Why Movement in Control[1]

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1 Introduction

Control is a relation of co-referentiality between two arguments in a given structure. Commonly, one argument occupies the matrix clause and is pronounced, determining the identity of an unpronounced argument in a subordinate clause (e.g., (1)); the symbol Δ stands for the unpronounced argument.

(1) [$_{\text{Matrix}}$ Sue $_{i}$ tried [$_{\text{Subordinate}}$ Δ_i to escape]]

Different theories of control have been proposed in the literature. One theory within the framework of Principles and Parameters that emerged in the wake of the Minimalist Program (Chomsky 1995) is the Movement Theory of Control (Hornstein 1999, 2003). According to this theory, the two co-referential arguments in a control structure are related through movement, whereby movement is understood as copy-plus-merge (Chomsky 1995). That is, sentence (1) derivationally looks like (2). *Sue* undergoes first merge in the subordinate clause before it moves to the matrix clause. At LF, both copies are available for interpretation. Decisions concerning the pronunciation/deletion of copies are made at PF. In (2), the lower copy is deleted, and the higher copy is pronounced.

(2) [$_{\text{Matrix}}$ Sue tried [$_{\text{Subordinate}}$ ~~Sue~~ to escape]]

The major premises of the movement approach are delineated in (3a-d) (Hornstein 2003: 22 (40)). Most relevant for the purpose of this paper are the premises in (3c-d) and their relation to control. These assume that movement takes place only for the purpose of feature checking. A syntactic object moves either to check its own feature or to check a feature on the target.

(3) (a) Theta roles are features and can thus trigger movement.
(b) There is no upper bound on the number of theta features that a DP can have.
(c) Movement is Greedy.
(d) Greed is understood as 'enlightened self interest', whereby an element moves to check a feature of its own or a feature of the target (Lasnik 1995).

To illustrate, observe (4), which is an expanded version of (2) above. *Sue* starts out in Spec,vP of the subordinate clause where it checks the theta-role feature of the subordinate predicate. Subsequently, it moves to Spec,IP to check the EPP feature. This is followed by movement to Spec,vP of the matrix clause where it satisfies the thematic requirements of the matrix predicate. Finally, *Sue* moves to matrix Spec,IP where it checks its case feature, and the structure converges. At PF, all but the highest copy of *Sue* are deleted. Note that every instance of movement in (4) is triggered by feature checking.

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(4) $[_{IP}$ Sue$^{Case/EPP}$ $[_{vP}$ ~~Sue~~$^{\theta 2}$ tried $[_{IP}$ ~~Sue~~^{EPP} to $[_{vP}$ ~~Sue~~$^{\theta 1}$ escape]

This paper presents evidence from Forward/Backward Adjunct Control in Telugu [tel], a Dravidian language, to show that movement in control is not always triggered by feature checking. As an alternative, the paper suggests that the subordinate subject moves in order to license the merge of the subordinate clause with the matrix clause. The paper is organized as follows. Section 2 presents the facts about Adjunct Control in Telugu and offers a possible derivation. Section 3 delineates some theoretical assumptions that are important for the discussion in the following sections. Section 4 shows that the movement of the subject in Telugu Adjunct Control is driven by the feature characteristics of the head of the adjunct. Section 5 extends the analysis to Sinhala [sin], an Indo-Aryan language. Section 6 is a conclusion.

2 Adjunct Control in Telugu

In the following subsections, I present the relevant Telugu Adjunct Control structures (section 2.1) and put forth a possible analysis of these structures as involving movement (section 2.2). The discussion is rather brief due to space limitation. For more details see Haddad (to appear).

2.1 The Data

Telugu is a subject pro-drop, head-final language in which *pro* and overt subjects are interchangeable (Kissock 1995). Two types of subjects are licensed in Telugu: (i) structural case marked subjects and (ii) inherent case marked subjects. The former are nominative (e.g., (5a)). The latter are licensed by psych or experiential predicates, and they are mainly dative (e.g., (5b)).[2]

(5) (a) Structural Case: Kumaar paapkaarn tinnaa-Du
Kumar.NOM popcorn ate-3.M.S
"Kumar ate popcorn."

(b) Inherent Case: Kumaar-ki jwaram waccin-di
Kumar-DAT fever.NOM came-3.N.S
"Kumar had a fever."

Like other South Asian languages, Telugu has a special type of non-finite dependent clauses know as adverbial or conjunctive participle (CNP) clauses. These function as adjuncts, expressing an action that is anterior to or simultaneous with that of the matrix clause. They do not take a complementizer, which is why they are normally considered IPs rather than CPs (Jayaseelan 2004), and the verb shows no inflection for tense or agreement.

The language has two types of CNP clauses: (i) perfective and (ii) durative. The verb of a perfective CNP clause takes the form in (6), while the verb of a durative CNP clause takes the form in (7). For the purpose of this paper, I gloss both types as CNP verbs (see Krishnamurti and Gwynn 1985, ch.18).

(6) Perfective: Verb stem + *-i*

(a) Kumaar$_i$ [$\Delta_{i/*k}$ jwaram wacc-i] haaspaTal weLLaa-Du
Kumar.NOM [Δ.DAT fever.NOM come-CNP] hospital went-3.M.S
"Having had a fever, Kumar went to hospital."

(b) Sarita-ki$_i$ [$\Delta_{i/*k}$ aa maaTa win-i] koopam waccin-di
Sarita-DAT [Δ.NOM that matter hear-CNP] anger.NOM came-3.N.S
"Having heard the news, Sarita got angry."

(7) Durative: Verb stem + *-tuu*

Kumaar$_i$ [$\Delta_{i/*k}$ bhoojanamu cees-tuu] Aarun-ki fon ceesaa-Du
Kumar.NOM [Δ.NOM dinner take-CNP] Arun-DAT phone did-3.M.S
"While Kumar was having dinner, he called Arun."

[2] Abbreviations: 3 '3rd person', ACC 'accusative', CNP 'conjunctive participle', DAT 'dative', INF 'infinitive', F 'feminine', G 'genitive', M 'masculine', N 'neuter', NOM 'nominative'. S 'singular'.

As the indices show, structures with CNP clauses do not allow disjoint subjects and are, thus, Adjunct Control structures. In other words, Adjunct Control in Telugu qualifies as obligatory subject control in the sense that the CNP subject has to take the matrix subject as an antecedent. Even with enough context, the CNP subject cannot be coreferential with any other NP in the sentence (e.g., the possessor of the matrix subject), and it cannot be coreferential with an NP selected from surrounding discourse (see Williams 1980, Hornstein 1999, Jackendoff and Culicover 2003, Polinsky and Potsdam 2004, among others). To illustrate, in (8) the CNP subject takes as an antecedent the possessor of the matrix subject *atani* 'his' or the dative NP *atani-ki* 'him-DAT'. In (9), the antecedent is selected from surrounding discourse (speaker or hearer). Both sentences are ungrammatical under the designated readings.

(8) * [**atani**$_i$ amma]$_k$ [Δ_i aakali wees-i] **atani-ki** annam peTTin-di
[his mother.NOM] [Δ.DAT hunger.NOM fall-CNP] him-DAT food put-3.N.S
Intended meaning: *"He got hungry, and his mother gave him food."*

(9) * Sarita [$\Delta_{i/k/j}$ jwaram wacc-i] naa-ku$_i$/mii-ku$_k$ mandulu iccin-di
Sarita.NOM [Δ.DAT fever.NOM come-CNP] me-DAT/you-DAT medicines gave-3.N.S
Intended meaning: *"I/You had a fever, and Sarita gave me/you medication."*

The grammatical structures in (6-7) above are instances of Forward Control. These are structures in which the matrix subject is pronounced determining the identity of the unpronounced subordinate subject. In addition to Forward Control, Telugu licenses Backward Control. In this case, the subordinate subject is pronounced, determining the identity of the unpronounced matrix subject. The sentences in (10) are examples.

(10) (a) $\Delta_{i/*k}$ [Kumaar-ki$_i$ jwaram wacc-i] haaspaTal weLLaa-Du
Δ.NOM [Kumar-DAT fever.NOM come-CNP] hospital went-3.M.S
"Having had a fever, Kumar went to hospital."

(b) $\Delta_{i/*k}$ [Sarita-ki$_i$ aa maaTa win-i] koopam waccin-di
Δ.NOM [Sarita-DAT that matter hear-CNP] anger.NOM came-3.N.S
"Having heard the news, Sarita got angry."

Like their Forward Control counterparts, Backward Control structures are instances of Obligatory Control. As the indices in (10) show, if the CNP subject fails to determine the identity of the matrix subject, the result is ungrammaticality.

2.2 The Analysis

Following Hornstein (2003) and Nunes (1995, 2004), I analyze Telugu Adjunct Control as sideward movement. This type of movement is an instance of copy-plus-merge between two unconnected structures. For example, L and M in (11) are two independent structures. X copies out of L and merges in M.

(11) [$_L$ **X**…] =COPY=> **X** =MERGE=> [$_M$ **X** […]]

Sideward movement comprises two further operations. These are Form Chain and Chain Reduction. According to Nunes, two constituents form a chain if they are (i) non-distinct (i.e., copies of the same token) and (ii) in a c-command relationship. For example, upon the merge of L and M in (12), the two non-distinct instances of X enter a c-command relation and form a chain (symbolized by the dotted arrow).

(12) [$_M$ [$_L$ **X**…] [$_M$ **X** […]]]

Chain Reduction is a PF operation. According to Nunes, if two non-distinct elements form a chain, one of them has to be deleted for the purpose of linearization. Stated differently, Chain Reduction satisfies the Linear Correspondence Axiom in (13) which dictates that an element cannot follow and precede itself, as this induces a violation of irreflexivity. This PF operation reads as (14). When applied to (12), Chain Reduction dictates that all but one instance of X be deleted. Normally, the copy that has the least unchecked features survives deletion.

(13) Linear Correspondence Axiom
Let X, Y be nonterminals and x, y terminals such that X dominates x and Y dominates y. Then if X asymmetrically c-commands Y, x precedes y. (Kayne 1994: 33)

(14) Chain Reduction
Delete the minimal number of constituents of a nontrivial chain CH that suffices for CH to be mapped into a linear order in accordance with the LCA. (Nunes 2004: 27, (44))

Following Hornstein and Nunes, we can propose that sentence (15) has the derivation in (16). In (16a), the CNP clause and the matrix clause form independently, and 'Kumar' copies out of the CNP clause. In (16b), 'Kumar' merges in the matrix clause. Subsequently, the CNP clause adjoins to matrix vP, as shown in (16c). In (16d), the matrix subject 'Kumar' moves from Spec,vP to Spec, IP to check the EPP feature. As the dotted arrows show, the copy of 'Kumar' in Spec,IP c-commands both the copy in the CNP clause and the copy in Spec,vP, forming a chain with each – thus, Form Chain. The pronunciation of all the non-distinct copies of 'Kumar' at PF induces a violation of irreflexivity and the Linear Correspondence Axiom in (13). The reason is that 'Kumar' ends up preceding and following itself. This is why the PF operation Chain Reduction applies in Step (16e). This is when the lower copy in each chain is deleted in order for the structure to be linearized.

(15) **Kumaar** [~~**Kumaar-ki**~~ jwaram wacc-i] haaspaTal weLLaa-Du
Kumar.NOM [~~Kumar-DAT~~ fever.NOM come-CNP] hospital went-3.M.S
"Having had a fever, Kumar went to the hospital."

(16) (a) i. $[_{CNP}\ [_{NP}$ **Kumaar-ki**] jwaram wacc-i] =COPY=> $[_{NP}$ **Kumaar**]
$[_{CNP}\ [_{NP}$ Kumar-DAT] fever.NOM come-CNP]
ii. $[_{Matrix\ vP}$ haaspaTal weLLaa-Du]
$[_{Matrix\ vP}$ hospital went-3.M.S]

(b) $[_{Matrix\ vP}[_{NP}$ **Kumaar**] haaspaTal weLLaa-Du]

(c) $[_{Matrix\ IP}[_{vP}[_{CNP}[_{NP}$ **Kumaar-ki**] jwaram wacc-i] $[_{vP}\ [_{NP}$ **Kumaar**] haaspaTal weLLaa-Du]]]

(d) $[_{CP}[_{Matrix\ IP}[_{NP}$**Kumaar**$][_{vP}[_{CNP}[_{NP}$**Kumaar-ki**] jwaram wacc-i$][_{vP}[_{NP}$**Kumaar**] haaspaTal weLLaa-Du]]

(e) $[_{CP}[_{Matrix\ IP}[_{NP}$**Kumaar**$][_{vP}[_{CNP}[_{NP}$~~**Kumaar-ki**~~] jwaram wacc-i$][_{vP}[_{NP}$~~**Kumaar**~~] haaspaTal weLLaa-Du]]

The outcome of (16e) above can be slightly different. As (17) illustrates, the higher copy in the chain $\{[_{NP}$ Kumaar$]^{Matrix\ IP}, [_{NP}$ Kumaar-ki$]^{CNP}\}$ may be deleted, the outcome of which is Backward Control. This suggests that the derivations of Forward and Backward Control are identical. The difference between the two is a matter of externalization contingent on the selection made by the PF operation Chain Reduction. See Potsdam 2006 for a similar analysis of control in Malagasy.

(17) $[_{CP}[_{Matrix\ IP}[_{NP}$~~**Kumaar**~~$][_{vP}[_{CNP}[_{NP}$**Kumaar-ki**] jwaram wacc-i$][_{vP}[_{NP}$~~**Kumaar**~~] haaspaTal weLLaa-Du]]

Still, the outcome in (17) is a little surprising. One would expect the higher/matrix copy to be pronounced and the lower/subordinate copy to be deleted. Why is it possible to delete the matrix copy and pronounce the CNP copy in Telugu? In Nunes's system, the lower copy is usually deleted because in most cases it has fewer checked features than the higher copy. This puts the higher copy at an advantage. When Chain Reduction applies, it picks the copy with more unchecked features (i.e., the lower copy) and the higher copy escapes deletion.

Let us have a closer look at (16d) above. As the dotted arrows indicate, at least two chains of the subject *Kumaar* are formed. The first chain is $\{[_{NP}$ Kumar$]^{Matrix\ IP}, [_{NP}$ Kumar$]^{Matrix\ vP}\}$. Out of these two copies, the higher copy in Spec,IP has an advantage of checking more features (mainly case), which is why the lower copy is deleted. The second chain is $\{[_{NP}$ Kumar$]^{Matrix\ IP}, [_{NP}$ Kumar$]^{CNP}\}$. These two copies are on equal footing as far as feature checking is concerned. Both copies have checked case, and neither copy has an uninterpretable feature that needs to be checked. When Chain Reduction applies, the operation is free to

select either copy for deletion. If Chain Reduction chooses the lower copy, Forward Control obtains. If Chain Reduction chooses the higher copy, Backward Control obtains.

If this analysis is correct, an important question follows: If the CNP subject does not have a feature to check, why does it move? This question is important because movement in the Minimalist Program is not free. It normally takes place for the purpose of feature checking. Given that in Telugu the CNP subject checks case prior to movement, it is hard to imagine why movement takes place at all.

Hornstein (1999) solves this problem by assuming that theta-roles are features and that they trigger movement. In addition, he adopts Lasnik's (1995) Enlightened Self Interest, whereby an element undergoes movement to check a feature of its own or a feature on the target. I state these assumptions in (3) above. The assumptions are not innocent, however. They are questioned on empirical grounds, posing a serious challenge for the Movement Theory of Control in general (see Bobaljik and Landau 2007). The main challenge is that the thematic requirement of the matrix predicate may be satisfied by a lexical item in the numeration (i.e., via external merge). Thus, movement (or internal merge) should be optional at best, in which case a control interpretation cannot be enforced.

Another possible solution is to adopt the standard assumption that the structural licensing of a subject NP (i.e., checking structural case) takes place only if a tensed T that is saturated by C is available. Otherwise, the subject remains active, which is why it moves to the matrix clause where it checks its structural case feature (Chomsky 2001). This approach is not without problems, however. If the CNP subject in Telugu Adjunct Control does not check its structural case feature (in this case, nominative case would be default case), it should be the easier target for deletion when Chain Reduction applies. This means that Forward Control should at least be considered superior to Backward Control, which is not true. (For a more detailed discussion, see Haddad 2007: 196-215).

As an alternative, I suggest that the CNP subject moves to the matrix clause, not to check a feature of its own or a feature on the target, but to license the merge of the CNP clause. I suggest that, although the CNP clause is propositional (i.e., a predicate with a closed subject position), the head of the CNP clause is more likely to bear a predicative feature, and I provide evidence to this effect. This feature makes it necessary that the CNP clause undergo merge as a predicate, which is only possible if the CNP subject undergoes movement. Section 4 spells out the details. First, however, I lay out some theoretical assumptions related to the merge of adjuncts and predication in section 3. In section 5, I provide evidence from Sinhala, another South Asian language, to show that if the CNP clause may merge as a proposition, no movement of the subject – and thus no control interpretation – is necessary.

3 Theoretical Assumptions

3.1 Merge of Adjuncts

Within the framework of the Minimalist Program, merge is defined as an instance of a probe-goal relation between two syntactic objects determined by the features on the heads of the probe and the goal; that is, if α and β merge, some feature F of α must probe F on β (Chomsky 2000: 132-135, Hornstein 2001: 56, Adger 2003: 91, and Pesetsky and Torrego 2006).

Whereas the above definition is true of the merge of complements, it does not automatically apply to the merge of adjuncts. Unlike complements, adjuncts do not have to meet the selectional requirements of the head they merge with (Chomsky 2004: 117). This means that adjuncts do not enter a probe-goal relation with the head of the structure they adjoin to, and accordingly they do not value features on probes.

Still, adjunction is a type of merge. Following Webelhuth (1992: 86), I assume that when properties of a syntactic object cannot be determined by selection, its behavior may be dictated by the properties of its own head. Similarly, Chomsky (2006) holds that "in order for a phrasal structure to undergo merge, its head must have a feature indicating that it can merge." Applying this assumption to the adjuncts under investigation, we may conclude that the merge of a CNP clause with the matrix clause depends solely on the characteristics of the head of the former.

3.2 Predication

For the purpose of this paper, I adopt the structural theory of predication as proposed by Rothstein (2001). According to this theory, although mapping between semantic and syntactic predicates is possible, "syntactic predication relation can be defined without reference to semantic or thematic concepts" (60-61).

For example, a pleonastic may appear in the subject position of a predicate constituent only to satisfy the Predicate Licensing Condition. This condition dictates that "every syntactic predicate must be syntactically saturated … by being linked to a non-predicate constituent, its subject" (47).

According to Rothstein, the Predicate Licensing Condition may be satisfied directly, whereby a non-predicate constituent fills the subject position of a predicate, and together they form a closed maximal constituent or a proposition. It may also be satisfied indirectly, in which case the predicate – a subordinate phrasal structure – is linked to (or predicated of) a non-predicate constituent in a higher clause.

In addition, there are two types of predicates: inherent (18a) and derived (18b) (Rothestein 2001: 58-60, (55)). Examples of inherent predicates are AP and VP. An example of derived predicates is a predicative CP. A CP is inherently non-predicative/propositional, unless an operator is inserted in Spec,CP, binding a syntactic variable inside CP, in which case it becomes predicative. For example, *for you to read* in (19), (in original (52b)), is a derived predicate.

(18) (a) Inherent predicates are maximal projections of lexical heads.
(b) Derived predicates are derived from maximal projections of functional heads by syntactic operations.

(19) I bought a book [$_{CP}$ OP$_i$ [$_{C'}$ for [$_{IP}$ you to read t$_i$]]].

Most crucially, Rothstein (Rothestein 2001: 58-60) holds that predicates (inherent or derived) cannot function as arguments, as (20), (in original (56-iv)), explicitly states (see also Stowell 1991). For example, sentences (21a-b), (in original (54a-b)), are ungrammatical because a derived predicate occupies an argument position.

(20) Predicates are not assigned theta-roles since these are assigned to syntactically closed maximal projections.

(21) (a) *I persuaded John [$_{CP}$ OP$_i$ [$_{C'}$ [For John to meet t$_i$]]].
(b) *[$_{CP}$ OP$_i$ [$_{C'}$ [For John to meet t$_i$]]] would seem unlikely.

In the following section, I present evidence to show that CNP clauses are syntactically predicative although they are semantically propositional.

4 CNP Clauses as Predicative

Evidence that Telugu CNP clauses are less likely to be closed predicate constituents comes from two sources. First, CNP clauses in Telugu may never take an overt complementizer, which seems to indicate that they do not project higher than IP (see Jayaseelan 2004). In other words, they are not CPs, which according to Rothstein qualify as inherently non-predicative constituents.

Further, Telugu CNP clauses may never merge as arguments (see Masica 2005: 127). Observe the sentences in (22). I take it that the NPs (or, more appropriately, DPs) in (22a-b) are arguments. The prediction is that none of these positions may be filled with a CNP clause. This prediction is borne out, as the sentences in (23) illustrate.

(22) (a) [$_{NP}$ samayaM] anTee [$_{NP}$ dhanam-e]
[$_{NP}$ time] mean [$_{NP}$ wealth-EMPH]
"Time is nothing but money."

(b) [$_{NP}$ aalaysam] anTee [$_{NP}$ naʃTam-e]
[$_{NP}$ delay] mean [$_{NP}$ loss-EMPH]
"Delay is nothing but a waste."

(23) (a) *popkorn tina-Daaniki sari-ayina samayam anTee
popcorn eating- for proper-happening time means
[cinimaa cuus-tuu(-e)]
[movie watch-CNP(-EMPH)]
"The best time to eat popcorn is while watching a movie."

(b) *kaafi taaga-Daaniki sari-ayina samayam anTee
coffee drinking-for proper-happening time mean
[pani-ki weLL-i(-e)]
[work-to go-CNP(-EMPH)]
"The best time to have coffee is before going to work."

If the CNP clauses in (23) are substituted by non-finite CP adjuncts, the result is the grammatical structures in (24).

(24) (a) popkorn tina-Daaniki sari-ayina samayam anTee
popcorn eating- for proper-happening time mean
[cinimaa cuus-tunna-appuD-e]
[movie watch-INF-while-EMPH]
"The best time to eat popcorn is while watching a movie."

(b) Sarita kaafi taaga-Daaniki sari-ayina samayam anTee
Sarita.NOM coffee drinking-for proper-happening time mean
[Kumar pani-ki weLL-ina-tarwaat-e]
[Kumar.NOM work-to go-INF-after-EMPH]
"The best time for Sarita to have coffee is after Kumar goes to work."

Let us assume that the above observations suffice to conclude that Telugu CNP clauses may not merge as closed predicate constituents. The question is: In what capacity do they merge when they adjoin to the matrix clauses of Adjunct Control structures? In section 3.1, I suggested that the merge of an adjunct depends on the feature specification of the head. Assuming that CNP clauses do not qualify as closed predicate constituents, this means that they undergo merge as open predicates.

However, evidence from Backward Control shows that the subject position of CNP clauses is filled clause-internally, which means that CNP clauses cannot be inherent predicates. Further, only lexical projections qualify as inherent predicats (see (18a)). If CNP clauses are IPs, then they are not lexical projections. Therefore, we are left with one possibility: To undergo merge as open predicates, CNP clauses must qualify as derived predicates. According to Rothstein, this is possible only if a syntactic operation converts them to open predicates (see (18b)). I suggest that the operation in this case is movement. The CNP subject moves to the matrix predicate, allowing the CNP clause to merge as an open predicate that is indirectly predicated of an element in the matrix clause.

If this approach is on the right track, at least three questions arise. First, how can a phrasal structure be a saturated predicate, yet its head is non-predicative? The answer to this question depends crucially on the main premise of the structural theory of predication as delineated in section 3.2: "Syntactic predication relation can be defined without reference to semantic or thematic concepts" (Rothstein 2001: 60). In the present analysis, this means that semantically the CNP clause can be a saturated predicate, yet syntactically it does not project a non-predicative head, namely, a CP. This idea is reminiscent of the role of D in DP. A bare NP is crucially predicative; the projection of D renders it non-predicative (Higginbotham 1987, Rothstein 2001). Szabolcsi (1994) makes a more explicit comparison between C and D, holding that they both "enable a 'proposition' to act as an argument." If the observation that arguments are necessarily non-predicative is correct, then C and D are similar in that they both are non-predicative heads.

The second question is related to the derivation as presented in section 2.2. If the subject moves to license the merge of the CNP clause, the question is: what type of movement is this? It is not Greed. It is not Attract. What is it?

Closer observation shows that this type of movement is not different from the movement that takes place to check a feature on the target, which incidentally takes place anyway. In both cases, an element moves in order to serve a purpose other than its own, resulting in the convergence of the structure. This means that one can still label this type of movement as Enlightened Self Interest. If further research proves that its use goes beyond Adjunct Control in Telugu, then adding it to the definition of Enlightened Self Interest becomes desirable. However, I will refrain from doing so here awaiting more empirical evidence.

The third question is: At what point does the CNP clause realize that it is not going to project a non-predicative CP and thus urge its subject to move? This usually happens when the numeration is exhausted. If movement happens before the numeration is exhausted, then the undesired operation Look Ahead must be involved, in which case the CNP clause foresees the problem and takes action.

Fortunately, the implementation of Look Ahead becomes unnecessary if we assume that the computational system works with subarrays of the numeration rather than with the whole numeration at once (Chomsky 2000). In this sense, the CNP clause would be assembled based on one subarray. When this subarray is exhausted, the CNP clause realizes that its head is predicative and that there are no more items at its disposal to change the situation. This is when the subject copies out of the CNP clause and becomes available in the workspace, awaiting merge in the matrix clause. Upon merging with the matrix predicate, the subject licenses the merge of the CNP clause as a predicate.

Adjunct Control into CNP clauses is not typical of Telugu. It is a feature that Telugu shares with all South Asian languages. I suggest that this type of control is derived by movement, and that movement takes place in order to license the merge of a predicative CNP clause. If this is correct, a non-trivial prediction follows: If CNP clauses in a given language of South Asia behave as non-predicative constituents, movement becomes unnecessary and control interpretation becomes optional at best. Fortunately, such a language exists. The details are in the following section.

5 Sinhala CNP Clauses as Non-Predicative

Like Telugu, Sinhala licenses Adjunct Control into CNP clauses; sentence (25) is an example (Gair et. al 1998: 275, (9a)). Notice that the CNP subject, which is obligatorily silent, has to be coreferential with the matrix subject.

(25)	mamə$_i$	[$\Delta_{i/*k}$	gedərə	gihil-la]	kææmə	kææwa
	I	[Δ	home	go-CNP]	food	ate

"I went home and ate.' Or 'Having gone home, I ate."

However, Sinhala CNP clauses have other functions that Gair (2003) describes as "unusual" and "unique" among South Asian languages. They can function as independent, matrix predicates. Sentence (26) is an example.[3]

(26)	mamə	Renu-wə	dækka	habei	dæn	æyə	gihil-la
	I	R-ACC	saw	but	now	3F.S	go-CNP

"I saw Renu but now she has gone." (From Taylor 2006: 151, (5))

In addition, CNP clauses in Sinhala may be realized in an argument position (e.g., (27)). Notice that in this case the CNP clause takes an overt complementizer.

(27)	[horek	tamange	kææmə	horəkam	kərə-la	kiyəla]	ohu	dææka
	[robber	self-GEN	food	theft	do-CNP	COMP]	he	saw

"He saw that a robber had stolen his food." (From Taylor 2006: 159, (24b))

Assuming that independent clauses are CPs and that an overt complementizer is evidence of a CP layer, we may conclude that the CNP clauses in (26) and (27) project as high as CP.[4] This is further supported by the fact that independent clauses and arguments are non-predicative, which is an inherent characteristic of CPs. This means that the CNP subject in Sinhala Adjunct Control structure does not have to move in order to license the merge of the CNP clause. The head of the CNP clause is non-predicative and it may merge with the matrix clause as a closed predicate. Therefore, unless there is another reason for the subject to move, control into Sinhala CNP clauses should be optional at best. This prediction is correct, as (28-29) show (from Gair et. al: 1998: 275-277, (9b) and (14a)). Compare (28) with (25) above.

[3] Gair et. al (1998) analyze *-la* in (26) is homonymous with the CNP marker in (25). However, Taylor (2006) provides an elegant polysemy analysis of the Sinhala *-la*, capturing the aspectual perfective meaning that characterizes it different uses.

[4] The fact that the CNP clause in (26) is an independent clause with a non-finite verb may sound bizarre. However, see Nikolaeva (2007) and works within for evidence that finiteness and main clause status are not necessarily linked and that independent clauses may be non-finite.

(28)	mamə	[Kalyaani	gedərə	gihil-la]	kææmə	kææwa
	I	[Kalyani	home	go-CNP]	food	ate
	"Kalyani went home and I ate.' Or 'Kalyani having gone home, I ate."					
(29)	amma	gaməTə	gihil-la			
	mother	village.DAT	go-CNP			
	mamə	seerəmə	gedərə	wæDə	kərannə	oonə
	I.NOM	all	house	work	do	necessary
	"With Mother gone to the village, I have to do all the housework."					

Control into CNP clauses in Sinhala obtains only when the CNP subject is unpronounced (e.g., (25) above), which makes Adjunct Control optional. One explanation is that CNP clauses in Sinhala take two forms: IPs and CPs. Only the former results with control for the same reasons I explained in the previous section.

6 Conclusion

One of the main arguments used against the Movement Theory of Control is related to the trigger for movement, or why movement takes place. Given that subordinate subjects of control structures in several languages (e.g., Icelandic) check case in the subordinate clause, it is hard to argue that movement takes place for the purpose of the structural licensing of the subject. At the same time, the assumption that the subject moves in order to satisfy the thematic requirement of the matrix predicate is contentious. In this paper, I argue that the subject moves in order to license the merge of the subordinate clause that hosts it. The virtue of this approach, if correct, is that it divorces movement in control from feature checking. Evidently, this paper is limited in scope, focusing mainly on Telugu Adjunct Control and extending the discussion to Sinhala. More research is needed to test whether the approach proposed here applies to other languages.

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