

# **GENITIVE CONSTRUCTION IN HINDI**

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## **Chapter 1**

### **INTRODUCTION**

#### **1.1 The objective of the study**

The study involves linguistic analysis of the genitive case in Hindi. The genitive has been one of the most discussed topics in the grammar of a natural language and still there are many unresolved issues regarding genitive. This study is an attempt to determine the actual status of genitive in grammar, particularly in the Hindi grammar. It focuses on three important aspects of genitive. First, it discusses various observations regarding the concept of genitive keeping in view both the traditional and modern scholars of Western and Indian grammatical traditions. Secondly, it looks into the morphosyntactic aspects of the genitive markers in Hindi. This has been done with a view to presenting their linguistic analysis. Thirdly, it studies the position of genitive within the Chomskyan syntactic theories as exemplified by the theory of Government and Binding (Chomsky, 1981, 1986) and the Minimalist Program (Chomsky, 1995). This is done with a view to determining the unified characteristics of genitive in Universal Grammar (UG), and finding out how genitive in Hindi differs from them.

#### **1.2 The outlines of the study**

The study has been divided into four chapters. Chapter I discusses different approaches to the concept of genitive as a case-relation. It discusses both traditional and modern approaches and examines the views of different grammarians and linguists belonging to both Western and

Indian grammatical traditions. The attempt is made to reach a satisfactory definition of the genitive case in the light of different conflicting views.

Chapter II deals with the morphosyntactic analysis of the genitive case-markers in Hindi. It discusses different theoretical assumptions with a view to determining the status of *k-* and *-aa/-e/-ii*. It also discusses the status of *ke* and examines the agreement phenomenon in genitive constructions in Hindi.

Chapter III looks into the mechanism of genitive case-assignment in Hindi. It discusses the theoretical assumptions of Chomskyan Case Theory with a view to determining their applicability to Hindi genitive constructions. It also discusses the points on which Hindi genitive constructions differ from those of English.

Chapter IV gives a brief summary of the discussions and observations made in the three previous chapters.

### **1.3 An overview of genitive**

The term 'genitive' refers to one of the several case-relations by which different arguments of a sentence are related to the predicate and one another. In a language, these case relations can be of two types: (a) those which establish the relation of a noun phrase with the verb, and (b) those which express the relation of a noun phrase with another noun phrase. The latter category involves the genitive case relation. For instance, in English, constructions like (1) and (2) are genitive constructions:

- 1    a. John's book
  - b. the book of John
- 2    a. John's reading a book

b. the reading of a book by John

In a language constructions that establish relation between two nominals are referred to as genitive constructions. In Hindi, the counterparts of (1) and (2) are (3) and (4) respectively:

3. John    kii        kitaab

John    of        book

John's book

4. John    kaa        kitaab    padhnaa

John    of        book    reading

John's reading the book

In genitive constructions the relation between two nominals denoted by markers 's and *of* in English and *kaa/kii/ke* 'of' in Hindi is unlike other relations in a sentence which involve the relation of the NP with the verb. We can see it with the help of sentences in (5-7):

5. [NP1 mohan]    [NP2 aam]        khaataa        hai

Mohan            mango        eat                pr.3.m.sg

Mohan eats a mango.

In (5), there are two noun phrases, *mohan* and *aam* 'mango'. Both of them are directly related to the verb *khaataa hai* 'eats'. The first NP is the subject; it is in the nominative case, the second is the object; it is in the accusative case. In terms of thematic relations, the first NP is the agent, the second, the theme.

6. [NP<sub>1</sub> mohan] [NP<sub>2</sub> raam ko]<sup>1</sup> [NP<sub>3</sub> ek kitaab] detaa hai  
 Mohan Ram to one book give pr.3.m.sg

Mohan gives Ram a book.

In (6), there are three NPs, each of them has a unique relation with the verb. NP<sub>1</sub> is in the nominative case, NP<sub>2</sub>, in the dative case and NP<sub>3</sub>, in the accusative case.

7. [NP<sub>1</sub> mohan] [NP<sub>2</sub> raam ko] [NP<sub>3</sub> dukaan se] [NP<sub>4</sub> kitaab] detaa hai  
 Mohan Ram to shop from book give pr.3.m.sg

Mohan gives a book to Ram from the shop.

In (7), there are four NPs and all of them are directly related to the verb *detaa hai* 'gives'. NP<sub>1</sub> is in the nominative case, NP<sub>2</sub>, in the dative case, NP<sub>3</sub>, in the ablative case and NP<sub>4</sub>, in the accusative case. We may now look at (8) to differentiate the genitive case from other cases:

8. [NP<sub>1</sub> mohan] [NP<sub>2</sub> raam ko] [NP<sub>3</sub> dukaan kii kitaab] detaa hai  
 Mohan Ram to shop of book give pr.3.m.sg

Mohan gives Ram a book that belongs to the shop.

In (8), the NP<sub>1</sub> *mohan* and NP<sub>2</sub> *raam ko* 'to Ram' are directly related to the verb, and so is NP<sub>3</sub> *dukaan kii kitaab* 'the book from the book-store'. It is to be noted that the NP *dukaan* 'shop' is not directly related to the verb *detaa hai* 'gives' but to the NP *kitaab* 'book'. Thus, *dukaan kii kitaab* 'the book from the book-store' is a typical genitive construction in which *kii*<sup>2</sup> is a marker

<sup>1</sup> Strictly speaking an NP with a postposition is a postpositional phrase. Thus, *raam ko* 'to Ram' is a PP rather than an NP. We have treated such an expression as an NP for the sake of convenience.

<sup>2</sup> Its morpho-syntactic status has been discussed in Chapter II.

of the genitive case. As a case-relation, the genitive denotes with the verb, is indirect (through the head of the NP in which it occurs in a determiner-like role) and its semantics is complex, it has been the subject of research for quite sometime.

#### **1.4 Traditional grammarians' view**

Traditional grammarians, who have studied classical languages like Latin, Greek and Sanskrit, have found the study on genitive interesting as well as challenging. For them, the main concern has been its morpho-syntactic and semantic role in grammar. For instance, there has been ample discussion on whether the study on genitive pertains to syntax, morphology or semantics. Besides, there has also been a question whether genitive belongs to the category of proper case (Panini's *kaaraka* theory). Western grammarians' (Jespersen, 1924, de Groot, 1956, Kurylowicz, 1964, etc.) views on genitive are as varied as those of their Indian counterparts.

Jespersen (1924: 180) observes that "not a single one of the old Aryan cases is so well-defined in its meaning that we can say that it has some single function or application that makes it off from all the rest". He states that the genitive, only in the vaguest sense, can refer to senses such as "belonging to", "appertaining to", "connexion with", etc. He himself appears to prefer the term "connexion" (connecting two constituents) as the most common function of genitive. Most grammarians are aware of the varied senses in which genitive is used. But they differ in regard to the actual nature and scope of the genitive case. Lyons (1968: 290) studies the traditional views of cases and terms 'genitive' as case of "possession" on the basis of its most common function. In a number of studies the terms 'genitive' and 'possessive' have been used interchangeably.



Fillmore (1968), a linguist of the transformational-generative school, discusses different approaches to the notion of the genitive case and argues for the transformational approach. For him, the genitive case is a purely syntactic relation which is derived from other base forms through the process of transformation by applying transformational rules. He observes that the rules which form deverbal (desentential) nominals convert some of the original case-forms into "genitive", either by replacing the assigned preposition/postposition with 'of' (as in English) or, in some cases, by removing the original preposition and affixing it with a genitive suffix, as in, *John has a book which is torn => John's book is torn*<sup>3</sup>.

Among Fillmore's eight semantically-oriented case-roles, genitive does not find a place because it refers to syntactic notion whereas case-roles are entirely semantic notions. In Lyons' (1968) view "case" is not present in deep structure at all, but is merely the "inflectional realization" of particular syntactic relationships. According to him the "genitive marker is introduced as an accompaniment to a nominalization transformation." In many other studies on the genitive case, the term 'genitive' has been used in such a way that we end up having its conflicting and confusing interpretations. Martinet (1964: 108), for instance, talks about "the notorious genitive of the type *the king of England's*". It is true that almost all known languages have the genitive case but the way it is realized in various languages is not the same. The traditional grammarians perceived the universal phenomenon involving the genitive case but they wanted to capture the generalization in terms of its surface manifestations. Some of them tried to interpret them according to their various uses and functions but the attempts were rather descriptive. The result has been a long list of names attached to different uses of the

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<sup>3</sup> See also Levi (1978) for a similar account of the genitivization transformation.

genitive case and their findings are as varied as their approaches to the study of the genitive case.

Their focus has been mainly on two points: (a) the overt case forms and (b) the list of different uses and functions of genitive. In this regard these grammarians have been obviously guided or constrained by the system of the respective languages they have studied. For instance, in languages like Latin, Greek and Sanskrit, which exhibit rich inflectional marking, the markers for the categories of case, number, gender and person may be fused into one when realized at the surface level. It is not always possible to separate markers of one category from those of others. Matthews (1974: 147) calls such a system of the fused representation "cumulative exponence". Such an approach may be adequate in regard to the study of languages like Latin and Sanskrit, but it fails when applied to languages like English and Hindi. We may note that the syntax of Sanskrit differs considerably from that of Hindi because Sanskrit is a synthetic language with a rich inflectional system while Hindi may be said to be an analytical language that mostly uses postpositions for the purpose of realization of case. That is why attempts to study Hindi syntax within the Paninian theory of *kaaraka*, i.e., in Vajpeyi (1958), have not been very rewarding.

A well-known study by de Groot (1956) can be viewed as an effort to simplify the complicated picture of the analysis of genitive in Latin by other traditional grammarians before him. The classical grammars of Latin describe genitive with a long list of its uses and functions, each function being given a separate term like "genitive of origin", "genitive of possession", etc. leading to more than thirty different uses of genitive in Latin (de Groot 1956: 8). For simplification of treatment of genitive in Latin, de Groot claims to have based his classification of the genitive case on syntactic grounds and reduces its thirty traditional uses to

eight. According to de Groot the traditional three senses in a genitive construction; (a) *genitivus possessivus* (the statue possessed by Myro), (b) *genitivus subjectivus* (statue sculpted by Myro) and (c) genitive of represented subject (statue depicting Myro) as in *statua myronis* as well as the "subjective" and "objective" genitive sense of *amar parris* are not significant from the point of view of linguistic analysis. de Groot rejects them as certain irrelevant phenomena while Fillmore (1968: 7) considers them of syntactic importance.

Benveniste's (1966) analysis of genitive is yet another attempt to simplify the complex study of genitive in Latin. In Benveniste's view, genitive is transformational in the sense that it is transformationally derived from sentences through nominalization processes. We may notice a somewhat similar observation in Kurylowicz (1964). Fillmore (1968) feels that this view of Benveniste brings him closer to the generativists. Kurylowicz (1964: 179-181) makes a distinction between syntactic and semantic functions of genitive. In his view, genitive is a grammatical case and like nominative and accusative, its primary function is syntactic. He assigns genitive a few semantic functions and refers to them as its secondary functions. He observes that the syntactic function of genitive is "evidenced by transformational and hierarchical consideration which contrasts both with the nominative and the accusative" (Kurylowicz 1964: 179).

A few more significant studies, which broke away from the usual practice of merely listing case-uses or functions are those of Hjelmslev (1963) and Jakobson (1971) (Blake 1994: 39). These studies have attempted to find out a unified pattern of each case. They propose that each case has a basic meaning which should be taken as the reference point for the analysis of other meanings of that case. Blake (1994: 43) points out that Jakobson (1971) considers genitive as a peripheral case rather than core case on the basis of its adnominal use.

In short, we observe that genitive has been one of the most discussed topics among the Western scholars. Their views about genitive are different and they offer different treatments to describe it. We may now look at the way genitive has been treated in the Indian grammatical tradition.

### 1.4.1 The *Kaaraka* theory of Panini

Among Indian traditional grammarians, Panini has been most discussed and his *kaaraka* theory has been interpreted both by Western and Indian scholars. Cardona<sup>4</sup> observes that although the *kaaraka* theory of Panini has been one of the most scientifically structured system of rules, yet it has not been very influential. The most accepted definition of *kaaraka* is that it is a semantic relation between a noun and a verb. Panini's definition of *karaka* assigns *kaaraka* status only to six cases, i.e., nominative, accusative, instrumental, dative, ablative and locative. As no direct relation can be established between the verb and the genitive noun, genitive is not treated as a separate *kaaraka*. Blake (1994: 65) observes that, because genitive is considered to be adnominal, no *kaaraka* should be assigned to genitive-marked nouns. Taraporewala (1967) suggests a similar view. However, Panini himself has given thirty one *sutras* (rules) dealing with genitive (Bhardwaj 1986: 109). The most discussed *sutra* is *ṣaṣṭhi ṣeṣe*. Panini seems to be noncommittal to anyone of the *sutras* and this has led to a number of interpretations of his views on genitive. Patanjali's interpretation of this *sutra* is that whatever is not desired to be spoken as a *kaaraka* is to be treated as *ṣeṣe* (rest) and genitive affix is to be used to denote this expression (Speijer 1993: 82).

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<sup>4</sup> His lectures on Panini at the Univeristy of Delhi in 1992.

There are several types of relations in a sentence, apart from the relation between a noun and a verb, that genitive is assigned to express. In other words, the relations which cannot be captured by six *karakas* are expressed by genitive. One of the sutras dealing with genitive is *sva-svaamibhaava* (possessor-possessed relationship). It has been observed that this is the most familiar sense in which a genitive is used in any language. Some grammarians think that this is the primary idea involved in genitive and all other uses of it are derived from it (Taraporewala, 1967, Whitney 1962). Bhardwaj (1986: 110) feels that Panini was aware of the use of genitive in the sense of one *kaaraka* or the other. The use of the genitive affix in the sense of accusative with regard to the object of the roots (in Sanskrit) *smṛ* 'to remember', the roots *daa* 'to give' and *iṣa* 'to desire' indicates this. For instance, *maatuh smarati* (mother-gen remember pr.3.m./f.sg) 'S/he remembers his/her mother'. It appears that most of the commentators have taken Panini's one *sutra*, i.e., *ṣaṣṭhī śeṣe* as the key *sutra* and have virtually skipped the other *sutras* while dealing with genitive. Hindi grammarians, who take the Sanskrit language and its grammar as their model, adopt the *karaka* theory of Panini, however, all the grammarians are not that impressed by Panini's *kaaraka* theory.

#### **1.4.2 Hindi grammarians' view**

Most of the traditional Hindi grammarians have adopted, by and large, a similar approach and have categorized the genitive case according to its various functions. Early Hindi grammarians may be put in either of the two groups. One group thought that the syntax of Hindi was closer to that of English in many respects and the other thought that it was closer to that of Sanskrit, the language from which Hindi has originated. The former followed the pattern of traditional English grammarians. Their approach was also influenced by their training in English

grammatical tradition. The latter group was influenced by Indian grammatical tradition, particularly that of Panini. In the former group we may include Kellogg (1892), Guru<sup>5</sup> (1920), etc. who adopt the pattern of traditional English grammar to study Hindi genitive. For them, genitive is like one of the several case-relations such as nominative and accusative. They study genitive according to its different uses and present a long list of its different functions. Kellogg discusses different possible sources of the Hindi genitive markers, which he makes complicated by including several dialectal variations of those markers. Guru, however, points out that the issue of the genitive case in Hindi needs further research. It is to be noted that these scholars do not go into the theoretical analysis of genitive. Vajpeyi (1958), who seems to be strongly influenced by the Indian grammatical tradition and follows Panini's *kaaraka* theory to interpret the genitive construction in Hindi, tries to go into the theoretical implication of the case (in his term *kaaraka*) and claims to have found a solution for the analysis of the genitive constructions in Hindi (Vajpeyi 1958: 130). He follows the standard definition of the term *kaaraka* which denotes relationship between verbal and nominal elements of a sentence and, as the genitive does not constitute the essential part of a verb, it is not considered a *kaaraka*. It appears that Vajpeyi is the first Hindi grammarian to present a primarily theoretical analysis of the genitive case-markers) i.e., *k-aa*, *k-e*, and *k-ii*. He clearly differentiates them from *ke*. His analysis of these markers is based on certain theoretical assumptions, for reasons which we do not find satisfactory. We discuss this in detail in the next chapter. Almost all other traditional Hindi grammarians study the genitive case without going into its theoretical perspective.

In modern times a number of studies have been done on Hindi syntax within the framework of various versions of the Transformational Generative (TG) theory. Before we

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<sup>5</sup> Guru's work attempts at a synthesis between Indian and Western grammatical traditions. However, in so far as his approach to case is concerned, by and large, it is more Western than Paninian.

look at them, let us have a brief outline of the Chomskyan Case Theory and the position of the genitive case in it.

### **1.5 The genitive case in Chomskyan Case Theory**

The earliest version of Transformational Generative theory, namely the Standard Theory (Chomsky, 1965) did not pay much attention to case. It was the Case Grammar of Fillmore (1968) that highlighted the significance of case in a syntactic theory. Since then many approaches to case have been made available such as the Localist approach (Anderson, 1977). The Relational Grammar (Postal and Perlmutter, 1974<sup>6</sup>) does not directly discuss case; it is, in a way, a reaction to Fillmore's Case Grammar and tries to meet some of the deficiencies of his approach. It is confined to functional notions such as 'subject' and 'object' (direct, indirect, and oblique) and does not discuss the genitive case at all. It is only the later version of Chomsky's theory that emphasizes the significance of case in details.

Among the modern grammatical theories, the Principles and Parameters Theory of Chomsky, also known as the GB theory (Chomsky, 1981), along with its later version in the form of the Minimalist Program (Chomsky, 1995) is the most influential theory. Chomsky holds the view that 'case' is universal. Unlike traditional grammarians who focused on the morphological aspect of case, Chomsky observes that cases are abstractly present whether they are morphologically realized or not. The concept of abstract case provides an important mechanism to capture variations among languages on the basis of morphological realization of cases. In the Case Theory, cases are defined as relations of nominals with the verb as well as other nominals and the genitive is considered as one of the important cases in the grammar of a

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<sup>6</sup> Postal and Perlmutter developed the theory of Relational Grammar in various lectures they delivered at the Linguistic Institutes conducted by the Linguistic Society of America in early seventies, though their articles were formally published mostly in 1983.

language. The genitive case has been clearly differentiated from other cases on the basis of the mechanism of case assignment proposed in the Case Theory. Chomsky (1986: 193) observes that cases like nominative and accusative are structural cases which are assigned structurally by the potential structural governors. On the contrary, the genitive case is an inherent case and is assigned inherently by  $\theta$ -marking heads. Thus we observe that the genitive case is associated with the thematic property of the structure in which it occurs. In English's and of are considered to be morphological realization of the genitive case. For instance, in structures like *John's kite* and the *kite of John*, *John* is in the genitive case. In Case Theory, genitive is considered mainly as an NP-internal relation, i.e., the spec of an NP is in the genitive case. However, Chomsky is also aware of a few other uses of genitive. For instance, in structure such as *He persuaded John of the importance of going there*, Chomsky observes that persuade takes a genitive complement, i.e. *of the importance* (Chomsky 1986: 191).

We may point out that in the earlier version of Chomsky's Case Theory, genitive was considered to be derived from corresponding nominative and accusative structures<sup>7</sup>. We have already observed how traditional grammarians like Kurylowicz (1964), Benveniste (1966), etc. held a somewhat similar view with respect to genitive. In the later version of the Case Theory, i.e., in the Principles and Parameters theory (Chomsky, 1986), genitive is viewed as base-generated rather than transformationally derived. One of the sub-modules of the Case Theory, called Case-Filter, states that every overt NP must have an abstract case (Chomsky 1986: 74). In the recent studies Case-Filter condition is studied in relation to  $\theta$ -marking of an NP (Chomsky and Lasnik 1991: 78). The case features, along with the agreement features, make an NP position visible for  $\theta$ -marking. In the latest version of the Case Theory, i.e., in the

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<sup>7</sup> Lees (1960) and Levi (1978) adopt and develop this approach in their respective studies.



Minimalist Program (Chomsky, 1995), case has yet wider role to play for adequate analysis of the data of a language. The Case Theory has triggered a number of investigative studies across languages which have led to many significant generalizations with respect to case in general and genitive in particular (Abney, 1987, Giorgi and Longobardi, 1991, Marantz, 1995, etc., to name only a few).

A number of studies have been done on Hindi syntax within the Chomskyan framework; such as Kachru (1970), Balachandran (1973), Subbarao (1984), Mahajan (1990), etc. to name only a few. Many of these studies, like those of Kachru and Subbarao, have been done within the earlier framework of transformational theory and need to be reexamined in view of the substantial changes that have occurred since then. Other studies too do not throw much light on the study of the genitive case in Hindi. Except for a few passing and casual references to the genitive case in Hindi, the topic has been left untouched. It is primarily because of this fact that we propose to study the genitive construction in Hindi to find out whether the Chomskyan approach to the genitive construction can throw more light on the nature of the genitive case.

## Chapter II

### APPROACHES TO HINDI GENITIVE

#### 2.1 An overview

In traditional Hindi grammars *kaa*, *ke* and *kii* are categorized as postpositions (Kellogg, 1892, Guru, 1920, Sharma, 1972, etc.). At first glance they appear to be postpositions because Hindi has postpositions. As a rule, languages fall into two groups on the basis of their mode of case-marking. The languages which have inflectional marking are termed as 'synthetic' and those languages which have postpositions/prepositions are termed as 'analytical' (Blake 1994: 10). Historically, it may be observed that Hindi has evolved from Sanskrit, a synthetic language, and this evolution maybe termed as an evolution from a synthetic to an analytical language. Unlike Sanskrit, Hindi adopts postpositional case-marking. For instance, we may compare (1) and (2):

- |    |                         |                 |                 |            |
|----|-------------------------|-----------------|-----------------|------------|
| 1. | raamasya                | putrah pustakam | paṭhati         | (Sanskrit) |
|    | Ram's                   | son book        | read pr.3.m.sg. |            |
|    | Ram's son reads a book. |                 |                 |            |
|    |                         |                 |                 |            |
| 2. | raam kaa                | laṛkaa kitaab   | paḍhtaa         | hai        |
|    | Ram's                   | son book        | read            | pr.3.m.sg  |
|    | Ram's son reads a book. |                 |                 |            |

In (1), there are three nouns. They are inflected for different case relations; *raamasya* 'Ram's' is in the genitive case, *putrah* 'son' is in the nominative case and *pustakam* 'book' is in the accusative case. All the three nouns in (1) have been inflected for the case-relations they

denote. In (2), there are three nouns which denote three case relations as their counterparts in (1) do. The nouns *laṛkaa* 'boy' and *kitaab* 'book' are without any overt marker for the case relations they denote. But *raam* is followed by *kaa* which has been referred to in traditional Hindi grammar as the genitive case marker postposition. As Hindi is an analytical language, we expect postpositions in place of inflectional case-markers. But in Hindi all the case-relations are not obligatorily realized overtly. The usual pattern is to have postpositions with nouns and if the nouns in (2) need overt case-markers, they will be postpositions. For instance, in (3,) *ne* and *ko* are postpositions which denote ergative and accusative cases, respectively:

- |    |                |                 |                |
|----|----------------|-----------------|----------------|
| 3. | <i>raam-ne</i> | <i>sitaa-ko</i> | <i>dekhaa</i>  |
|    | Ram-erg        | Sita-acc        | see pt. 3.m.sg |
|    | Ram saw Sita.  |                 |                |

In short, in Hindi postpositions denote different cases. On this basis grammarians have categorized *kaa*, *ke* and *kii* as postpositions which denote the genitive case. But there is a theoretical difficulty in considering *kaa*, *ke* and *kii* as postpositions which we discuss in (2.2) below.

## 2.2. Morpho-syntax of *kaa*, *ke*, *kii*

Let us look at structures in (4-6):

- |    |                     |               |
|----|---------------------|---------------|
| 4. | [ <i>raam-kaa</i> ] | <i>laṛkaa</i> |
|    | Ram's               | son           |
| 5. | [ <i>raam ke</i> ]  | <i>laṛke</i>  |
|    | Ram's               | sons          |

6. [raam-kii]      laṛdi/laṛkiyāñ  
                  Ram's              daughter/daughters

In (4-6), the forms *kaa*, *ke* and *kii* are dependent on the respective noun which follows, i.e, *kaa* occurs when the following noun is masculine and singular; *ke* occurs when the following noun is masculine and plural and *kii* occurs when the following noun is feminine and either singular or plural: In Hindi, *-aa*, *-e*, and *-ii* are attested as nominal agreement suffixes which are attached with verb (and adjectives), as in (7-9):

7. laṛkaa    khaa-t-aa hai  
              boy    eat perf.pr.3.m.sg  
              The boy eats.
8. laṛke    khaa-t-e hai  
              boys    eat perf. pr.3.m.pl  
              The boys eat.
9. laṛkii    khaa-t-ii hai  
              girl    eat perf.pr.3.m.sg  
              The girl eats.

We have to determine the status of *-aa*, *-e*, and *-ii* in (4-6) as nominal agreement markers which occur to mark agreement between the NP in the genitive case and its head noun. However, as in (4-6), *kaa*, *ke*, and *kii* have been treated as single morphological units in Hindi grammars. But Vajpeyi (1958) observes that in *kaa*, *ke*, and *kii*, *-aa*, *-e* and *-ii* are the nominal suffixes which are attached to *k-*. Thus, the internal morphology of *kaa*, *ke*, and *kii* may be stated as follows:

10. *k-* is the genitive case marker and *-aa*, *-e* and *-ii* which are attached to *k-* are nominal agreement markers which agree, with the head noun in number, person<sup>8</sup> and gender.

To illustrate the point in (to), we may look at (11) and (12):

- 11 a. raam-k-aa            ghar  
       Ram-gen-3.m.sg   house (3.m.sg)  
       Ram's house
- b. raam-k-e            ghar<sup>9</sup>  
       ram-gen-3.m.pl   house (3.m.pl)  
       Ram's houses
- c. raam-k-ii            kitaab  
       ram gen-3.f.sg   book (3.f.sg)  
       Ram's book
- d. raam-k-ii            kitaabẽ  
       Ram gen-3.f.sg   book (3.f.pl)  
       Ram's books
- 12 a. raam-ne   larke-ko        dekh-aa<sup>10</sup>  
       Ram-erg   boy-acc        see-pt.3.m.sg  
       Ram saw the boy.

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<sup>8</sup> The nominal head of the genitive construction is always in the third person.

<sup>9</sup> The plural of *ghar* 'house' remains *ghar* 'houses' if it is not followed by a postposition. In case it is followed by a postposition, it becomes *gharõ* 'houses', as in *raam ke gharõ 'par* 'at Ram's houses'.

<sup>10</sup> 3 Here we are not interested in the fact that the AGR on the verb is third singular masculine in all the cases in (12).

- b. raam-ne          laṛkō-ko          dekh-aa  
          Ram-erg          boy-acc          see-pt.3.m.pl

Ram saw the boy.

- c. raam-ne          laṛkii ko          dekh-aa  
          Ram-erg          girl-acc          see-pt. 3.m.sg

Ram saw the girl.

- d. raam-ne          laṛkiyō-ko          dekhaa  
          Ram-erg          girl-acc          see-pt.3.m.sg

Ram saw the girls.

From (11) and (12), we can deduce two points. First, that *k-aa*, *k-e* and *k-ii* are not single morphemes but involve two morphemes in each of them. Secondly, the status of *k-aa*, *k-e*, and *k-ii* is not similar to that of established postpositions in Hindi such as *ne* and *ko*. In (11a), *k-aa* is followed by a masculine singular noun *ghar* 'house'. In (11b), *k-e* is followed by a masculine plural noun *ghar* 'houses'. In (11c), *k-ii* is followed by a feminine singular noun *kitaab* 'book'. In (11d) *k-ii* is followed by a feminine plural noun *kitaabē* 'books'. We observe that *k-* remains constant and the agreement markers are dependent on the head nouns which follow them. This clearly indicates that *-aa*, *-e* and *-ii* are agreement markers and *k-* is the genitive case marker. Again the contrast between *k-aa*, *k-e* and *k-ii* in (11) and *-ne* and *-ko* in (12) clearly indicates that *k-aa*, *k-e* and *k-ii* cannot be treated as the postpositions the same way as *-ne* and *-ko* are. In Hindi *-ne* and *-ko* are postpositions which indicate the ergative and accusative case respectively. We notice in (12) that *-ne* and *-ko* remain unaffected of the number and gender agreement of the nouns in the construction. In (12a), *-ne* is followed by a masculine singular noun *laṛke* 'boy'. In (12b), *-ne* is followed by a masculine plural noun *laṛkō* 'boys'. In (12c) and

(12d), *-ne* is followed by feminine singular and plural respectively. Thus *-ne* does not change according to the number and gender of the nouns which follow it. It remains unaffected by the number and gender features of the nouns which precede it. Similarly, the postposition *-ko* which denotes the accusative case, does not show agreement features on it either for the nouns that precede it or the nouns that follow it. In short, *-ne* and *-ko* follow the standard pattern of postposition; they are full words and do not vary in their forms to indicate agreement. On the contrary, *k-aa*, *k-e* and *k-ii* involve two morphemes and vary according to the agreement features of the head noun of the construction. Hence we cannot consider *k-aa*, *k-e* and *k-ii* as postpositions in the sense in which *-ne*, *-ko*, etc. are postpositions.

In Hindi grammars, there appear to be two views with respect to the nature of *k-aa*, *k-e* and *k-ii*. According to one view, *k-* is considered as a genitive suffix and *-aa*, *-e* and *-ii* are separated from *k-* as nominal agreement suffixes (Vajpeyi, 1958). According to the other view, which is the view held by a large number of grammarians both traditional as well as modern, *kaa*, *ke* and *kii* are single units and are considered postpositions (Kellogg, 1892, Guru, 1920, Tiwari, 1961, etc.). Singh and Agnihotri (1997: 82) observe that *-ne*, *-ko*, *-se*, *-me*, and *par* are invariable postpositions and *k-aa* is a postposition which changes its form according to number and gender of the following noun. Based on the theoretical domain they adopt, they<sup>11</sup> consider *kaa* as a word which cannot be analyzed into further morphemes. Shapiro (1994) considers *k-aa* a declinable postposition. On the basis of the discussion given above with regard to structures in (11) and (12), we adopt Vajpeyi's approach in regard to the study of the internal structure of *k-aa*, *k-e* and *k-ii*. In the section given below we analyze Vajpeyi's observations in details.

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<sup>11</sup> Prof. R K. Agnihotri (personal communication).

### 2.2.1 Vajpeyi's view

As we have mentioned in Chapter I, Vajpeyi (1958) studies the case system of Hindi within the framework of Panini's *kaaraka* theory. As a consequence, he considers genitive a non-*kaaraka* relation. Vajpeyi observes that *k-* is a genitive suffix and supports his claim by defining the term *vibhakti*. He observes that *vibhakti* is an ultimate suffix and no suffix can be added to it. Vajpeyi's discussion is based on traditional terms such as *pratyaya* 'suffix' and *vibhakti* 'postposition'. Though there may be differences with regard to the actual denotation of *vibhakti*<sup>12</sup> 'postpositions, such as *ne*, *ko*, *se*, etc., can be clearly categorized as *vibhakti* for the purpose of discussion here. The second point that Vajpeyi makes is that *k-aa*, *k-e* and *k-ii* show agreement with the possessed nouns which again is not the characteristic of a postposition. Although, there appear to be sufficient reasons for not equating *k-* with postpositions such as *ne*, *ko* etc, a question arises: what is the status of *k-*? According to Vajpeyi *k-* is a *sambandha pratyaya* 'genitive-suffix'. But according to its typical definition, a suffix is phonologically integrated into a host which is an independent word such as a noun. This norm is not always adhered to in the case of *k-*. The genitive marker *k-* remains phonologically separate from the word which it is supposed to be a suffix of. For instance, in *raam k-aa ghar* 'Ram's house', *k-* and *-aa* are phonologically integrated and form a single phonological unit. However, *room* and *k-* are phonologically separate. Vajpeyi does not discuss this aspect of the issue. We take this issue to further discussion in the next section. Unlike Vajpeyi, Guru (1920) has not divided *k-aa* into two parts, i.e., *k-* and *-aa*. However, Guru too, defines a *vibhakti* as an ultimate suffix and observes that Hindi does not have a genitive *vibhakti*. If we take this observation of Guru into account, we can say that Guru (1920) anticipates Vajpeyi (1958). Guru suggests that this

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<sup>12</sup> A few Hindi grammarians, for instance, Tiwari (1961), uses *parasarga* rather than *vibhakti* to refer to postpositions in Hindi.



topic needs further detailed study and for the sake of not making his grammar too complex, he prefers to call *k-aa*, *k-e*, and *k-ii* as *sambandha vibhakti* 'genitive postposition'. Almost all later grammarians (both traditional and modern) discuss the genitive case along with the assumption that *k-aa*, *k-e* and *k-ii* are single morphological units and treat them as postpositions.

The discussion given above suggests that the status of *k-aa*, *k-e* and *k-ii* is not clear. If we follow the analysis given by Vajpeyi, a few theoretical consequences may arise. We look at some of them while determining the status of *k-*.

### 2.2.2 Status of *k-*

We argue that *k-* is a marker for the genitive case and examine the status of *k-* in Hindi grammar. That is, whether it is a postposition, or a suffix or a clitic. It has been argued that *k-aa* is not a postposition because it is declinable (e.g. *k-aa*, *k-e* and *k-ii*) whereas postpositions or prepositions are indeclinable lexical items. This observation is true about languages across various language families. In languages such as French and Italian a preposition does not contain any nominal suffix on it. For instance, French *de* and Italian *dii* which are prepositions to denote the genitive case remain unchanged in form, ie., they do not change for any nominal agreement despite the fact that in Italian number, person and gender agreement are very rich<sup>13</sup> and even articles and determiners agree with their respective head nouns. English is said to resort to either suffixal or prepositional realization of the genitive case (e.g. *John's book* vs *the book of John*), French and Italian have only prepositional genitive constructions. However, in English the status of 's has been a matter of debate with regard to its morpho-syntactic status.

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<sup>13</sup> See Giorgi and Longobardi (1991) for data.

A number of linguists are of the view that 's is a clitic (Matthews, 1974, Abney, 1987, Bauer, 1988).

When we look at Indian languages we find that in Dravidian languages<sup>14</sup> the postposition exhibits no nominal agreement with the head of the DP. Even in Hindi postpositions such as *ne*, *ko*, *se*, etc., which denote different case relations, do not change to indicate agreement with their respective head nouns. In short, we can say that there is sufficient theoretical evidence to differentiate *k-* from postpositions and claim that it is not a postposition. Then, there are two possibilities. It may be either a suffix or a clitic. Let us find out whether it is a suffix. Blake (1994: 13) observes that "phonological integration" into a host is the best guide to the affixal status of a case marker. This criterion does not appear to be important to Vajpeyi otherwise he would not have categorized Bhojpuri *ke* as a suffix. The marker *ke* in Bhojpuri is a postposition used to denote the genitive, accusative and dative cases and is not integrated into the host. Languages like Bengali and Maithili, which are languages of the same family to which Hindi belongs, resort to suffixes to denote the genitive case. For instance, in Bengali *-r* and in Maithili *-k*<sup>15</sup> are the suffixes to denote the genitive case. In Bengali, *raamer* 'Ram's' and *siitaar* 'Sita's' and in Maithili, *raamak* 'Ram's' and *siitaak* 'Sita's' are NPs in the genitive case. The suffixal status of *-r* and *-k* is due to the fact that they are phonologically integrated into their respective host. But in Hindi *k-* is not phonologically integrated into the host; for instance, in *raam k-ii kitaab* 'Ram's book', *k-* is not phonologically integrated into room, instead *k-* and *-ii* are phonologically fused together into one.

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<sup>14</sup> We have checked data from Dravidian languages such as Telugu, Tamil and Kannad to verify this statement.

<sup>15</sup> Among Maithili speakers there is perceptible variations in regard to the use of *k-* and a large number of Maithili speakers use *ke*. Here we see only nominal genitive case-marker and skip their pronominal counterparts.

We may look at a few other theoretical considerations to decide the issue. Blake (1994: 11) again, observes that "where markers occur in concord, they are clearly affixes". In Hindi, Vajpeyi says that *k-* agrees with the noun which follows it. Thus, on this basis, *k-* is categorized as a suffix rather than a postposition. But only this cannot be considered to be the deciding criterion and we may look at the issue from yet another angle. Let us look at another possibility that *k-* may be a clitic rather than a suffix.

A 'clitic' is a grammatical item which is generally referred to as an intermediary that falls between the domain of morphology and syntax. The clitic may be an independent semantic unit which is attached to either the preceding or following word. If it is attached to a preceding word, it is called a pro-clitic, if, to a following word, it is called an enclitic. Matthews (1974:168) observes that, "clitics lean for support on a neighboring full word in their construction". Klavans (1980), Bauer (1988), Spencer (1991) and Halpern (1995) have also noted these points about the clitic. This definition of clitic presupposes that the element on which a clitic is phonologically dependent is a full word. But in Hindi, *k-* is not phonologically dependent on a full word, rather *k-* and the nominal suffixes are interdependent. In modern morpho-syntactic theories a number of investigative studies have been done on clitic (Jaeggli, 1986, Babby, 1987, Spencer, 1991, Hendrick, 1995, etc.) and in the light of the findings in these works, the status of *k-* and *-aa*, *-e*, and *-ii* can be further studied in detail. We feel that the morphology of *k-aa*, *k-e* and *k-ii* has more syntactic than morphological motivation. We consider *k-a* clitic and assume that it is syntactically attached to the whole phrase rather than to the head of the phrase. We may also argue that the nominal agreement markers *-aa*, *-e* and *-ii*, which we have treated as suffixes so far, are nominal agreement clitics<sup>16</sup>. We further argue that

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<sup>16</sup> It needs further investigation.

in (13), *k-* and *-aa* are attached to the whole phrase rather than to the head noun because a phrase is essentially the maximal projection of its head and whatever takes the head, within its scope, takes everything attached to the head within its scope:

13.    [un            jaise    logō-k-aa]            ghar  
          those        like     people-gen-3.m.sg    house (3.m.sg)

The house of people like them

In (13), *k-* and *-aa* are attached to the whole phrase *un jaise logō* 'people like them' and not only to the head of the phrase, i.e., *logō* 'people'. Likewise *-aa* is also attached to the whole phrase rather than to *k-*. Thus, the genitive case marker *k-* and agreement markers *-aa*, *-e* and *-ii* are clitics in Hindi.

The fact that in the NP *raam k-aa*, *k-aa* is separated from *raam* should not be emphasized beyond a point for in the genitive of the pronouns, *k-aa* is attached to the pronoun. Thus, we have *uskaa/uskii/uske* 'his', *aapakaa/aapkii/aapke* 'your', etc. Even those Hindi writers who try to maintain uniformity and write *us kaa* 'his' (rather than *uskaa* 'his') *aap kaa* 'your' (rather than *aapkaa* 'your') do not write *me aa* 'my'; they invariably write *meraa* 'my'. Since the difference involves the writing convention rather than a morpho-syntactic phenomenon for which no independent linguistic arguments can be given, we do not wish to draw much support from the point that in *raam k-aa*, *raam* is separated from *k-*. In other words, we cannot claim that *k-* is not a clitic because it is not attached to a noun.

### 2.3 Status of *ke*

Besides *k-aa*, *k-e* and *k-ii* which have been discussed above, there is one occurrence of *ke* in Hindi which overlaps the occurrence of *kaa*, an undisputed postposition. This *ke* has not been distinguished clearly from the genitive markers. Vajpeyi (1958) terms this *ke* as a genitive postposition (in his sense *sambandha vibhakti* and categorizes it along with other *vibhakti* of Hindi. Kellogg (1892: 416) terms it as a metaphorical use of the genitive marker and observes that it is used to denote Hindi counterparts of the English verb to have. This *ke* also occurs with compound postpositions (in Blake's (1994: 11) sense "secondary postpositions") in Hindi such as *ke saath* 'with', *ke baare mẽ* 'about'; *ke liye* 'for', etc. Blake considers *ke* a genitive postposition. In almost all Hindi grammars *ke* is included as a genitive marker (in Hindi termed as *sambandha vibhakti*). But according to the typical definition of a genitive construction, i.e., it involves relationship between two nominal elements, *ke* does not qualify to be categorized as a genitive case marker. First, we see that *ke*, unlike *k-* which we have established as a genitive case-marker, is a postposition which remains unaffected by agreement markers. Secondly, *ke* denotes relation between a nominal and a verb in the construction in which it occurs. In a few dialects of Hindi, this *ke* is often replaced by *ko*, a dative case-marker<sup>17</sup> postposition. We may look at (14) to illustrate this point:

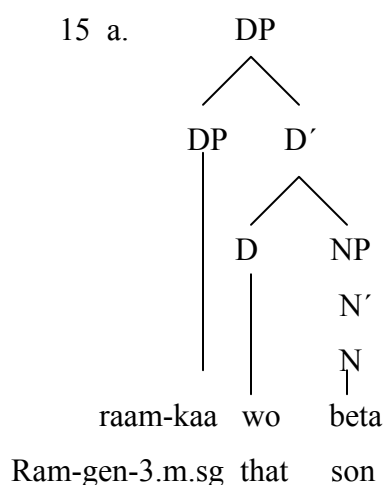
14. a. raam ke/ko          ek          beta          huua  
          Ram dat            one          son (3.m.sg)   be pt 3.m.sg  
          Ram had a son.

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<sup>17</sup> A number of instances of interchange between genitive and dative have been noticed by Taraporewala (1967), Lyons (1968) and Fillmore (1968). Some scholars may be of the view that this phenomenon has a socio-linguistic dimension.

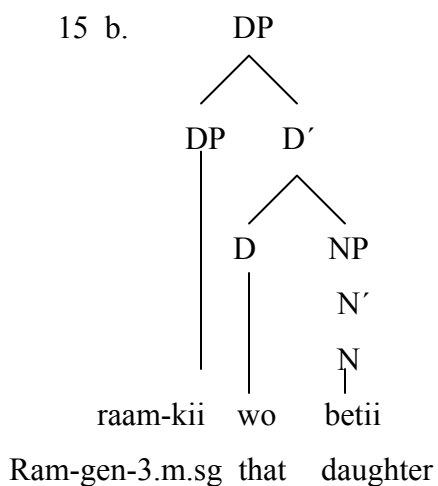
- b. raam ke/ko          ek          betii          huii  
 Ram dat                  one          daughter (3.f.sg)          be pt 3.f.sg  
 Ram had a daughter.

In (14), *ke* or *ko* does not denote relation between two nominals as is the typical case with a genitive construction. Rather *ke/ko* denotes direct relation between verb *huuaa/huii* 'was born' and the subject noun *raam*. Secondly, the nouns which follow *ke* agree with the verb of the sentence. This is not a characteristic of the genitive marker *k-* in Hindi which agrees with the nouns which follow it. Besides, *ke* remains unchanged just like *ko*. It is not a variant of *k-* in any context here. Thus, there is a clear contrast between the genitive construction and the '*ke*-construction' which can be illustrated with the help of tree-diagrams in (15-16). (15) is a genitive construction which involves a DP<sup>18</sup>-internal relation between the specifier (Spec) and head of DP where the spec of DP *raam k-aa/k-ii* 'Ram's' is in the genitive case and the embedded genitive DP agrees in number and gender with the head noun of the DP in which it is embedded. On the contrary, (16) is an IP in which *ke* occurs as a postposition:

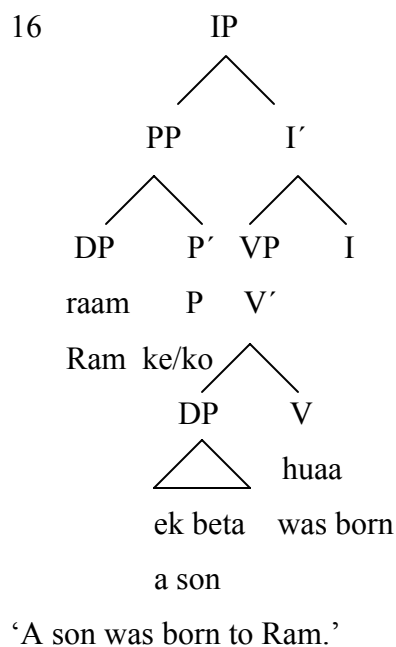


<sup>18</sup> From now onward we refer to the traditional NP as DP. For detail, see chapter 3.

15 b.



16



This type of *ke* never denotes a DP-internal relation. The DP *ek betaa* 'a son' is in the object position of the verb *hona* 'to be born' and *raam ke/ko* 'to Ram' is in the Spec position of the IP. As far as agreement is concerned, it is between the object DP and the AGR of IP. In short, the contrast between (15) and (16) clearly shows that *ke*-construction in (16) cannot be treated as a genitive construction and hence this *ke* cannot be a genitive marker. Then question is: what case-relation does *ke* denote? There are not many case-markers in Hindi, a single

postposition may be used to denote more than one case-relation. We may claim that *ke* is used to indicate both dative and locative cases. However, from the semantic point of view, *ke* expresses possessive relation as well, as in (17):

- 17 a. raam ke/ko        ek        gaay    hai  
       Ram dat has        a        cow    has  
       Ram has a cow.
- b. raam ke/ko        ek        noukar        hai  
       Ram to            a        servant        has  
       Ram has a servant.
- c. room ke/ko        ek        naak    hai  
       Ram to            a        nose    has  
       Ram has a nose.
- d. \* raam ke paas    ek        naak    hai  
       Ram with        a        nose    has  
       Ram has a nose.

In (17a) and (17b), *ke* can be replaced by *ke paas*. 'with' but that is not possible in (17c). (17d) indicates that though Hindi uses *ke* (*paas*) 'at/on/near' to denote an alienable possession, it cannot be used to denote an inalienable possession. We may note that in both (17a) and (17b), *ke* or *ke paas*, can be substituted by *ko*, a dative case-marker in Hindi.



## 2.4 Genitive DP within PP

When a genitive DP is embedded within a postpositional phrase (PP), both the *-aa* of *-aa* ending words and the agreement marker *-aa* which follows *k-* change into *-e*. We may look at the following examples to illustrate the point:

- 18 a. room-k-aa            ghar  
       Ram-gen-3.m.sg    house (3.m.sg)  
       Ram's house
- b. [PP [DP raam k-e            ghar]            par]  
       Ram gen-3.m.sg    house (3.m.sg)at  
       at Ram's house
- c. [PP [DP raam k-e            gharō]            par]  
       Ram gen-3.m.pl    houses (3.m.pl)            at  
       at Ram's bouses
- d. [PP [DP raam-k-ii            kitaab]            mē]  
       Ram-gen-3.f.sg    book (3.f.sg)    in  
       in Ram's book
- e. [PP [DP raam-k-ii            kitaabō]            mē]  
       Ram-gen-3.f.pl    books (3.f.pl)    in  
       in Ram's books
- f. laṛke-k-aa            ghar  
       boy.obl-gen-3.m.sg    house (3.m.sg)  
       the boy's house

- g. [PP [DP larke-k-e            ghar]            par]  
      boy.obl-gen-3.m.sg        house (3.m.sg) at  
      at the boy's house
- h. [PP [DP larḱō<sup>19</sup>-k-e        ghar]            par]  
      boys.obl-gen-3.m.pl       house (3.m.pl) at  
      at the boys' house

(18a) is a DP which is not embedded in any PP. In it, the genitive agreement marker *-aa* is third masculine singular because the head of the DP is third masculine singular. (18b) is a PP within which a genitive DP *raam-k-aa ghar* 'Ram's house' is embedded. Here the genitive agreement marker is *-e* rather than *-aa* even though the head of the DP is third person masculine singular. This occurrence of *-e* with *k-* is attributed to the fact that the genitive DP is within a PP; *par* 'at' is a postposition which heads the PP in (18b). In (18c) *-e* is a plural marker because *ghar* 'house,' the head of the DP is plural and the genitive DP is within a PP. If a genitive marker is plural because of agreement, the need to change *-aa* to *-e* because of obliqueness (i.e., the presence of the postposition as the head of the PP) is not there. We may note that in (18d) and (18e) the genitive agreement marker is *-ii* because the head of the embedded DP is feminine and it remains unchanged in spite of number-agreement<sup>20</sup>. We may also note that the agreement marker *-aa* of the genitive *k-aa* becomes *-e* even when the genitive is embedded in another genitive construction as in (18j):

<sup>19</sup> The structural linguists have called this kind of change the oblique form of the genitive marker. In such a case *-e* is not a plural marker at all if the head of the DP is singular.

<sup>20</sup> In Hindi *-ii* denotes both the singular and plural number of the third person feminine, s in (18c and 18d) given above.

- 18 i. raam-k-aa              larḱaa  
       Ram-gen-3.m.sg   son (3.m.sg)  
       the son of Ram
- j. raam-k-e              larḱe-k-aa        ghar  
       Ram-gen-3.m.sg   son-gen-3.m.sg   house (3.m.sg)  
       the house of son of Ram

## 2.5 Nominals in the genitive construction

Three types of nominals may occur in a genitive construction in Hindi. They are: (a) Simple nouns, (b) derived nominals and (c) infinitival nominals.

We may look at the following examples:

- 19 a. larḱe-k-ii              kitaab  
       boy.obl-gen-3.f.sg        book (3.f.sg)  
       the book of the boy
- b. kitaab-k-ii              zild  
       book gen-3.f.sg        cover (3.f.sg)  
       the cover of the book
- 20 a. ghar-k-ii              sajaawat  
       house-gen-3.f.sg        decoration (3.f.sg)  
       the decoration of the house
- b. sajaawat-k-aa              mahatava  
       decoration-gen-3.m.sg   importance (3.m.sg)  
       the importance of decoration

- 21 a. *bacce-kaa*                      *ronaa*  
       baby-gen-3.m.sg              weeping (3.m.sg)  
       the weeping of the baby
- b. *rone-k-ii*                      *aawaaz*  
       weeping-gen-3.f.sg        sound (3.f.sg)  
       the sound of weeping

In (19), both the head and dependent nominals are simple common nouns and genitive agrees with the head of the DP in number, person and gender, i.e., with *kitaab* 'book' in (19a) and *zild* 'cover' in (19b). In (20a), *sajaawat* 'decoration', a derived nominal is the head of the construction and as it is third person singular feminine, the genitive also has the same AGR features. In (20b), the genitive does not agree with *sajaawat* 'decoration' but with the head nominal *mahatava* 'importance'. In (21a), *ronaa* 'weeping' is used as the head of the genitive construction. In (21b), *rone* 'weeping' is the oblique form of *ronaa* 'weeping', it is no longer the head of the DP. Since the AGR features of the genitive DP have to match with the AGR features of the head; in (21a), it agrees with *ronaa* 'weeping' and in (21b), with *aawaaz* 'sound'. In English, a verb-base may be used as a noun as in flow in the DP the flow of water. We can use an infinitive as a noun as to err in to err is human. We can also use a gerund as a noun, as *walking* in *walking is a good exercise*. In Hindi, however, only the gerund form of the verb is used as a nominal as in *ronaa* 'weeping', *jaanaa* 'going', *parhnaa* 'reading', etc. There are no gerundive nominals such as *tahlataa* 'walking', though we have adjectival phrases such as *tahlate (hue)* 'walking' as in *tahlate hue aadmii* 'the people who are walking'. Both derived and gerund nominals have case and agreement inflections like other simple nouns. However, there

is one difference. While a derived nominal is marked for number and gender, the gerund is unmarked, i.e., it is always in third person, singular and masculine.

## 2.6 Agreement relation in the genitive construction

We have noticed that in Hindi the genitive DP agrees<sup>21</sup> with the head noun of the DP in which it is embedded in number and gender. Among the Indian languages, Hindi-like genitive constructions are found in languages such as Punjabi and Rajasthani where the genitive DP agrees with the head nouns of the construction in number and gender. We may look at (22) and (23) to discuss the data from Punjabi and Rajasthani respectively:

- 22 a. raam-d-aa                      puttar  
       Ram-gen-3.m.sg    son (3.m.sg)  
       Ram's son
- b. raam-d-e                      puttar  
       Ram-gen-3.m.pl                      sons (3. m.pl)  
       Ram's sons
- c. raam-d-ii                      kuṛii / kuṛiyāã<sup>22</sup>  
       Ram-gen-3.f.sg/pl                      daughter (3.f.sg) / daughters (3.f.pl)  
       Ram's daughter/ daughters

<sup>21</sup> Abney (1987) and Szabolcsi (1994) refer to Turkish and Hungarian data where it appears that it is rather the head of the genitive construction which carries the AGR features of the spec DP.

<sup>22</sup> Prof Prem Singh suggests (personal communication) that *raam d-iyāã kuṛiyāã* 'Ram's daughters' is the correct construction. However, *raam d-ii kuṛiyāã* 'Ram's daughters' is not uncommon among Punjabi speakers in Delhi.

- 23 a. thaa-r-o<sup>23</sup>                      choraa  
          your.3.m.sg      son (3.m.sg)  
          your son
- b. thaa-r-aa                      choraa  
          your.3.m.pl              sons (3.m.pl)  
          your sons
- c. thaa-r-ii                      chorii  
          your.3.f.sg/pi              daughter (3.f.sg/pl)  
          your daughter/s

In Punjabi, *d-* is used as the genitive case marker instead of *k-* as in Hindi. However, the nominal agreement markers are similar to those of Hindi. In Rajasthani, the nominal agreement suffixes are *-o* (3.m.sg), *-aa* (3.m.pl) and *-ii* (3.f.sg/pl). The syntactic motivation for the agreement relationship in a genitive construction is discussed in details in the next chapter. Here we may like to point out that in Hindi, adjectives also agree with the head noun in the same way as the genitive DP does. For instance, in (24), not only the genitive but also the adjective phrase *itani achii* 'this much good' agrees with *kamiiz*, 'shirt', the head of the DP:

24. raam-k-ii              itan-ii              acch-ii              kamiiz  
          Ram-gen-3.f.sg    this much-3.f.sg    good-3.f.sg      shirt (3.f.sg)  
          lit: Ram's this much good shirt  
          Such a nice shirt of Ram

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<sup>23</sup> Rajasthani data has been taken from Vajpeyi (1958). He discusses Gujarati and Marathi data to prove a similar point. As we notice, the suffix *-r-* in Rajasthani may be considered a genitive marker in pronominals.

In short, this chapter has presented a morpho-syntactic analysis of some aspects of the genitive case-marker in Hindi. It has argued that *k-* (and not *k-aa/k-e/k-ii*) is the genitive marker in Hindi and *-aa*, *-e* and *-ii* are nominal agreement markers. It has further argued that one of the fused forms of the genitive is *k-e* (in case the head of the DP in which the genitive is embedded is third, masculine, plural) which is different from *ke* that is either a variant of *ko* (a dative marker) or a clipped form of *ke paa* (a locative marker).

## Chapter III

### GENITIVE CASE ASSIGNMENT IN HINDI

#### 3.1. The Case Theory

In the Case Theory of Chomsky (1981, 1986) and its later developments (i.e., Chomsky and Lasnik, 1991, Chomsky, 1992, 1995) the genitive case is clearly differentiated from other cases. The Theory has two basic points: the concept of 'abstract case' and the principles of case assignment. In Chapter I we have briefly discussed how the concept of abstract case is able to capture the universality of case. Similarly the assumption about case assignment helps us capture specific overt realization of cases. The diversity in the case system of languages has thus been reduced by the rule of case assignment.

##### 3.1.1 Mechanism of case assignment

In Case Theory two mechanisms of case assignment have been posited:

- a. Structural case assignment, and
- b. Inherent case assignment.

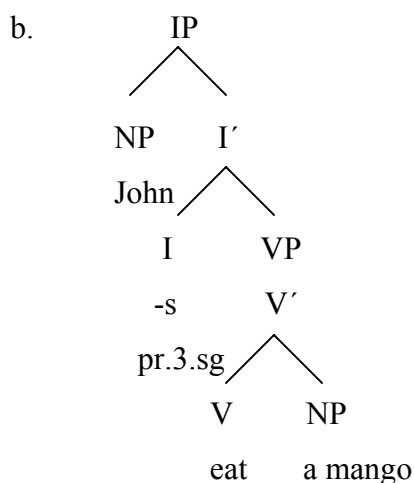
The question of case assignment depends crucially on certain assumptions concerning other subsystems of Universal Grammar (UG). One such assumption is the government relationship between the “Case-assigner” and “Case-assignee”, as is stated in (1):

1. If the category has a case to assign, then it may assign it to an element that it governs. (Chomsky 1986: 259)



Chomsky and Lasnik (1991: 50) observe that cases are uniformly assigned under government. Thus, for both mechanisms of case-assignment, condition of government relation is needed. Here, we may also point out that government is a structural relationship where the categories which govern and the categories which are governed are in m-command relation and there is no intervening node between them. On the basis of the mode of case-assignment involved, there are two types of cases. The cases which are assigned solely under the structural relationship of government are referred to as structural cases, i.e., they are assigned structurally and independently of semantic constraints. The cases such as nominative and accusative in English and Hindi are examples of the structural case. On the contrary, the cases which are inherently assigned are dependent on the  $\theta$ -marking property of the case-assigners. The genitive case is a typical example of inherent case in English and Hindi. We may look at an instance of the structural case-assignment in (2):

2 a. John eats a mango.



In (2b), the structural representation has been presented with the help of a tree-diagram. There are two NPs in (2b) which are assigned case structurally. The NP *John*, which occurs in the spec position of IP, is assigned the nominative case and the NP *a mango* which occurs in the

complement position of the VP is assigned the accusative case. Both nominative and accusative cases are assigned structurally under government. The NP *John* is governed by INFL (I) which contains tense and AGR features. In English INFL (+ TNS) and verb are structural governors and case-assigners. In (2b), I and the NP *John* are in government relation. I and *John* are under the same maximal node IP, and are in m-command<sup>24</sup> relation. There is no intervening node between I and the NP *John*. Thus, I governs *John* and assigns it the structural case of nominative. Similarly, verb *eat* and the NP *a mango* are in government relation. The verb *eat* governs the NP *a mango* and assigns it a structural case, i.e., accusative case.

Unlike structural case-assignment, the inherent case-assignment is linked with non-structural governors. Non-structural governors govern only categories that they subcategorize (Giorgi and Longobardi, 1991: 92). Chomsky (1986: 193) observes that P, N and A assign inherent case at D-structure, whereas V and INFL (+ TNS, + AGR) assign structural case at S-structure. We may illustrate this point with the help of an English example, as in (3):

### 3. John's story

In (3), *John* is in the genitive case which is assigned to it by the head noun, story (Chomsky 1986: 195). For the assignment of the inherent case Chomsky proposes a condition referred to as Uniformity Condition as in (4):

4. If  $\alpha$  is an inherent case-marker, then  $\alpha$  case-marks NP if and only if it  $\theta$ -marks the chain headed by (that) NP. (Chomsky 1986: 194)

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<sup>24</sup> The difference between the c-command and m-command is immaterial for our discussion here.

Thus according to the Case Theory the head noun, *story*,  $\theta$ -marks the spec NP *John* and assigns it the genitive case. On the question of the nature of  $\theta$ -role assigned by *story* to the NP, John. Chomsky suggests Gruber's (1976) and Anderson's (1984) proposal that a "possessional  $\theta$ -role" is assigned in this structural position. Besides, the structure in (3), in which a basic noun is said to be the genitive case-assigner, Chomsky discusses at least two more structures in which the spec NPs are in the genitive case and the case is assigned by the head of the respective structure. In (5), the head *destruction* is referred to as a derived nominal and in (6), the head which assigns the genitive case to the Spec NP *John*, is referred to as a VP (Chomsky 1986: 195).

5. [[<sub>NP</sub> city's] [<sub>N'</sub> destruction]]

6. [[<sub>NP</sub> John's] [<sub>VP</sub> reading the book]]

Chomsky observes that in (5), *destruction* assigns the genitive case to its Spec NP *the city* and in (6), *reading the book*, i.e., a VP assigns the genitive case to its Spec NP *John*. In both the cases the respective head  $\theta$ -marks its spec and the Uniformity Condition is met. In all the structures with a genitive NP Chomsky considers 's a genitive case-marking suffix. Chomsky's treatment of the genitive case-assignment in all these structures (3), (5) and (6), particularly in (6), has been reviewed by a number of subsequent scholars (Anderson, 1984, Abney, 1987, Radford, 1988, etc). Anderson considers 's a "Poss" element on par with a postposition. Abney raises the point that there is a difficulty with respect to X-bar theory in considering VP, in (6), a case-assigner. Abney's DP- hypothesis presents a somewhat different analysis of structure in (6) within the framework of GB. We look into it in some detail in later sections of this chapter. Abney (1987) suggests that nominals are actually headed by determiners and should be

reanalyzed as a Determiner Phrase (DP) instead of an NP. He discusses different aspects of the consequences of this hypothesis and also points out where the head D of DP can be equated with the lexical determiner. In the subsequent theoretical developments (Chomsky, 1992, 1995), the analysis of D as X-bar theoretic head has been widely accepted and the NP has been often referred to as 'the DP'.

### 3.2 Genitive case-assignment in Hindi

In the first section of this chapter we have presented a brief outline of a few theoretical assumptions behind the genitive case-assignment in the Case Theory. We have seen how the mechanism involved in the genitive case-assignment is different from that in other cases. We have briefly discussed it with the help of a few English examples. Like English and other languages Hindi also has genitive constructions in which the genitive case is assigned to a DP. We may look at the structures in (7-9) to study the mechanism of case-assignment to the genitive DPs in them. Each of these three structures represents a class:

- 7 a. raam-k-ii            kitaab  
       Ram-gen-3.f.sg book (3.f.sg)  
       Ram's book
- 8 a. paanii-k-aa            bahaav  
       water-gen-3.m.sg flow (3.m.sg)  
       the flow of water
- 9 a. raam-k-aa            kitaab            paṛhnoo  
       Ram-gen-3.m.sg book            reading (3.m.sg)  
       Ram's reading the book

All of these three structures in (7a-9a) are DPs in which the specifiers of DPs are in the genitive case. In the structure in (7a), the spec DP *raam* is assigned the genitive case by the head noun *kitaab* 'book'. In (7a) the head noun *kitaab* 'book' is a simple noun (as against a derived noun). In the structure in (8a), the DP *paanii* 'water' is assigned the genitive case by the head noun *bahaav* 'flow' which is a derived nominal, derived from the verb-root *bah-* 'to flow' by adding a noun-formation suffix *-aav*. In the structure in (9a), the Spec DP *raam* is assigned the genitive case by the head *parhnoo* 'to read' which is basically an infinitival noun. Chomsky (1986: 195), in a parallel English structure *John's reading the book*, considers *reading the book* the head of the structure and proposes that it be considered a VP. Let us look at the structures in (7a) in detail. We have seen that the head noun *kitaab* 'book' is a simple noun which assigns the genitive case to the spec DP *raam*. We know that verb and INFL ( + TNS, AGR) are structural governors and assign structural cases, as against nouns and adjectives which are non-structural governors and assign the inherent case. In (7a), the head is a noun and is assumed to be the case-assigner. Thus, it assigns an inherent case. The Case Theory proposes that cases are uniformly assigned under government. Chomsky (1986: 195) is not very explicit about how the head noun governs the genitive DP (in his sense NP). However, he assigns nouns and adjectives (along with prepositions<sup>25</sup> in English) the status of inherent case assigners which assign the genitive case under the Uniformity Condition (Chomsky 1986: 193). For the Uniformity Condition to be met in (7a), let us assume that the head noun *kitaab* 'book'  $\theta$ -marks the spec DP *raam*. The question that arises is: what is the exact  $\theta$ -role assigned to the spec DP *raam* by the head noun *kitaab* 'book'? The question of thematic relations within DPs has direct bearing on the principles of  $\theta$ -theory and the

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<sup>25</sup> Chomsky (1986), however, refers to Kayne's (1984) suggestion that prepositions in English are not inherent (genitive) case-assigners.

Projection Principle. Chomsky's  $\theta$ -criterion ensures that a DP must have one and only one  $\theta$ -role assigned to it, as in (10):

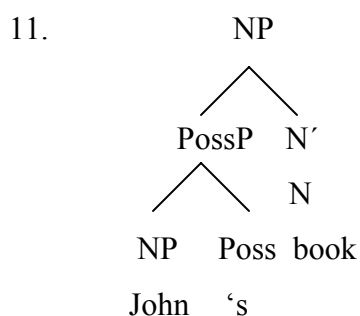
#### 10. $\theta$ -Criterion

Each argument bears one and only one  $\theta$ -role and each  $\theta$ -role is assigned to one and only one argument. (Chomsky 1981: 36)

Most of the studies have accepted the point that the thematic relation between a genitive DP and the head of the DP in which it is embedded is quite variable. Interestingly enough, modern Western scholars (Gruber, 1976, Williams, 1982, Higginbotham, 1983, Anderson, 1984, Dowty, 1991, etc.) hold views which are similar to the views of traditional grammarians such as Panini, Patanjali, Guru (1920), de Groot (1956), Vajpeyi (1958), Kurylowicz (1964) and Benveniste (1966). However, the important point is that unlike traditional classifications of the different semantic ideas involved in genitive, in modern studies there has been an effort to unify different roles of the genitive DPs by subjecting it to certain constraints of the  $\theta$ -theory and the case-assignment rule. When we look at (7a), we may have at least the following (7a'-7a'') possible paraphrases of it:

- 7 a. raam-k-ii            kitaab  
       Ram-gen-3.f.sg book (3.f.sg)  
       a'. the book which belongs to Ram  
       a''. the book which Ram has written  
       a'''. the book which is with Ram

On the basis of the interpretation of (7a), as given in (7a', a'', a'''), we notice that more than one thematic relation may be established between the head noun *kitaab* 'book' and the genitive DP *raam* in (7a). In (7a'), *Ram* is the possessor of the book. In (7a''), *Ram* is the author, i.e., agent (in the sense of *Ram created the book*, as in *Rushdie k-ii kitaab* 'Rushdie's book'). In (7a'''), *Ram* is neither the possessor nor the agent but the locative as in *pustakaalaya k-ii kitaab* 'library's book'. Thus, *Ram* may have one of the several case relations with the head noun *kitaab* 'book' in (7a). The exact  $\theta$ -role assigned to it by the head noun *kitaab* 'book' is determined by the context and the  $\theta$ -role once assigned remains unchanged in that context. However, the context may leave the door open for ambiguity. Gruber (1976) proposes that different thematic relations between the genitive DP and the head noun be captured by a generic term "possessional location" (in Williams' and Higginbotham's sense R-relation). Anderson (1984: 5) claims that the possessive affix 's (in Chomsky's sense) is actually a lexical morpheme which functions as a postposition to govern and assign a case to the Spec DP (in her sense NP). She extends Gruber's proposal to suggest that the  $\theta$ -role assigned by this morpheme is "possessional location". We can illustrate her point with the help of the tree-diagram given in (11):



Chomsky (1986: 195) appears to accept Gruber's (1976) and Anderson's (1984) proposal regarding the nature of  $\theta$ -role assigned by the head noun and he refers to it as "possessional  $\theta$ -role". However, he retains his earlier assumption that 's is a morphological genitive case-affix rather than a lexical morpheme. Anderson's claim that 's is a lexical morpheme may be rejected on another ground; namely, it violates the basic concept of morpho-syntactic constraints in a language. In a number of recent studies (Bauer, 1988, Spencer, 1991, Katamba, 1994, Hendrick, 1995, etc.) 's has been discussed as a clitic in the sense that it is functionally attached to a phrase rather than a noun head<sup>26</sup>. We may keep the observations made above in mind while examining their applicability to Hindi. Interestingly, Sanskrit grammarians (such as Taraporewala, 1967) and Western scholars of Sanskrit (such as Whitney, 1962) appear to be aware of what Gruber (1976) and Chomsky (1986) call the "possessional  $\theta$ -role". Taraporewala (1967: 51), for instance, observes that when a man knows something, the knowledge becomes the possession of the person, hence it has the genitive case-relation. Whitney (1962: 294) makes a similar observation. He thinks that "subjective" and "objective" genitive are derived from the original "possessive" genitive. We have mentioned these observations to highlight a point, namely, that the efforts to unify the varied thematic relations involved in the genitive case may not be attributed to any single grammatical theory. However, the approaches of modern grammatical theories, particularly the Case Theory of Chomsky appears to be more cohesive and scientific. Thus, for the structures in (7a), we may assume that the "possessional  $\theta$ -role" has been assigned to the spec DP, *raam* by the head noun, *kitaab* 'book' of the larger DP in which the former is embedded. A number of cross-linguistic studies have come up recently with observations and suggestions that further strengthen this position.

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<sup>26</sup> See also Klavans (1980) and Halpern (1995).



Giorgi and Longobardi (1991), Chomsky and Lasnik (1991), Chomsky (1992, 1995), Marantz (1995), to mention only a few, have studied different aspects of theoretical complexity of this assumption. They propose that head nouns be considered potential  $\theta$ -marking element for the purpose of assigning an inherent genitive case to their respective spec DP. Giorgi and Longobardi (1991: 37) observe that the inherent genitive case is realized by means of its case-agreement with its head. They differentiate between the inherent case feature of the genitive case from the structural case relation. A similar observation has been made by Marantz (1995: 366). He suggests that the AGR element between the head noun and the spec DP may enable the spec DP to inherit its case and phi-features. Giorgi and Longobardi (1991) present the possessive parameter, as in (12):

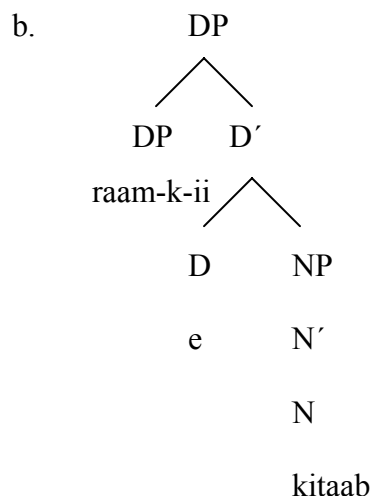
12. Possessive Parameter: Possessive elements are syntactically specified to be realized on the surface either as As (as in Italian) or as Ds (as in English and French).

(Giorgi and Longobardi 1991: 155)

They propose that the genitive DP should have a case by inheriting it through agreement with the head, exactly like regular adjectives and determiners. Among the Hindi grammarians, somewhat similar views (terms used are, however, different) have been expressed by Vajpeyi (1959: 132). He observes that the adnominal functions of the genitive case (in his sense *sambandha*) is equal to that of the adjectives in Hindi. For instance, in terms of relationship within a DP *room k-aa larḱaa* 'Ram's son' is equal to *acḱaa larḱaa* 'nice boy'. We may recall that in the second chapter we have observed that in Hindi the genitive DP agrees with the head noun in number and gender the same way as the adjective agrees with the head noun, For instance, in (7b), we may observe that the spec DP *room k-ii* agrees with the head noun *kitaab*

'book' in number and gender:

- 7 a. raam-k-ii      kitaab  
      Ram-gen-3.f.sg book (3.f.sg)  
      Ram's book



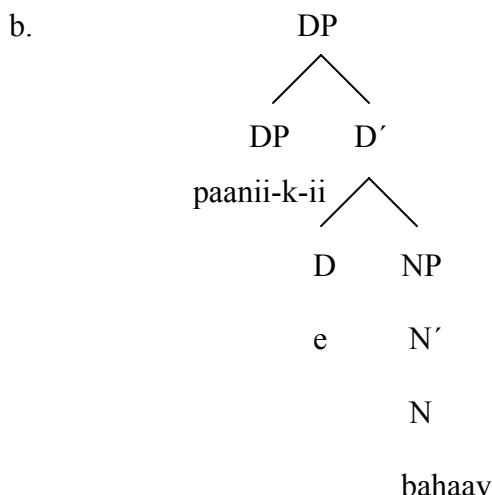
The agreement clitic *-ii* stands for the nominal agreement features, feminine and singular. The genitive case marker clitic *k-* and AGR clitic *-ii* are attached to the spec DP. According to Abney (1987), and subsequent theories of Marantz (1995) and Chomsky (1992, 1995), the genitive DP occurs in the spec position of a higher DP. In Hindi both the determiner and adjective positions of DP may be optionally occupied by lexical heads. Thus, for the genitive DP to occur, only the spec position can be specified. Abney's claim that abstractly present head D contains the AGR features cannot adequately account for the structures in Hindi for unlike in English, in Hindi the D position may be optionally occupied by lexical determiners such as *yah* 'this', as in (13):

13. raam-k-ii                yah        kitaab  
       Ram-gen-3.m.sg    this        book  
       this book of Ram

In (13), *yah* 'this' is a lexical determiner which occurs in D position. The literal English counterpart of this structure, i.e., Ram's this book is ungrammatical; it has got to be *this book of Ram*. Keeping all these points and the characteristics of Hindi in view, we may claim that the AGR relation between the spec DPs and the head nouns in the structures like the one in (7a) enables the head noun to  $\theta$ -mark the Spec DP and assign it the genitive case. Here, we need to sort out one point. The fact that the genitive DP inherits its case and phi-features from the head noun offers two possibilities. One, that the same case (say, nominative) which the head noun is assigned may be inherited by its Spec DP. Secondly, a different case (namely, genitive) may be assigned to the spec DP. This situation may lead to "case-conflict". We may avoid it by assuming that the genitive clitic *k-* in Hindi, which is attached to the spec DP, prevents the spec DP from inheriting the case features of its head. In short, the agreement relationship between the Spec DP and the head noun in which that DP is embedded in Hindi plays a more important morpho-syntactic role than the case of head of the configuration in which the genitive DP occurs.

We may now look at structure in (8a). We present the tree-diagram of (8a) in (8b):

- 8 a. paanii-k-aa                bahaav  
       water-gen-3.m.sg        flow (3.m.sg)  
       the flow of water



As we have seen, the head noun *bahaav* 'flow' assigns the genitive case to the spec DP *paanii* 'water'. The clitic *k-* and AGR clitic *-aa* are attached to the DP because of the genitive relation between the genitive DP and the head of the higher DP. For the head noun *bahaav* 'flow' to assign an inherent case, the Uniformity Condition has to be met. Chomsky (1986: 194) observes that in structure like *the city's destruction*, *destruction* assigns the genitive case to *the city* and the Uniformity Condition is met. For the Uniformity Condition to be met, *destruction* is assumed to  $\theta$ -mark the DP *the city*. The question is: how a derived noun like *destruction* assigns a  $\theta$ -role to the Spec DP *the city* and what is that assigned  $\theta$ -role? In so far as the question of  $\theta$ -role assignment in the structures mentioned above (and in similar other structures where derived nominals are heads of the constructions) is concerned, the prevailing view appears to be that there is some systematic relation between the argument structure of a verb and its corresponding nominals (cf. Hendrick 1995: 328). Scholars such as Baker (1985), Abney (1987), Grimshaw (1990), Giorgi and Longobardi (1991), Carrier and Randall (1992), Hendrick (1995) and Webelhuth (1995) have taken note of Chomsky's (1970) view on the relation between *refuse* and *refusal* with reference to the  $\theta$ -role assignment. They have discussed the theory of inheritance in detail from different theoretical perspectives and have

accepted the importance of inheritance. Against this view are the views of scholars such as Williams (1981a), Higginbotham (1983), Anderson (1984) and Dowty (1991). They are of the view that unlike verbs, nouns derived from them have no obligatory argument structure (Hendrick 1995: 328). In the case of *destruction* Baker (1985) proposes that *-tion* be considered a "syntactic affixation". In view of the fact that derived nominals do not lose the property of having argument structures similar to those of verbs from which they are derived, we accept the role of inheritance and examine how similar Hindi structures can be analyzed. The head noun *bahaav* 'flow' in (8a) has an intransitive verb-root *bah* 'to flow' which can take one argument, i.e., theme. Thus, the Spec DP *paanii* 'water' is assigned a  $\theta$ -role of theme by the head noun *bahaav* 'flow'.

We may now look at a structure which has a nominal head derived from a transitive verb base, an in (14a):

- 14 a. shahark-ii            sajaawat  
          city-gen-3.f.sg    decoration (3.f.sg)  
          the decoration of the city

In (14a), the nominal head *sajaawat* 'decoration' is derived from a transitive verb-base *sajaa* 'to decorate' by affixing a nominal formation suffix *-wat*. Thus, *sajaawat* 'decoration' is expected to take both its arguments, i.e., external and internal arguments. In (14a), the Spec DP *shahar* 'city' which is in the genitive case is the internal argument of the base-verb *sajaa* 'to decorate' and is assigned the  $\theta$ -role of theme. The external argument of *sajaawat* 'decoration' (or its verb-base *sajaa* 'to decorate') is suppressed. In this context we refer to the arguments given by Grimshaw (1990) and Carrier and Randall (1992). They argue that a nominal formation rule,

like the passive formation rule, suppresses the external argument of the base verb. However, they observe that an optional by-phrase (as in English) can realize the  $\theta$ -role of the suppressed external argument. We may illustrate this point in (14b):

- 14 b. raam      dwaaraa      shahar-k-ii      sajaawat  
        Ram      by              city-gen- 3.f.sg      decoration (3.f.sg)  
        the decoration of the city by Ram

In (14b), *raam* is assigned the  $\theta$ -role of agent by the head noun *sajaawat* 'decoration'. Lebeaux (1986) and Safir (1987) have made similar<sup>27</sup> observation. They claim that external  $\theta$ -role of the derived nominal can be assigned only after the internal  $\theta$ -role has already been assigned. Taking all these observations into account, we can apply the theory of inheritance to analyze similar Hindi structures. This approach enables the head nouns such as *bahaav* 'flow' in (8) and *sajaawat* 'decoration' in (14) to assign  $\theta$ -roles to their respective Spec DPs and thus satisfy the Uniformity Condition of the genitive case assignment. Next, we can look at the agreement relation between the head noun and the spec DP embedded in the higher DP for the structures in (8a) and (14a) given above. It functions in a similar way as in the case of a basic noun as head in (7a). In (8a), *bahaav* 'flow' has nominal features of masculine and singular which is also reflected by its genitive DP *paanii k-aa* 'of water'. In (14a), *sajaawat* 'decoration' has the nominal features of feminine and singular which is also reflected by its genitive DP *shahar k-ii* 'of (the) city'. Thus, the agreement features make the relation between the Spec DP and the nominal head of the higher DP visible for  $\theta$ -role assignment and case assignment.

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<sup>27</sup> See Selkirk (1982:35) for LFG account of the association of the grammatical function subject (external argument) with the genitive DP.

- 9 a. raam-k-aa            kitaab   paṛhnaa  
       Ram-gen-3.m.sg   book   reading (3.m.sg)  
       The reading of the book by Ram

In (9a), *raam k-aa* 'Ram's' is the genitive DP. As has been noted earlier, here *k-* is the genitive case marker and *-aa* is agreement marker which agrees with *paṛhnaa* 'reading'. To examine how the genitive case is assigned to *raam* in (9a), we take a parallel structure of English, as in *John's reading the book*. Chomsky (1986: 195) considers *reading the book* the head of the structure which assigns the genitive case to John. Abney (1987) points out that a VP is a maximal projection and to consider it the head violates X-bar theoretic assumption. Now the question that arises is: if *reading the book* is not the head, what is the head of the construction? In Abney's view the nominalizing suffix *-ing* is considered the nominal head. Baker (1985) expresses a similar view when he considers the feature *Poss-ing* a kind of the nominal feature. Both these scholars suggest that the verb-base, in this case *read-*, retains its thematic structure and can  $\theta$ -mark the nominal dependent on it. Hence in the English construction *John's reading the book*, *reading* supplies an external  $\theta$ -role to *John* and assigns the genitive case<sup>28</sup>. This way the Uniformity Condition of case-assignment is met. As a grammatical category *reading* is a nominal head. We have noted above that some scholars support the view that even after nominalization, the verb-root retains its original thematic structure. If this observation is extended to gerundive nominals such as *reading* in English we can argue that *reading* is the nominal head that  $\theta$ -marks its dependent noun and assigns it the genitive case. We can apply this generalization to study similar structures in Hindi.

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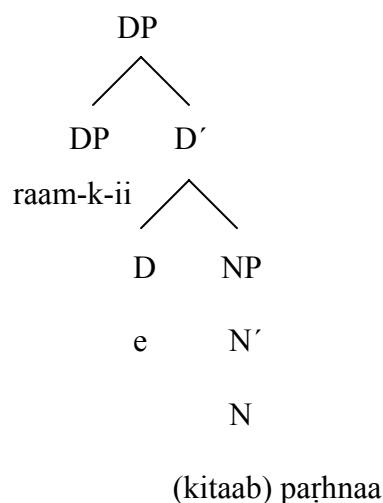
<sup>28</sup> The difference between the external and internal arguments is not of much relevance within the framework of the Minimalist Program, for in it both agent and theme are VP-internal arguments.

For instance, we can claim that in (9a), *raam-k-aa kitaab parhnaa* 'the reading of book by Ram', *raam* is assigned the genitive case by *parhnaa* 'reading'. To recapitulate, for room to be assigned the genitive case, the head has to  $\theta$ -mark it so that the Uniformity Condition is met. As has been noted above, in Hindi infinitival nominals and derived nominals share common properties as far as their nominal status is concerned. For instance, like derived nominals, infinitival nominals retain the thematic structure and are capable of  $\theta$ -marking the Spec DP. In (9a), the genitive DP *raam k-aa* 'Ram's' agrees in number, person and gender with *parhnaa* 'reading'. In other words, *parhnaa* 'reading' is the head nominal of the genitive construction in (9a). Here *parhnaa* 'reading' is gerund derived from the verb *parh* 'to read' which is a transitive verb and has potentially two argument positions. According to the inheritance principle, the infinitival nominal *parhnaa* 'reading' retains the property of the verb *parh*- 'to read' in so far as its thematic structure is concerned. In (9a), *kitaab* 'book' is assigned the  $\theta$ -role of theme and *raam* is assigned the  $\theta$ -role of agent. Thus, we argue that *raam* is assigned  $\theta$ -role by *parhnaa* 'reading' and we note that the AGR features of the DP *raam k-aa* 'Ram's' has to match those of *parhnaa* 'reading'.

The discussion presented above shows that the gerund head behaves in a way similar to the behavior of a basic or derived nominal. The tree-diagram for (9a) can be presented, as in (9b) below:



b.



As has been noted earlier, the structure (9a) is complex and it may be related to some language-specific characteristics. We try to illustrate some of these characteristics with examples in (15):

- 15 a. is        kitaab-k-aa        chaapaa jaa-n-aa  
       this     book-gen-3.m.sg    print    pass-ger-3.m.sg  
       this book to be printed
- b. is        kitaab-k-aa        chaapnaa  
       this     book-gen-3.m.sg    printing  
       the printing of this book
- c. raam-k-aa        is        kitaab-k-aa        chaap-n-aa  
       Ram-gen-3.m.sg this    book-gen-3.m.sg    print-ger-3.m.sg  
       for Ram to print this book
- d. \* raam-k-aa        chaap-n-aa  
       Ram-gen-3.m.sg        print-ger-3.m.sg  
       Ram's printing

- e. raam-k-aa            is        kitaab-ko        chaap-n-aa  
      Ram-gen-3.m.sg   this       book-acc       print-ger-3.m.sg  
      for Ram to print this book
- f. \* is            kitaab-ko        chaapaa jaa-n-aa  
      this           book-acc        print pass-ger- 3.m.sg  
      this book to be printed

The grammaticality of (15a) and the ungrammaticality of (15f) suggest that in a passive construction, the theme is the only argument that can be in the genitive form. (15f) is ungrammatical because the theme) *is kitaab* 'this book' has been assigned the accusative case in the passive construction. (15b) and (15c) suggest that either theme, as in (15b), or both theme and agent, as in (15c), can be in the genitive case if the transitive verb is in the active voice. However, the construction is not well-formed if only the agent is in the genitive form in an active construction of a transitive verb. The theme can also be in the accusative case, as in (15e), if the verb is in the active voice. One more important point to note here is that the use of *is* 'this', a definite determiner, can affect the well-formedness of the construction. As in (15c), if we delete *is* 'this', then the theme *kitaab* 'book' cannot occur in the genitive form. It can be clearly shown by (15g) and (15h) given below:

- 15 g. raam-k-aa            kitaab            chaap-n-aa  
      Ram-gen-3.m.sg   book (3.m.sg)   print-ger-3.m.sg  
      Ram's printing the book

- h. \* raam k-aa            is    kitaab            chaap-n-aa  
      Ram gen-3.m.sg this   book (3.m.sg) print-ger-3.m.sg  
      Ram's printing this book

(15h) is bad because the DP with the definite determiner *is* 'this' is not in the genitive form.

The observation in the last section with regard to the status of the external argument in a passive nominal construction is further strengthened by the data given in (15). If both the external and internal arguments are present, it is the internal argument that will be in the genitive form; the external argument will have a PP structure with (Ire) *dwaaraa/se* 'by', as in (16), or it may be in the genitive, as in (15c).

16. room    (ke)dwaaraa/se    kitaab-k-aa            chaapaa    jaa-n-aa  
      Ram    by                            book-gen-3.m.sg    print            pass-ger-3.m.sg  
      the book beingprinted byRam

In short, in a nominal structure with an intransitive verb-root, the only overt essential argument will be in the genitive form. If the nominal structure has a transitive verb-root, there are several possibilities. If only one argument is present in such a structure it is mostly theme rather than agent. In other words, it is agent, rather than theme that is suppressed. If both arguments are present, the theme may be in the accusative rather than in the genitive form. However, if theme is in the genitive form, agent may be present as an adjunct DP in the form of DP *ke dwaaraa/se* 'by DP'. Both the agent and theme may be in the genitive if the gerund has the passive verb-root (e.g. *chaapaa jaanaa* 'to be printed' rather than *chaapnaa* 'to print').

To sum up, this chapter discusses the mechanism of genitive case assignment with special reference to Hindi. After comparing various transformational approaches to the

genitive construction, we have concluded, on the basis of syntactic evidence from Hindi, that the genitive case is assigned to the spec DP of a higher DP on the basis of the syntactic character of the head , of the higher DP. The marker of the genitive case in Hindi is *k-* the AGR of which must check the AGR features of the head of the DP. It takes markers for singular and masculine if the head is singular and masculine, it takes markers for plural and masculine if the head is plural and masculine. It takes markers for feminine, if the head is feminine.

Another point that has been discussed in detail is the nature of the argument that can occur in the genitive form. As the case assignment is by an inherent case assigner, it  $\theta$ -marks the chain headed by that DP. It has been shown that the head is either a basic noun or a derived nominal or the gerund. If it is a noun derived from a verb-root it retains the thematic structure of the root-verb. As the nature of the thematic structure of a verb depends on the possible arguments it can take, we have been able to make a few generalizations:

- a. If the verb base of the nominal is intransitive, it will have only one argument which will be in the genitive case.
- b. If the verb base is transitive, it may have either a theme or an agent in the genitive case. In case, the theme is in the genitive case, the agent will be suppressed or expressed in an oblique form of the DP (*ke*) *dwaaraa* 'by'. In case, the agent is in the genitive case, the theme is either in the genitive or the accusative case or it is incorporated in the verb (i.e.,  $\theta$ -absorbed in the sense of Chomsky (1986).
- c. In case, none of these arguments is available to occur in the genitive form an argument with any other thematic role can occur in the genitive form.

## Chapter IV

### SUMMARY AND CONCLUSIONS

This study aims at presenting an analysis of genitive constructions in Hindi within the theoretical framework of Principles and Parameters Theory of Chomsky. The genitive case has always been a hotly debated subject and yet its position in grammar is not clear. The study has been carried out into three chapters. Some important observations made in the preceding chapters may be presented in a nutshell in the following manner. The main concern of Chapter I has been to examine different approaches to the study of the genitive case. We have observed that there has been a lot of indeterminacy regarding the actual position of the genitive case among both the Western and Indian traditional grammarians. We have shown that their study is more descriptive than explanatory. However, there have been efforts to determine the actual scope of genitive and also to unify its various uses. In this regard studies by Western and Indian traditional grammarians are significant. Jespersen's (1924) suggestion that the genitive case-relation can be referred to by a generic term "connexion to", i.e. it connecting two constituents of a sentence appears to be significant. It is not a mere coincidence that Vajpeyi (1958), a traditional Hindi grammarian makes a similar observation. Linguists such as Kurylowicz (1964), Benveniste (1966) and Fillmore (1968) appear to be more concerned with the transformational aspect of the genitive case which has also been pointed out by Stall (1966) in the context of his discussion on the genitive case in the *kaaraka* theory. Lyons (1968) observes that every case-relation is related to a primary function and can be referred to by it. For instance, the primary function of the genitive case is to indicate "possession".

Jakobson (1971) feels that the genitive case is peripheral rather than a core relation, and considers "possessive" to be its primary function. In Chomskyan Case Theory the genitive case has been differentiated from other case-relations on the basis of mechanism of case assignment. There is a significant similarity between Chomskyan approach and those of some traditional grammarians (Taraporewala, 1967, Speijer, 1993, etc.) regarding the primary relation denoted by the genitive case. Chomsky (1986) considers the genitive case an inherent case which is associated with  $\theta$ -marking property of the head of the DP in which the genitive DP is embedded. The basic difference between the Chomskyan approach and those of the traditional grammarians is with regard to the assignment of a unified  $\theta$ -role, i.e., "possessional  $\theta$ -role" to all genitive DPs. The discussion in this chapter is intended to prepare a case for the Chomskyan approach.

Chapter II discusses the morpho-syntactic status of the genitive case marker in Hindi. We have argued that *k-aa*, *k-e* and *k-ii* are not single morphological units nor are they postpositions. We have adopted the observation made by Vajpeyi (1958) that *k-* and *-aa/-e/-ii* are separate morphological units and argued that it is linguistically more scientific than the generalizations made by other grammarians. We have discussed a few theoretical points and provided evidence to prove that *k-* and *-aa*, *-e* and *-ii* are separate units and their status is neither postpositional nor typically suffixal. Further, we have tried to prove that they are like clitics. We have argued that *ke* is actually a dative/locative marker postposition rather than a genitive marker as has been considered in Hindi grammar so far. Another observation made in this chapter is with reference to the characteristics of Hindi in so far as the agreement relation inside a genitive construction is concerned. We have argued that in Hindi, as in Punjabi and Rajasthani, the agreement marker is present on the genitive DP which agrees with the head

noun of the higher DP in number and gender. We have shown how the construction undergoes further changes if the DP is embedded in a PP. We have argued that the change from *-aa* to *-e* in such cases is not because of the AGR features of the head of the higher DP. It is a low level phonological adjustment rule which does not affect the relation between the genitive DP and the head of the higher DP.

In Chapter III, the mechanism of the genitive case-assignment have been discussed within the framework of the Principles and Parameters Theory. We have taken note of other related studies on this topic within the current linguistic theory. It has been done with a view to determining a unified approach to the genitive case in the Universal Grammar. We have discussed three categories of Hindi genitive constructions based on the nature of the head nominal in various constructions. In the first category we have observed that the basic noun-heads of the genitive construction assign the genitive case to the genitive DP. For the Uniformity Condition to be met, we have assumed that the basic noun-head assigns "possessional  $\theta$ -role" to its genitive DP. In the second category of the Hindi genitive construction, we have pointed out that derived nominals assign the genitive case to spec DP in a similar way. However, the nature of the  $\theta$ -role assigned to the spec DP is determined by the corresponding verbal root of the head of the higher DP. We have made use of the theory of inheritance as exemplified in various studies (Giorgi and Longobardi, 1991, Marantz, 1995, etc.) to argue that a specific  $\theta$ -role is assigned to the genitive DP in a particular construction based on the potential thematic structure of the verb from which it is derived. We have observed that in this respect Hindi genitives are similar to English genitives. The third category of the genitive construction in Hindi involves those structures in which infinitival nominals are potential heads. We have shown that the matching of the AGR features of the

infinitival nominals with those of the genitive in the DP meets the Uniformity Condition and accounts for their well-formedness.

In short, we conclude that though there are a few points of difference between the genitive construction in Hindi and English, both adhere to the well-defined assumptions of the Universal Grammar with respect to the Case Theory.



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