



# 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	25 Oct, 2004	4.1.0.1	Created
Tafseer Ahmed	4 <sup>th</sup> Nov, 2004	4.1.0.1	F-Description is added to the rule.
Sara Hussain	20 <sup>th</sup> Dec, 2004	4.1.0.2	Renamed FORM feature of asp_aux to _AUX_FORM

Rule ID: UGR110

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

VerbalPpassive -> ComplexP asp\_aux (asp\_aux) (TenseAuxP)

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

VerbalPpassive -> ComplexP:^ = !; asp\_aux: [!\_AUX\_FORM =c 'passive\_ja'],^ TNS\_ASP =! TNS\_ASP,^ \_MORPH\_FORM =c !\_ALLOWED\_FORM, ^ \_MORPH FORM =! \_MORPH\_FORM,^ NUM =! NUM, ^ RESPECT =! RESPECT, ^ PERS =! PERS, ^ GEND =! GEND; (TenseAuxP:^ TNS\_ASP =! TNS\_ASP, ^ \_MORPH FORM =! \_MORPH ALLOWED\_FORM, ^ NUM =! NUM, ^ RESPECT =! RESPECT, ^ PERS =! PERS, ^ GEND =! GEND;).

VerbalPpassive -> ComplexP:^ = !; asp\_aux: [!\_AUX\_FORM =c 'passive\_ja'],^ TNS\_ASP = ! TNS\_ASP,^ \_MORPH\_FORM =c ! \_ALLOWED\_FORM, ^ \_MORPH JA\_FORM =! \_MORPH\_FORM,^ NUM =! NUM, ^ RESPECT =! RESPECT, ^ PERS =! PERS, ^ GEND =! GEND; asp\_aux:^ TNS\_ASP =! TNS\_ASP, ^ \_MORPH JA\_FORM =c ! \_ALLOWED\_FORM, ^ \_MORPH FORM =! \_MORPH\_FORM, ^ NUM =! NUM, ^ RESPECT =! RESPECT, ^ PERS =! PERS, ^ GEND =! GEND; (TenseAuxP:^ TNS\_ASP =! TNS\_ASP,^ \_MORPH FORM =! \_MORPH ALLOWED\_FORM, ^ NUM =! NUM, ^ RESPECT =! RESPECT, ^ PERS =! PERS, ^ GEND =! GEND;).

#### Frequency: 1

**Description:** This rule shows main rule for verb phrase.

*c-structure*: Verb phrase consists of a complex predicate phrase followed by optional aspectual auxiliaries and tense auxiliary phrase.

*f-structure:* Complex predicate phrase, auxiliary and tense auxiliary have agreement on the basis of number, gender, person and morphological form of verb.

#### **Examples:**

کتاب [پڑھی گئی]۔ کتاب[پڑھی جا سکتی ہے]۔





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Rule Status: Under Process

Reference: UGR103, UGR109

Related Rules: UGR116, UGR024

Related POS: UPOS013

Replaces: - UGR020

Reason: - UGR020 was a general rule for all types of VP.

Replaced by: -

Analysis: Following is the analysis of the rule.

*Analysis:* Passive Sentence has a special syntax that is different from syntax of Usual Verb Phrase. It has Aspectual Auxiliary 'passive\_ja' after Complex Predicate. The form of 'passive\_ja' is determined by tense and aspect of the sentence. The Agreements in this kind of Verbal Phrase is same as discussed in UGR109.

Result: We decided on above analysis.

Future Work: Sentences having more than two aspectual auxiliaries will be modeled.