



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

Reference No:

Revision History:

Name	Change Date	Version	Description of Changes
Kiran Khurshid	6 <sup>th</sup> September 2004	0.1	Created
Kiran Khurshid	22 <sup>nd</sup> September 2004	1.0	Approved by SA
Zunaira Malik	9 <sup>th</sup> august, 2005	1.2	New Release

Rule ID: EGR251

Rule Syntax:

AuxPinf -> aux  
AuxPinf -> aux aux  
AuxPinf -> aux aux aux

Rule Functional Description:

AuxPinf -> aux: ^\_AUX1 = !, ^\_MAUX = !, ^\_AUX1 \_MORPH\_FORM = TO\_INF, ^\_MAUX TNS\_ASP \_JUNK = 'check';

AuxPinf -> aux: ^\_AUX1 = !, ^\_AUX1 \_MORPH\_FORM = TO\_INF; aux: ^\_MAUX = !, !\_MORPH\_FORM = c ^\_AUX1 \_ALLOWED\_FORM, ^\_MAUX TNS\_ASP \_JUNK = 'two\_aux\_in\_auxpinf';

AuxPinf -> aux: ^\_AUX1 = !, ^\_AUX1 \_MORPH\_FORM = TO\_INF; aux: ^\_AUX2 = !, !\_MORPH\_FORM = c ^\_AUX1 \_ALLOWED\_FORM; aux: ^\_MAUX = !, !\_MORPH\_FORM = c ^\_AUX2 \_ALLOWED\_FORM;.

Frequency: -

Description: This rule is for all the combinations of auxiliaries that can occur in a to-infinitive clause.

*c-structure*: An infinitive auxiliary phrase can allow zero to three auxiliaries.

*f-structure*: The values starting with “\_” are junk values only to check wellformedness of the phrase.

Example:

- (1) You need to run to catch the bus
- (2) We are glad to have invited you.



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

**Rule Status:** Active

**Reference:**

- (1) Pam Peters, "The Cambridge Guide to English Usage"
- (2) Quirk et al, "A Comprehensive Grammar of the English Language"

**Related Rules:** -

**Related POS:** EPOS101

**Replaces:** - EGR107

**Reason:** - New Release

**Replaced by:** -



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

**Analysis:**

*Analysis 1:* The basic nonfinite forms of verbs such as (to) ask, (to) go, (to) decide are called **infinitives** [1]. There are 5 basic forms of full verbs given on [pp. 96-97, 2]. The base form of the verb has two nonfinite forms: 1) the bare infinitive and 2) the *to*-infinitive. This rule is used to parse the auxiliaries that can occur in *to*-infinitive phrases.

If we relate the structure of the nonfinite verb phrase to that of the finite verb phrase, we can tabulate the eight possible combinations as follows [pg. 153, 2]:

Type of verb phrase	Infinitive	Type
Simple	to examine	
Complex	to have examined	B
	to be examining	C
	to have been examining	D
	to have been examined	BC
	to be being examined	CD
	to have been being examined (rare)	BCD

Where Type B, C and D mean [pg. 152, 2]:

Type B: perfective aux (HAVE) + -ed participle  
Type C: progressive aux (BE) + -ing participle  
Type D: passive aux (BE) + -ed participle

To cover all these combinations of auxiliaries the above three productions are used. Note that “have”, “been”, “being” and “be” are all auxiliaries named as “aux”. The `_AUX1` and `_AUX2` are temporary structures to check the well-formedness of the sentence. Similarly, all other values starting with “\_” are used to check well-formedness.

**Result:** We decided on the above analysis.

**Future Work:**