CHAPTER FOUR

COORDINATION IN MALAYALAM

4.0 Introduction

The explanatory adequacy of any theory of grammar lies in answering the question: Why are the facts of a particular language A different from the facts of some other language B with respect to certain properties? The search for an answer to this question throws considerable light upon the nature of UG. Each of the sub-systems of UG contains principles with a limited degree of parametric variation. Through the interaction of these subsystems, many properties of particular languages can be accounted for. It can be seen that there are certain complex properties typical of particular types of language; such collections of properties should be explainable in terms of the choice of parameters in one or other sub-system.

So far, we have been discussing the facts of coordination in English. By proposing the ECP account of coordination we were able to show that coordinate structures fall in line with other structures and that there are no specific rules or conditions that are unique to these structures. Now we would like to extend our analysis to the facts of coordination in other languages as well. It is in this
perspective that we propose to examine the facts of coordination in Malayalam, a language different from English in certain respects. The focus of our discussion in this Chapter will be the range of parametric variation with respect to certain properties associated with coordination in these two languages.

4.1 General properties of Coordination in Malayalam

The coordinator used for conjunction in Malayalam is a suffixal -um; for disjunction, there is a suffixal -oo. An obvious difference between the coordinators in English and those in Malayalam is that the latter have to appear after each of the conjuncts in a coordinate structure whereas in English the coordinator does not show up with every conjunct. More crucially, in English, the initial coordinator in a coordinate construction is obligatorily deleted. Notice that the coordinators in Malayalam are clitics. As we suggested earlier, clitic coordinators cannot be deleted. See the illustrative examples below:

(1) a. raaman -um siita -yum
    Raman and Sita and
    "Raman and Sita"
b. *raaman -um siita

c. *raaman siita -yum

(2) a. raaman -oo siita -yoo
    Raman or Sita or
    'Raman or Sita'

b. *raaman -oo siita

c. *raaman siita -yoo

4.1.1 Phrasal Coordination

Phrasal categories like NP and PP can be conjoined using -um or -oo.

(3) a. [[[ ente makan ] -um ] [[ ninte makal ] -um ]]_NP
    my son and your daughter

b. [[[ ente makan ] -oo ] [[ ninte makal ] -oo ]]_NP

    hand-in and head-in and
    'in hand and on head'

b. [[[ kayy-il ] -oo ] [[ tala -yil ]-oo ]]_NP
    'in hand or on head'
However, there seems to be a problem with VP-coordination especially when the conjoined VPs are tensed. That is, VPs can be conjoined with -um only when they are not tensed. See (5) alongside (6):

(5) **aval [[[ paattu paadunnu ] -um ] [[ panam
  she song sing-pres. and money
  sampaadikkunnu ] -um ]]_VP
  earn-pres

  'She sings songs and earns money'

(6) aval [[[ paattu paaduwaan ] -um][[ panam
  sampaadikkwaan] -um ]] tudaññi

  'She began to sing songs and earn money'

-uwaan in (6) may be treated as analogous to the for-to infinitive in English (cf. Jayaseelan (1985)). In that case (6) may be treated as an instance of clausal coordination. In fact, we are going to argue that VP coordination is not possible in the language. We will take up this point in the next section.
We do not find examples of AP-coordination in Malayalam since the language does not have adjectives (cf. Anandan (1985)). The 'so-called' adjectives in Malayalam are relative clauses. However, these cannot be conjoined.

   she black and red and
tunikal istappedunnu
clothes like-pres.
'She likes black and red clothes'

tunikal istappedunnu
'She likes black or red clothes'

There are a few marked adjectives in the language like nalla 'good', putiya 'new', pazaya 'old', valiya 'big', ceriya 'small'. Even these cannot be conjoined.

   
   b. *[[[ nalla] -oo] [[ putiya ]-oo ] ]_{AP}

(9) a. *[[[ valiya ] -um ] [[ ceriya ] -um ]]
   
   b. *[[[ valiya ] -oo ] [[ ceriya ] -oo ]]
4.1.2 **Lexical Coordination**

Let us now consider the types of $X_0$ categories that can be conjoined.

(10) a. [[[ kadalaas ] -um ] [[ peena ] -yum ]]$_N$
    'paper and pen'

    b. [[[ kadalaas ] -oo ] [[ peena ] -yoo ]]$_N$
    paper or pen

    'before and after'

    b. [[[ mump ] -oo ] [[ pimp ] -oo ]]
    'before or after'

    'three and four'

    b. [[[ muunn ] -oo ] [[ naal ] -oo ]]
    'three or four'
As in the case of VP-coordination, we maintain that V-coordination is also nothing but clausal coordination. For instance consider (13).

(13) ńaan maanja veevicc-um uppilitt-um tinnu
      I mango cooked-and pickled-and are

Though veevicc-um uppilitt-um appears like a [V and V and] sequence, it can be treated as a case of clausal coordination (cf. 14):

(14) ńaan₁ maanja₁ [ e₁ e₁ veevicc-um ] [ e₁ e₁ uppilitt-um ]₂ tinnu

Consider once again (12) which involves the coordination of quantifiers. Notice that quantifier expressions can be conjoined when these are number expressions or numerals (cf. 12), but not when the coordinate structure involves quantifiers like oru 'a', cila 'some', ellaa 'all', pala 'many'. In English an expression like (15) is possible which does not have a counterpart in Malayalam.

(15) He examined each and every item in the list.

(16) *avan listile ooroo-um ellaa-um inam parisoodiccu
Since lexical items like quantifiers, adjectives and determiners can appear as NP specifiers, it is worth examining these in terms of coordination. Despite the limited range of coordination of NP specifiers across languages, specifiers in English are readily conjoinable. Excepting the number expressions/numerals and possessives none of the NP specifiers in Malayalam can be conjoined. See the following paradigm.

(17) *[[[ ii ] -um ][[ aa ] -yum ]]
 this and that

(18) *[[[ pazaya ] -um ][[ puțiya ] -um ]]
 old and new

(19) *[[[ ella ] -um ][[ ella ] -um ]]
 all and all

(20) [[[ ente ] -yum ][[ avante ] -yum ]]

One might be tempted to ask why there should be a severe constraint on conjoinability of NP specifiers in Malayalam since the specifier system of both these languages is in conformity with the same parameter of X-bar theory, namely, (2):

(21) $x^* \longrightarrow x^* \ x'$
(21) tells us that NP specifiers in both English and Malayalam precede the head noun. (For the time being we ignore certain differences between these two languages with respect to the linear order of the various specifiers.)

We will pursue the discussion in section 4.2.

4.1.3 **Clausal Coordination**

An interesting difference between English and Malayalam with respect to the conjoinability of clauses is that in English, tensed clauses can be conjoined, but not in Malayalam. This contrast is illustrated below:

(22) John washes the dishes and Mary dries them

(23) *joon paatraṁñal kazuk-urança um meeri awa
    John dishes wash-pres-and. Mary them

    unakk-unsafe um
    dry-pres-um

Tensed clauses become conjoinable with the presence of a lexical complementizer.
Consider now the coordination of infinitival CPs. We have already come across the -uwaan construction in (6) which we assumed to be equivalent to the for-to construction in English. Here again it is to the lexical complementizer -uwaan of the conjoined CPs that the clitic coordinator is attached. See the structure of (6) given in (25):

\[
(25) \begin{align*}
\text{CP} & \left[ \text{IP awa;} \left[ \text{VP} \left[ \text{cp} \left[ \text{IP PRO} \left[ \text{VP pattu paad } \right] \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \right. \r
What is common about these three sentences is that they have a verbal stem to which a suffix is attached (cf. -uwaan, -al, -uka); the verbal stem does not show Tense alternation.

Notice that the -al construction is in fact a "true" NP with a deverbal nominal as head (cf. Jayaseelan (1985)) and is analogous to the "mixed form" referred to in Chomsky (1970) illustrated in (28):

(28) John's destroying of the city

Since there is sufficient evidence supporting the claim that the "mixed form" is an NP, (26) turns to be an instance of NP coordination and not clausal coordination.

The -uka construction is more or less parallel to the to-infinitival construction. Notice that the to-infinitive can have either a PRO or a NP-trace in subject position at S-structure, as illustrated below:

(29) John tried \([_{\text{CP}} [_{\text{IP}} \text{PRO to be happy }]]\)
(30) John seemed \[ CP [IP t \_i to be happy ] ]

We assume that (27) has the structure given in (31)\(^5\):

(31)
Notice that (31) is a derived structure from the sentence in (32)

(32) joon paatranhal kazukkuka-yum ceydu meeri awa
      unakkuka-yum ceydu.

The verbal material has been RNRaised. -uka can be assumed to be occupying the COMP position just like a lexical complementizer by virtue of which the two clauses become conjoinable.

Let us now consider coordination of sentential adjunct constructions like (33)-(36). The paradigm under consideration consists of the four sentential adjunct constructions in Malayalam namely, the "kondα adjunct", the "ittα adjunct", the "kondirikke adjunct" and the "2 adjunct".

(33) naan karannu-kond-um awal ciriccu - kond-um
      I crying -and she laughing - and

      skuulilekkα pooyi
      school-to go-past

'I crying and she laughing (we) went to the school'
(34) kutti karann-itt-um acc an sakaaricc-itt-um
child cried-having-and father scolded-having-and
amma anañhiyilla
mother move-past-not

'The child having cried and the father having scolded
(and yet) mother did not move'

(35) kutti kaliccu-kondirikke-yum acc an paattu
child play-kondirikke-and father song
paadi- kkondirikke-yum amma jooli ceydu
sing-kondirikke -and mother work did

'While the child was playing and father was singing
mother worked'

(36) awal paattu paadi-yum nrattam ceyd-um panam
she song sing-and dance-do-and money
sampaadiccu
earn-past

'Singing songs and dancing she earned money'

We assume that the adjunct markers "konda", "itta", "kondirikke" and "ə" are all occupying the COMP
position. Thus (33) will have a structure something like (37).
We got a similar structure in (31) for the -uka construction. Notice that (31/37) is different from typical coordinate structures. Here the coordinator has "floated" inside the clause and has attached itself to the material in the COMP.

Curiously enough when the coordinator "floats" inside the clause, tensed clauses become conjoinable.

(38) mannamkatta alinn-um pooyi, kariyila paranp-um pooyi
mud dissolved-and dry leaf flew-and
'The mud dissolved (itself) and the dry leaf flew'

The examples we have examined so far show that clauses are conjoinable when there is some lexical element in the COMP position to which the clitic coordinator can be attached.7

In addition to the four adjunct constructions discussed, Malayalam has constructions involving -appool 'then' and -aal 'if'.

(39) kutti aanaye nulli-yappool-um aana
child-n elephant-a pinched-when-and elephant-n
kuttiye nulli-yappool-um amma peediccuy
child-a pinched-when-and mother got scared
'Mother got scared when the child pinched the elephant and (also) when the elephant pinched the child'.
(40) kutti aanaye nulli-yaal-um aana kuttiye
child-n elephant-a pinched-if-and elephant-n child-a
nulli-yaal-um amma peedikkum
pinched-if-and mother will be scared

Assuming that the elements appool and aal will be occupying
the COMP position of the embedded clauses the structure
proposed in (31) can be extended to these constructions also.

Thus we have the following state of affairs: Coordinators
in Malayalam are clitics and they appear obligatorily after
each of the conjuncts in a coordinate structure. Phrasal
categories like NPs or PPs are readily conjoinable whereas
APs or VPs are not. The situation is the same at the lexical
level, where Ns and Ps are conjoinable but not As or Vs.
Moreover, there is a severe constraint on conjoining NP
specifiers. Clausal coordination is possible only if some
lexical item is present in the COMP position of the conjoined
clauses; coordinators are attached to the material in the
COMP.

4.2 Categorial distinctive features and selectional
restrictions

Let us take up the issue of the constraint on s-selection
with respect to coordinators in Malayalam, in that certain
categories are not selected as complements. We want to
suggest that this constraint has something to do with categorial features of the complement of the coordinator. What we have at the back of our mind is the claim made in Stowell (1981) that the categorial status of each complement must be specified in the θ-grid of a head along with the argument status of the complement. Incorporating Stowell's theory of strict subcategorization into our account of coordination, we assume that the θ-grid of a coordinator contains information on the categorial features of its complement. Before going further, we intend to clarify notions like categorial features, strict subcategorization and so forth.

4.2.1 Categorial Distinctive Features

Chomsky (1974) proposed a theory of syntactic features from which the major lexical categories could be derived. Thus, the syntactic features associated with the major lexical categories are as follows:

\begin{align*}
N &= \begin{bmatrix} +N \\ -V \end{bmatrix} \\
A &= \begin{bmatrix} +N \\ +V \end{bmatrix} \\
V &= \begin{bmatrix} -N \\ +V \end{bmatrix} \\
P &= \begin{bmatrix} -N \\ -V \end{bmatrix}
\end{align*}
Following the conventions of X-bar theory, these syntactic features will be carried on to the maximal projections of these lexical categories.

\[
\begin{align*}
\text{NP} & = [ +N ] \quad \text{AP} = [ +N ] \\
& \quad [ -V ] \\
\text{VP} & = [ -N ] \quad \text{PP} = [ -N ] \\
& \quad [ +V ]
\end{align*}
\]

The feature system given above, defines certain natural classes of categories and excludes others. It predicts the following syntactic natural classes:

(43) \([+N]\) (nouns, adjectives)\((\text{NPs, APs})\)  
\([-N]\) (verbs, prepositions)\((\text{VPs, PPs})\)  
\([+V]\) (verbs, adjectives)\((\text{VPs, APs})\)  
\([-V]\) (prepositions, nouns)\((\text{PPs, NPs})\)

4.2.2 **Strict Subcategorization**

Let us now consider the notion of strict subcategorization discussed in Stowell (1981). Stowell observes that strict subcategorization features of lexical entries are closely analogous to \(\theta\)-grids. The \(\theta\)-grid encodes the configurations of argument positions which a lexical entry requires at LF; the strict subcategorization frame encodes
the syntactic configurations of complements that the lexical entry requires. Stowell stipulates that a strict subcategorization frame must specify a particular matrix of categorial distinctive features of each complement.

Since there is one-to-one correspondence between subcategorized complements and θ-roles (in fact, the subcategorization frame and the θ-grid are one and the same), the strict subcategorization frame for a lexical entry is directly dependent upon its θ-grid. To quote from Stowell (1981):

\[\ldots\text{we can think of strict subcategorization features as being linked to specific positions in θ-grids. Take the θ-grid to be the basic code for the lexical head’s complement structure. Every complement position corresponding to a position in the θ-grid is selected as a lexical property, so by virtue of the projection principle, it must appear at every grammatical level. Then just as the argument status of each complement may be specified in the θ-grid, so may its categorial status be specified. This, in effect is strict subcategorization.}\]

Keeping this in mind, let us examine the constraint on the range of categories that can appear as complements of coordinators in Malayalam. We saw that the coordinator -um selects lexical categories such as nouns or prepositions and phrasal categories such as NPs or PPs as its complement,
but not verbs, adjectives, VPs or APs. Again it selects the clausal phrase CP. The coordinator -oo behaves like -um with respect to the property of s-selection. Neither -um nor -oo selects an IP.

Taking a cue from Stowell's stipulation that the categorial status of a complement is specified in the 0-grid of its head, let us assume that the coordinators -um and -oo are (strict) subcategorized for [-v] categories. In other words, the argument position in the 0-grid of these coordinators will be associated with the feature matrix [-v]. Assuming that strict subcategorization is subsumed under s-selection, we can say that coordinators in Malayalam s-select a [-v] category. Unlike the coordinators in Malayalam, coordinators in English will have a 0-grid in which the argument position is associated with the category-neutral feature matrix [+N, ±V] which represents the unmarked case.

Let us examine the implication of the present assumption. The feature [-V] puts nouns, prepositions, NPs and PPs under a natural class excluding [+V] categories such as adjectives, verbs, APs and VPs. All instances of noun/NP-coordinations and P/PP-coordinations are accounted for automatically. Also we can show that APs and VPs in Malayalam cannot be
conjoined. Similarly, we can account for the fact that coordinators in English may s-select any category by virtue of the neutral feature matrix [+N, +V].

Let us now deal with the question why Malayalam coordinators can s-select a CP. Stowell (1981) shows that NP and S' have a strong parallelism in behaviour which relates to strict subcategorization. These two categories appear as disjunctive terms in strict subcategorization frames.

(44) a. Jim reported [his brother's disappearance] to the police.

b. The prisoner requested [an early release]

(45) a. Jim reported to the police [that his brother had disappeared]

b. The prisoner requested [to be released early]

The subcategorized NP complements in (44) and S' complements in (45) are assigned the same θ-roles. In Stowell's terms, this means that the subcategorization requirements for an NP and S' must be stated within a single matrix of categorial features associated with the "object" position in the θ-grids of these verbs. This in turn implies that
NP and $S'$ must form a natural class of syntactic categories. Following this line of argument, Stowell suggests that $S'$ like NP, bears the categorial features [+N, -V].

Stowell's claim holds good in Malayalam as well. Notice the parallelism between NP and $S'$ in the following paradigm.

(46) a. [tante sahoodaran apprattyaksam aaya vivaram] his brother disappeared be-that fact
    jim pooliisina rippoorta ceydu
    Jim police-to report do-past

    'Jim reported to the police the fact that his brother had disappeared'

b. [tante sahoodarante appratyaksam aakal] jim
    pooliisina ripporta ceydu

    'Jim reported his brother's disappearance to the police'

(47) a. [tante sahoodaran apratyaksan aayi] enna] jim
    pooliisina ripporta ceydu

    'Jim reported to the police that his brother had disappeared'
We conclude from the above data that in Malayalam too NP and CP share the categorial feature [\(+N\), \(-V\)]. Since the distinctive categorial feature of an NP is \([-V\)], we assume that CP too is \([-V\]). What immediately follows is the fact that coordinators in Malayalam may s-select a CP. This is true of coordinators in English as well.

4.3 Coordination of Relative Clauses and NP modifiers

We noted that there is a severe constraint against the coordination of NP specifiers (adjectives, quantifiers, determiners etc.) in Malayalam. Despite the possibility that this constraint might cut across languages, English allows certain constructions involving the coordination of NP modifiers though such cases may be very 'marked' ones. A more striking difference between English and Malayalam with respect to coordination is that in English relative clauses can be conjoined, but not in Malayalam. Thus the structure (48) is expected of relative clauses in English, whereas the structure (49) is the one that is expected of Malayalam relative clauses. In this section we will account for the difference between the two languages with respect to the conjoinability of relative clauses and NP specifiers.
Before discussing the above structures in detail let us consider a few constructions in English involving coordination of NP modifiers and relative clauses.
(50)  a. He selected good and new clothes for his birthday.
b. These clothes are good and new.

(51)  a. A smart and intelligent boy like John could not pass the test.
b. John is smart and intelligent.

(52)  a. Each and every item in the shop appears to be expensive.
b. A few, or possibly all of these items are expensive.

The above examples may be stylistically clumsy, nevertheless, they are grammatical. Consider now, coordination of relative clauses.

(53)  a. The man [CP who [IP [IP John loves e ]] 
[ and [IP Mary loves e ]]] is a linguist

b. John [CP who [IP [IP e saw Bill ]] [and 
[IP e likes Tom ]]] is a violinist

We have already come across examples like (53) in the previous chapter where we discussed the ATB phenomenon. These examples are in conformity with the structure (48). Let us now, move on to the Malayalam facts.
(54) a. *awan tante pirannaaling nallayum
    he his birthday-for good-and
    putiyayum kuppaayaññal tiraññedutu
    new-and clothes select-past

    'He selected good and new clothes for his birthday'

b. *ii kuppayaññal nallayum putiyayum aana
    this clothes good and new and is

    'These clothes are good-and new'

(55) a. *ii saappile ooroo-um ellaam-um inaññal
    this shop-in each and every-and items
    wila kuutiyawa aana
    cost - more is

    'Each and every item in the shop is expensive'

b. ii inaññalil kuracc-oo ellaam-oo
    these items-in some or all or
    wila kuutiyawa aana
    cost more is

    'Some or all of these items are expensive'
Since coordinators in Malayalam are not subcategorized for [+V] categories we do not expect to find an acceptable construction involving coordination of adjectives and hence the ungrammaticality of (54). But there is no evidence to show that quantifiers, like adjectives are [+V] categories. What is more likely, is that quantifiers may have a category neutral feature matrix. Therefore, the ungrammaticality of (55a) is unexpected. If the contrast between the a and b examples in (55) really exists, it too has to be accounted for.

We have a problem with examples like the following:

(56)a. *joon karutta-yum melinna-yum aana
   John-n dark-and lean-and is
   'John is dark and lean'

b. 'Oru tadicca-um kozutta-um pasu weeli caadi
   a fat - and fleshy-and cow fence jump-past
   'A fat and fleshy cow jumped over the fence'

Expressions like karutta 'dark', melinna 'lean', tadicca 'fat', kozutta 'fleshy' are traditionally classified as adjectives. If these forms are treated as adjectives, then the ungrammaticality of the constructions in (56) does not pose any problem. But there is clear evidence that these
are not adjectives, but relative clauses (cf. Anandan (1985)). Assuming this to be true, we have a problem with (56) since the structure of a relative clause is that of a CP:

\[(57) \quad \text{a.} \]

\[
\begin{array}{c}
\text{NP} \\
\downarrow \\
\text{NP} \\
\downarrow \\
\text{CP} \\
\downarrow \\
\text{...} \\
\downarrow \\
\text{C} \\
\end{array}
\]

\[
\begin{array}{c}
\text{C'} \\
\downarrow \\
\text{IP} \\
\end{array}
\]

\[
\begin{array}{c}
\text{b.} \\
\text{NP} \\
\downarrow \\
\text{CP} \\
\downarrow \\
\text{NP} \\
\downarrow \\
\text{...} \\
\downarrow \\
\text{C} \\
\downarrow \\
\text{IP} \\
\downarrow \\
\text{C} \\
\end{array}
\]

(57a) represents the structure of an NP containing a relative clause in English and (57b) represents the structure of an NP containing a relative clause in Malayalam. If we say that coordinators in Malayalam s-select a [-V] category, there is no reason why a structure like (57b) cannot be s-selected since the whole structure is that of an NP with
the feature matrix \([-v]\). The internal structure of this NP, even if it matters, cannot have created any problem since both CP and NP have the same feature matrix \([-v]\). How, then, are we to account for the ungrammaticality of (56)?

4.3.1 The empty feature matrix of NP specifiers

It seems, the constraint against the conjoinability of NP modifiers and relative clauses in Malayalam is crucially dependent on their structure.

Anandan (1985) argues that NP modifiers in Malayalam are generated with an empty feature matrix which is filled with PNG markers in post-nominal positions by way of a copying rule. Thus the structure of bare NP specifiers will be something like the following:

(58) a. valare nalla 'very good'

```
      Adj.P
        /
       /  \
      Degree Modifier  AP
        /          /  \
      valare  A
           /  \\   A
          nalla [ ]
```
Unless the NP modifier precedes a lexical noun, the empty feature matrix is to be filled. This explains the contrast between the (a) and (b) examples below:

(59) a. nalla kutti
    good child

b. *kutti nalla
We assume that it is this empty feature matrix of NP specifiers which prevents the coordinator from being attached to such forms (i.e. bare forms of the NP specifiers). If the feature matrix is filled with PNG markers, then these forms become conjoinable. Contrast the following examples with those in (54) and (55):

(61) a. apan tante pirannaaling pallavayum
    he-n his birthday-for good+PNG-and
    putiyavayum aaya kuppayaññal waaññi
    new+PNG-and be clothes, buy-past
    (= 54a) ('He bought good and new clothes, for his birthday')

b. ii kuppayaññal pallavayum putiyavayum aanə
    (= 54b)

(62) ?ii saappile ooroonnnum ellatum aaya inaññal
    wila kuutiyawa aanə
    (= roughly 55a)
The fact that forms such as nallava, putiyawa, ooroonna are conjoinable is not surprising because NP specifiers with agreement markers have the status of NPs. Thus nallawa has the following structure.

(63)

The arrow represents the operation of the copying rule which copies the features of the empty head noun onto the empty feature matrix of the adjective. We want to propose that forms like karutt-a, melinn-a, tadicc-a, kozutt-a are not conjoinable because of the empty feature matrix of the relativizing particle -a in these. See the structure of the expression karutt-a, for example. (cf. Anandan (1985)): 
The relativiser -a in COMP has a feature matrix which is empty. It will be filled with PNG markers if the head noun is lexically null. But it will remain empty if it is followed by a lexical head. Compare (a) and (b) of (65):
(65) a.

```
(\[65\] a.
NP
   CP NP
      ...
        C
           IP
                 COMP N
                   N
                   t
                       VP I
                            kutti
                                karutt
...

(c.f. karutta kutti)
```

b.

```
(\[65\] b.
NP
   CP NP
      ...
        C
           IP
                 COMP N
                   [+masc] N
                       [+sing]
                             t'
                                 VP I
                                      karutt
...

(c.f. karuttawan)
```
If the feature matrix of $-a$ is filled with agreement markers, then the coordinator can be attached to $-an$, the morpheme representing the bundle of features [+masc, +sing] (cf. (66a)). In (66b) $-t\tilde{a}$ represents [+neut, +sing]:

\[ (66) \]

\begin{enumerate}
\item a. karutt\-a\-vanum tadicc\-a\-vanum
darkened\-that+PNG+and fattened\-that+PNG+and
\item b. cuvann\-a\-\tilde{t}\-um melinn\-a\-\tilde{t}\-um
reddened\-that+PNG+and lean \-\tilde{t}that +PNG+and
\end{enumerate}

4.3.2 The structure of COMP in Malayalam

Recall our earlier stipulation that CPs can be conjoined only if there is some lexical element in the COMP on which the coordinators can be realized. We had supporting evidence from sentential adjuncts with lexical elements like $-\tilde{a}$ itt\tilde{a} kond\tilde{a}, kondirikk\tilde{e} in the COMP by virtue of which coordination of these adjuncts was made possible. If coordinators can be attached to an element like $-\tilde{a}$ (cf.60-62) why can't they be attached to $-a$ which too is in the COMP?

The answer to this problem lies in the structure of COMP in Malayalam. Elaborating on Anandan's (1985) claim that the complementizer $-a$ has a feature matrix, Madhavan
(1987) proposes the following structure for COMP in Malayalam.

\[(67)\]

\[
\begin{array}{c}
\text{CP} \\
\text{IP} \quad \text{COMP}' \\
\quad \text{COMP} \quad \text{a+ [ ]} \\
\quad \{ \emptyset \} \\
\quad \{ \text{enna} \}
\end{array}
\]

Madhavan postulates a binary branching COMP. The \text{a+} feature matrix is present in the right slot at all levels of representation. The left slot is always the head. At S-structure this is occupied by the [-WH] complementizer \text{enna} 'that' in tensed complement clauses. It is not optional as in the case of English (cf.(68)):

\[(68)\]

\[
\begin{array}{c}
\text{[} \text{kutti aanaye nulli } \text{enna}\text{]} \\
\text{child-n elephant-a pinched that} \\
\text{amma paranñu} \\
\text{mother said}
\end{array}
\]

'The mother said that the child pinched the elephant.'
b. *{kutti aanaya nulli } amma paraññu

Following Lasnik and Saito's (1984) analysis of English 'that', Madhavan assumes that enna can be inserted at S-structure and deleted at LF optionally by Affect-alpha.

Relative clauses involve the movement of an empty operator in COMP at S-structure. The standard assumption is that the head NP is co-indexed with CP by predication, in Relative clauses. This index percolates down to the empty operator which is the head of the COMP without which the gap in IP cannot be interpreted with the head of the Relative clause.

The structure of COMP posited in (67) correctly predicts that enna will not appear in a Relative Clause (cf. (69));

(69) a. *[kutti $t_1$ nulli ] enna-a ] aanā
child-n pinched that-a elephant

'the elephant that the child pinched'

b. {kutti $t_1$ nulli } φ-a ] aanā
When a tensed clause is embedded only Ṇṇa can be present and not the a+feature matrix in the right slot. Also, both cannot appear together in such cases.

(70) a. *[ kutti aanaye nulli ] a ] amma
child-n elephant-a pinched that mother
parannu
said
'the mother said that the child pinched the elephant'

b. [kutti aanaye nulli ] Ṇṇa ] amma parannu

c. *[kutti aanaye nulli ] Ṇṇ -a ] amma parannu

Let us return to the problem of coordination of Relative Clauses. The coordinator can be attached to the morpheme representing the bundle of features in the feature matrix of a since this morpheme is of a nominal character. But if the feature matrix is empty, the complementizer a resists being combined with the coordinator. (We assume this to be the characteristic property of the morphology of the complementizer a). Neither can the coordinator skip the a+feature matrix and attach to the lexical head in the left slot of the COMP. See for example, (71):
Two things are to be noted regarding the distribution of ~. In the first place, it is generated in the COMP of relative clauses only and not in the COMP of an embedded clause. Secondly, if there is a series of relative clauses modifying the same head noun, it surfaces only in the COMP of the final CP. Thus we get constructions in (72) but not those in (73):

(72) a. [[[ kuttì aanaye nullì ] enm -a]kaaryam
   child-n elephant-a pinched that a that-a-fact
   'the fact that the child pinched the elephant'

b. *[kuttì aanaye nullì ] enm- a-um ] kaaryam

c. *[kuttì aanaye nullì ] enm-um-a ] kaaryam

(71) a. [[[ kutti aanaye nullì ] enm -a]kaaryam
   child-n elephant-a pinched that a that-a-fact
   'the fact that the child pinched the elephant'

b. *[kutti aanaye nullì ] enm- a-um ] kaaryam

c. *[kutti aanaye nullì ] enm-um-a ] kaaryam

Two things are to be noted regarding the distribution of ~. In the first place, it is generated in the COMP of relative clauses only and not in the COMP of an embedded clause. Secondly, if there is a series of relative clauses modifying the same head noun, it surfaces only in the COMP of the final CP. Thus we get constructions in (72) but not those in (73):

(72) a. [[[ eì karuttì CP] [eì melinnìa CP][kuttì NP] NP]
   'the child who is dark and lean'

b. [[[ PRO eì paricca CP] [PRO eì muricca CP]
   [PRO eì uppilitta CP] [pro eì tinna CP]
   [maaìña NP] NP]
   'the mango that was plucked, cut, pickled and eaten'
These examples are in conformity with the structure given in (49). Notice that the final clause in the string has a pro whereas the other clauses have only PRO (cf. 72b). This is expected since the final clause is tensed. Recall our discussion on ~ adjuncts. The non-final CPs in (72a, b) are in fact adjunct-constructions.

We have a small hitch here. If the element ~ were present in the COMP at D-structure, why couldn't the coordinator attach to it as in the case of (36). Also see the following example:

(74) pariccum muriccum uppilittum tinna maanha

'The mango that was plucked, cut, pickled and eaten'

However, (74) is not analogous to (72b); the two sentences have different interpretations.
We suggest that $\Box$ can be inserted at S-structure optionally, as in the case of enna and its analogue that. In sentences like (74), $\Box$ is generated in the base in the left slot of the COMP. It does not appear in relative clauses along with a. The structure of COMP will be something like (75):

(75)

```
   CP
     \--...
            \--\underline{C}
              \--\underline{IP}
                \--\underline{COMP}
                  \-- a+ [ ]
                        \{ \emptyset \}
                        \{ ena \}
```

4.4 Extraction from Coordinate Structures in Malayalam

This section is more or less an appendix to our discussion on extraction from coordinate structures in English in Chapter Three. We showed that all cases of CSC violations can be analysed as cases of ECP violation. We also showed that ATB constructions and parasitic gap constructions are derived from their corresponding RNR sources. In the present
section we will extend our analysis to Malayalam facts. We will produce supporting evidence to our claim that ATB constructions are derivable from RNR constructions. Furthermore, we will show that in Malayalam, facts of the language are such that ATB constructions are not distinguishable from RNR constructions. Our analysis of extractions from asymmetric conjuncts on a par with ATB extractions will be further strengthened by supporting evidence from Malayalam. Also, it will be shown that our hypothesis that RNR mimics the direction of government holds good with respect to Malayalam facts as well.

4.4.1 CSC effects

Let us first consider CSC facts, illustrated in (76):

(76) a. *meeri aare sneehikkuka-yum suusan
     Mary-n who-a love -and Susan-n
     billine werukkuka-yum ceyyunnu
     Bill-a hate -and do-pres
     * 'Who does Mary love and Susan hates Bill?'

b. *aare meeriye sneehikkuka-yum suusan billine
   who-n Mary-a love -and Susan-n Bill-a
   werukkuka-yum ceyyunnu
   hate -and do-pres
   * 'Who loves Mary and Susan hates Bill?'
In (76a) the object NP from the first conjunct is extracted; what is extracted in (76b) is the subject NP. Both are starred as one would expect because of typical CSC effects. Let us see how these examples are ruled out by the ECP.

Following our discussion of the -uka construction in an earlier section (cf. 4.1.3), the S-structure of (76a) will be something like the following:

(77)
We do not intend to discuss how *meeri* and *suusan* are raised from the embedded clauses to their corresponding matrix subject positions. Already we have come across this kind of structure (cf. 4.1.3, (31)). In the given structure, the verbal material *ceyyunnmu* has been RN-Raised. The wh-phrase *aare* in the first conjunct has been generated in the argument position. (We assume that wh-phrases in Malayalam are "in-situ" at S-structure. They move to SPEC of CP at LF, akin to the Chinese examples discussed in Huang (1982)).

*aare* will be moved to the SPEC of CP$_0$ leaving its trace behind which will not be properly governed because of the intervening barriers IP$_1$ and IP$_0$. To have a clear view as to how these nodes become barriers in (77), let us look at the LF structure of (77) given in (78):
Notice that the coordinate structure that we find here is different from a typical coordinate structure in the sense that here the coordinator has floated into the clause. We have already noticed this as a strategy that Malayalam takes to get around the problem of non-conjoinability of tensed clauses. But the typical adjunction configuration is obtained in this structure also (cf. $[IP_0 IP_1 IP_2]$). Recall that this configuration is crucial for our account of CSC violations in terms of ECP.

Let us see how ECP rules out the structure given here. aare is first adjoined to VP$_3$ from where it moves to the SPEC of CP$_3$. Nothing prevents these movements. The original trace will be properly governed by t'. CP$_3$ will not be a barrier because it is L-marked by the coordinator (by our stipulation). CP$_1$ too is not a barrier since it is L-marked by V. Now, the next movement is to VP$_1$. The movement upto this node creates no problem for the ECP. From VP$_1$ aare straight away moves to the SPEC of CP$_0$. This is so because IP$_1$ cannot be adjoined to (by our stipulation) and IP$_0$ too cannot be adjoined to since wh-operators cannot be adjoined to IP. Since IP$_1$ is not L-marked it is a barrier and IP$_0$ inherits barrierhood from IP$_1$. Thus the last chain (from VP$_1$ to SPEC of CP$_0$) becomes ill-formed; t"' is not properly governed resulting in an ECP violation.
Consider now (76b). Here too we get the same results. 

[Diagram]

At LF aara will be occupying the specifier position of IP₁ at S-structure cf. (79), (omitting details):

(79)

At LF aara has to be moved to the SPEC of CP₀ crossing VP₁, which is the intermediate adjunction site. Now this chain is ill-formed due to the barriers IP₁ and IP₀. Thus we get an ECP violation.
4.4.2 ATB/RNR facts

Suppose in (76) extraction takes place from both the conjuncts. We expect a typical ATB example cf. (80):

(80) aare meeri- sneehikkukayum suusan-werukkukayum
    who-a Mary-n love -and Susan-n hate and
    ceyyunnu
    do-pres

'Who does Mary love and Susan hate?'

However, since there is no wh-movement at the S-structure, it is difficult to say that this is an instance of ATB extraction. What we get is something like an RNR construction. In other words, the typical ATB example here turns to be an RNR construction which strengthens our claim that an ATB construction is derivable from its RNR source. The intonation break in (80) also suggests that it is an RNR construction cf. (81):

(81) aare, meeri sneehikkukayum suusan werukkukayum ceyyunnu

Here intonation invariably is after aare.

Since Malayalam exhibits scrambling, one might argue that (80) is an output of scrambling. But notice that if we try to put aare back in its supposedly original position...
(i.e., the object position of V), the sentence is starred cf. (82).

(82) *meeri aare sneeikkukayum suusan werukkkayum ceeyunn

The only way to get aare out of the coordinate structure without violating ECP is RNR (our claim in Chapter Three). The contrast between (80) and (82) is a strong evidence to show that ATB constructions in Malayalam are RNR constructions and that RNR does not involve Move \( \alpha C \). To see how RNR works here, let us represent the S-structure of (80) using a tree diagram (cf. (83) (omitting details)):

(83)
aare occupies identical positions in the two clauses at S-structure. RNR applies and copies aare on to IP$_0$. (The verbal material ceyyungnu is copied on to the right). At LF aare will move to SPEC of CP$_0$ without violating the ECP.

On the other hand in (82) RNR has not applied and aare remains in the object position of the left conjunct clause whereas in the right conjunct there is a gap. Thus (82) becomes an instance of CSC violation. The LF movement of aare to the SPEC of CP$_0$ will cause an ECP violation (for reasons already stated) and hence the ungrammaticality of (82).

We have noticed that when constructions involving -uka are conjoined the CCNJ moves into the clause and therefore the coordinate structure thus obtained will be different from ordinary coordinate structures. In order to stress our claims that RNR and ATB constructions are closely related and that RNR is not a movement rule we will examine an ordinary case of CP coordination (This is to avoid the complication due to the "floating" of the coordinator into the clause). Consider examples (84-86):

(84) joonine, [meeri ___ sneehikkunnu enn-um]
John-a CP Mary-n love-pres that-and
[CP suusan ___ werukkunnu enn]-um] piitter paranu
Susan-n hate-pres that-and Peter say-past

'Peter said that Mary loves and Susan hates John'
'Peter said that Mary loves John and (that) Susan hates John'

(86) piitter [CP meeri joonine sneehikkunnu enn-um ]
Peter-n Mary-n John-a love-pres that-and

[CP suusan joonine werukkunnu enn-um]
Susan-n John-a hate-pres that-and

parannu
say-past

'Peter said that Mary loves John and (that Susan hates John'
(87)

```
CP
  ...
  C
  IP'
    joonine
    IP'
      CP
        CP
          ... C
          CP
            CONJ
              CP
                C
                IP
                  C
                  meeri
                  IP
                    C
                    IP
                      e_i
                      paranu
                      CP
                        V
                        VP
                          I
                          VP
                            t_j
                            snehikkunnu
                            NP
                              V
                              t_j
                              werukkunnu
```

Now, if we replace joonine in (87) with aare we will get an ATB example. And aare will move at LF to the SPEC of the matrix CP without causing an ECP violation.

There are certain constructions where both the subject and the object are RNraised. See (88):

(88) naan citram warakkunnu -enn -um wilkkunnu
     I picture draw-pres- that-and sell-pres
     enn-um awan karutunnu
     that-and he-n think-pres

'He thinks that I draw and sell pictures'.

The structure of (88) is shown in (89):
(89)

```
(89)
CP
   ...
   C
   IP''
   C
   naan
   IP'
   citram
   IP
   CP_0_i
   CP_1
   CP
   CONJ
   CP
   CONJ
   ...
   C
   -um
   ...
   C
   -um
   CP
   t_i
   karutunnu
   VP
   I
   C
   -enn-
   I
   VP
   I
   NP
   V
   NP
   V
   t_k
   warakkunnu
   t_k
   wilkkunnu
```
The conjoined clause is scrambled and adjoined to the matrix IP. Both ṇaan and citram are RNRaised.

4.4.3 Extraction from asymmetric conjuncts

We will now consider the possibility of extractions from asymmetric conjunction structures. Consider the examples below:

(90) ii wiski aana / ṇaan [stoorileekk pooyatum ]
this whiskey is I store-to go-past-and
[ __ waaññiyatum ]
buy-past-and

'This is the whiskey that I went to the store and bought'

(91) ii stooril aana [ ṇaan __ pooyatum ]
this store-to is I go-past-and
[ wiski waaññiyatum ]
whiskey buy-past-and

'This is the store I went to, and bought whiskey'

Recall our discussion of the asymmetric conjuncts in English. We argued that asymmetric conjunction is an instance of ATB extraction and that there are empty categories in both the conjuncts. Thus we showed that in examples like (90) there is the gap of a purpose adverbial such as for which and that
in examples like (91) there is the gap of a place adverbial as where cf. (92-93):

(92) *ii whisky aana naan [ e stoorileekk pooyatum ]
     [ e waañniyatum ]

(93) *ii stooril aana naan [ e pooyatum ]
     [ e wiski waañniyatum ]

This claim is supported by the examples given below:

(94) *ii whisky aana [ naan itu waañnuwaan weendi ]
     this whiskey is I this buying-for
     stoorileekk pooyatum ] [ ___ waañniyatum ]
     store-to so-past-and buy-past-and

"this is the whiskey (for buying this) I went to
the store and bought"

(95) *ii stooril aana [ naan ___ pooyatum ]
     this store to is I go-past-and
     [ awite ninae wiski waañniyatum ]
     there from whiskey buy-past-and

In (94) the purpose adverbial itu waañnuwaan weendi ('for
buying this') is overtly present. Therefore we will not get
ATB effects in (94). Similarly in (95) the place adverbial
is overtly present (cf. avite ninnæ 'from there') and again we will not get ATB effects. If there is only one gap in (90) and (91) it will be difficult to explain why (94) and (95) are starred.

To sum up, our claim that instances of extraction from asymmetric conjuncts are on a par with ATB examples is well supported by the Malayalam facts given above.

4.4.4 The direction of RNR

RNR is a bidirectional copying rule. In the English examples we saw that the subject material is copied on to the left and the object material on to the right. In Malayalam, we find both subject and object materials are copied on to the left. This strengthens our earlier hypothesis that RNR mimics the direction of government. In Malayalam canonical government is from the left to the right since all heads in a construction are on the right. But in English, all heads except INFL are on the left. Since INFL governs the subject material to its left, the latter can be RNRed only to the left.

4.5 Summary

The Malayalam data discussed in this chapter reveals some important properties of coordination in general and of coordination in Malayalam in particular. The conjunction
element -um and the disjunction element -oo are clitics and they have to appear after every conjunct in a coordinate structure. Regarding the S-selection of arguments, it is noticed that Malayalam coordinators S-select only [-V] categories, which excludes verbs and adjectives. There is a severe restriction as regards the conjoinability of prenominal specifiers in Malayalam. This is because of the feature matrix that is generated along with the bare specifiers. When this feature matrix is filled with PNG markers, these specifiers become readily conjoinable. Clauses in Malayalam can be conjoined only if some lexical material is present in the COMP of these clauses.

There is a special kind of clausal coordination in Malayalam in which the coordinator seems to have 'floated' into the clause. In such cases also, there will be some lexical material in the COMP to which the coordinator can be attached.

Relative clauses in Malayalam are not conjoinable. The COMP has a binary branching structure. The right slot is occupied by the complementizer -a plus its feature matrix. The left slot contains an empty operator and enp[-] in tensed clauses. The left slot also contains an optional element -ə. In a series of relative clauses, -a appears in the COMP
of the final CP only. The nonconjoinability of relative clauses is due to the lack of any lexical materials in the right slot of the COMP to which the coordinator can be attached. Even if the relativizer -a is present in the COMP of the relative clause, it cannot be conjoined because of the empty feature matrix of -a.

Extractions from coordinate structures in Malayalam give supporting evidence to our claim that ATB constructions are derivable from their corresponding RNR sources. Our treatment of extractions from asymmetric conjuncts on a par with ATB extractions is extendable to Malayalam facts as well. Our claim that RNR is not a movement rule but a bidirectional copying rule, also gets supporting evidence from Malayalam facts. And finally, it is shown that our hypothesis that RNR mimics the direction of government takes care of the Malayalam facts also.

Thus more than suggesting a typological difference between the two languages, our discussion in this chapter and in the previous chapters focuses on things that may be looked for in UG. We feel that we have achieved our goal in showing that coordinate structures are like any other structures, and do not demand any special mechanisms exclusively designed for them. We started with a statement that coordination is a peculiar animal. Yes, it may be a peculiar animal, but nevertheless, it is tamable.

...
Notes

1. When the tensed VP is conjoined with -oo 'or' we get the following expression.

(5') awal paattu paadunn-oo panam sampaadikkunno?

This is okay only as a yes-no question. That is, when the clitic morpheme -oo is attached to an expression which is tensed it becomes a yes-no question. cf. the paraphrase of (5').

(5") Does she sing or earn money?

It does not mean, "She either sings or earns money."

2. Expressions like muunna with the inclusive -um attached to it, can substitute NPs cf. (i).

(i) a. awan muunna pustakaanhal waaaniyirunnenkilum
    he-n three books bought-had though
    muunnum nastappettu
    three-incl. lost

    'though he had bought three books he lost all three'

    b. muunnu pustakaanhal laibrariyil unte
    thee books library-in is
    muunnum kandilla
    three-incl see-past-not

    'there are three books in the library. All three are not to be seen.'
It is by virtue of the inclusive -um 'all' attached to muunn3 that the quantifier can substitute an NP. Without -um these sentences will be bad (cf. ii).

(ii) a. *awan muunnu pustakaţnâl waañniyirunnennkil-um
muunn nastappettu

muunn kandilla

But expressions like oru, cila cannot replace an NP if the inclusive -um is attached to it. cf. (iii).

(iii) *awan oru pustakam waanni. oru-um nastappettu.


4. An alternative account of the uka construction is given in Madhavan (1987) who has argued that the -uka construction is in fact a gerund which implies that it is an NP with the internal structure of a clause. Thus Madhavan gives the -uka construction the structure [NP NP VP]. This explains why the gerund will have the distribution of an NP despite its internal clause structure. Madhavan (1987) shows that the instrumental Case marker -aal 'with/by' can attach to a structure ending in -uka. Cf. (i).
If Madhavan's observation is correct, then the conjoinability of -uka constructions will be instances of NP coordination.

Nevertheless, Madhavan's (1987) proposal has an apparent problem. A gerund is conventionally defined as a structure which has a genitive subject and the internal structure of an S. As Jayaseelan (1985) notes, if we go by this definition, Malayalam has no gerund.

5. See Jayaseelan (1985) for the analysis of -uka constructions in Malayalam.

6. konda, itta, kondirikke, -ə, are suffixes attached to the past tense stem of the verbs. This stem does not undergo Tense alternation. The Malayalam verb has a present tense stem also; but these suffixes are not attached to the present tense stems.

7. There is an apparent problem with (36) which involves the adjunct -ə. Though the element is not realized phonetically in (36) there are any number of examples in the language where it surfaces. Consider for example
(i) and (ii) discussed in Jayaseelan (1984) where verbs ending in -ʔ were analysed for the first time as sentential adjuncts:

(i) ٌناٌن [ اوٌا مناٌنا پوتيق-ُ] ثَيَيَم
    I-n one mango-a-pluck eat-future

(ii) [ كاٌرو ويت-ُ] اٌوان اوٌو باٌسٌِو واٌاٌني
    car-sell he one bus buy-past

We assume that in examples like (36) the -ʔ morpheme is not realized on the verb stem due to the operation of some phonological rules.

8. Jayaseelan (1991) observes that the nonconjoinability of a finite verb is probably due to some morphological restriction. He suggests that there is a general Dravidian prohibition against a verbal root taking more than two suffixes. He gives illustrative examples from Tamil. cf. (i)-(ii):

(i) *راٌماٌن پوٌ-ن-اٌن-ٌم سٌٌتا پوٌ-ن-ٌال-ٌم
    Raman go-past-3ms-CONJ Sita go-past-3fs-CONJ

(ii) راٌماٌن-ٌم پوٌ-ن-ٌٌن سٌٌتا-ٌٌم پوٌٌن-ٌٌل
    'Raman went and Sita went'
As seen in (i) and (ii), the tensed verb has two suffixes, namely Tense and agreement, a third suffix cannot be attached to its (cf. i). But this problem does not arise in (ii) since the coordinator is attached to the NP's.

9. Caldwell (1913 [1856]) tells us/Dravidian languages have no relative clauses. However, it is shown in Anandan (1985), that in fact adjectives in Malayalam are relative clauses, (a claim which holds good in other Dravidian languages also).

10. This property of prenominal specifiers is hopefully true of all Dravidian languages.