

X-BAR THEORY APPLIED TO KASHMIRI: A V2 LANGUAGE

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Introduction

Government and Binding Theory (Chomsky: 1978-1993), inquire about to capture the similarities between different categories of lexical phrases by assigning the same structure to them. Below is a list of PS rules in English; their arrangement helps us recognise their overall internal structure:

NP → N
 NP → N PP
 NP → N PP S
 NP → N S
 VP → V
 VP → V NP
 VP → V PP
 VP → V NP PP
 VP → V NP S
 VP → V PP S
 VP → V S
 AP → A
 AP → A PP
 AP → A S
 AP → A PP S
 AP → A S
 S → N AUX V
 S' → Comp S

Rather than having different phrase structure rules for VPs, NPs, APs etc. in PSG, they are reduced into the following two basic schemas (I), which may be shown by the branching diagram (II) cover all the lexical categories:

(I) Two Basic Schemas:

(for any lexical category X, X= Head, X'=intermediate projection of X and

X''=Maximal projection of X)

a) (Specifier rule)

$X'' \rightarrow (\text{Specifier}) X'$

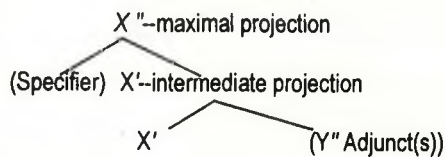
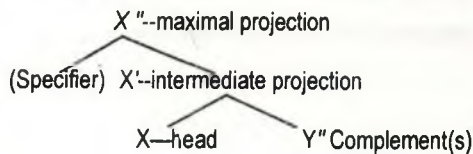
b) (Complement rule or Adjunct rule)

$X' \rightarrow X \text{ Complements (=YP)}$

$X' \rightarrow X' \text{ Adjuncts (=YP)}$

In the trees generated by these rules, the top node (corresponding to left side of the rule) is known as the mother (X'' or X'), with the two daughters introduced by the right side of the phrase structure rule. The daughter nodes at the same level are known as sisters. In (II) one of the daughters, X' , is also a mother with daughters of her own, just as in normal family relationships.

(II) Basic X-bar Structure



The important assertion involved in these schemata:

- A. Specifier is sister to X' and daughter of X'' . In general, specifiers are optional constituents. Evidently, specifiers may be words (determiners, demonstrative pronouns, etc.) or phrases.
- B. Head is "the word that gives its category to the phrase" (Carrie: 2002: 137). Therefore we can say all phrases are projected from lexical categories, e.g. $N'' \rightarrow N' \rightarrow N$ (noun), $V'' \rightarrow V' \rightarrow V$ (Verb), $A'' \rightarrow A' \rightarrow A$ (Adjective or Adverb), $P'' \rightarrow P' \rightarrow P$ (Preposition), $I'' \rightarrow I' \rightarrow I$ or Infl (Inflection), $C'' \rightarrow C' \rightarrow C$ (Complimentizer).
- C. A head subcategorizes for all and only its sisters. The subcategorized complements are always phrases. A complement is sister to X and daughter of intermediate projection X' .
- D. An adjunct is optional. It is a sister to intermediate projection X' and daughter of intermediate projection X' .

Here (I&II) the adjoined categories in the form of specifier/complements are unordered or we can say it is not linear and can appear on either side of the X (head) and X' (intermediate level) that depends on the basic word order of the language. Also, the right side of the adjunction rule is unordered; adjectives adjoin on the left, and relative clauses adjoin on the right of NP and VP adjuncts such as adverbs may adjoin on either side.

Thus the basic rewrite rules for the configurational language can be instantiated as either of the two alternatives as can be represented as under:

$X'' \rightarrow \text{Specifier } X' / (\text{Specifier}) X'$	<i>(Specifier rule)</i>
$X' \rightarrow X \text{ Complement(s)} / \text{Complement(s)} X$	<i>(Complement rule)</i>
<i>or</i> $X' \rightarrow X' \text{ Adjunct(s)} / \text{Adjuncts } X'$	<i>(Adjunct rule)</i>

This means "The word-order differences between say English [VO language] and Japanese [OV language] remain to be accounted for [the variation in two languages]. One option is to say that in fact the word-order variation is an instance of parametric variation, it is determined by the fixing of a parameter of UG. This means the UG makes both the orders OV and VO available and the child has to set the word-order parameter for his language" (Haegeman 1994: 96). Of course, not all sentences in any language have the basic word order. In languages having SVO, SOV, VOS, or OVS word order, the trees are simply generated in the proper order at D-structure from the phrase structure rules which have been parameterized for the language. In VSO and OSV languages, we must either use a flatter structure where the subject is a sister of the verb or posit some as yet undetermined movement. SVO, SOV, VOS, and OVS languages have been analyzed with their basic word order, and the X-Bar schemata that have been analyzed by various eminent syntacticians who worked on various language with different word order, can be summarized:

SVO	$X'' \rightarrow \text{Specifier } X'$ $X' \rightarrow X \text{ Complement(s)}$	VOS	$X'' \rightarrow X' \text{ Specifier}$ $X' \rightarrow X \text{ Complement(s)}$
SOV	$X'' \rightarrow \text{Specifier } X'$ $X' \rightarrow \text{Complement(s)} X$	OVS	$X'' \rightarrow X' \text{ Specifier}$ $X' \rightarrow \text{Complement(s)} X$

Table 1. X-Bar Schemata for languages with different word orders.

There are still two more word orders that do not fall out directly from a change of order within the X-bar rules: VSO and OSV.

Another important additional rule (c) is conjunction rule:

(3) $X^n \rightarrow X^n \text{ Conj } X^n$. ('n' may be any of the level-lexical, intermediate or maximal).

Structure / Word-order of Kashmiri

As far as order of subject, object and verb in Kashmir sentences is concerned, it has been argued V2 language (Hook: 1976; Koul & Hook: 1984; Wali, Hook, Koul and Koul, :2000) . The position of finite verb in declarative clauses is fixed to second, e.g.

- a. rahiim-an moor hoon.
Rahim-erg killed dog.
'Rahim killed the dog'.
- b. hoon moor rahiim-an
dog killed Rahim-erg
'Rahim killed the dog'.
- c. miiraa cha caay cavaan baag-as maNz. (Wall Kashi, O.N. Koul & A. K Koul 2000:471)
Mira is tea drinking garden-dat in.
'Mira is drinking tea in the garden'.
- d. caay cha miiraa cavaan baag-as manz. (ibid)
tea is Mira drinking garden-dat in.
- e. baag-as manz cha miiraa caay cavaan. (ibid)
garden-dat in is Mira tea drinking.

As there is flexibility in the position of subject and object but the position of verb is confined to second. Even in the embedded (subordinate) finite clauses verb occupies second position and in main clause also. "Kashmiri is a verb-second language. In root... and finite subordinate *zi/ki* 'that'... clauses the verb occurs in second position, which may be preceded by any phrasal constituent of the clause. The movement of these constituents is clausal bound. The subordinator *zi/ki* always precedes the clause and does not count as the first constituent. The verb-second pattern is also found in [*tik'a:z*] 'because' clauses (if)". (ibid)

- f. jaaveed-an von aslam-as (zi/ki) miiraa cha caay cavaan. (ibid: 472)
 Javed-erg told Aslam –dat that Mira is tea drinking.
 'Javed told Aslam that Mira is drinking tea'.
- g. jaaveed-an von aslam-as (zi/ki) caay cha miiraa cavaan. (ibid)
 Javed-erg told Aslam-dat that tea is Mira drinking.
 'Javed told Aslam that Mira is drinking tea'.
- h. tik'aazi sirinagalrl AAs sakh garmii bl goos gulmarlg. (ibid)
 because Srinagar-abl was very hot I went Gulmarg.
 'Because it was hot in Srinagar I went to Gulmarg'.

The study as sketched briefly here in this paper is to apply X-bar Theory developed by Chomsky in 1970, in Kashmiri language for representing the structure of phrases, sentences, and clauses, based upon the subcategorization of a head for its complement(s), using only the two basic rules (Specifier rule and complement rule) plus the rules for conjunction and adjunction.

X-bar theory applied to Kashmiri phrases

In this section we will examine the structure of different phrase like noun phrase, verb phrase, adjective phrase, adverb phrase, postpositional phrase, inflectional phrase and finally complimentizer phrase on the basis of basic schemata of X-bar format:

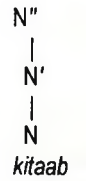
Noun Phrase

Noun Phrase in Kashmiri as in other languages can be simple or complex. Generally, the Specifier position is occupied by definite and indefinite articles, determiners, quantifiers, demonstrative pronouns, noun phrases etc. However, "there are no articles as such in Kashmiri. A bare noun is ambiguous between a definite and indefinite sense. A demonstrative pronoun may function as a definite article." (Wali & Koul 1997: 100).

It consists of either only a lexical head i.e. (bare head) or many other combinations shown as under:

$N'' \rightarrow N' \rightarrow N$

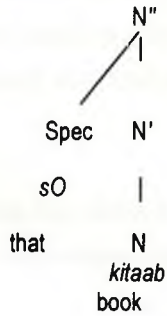
- (1) *kitaab*
 book
 'the book'



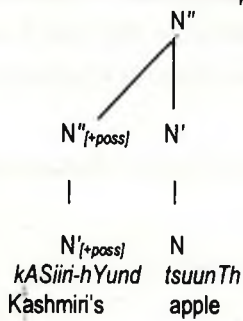
'the book'

$N'' \rightarrow (\text{specifier}) N'$

- (2) *sO kitaab*
 that book
 'that book'



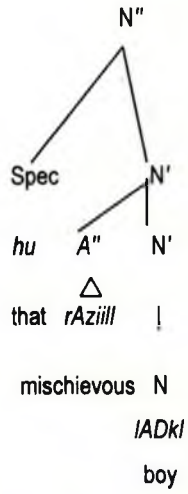
- (3) *kASiiri-hYund tsuunTh*
 Kashmir-gen apple
 'Kashmir's apple'



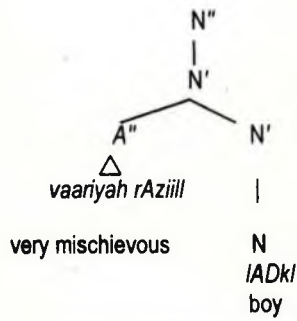
$N' \rightarrow (X'') N'$

The attribute rule is recursive and can indefinitely adjoin many stacked attributes.

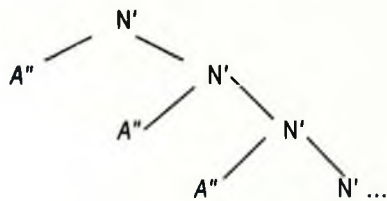
- (4) *hu rAziill IADkI*
 that mischievous boy
 'that mischievous boy'

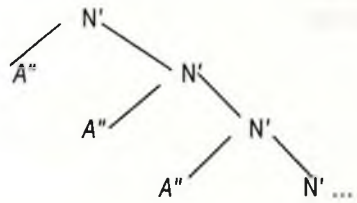


- (5) *vaariyah rAziill IADkI*
 very mischievous boy
 'the very mischievous boy'



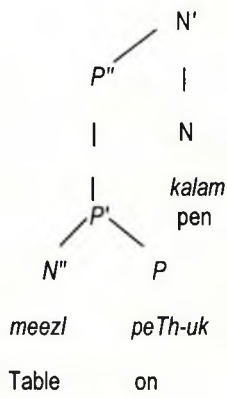
In case, a noun phrase adjuncts many premodifiers; it can be sketched as under:



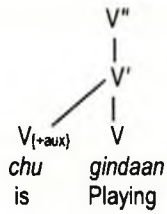


$N' \rightarrow (X'') N$ Compliment rule

- (6) *Meezl peTh-uk kalam*
 Table on-dat pen
 'The pen on the table'

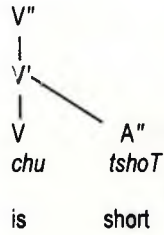


- (7) *yi beegl manz-uk temaaSI*
 this bag in-Dat toy
 'the toy in the bag'

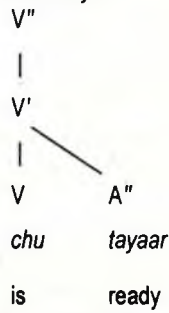


$V''_{[trans]} \rightarrow V \rightarrow X''$ (Adjective phrase/adverbial phrase/noun phrase/postpositional phrase)

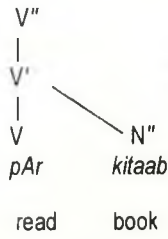
(10) *su [v- chu tshoT]*
he is short.
'He is short.'



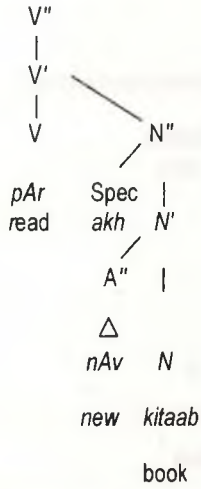
(11) *rahiim [v- chu tayaar]*
Rahim is ready.
'he is ready.'



(12) *me [v- pAr kitaab]*
I read book.
'I read the book.'

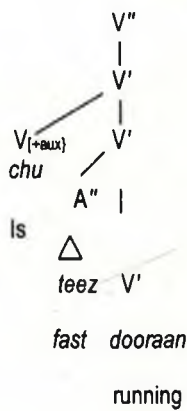


(13) *me* [*v*-*pAr akh nAv kitab*]
 I read one new book.
 'I read a new book'



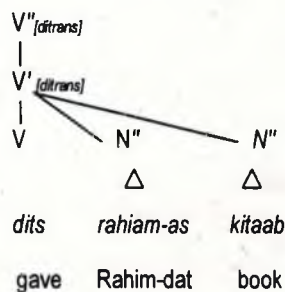
Also $V''_{[intrans]} \rightarrow (X'') V'$ adjunct rule

(14) *su* [*v*-*chu teez dooraan*]
 He is fast running
 'He is running fast'.



$V''_{(ditrans)} \rightarrow V \rightarrow X'' X''$ (postpositional phrase/noun phrase)

(14) tAmY [v^o dits rahiim-as kitaab]
 He gave Rahim-dat book
 'He has given Rahim a book'.



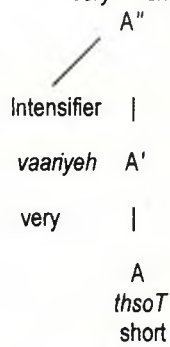
Adjectival phrases

Adjective can exist either as bare heads or take intensifiers as specifier and postpositional phrases and nominal phrases are adjoined as compliments and adjuncts.

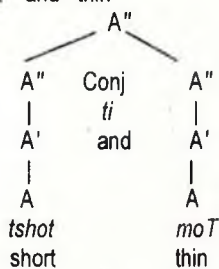
$A'' \rightarrow A' \rightarrow A$

(15) tshoT
 'short'
 A''
 |
 A'
 |
 A
 tshoT
 'short'

(16) *vaariyeh tshoT*
 'very short'



(17) *tshoT ti moT*
 'short and thin'

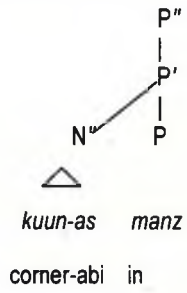


Postpositional phrase in Kashmiri.

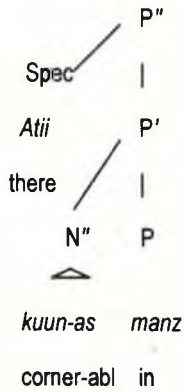
In Kashmiri "A core postpositional phrase is headed by a postposition that governs noun phrase." (Wali Kashi 1997: 96)

$P' \rightarrow N'' P'$

(18) *kuun- as manz*
 comer-abl in
 'in the corner'



(19) *Atii kuun-as manz*
there corner-abl in
'there in the corner'



(20) *makaan-as niS*
house-dat near.
'near house'.

(21) *zamiin-as pATH.*
Earth-dat on.
'on the earth'.

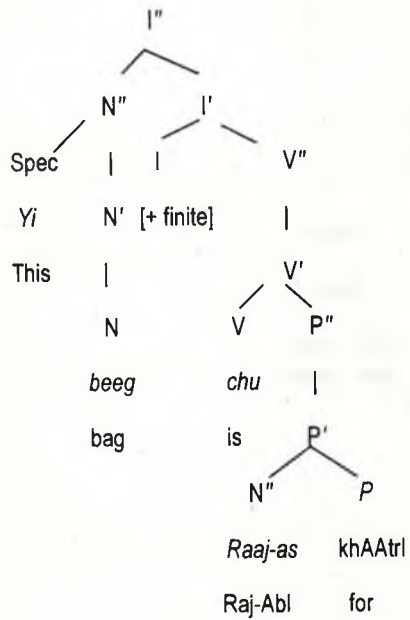
Inflectional Phrase IP or I''

In Kashmiri $I_{[+finite]}$ is never filled by a lexical word at D-structure as in English, so it does not have a lexical entry. It always takes a VP as its complement just as nonfinite does. The subject NP is assumed to fill the

specifier position in the IP. We can now draw trees of the Kashmiri sentences with V2 basic word order discussed so far

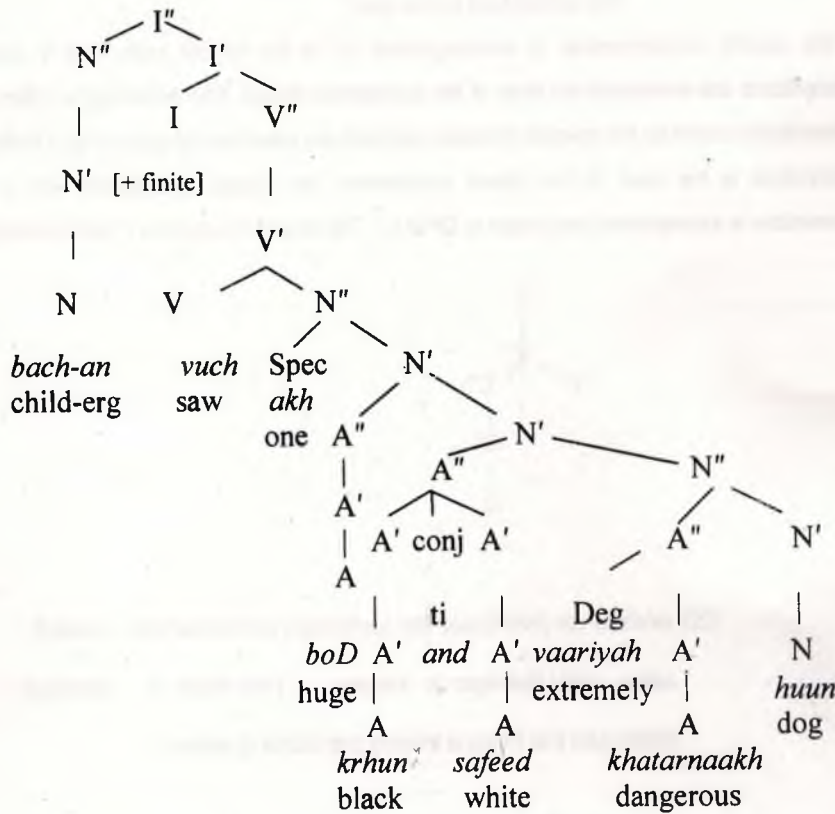
$I'' \rightarrow N'' \quad I' \rightarrow IV'$

(22) *yi beeg chu raaj-as khAAtrI*
 this bag is Raj-abl for
 'This bag is for Raj'.



(23) *tAmY dits me urdu kitaab*
 He gave me Urdu book.
 'He gave me Urdu book'.

(25) *bach-an vuch akh boD krlhun ti safæed vaariyah khatarnaakh huun.*
 child-erg saw one huge black and white extremely dangerous dog.
 'Child saw a huge black and white extremely dangerous dog.'



Complimentizer Phrases (C'')

In Kashmiri, the clausal complements are usually embedded by introducing complementizer e.g. *zi/ki* 'that' or *agar* 'if' etc.

(26) *tAmY von [c- zi/ki rahiim chu me naphrath karaan].*

he said [that Rahim is me hate do-present participle].

'He said the Rahim hates him/me.'

(27) [c- *agar* *tsl* *yikh* *meslItY*] *bl* *yiml*.

{ if you come me-with} I come.

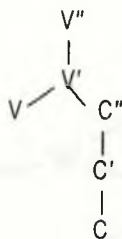
'If you come with me I will come.'

(28) *tAmY* *kareeyi* *mehnat* [c- *magar* *su* *gov* *naakaamlyaab*].

he do-past participle work [but he went fail].

'He worked hard but he failed'.

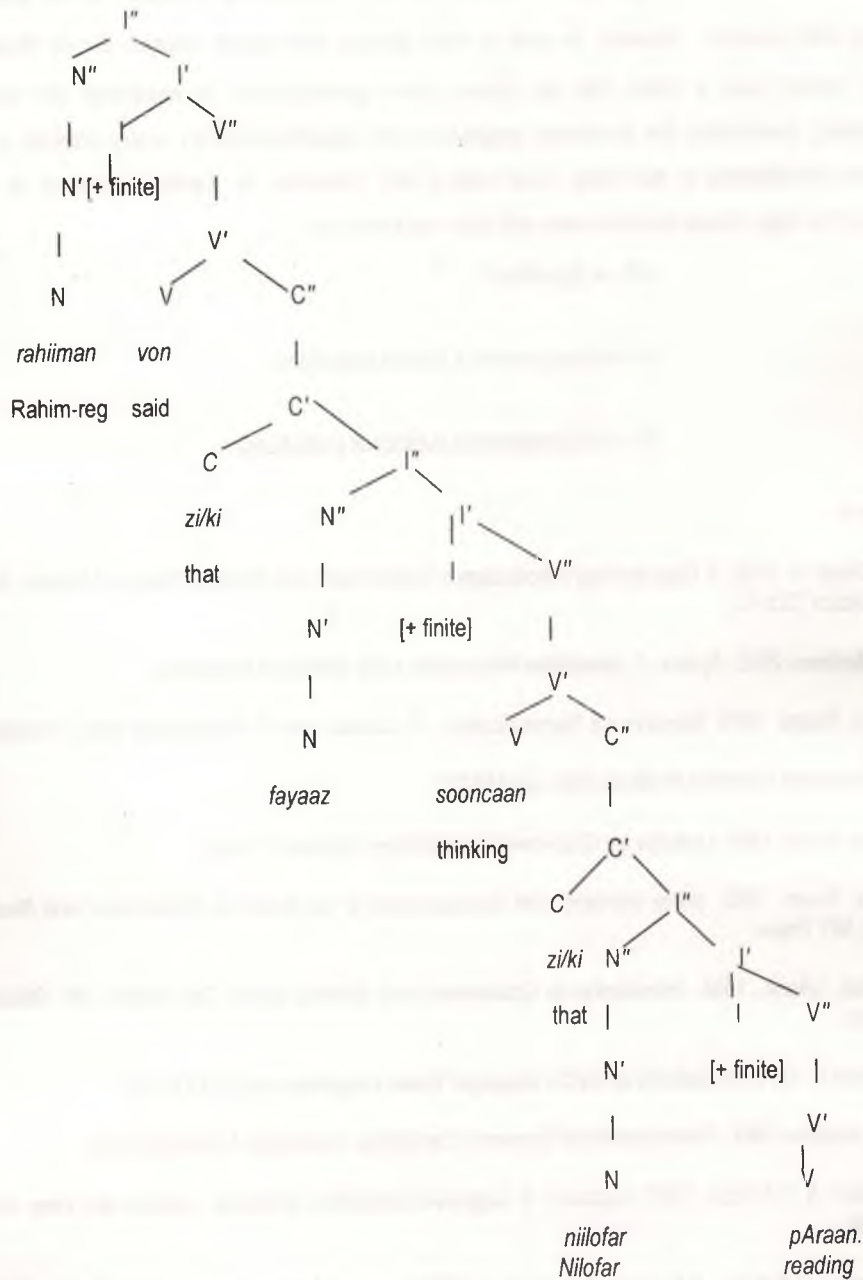
Since the specific complementizer is subcategorized for by the specific verb, that is why, the complementizers are considered the head of the complement clause, then according to X-Bar theory it (complementizer) cannot be the specifier because specifiers are never subcategorized for.) Further, if the complementizer is the head of the clausal complement, the clausal complement with or without complementizer is a complementizer phrase or CP. The revised structure for I" with embedded C":



(29) *rahiiman* *von* [*zi/ki* *fayaz* *chu* *sooNchaan* [*zi/ki* *niilofar* *cha* *pAraan*]]

rahim said [that fayaz is thinking [that nilofar is reading]]] .

'Rahim said that Fayaz is thinking that Nilofar is reading.'



Conclusion

What is consistent about the phrases in Kashmiri language? In the inflectional phrase, complementizer phrase, noun phrase, adjectival phrase, adverbial phrase and 'postpositional' phrase, the lexical head is

final and functional head occupies initial position. And if specifiers are present then the specifier occupies initial position. However, in case of noun phrases with relative clauses, $N' \rightarrow N$ [Relative Clause], lexical head is initial. We can capture these generalizations of **head-final (for lexical projections)**, **head-initial (for functional projection)** and **specifier-initial** by simply ordering of the head and complements in two basic X-Bar rules (I & II). Therefore, for Kashmiri language as (V2-language) the basic phrase structure rules with basic word order are:

$$XP \rightarrow \text{Specifier } X'$$

$$X' \rightarrow \text{Complements } X \text{ (lexical projections)}$$

$$X' \rightarrow X \text{ Complements (functional projections)}$$

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