



Center for Research in Urdu Language Processing National University of Computer and Emerging Sciences, Lahore Pakistan

Revision History:

Name	Change Date	Version	Description of Changes
Tafseer Ahmed	13 Sep, 2004	4.1.0.1	created.
Tafseer Ahmed	30 Oct, 2004	4.1.1.1	Rule modified for VPinf.
Sara Hussain	7 th Feb, 2005	4.1.1.2	Rule modified
Aasim Ali	08-AUG-2005	5.1.0.1	Documentation of changes made in UGR file by Tafseer

Rule ID: UGR104

Rule Syntax: Following is the constituent description of the rule.

VPinf -> (KP) pro v

Rule Functional Description: Following are the functional specifications of the rule.

Frequency: -

Description: This rule models infinitival clause. Infinitival clauses are clauses ending with a verb in infinitival form.

c-structure: Infinitival clause consists of optional Case phrase (KP), compulsory pronoun and infinitival verb.

f-structure: This rule handles only non-agreeing infinitival form as shown in the column Dialect 2 of the table given below in the Analysis section.

Example:

مجھے روٹی کھانی ہے۔ وہ دوا کھانا چاہتا ہے۔ [سبق یاد کرنے] والا طالب علم آیا۔ [کتاب پڑھنا] اچھی عادت ہے۔





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Rule Status: Under Process

Reference: 'Long Distance Agreement in Hindi-Urdu' by Rajesh Bhatt

Related Rules:

Related POS:

Replaces: - UGR001

Reason: -

Replaced by: -





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Analysis: Following is the analysis of the rule.

Analysis 1:

There are three aspects of infinitival clauses that have been analyzed separately: (1) The position of infinitival clause in a sentence, (2) The occurrence of infinitival verb in Nominative and Oblique case, and (3) the gender agreement between the infinitival verb and its embedded object in an infinitival clause.

(1) It has been decided that infinitivals are verbs which have nominal behavior. That is they occur as either subjects or objects in a sentence depending on their position in a sentence. For this reason rule for infinitival clause is called from the main noun rule (i.e. UGR106 NPnoun rule). Some occurrences of infinitivals in different nominal positions are given below.

کے مزے (as a specifer in genitive phrase) کا لکھنا (genitive phrase) حامد کا لکھنا (nominal post position phrase) لکھنے کے بعد (before case marker) لکھنے سے (in wala phrase)

However infinitival verbs like verbs have sub-categorization frame but they lack a subject argument. They can further have additional description in form of adjuncts (as shown by KarP and S_adjunct in the above rule).

(2) Infinitival verb can occur in Nominative or Oblique case. Nominal case rules govern change in case of infinitival verbs. Thus an infinitival verb occurring before a case marker or a post position is in oblique form. Similarly other such rules are also followed by infinitival verbs. Different forms of the infinitival verb are given below. This information about cases can be embedded in the lexicon.

Masculine Singular Nominative: کھانے Masculine Singular Oblique: کھانے Masculine Plural Nominative/Oblique: کھانی Feminine Singular/Plural Nominative/Oblique: کھانی

(3) In this case we are determining the presence or absence of gender agreement between the infinitival verb and its embedded object in an infinitival clause. Speakers show variation in this regard. That is some speakers prefer gender agreement in cases where other speakers prefer no gender agreement. While both the sentences below seem correct to a group of speakers.

Gender agreement between feminine object (ٹہنی) and Infinitival verb (گاٹنی کاٹنی چاہی).

Absence of gender agreement between feminine object (گاٹنا). and Infinitival verb (کاٹنا).

Variation and similarity in dialect in different sentence structure can be seen in the following table.

Ser.	Dialect 1	Gender	Dialect 2	Gender Agreement
No.		Agreement		
1	حامد ٹہنی کاٹنا چاہتا ہے	no agreement	حامد ٹہنی کاٹنا چاہتا ہے	no agreement
2	آمنہ ٹہنی کاٹنا چاہتی ہے	no agreement		no agreement
3	اس نے ٹہنی کاٹنی چاہی	Agreement	اس نے ٹہنی کاٹنا چاہی	no agreement
4	اس نے کھانا کھانا چاہا	agreement	اس نے کھانا کھانا چاہا	no agreement
5	اس نے ٹہنی کاٹنے کو کہا	no agreement	اس نے ٹہنی کاٹنے کو کہا	no agreement
6	اسے ٹہنی کاٹنی [چاہئیے / تھی / آتی تھی]	Agreement	اسے ٹہنی کاٹنا [چاہئیے / تھی / آتی تھی]	no agreement
7	ان باغوں میں نقلی پہاڑیاں بننی تھیں	Agreement	ان باغوں میں نقلی پہاڑیاں بننی تھیں	agreement
8	تُهنى كاتُنا كام آيا	no agreement	تُهنى كاتَّنا كام آيا	no agreement





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9	ٹہنی کاٹنا اچھا ہوتا ہے	no agreement	ٹہنی کاٹنا اچھا ہوتا ہے	no agreement
10	کھانا کھانا اچھا ہوتا ہے	no agreement	کھانا کھانا اچھا ہوتا ہے	no agreement
11	ٹہنی کاٹنا اچھی عادت ہوتی ہے	no agreement	ٹہنی کاٹنا اچھی عادت ہوتی ہے	no agreement
12	کھانا کھانا اچھی عادت ہوتی ہے	no agreement	کھانا کھانا اچھی عادت ہوتی ہے	no agreement

It has been noticed that most speakers prefer the dialect 1. The analysis given below tries to model this dialect.

We agree with Marium Butt's analysis of infinitives which introduces two independent instances of local agreement. The first instance involves agreement between object of the embedded infinitival clause and the infinitival verb and the second instance involves agreement between the infinitival clause and the matrix (outer main) verb [1]. The second agreement is the same as between an object and the main verb in which the main verb agrees with the object only when the subject is blocked (i.e. subject is not in nominative form). So for infinitivals we only consider the agreement between object of the embedded infinitival clause and the infinitival verb.

As a rule the infinitival verb does not agree with its object when the infinitival clause is followed by case markers, post-positions, nominal post position or the word 'wala'. Also whenever the infinitival clause occurs as a subject this agreement does not hold (sentence 8-12). Thus the presence or absence of this agreement is questionable only when the infinitival clause occurs as an object in nominative case.

From the above sentences it can be deduced that the agreement holds when the sentence having infinitival object has a blocking subject. Thus when an infinitival act as an object and its subject is in ergative, dative or instrumental case then this agreement is positive. For other cases it is negative.

Sentence number 11 and 12 in the above table indicates absence of gender agreement plus it shows absence of gender in the infinitival phrase. The absence of gender is indicated by the fact that the pred-link ((left)) does not agrees with the subject (sentence 12). In general it can be said that whenever gender agreement is absent gender is missing. To model this lexicon can have separate entries for infinitivals having positive gender agreement (like Masculine (left)) and for the ones that have negative gender agreement. Entries with negative agreement will have no gender feature in them (like (left)) (left) (left)

Result: We decided on analysis 1 & 2 above.

Future Work: To generate all accent variation.





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