand, its own uninterpretable Structural Case is valued and deleted by the probe. The EPP feature of T which requires the presence of a category in its specifier position is satisfied by the Merge of the expletive, as the lexical array/numeration contains the expletive "there" and Merge is less costly than Move (as we will see in the next section). The uninterpretable person feature of the expletive is checked and deleted by T. However, the uninterpretable features of T cannot be valued by the expletive as it has no features other than the person feature. In the absence of the expletive in the
lexical array/numeration the EPP feature would trigger the displacement of the phrase containing the goal. Agree does not involve displacement.

### 2.1.2.3 Move

The most complex operation of $\mathrm{C}_{\mathrm{HL}}$ is Move with three components-Piedpiping, Merge, and Agree. "The combination of selection of $P(G)$, Merge of $\mathrm{P}(\mathrm{G})$, and feature-deletion under match(Agree) is the composite operation Move..." Chomsky (1998). As mentioned earlier, Move is triggered by the EPP feature assumed to be optionally assigned to the heads of strong phases discussed in section 2.1.3. The EPP feature requires the presence of a category in the specifier position. It identifies the phrase containing the goal to be Pied-piped and Merged in the specifier position. In the operation Move three sets of uninterpretable features come into play- (a) the uninterpretable features of the probe; (b) the uninterpretable features of the goal; and (c) the EPP feature of the probe. Let us examine (4) taken from Chomsky (1998).
(4) T be an unpopular candidate.

The T merged with the copula headed phrase in (4) has an uninterpretable $\phi$ set and the EPP feature. With no expletive in the lexical array/numeration the operation Move is triggered by the EPP feature of T. The uninterpretable $\phi$-set of T (the probe) identifies the $\phi$-set of "an unpopular candidate" as the matching goal. The unchecked Structural Case of the goal renders it active. The EPP feature identifies the phrase containing the goal to be pied piped, i.e., "an unpopular candidate". Thus we have (5).
(5) An unpopular candidate was elected t.

In (5), the complement of "elect" has undergone movement to the specifier position of T. The complexity of Move makes it costlier than Merge, Agree, or a combination of the two and therefore when possible is substituted by latter.

### 2.1.3 CFCs and the Notion of Phases

The lexicon, as mentioned earlier, is assumed to consist of substantive and functional categories. Chomsky (1998) identifies the core functional categories to be " C (expressing force/mood), T (tense/event structure), and $\mathbf{v}$ the "the light verb head of transitive constructions". T and $\underline{v}$ have agreement features which are uninterpretable. C can optionally possess such features. Regarding the selectional properties of CFCs, it is assumed that $C$ can either be unselected or selected by substantive categories. T is selected either by C or V . When selected by the former, T has a full complement of agreement features. T is defective if selected by $\mathrm{V} . \mathrm{y}$ can only be selected by a functional category. Apart from selecting verbal elements v can also select an NP/DP as its external argument. Each CFC allows an extra specifier beyond its sselection. This is selected by its EPP feature. T is assumed to be universally assigned an EPP feature. For C and $\underline{\mathrm{v}}$ it is optional. It is also assumed that only the EPP feature of T can be satisfied by the pure Merge of an expletive. For $C$ and $\underline{v}$ the EPP feature can be satisfied only through the complex operation Move. This is derived from the theta-theoretic principle (6).
(6) Pure merge in theta position is required of (and restricted to) arguments.

This principle prevents the merge of non-arguments in $\theta$-positions and that of arguments in non- $\theta$-positions.

The notion of phases, as Chomsky $(1998,1999)$ defines it, is linked to the notion of CFCs. The access of $\mathrm{C}_{\mathrm{HL}}$ to the lexical array is restricted by the selection of subarrays successively. A subarray "should determine a natural syntactic object SO" (Chomsky (1998)). The SO is assumed to be "the closest syntactic counterpart to a proposition: either a verb phrase in which all theta roles are assigned or a full clause including the tense and force." In short, it is assumed that a selection of lexical subarray contains one occurance of C or $\mathbf{v}$. Selection of $C$ determines a clause and that of $\mathbf{v}$, a verb phrase with a complete set of features. TPs and unaccusative/passive verb phrases which lack agreement features are not phases. Phases are assumed to satisfy a strong cyclicity condition specified in (7).
(7) The head of a phase is "inert" after the phase is complete, triggering no further operations.

In other words, once a phase is completed the head cannot function as probe anymore. It is further assumed that once a phase is completed its domain is inaccessible for further operations. The "phase-impenetrability condition" is stated as follows.
(8) In phase $\alpha$ with head $H$, the domain of $H$ is not accessible to operations outside $\alpha$, but only H and its edge. (Chomsky 1998)

In (8) $\mathrm{HP}=[\alpha[\mathrm{H} \beta]]$. The domain of H is taken to be $\beta$, and $\alpha$ consisting of one or more SPECs to be its edge. This notion of phases plays an important role in the theory of Multiple Spell Out developed in Chomsky (1999) and discussed in the next section.

### 2.1.4. Theory of Multiple Spell-Out

Chomsky (1995, 1998) posits two levels of representation PF and LF, thus adopting a weaker derivational approach. In Chomsky (1999), however, a stronger derivational approach with a multiple application of the operation Spell-out is proposed. In the earlier theory, Spell-out is stipulated to apply only once in the course of a derivation. Chomsky (1999) identifies the Spellout domains to be the strong phase levels in the derivation stipulated to be CPs and v*Ps (light verbs with all the relevant features). Spell-out is assumed to take place at the next higher strong phase.

Another version of the theory of Multiple Spell-Out (MSO) is developed in Uriagereka (1999). This version is developed to deduce Kayne's (1994) Linear Correspondence Axiom. Uriagereka (1999) proposes MSO as a fall-out of the PF interface condition of linearization. Since linearization is necessary for convergence at PF, Spell-Out applies each time before a linearizable object becomes non-linearizable by the operations of $\mathrm{C}_{\mathrm{HL}}$. A linearizable object as Uriagereka (1999) defines it, is formed by the continuous application of Merge to the same object as in (9).
(9)(a)

(b)


The element ' $g$ ' in ( $9(\mathrm{~b})$ ) is not formed separately by the application of merge as in (10(a)).
(10)(a)

(b)

(c)


In (9(b)) there is a single command unit where command is essentially a relation "I have merged to your ancestors". (10(c)), on the other hand, consists of two command units of which one is (10(a)). The assumption is that only CUs are linearizable as precedence is linked to command.
(11) If A commands B, then A precedes B.

Apart from command, we assume the Head Parameter (HP) to affect linearization. The HP determines the order of a head and its complement. The HP also influences Spell-Out by Principle (12).
(12) A Command Unit must instantiate a unique setting of HP.

The projection of a head with a head final parameter setting cannot be part of a CU containing another head with a different setting. In other words, projections of heads with different settings will spell-out separately.

Spelling out CUs separately leads us to the problem of linking them. In other words, once a CU is spelled out, how does it merge to a still 'active' phrase marker. Uriagereka (1999) proposes two solutions-a conservative one and a radical one. According to the former, the collapsed phrase marker is no longer phrasal. Its terms are visible for interpretation but not for operations of $\mathrm{C}_{\mathrm{HL}}$. It is treated as a word level category for the purposes of further computation, i.e., it is opaque. The word like status of a spelled out CU is derived by Uriagereka (1999) from set theoretic notions. Collapsing a syntactic object $\{@\{\mathrm{~L}, \mathrm{~K}\}\}$ with L and K as terms and @ its label, we get $\{@<\mathrm{L}, \mathrm{K}>\}$ which is equivalent to $\{@,\{\{\mathrm{~L}\},\{\mathrm{L}, \mathrm{K}\}\}\}$. Uriagereka defines terms as follows.
(13) $K$ is a term if and only if (a) or (b):
(a) Base: K is a phrase marker.
(b) Induction: K is a member of a member of a term.
$\{@\{L, K\}\}$ is a term through (13(a)). L and K are also terms by (13(b)) while @, the label, is a member of the first term and so not a term. In the collapsed object L and $\{\mathrm{L}, \mathrm{K}\}$ are terms by (13(b)). However, $\{\mathrm{L}, \mathrm{K}\}$ without a label is not a syntactic object. The collapsed structure cannot be a syntactic object as one of its terms is not a syntactic object. The only way it can be a syntactic object is by functioning as a word with its internal structure opaque.

The radical proposal leaves inter-phrasal association to the performative components. The spelled out CUs are assumed not to merge into a single
structure. They remain separate. Inter-phrasal association is done via agreement. Agreement links the CUs, split by Spell-Out, to their interpretation sites in the larger structure. Agree is assumed to be "a rigidly unique address".

Uriagereka (1999) assumes a dynamically split model where Spell-Out sends chunks of structure to PF and LF. Though linearization is a PF condition, Uriagereka assumes a collapsed structure at LF also. Spell-Out, then involves collapsing the command unit before it is split into LF and PF relevant parts. A collapsed structure is not necessary at LF. While examining the PF and LF effects of MSO, Uriagereka points out phenomena where "adjacency of cascades for PF, (and) 'top' of CUs for LF' are relevant. While selection takes into account the label which constitutes the "top" of a CU without any reference to the constituents within it phonological phenomena such as realisation of clitics reveals that it is adjacency of cascades that matters at PF . A Galician example is given in Uriagereka (1999).
(14) vimo-lo pallasos chegar
saw.we-the clowns arrive
"We saw the clowns arrive."

The determiner in (14) is cliticised to a thematically unrelated head. However in the Phonological component they form the edges of two adjacent cascades. This could very well be an indication that collapsing and
linearization are part of the PF component and not common to both PF and LF.

The conservative version, as mentioned above, assumes the spelled out CUs to behave like lexical compounds for further computation. One question that arises in this version of MSO is regarding the continuation of the Spelled out CU in the computational space. Instead of making further assumptions, we adopt the radical version which also provides motivation for the existence of agreement in language. The Spelled out structure disappears from syntax and is linked to the rest of the structure via agreement.

The problem of linking up the separate CUs remains. Uriagereka (1999) suggests a possible place holder [D] with which a Spelled out CU agrees. It is this [D] which undergoes Case-checking, etc., in syntax. Even after the collapse of the structure at PF , the categorial place holder [D] remains visible and the Spelled out CU can be linked to the mother CU.

We hold that Spell-Out domains to be determined by Merge (CU), phase and HP.

### 2.1.5 Linearization in the PF Component and PF-Movement

We assume CUs to collapse and linearize in the PF component. As we have seen in the previous section Uriagereka (1999) holds that precedence is linked to command (See 11). We modify this by assuming the HP to determine the relation between the head and its complement. Command

$$
\begin{gathered}
\text { Diss } \\
\text { Po } \\
\hline 22,5
\end{gathered}
$$

determines the order of Specifiers and adjuncts. The HP and command interact to derive the basic order of constituents in a sentence.

Discourse phenomena like focus are argued to be licensed in the PF component (Kidwai 1999). In positional focus languages like Malayalam and Hindi-Urdu PF-scrambling brings about the necessary configuration for the checking of focus which is argued to be a [ $\mathrm{PF}[+$ Interpretable]] feature (Kidwai 1999). We assume PF-scrambling to be PF-reordering. PF-reordering operates on linearized CUs. The focus feature is licensed by adjacency to the verbal predicate. The structure formed in the PF-reordering rules are interpreted in Domain Discourse.

### 2.2. Biclausal Ápproach vs. Monoclausal Approach

### 2.2.1. A Critique of the Biclausal Approach

Madhavan (1987) adopts a biclausal approach in the analysis of Malayalam clefts. Clefts, according to him, are base-generated with a bipartite structure. In Malayalam, the bipartite structure is assumed to consist of a CP or, in his terms, a 'sentential' subject and a VP.

$$
\begin{aligned}
& \text { Nina see-PST -3SN Chandran-ACC be-PRE } \\
& \text { "It is Candran that Nina saw." }
\end{aligned}
$$

In the descriptive terms used previously, the subject CP is the cleft clause and the clefted phrase is base-generated in the VP headed by the copula.

Correspondence is established between the clefted phrase and the gap in the cleft-clause by means of an operator movement to the SPEC of the subject CP and the condition that the heads of the two arguments of the copula must agree in all respects-person, number, gender features, Case and Category. (16) is the D-Structure representation of (15) as proposed in Madhavan (1987) and (17) is the corresponding S-Structure representation.
 a:ఇ, $]]$ Nina see-PST 3SN Chandran-ACC be-PRE


The operator in [SPEC, CP] agrees with the C head of CP . The head of the subject CP and the head of the complement NP has to agree in $\phi$-features, Case and Category.

The analysis of clefts as base-generated bipartite structure crucially depends on the stipulated condition that arguments of the copula should agree in Category, Case and $\phi$-features to capture facts about the Case of the clefted phrase. The clefted phrase, being the complement of the copula, the copula would be required to check any Case which corresponds to the gap in the presupposed clause. Since this is not desirable, the other option is to say that the copula does not check Case. If so the Case feature of the clefted phrase would not be checked and erased and the derivation would crash. Moreover
assuming that derivations proceed from lexical subarrays, it cannot be explained how two clauses are selected together. If we assume that the subject CP is derived separately and then merged to the rest of the structure then the condition that arguments of the copula should agree in Category, Case and $\phi$-features cannot be derived. The monoclausal approach which involves movement of the clefted phrase overcomes the problem with biclausal approach. In the next section the monoclausal approach of Srikumar (1992, 1994a) is reviewed.

### 2.2.2. A Critique of the Monoclausal Approach

A monoclausal approach which involves movement overcomes the drawbacks of the biclausal approach while explaining the same empirical facts. Srikumar (1992, 1994a) proposes an analysis of clefts in this line. On analogy with Rochemont's (1986) analysis of English clefts, Srikumar (1992, 1994a) proposes a focus movement for Malayalam clefts. The copula is assumed to take a CP complement and the focus movement involves adjunction of the clefted phrase to the matrix VP. Assuming adjunction to matrix VP enables Srikumar to derive the linear order of constituents in clefts. Improving on the 1992 version to accomodate Chomsky's(1992) minimalist notions the movement is feature driven and checking involves SPEC-HEAD agreement, Srikumar (1994a) proposes the projection of a Focus Phrase (FP) with F as the head with a strong focus feature and IP as its complement.. The clefted phrase is assumed to move from its VP adjoined position to [SPEC, FP], while the copula moves from V-to-I-to-F. The schematic representation of (18) is as follows within this approach.


Srikumar (1994a) proposes a strong focus feature. This would require overt movement for checking. However if overt movement of the clefted phrase takes place to [SPEC, FP] and the copula moves to F we obtain empirically incorrect results with the complement $\mathbb{P}$ of F intervening between the copula and the clefted phrase. Moreover, postulating a Focus Phrase is problematic as the framework we adopt does not favour unconstrained postulation of functional heads. The core functional categories, as mentioned above are $\mathrm{C}, \mathrm{T}$, and $\underline{\mathrm{v}}$. Any other functional projection has to be well
motivated. While in Srikumar (1994a) the FP has IP as its complement, in Rochemont (1986) it takes a VP complement. Apart from this the details of movement as proposed in Srikumar (1992, 1994a) cannot be accepted as such within the theoretical framework we adopt. Not only does the grammar prevent adjunction, it also prevents unmotivated movement such as this adjunction to VP. The only motivation for adjunction to VP is to derive the surface order. Within the theory adopted escape hatches for successive cyclic movement are the edge of strong phases and VP is not one.

## CHAPTER THREE

## EMPIRICAL ISSUES

Before attempting an analysis of clefts within the theoretical background presented in Chapter 2, we examine in detail the empirical issues to be investigated. In section 1.2 we make a brief mention of these issues, which we now describe in the coming sections. Section 3.1 establishes the clausebound and recursive nature of clefts, while section 3.2 examines scrambling facts. WH-scope is examined in section 3.3. Section 3.4 looks into the nature of the particle ato and the problems with the existing analyses. In section 3.5 we describe the differences and similarities between a precopular focus and any preverbal focus in Malayalam, a positional focus language.

### 3.1 Clefting - Clause Bound and Recursive

In Malayalam, clefting is clause bound and can be recursive as revealed in the data given below. The clefted phrase should belong to the cleft-clause and in a complex sentence it is possible to cleft the embedded clauses along with the matrix clause.
ra:vanən si:taye a:ŋə kattațo
Ravan Sita-ACC be-PRE steal-PST-3SN
"It is Sita whom Ravan stole."
(2) ravi a:ఇə ra:vanan si:taye a:そə kattata

Ravi be-PRE Ravan Sita-ACC be-PRE steal-PST-3SN
enña paranata
that say-PST-3SN
"It is Ravi who said that it is Sita whom Ravan stole."
(3) *ravi a:ఇə ra:vanan si:ṭaye kattaṭə eñnə

Ravi be-PRE ravan Sita-ACC steal-PST-3SN that paranu
say-PST
(4) *ravi ra:vanan a:nə si:taye kattu enñə

Ravi Ravan be-PRE Sita-ACC steal-PST that patajuata
say-PST-3SN
(1) consists of a single clause which is clefted. In (2) the embedded clause which is a complement of paranu"said" is also clefted, apart from the matrix clause. In the ungrammatical (3) ravi the subject of the matrix clause is focused. However the enclitic/particle glossed as 3 SN is suffixed to the predicate of the embedded clause. In other words, the cleft clause belongs to the complement of paranu "said" while the clefted phrase is part of the matrix clause. In (4) the enclitic/particle ato is attached to the matrix clause, while the copula is adjacent to a constituent of the embedded clause.

Clefting, in short, is strictly clause bound and it can recur depending on the number of clauses in a sentence.

### 3.2 Scrambling in Clefts

Malayalam is a free word order language with a default SOV order of constituents. As in languages like Hindi-Urdu (Kidwai 1999, 2000), Malayalam allows dislocation of arguments to the left as well as to the right of the verb. For example, (5) can have the word order variants given in (6).
(5) hari ravikk pustakam koduttu

Hari Ravi-DAT book give-PST
"Hari gave Ravi the book".
(6)
a) hari pustakam ravikkə kodututu
b) ravikkə hari pustakam koduttu
c) ravikkə pustakam hari koduttu
d) pustakam ravikkə hari koduttuy
e) pustakam hari ravikkə koduttu
f) hari ravikkə koduttu pustakam
g) hari koduttu ravikkə pustakam
h) ravikkə pustakam koduttu hari
i) hari pustakam koduttur ravikkə
j) hari koduttu pustakam ravikkə

A similar scrambling pattern is allowed in the clefts of the language. For example, (7) can have the word order variants in (8) which are similar to those in (6).

| (7) hari a:nə | ravikkə pustakam | koduttatə |
| :--- | :--- | :--- | :--- | :--- |
| Hari be-PRE | Ravi-DAT book | give-PST-3SN |
| "It is Hari who gave Ravi the book." |  |  |

(8)
a) hari $a: \eta ə$ pustakam ravikkə koduttatat
b) ravikkə hari $a: \eta \ni$ pustakam koduttata
c) ravikkə pustakam hari $a: n \partial$ koduttata
d) pustakam ravikkə hari $a: \eta \partial$ koduttato
e) pustakam hari $a: \eta ə$ ravikkə koduttata
f) hari $a: \eta \partial$ ravikkə koduttata pustakam
g) hari $a: \eta \partial$ koduttatatə ravikkə pustakam
h) ravikkə pustakam koduttata hari $a: \eta$ º
i) hari $a: \eta$ ə pustakam koduttotatə ravikkə
j) hari $a: \eta \partial$ koduttatatə pustakam ravikkə

Kidwai(1999) links scrambling with positional focus. In (6), the argument in the position are focused. The leftward scrambled arguments in (6a-e) are usually interpreted as Topics--definite and specific. However, rightward
scrambling lacks these effects in interpretation. In (8) the precopular constituent is focused. In (8b-e) the constituents preceding hari can be interpreted as topics. While rightward scrambling of arguments is not a favoured strategy for focusing in non-clefts, apparent rightward scrambling of the clefted phrase along with the copula in (8(h)) is by no means marked. Word order variants in (6) and (8) are usually judged to be entirely optional and discourse driven. In the clefts in (8), however, the clefted phrase and the copula necessarily occur adjacent to each other.

### 3.3 WH-scope in Clefts

Wh-phrases are assumed to carry inherent focus (Rochemont 1978,1986; Horvath 1981; Rizzi 1990, 1997). Rochemont (1986) gives conceptual and empirical arguments for considering wh-phrases as foci-"...the wh-phrase may be informally viewed as a kind of vacuous operator, binding an open position in a proposition for which the speaker intends the audience to provide an appropriate value-the focus, or new information." Empirical support comes from languages where wh-phrases occupy focus position as in Aghem and Hungarian. Rizzi (1997) assumes wh-phrases to be naturally focused as their presence prevents the focusing of other constituents in a sentence. Assuming the clefted phrase to contain focus an inherently focused wh-phrase necessarily occurs in the focus position as in (9).
(9) ra:d ${ }^{\text {ha }}$ a:re $\mathrm{a}: \bigcap_{2}$ kandatat
Radha who-ACC be-PRE
see-PST-3SN
"Who is it that Radha saw?"


In (9) the clefted phrase consists of the question word, while in (10) the question word is part of the cleft clause. The cleft-clause contains "presupposed" information and the wh-phrase cannot be part of it.
In embedded clauses, wh-phrases can receive either a wide-scope or a narrowscope reading when the clause containing it is focused as in (11).

| (11) ra:d ${ }^{\text {ha }}$ a:rə vi:tul pokum | ennə | a:ఇə paranatə |  |
| :--- | :--- | :--- | :--- | :--- |
| Radha who home go-FUT | that | be-PRE | say-PST- | 3SN

"(lit.) Who will go home is it that Radha said"

However, as (12) shows, if the complement clause is not focused the whphrase in it can have only a narrow scope.
(12) ra:d ${ }^{\text {l2 }}$ a:nə a:rə vi:ttil pokum ennə paranata

The focusing of the complement clause containing the wh-phrase enables it to have a wide-scope reading in (11). Note that a corresponding cleft is not allowed in English.
(13) *Who will go home is it that Radha said?

## 3.4 ațə -- a Co Nominalizer or a D/DP Pronominal

In Malayalam clefts an element putatively homophonous to the third person neuter pronominal is found suffixed to the cleft clause.

| ravi | a:nə | kuppi | potticatə |
| :--- | :--- | :--- | :--- |
| Ravi | be-PRE | bottle | break-PST-3SN |

"It is Ravi who broke the bottle."

This element has been standardly analysed as a $\mathrm{C}_{\mathrm{O}}$ with a nominal feature matrix dominating the clause (Madhavan 1987, Srikumar 1992, 1994a). The feature matrix is assigned values only when no overt nominal follows the Co.
(15)(a) kuppi potticca payyan vannu
bottle break-PST boy come-PST
"The boy who broke the bottle came."
(b) kuppi potticcavan vannuu
bottle break-PST-3SM come-PST
"He who broke the bottle came."

In (15(a)) the participial kuppi potticca modifies the nominal payyan. In the absence of the nominal in (15(b)), the feature matrix in the CP is valued as third person singular masculine avan. An obvious problem with the analysis is that the selectional properties of the predicate are not satisfied. Instead of a $\mathrm{DP} / \mathrm{NP}$ argument, it has a CP. However, the sentence is grammatical.

Another empirical fact that needs to be noticed is that the " CP " argument is Case-marked.
(16) na:n raviye kandavane kandu

I Ravi-ACC see-PST-3SM-ACC see-PST
"I saw the one/him who saw Ravi."

In (15a) the participial clause modifies a nominal. In (15b), if the features are part of the participial clause, there is no nominal to modify. We argue that the $\mathrm{C}_{\mathrm{O}}$ nominal features are $\mathrm{D}_{\mathrm{O}}$ pronominals (see section 4.1.1).

### 3.5 Copula and Focus

Clefts in most languages have the focused phrase adjacent to the copular form of that particular language. In English, the clefted phrase occurs in the post copular position while in Malayalam it occurs in the precopular position. Malayalam is a positional focus language (Jayaseelan 1989,1995) with the preverbal position designating focus even in non-cleft constructions. Like Hindi-Urdu, Malayalam can identify focus morphologically and also by means of prosody. A wh-phrase, which is inherently focused occurs in the preverbal position.
(17) avane a:rə kandu
he who see-PST
"Who saw him?"
avan a:rə a:nə
he who be-PRE
"Who is he?"
(19) *a:rə avan a:ఇŋ

In (17) the wh-phrase occupies the preverbal position. (18) is a non-cleft construction and has the wh-phrase in the precopular position. It contrasts with (19) where the wh-phrase is not in the precopular position. The precopular position being the focus position in clefts could be an extension of this general phenomenon.

However, unlike other pre-verbal foci, a pre-copular foci receives a contrastive interpretation as observed in the following discourse contexts.
(20) A ninakkə ento patti
you-DAT what happen-PST
"What happened to you?"

B enne ra:d ${ }^{\text {b }} \mathbf{a}$ talli
1S-ACC Radha hit
"Radha hit me"

C \#enne ra:d ${ }^{\text {h }} \mathbf{a}$ talli
(21)A ninne a:rə talli

2S-DAT who hit-PST
"Who hit you?".

| B | enne | ra: $\mathrm{d}_{\mathrm{N}}{ }^{\text {a }}$ | talli |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1S-ACC | Radha | hit |  |
|  | "Radha hit me" |  |  |  |
| C | \#enne | $\mathrm{ra}: \mathrm{d}^{\text {h }} \mathrm{a}$ | talli |  |
| D | enne | ra: ${ }_{\sim}^{\text {b }}$ b | a:nə | talliyato |
|  | 1S-ACC | Radha | be-PRE | hit-PST-3SN |
|  | "It is Radha that hit me" |  |  |  |

(22) A ra:d $d_{\pi}^{\text {lh }}$ e:tə $\quad$ a:nə Radha which be-PRE "Which is Radha?"

B aval
a:nə
ra: $\mathrm{d}^{\mathrm{h}} \mathrm{a}$
She
be-PRE Radha
"She is Radha."
$C$ aval a:no ra: $\tilde{\mu}^{\text {h }} \mathrm{a}$

In $1, r a \cdot d_{n}^{h} a$ is the information focus (in the sense of Kiss (1998)) of the sentence $B$. A heavy stress on the phrase (in bold) in $C$ renders it contrastive. However, in the discourse context of (1), C is infelicitious. In the context of $2, A, B, C$ and $D$ are felicitious. In $3, B$ is ambiguous between presentational or contrastive reading of aval. However, the latter is preferred. With the
heavy contrastive stress aval in C the focus is disambiguated between a contrastive and presentational interpretation. In short, the pre-copular position has a preferred contrastive focus interpretation. This should preferably be attributed to the nature of the copula.

To conclude, in this chapter we have attempted a detailed investigation of the empirical issues to be addressed in deriving clefts within the theoretical framework we adopt and develop in Chapter 2. We attempt to derive the scrambling and scope facts from discourse driven PF phenomena. That clefting is clause-bound is to be derived from the mechanism of operation Spell-Out and the way PF-reordering takes place.

## CHAPTER FOUR

## DERIVING CLEFTS

In the Chapter 2 we have outlined the theoretical background assumed in the analysis of Malayalam clefts attempted here. In deriving the cleft-construction we examine the structure of the ataclause (4.1.1) and the clause containing the copula (4.1.2). Their structure being determined by the multiple application of Spell-Out and linearization in PF (4.1.3). We examine the interpretive effects of clefting mainly attributed to the exhaustive identification function of the copula and the presupposed nature of the cleft-clause.

### 4.1 The Derivation of Cleft- Construction

In deriving clefts we find two distinct approaches, as we have already mentioned-a biclausal approach and a monoclausal approach. In both the approaches the structure of the clefts with the clefted phrase adjacent to the copula, has been derived syntactically. In other words, assignment of focus is assumed to be syntactic. The structure is so derived that the adjacency requirement between the copula and the focused phrase is achieved. In Madhavan (1987) the adjacency is achieved by base generation at D-Structure while in Srikumar (1992, 1994a) it is achieved via movement to positions which would give the required surface order. While in the above analyses, the structure of the clefts, the nature of the copula and the position of focus are dealt with solely from the perspective of clefts, we argue that the properties of
the language existing independently, interact to derive clefts. These properties are not particular to cleft-constructions.

### 4.1.1 The ata - Clause

As pointed out, clefts in Malayalam have a suffix, homophonous to the third person singular neuter pronominal, attached to the predicate of the cleft clause, as in (1).

| (1) ravi a:nə sitakk | pustakam | koduttato |
| :--- | :--- | :--- | :--- | :--- |
| Ravi be-PRE | Sita-DAT book | give-PST-3SN |
|  | "It is Ravi that gave a book to Sita." |  |

This suffix is standardly analysed as the spelling out of a nominal feature matrix in $\mathrm{C}_{\mathrm{O}}$. Case and selectional properties indicate otherwise as we see in section 2.3.1.

The pronominals in Malayalam are given in (2).
(2) (a) na:n - $1 S$
(b) nanal - 1 P
(c) $\mathrm{ni}: \quad-\quad 2 \mathrm{~S}$
(d) ninal - 2 P
(e) avan - 3 SM
(f) aval - 3 SF
(g) avar - 3 P
(h) ata - 3SN
(i) atuyal- 3 PN

All these pronominals can be modified by participial clauses. A couple of examples are given below.
(3) avide poya ni: ... there go-PST 2 S
"You who have gone there ..."
(4) payane ' kanda enṇe...
boy-ACC see-PST 1S-ACC
"I who have seen the boy..."
(5) si:taye kanda nanalodu...

Sita see-PST 1P-to
"To us to have seen Sita..."

In (3) the modified nominal is second person singular pronominal in the nominative case, in (4) it is the first person singular pronominal in the accusative case and in (5) it is the first person plural pronominal in the locative case. The $\mathrm{C}_{\mathrm{O}}$ feature matrices are homophonous to the pronominals. From the above data it can be safely assumed that instead of being feature matrices in $\mathrm{C}_{0}$, they are pronominals. This could be extended to the -ata suffix in cleft constructions. The structure of the ataclause is schematically represented in (6) (irrelevant details are suppressed in all the schematic representations).
(6) [ ${ }_{\mathrm{DP}}\left[{ }_{C P}\right.$ ravi sitakkə pustakam koduttu $\left.{ }_{\mathrm{CP}}\right]$ ata $\left.{ }_{\mathrm{DP}}\right]$

Longobardi (1994) shows that pronominals are D elements and are referential. They refer to something in the context of discourse. If so, in a cleft construction it could be argued that the clause to which the -ato is suffixed denotes what the pronoun refers to. Being neutral in gender, the third person singular neuter pronoun ata refers not only to individual objects but also to propositions. If the whole proposition precedes the copula, then either the entire proposition or the predicate is contrastively focused as in Propositional Focus Constructions mentioned in Srikumar (1992). If the clause is clefted, the constituent preceding the copula would be contrastively focused while the rest of the clause is 'presupposed'. The interpretation that it is presupposed is assumed to tie up with the clause functioning of a CP as a restriction on the reference of the pronominal. The functioning as a restriction on a DP is developed in Dayal (1996) while discussing Hindi finite clauses. We adopt the basic idea to link up the pronominal and the CP preceding it to which intuitively $a t o$ refers. In short, the pronominal selects for a CP. We argue this CP to be a weak phase lacking force. The complementizer enno cannot intervene between koduttu and ato as in (7).
(7) *ravi a:nə sitakkə pustakam koduttu ennə ațə

Ravi be-PRE Sita-DAT book give-PST that 3SN
"It is Ravi that gave a book to Sita."

A question particle is also not allowed as in (8) below.
(8) *ravi a:nə sitakkə pustakam kodutto Ravi be-PRE Sita-DAT book give-Q

In short, we assume the CP selected by the D ata to lack force and is therefore a weak phase. In other words, Merge would continue to apply after the completion of the CP without the Spell-Out of its domain.

### 4.1.2 Copula

The clefted phrase or the phrase containing the identificational focus occurs adjacent to the copula. Malayalam is a positional focus language (Jayaseelan 1989, 1995) with the pre-verbal position designating focus. The precopular focus position is, in other words, not unique to the copula. The copula being a verbal element, the position preceding it is a focus position like that preceding any other verbal element.

The copula is assumed to be a monadic predicate. It selects a DP complement. Lacking a full complement of features, the vP dominating the copula is argued to be a weak phase like unaccusative and passive vPs (Chomsky 1998, 1999). It does not select for an external argument. The complement is not assigned any Case. The derivation of the clause with the copula as a predicate is given in (9).


As Spell-Out applies to the domain of strong phase heads, the derivation would continue till strong phase CP is completed. Once it is completed the TP would Spell-Out. With overt verb raising in Malayalam (Jayaseelan 1989, Madhavan 1987, Srikumar 1992, 1994a) the copula would be adjoined to T.

### 4.1.3 MSO and the Derivation of Clefts

The theory of MSO as proposed in Chomsky (1999) and Uriagereka (1999) outlined in Chapter 2 identify distinct spell out domains. However, we adopt both versions as Uriagereka's (1999) version is motivated by PF requirements while that of Chomsky (1999) is determined by selectional and checking factors primarily related to LF. The linearisation of a structure in PF is sensitive of command and the setting of the Head Parameter (HP). While HP determines the order of the head and its complement, command would determine the linear order of specifiers and adjuncts. Malayalam is a head final language with a basic SOV order. We adopt Principle (10) and assume it to interact with other factors in determining Spell-Out domains.
(10) A Command Unit must instantiate a unique setting of the Head Parameter.

A CU with a head final setting cannot be merged to a head, which takes its complement to the right. In other words, a Merged structure would Spell-Out before it further merges to a head or its projection with a different setting. In Malayalam, DPs are head initial. By (10) the DPs Spell-out separately. The step by step derivation of the ata-clause in (6) is given in (11).




In (11(a)) the $\mathrm{C}_{\mathrm{HL}}$ merges the DPs and operation Spell-Out sends them to LF and PF. (11(b)) represents the derivation upto the strong phase level $\mathrm{v} P$. The Ds in (11(b-c)) are placeholder Ds. Once the phase is completed its domain VP is spelled out. However, with overt verb raising the V would occur adjoined to T. Since we take the CP dominating the clefted clause to be a weak phase the derivation would go upto the next strong phase level before its domain is spelled out. However, as DPs Spell-Out because of PF requirements, (11(c)) is spelled out. The vP dominating the copula is a weak phase. Since the matrix CP is the strong phase dominating it derivation would continue till it reaches CP. Once the phase is completed, its domain TP would Spell-Out by our assumptions. Thus, at PF we have the CUs corresponding to the DPs and the domains of the strong phase levels corresponding to (12).
(12) (a) [vp ... ]
(b) matrix [Tp ...]
(c) $[\mathrm{CP} \ldots]$
(12(b)) contains the copula $a: \eta$.

In the PF component, the Spelled-out structures linearize. The constituents of a linearised CU are not accessible for any reordering or movement rules. The
linearised CUs can undergo PF-reordering as a whole. In other words, instead of being interpreted in the PF-component in positions indicated by placeholders, the CUs can undergo reordering and it is this reordering that is sensitive to focus. Clefting, as we have seen in Chapter 3, is a clause bound phenomenon. We derive this from the Spell-Out domains and the assumption that internal constituents of linearized CUs are inaccessible to movement. See (13).


In (13) ravi is part of the matrix clause dominating the clause containing the copula. The CP dominating this clause is strong. We assume from the presence of enno, an overt complementizer which appears to indicate the completion of the derivation of a clause. Once the CP phase is completed we assume the CUs linked to it via agreement to undergo the relevant PF reordering and become a unit. Therefore, (13) is ungrammatical where a CU which belongs to a lower CP, that has become a unit, moves adjacent to a CU from a higher structure. (14) below can also be explained by the same assumptions.

| *ravi ravanan a:no sitaye | kattu $\quad$ ennə |  |  |  |
| :--- | :---: | :--- | :--- | :--- |
| Ravi Ravan |  | be-PRE | Sita-ACC | steal-PST |

that
patanata
say-PST-3SN

In (14) [CP ravanan sitiaye kattu enna ] has become a unit having undergone the necessary PF reordering, if any. The copula that belongs to the matrix clause moves adjacent to a constituent within a completed unit.

### 4.2 Interpretive Effects of Clefting

In Malayalam, two copular forms are identified standardly (Asher \& Kumari, 1999) - a:no and undə. The following data bring out the interpretational difference between the two forms.
avan vittil a:ఇə

3SM home-in be-PRE
"He is at home."

| (16) | avan | vittil | unda |
| :--- | :--- | :--- | :--- |
|  | 3 SM | home-in | be-PRE |
|  | " He is at home." |  |  |

In (15) vittil is interpreted as contrastively focused while in (16) there is no such interpretation available. Even with heavy stress, speakers identify only an information/presentational focus, and not a contrastive one. We assume that Malayalam lexicon makes available a copular form with the features [ + exhaustive] and [+contrastive] as postulated in Kiss (1998) and one without
these features. The former is $\alpha: \eta \partial$ and the latter is unda. In other words, $a: \eta \partial$ performs an exhaustive and contrastive identification function. In Chapter 1, we mention the clefted phrase to contain the cleft focus, and the cleft clause and the non-focused material in the clefted phrase to contain information that is 'under discussion'. In other words, clefting creates a "presuppositionassertion structure" (Kidwai, 1999). Clefting, as we have seen, gives rise to a contrastive interpretation of focus. For example, see (17).
(17) A ninne
a:rə
talli
2S-DAT who hit-PST
"Who hit you?"

B enne ra: $\tilde{\pi}^{\text {ha }}$, talli
1S-ACC Radha hit
"Radha hit me."
$C$ enne ra: ${\underset{\eta}{1}}^{\text {h }} \mathbf{a} \quad$ talli

| D | enne | ra: d $^{\mathrm{h}} \mathrm{a}$ | a:ףə | talliyatə |
| :--- | :--- | :--- | :--- | :--- |
|  | 1S-ACC | Radha | be-PRE | hit-PST-3SN |

"It is Radha that hit me."

In (17) the predicate is under discussion. In such a context the question is also preferably clefted. Kiss (1998) terms contrastive focus as 'identificational focus'. The definition of 'identificational focus' is given in (18).
(18) An 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 of this set for which the predicate phrase actually holds.

One of the functions of the copula is identification. a:no, as we have mentioned, has the features [+exhaustive] and [+contrastive]. In other words, $a: \eta \partial$ performs an exhaustive and contrastive identification function and hence the focus it assigns is contrastive. The cleft-clause with the ato attached to it is interpreted as presupposed.

Let us now examine scrambling, coreference and scope facts.

### 4.2.1 Scope

The A-P and C-I systems being unitary and distinct, PF operations are not supposed to have any semantic effects. However, focus is determined by discourse and we license it at PF. This would mean that some part of the meaning is determined by PF-reorderings. Following Kidwai (1999) we argue that structures formed by PF-operations are interpreted at Domain Discourse located at the edge of PF. In Malayalam, we find scope to be indicated by linear order. For example, (19) below has a preferred wide-scope reading for the universal quantifier while (20) has a preferred wide-scope interpretation for the indefinite DP.
(19) ellavarum oru pustakam vayiccu everyone one book read-PST "Everyone read a book."
(20) oru pustakam ellavarum vayiccu one book everyone read-PST "Everyone read a book."

Clefting the universal quantifier is not acceptable. In Chapter 1 we mention this to be linked to the necessary existence of a complementary set.
(21) ellavarum oru pustakam a:ףə vayiccat̃o everyone one book be-PRE read-PST-3SN "It is one book that everyone read."

| (22) | oru | pustakam | a:ఇo | ellavarum | vayiccato |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | one book | be-PRE | everyone | read-PST-3SN |  |

"It is one book that everyone read."

In (21) and (22) the preferred scopal readings are those of (19) and (20) respectively. The contrastive focus could either be on oru or pustakam. However, the scope remains the same as in the non-clefted sentences.

Examining WH-scope, it is observed in Chapter 3 that the WH-phrases or embedded clauses containing WH-phrases have to be in the focus position in clefts to be interpreted as questions. The ungrammatical (23) reveals this.

| *rad ${ }^{\text {b }} \mathbf{a} \quad$ a:n | a:re | kandata |  |
| :--- | :---: | :--- | :--- |
| Radha | be-PRE | who-ACC | see-PST-3SN |
| "It is Radha who saw whom." |  |  |  |

Wide scope for WH-phrases in WH-in-situ languages has been recently explained by means of unselective binding were a Q -operator in $\mathrm{C}_{\mathrm{O}}$ unselectively binds all the WH-variables in the clause. At LF we assume unselective binding to be operative in the interpretation of WH-phrases. However, in the PF component a WH-phrase being inherently focused needs to occur adjacent to the copula. In non-clefts even if the WH-phrase is not positionally focused it does not lead to complete unacceptability as in (24).
(24) ravi a:rkkə pustakam koduttu

Ravi who-DAT book give-PST
" To whom did Ravi give the book ?"

However, the unacceptability of (23) can be attributed to the fact that apart from the cleft focus the rest of the clause is presupposed. The WH-phrase is a place- holder for new information in the answer (Rochemont 1986). The [+FOCUS] feature, assumed to be inherent in WH-phrases clashes with the presupposed interpretation assigned to the cleft clause.

It is observed that WH-phrases in embedded clauses can receive a wide scope reading. We attribute this to the presence of a $\mathrm{C}_{\mathrm{O}+\mathrm{WH}]}$ in the embedded clause along with a $\mathrm{C}_{\mathrm{O}[+\mathrm{WH}]}$ in the matrix clause. To receive wide scope the embedded clause has to be adjacent to the copula. If the embedded clause with the WH -phrase is not focused then the WH -phrases receive only narrow
focus. The non-focusing of the embedded clause as in (25) below (repeated from Chapter 1), does not lead to ungrammaticality because the clause itself is not a place-holder for new information.
(25) ra:d $d^{\text {h }} a$ a:rə vi:ttil pokum enne a:nə paranato Radha who home-in go-FUT that be-PRE say-PST-3SN "(lit.) Who will go home is it that Radha said."

### 4.2.2 Coreference

Malayalam scrambled sentences exhibit an overriding of Weak Cross Over effects as in (26) below.
(26) (a) avante $_{i} \quad b^{\text {b }}$ :rya $\quad$ a:re ${ }_{n_{i}} \quad$ kandu
His wife who-ACC see-PST
"Who did his wife see?"
(b) $\quad$ avante $_{i} \quad b^{\text {h }}$ a:rya $\quad$ raviye $_{x_{i / j}} \quad$ kandu
His wife Ravi see-PST
"His wife saw Ravi."
(c) avante $_{i} \quad b^{\text {ha }}$ a:rya $\quad$ a:nə raviye $_{*_{i j}}$ kandata his wife be-PRE Ravi-ACC see-PST-3SN
"It is his wife who saw Ravi."
(d) $\quad a_{i r e}^{i} \quad$ avante $_{i / j} \quad b^{\text {h }} a: r y a \quad$ kandu

Who his wife see-PST
"Who did his wife see?"
(e) raviye $_{i} \quad$ avante $_{i j}{ }^{j} \quad b^{\text {ba }}$ :rya $\quad$ kandu Ravi-ACC his wife see-PST
"His wife saw Ravi."
(f) raviye $_{i}$ avante ${ }_{i / j} \quad b^{\text {hary }}$ arya $a: \eta \partial \quad$ kandata Ravi-ACC his wife be-PRE see-PST-3SN
"It is his wife who saw Ravi."
(26(a-c)) with the binder in the focus position coreference is not allowed. In ( $26(\mathrm{~d}-\mathrm{e})$ ) with the bindee in the focus position coreference is perfectly acceptable. Although, Kidwai (1999) indicates coreference to be the result of the bindee in a focused state, in Malayalam, contrastively focusing the bindee with heavy contrastive stress as in (27) below disallows coreference. We hold that as in quantifier scope it is the linear order of the binder and the bindee that allows coreference. The binder has to precede the bindee.

(c) raviye $_{i}$ avante ${ }_{\mathbf{x}_{i j}} \quad b^{\text {ha }}$ :rya $\quad$ a:no kandata Ravi-ACC his wife be-PRE see-PST-3SN "It is his wife who saw Ravi."
(d) raviye $_{i}$ avante ${ }_{i / j} \quad b^{\text {b }} \mathbf{a}$ :rya $\quad \mathrm{a}:$ no $^{2}$ kandato

Ravi-ACC his wife be-PRE see-PST-jSN
"It is his wife who saw Ravi."

While precedence of the binder in terms of linear order allows the possibility of coreference, contrastive focus disallows such coreference as in (27). In (27(c)) the cleft focus, as defined in Chapter 1, is on the possessive pronoun and in ( $27(\mathrm{~d})$ ) it is on the head noun. Though in all cases the clefted phrase contains a contrastive cleft focus, it is only when the cleft focus is on the bindee that coreference is disallowed. Clefting raviye does not allow coreference even where it precedes the bindee.

The remedying of the WCO effects by scrambling raises the question whether there is any syntactic movement of the clefted phrase to an operator position involved. Chomsky (1998), holds that binding and coreference takes place in the C-I component. As we have seen scrambling has an effect on interpretation. Scrambling being driven by focus licensed at PF , the linear order that overrides WCO is obtained at PF. The Domain Discourse, which is assumed to interpret structures formed in the PF-component, could be argued to be the site of coreference interpretation. However, contrastive focus does not remedy WCO effects. It does not allow coreference, as we have seen in (27). Contrastive focus involves exhaustive identification. Coreference nullifies
this exbaustivity of the focus. Hence, contrastive foci are unavailable for coreference effects.

### 4.2.3 Scrambling

In Malayalam, scrambling allows all word order variations, as we have seen in Chapter 3. Scrambling has been argued to be PF-adjunction driven by the requirement to license focus (Kidwai 1999). However, we argue for PFreordering of CUs. The DPs in a clause are spelled out separately. They form independent CUs which can be reordered. In Malayalam, as in Hindi-Urdu (Kidwai 1999), leftward clause-internal argument scrambling gives a topic interpretation to the scrambled arguments. For example, in (28) either the direct object ( DO ) or the indirect object ( IO ) can be interpreted as topics.
(28) siṭakkə pustakam ravi koduttuu

Sita-DAT book Ravi give-PST
"Ravi gave the book to Sita."
(29) sitakkə pustakam ravi a:nə koduttata

Sita-DAT book Ravi be-PRE give-PST-3SN
"It is Ravi that gave a book to Sita."

In (29) the DO and IO receive similar interpretations as in (28).
(30) pustakam ravi a:ఇə sitakkə koduttatata
book Ravi be-PRE Sita-DAT give-PST-3SN
"It is Ravi that gave a book to Sita."

In (30), unlike (29), only pustakam can be interpreted as a topic while sitako is part of the presupposed information. We find a similar interpretation in (31) where the DO is scrambled to the left.

| (31) | pustakam | ravi | sitakka | koduttu |
| :--- | :--- | :--- | :--- | :--- |
|  | book | Ravi | Sita-DAT | give-PST |

"Ravi gave the book to Sita."

In (31) ravi is focused by means of stressing and the DO is interpreted as the topic. We find no difference in interpretation between the clefted and nonclefted sentences. The Domain Discourse reads off the information status of the constituents from the linear order.

We conclude by summarizing the main arguments. Focus is a discourse phenomenon. Clefting is an instantiation of focus movement, which we have argued to take place in the PF-component. Displacement in the PFcomponent is by the reordering of CUs. The pre-copular focus position is not particular to the cleft constructions in Malayalam. Being a positional focus language the preverbal position is generally a focus position. The contrastive interpretation of the clefted focus is derived from the nature of the copula $a: \eta \partial$ which performs an exhaustive identification function thereby also identifying a complementary set and establishing contrastive focus. The clause structure of clefts and its clause-boundedness are derived from the theory of MSO and linearization at PF discussed in Chapter 2. Scope and co-reference are dependent on the linear order. However, we find that the exhaustivity of the contrastive focus disallows co-reference.

It could be speculated in this context that in the PF-component nonconfigurational languages allow spelt out CUs to remain separate from the mother CUs. Rich phonological realization of Case/Agreement features is widespread in such languages. On the other hand, configurational languages like English with poor phonological realization of Case/Agreement features may merge into a single CU.

## CHAPTER FIVE

## CONCLUSION

In this dissertation we have attempted a study of Malayalam clefts from the perspective of the minimalist programme set out in Chomsky (1995, 1998, 1999). Clefts involve pre-copular focussing of a constituent which receive contrastive interpretation. The rest of the clause is interpreted to be "under discussion". Focussing is a discourse phenomena which we assume to be interpreted at the Domain Discourse. The Domain Discourse is fed with structures from the component.

The precopular focussing is part of a more general phenomenon. Malayalam is a positional focus language licensing focus in the preverbal position. The contrastive interpretation of the precopular foci, is attributed to the nature of the copula c:no. The copula a: $\eta \partial$ with the feature [+ exhaustive] performs an exhaustive identification function which also creates a complementary subset which is excluded. The contrastive interpretation results from this exhaustive identification. Coreference facts reveal that contrastive focussing of the binder or bindee disallows coreference. This is again attributed to this exhaustivity of the contrastive foci as coreference extends the set and nullifies exhaustive identification. The copula selects for a DP complement which is the pronominal $a t z$ which is realized as a suffix on a cleft clause. The pronominal being referential selects a CP as its restriction. If this clause contains a constituent which carries the [+ Focus] feature the reordering of CUs in the PF component achieves the adjacency required for licensing the feature. This reordering, in short, derives the surface order of clefts in Malayalam.

As mentioned, it is the Spelled Out CUs which undergo reordering in the PF component. We have adopted a strong derivational approach with multiple
application of operation Spell Out. The Spell Out domains have been identified in the terms of phases (Chomsky, 1999), simple merge structures (Uniagereka, 1999) and projections with unique head parameter settings. CPs and vPs with a full complement of features are held as strong phase levels. However, the CP selected by ato and the ${ }^{\mathrm{v}} \mathrm{P}$ dominating the copula are argued to be weak phases and their domains do not Spell Out. The setting of the head parameter and the requirement that CUs must instantiate a unique setting of the parameter allows the DPs in Malayalam to Spell Out separately as they have a head initial setting unlike the rest of the structure. The DPs and other CUs existing separately in the PF component can be scrambled to license discourse features.

Arguing that scrambling is the reordering of the CUs in the PF components allows us to speculate that in the PF component the Universal Grammar allows languages the option of adopting the conservative version of Uniagereka's (1999) MSO where the separately Spelled Out CUs merge into the mother CU before undergoing further operations. This would allow a natural explanation of the distinction between configurational and non-configurational languages with the latter allowing separately Spelled Out CUs to exist separately in the PF component. In the narrow syntax and LF we assume languages to be uniform in adopting the radical version. The rich phonetic realization of Case and Agreement in non-configurational languages could be a reflex of this as independently existing CUs are assumed to be linked to the mother CU via agreement.

To conclude, we derive the properties of clefts from independently existing properties of the language -- the clause structure of the language, the nature of the copula and positional focus.

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