



## 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	5 Oct, 2004	4.1.0.1	Created
Sara Hussain	16 Dec, 2004	4.1.0.2	comments added for compatibility with grammar file and better understanding
Aasim Ali	29-Jun-2005	5.1.0.1	Removed redundant rule for coordinate conjuntion of 2 <sup>nd</sup> & 3 <sup>rd</sup> Person
Aasim Ali	18-Jul-2005	5.1.0.2	Removed constraint for PERSon
Aasim Ali	19-Jul-2005	5.1.0.3	Changed ~'AUR' to 'YA'

Rule ID: UGR125

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

NPmain -> NP

NPmain -> NP [[comma NP]]\* coord\_conj NP

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

NPmain -> NP: ^=!; .

//AUR Conjuncted

NPmain -> NP: ! \$ ^; [comma:; NP: ! \$ ^, ^ FORM = ! FORM;]\* coord\_conj:^=!, !CONJ\_FORM =c AUR; NP: ! \$ ^; .

//YA Conjuncted

NPmain -> NP: ! \$ ^; [comma:; NP: ! \$ ^, ^ FORM = ! FORM;]\* coord\_conj:^=!, !CONJ\_FORM =c YA; NP: ! \$ ^; .

## Frequency:

**Description:** This rule represents the co-ordination of Noun Phrase.

*c-structure*: It consists of a noun phrase or a list of comma separated noun phrases.

f-structure: A set of noun phrases having co-ordination type and agreement features at the root.

## **Examples:**

میں یا وہ تم، حامد اور عمران





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

Rule Status: Under Process

Reference: UGR137(KP Coordination Document)

Related Rules: UGR138

Related POS: UPOS121, UPOS122

Replaces: -

Reason: -

Replaced by: -

**Analysis:** Following is the analysis of the rule.

Analysis: Noun Phrase can be coordinated by using coordination conjunction. So a Noun Phrase (NP) can be a single noun phrase or a list of comma separated noun phrases having a coordinating conjunction before last case phrases.

The features of coordinated noun phrase are determined by the grammar rules. The rules are similar to the rules of KP discussed in UGR137. The only except is that NP do not deal CASE feature. The feature rules are following:

Conjunction Type	Aur	Others( e.g. ya)
Number	Plural	Of last NP
Gender	Masculine	Of last NP
Person	1st then 2 <sup>nd</sup> then 3rd	Of last NP
Form	All NPs should have	All NPs should have
	same.	same.
Respect	Usual	Of last NP

Constraint for person has been removed keeping in view to prefer the order of the original sentence in English.

**Result:** We decided on analysis.

Future Work: (1) The Gender rule for 'aur' conjunction is an over-simplification, that says that gender of 'aur' conjuncted phrase is always Masculine. The rule is true for masc-masc and fem-masc conjunction, but it is not true for fem-fem conjunction. New rules should be written to successfully parse sentences like للإكيون أور استانيون نے كہا۔

(2) We assume that NP do not have CASE feature, the assumption is not true for pronouns having accusative/dative case. For example, اسے، تنہیں . It is required that these pronouns should be constrained in this phrase.