CHAPTER IV
SMALL CLAUSE COMPLEMENTS

4.1 INTRODUCTION

This chapter discusses small clause complements. We begin with the question what are "small clauses" in 4.1.1. In 4.1.2 we present small clauses in H/G. 4.1.3 examines recent hypotheses regarding the question raised in 4.1.1: the categorial status of the small clause.

4.1.1 Small clauses are in some ways the most difficult to analyze, although not infrequently discussed in current syntactic debates. There is no general agreement, for instance, regarding the categorial status of the bracketed complements in (1) & (2) or the bracketed adjunct in (3):

1 I consider [John intelligent]
2 We feared [John killed by the enemy]
3 They ate the meat [raw]

Note: (2) is from Hong (1989)

The question is: do the complements in (1) and (2) count as clauses? Of exactly what sort?

4.1.2 Before moving on to these issues let us look at a few putative small clause constructions in H/G:
4.1.3 Although, as we shall see, the issue of category is not our central concern, it is nevertheless important to take stock of the situation, as it were.

The literature on small clauses begins with Stowell's (1983) by now classic analysis which focuses on small clauses that function as complement clauses and seeks to explain Case and government patterns to be found within the small clauses. Before going on to the specific problem that concerns us in this paper, let us take a brief look at what a small clause is taken to be. The commonly assigned structure for a small clause is:

\[ [\text{sc} \ NP \ XP \ ] \]

Traditionally, a small clause is a syntactic unit consisting of an NP subject and some nonstandard predicate, and not containing either a C or an I, more specifically, any particle or tense-
sensitive auxiliary whose presence would have made it a regular clause. According to Stowell (1983), any constituent that can be demonstrated to have a subject and a predicate at LF is a clause, "...although the clause may not function as a complete proposition if it lacks an internal tense operator" (Stowell, 1983). Alternatively, the predication module of parametric syntax demands that every predicate must be predicated of a subject.

Stowell answers the crucial question — do the subject and predicate of a small clause form a syntactic unit -- in the affirmative and gives constituency tests, which we need not recount here, to support his argument.

Sinha (1991) makes the interesting proposal that the structure of a small clause is \([_{SC} \text{XP} \text{XF}]\). He uses Kayne’s (1985) arguments and data to show that XP in subject position can be any category, including a tensed CP. Let us look at his position in brief. Sinha explains some raising facts of Hindi in terms of small clauses. Based on Chomsky (1981), he proposes that the raised" element and the embedded clause together form a small clause, resulting in a tensed CP occurring in the predicate position of the small clause. In

\[
\text{7H maiM jOn koj jaantaa huuM [}_{CP} \text{ki pro^/wah^ kitaab} \\
\text{I John-Acc know that pro/he book} \\
\text{paRhtaa hai]}
\]

reading is

the verb \text{jaantaa} is \text{monotransitive}. The two candidates for the
same position, \textit{jOn} and the extraposed CP, are considered to be sub-parts of one, larger, constituent. The d-structure for the above sentence is:

\[ \text{8H maiM [jOn ko_i [cp ki pro_i/wahi kitaab paRhtaa hai]] jaantaa huum} \]

Sinha suggests treating this construction as a small clause. Based on the standard structure assigned to small clauses viz \([_{sc} \text{NP XP}]\) and on Kayne's (1985) analysis of English particle constructions in terms of small clause constructions as \([\text{XP Prt}]\), Sinha arrives at the following structure for small clauses:

\[ [_{sc} \text{XP XP}] \]

Kayne's analysis implies that the subject XP of a small clause can have any value: particular values of X may be ruled out by \textit{theta-theory}, Case theory etc. Sinha deals with the possibility that the predicate XP can be a tensed CP. Drawing on Williams' (1980) theory of predication, according to which any category can be a predicate, including IP and CP which are "complex predicates" as opposed to AP, NP, PP and VP which are "simple or headed predicates", he postulates \([_{sc} \text{XP CP}]\) as a possible small clause structure.

In the earlier \textit{Stowell-type} analyses discussed above, the small clause must be a projection of the category of its predicate. Thus,
10 I consider [AP John intelligent]
11 I vote [NP John the leader of this class]

and so on. Hong (1989) suggests that all small clauses, no matter what category their predicates belong to, are IP structures. She gives the structures (12-13) for English and (14-15) for French, where the AGP. (the INFL, in the earlier machinery) is present inside the small clause.

12 I consider [IP John [• φ [NP a genius]]]
13 I consider [IP John [I : φ [AP intelligent]]]
14 je crois [IP Marie [I : AGR [NP une genie]]]
15 je crois [IP Marie [I : AGR [NP intelligente]]]

In the H/G examples presented in (4-5), then, the AP/NP/CP status of the small clauses would, if we were to follow Hong seriously, change to IP.

We will discuss the more recent contributions of the MPLT framework to the analyses of small clauses in 4.4.1. For the moment we can note that the controversy over the exact categorial composition of small clauses still persists (see Sinha's (1991) criticism of Stowell (1983)). Our concerns do not compel us to choose any particular option among the various structures proposed for small clauses.
4.2 PROBLEM

This section presents a phenomenon specific to H/G small clauses. The problem is mentioned in 4.2.1 along with certain (related) facts of H/G agreement. 4.2.2 outlines the problem in detail.

4.2.1 Let us turn now to our main concern regarding small clauses which is about something that takes place inside the small clause: Case marking into the small clause. Specifically, there exists an asymmetry in (the verbal agreement pattern and) Case marking that is extremely visible in small clauses. Let us look at the relevant data in the two languages in order to get a clearer picture of what the problem is all about. Compare the following sentences (based on Wall, 1989):

16aH yeh log [patthar ko bhagawaan] maante haiM
16aG aa loko [pattharne bhagawaan] maane che
   these people stone-ACC God believe
16bH + yeh log [patthar bhagawaan] maante haiM
16bG * aa loko patthar bhagawaan maane che
   'These people believe a stone to be God'

Notice that the subject of the small clause receives Accusative, rather than Nominative Case. Before outlining the problem in detail, I would like to present certain agreement facts about H/G which are pertinent in the context of the later discussion, in particular the discussion relating Case marking to agreement.
Consider (17)a & b:

17aH roaiM ne larkii ko dekhaa
17aG meM chokrii ne joyii
   I-ERG girl-ACC saw
17bH maiM ne larkii dekhii
17bG meM chokrii joyii

The normal agreement pattern in Hindi and Gujarati is as follows: the verb in Hindi agrees with that NP which bears a phonologically null Case. In (17aH), the V does not agree with either of the two NPs in the sentence -- rather, it takes the default (masculine, singular) morphology to show its neutrality. In (17bH), the V agrees with the object NP and hence takes the feminine morpheme -ii. In Gujarati, the verb, if non perfect, agrees with the Nominative subject as in maniSaa/raaJeeS chokrii ne joyii (‘Manisha/Rajesh is looking at a girl’) and if perfect agrees with the Direct Object, regardless of the Case marking, null or overt, of the Direct Object; hence the feminine form joyii in (17a, bG). Note that Direct Object status is compatible with null and overt Case marking in both languages.

4.2.2 Having described the agreement patterns in Hindi and Gujarati, let us return to the problem at hand. Essentially, what we are asking is, why do the subjects of small clauses (it both Hindi and Gujarati) have to have phonologically overt Case marking? That is, phonologically null Case-marked NPs in this position are possible in other constructions as in
where patthar is not the subject of a small clause as there is no predicate; why is this disallowed in small clauses?

4.3 EARLIER ANALYSES

A look at some of the analyses offered for similar problems might be useful at this juncture. Two accounts are presented here. Mahajan (1990) in 4.3.1 and Sinha (1991) in 4.3.2.

4.3.1 Mahajan (1990) offers an interesting account of these and related facts using the current framework. His position on agreement and Case in Hindi is summarized below.

Mahajan has argued for a movement rule called argument shift and his claim is that subject as well as object agreement in Hindi takes place by means of this rule. Argument shift is an L-movement rule involving substitution into an L-position and has the properties of A-movement. This rule moves the argument in question (i.e., the NP with which the V will agree) into the SPEC of AGR making available a SPEC-head configuration in which agreement can take place. Mahajan believes that agreement between AGP and the argument that it governs is the very same configuration
in which structural Case is assigned. Mahajan’s suggestion that object agreement in Hindi occurs only when the V cannot assign structural Case follows from the implication that elements which do not receive structural Case within the VP move to SPEC AGP positions while elements which receive structural Case in the VP do not and cannot move out to SPEC AGR -- it is assumed that all arguments are generated VP internally. Moreover, a distinction is maintained between inherent and structural Case. In Mahajan's theory, all NPs must bear some Case (inherent or structural) at s-structure and specifically, structural Case at LF. Evidence from closely related languages demonstrates that NPs bearing inherent Case can also show verbal agreement, leading Mahajan to speculate that even inherently Case marked NPs must receive structural Case.

Mahajan also discusses the nature of the Case assigned by V. Unaccusative (or ergative) verbs assign a Case to their objects which is similar to the partitive Case of Belletti (1988). Mahajan differs from Belletti, though, in maintaining that partitive Case is not inherent but that structural Case is.

The canonical agreement configuration assumed by Mahajan for both subject and object agreement is as follows:

1. Note that this is similar to and can easily be reformulated in the MPLT manner.
The IP structure he assumes is the articulated clause structure due to Pollock (1989) and Chomsky (1989). He differs from Pollock (and follows Chomsky) in that he includes TP within AGRP. Thus the IP structure in Mahajan's discussion of Hindi is: 

**Structural Case** is assigned to NPs in [SPEC, AGR$_5$] and [SPEC, AGR$_0$] positions.
Having summarized Mahajan's account of agreement and Case in Hindi and outlined his theoretical assumptions, let us now look at those of his proposals that are relevant to our problem. Consider again (17aH) and (17bH). To complete the picture, we have:

\[21aH \quad * \text{maiM ne laRkii dekhaa} \]
\[21bH \quad * \text{maiM ne laRkii ko dekhii} \]

Mahajan's explanation for the above paradigm is as follows: Object NPs which bear the postpositional lexical Case -ko are marked for specificity. Mahajan claims that objects which show agreement (i.e., those which are not -ko marked and which thus move to \(\text{SPEC AGR}_0\) to receive structural Case) also exhibit specificity. These two types (both objects of perfect participles which do not assign structural Case) are contrasted with a type of object which neither shows agreement nor bears -ko and is non-specific:

\[22H \quad \text{siitaa laRkaa dekh rahii hai} \]
\[\text{Sita boy see is\textdoublespace\text{\textdoublespacecont.}} \]
\[\text{\textdoublespace\textdoublespace'}Sita is seeing the boy' \]

Mahajan has shown that (17aH-17bH), which allow leftward NP movement, are cases in which the fronted object may bind a pronoun or a reflexive; (22H) does not allow this possibility. To this is added the third difference (apart from the lack of
agreement and binding} of non-specificity. Thus, objects that are structurally Case marked by the V cannot move to an L-related position, therefore cannot show agreement and are not in a position to bind and must be interpreted as nonspecific. By implication, then, agreeing objects are always specific because they must receive a structural Case from outside the VP. Mahajan cites Dutch and German studies for similar effects.

In Mahajan's system, the Case which is associated with non-specificity is not an inherent Case as in Belletti (1988) -- recall that partitive Case is structural for Mahajan. He presents a paradigm for the specificity issue which classifies sentences on the basis of perfect vs. non-perfect participles. Thus, for him, since in Hindi the perfect participle cannot assign structural Case at all, the object has to move out of the VP, resulting in a non-specific interpretation for the sentence.

Mahajan's proposal for the correlation between specificity and structural Case assignment by means of AGR is that the pronominal features of AGR bring about specificity effects. NPs which are coindexed with AGR have to necessarily be interpreted as specific. Non-specific NPs cannot, thus, be coindexed with AGR, in other words, cannot move to SPEC AGR to receive structural Case from AGR; non-specific objects can receive structural Case only from the V (which in Mahajan's account, can assign it).

For our purposes, let us summarize Mahajan's position thus: Mahajan implies that only those objects which don't show agree-
ment but show specificity are -ko marked (not all objects showing specificity are -ko marked — some have agreement and no -ko).

Our problem with Mahajan’s analysis is two-fold: (1) While Hindi has (17aH), Gujarati has (17aG), i.e., Hindi has no object agreement while Gujarati does have it. This is not an isolated occurrence: as mentioned in 4.2.1, in Gujarati, typically, when the subject bears an inherent (Ergative) Case marking, the verb (if perfective) agrees with the object irrespective of Case. This is, however, a problem of simplex clauses and I will not discuss it further in this work. See Shah (1989) for more details regarding H/G agreement differences. (2) The Hindi sentence maiM_ne laRkii dekhii, contrary to Mahajan’s claims, seems to permit non-specific readings with ease, suggesting that an analysis that groups -ko in non-perfect sentences with null Case objects in perfect sentences might be on the wrong track.

4.3.2 Sinha (1991) has an interesting alternative account of the -ko/∅ alternation of objective Case marking in Hindi, one which does not group null Case in perfect with -ko in non-perfect sentences. He uses Baker’s (1985) notion of incorporation and a hierarchy of nouns and verbs to predict which Case-marker will occur under what circumstances. Let us briefly summarize his position.

In Hindi, as in other Nominative-Accusative languages, a transitive verb assigns Case to its object argument and this Case is morphologically realized as -ko. But sometimes the Case-
marker -ko fails to surface on an NP which has been assigned Accusative Case -- the object argument surfaces with a Ø Case-marker. Example: maiM roTii khaataa huuM 'I eat bread' (Sinha, 1991:24).

Kellogg (1875), Guru (1920), Porizka (1963), among others, suggest the animacy, specificity and genericity (besides other features) of the object NP as conditions for the appearance of -ko on it. But it is easy to find individual counter-examples to these conditions. No one, to Sinha's knowledge, has given an in-depth account of what determines the appearance or otherwise of -ko.

Based on Chomsky (1986b), Sinha reasons that a V can assign inherent Case (to a complement that it theta-marks) at d-structure. Chomsky (1986b) assumes that N, A and P assign inherent Case at d-structure to complements they theta-mark; V and INFL assign structural Case at s-structure. Sinha holds that V and INFL continue to assign structural Case at s-structure to positions they don't theta-mark -- this accounts for Nominative Case on derived subjects and ECM.

Sinha's treatment of the phenomenon of -ko disappearance employs incorporation. Most transitive verbs have a lexical property that enables them to incorporate the Case of their direct objects. But what about the sentences where the NP must surface with -ko? The question here is whether the verb fails to incorporate the Case due to its own "weakness" or whether the NP
has managed to resist its Case being incorporated. Sinha's suggestion is that there is "tension" between the verb and its direct object regarding the Accusative Case -ko -- the verb trying to incorporate it and the NP trying to retain it. Some verbs are too weak to incorporate the Case. Some NPs are strong enough to resist incorporation of their Case by the verb. The weakness of the verb and the strength of the NP may be due to their respective semantic properties. Sinha isolates three features of NPs which are relevant to incorporation [+Generic], [+Specific], [+Definite]. Only his exclusion of animacy is a departure from the traditional studies mentioned earlier. There is an implicational hierarchy in the arrangement of these features with regard to the reach of the verb. If a verb's incorporating strength can only reach [+Generic], then it cannot reach the other two. The Case on the NP with [+Generic] feature will be incorporated into the verb and subsequently deleted. With the same verb, [+Specific] and [+Definite] NPs will -- must -- surface with -ko. If a verb's reach is limited to [+Specific], [+Generic] and [+Specific] NPs will have ø while [+Definite] will have -ko and so on. These judgments are relative -- if the verb reaches [+Specific], for example, a [+Specific] NP with -ko is "unidiomatic" while a [+Generic] NP with -ko is nearly ungrammatical, and so forth. There may be verbs with ø incorporating strength, unable to reach even [+Generic] NPs. There are also abstract NPs which, no matter what feature they have, always allow Case incorporation, irrespective of the strength/weakness of the verb. An incorporation configuration would look like:
The Case incorporation rule is a preference rule for Hindi, that is, if it can apply then it must apply —otherwise resulting in highly unacceptable though not totally ungrammatical sentences. It is a movement rule and must apply in the syntax. However, with regard to every transitive verb, it needs to be made explicit in the lexicon what the incorporating strength of that verb is. This seems to be an idiosyncratic property of the verb and needs to be learnt by a language learner.

Incorporation is dealt with in great detail in the formal syntax tradition by Baker (1988). Essentially incorporation means syntactic movement of an X' category —there are examples of Noun, Verb, and Preposition incorporation. According to Baker, all GF-changing processes are the result of movement of a lexical head (i.e. X*) category —incorporating it into a higher head. Being a movement rule, it is one instantiation of Move-a. Thus it must satisfy all the conditions on movement viz. ECP (t must be properly governed), the theta-criterion (movement must be to a non-theta position) and Subjacency. Baker has revised the notion of theta-position —it subsumes both "a position to which a theta-role is assigned" and "a position from which a theta-role is assigned". Thus, N, V, and P all occur in theta-positions at d-structure. But all adjunction positions are non-
theta-positions, given the X'-theory (Jackendoff, 1977, Stowell, 1981). Therefore, if N, V, P are adjoined to an X' category, they will not be able to assign or receive a theta-role from that position. Baker shows that incorporation satisfies all the movement conditions.

An illustration of how incorporation works:

24aH maiM [NP roTii] khaataa huuM
  I bread eat AUX

24bH d-structure

\[
\begin{align*}
&CP \\
&\quad \text{SPEC} \quad C' \\
&\quad \quad \text{IP} \quad C \\
&\quad \quad \quad \text{NP} \quad I' \\
&\quad \quad \quad \quad \text{maim} \quad \text{VP} \quad I \\
&\quad \quad \quad \quad \quad \text{NP} \quad V \quad huuM \\
&\quad \quad \quad \quad \quad \quad \text{NP} \quad K \quad khaataa \\
&\quad \quad \quad \quad \quad \quad \quad \text{roTii} \quad \text{ko}
\end{align*}
\]
Here, Case is assigned to the NP [roTii] at d-structure itself. Since [roTii] is [+Generic] and khaanaa is a verb that reaches all the three features, the Case is incorporated by it, that is, the $X'$ category K adjoins the $X'$ category V by Move-$\alpha$. The movement of K obeys the major condition on such movement -- the HMC subcase of ECP. This s-structure goes into LF and the NP [roTii] is correctly interpreted as the direct object of the verb khaanaa. The Case K does not get any phonetic realization. In the PF, both K and its t are deleted.

The assumption is that -ko is assigned at d-structure. This gives us an option. In an expositorily convenient naive formulation, we may say that either (i) it is deleted in situ or (ii) it
is deleted after incorporation. To put it more carefully in the context of the account that is emerging, either (i) the null Case option is exercised absolutely within the nominal, or (ii) the exercise of this option is relativized to the application of incorporation. Sinha argues that adopting (ii) has some advantages.

To ensure the proper distribution of null-Case-marked objects over surface structures, Sinha suggests a PF filter analogous to the old "doubly-filled COMP" filter. In the man [that [I saw t]] there is a "null operator" (a WH-element with no phonetic realization) in [SPEC, CP] which gives its index to the complementizer. This null WH-element is taken as the head of the relative clause and is coindexed with the NP which the relative clause modifies -- this index is given to the complementizer which then acts as a relative pronoun (as was claimed by traditional grammar). The null operator participates in the index-sharing by adjoining to that, an option not available to a phonetically realized WH-element (violation of the doubly-filled COMP filter). Sinha suggests using a similar mechanism in the case of -ko deletion.

Incorporation is subject to the following condition proposed by Baker: The indexation of a complex $X_j$ category (created by incorporation) is the sum of the indices of its constituent elements. We can use the same convention for the Comp index sharing phenomenon and say that the complex C category that results from the adjunction of the null operator to the complemen-
tizer would bear the index of the null operator (as well as the index of the complementizer, if it has one).

Although all Baker's examples of incorporation are non-null, Sinha notes that, nothing in a theory that otherwise allows null elements prevents null Cases also from being incorporable. Sinha points out that the study of the doubly-filled COMP filter data suggests that, actually, the incorporation of a null element is the less marked case. Hindi sets a parameter -- it restricts the incorporation of Case into the verb to a null, i.e. phonetically empty K. In view of this, Sinha revises his "deletion" account to propose that either (i) the overt K element -ko or a phonetically empty K is assigned to the direct object at d-structure. Alternatively, (ii) Case is assigned to the direct object at d-structure, but it is phonetically realized only at s-structure, and if it is incorporated, it will not be phonetically realized. And, as noted earlier, Sinha argues for analysis (ii).

Barring a very small number, almost all the transitive verbs in Hindi are capable of incorporating the Accusative Case. So, it is the referential features of the NP which effectively decide in which cases incorporation does take place. Here is a quick survey of the patterns:

I Some transitive verbs can incorporate Case from

\[ \text{NP[+Definite]}: - \]

\[ \text{paRhnnaa, likhnaa, dhonaa} \]

'read', 'write', 'wash'
25aH  maiM kitaab paRhtaa huuM  

[+Generic]  
I-NOM book read  

25bH  maiM ne ek kitaab paRhii hai  

[+Specific]  
I ERG one book have-read  

25cH  *??maiM ne ek kitaab ko paRhaa hai  

25dII  maiM ne yah kitaab paRhii hai  

[+Definite]  
this  

25eH  ?maiM ne is kitaab ko paRhaa hai  

II  Some transitive verbs can incorporate from NP[+Specific]  
dekhnaa, puujnaa  
see'. 'worship'  

III  Some transitive verbs can incorporate from NP[+Generic]:  
pahcaannaa  
'recognize'
IV Some transitive verbs which do not incorporate Case:-
Jaannaa, samajhnaa
‘know’, ‘understand’

V Abstract NPs always allow Case to be incorporated:-
paap dhonaa, sapnaa dekhnaa, caalaakii pahcaannaa, bhaashaa
‘wash sins’, ‘see dream’, ‘recognize cleverness’. ‘know
jaannaa, kasam khaanaa
language’, ‘take oath’

VI Names and pronominals never allow Case incorporation

To summarize the relevant points of Sinha’s position: those
objects for which incorporation fails to take place, i.e. where
the NP is too strong or the verb is too weak, are -ko marked.

This account, while beginning to explain the general pattern
of Accusative Case marking (and leaving open questions such as
why names and pronominals pattern alike, which need to be ad-
dressed in future work), fails to predict the variability ob-
served in (26H) below and similar sentences:

26H maiM patthar (ko) toRtaa huuM
   [+Generic]
   I stone (KO) break Pres

27H maiM ek patthar (ko) toRuungaa
   C+Specific]
   I a stone (KO) break-Fut

In these sentences, there seems, in actual usage, to be an option
about applying incorporation. Recall, however, that Sinha main-
tains that it is a rule that must apply if it can. Another
point, more central to our concerns here, is that the obligatory
occurrence of -kg in small clauses is not immediately explained
by this account.

Our strategy will be to build on Sinha and find a way to
address these difficulties. The variability of (26H) and (27H),
we suggest, is the zone between the "always" for abstract NPs at (V) above and the "never" for names and pronominals at VI -- we
crucially add [+Animate] NPs at, and we crucially subtract [-
Animate] pronominals from, (VI). Turning to the obligatory use of
ko in small clauses, we propose an account based on Sinha's
proposal that null-Case-marked objects are possible only under
incorporation. This correctly predicts that a V with a small
clause complement, since it cannot incorporate from the subject
of its complement (a head, thanks to the HMC, can only incorpo-
rate the head of its complement, and even "successive cyclic
incorporation" would only give the V access to the predicate of
its small clause complement), will fail to license null Case for
the subject of its small clause, leaving -ko as the only option.

While we are not, strictly speaking, obliged to refine our
machinery to make such an account work, the MPLT apparatus pro-
vides a convenient setting for the results we need. And, in any
case, our goal is to offer an analysis feeding future explanatory
work as transparently as possible. So we prefer to couch our
treatment of small clauses in the idiom of MPLT.
4.4 SOME APPROXIMATIONS

In this section we present three approximations to a full analysis -- an initial account in 4.4.1, a reworking of Sinha (1991) in 4.4.2 and some animacy-related moves in 4.4.3 which may serve to refine any analysis in this area.

4.4.1 The Minimalist framework of MPLT gives an interesting account of (English) small clauses which may serve as a point of departure. Consider the following structure:
In MPLT, ECM is considered to be a simple case of raising the subject of the small clause to [SPEC, AGR$_0$] (analogous to the standard raising to [SPEC, AGR$_5$] that we have encountered in earlier chapters) rather than truly "exceptional" Case-marking. In (28) above, raising of the NP "John" to [SPEC, AGR$_4$] and of the Adjective intelligent to AGR$_4$ gives rise to the configuration required for SPEC-head agreement of the NP-Adjective pair within the predicate phrase. The resulting structure, as shown in (28), can be postulated for the small clause in (29):

29 I consider John intelligent (=1)

Now, the structure given in (28) can also be used for a sentence such as (30), where the AP is a complement of the verb be:

30 John is intelligent

The two constructions (29) and (30), then, may be explained in terms of a single structure with one difference: While the further movement of the NP John in (29) to [SPEC, AGR$_0$] to check for Accusative Case is procrastinated to LF, as indicated in (28) by means of the dotted line, in (30), the raising to [SPEC, AGR$_5$] to check for Nominative Case is in the overt syntax.

Note that, just as the movement of John in (28) from its base position to [SPEC, AGR$_4$] takes place in tandem with the head movement of intelligent from A to AGR$_4$, so also the further
raising of John in LF to the matrix [SPEC, AGR$_0$] is coupled with the LF incorporation of the AGR$_1$/A chain intelligent, via the V, into the V-AGR$_0$, consider, yielding the complex head consider-intelligent, with the trace of consider heading V and the trace of intelligent at A.

Assuming the basic MPLT structural configuration as given above, we now attempt to analyze the small clause construction that this chapter focuses on.

4.4.2 Keeping Mahajan’s and Sinha’s accounts in mind, along with the problems involved with each proposal, let us return to the small clauses in (16). We have (16) and (18) mentioned above, and (31), (32) to complete the paradigm. (For glosses see (26H), (27H) above.) Note that even in perfect TAM sentences a (16b) type small clause is out although both (31a and b) (like (17)a and b) are possible.

31aH maiM ne patthar ko toRaa
31bH maiM ne patthar toRaa
32aH maiM ne patthar ko bhagwaan maanaa
32bH * maiM ne patthar bhagwaan maanaa

As observed earlier, the contrast between (16) and (18) or between (31) and (32) is one of small clause vs non-small clause constructions. Some trees are in order here:

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(33) and (34) are the structures for (31H) and (32H) respectively.

How do we account for the difference -- why do small clauses need a -ko and the non-small clauses have an option between -kp and null? And what does this have to do with the variability in (31H)?
The small clause in (33) forces its subject *patthar* to move first to its own [SPEC, AGR] and then to the matrix [SPEC, AGR₀] in order to receive Case, while the small clause's head AGR travels to the matrix V and then AGR₀ driven by its own licensing needs. At no stage can the K of *patthar* be incorporated into the matrix verb *maan*, for it is not the head of the complement (or even the head of the predicate of the complement) of V. Consequently the mechanisms for null Case marking never swing into motion. This leaves the -kö Case, licensed at [SPEC, AGR₀], as the only choice.

To complete this account, which depends heavily on Sinha’s work, we need to repair some gaps in his analysis. Given that Sinha’s incorporation should either apply or not apply in any particular instance, why is it that a V can even optionally assign -kö to an NP? We shall take the position that this variable Case is sensitive to intrinsic nominal properties like animacy working in association with specificity. This can be observed in non-small clause constructions also such as:

35aG * meM ,10n beThelo joyo
  I-ERG John sitting saw
35bG meM jOnne beThelo joyo
  'I saw John sitting'
36aG meM vaat maanii ke ...
  I-ERG saying believed that
As a first approximation, let us make some categorical observations here. In (36G), the NP in question clearly lacks the [+animate] feature; so the \([-kp\] option cannot be exercised. In (35G) the NP is animate; hence the \([-ko\] option must be exercised. The question is how to link these observations to our earlier statement that the V has a choice between assigning \([-ko\] and assigning null. Evidently, in (35) and (36) there is no real choice. We need to explain these determinate instances as well as the variable ones in our account of the ways in which animacy, in conjunction with other nominal features, co-determines the assignment of \([-ko\] to the NP in this position.

4.4.3 This way of posing the issue leads us naturally to a fresh engagement with Mahajan’s analysis. In the context of his perfect/non-perfect paradigm, \(\text{maim ne laRkii dekhii}\) should be an instance of specificity, Mahajan predicts. However, native speakers that I have consulted consistently interpret the sentence non-specifically, as against \(\text{maim ne laRkii ko dekhaa}\) which does have a specific reading. The same results have been obtained for Gujarati. Thus the idea that null Case marked NPs associate with perfect AGR to yield a specific reading does not lead us to a descriptively adequate account. Sinha’s proposal, linking null Case objects with properties of particular verb and noun types sponsoring incorporation, is at least consistent with the data, and may serve as the basis for our account. All we have to do now is plug the obvious holes in the story.
The most important gaps have to do with animacy. We have identified a conceptual gap (Sinha’s failure to consider animacy in the architecture at all, despite the attention given to it in the traditional studies of Hindi) and two empirical gaps (Sinha’s omission of animate nouns at (VI) in the summary above, and Sinha’s inability to deal with variable Case marking for animate NPs). But there is also a formal gap in Sinha’s account. He does not make K the head of the nominal structure, and thus technically violates the HMC. A few simple moves will suffice to deal with all these problems.

37 Assume that nominal individuation formally amounts to having an index on D, the head of the nominal phrase DP.

38 Animate pronouns strongly individuate on D, yielding D[+Specific] in the sense of Sinha.

39 Inanimate pronouns weakly individuate on D, yielding D[+Generic] in Sinha’s sense; hence unstressable *it* in English, null Case objects *ve "this", vo "that* in Hindi.

40 NPs with animate N have (and often exercise) the option of strongly individuating on D; names must do it.

41 NPs with abstract N never have this option, for reasons of (semantic, but perhaps in part language particular?) principle.

42 D strength determines D-raising to V; presumably specific D cannot raise and generic D must raise if the V lets it (a very weak V, e.g. *samajh*, does not let it).
43 [+Definite] is involved with the **Q(uantifier) system** and can be ignored here without major **loss**, but will have to be kept in view when one wants to do a full retake of Sinha.

It should be mentioned, for readers who really want to know all about the unsolved details in the domain, that Aspect also plays a part here: for some cases, perfect tenses seem to give [+specific] reading and an indefinite tense gives [-specific] reading, for example, *us ne kitaab paRhii* vs *wah kitaab bectaah hai*. But *wah kitaab paR* rahaa *hai/thaa* is specific, so is *ciTThi likh* rahaa *hai/thaa*, indicating that progressive tenses are "definite" in some important sense, relevant to this side-track that we ignore.

Obviously the main outlines are clear, and matters that are not yet entirely understood can already be seen in definite contexts shaped by what is within the formal grasp of the account **offered here**.

4.5 CONCLUSION

Once again, this final section includes a summary of the chapter (4.5.1) and an opening up of a possible tie-up between the analysis offered here and that given in section 3.4.

**4.5.1 We recapitulate briefly the main points of our discussion on small clauses. A review of the literature in 4.1.3, has made it clear that there is an interesting and ongoing debate about the categorial status of the small clause. For our purposes, we**
have found \([sc \ NF \ XP]\) to be sufficient/the data presented here. Our interest, rather, lies in the problem of Accusative Case-roarking of the subject of the small clause that we have mentioned along with a description of H/G agreement pattern, in 4.2. In section 4.3 we looked at two major contributions to this issue, Mahajan (1990) in 4.3.1 and Sinha (1991) in 4.3.2. In Mahajan’s case the conclusion that interests us is that only objects that are identified as specific but do not show agreement are -ko marked. We have noted a problem with this conclusion regarding specificity leading us to suggest that classifying the -ko in non-perfect sentences with a null Case in perfect sentences might be unfruitful. Sinha’s account offers an alternative. Briefly, Sinha’s crucial use of incorporation in the sense of Baker (1988) allows him to claim that those objects which do not incorporate -- for reasons of too "strong" an NP or too weak a "VP" -- are -ko marked. Incorporation, however, seems to be optionally applied in certain cases as we have noticed. The explanation that we have offered, in 4.4.2 and 4.4.3, is that the -ko/\(\emptyset\) variability is on account of sensitivity to intrinsic nominal properties like animacy interacting with specificity. The moves presented in (37-43) at the end of section 4.4.3 are an attempt to fill in the gaps in Mahajan’s and Sinha’s accounts. (37-43) are themselves concise versions of the ideas behind the hypothesis suggested and need no further summary.

4.5.2 There is a possibility that the analysis offered here might in some way be adapted for the participial clauses of ch. 3, often considered to be similar to small clauses. One might want
to carry over the basic results of the participial section of ch. 3. There is only one problem to be faced by the reader who wants to fuse the basic results of our analysis of the (very small-clause-like) Participial construction with this chapter. The problem has to do with the existence of variable Case marking in \textit{imaarat (ko) girt\textregistered dekh\textregistered} 'see the building falling', in contrast to the unavailability of null Case in small clauses. One can solve that problem by permitting \textit{girt\textregistered dekh\textregistered} to become a verbal complex with a shared SPEC $\text{AGR}_0$ to which \textit{imaarat} moves, so that our reworking of Sinha's analysis applies. We leave these details for future work.