CHAPTER-III

NOUN MODIFICATION

Noun modification is built in the grammar of Urdu/Hindi by the condition of coreferentiality which permits a noun to be modified by an embedded S. By this process of noun modification, sentences embedded in a NP come to the surface as modifiers that modify the noun, identical and coreferential with the noun of embedded S. It is noted that if the embedded modifying clause contains stative ho 'be' as MV, can be transformed to yield either an adjective, possessive N, or noun in apposition, which is said to function as modifier. On the other hand, if an embedded clause does not contain ho 'be' as MV, yields a participial or relative clause. The modifiers that occur before noun are called Pre-NP modifiers and those that occur after the noun are termed as post-NP modifiers. Some examples are provided such as follows:

(1) mai ne ek safed billi dekhī

'I saw a white cat'.

(2) baccoonī ek urti hui cīriya pakṛī

'The children caught a bird flying.'

(3) rām ka naukar bimār hai

'Ram's servant is unwell'
Modifiers before nouns as given in 1-5, are adjective, participle, possessive noun, pronoun and possessive reflexive. As far as the relative clauses and noun in apposition are concerned, they are seen to occur either before or after the modified nouns, such as in 6-9.

The basic aim of this approach to noun modification is that all the modifiers are derived from underlying full sentences that make an assertion about the noun that they modify. Let us again clarify the condition for the application of noun modification rule such as the following: the noun in
the embedded clause must be identical to the noun being
modified in the matrix clause.

There are various types of noun modification in Urdu/Hindi depending on how the underlying structure such as

```
NP
  
  Det    N
  
  S
  
  NP    VP
```

results in any of the following ways:

(i) A Relative Clause
(ii) A Participial modifier
(iii) An Adjectival modifier
(iv) Noun in apposition
(v) A possessive phrase

**Relative Clause**

An underlying clause embedded into NP when undergoes
the transformations to restrict the reference of the antecedent
or head noun is called a 'Relative Clause'. It seems to be
justified if we maintain that the relative clauses in Urdu/Hindi
are instances of noun modification. The distinguishing
characteristic of the relative clauses is that they do not delete j-element as well as VP, unlike other modifiers. As regards the derivation of a relative clause, the conditions for the application of Relative Transformation which seem to be quite general. The N dominated by the NP of constituent clause must be identical with the N dominated by the NP which dominates the constituent clause.

The process involved in the derivation of a relative clause meets satisfactorily, if the provided conditions are not unsatisfactory. The respective nouns must share common features, no matter what ever the function of the NP of a matrix and a constituent clause is.

All the R-clauses in Urdu/Hindi that are seen to occur in different distributional occurrences are derived from an underlying structure of the following type:

\[
\begin{array}{c}
\text{NP} \\
\text{Det} \\
\text{S} \\
(R) \\
\end{array}
\]

That is, under noted structural diagrams will show that \( N_1 \) and \( N_2 \) must be identical:
Some examples of coreferential nouns involved in the main and R-clause are provided by the following sentences:

1. Voh log hameshā dukhi rahte hai jo dusrō par bharosā karte hai 'They are always in trouble who depend upon others'.

2. Voh ghoṛā māṛgāyā jo maiṇ ne kalkatte se xaridā tha 'The horse dies whom I purchased at Calcutta'.
3. Keval vohi log āe jīnko māi ne xat liṅkāhā
   'Only those persons came to whom I wrote (a) letter!'

4. Voh larki kahā hai jīskā bhāi āgre mē hai.
   'Where is that girl whose brother is in Agra'.

5. māi ne vohi kītābe māgāi hai jo bhārat mē nahi mīlti
   'I have ordered for those books which are not available in India'.

6. rām ne us kutte ki tāg tordi jīsne mujhe kāṭā thā
   'Ram broke the leg of the dog who bit me'.

7. māi usi makān mē rahtā hū jīsmē rām thā
   'I live in that house in which Ram lived'.

In sentence 1, both matrix and R-clauses, contain subject NP log 'people'. In sentence 2, matrix clause contains subject NP ghorā 'horse' and R. Clause contains D. object NP ghorā. In sentences 3, NP log is subject in the matrix clause but the same NP in R-clause functions as indirect object. The matrix clause in sentence 4 contains larki 'girls' as subject NP and in R-clause larki is possessor N of the possessive phrase. In sentence 5, matrix clause contains kitāb 'books' as object NP. In sentence 6, NP larkē 'boys' is the indirect object of the matrix clause and the same is the subject of R-clause. In sentence 7 matrix clause contains possessive phrase such as Us Kutte Ki tāg 'leg of the dog' and R-clause contain Kutta 'dog' as subject NP. In sentence 8, both matrix and R-clause contain post positional phrase makan mē 'in the house'. 
An examination of the above examples makes it clear that the coreferential nouns in either clause may be subject, direct object, indirect object, post positional object or a possessive.

Relative clauses in Urdu/Hindi are of two types: Restrictive Relative Clause (RR) and Non-restrictive Relative Clause (NR). A non-restrictive Relative Clause always follows the noun directly, to which it modifies, but a Restrictive Relative (RR) may have three distributional occurrences and may take any of three positions. It can occur immediately after the modified noun (like NR), it can occur before the matrix clause, or it can occur after the matrix clause. According to its occurrence in the sentence, NR is very similar to sentence-medial RR clause. Notice that the extraposition in Urdu/Hindi is totally impossible with a NR.

Consider the examples, such as the following:

9. mīsṭār xan, jo jāmiā ke shaīx hāī, sadar hogae
   'Mr. Khan, who is the Vice-Chancellor of Jamia became the President of (India)

10. jo larkā bimār thā voh āj cal basā
   'The boy who was sick, died today'.

11. voh larkā āj margayā jo aspatāl mē thā
    'The boy died today who was in hospital'.

12. voh larkā jo aspatāl mē thā āj calbasā.
    'The boy who was in hospital died today'.
Mrs. Kachru emphasizes the general non occurrence of sentence-medial relative clause. There is some evidence to support the claim that RR can occupy any of three positions in the sentence. Donaldson (1971)\(^2\) in her treatment of Relative clauses does not oppose the sentence-medial position of Relative clauses.

The RR rarely occur with proper nouns because of their (proper N ) unique reference. If there were more than one person of a single name at a time, the RR, in fact, can occur with them to individualize one of them. For instance, the sentence is noted below:

13. Profaisar xān jo kālej mē bhāshā viṅgyāṅ paṅhaṅte hai āj amrikā cale gae

   'Professor Khan who teaches linguistics in the University went to America today.'

RR can occur with either definite or indefinite determiner, but RR with indefinite determiner can not occur in sentence initial and medial position e.g.

14. māi ne ek kabūṭā r paṅrā jo bahut xubsurat thā.

   'I caught a pigeon which was very beautiful'.

15. * māi ne ek kabūṭār jo bahut xubsurat thā paṅrā.

   'I a pigeon which was very beautiful was caught'.

'Which pigeon very beautiful was I a pigeon caught'.

However, the R-clause sentence-medial position is not ill-formed:

koi bhi larkā jīse naukri cāhīe mere pās ā jāe

NR is always used in apposition to the noun it modifies. It can occur after both proper and common nouns. It provides an extra and inessential information to what has already been said about the particular noun. RR clause that are usually called Relative clauses, on the other hand, differ in their behaviour. They play a determining role. They identify the noun to which they refer. As we shall see in the following discussion that the determiners and RR are also linked in Urdu/Hindi. There is a rule in Urdu/Hindi that the coreferential noun is deleted from either clause (main or embedded) whichever occurs finally in the sentence.

However, the role of determiners in such a constructions in Urdu/Hindi is very interesting. The identical noun is deleted from second clause and only a pronominal appears in NP position. If the R-clause appears initially, the distant third person voh 'he' (or its variants) occurs in the following clause, if the matrix clause is in initial position then the relative pronoun jo 'who' (or variants) occurs in the embedded clause. In these complex sentences, jo and voh play two roles: if jo is NP in
second clause voh will act as a determiner [+ definite, + distant] in first clause; if voh occurs as NP in second clause, jo will act as determiner (relative determiner) in the first clause. The determiner [+ definite, + distant] voh and III person pronoun voh 'he' are similar in phonetic form. Similarly jo plays two roles: relative pronoun and relative determiner. It is noted that jo and voh will act as determiner if occur before noun, if in isolation under NP node, they are themselves NPs of clauses. Jo and voh will act as NP only in second clause and as determiner always in first clause.

In the following examples, the deletion of repeated N from second clause is illustrated:

voh larkā margayā jo bimār thā.
'The boy who was sick died'.

jo larkā patra līkh rahā hai voh kalkatte se āyā hai.
'The boy who is writing a letter has come from Calcutta'.

It is not clear how the following usages of jo could be treated systematically in the grammar of Urdu/Hindi. Usually they have been treated as idiomatic.

Consider the examples, such as the following:

jisko piya cāhāi (voh) suhāgan rahe
jo boyā so kata
jo huā so huā
jo baraste hai voh garajte nahī
It is noted that NR embedded sentences originate as independent sentences in the deep structure. They can be removed without changing the meaning of the sentences in which they appear. They are not embedded inside the noun phrases but rather are adjoined to NPs by transformation. When two compound sentences exist side by side in deep structure, NR clause transformation introduces one of these sentences into the other immediately after a NP. NR clause transformation operates on a structure of the following sort:

```
Underlying
S
  S1
  NP
  VP
  S2
  NP
  VP
Surface structure
S1
  NP
  S2
  VP
```

On the other hand, RR originate inside the NP of another S. The Relative clause Transformation operates on a structure of the type:

```
NP
  Det
  N
S
```

It is noted that if a RR, unlike NR, is removed from the sentence, the meaning of the sentence in which it appears will be completely changed.
In her analysis of the relative clause in Hindi, Kachru adopts the process of embedding for the generation of relatives. According to her, the relative clause is the result of an optional expansion of NP in the deep structure which is later moved to be the left daughter of the determiner for the modified noun.

Professor Kachru (1966:99) states:

The process of generating a complex sentence with a relative clause is as follows:

1. Permute the Def. Det of the Matrix S. with the embedded S.
2. Delete the repeated N.

She applied these two rules to the underlying structure for the generation of relatives:

Underlying

```
  S  ---------------->  S
  NP VP               NP VP
     |                  |     S
     |                  |     |
     |                  |     | larka
     |                  |     |    S
     |                  |     |
     |                  |     |  patr likh
     |                  |     |
     |                  |     |  rah a hai
     |                  |     |    S
     |                  |     |
     |                  |     |  voh
     |                  |     |    S
     |                  |     |
     |                  |     |  +Det
     |                  |     |    +Prox
     |                  |     |    voh
     |                  |     |    S
     |                  |     |
     |                  |     |  Det
     |                  |     |
     |                  |     |  N
     |                  |     |    N
     |                  |     |    kalkatte se
     |                  |     |    aya hai
     |                  |     |    kalkatte se
     |                  |     |    aya hai
     |                  |     |    larka
     |                  |     |    voh
     |                  |     |    S
     |                  |     |
     |                  |     |  NP
     |                  |     |
     |                  |     |  VP
     |                  |     |
     |                  |     |  patr likh
     |                  |     |
     |                  |     |  rah a hai
     |                  |     |    S
     |                  |     |
     |                  |     |  Det
     |                  |     |
     |                  |     |  N
     |                  |     |    N
     |                  |     |    j larka
```
It seems to be obvious that it is not just permutation of the determiner and relative that is involved but rather daughter adjunction of the relative to the determiner.\(^5\).

It is noted that the permutation is a rule that operates entirely, within a sentence, while Kachru's permutation is a rule that operates between two sentences in that it changes the original position of the determiner of higher S and makes the embedded clause a part of determiner of higher S.

She further argues in support of her claim that the basic order of the relative is sentence initial position, if the noun is in subject position in the main clause. It is not correct that the basic order of the relatives is sentence initial position. It may occur in three distributional occurrences, as mentioned above, rather than preceding main clause. The basic aim of an analyst is to set up the underlying structure of the sentence and to formulate the rules for the generation of a surface sentence, rather than fixing up its surface form from its underlying, position. It is noted that the positional occurrence of relative clause within the sentence is the choice of speaker depending upon the criteria of acceptability rather than proposing basic order for one of the distributional occurrences of R-clause in the sentence. The greater freedom is exercised by the speaker in his choice of position within the sentence for the relative clause. There is strong evidence in Urdu/Hindi, to
support the claim that the noun is in subject position in the main clause and the relative clause may occur either sentence-initial, medial or final position. Let us consider the examples such as the following:

17. वो लड़का मेरा छोटा भाई है जो मेरे पास राखा है।
   'The boy who is living with me is my little brother'.

18. जो लड़का बीमार था वो अब ठीक है।
   'The boy who had been ill is now well'.

19. वो लड़का जो बीमार था अब ठीक है।
   'The boy who was ill is now well'.

Mrs. Kachru has also claimed that when the modified noun is not the subject N but either it is an object N or a post-positional object, the relative clause will not precede the modified noun rather it follows the matrix S, and an obligatory transformation, i.e. topicalization of the main clause, which moves to sentence initial position, takes place. She further states that if noun modified is preceded by an indefinite determiner, the relative clause extraposes beyond the main clause. Mrs. Kachru has employed two distinct operations for surfacing the relative clause to the end of the sentence. In one case she takes main clause and places it before R-clause and in other case, she manipulates the R-clause which is extraposed to the end of the main clause.

It is neither justified nor convincing that the relative
clause occurring in the sentence-final position is handled by two different operations. It could be argued that in such a case only one cyclic rule, i.e. the extraposition transformation can be applied to generate the final position of the relative.

It has been emphasized by Mrs. Kachru that when the modified noun in the main clause is not in subject position the relative clause does not occur in sentence initial position. But she offers no syntactic argument for this proposal. The examples of grammatical sentences beginning with a relative, modifying the main clause object noun or post-positional object are noted below:

20. jo log is makān mē rahte hai ham unhe acchi tarah jānte hai. 'The people who live in this house are known by us very well'

21. jis bas mē ham the Usi mē rām thā. 'Ram was in the same bus in which we were'.

In sentence (20) the modified noun log 'people' is in object position in the main clause and in (21) the modified noun bas 'buss' is post positional object in the main clause and the sentence-initial occurrence of R-clause in sentence 20 and 21 is not far beyond the acceptability.

Other instances of R-clauses are provided by sentences such as the following:
1. Subj of $S_1$ and $S_2$

a) voh larkā ab āgre mē hai jo mere pās rehtā thā.
b) jo larkā mere pās rahtā thā voh ab āgre mē hai.
c) voh larkā jo mere pās rahtā thā ab āgre mē hai.

'The boy who lived with me is now in Agra'.

2. Subj of $S_1$ and P phrase of $S_2$

a) yeh daur acchā nahī hai jīsmē ham rahte hai.
b) jīs daur mē ham rahte hai voh acchā nahī.
c) yeh daur jīs mē ham rahte hai acchā nahī.

'This age in which we live is not peaceful.'

3. Subj of $S_1$; Poss of $S_2$

a) voh larki Iskul nahī gayi jiski yeh kitāb hai.
b) jīs larki ki yeh kitāb hai Iskul nahī gayi.
c) voh larki jiski yeh kitāb hai Iskul nahī gayi

4. P phrase of $S_1$; Subj of $S_2$

a) māī Us kamre mē rahtā hū jo bahut choṭā hai.
b) jo kamrā bahut choṭā hai māī ēsmē rahtā hū.

'I live in that room which is too short'.

5. P phrase of $S_1$; P phrase of $S_2$

a) baccā Us kursi par baithā thā jīs par adhyāpak baīthtā hai.
b) jIs kUrsi par adhyApak baitha hai Us par bacca baitha tha.

6. Poss of S₁ : Sub of S₂

a) Us lārke kā bhai āyā hai jo mera dost hai.
b) Jo lārkā merā dost hai uskā bhai āyā hai.

'The brother of the boy who is my friend has come'.

7. Poss of S₁ : P Phrase of S₂

a) Us ghar ki chat gir gai jīsmē rām rahta thā.
b) jīs ghar mē rām rahta thā Us ki chat gir gai.

'The roof of the house in which ram lived collapsed'.

The process of Relativization in Urdu/Hindi, thus involves the following rules:

1. Relative Transformation.
2. Equi-NP Deletion rule.
3. Extraposition.
4. Relative clause Fronting Rule.
5. Topicalization.
6. Object Preposing rule.

Relative transformation in Urdu/Hindi is a rule which is ordered before all other cyclic rules. It basically deals with the process of substitution. The rule applies to the embedded clause converting definite determiner voh 'that' to jo 'which'.

Additionally, if the noun modified in the main clause is preceded by indefinite or zero determiner, the referential noun in the relative clause will be preceded by J-element.

**Equi-NP Deletion rule**

By Equi-NP deletion rule, the identical noun is deleted from second clause, leaving the determiner behind as a pronominal marker rather than substituting a pronoun for the deleted noun. It is preceded by other cyclic rules which take place for positioning the relative clause within the sentence.

**Extraposition**

In the structure where R-clause occurs after the main clause, the extraposition transformation applies. The application of this rule produce the intermediate structure by moving embedded clause from its previous occupied place. When the embedded clause is moved by extraposition, it may move only to the end of the clause in which it originates. The extraposition is followed by an optional **Object preposing rule** if it is required in order to deal with the movement of constituent within a clause i.e. relative clause.

**Relative clause Fronting rule**

A quite distinct operation, i.e. R-clause Fronting Rule takes place if we get a structure in which R-clause is followed
by the main clause. The R-clause 'Fronting rule' moves the embedded clause to the first position of the main clause. It is preceded by only Relative transformation and followed by Equi-NP deletion. If there is a rule that positions the relativized constituent within the R-clause, this will take place first after R-clause fronting rule and Equi-NP deletion will operate after it.

Topicalization.

In the structure where R-clause occurs in sentence medial position, there is an obligatory transformation called Topicalization of subject N, which moves the subject N of the higher clause to the front of the lower S, that is, it preposes the subj N of matrix clause to the front of the embedded clause. It is preceded by Relative Transformation and followed by Equi-NP deletion. Extrapolation and R-clause fronting Rule do not operate on a single string where one occurs the other does not.

Object Preposing rule

Object preposing rule applies optionally to the embedded clause, moving the object NP/post positional object (Relative Det + N (FP) to the first of the embedded clause. If there is a rule that positions the R-clause within the sentence, object preposing rule must occur after it. It is ordered before Equi-NP deletion and after all other cyclic rules. 'Object preposing'
rule must apply to the structure where J-element plus an optional post position is seen to occur just before a verb or the relativized forms indicate the expression of time and place.

The rules as formulated above are applied to generate the noted above sentences to illustrate how the rules work. The underlying representation of the sentences such as 1, 11 and 17 is as follows:

The application of Relative Transformation yields the structure such as:
By extraposition the original position of embedded clause is changed, moving it to the end of the higher clause. The yielded structure looks on follows:

By Equi-NP deletion, the identical N from second clause is deleted. The obtained surface structure after relevant phonological rule looks like:
The deep structure of sentences such (10) and (18) is as follows:

After Relative Transformation we obtain
via Relative clause "fronting rule", the lower clause is moved to the initial position of the matrix clause. After R-clause 'Front Rule', the resulting structure would look like:

By Equi-NP deletion we get the surface form such as the following:
The phonological rules are applied to interpret the spoken form to each surface structure after last cyclic rule as well as after post cyclic rules, i.e., Case marking rules.

The sentences in which modified noun occurs in object position or a post positional object as in:

22. mai Us larkē se miḷā jo kalkatte se āyā hai.
   'I met the boy who came from Calcutta'.

23. mai ne voh ām xaride jo kacce the
   'I bought those mangoes which were not ripe'.

The underlying tree representation would be:
Application of the rules, Relative transformation, Extra-position and Noun Deletion produce the surface structure such as:

```
S
  
S
  NP VP NP VP
  mai Us larke se jo kalkatte se ayaha
  mila
```

The examples in which R-clause is seen to occur in sentence medial position are:

24. voh log jo dusro par bharosa karte hai kabhi sukhi nahi rahte.
   'The people who depend on others are never glad'.

25. voh larka jo aspatal me tha aj cal basa.
   'The boy who was in hospital expired today'.

The underlying structure of these sentences is as follows:
After Relative Transformation, Topicalization applies which moves the subject N of matrix S to the front of the embedded S. After Topicalization of subject N, the obtained structure would look like the following:

```
S
  NP     VP
     |     |
   Det N  Adv MV Aux
       |     |
       NP VP
          |     |
          Det N
            |     |
            NP VP
               |     |
               Det N
                 |     |
                 Voh larka jo larka aspatal aja calbas me tha ya
```
By Equi-NP deletion and relevant phonological rule, the obtained form is as (25).

Some instances of object preposing, which have not been discussed so far, are noted below:

26. mai ne voh sabaq yād karliyā jo āpne batāyā thā. 
'I learned that lesson which you advised'.

27. voh baccā mar gayā jīsko rām ne pālā thā. 
'The boy whom Ram brought up died'.

28. jīs larke ko mai ne bulāyā hai voh merā choṭā bhāi hai. 
'The boy whom I called is my younger brother'.

29. jo kitāb āpne bheji thi voh mai ne mohan ko dedi. 
'The book which you sent I gave to Mohan'.

30. voh kele jo ham ne kal xaride the xarāb nīkle 
'The bananas which I purchased yesterday proved bad'.

31. voh marīz jīsko āŋktēr ne davā dī thīk hogāyā. 
'The patient to whom doctor gave medicine became healthy'.

The underlying tree representation of sentences 26-27 are as follows:
Application of the rules, Relative transformation, extraposition, object preposing (which moves the relativized object to the front of embedded S). Equi-NP Deletion and post cyclic rules, i.e. case marking rules generate the surface forms. After relevant phonological rules, the sentences that we obtain are 26 and 27.

The underlying structures for sentences 28 and 29 and T. Rules applicable to these structures are examined below:

**Sentence - 28**

```
S
   NP
      Det [+Def] voh
             larkā
      VP
         NP
            N larkā
       S
          N
     NP
       VP
          N
     NP
       PP
          Det [+Def] voh
                 larkā
          MV
            N bulā
       Aux
          cop
            hai
          MV
            cop
              hai
          Aux
            cop
          hai
```

Note: The diagram shows the underlying structure of the sentence, with each node representing a phrase or part of speech.
The rules that are applied to the above mentioned structures are Relative Transformation, R-clause fronting Rule, Object Preposing rule, Equi-NP deletion and case placement rules. After relevant phonological rules, the obtained structures are as 28 and 29.

The surface representation of sentences 30 and 31 is derived from underlying representation such as that given below:
Application of the rules, Relative Transformation, Topicalization of subject N, object preposing, Equi-NP deletion and case marking rule (after phonological interpretation) produce the surface forms of sentences 30 and 31.

A careful examination of above sentences reveals the fact that the greater freedom of movement of J-noun structure in R-clauses is not restricted with either S-initial relative clauses or S-final relative clauses. This, however, cannot be correct that jo-preposing rule is optional if the R-clause were S-initial and obligatory if it were S-final. We have noted the constraint in determining the position of J-noun structure in its clause what we want to state is that if jo-N structure plus an optional post position is seen to occur just before a verb, then it is moved obligatorily to the front of its clause.

For instance, consider the acceptable sentences containing R-clause sentence-finally, initially and medially and J-element is seen to occur in non-initial position of its clause.

32. Insān jīs mulk mē paida hotā hai voh uskā vatan kīhlātā hai.
    'The country in which a person is born is said to be his mother land'.

33. Ḍāktār ne jīs marīz ko dāvā dī vohi cal basā
    'The patient passed away to whom Doctor gave medicine'.
34. राम हमेशा उनही लोगो से मिलता है जिनको मैं नहीं पसंद करता।

'Ram always meets those people whom I do not like.'

35. मैं ने वोह किताब नहीं खरीदी कल आपने जो बताई

'I did not buy the book which you told about yesterday.'

36. आपने जो काम कल बताया था वो हैं नहीं कर सका।

'I could not do the work which you told yesterday.'

37. हम ने जिस नाकर पर भी भरोसा किया उसी ने हम को धोका दिया।

38. आपने जिस कुत्ते की तांग तोड़ी है उसी में मैंने काट था।

It is noted that if the noun modified is preceded by an indefinite determiner, the relative clause obligatorily occurs sentence finally, it frequently does not elsewhere. Additionally, if, however, the relative clause, though containing an adjectival phrase, is not reduced, it is extraposed beyond the main clause, rather it precedes the modified N. For instance, the underlying structure of sentence (14) is as follows:

\[
\begin{align*}
S & \\
| NP & VP \\
| [+ Prp] & \\
| mai & \\
| [-def] & S \\
| ek & kabutar pakar yā \\
| NP & VP \\
| [-def] & \\
| ek & kabutar \\
| Adv & Pred & MV & Aux \\
| bahut & Ap & cop & \\
| xuburat & thā & \\
\end{align*}
\]
The application of the rules, Relative Transformation Extraposition, Equi-NP deletion and case placement rules yield the sentence such as:

\[ \text{mai ne ek kabutar pak\r{a}jo bahut xubsurat th\=a.} \]

'I caught a pigeon who was very beautiful'.

Before the discussion of R-clauses is concluded, sentences which involve time and place adverbs such as \( \text{jab}' \text{when}' \text{jah\=a}' \text{where}' \) etc. have to be examined to determine if they are at all related to the types of constructions discussed so far.

The sentences such as follows are to be examined in this regard:

32. \( \text{mai us vaqt pahu\=ca jab voh mar cuk\=a th\=a.} \)
'I reached at that time when he had died'

33. \( \text{mai vaha\=a raht\=a hu jah\=a ram raht\=a hai} \)
'I live there where Ram lives'

34. \( \text{jab mai pahu\=ca voh mar cuk\=a th\=a} \)
'When I reached he had died'.

35. \( \text{jah\=a ram raht\=a hai vahi mai raht\=a hu} \)
'Where Ram lives I (also) live there.

As far as the sentences such as 32-35 are concerned, a relative clause which involves either time or place adverbs such as \( \text{jab, jah\=a etc.} \) is said to be functioning as adverbial clause. The R-clauses that are introduced by \( \text{jab or jah\=a} \) are generated
by the same set of rules as formulated above. The sentences such as 32-33 are derived by the same Extraposition transformation that places R-clause sentence finally and 34-35 are derived by R-clause 'Fronting Rule (Adv. clause Fronting Rule) which moves R-clause to sentence initial position. As regards the adverbs such as jab, jahā etc. which involve in R-clauses indicating time or place expression, they are obligatorily preposed in a R-clause by a Transformational rule.

Further more, it would not be irrelevant to state that when the modified noun is in object position or a post-positional object and indicates the adverbial expression of time or place, a R-clause seems to be functioning as adverbial clause in the sentence.

The question now arises, if jab, jahā etc. are not noun phrases underlyingly, how can the grammar of Urdu/Hindi account for them. A reasonable assumption is to consider them as noun phrases that indicate time and place.

The underlying structure of sentences such as 32-35 would look like the following:
Sentences such as 32-33 are derived by Extraposition and 34-35 by Fronting Rule and the object NP is moved to the front of its clause by the later preposing rule.

It is to be noted that the words 'jab and jahā' in its function as a relative pronoun, are often at the front of its clauses modifying a noun which has the feature [+ time] or [+ place] accordingly.

36. mai us vaqt pahūcā jab voh mar cūka thā
37. mai vahi rahtā hu jahā rām rahtā hai

'I live there where Ram lives'
Noun phrases which dominate the referent noun in the main clause seem to be transformed optionally by what might be called the 'time-place deletion transformation'. This transformation only deletes the noun phrases of which the noun has the feature [+time] or [+place];

The time place deletion thus allows the reduction of

38. jab mai pahucā voh us vaqt mar cukā thā
   'He died when I reached'

to the sentence below:

39. jab mai pahucā voh mar cukā thā.

The correlative type of clauses indicating time, place direction, etc. retain their correlatives in some contexts:

40. jab mai dillī mē thā tab har sal 15 agast dekhtā thā
   'I used to see the celebration of 15 August when I was in Delhi'

Relative markers in reduplicated forms such as jo jo, jab jab, jahā jahā etc. are used to express various distributive meaning:

41. jab jab āpne yād kiya mai hazir ho gayā
   'I came every time you called me'

It is to be noticed that if, however, the modifying constituent (Adv./Noun) contains the feature of [+Time] or [+Place] in the deep structure, even with these features
it may or may not change its word class in the surface representation. In this regard, the rule of Equi-NP Deletion operates optionally, no matter the items of the sort appear in the first or second clause:

42. (i) voh tab/Us vaqt marcukā tha jahjīs vaqt mai vahā pahūcā.
   (i.a) jahjīs vaqt mai vahā pahūcā tab/Us vaqt voh mar cukā thā
   'He had died when I reached there'
   (i.b) āp aise vaqt vahā pahūcā jo mūnasib na thā
   'You reached there at improper time'

43. (ii) mai vahā/Us jagah rahta hū jahjīs jagah rām rahta hai
   (ii.a) mai jahjīs jagah rahta hū vahā/Usi jagah rām rahta hai
   'I live there where Ram lives'
   (ii.b) mai Us jagah rahta hū jo āpne nahi dekhi
   'You did not see the place where I live'

To sum up the entire discussion, R-clause in Urdu/Hindi involve a Relativization rule and Equi-NP deletion rule, which are obligatory, but R-clause Fronting rule, Extrapolation and Topicalization are carried out obligatorily with regard to complementary distribution. Object preposing rule is in fact optional one, which is applied conditionally. The Equi-NP deletion rule is ordered after other transformational rules. But on the other hand, the relativization is followed by all
the transformational rules in Urdu/Hindi. The deletion of the shared noun always takes place in the second clause and the determiner automatically occupies the position of NP in the second clause. The determiner occurring in the first clause whether simple or relative will always act as determiner, unlike in second clause. The initial occurrence of relative clauses are not always considered best. Similarly fronting of the \( j \)-element in its clause may be preferred in most instances but not always. The referent noun in the main clause may be the subject, object, post positional object or a possessive, still it is acceptable to use a RR to begin the sentence. Similarly the RR may permit the occurrence of the share noun in different cases and constructions within them. The RR rarely occur sentence-medially, but frequently elsewhere.

**A Participial modifier**

Nouns are modified by clauses (i.e. RR clauses) or even by phrases. Since these phrases function syntactically like RR clauses, these are referred here as modifiers that modify a noun.

The internal structure of the complex noun phrase with a modifier is as follows: Such noun phrases may contain a clause which yields a clausal modifier—RR clause or simply a phrasal modifier i.e. participials or adjectives. The following are illustration:
44. vahā maī ne ek xubsurat jhil dekhi
'There I saw a beautiful lake'.

45. voh calcī gārī se khūd pārā
'He jumped down the moving vehicle.'

46. vahā jo log bāiṭhe hai maī unko nahi jāntā
'I do not know the people who are sitting there'.

In sentence-44, the NP has a numeral and an adjectival modifier, in 45, it contains a participial as modifier and in 46, a full RR clause, as modifier.

According to Lakoff (1970), modifiers in English are adjectives, participials, possessive nouns and pronouns and reflexive pronouns. In the present study the analysis of the participials and predicative adjectives derived as modifiers will be accounted.

The noun modifiers in Urdu/Hindi, are derived from underlying full sentences, that make an assertion about the noun being modified. Noun phrases functioning as subject, direct or indirect object, or object of post position are all modifiable and these modifiers restrict the reference of the antecedent or head noun as RR clauses do. The following exemplify the above:

47. āp kā likhā huā xat abhi tak nahi āyā.
'The letter written by you did not come up-to-now.'
48. Usne rote hue bacce ko tofi di.
   'He gave toffee to the child who was weeping'.

49. lilā sarāc hue ām nahi khatī.
   'Lila does not eat mangoes which are rotten'.

50. voh tuṭe hue palang par baitha thā
   'He was sitting on the broken cot.

In sentence 47, modified NP is subject xat 'letter'; in
48, indirect object bacca 'child' in 49, direct object 'am 'mango'
and in 50 post positional object palang 'cot'.

In Urdu/Hindi, participial constructions which are used
attributively to modify a noun, are sub classified into various
categories, both on formal and semantic grounds. In terms of
form, these have been set up as imperfect, perfect and agentive10.
These are expressed by the following forms (all forms are third
person singular masculine):

a) Imperfect  rota hua  'weeping'
b) Perfect  phata hua  'torn'
c) Agentive  jane vala  'who used to go'

The imperfect and perfect participials are formed by
attaching the perfect form hua, of the hona 'to be' to the imper­
fect and perfect stem of the verb. The form hua is optional in
most cases. The agentive participial, which has recently been
proposed by Kachru (1980:35), is formed by attaching vala to the
inflected infinitive of the verb. The following underlined participial constructions illustrate the three types:

51. Usne urti hui ciryā ko pakrā

'He caught a bird who was flying'

52. Ustad ne kīlas mē baiṭhe hue baccō ko āfoiyā dī.

'The teacher gave toffees to the children who were sitting in the class'

53. rāmu shām ko jāne vāli gārī se jāegā

'Ramu will go by the evening train'.

The present participle indicates on going action or process, and the agentive, habitual or potential action or process (Kachru 1980:35). Participials such as in 51-53, are instances of the above.

There are, however, cases where participle modifiers are used predicatively also, e.g.,

54. yeh xutut rām ke likhe hue ā

'These letters were written by Ram.

55. Uski shakl roti hui si hai

'His face is felt to be weeping.

56. rāmā Is same jāgti hui hogi

'Rāmā will be waking up at this time'

If used predicatively, the agentive participle may express meaning similar to future tense (Kachru 1980:73).
57. rāj kalkatte jāne vālā hai.
   'Raj is about to go to Calcutta'.

The participial modifiers derived from dative subject verbs can not occur attributively, although some of the past participial forms occur predicatively:

58.* mā yād āte hue baccā ro paṛā.
   'Remembering mother, the child wept bitterly'.

59.* bhuk lagā huā baccā ro rahā hai.
   'Having felt hunger, the child is weeping.

60. bacce ko bhuk lagi hui hai
   'The child is hungry'.

61. sher ko goli lagi hui hai
   'The lion is wounded by bullet'.

62. mujh ko āj bahut xushi hui hai
   'I am very happy today.

In a limited contexts, they yield perfect participles which modify noun identical to the complement of the participle:

63. goli lage hīrān ko shīkārī ne āsāni se pakaṛ liyā
   'The hunter easily caught the deer who was hit by the bullet'.

64. rām ko āyā huā yussā baṛī mushkil se Utartā hai
65. Uske lagi hui chot bahut halki hai.

There are, however, cases where the agentive participial expresses either potential action or action in progress rather than habitual action (Kachru 1980:73)

66. Imtahan me avval ane valo ko Inam diye jaeg.

'Those who secure a first class in the examination will be given prizes'.

67. Is kamre me parhne valo ko tang mat karna.

'Do not disturb those who are studying in this room'.

The following is an underlying structure of a participial adjectival phrase, in case it is used attributively to modify a noun identical and coreferential with the subject or with the object of the participial:

The subject of the participial and noun being modified would share the common feature, if the underlying tree representation is as follows:
The object of the participial and a noun to be modified would be identical and coreferential, if, however, the underlying tree representation is as below:

![Diagram](image)

It is clear from the above structures, noun modifiers require that either subject or object of the embedded S be identical to and coreferential with the noun of the NP which contains an S.

In terms of use, participial modifier behave in restricted manner to modify a noun identical to and coreferential with the subject or object of the participial. This may be illustrated in the following.

In general, most imperfect and perfect participles derived from intransitive verbs modify a noun identical and coreferential with their subject:

68. Us ne soti hui lu̍k ki ko jagā diyā

69. rāmu ne ṭu̍tā huā gīlās pāi̍k diyā

'RAMU threw out the broken glass'.

68. Us ne soti hui lu̍k ki ko jagā diyā

69. rāmu ne ṭu̍tā huā gīlās pāi̍k diyā

'RAMU threw out the broken glass'.
Most imperfect and only a few perfect participles derived from transitive verbs work in this manner also:

70. shikāri ne pāṇi pite hue sher par goli calāī
   'The hunter opened the fire to the tiger who was drinking water'.

71. angrezi parhe hue log kheti nahi karte
   'The people who knows English do not do cultivation'.

Most perfect participles obtained from transitive verbs modify a noun identical to and coreferential with their direct object. The subject of participle then is marked with the genitive post position ka 'of'

72. Usko lilā ke bheje hue kapre bahut pasand āe.
   'He liked the clothes sent by Lila'.

73. yeh meri parhī hui novīl hai
   'This ia a novel which I have read'.

For discussion of participial adjectival phrases, see, Kachru (1968) and Kachru (1980).

It can be argued that transitive verbs do not undergo the transformation to yield imperfect participials which modify a noun identical to and coreferential with the object of the participles:

74.* mai ne rām kā likhta hua xat parhā
   'I read a letter which is being written by Ram'.
Only a few transitive verbs such as lenā 'take', uṭhānā 'lift up', sikh nā 'learn', orhnā 'cover oneself', pahannā 'wear', laganā 'apply'
that denote changed state of subject or have a more lasting effect in their perfective aspect yield perfect participles that modify nouns identical to and coreferential with their subjects. Consider the examples.

75. maĩ ne būrga orhe hue larkī ko bāzār jāte dekhā
    'I saw a girl, covered by burqa going to market.'

76. hār liye hue mālī dārvāze par khaṛā thā
    'Flower man with garlands was standing on the door'.

Intransitive verbs such as kudnā 'jump up and down', uchālnā 'jump', nācına 'dance', cillāna 'shout', dāhār na 'roar' etc. that denote momentary action or accidental events do not undergo the transformation to result in perfect participial adjectival phrases.

77. jchlā huā maiḍak 'Having jumped frog'
78. nācı huī larkī 'Having danced girl'
79. dāhārā huā sher 'Having roared lion'

Intransitive verbs such as dhaknā 'cover', khulnā 'open', phātnā 'tear', ūṭnā 'break', khonā 'lost' that express the meaning similar to completed action do not yield imperfect participles:
80. धाक्ता हुआ दूध।
81. पहाते हुए कपरे।
82. क्षोता हुआ लाका।

The adjectivization transformation which yields participial as modifier performs the following operations:

a) It deletes the AUX of the embedded S
b) attaches the participial marker such as ता_हुआ/या_हुआ/ nevala to the MV of the embedded S.
c) It deletes the subject or object of the embedded S.

The underlying structure of sentences, such as 68-71 is as follows:

```
S
  NP  VP
    rāmu
  NP  MV  Aux
     gilās  phāık  de  yā

S
  NP  VP
    gilās  tut
  MV  AUX
```

The adjectivization transformation applies to the above structure and yields the following form (after tree pruning):

```
S
  NP  VP
    rāmu
  NP  MV  Aux
     tutā_हुआ  gilās  phāık  de  yā
```
In case of 70, the rule applies (Shikāri-(Sher pāni pitā hai) Sher par goli calāi) and transforms it to shikāri pāni pitā hue sher par goli calāi.

The process involved in deriving the participial which modify nouns identical and coreferential with the direct object of the participials is as under:

The sentences such as 72-73 have the following underlying structure such as:

```
S
  NP
  [ + Pro ]
    yeh
  Det
  NP
  MV
  Cop
  N
  S
  novil hai
  NP
  VP
  mai
  NP
  MV
  Aux
  novil parh
```

By Adjectivization transformation, the yielded structure results in a well-formed past participle such as yeh (meri parhi hui) novil hai.

The obvious difference between the participles used in 68-71 and 72-73 is that they modify nouns identical to and coreferential with their subject in 68-71 and 72-73, they modify nouns which share the features of the direct object of the participles.
In terms of internal structure, both participle clause and RR clause seem to appear identically but they are distinct superficially. RR-clauses are used in a fluctuating order in the sentence with respect to the main clauses, participles are not. This is illustrated from the following:

83. vahā jo log bāiṭhe hai unko māi nahi jāntā
'I do not know the people who are sitting there'

84. māi un logō ko nahi jāntā jo vahā bāiṭhe hai
'I do not know the people who are sitting there'.

85. māi vahā bāiṭhe hue logō ko nahi jāntā
'I do not know the people sitting there'.

86. māi Un logō ko nahi jāntā vahā bāiṭhe hue
'I do not know the people sitting there.'

It is obvious that sentence 86 is ungrammatical. Since participles do not behave like clauses, a reflexive pronominal form that refers to the main clause subject may occur in them, rather than with a full clause (Kachru-1980:142):

87. rāj ko apni bahan ki lāi hui cīzē pasand āī
'Raj like the things that his sister brought'

88. rāj ko voh cīzē pasand āī jo Uski bahan lāi
'Raj liked the things that his sister brought'.

It is to be noted that the internal structure of 87 is 88 in which the main clause subject rāj controls the reflexive form apni in 87:
89. rāj ko (rāj ki bahan ki lāi hui) cize pāsand āi.

'Raj Dat. Raj of sister of brought things liking came'.

Instrumental adverbial, like temporal and locational, is marked with the genitive postposition ka, in case it is used within the participles. The participles derived from independent sentences are illustrated below:

90. yeh shāl kashmir mē bane

'These shawls are made in Kashmir'.

91. sitā ne kashmir ke bane hue shāl xaride

'Sita bought shawls made in Kashmir'.

92. yeh khānā rāt banā thā

'This food cooked at night.

93. rām rāt kā banā huā khānā subah mē nahi khātā

'Ram does not take meal in the morning that cooked at night'.

94. yeh makān patthar se banā hai

'This house is made of stones'.

95. lātā patthar ke bane hue makān mē rahti hai

'Lata lives in a house made of stones'.

There are, however, cases where participial form of the verb is dropped, e.g. :

96. Usne kashmir ke shāl xaride

'She bought shawls made in Kashmir'.

97. latā patthar ke makān mē rāhti hai

'Lata lives in a house made of stones.

It is noted that the locational adverbial such as in 96, can be transformed to adjective such as in 98, and this then modifies the noun shāl which shares the features of the subject of the embedded S. This is clear from the following:

98. sitā ne kashmiri shāl xaridi

'Sita bought Kashmiri Shawls'.

It is noted that if agentive participle preceded by temporal adverbial is dropped, the temporal adverbial appears with the inflected form of either genitive ka or vale and this then modifies the noun gāri 'train' which is the object of se 'by':

99. voh shām ko jāne vāli gāri se jāegā

'He will go by the train, going in the evening.

100. voh shām ki gāri se jāegā

'He will go by the train in the evening.

101. voh shām vāli gāri se jāegā

'He will go by the evening train'.

Agentive participle, unlike imperfect and perfect participles, drops a noun to which it modifies. It may express completed action, too, depending upon the context:
102. jang mē mārne valo ko Inām diye gae
'Those who died in the battle were given prizes'.

It is to be noted that the agentive participles are used parallel to perfect participles which modify a noun identical and coreferential with their subject or with their object:

103. hamē ek angrezi jānne vāle naukar ki talēsh hai
'We are looking for a servant who knows English'.

104. rāmu ka sardi mē plīhanne vēlā koṭ phat gayā
'The coat which Ramu uses in winter season torn out'.

Infinitival phrases are also used attributively to modify a noun, similar to participial modifier:

105. latā ke sone kā kamrā gīr gayā
'The room in which Lata sleeps collapsed'.

Balachandran (1937) in support of her claim that casuative sentences are simplex one, states that the verbs in Hindi which can have the case frame A + O may yield participially modified noun phrases. This is exemplified in the following:

106. mai kavītā likhtā hū 'I write poem'

106(a) meri likhī hui kavītā 'The poem that I wrote'.

According to her such constructions are also possible when the verbs are causatives such as:
107. mai per kāṭ tā hu ‘I cut the tree (kat is causative of kat)"
107(a) mēra kāṭa huā per ‘The tree that I cut’

She further suggests that if surface object of causative verb is an agent or experiencer in the embedded sentence, this transformation can not be applied:

108. mai ne larke ko daurāyā ‘I caused the boy to run’
108(a) mēre daurāyā huā larkā ‘The boy whom I caused to run’
109. mai ne larki ko ghabrāyā ‘I caused the girls to be nervous’.
109(a) mēri ghabrāi hui larki ‘The girl whom I caused to be nervous’.

This does not seem to be satisfactory that 108(a) and 109(a) are ungrammatical only because of the deep structure case (agent) of larkā/larkī. It is obvious that the verbs such as in 61, denoting momentary action do not yield past participle modifier. However, this verb resulted in a past participle in the following context, cannot be said to be ungrammatical in Urdu:

110. mēra daurāyā huā qhorē res mē avval āyā ‘The horse that I caused to run came first in the race’.

On the other hand, an examination of 109 and 109(a) makes it clear that Balachandran failed to notice that the verb ghabrānē ‘to be nervous’ is an intransitive of the type which can not be converted into causative to have a well-formed case frame A + O
and which does not yield past participle.

There are also cases where the surface structure object is an agent of the embedded sentences like the following:

111. naukar ghar se nīklā 'The servant left house'
111(a) Usne naukar ko ghar se nīkālā 'He caused the servant to leave the house'.
111(b) Us kā ghar se nīkālā huā naukar 'The servant whom he caused to leave the house'.

112. bacca ďarā 'The child became nervous'
112(a) Us ne bacce ko ďarāyā 'He caused the child to be nervous'
112(b) Uskā ďarāyā huā baccā 'The child whom he caused to be nervous'.

113. bacce parhe 'The children read'
113(a) mai ne bacco ko parhāyā 'I caused the children to read'.
113(b) mere parhāe hue baccē 'The children whom I caused to read'.

The above mentioned examples do not support the view of Balachandran that the deep structure case (agent) of nouns is responsible for the ungrammaticality of such constructions.

Mrs. Kachru (1965) and 1966) failed to mention this in her analysis of the adjectival phrases in Hindi that there are some cases where past participle modifier can modify an animate noun. She (1971) further proposes that the adjectivization rule of Hindi is constrained in such a way that transitive verbs with
Animate objects do not yield past participial modifiers that modify the animate object\textsuperscript{14}.

In support of her claim, she provides the examples such as the following:

114. mai ne larke ko pukārā 'I called the boy'

* 114(a)mere pukārā huā larēkā 'The boy whom I called'.

115. mai ne kutte ko sahlāyā 'I patted the dog'.

* 115(a)merā sahlāyā huā kuttā 'The dog that I patted'.

116. pulīs ne cor ko pakrā 'The police arrested the thief'.

* 116(a) pulīs kā pakrā huā cor 'The thief who was arrested by police'.

Prof. Kachru stated that the verbs used above are inherently transitive, hence, the deep structure case of the modified nouns are not responsible for the ungrammaticality of 114(a)-116(b). This is only because of the use of animate object. According to Balachandran verbs used in 114-116 have the case frame A + O, hence, the object nouns are marked Dative. It is obvious that the example provided by her such as 68 is not acceptable by Urdu speakers.

The transitive verbs with animate objects that transformationally yield past participial modifiers are noted in the following examples:

117. mere bulāē hue qāvvāl 'The singers whom I invited'

118. uskā satāyā huā naukar 'The servant whom he teased'.
Mrs. Kachru (1980:82) holds the view that if, however, the direct object of the verb is a human noun, this process does not result in a well-formed past participial, such as the following:

121. ram ka pukāra hua larķā andar āyā
     'The boy called by Ram came in'.

122. manju ka piṭā hua baccā ro rahā hai
     'The child hit by Manju is weeping'.

123. Us ki sarāhi hui larķi xush ho gai
     'The girl admired by him became happy'.

This statement is not justifiable that all the verbs with human object do not yield past participials which modify a noun identical and coreferential with their direct objects. Depending upon the context, some verbs of the type may yield such constructions which modify a human noun identical to and coreferential with their direct object. Consider the instances such as the following:

124. nānā nāni ke pāle hue bacce aksar biγār jāte hai
     'The children brought up by grand parents become careless'.

125. vahā hamāre kai jāne pahcāne log hai
     'There are several persons who are well known to me'.
126. rām mera dekhā bhālā lārkā hai
'Ram is a boy whom I know very well'.

127. māi ne āpke bheje hue lārkē ko naukri dedī.
'I have given the job to the boy who was sent by you'.

To sum up the discussion held so far, transitive verbs with animate object may and may not yield past participials, depending upon the context. There are, however, some verbs of the type which do not yield such constructions.

In the foregoing discussion an attempt is made to show that all the NPs containing the structure modifier +N are instances of noun modification and how grammar generates new NPs if they are treated as such.

Adjectives in Urdu/Hindi are used both predicatively and attributively:

128. yeh jhil sundar hai 'This lake is beautiful'
129. vahā ek sundar jhil hai 'A beautiful lake is over there'.

Most adjectives occur predicatively. However, not all the adjectives occur attributively:

130. baccā taiyār hai 'The children are ready'
131. taiyār baccō ko bulāō 'Call the ready children'

If, however, these adjectives are with their complements, they can occur attributively (Kachru 1980:68).
132. bāhar jāne ko taiyār baccō ko bulāo
   'Call the children who are ready to go out'.

It is obvious that the difference between predicative adjectives and attributive adjectives lies in their function and derivation. Adjectives used predicatively perform the function as complement of the subject. If used attributively, adjectives are said to function as modifier. The predicative adjectives are derived by the highly simplified Base rules and attributive adjectives are obtained by transformations.

Most predicative adjectives yield attributive adjectives which modify a noun identical to and coreferential with their subject. The process of adjectival modifier is illustrated below:

133. (a) rām ne ek ghorā xarīdā 'Ram bought a horse'.
    (b) ghorā bahut acchā hai 'The horse is very good'.
    (c) rām ne ek [bahut acchā] ghorā xarīdā
        'Ram bought a very good horse'.

Sentence (b) can be transformed to yield the phrase in square bracket in (c) and this derived phrase then modifies the noun ghorā 'horse' which is identical and coreferential with the subject of copula hai 'is'.

The underlying structure of such sentences that contain copula as MV are the source for all NPs which can have the
Structure of the form modifier +N. That is, all such phrases of the form modifier +N are generated by the sentences of the type:

\[
\begin{align*}
S & \rightarrow NP \quad VP \\
NP & \rightarrow Pred \quad MV \quad Aux \quad Ap \quad \text{copula} \\
VP & \rightarrow \text{Adj.}
\end{align*}
\]

Other instances of adjectival modifier are provided by the sentences such as the following:

134. baccō ne ek safed totā dekhā 'The children saw a white parrot'.
135. latā ne ek kāli billi pāli hai 'Lata brought up a black cat'
136. pile ām mīthe hote hai 'Yellow mangoes are sweet'
137. īsne ek xubsurat cīryā pakri 'He caught a beautiful bird'
138. vahā ek moṭā ādmi raḥtā hai 'There lives a fat man'

The rules applied to generate the sentences with adjectival modifier are accounted below.

The underlying tree representation of sentences such as (134) are as follows:
The rule of Relativization and Relative Reduction are made to operate on the structure such as above and transform this to sentence (137). The relativization rule applies and yields the structure jo totā safed hai - tota . Further Relative Reduction reduces the relative clause i.e. transforms the above to safed totā and finally the sentence such as (87) is obtained. The deep and surface structure given above illustrate the process of noun modification and generate attributive adjectives of the type discussed above.

The attributive adjectives are usually parallel to the
...participial modifier in that they function as modifier. Even the underlying structure of adjectival modifier is embedded directly under the immediate domination a noun phrase similar to the participial modifier.

The attributive adjectives ending in-ā, similar to the participial modifier, agree in gender and number with the noun they modifying. Adjectives ending on consonant are indeclinable. Predicative adjectives are inflected for gender and number features of their subject. If needed, agreement features are introduced by transformational rules.

Reduplicated adjectives either have an intensive meaning or a distributive meaning: e.g., hare hare pɛr 'green trees', bāre bāre mākān 'big houses'. The affix sā or si added to the color adjectives signals diminished quality, e.g., lāl-sī-sāri 'redish saree'. Added to other adjectives, it signals intensive meaning, e.g., bārā-sā mākān 'very big house', caurī-sī sārāk 'very wide road' (Kachru 1980:76).

Even the predicative adverbials can undergo transformation to yield adverbial modifier i.e. attributive adverbs. In such a process, adverbials are marked with genitive post position kā or participle vālā. Consider the examples, which were not discussed by Kachru (1980), such as the following:

139. voh dīhlī ki sabhā mē gayā 'He was present in the party'
140. rām somvār ki pārthī mē maujud thā 'He was present in the party held on Monday'
141. mez wali kitab bahut mahagi hai  'The book which is on the table is expensive'.
142. Us kamre vala larka bimar hai
143. meri dilli wali caci ai hai.

**Noun in Apposition**

A clause embedded in apposition to the noun of NP of matrix clause, undergoes the transformation and yields a noun in apposition, i.e. appositive phrase.

The underlying clause embedded in the NP if contains copula as MV, preceded by either adjective phrase or NP comes to the surface as adjective phrase or noun in apposition. The underlying structure of such sentences is as

\[
\text{Cl}_1
\]

If the embedded clause contains the MV copula preceded by an adjective, every thing is deleted from embedded clause except the adjective by Relative Reduction rule and an adjectival
phrase is yielded (that has already been discussed earlier).
If the embedded modifying clause contains the MV copula preceded by a NP, we can generate an appositive i.e. the noun in apposition by deleting subject NP, copula and tense via Relative Reduction Rule. For example, from the underlying sentences:

(a) abid ali bimar hai 'Abid Ali is unwell'
(b) abid ali maulana hai 'Abid Ali is maulana'.

Someone can reduce the modifying clause to an appositive

144. Maulana abid ali bimar hai
    'Maulana Abid Ali is ill.

Appositives are usually said to function as non restrictive modifiers

The sentences which involve a noun in apposition are:

145. profaisar xân landan cale gae
    'Professor Khan went to London'.

146. pandit râm lâl mantri hogaye
    'Pandit Ram Lal became a minister'.

147. mistar xân, vais cãnslor jãmia tasrif lâe hai
    Mr. Khan, V.C. Jamia has come.

148. râm sarup dhobi kapre dho rahâ hai
    'Ram Saroop washerman is washing clothes'

The transformations that generate a noun in apposition
are Relativization and Relative Reduction. In the following it has been discussed how these rules are applied to generate such constructions.

The underlying representation of sentence (145) is as:

```
Cl₁
  NP
  VP
  Cl₂  xăn  landan cale gae
    NP
    VP
    Pred.  MV  Aux
    NP  Cop
    N  hai
    profaisar
```

By Relativization on Cl₂ cycle, the subject NP is relativized yielding 'jo xăn' and by Relative Reduction Transformation, the relativized subject NP, copula and tense are deleted from embedded clause and the modifying noun phrase profaisar in the second clause is called an appositive, i.e. appositive phrase. After Relative Reduction and tree pruning conventions the obtained structure is such as (145).

The deep structure of sentences (147-148) is like the following:
After Relativisation and Relative Reduction the obtained structure is as:

We now need a new rule (i.e., called Topicalization of NP of the higher clause) to switch the order of appositive and subject NP of higher clause. Topicalization applies to move the subject NP of matrix clause to the initial position of the embedded S, to produce the proper surface form/sentence (148).
We may conclude then that the derived appositive phrase is one of the instances of noun modification to be conditioned by NP-modification rule. In the above mentioned examples, it has been noted that the modifiers in surface structures are seen either to precede or follow the modified nouns. The derivational conditions are not satisfactorily met, if the subject of the appositive phrase is not identical to and coreferential with the subject of finite verb.

**Possessive Phrases**

All the instances of noun modification in Urdu/Hindi, depend upon the condition of coreferentiality of two nouns that occur in two different clauses. All the modifying constructions contain the structure of either Post-NP modifiers (modifier +N) or of Pre-NP modifier (N + modifier). The adjectives, participials and possessive phrases contain the form of post-noun phrasal modifiers. The distinguishing characteristic of noun in apposition and the relative clause is that they permit both the possibilities in their forms.

In the possessive phrases, possessor \( N + \text{ka} \) is said to be functioning as modifier that modifies subject as well as object \( N \). However, the reflexivized possessor \( N \) always modifies the object \( N \). If an underlying possessive sentence is not embedded in a NP, it will not act as modifier, like other possessor \( N \).
For example, the sentences with possessive constructions are such as the following:

149. राम का भाई बीमार है • Ram's brother is ill'.

150. राम ने मोहन का घोरा खरीदा है • Ram bought the horse of Mohan'.

151. लड़की अपने किताब पढ़ रही है • The girl is reading her book'.

152. मेरा भाई दिल्ली से आया है • 'My brother has come from Delhi'.

153. राम ने मेरा अम खाला • Ram ate my mango'.

154. मैं ने अपना काम खत्म कर लिया • 'I have finished my work'.

All the constructions of the form NP का NP with a possessive meaning, are derived from underlying structure of the type.

```
               NP
             |     |
            Det   S   N
             |     |
            [ +def ]
             |     |
            NP     VP
                |     |
            Predicate   MV   Aux
                |     |
            P phrase   Cop
                |     |
            NP     PP
```
The relation of noun to noun is signified by the postposition Kā 'of'. The post position Kā is said to be functioning as possessive marker. In the structure NP Kā NP, the initial noun is possessor N which is in the oblique case and is followed by the post position Kā (or its equivalents). The second noun is possessed N which is in the direct case. The possessive marker Kā which relates to nouns, agrees in gender and number with possessed N. Examples are given such as the following:

155. rām ki beṭi 'daughter of Ram'
156. tumhāri kītāb 'your book'
157. mere kapre 'my clothes'

It has been mentioned that the first and second person pronoun (except Hon. āp) used as possessor N, take rā in place of Kā 'of' that will be interpreted by the phonological rule.

That is, all the phrases of the form NP Kā NP, having a possessive meaning, are derived from underlying structure of the form which contains copula as MV, preceded by the post positional phrase. The possessed N which is in the direct case is the NP of S. The possessor N which is in the oblique case and is followed by post position either Kā, kepās, or mē, is dominated by VP. However, the possessor N which contains the feature (+ Animet.), is said to possess some thing.

The sentences, containing possessive form such as the
following, have the underlying structure such as that given below:

158. rām ki beṭi abhi āi hai
"Ram's daughter has come just now"

159. bācče ki mā so rahi hai
"Baby's mother is sleeping"

The T-Rules that are applied to the structure mentioned above are: The 'Relativization Transformation' and Relative Reduction. The Relativization Transformation is applied, in case the provided condition for embedding is satisfied, and transforms the underlying structure to:

jo beṭi rām kā hai voh beṭi abhi āyā hai
"The daughter who is of Ram the daughter has come just now".
The Relative Reduction' reduces the relative clause and transforms it to intermediate structure which has the final form after 'Agreement Rules':

160. rām ki beṭī abhi āi hai 'Ram's daughter has come just now'.

Mrs. Kachru (1968)\(^{19}\) in her analysis of possessive constructions, proposes a list of post positions such as ke, ke pas, ko, mē and ka, that are preceded by possessor. N.Kā is genitive postposition which agrees in gender and number with possessed N. Ke is invariable particle in her view, ke pas is a compound postposition, ko is directional and mē is location-al postposition. The examples of possessive phrases and the sentences corresponding to them are noted below:

161. rām ki bīhīn 'Ram's sister'
161(a) rām ke ek bīhīn hai 'Ram has a sister'

162. rām kā dost 'Ram's friend'
162(a) rām ke ek dost hai 'Ram has a friend'

163. Sita ki do bīlliyā 'Sita's two cats'
163(a) Sita ke do bīlliyā hai 'Sita has two cats'.

164. bīlī ki dum 'Cat's tail'
164(a) bīlī ke ek dum hai 'The cat has a tail'

165. bacce ki nāk 'The child's nose'
165(a) bacce ke ek nāk hai 'The child has a nose'

166. laṛke ki kītāb 'The baby's book'
166(a) laṛke ke pas ek kītāb hai 'The boy has a book'
167. merā naukar 'My servant'
167(a) mere pās ek naukar hai 'I have a servant'.

168. bacce kā buxār 'The child’s fever'
168(a) bacce ko buxār hai 'The child has fever'.

169. Uski himmat 'His courage'
169(a) Usmē himmat nahi 'He has no courage'.

170. rāju kā dhairya 'Raju’s patience'
170(a) rāju mē bāra dhairya hai 'Raju has a great deal of patience'.

The phrases 161-170 contain the post position kā, which agrees in gender and number with possessed N. The sentences 161 a-170 a, however, are non identical in their structure: 161a-165a contain ke which is an oblique form of kā, 166a-167a contain the so called compound post position ke pās, 168a contains the directional postposition ko and 170a contains locational postposition mē. Sentence 168a is turned out to be grammatically different in the present study.

The underlying representation for phrases such as 161-170 is as follows: .
It is noted that the transformational rules apply in case a copulative sentence of the form outlined above for possessive expression is embedded in a NP. The T.Rules applied to the underlying structure, delete identical noun and the copular verb +Aux. Further more, the surface form is yielded through 'Agreement Rules'.

The Relative Transformation and Relative Reduction are not applied to the underlying structures of sentences such as 161a-170a. Only 'Possessive Transformation rule applies to generate the surface structure of sentences such as 161a-170a, only because of the deep structure of sentences 161a-170a is not embedded into a NP. T.Possessive rule permutes the elements.
of possessive sentence i.e. it transforms ek kitāb mere pās hai to mere pās ek kitāb hai.

The deep structure of sentences 161a-170a is as the following:

*Underlying tree:*

```
S
   NP       VP
          │
          Pred       MV       Aux
          │          │
P Phrase  Cop
          │
          NP     PP
          │
       [+ Poss ]
            { loc }
            { dir }
```

The post positions used in the possessive constructions in Urdu/Hindi, originate in the deep structure and their surface forms i.e. the spoken forms of the possessive e.g. kā, ke, ke pās, ko and mē are interpreted by the later phonological rule, if needed.

Mrs. Kachru in her treatment of possessive constructions in Urdu/Hindi, substitute kā for ke, ke pās, ko and mē etc. through Relative Transformation. But this analysis differs from her approach and prefers to generate the surface forms
i.e. the spoken forms of these postpositions through phonological rule.

She treated ke as an oblique form of kā before pas, is obviously satisfactory. But ke has been set up as a separate postposition in her treatment rather than as an oblique or inflected form of kā. It is treated as a variant of kā rather than a separate postposition in this study.

The context of the occurrence of ke, ke pas, ko, me etc. has been discussed in her analysis in detail but hereunder an attempt is made to summarize the environmental conditions for the occurrence of these postpositions mentioned above.

It is noted that the postpositions are obviously associated with possessor N but occur in context of possessed N. The context of the occurrence of ke and ko is ruled out in the present discussion. But in some context ke and ke pas are seen in free variation, e.g.

171. rām ke do naukār hai  'Ram has two servants.'
171a. rām ke pās do naukar hai  'Ram has two servants.'
172. rām ke do gāē hai  'Ram has two cows.'
172a. rām ke pās do gāē hai  'Ram has two cows.'
173. rām ke do bāgy hai  'Ram has two gardens.'
173a. rām ke pās do bāgy hai  'Ram has two gardens.'

The above mentioned examples make it clear that the possessor N will contain the feature \ [+Animate] \ and the context
for the occurrence of ke pas is:

<table>
<thead>
<tr>
<th>Possessor N</th>
<th>Possessed N</th>
<th>Post position</th>
</tr>
</thead>
<tbody>
<tr>
<td>[+ Animate]</td>
<td>[+ Human]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[Profession]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[- Human]</td>
<td>ke pas</td>
</tr>
<tr>
<td></td>
<td>[- Animate]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[- Abstract]</td>
<td></td>
</tr>
</tbody>
</table>

The statement of the context for the occurrence of me, therefore is:

<table>
<thead>
<tr>
<th>Possessor N</th>
<th>Possessed N</th>
<th>Post position</th>
</tr>
</thead>
<tbody>
<tr>
<td>[+ Animate]</td>
<td>[+ Abstract]</td>
<td>me</td>
</tr>
<tr>
<td></td>
<td>state</td>
<td></td>
</tr>
</tbody>
</table>

The statement of contexts for the postposition, ko and me is not simple one. The above examples make it clear that me occurs in the context of possessed N which contains the features [- concrete] and denote states e.g. courage, enthusiasm etc. Ko occurs with subject nouns so that it has been ruled out. But in some context, not only ko and me but also ke pas occur in free variation, e.g.

174(a) rām ko aql nahi 'Ram is not intelligent'
174(b) rām me aql nahi 'Ram is not intelligent
174(c) rām ke pās aql nahi 'Ram is not intelligent'.

In the light of the above examples, the context for ko and ko vs. mē is very complicated. But it is not so far clear how those could be handled. One way of handling these problems would be as follows: The phonological rules, in addition to the set of rules which specify the features of the postpositions as well as inherent features of N, could be allowed to specify the restriction between noun and postposition. Ko such as in 174a never occurs as possessive PP but rather a dative ko. The phrases of the form N kā N which are identical to the phrases mentioned above are noted below:

175. gāō ki aurtē 'The women of villages'
176. kamre kā darvāzā 'The door of the room'
177. dīl kā ārd/ hāth ki ungliyā 'Pain of heart'/ figures of hand'
178. Xushī ki bāt 'matter of pleasure'
179. rihīm ki darxiūst 'Appeal of mercy'.

There is no grammatical justification to regard these phrases as different from phrases such as 161-170. In the phrases 175-179, the genitive postposition kā relates two nouns and also agrees in gender and number with possessed N. The possessor N, in these phrases does not contain the feature [+Animate]. The phrases 175-179, then are so called genitive phrases. As the set of rules as formulated above will
apply to generate the phrases, such as 175-179.

In the underlying structure of genitive phrases, a new feature \(+\text{genitive}\) is added under the mode of PP. The rule may be modified like the following.

\[
P \text{Phrase} \quad \longrightarrow \quad \text{NP} + \text{PP}
\]

\[
\text{PP} \quad \longrightarrow \quad [ + \quad \text{Genitive} \quad - ]
\]

However, the feature \(+\text{genitive}\) will insure that ka will occur with possessor N containing feature \([-\text{Animate}\)]\).

There are, however, another group of phrases of the form N kā N in Urdu, which are identical semantically as compared with the phrases such as 25-29. Examples are such as the following:

180. dārd-e-dīl \quad 'Pain of heart' 
181. sadr-e-mūmlikat \quad 'President of country'
182. shān-e-hind \quad 'Grace of India'
183. shaix-ul-jāmīlā \quad 'Head of the institution'
184. ālīm-ul-ṣaib \quad 'Who has the knowledge of future'

The phrases 180-182 contain the genitive particle -e- and 183-184 contain -ul- which relates two nouns; they follow the so-called possessed N and preced the possessor N. Genitive e
originally belongs to Persian and Ul-to Arabic language. These are the examples of literary Urdu that are purely based on Perso-Arabic structures.

There are, however, some cases in which genitive marker kā is deleted from the phrases. Consider the examples such as the following:

185. Suraj girhan
186. cad girhan
187. kan top
188. mezposh
189. kabutar xânā
d

A careful examination makes it clear that the phrases such as 185-189, are not compound words. If some one presumes the phrases 185-189 to be derived by the same process which derives dil kā dārd etc. then it is not clear how the genitive kā disappears in phrases such as 185-189.

This is another item such as vālā 'agency' which relates two nouns in the phrases such as the following:

190. rām vālā ghōrā
191. Iskul vālī kāpī
d

If, however, the phrases such as 180-184 are related to the phrases discussed above, then it is not clear how these could be handled.
There are, however, some phrases which create a complication, if an attempt is made to handle them. These are noted in the following:

192. shahri log 'The people of the city'
193. sarkāri Imārat 'Govt. building'.

The phrases of the following types:

194. prem cand ke navāl 'Prem Chand's novels'
195. sone kā hār 'A necklace of gold'
196. urdu ki pārnāi 'Teaching of Urdu'
197. rām kā patr likhnā 'Ram's writing a letter'

do not come under the scope of this study. These are taken care of in another part of the work.

The claim that the phrases of the form NP + Kā + Abstract N i.e. angrezi ki pārnāi is derived by Abstract nominalization transformation, is not unsatisfactory. As regards phrases such as aurat ka Intizār shyām ki carcā, bacce ki tārif etc. the best solution is to consider these phrases as related to the possessive phrases. There is no grammatical justification to regard these phrases as different from phrases such as 161-170. In the phrases such as bacce ki tārif 'Child's praise' the possessor N contains the feature [+ Animate] like the phrases such as 161-170.

It is obvious from this preliminary discussion that the question of possessive expressions in Urdu/Hindi requires further investigation and separate research.
NOTES & REFERENCES


2. See Kachru (1966:99) and Donaldson (1971: ) for details.


10. For details, see Kachru (1980:35) 'Aspects of Hindi Gr.'


