



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
Shanza Nayyer	2 nd Nov, 04	0.1	Created
Zunaira Malik	20 th May, 05	0.2	New Release
Zunaira Malik	16 th July, 05	0.3	Addition of rule for correlative "from to"
Shanza Nayyer	25 th July, 05	0.4	Addition of adv to PPn

Rule ID: EGR213

Rule Syntax: Following is the constituent description of the rule. PPn -> (adv) p NPmain PPn_obj -> p NPmain PPn -> p NPmain p NP

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

- 1) PPn -> (adv:^ADJUNCT ADV =!, !ADV_TYPE =c P_MOD, ~[!SEM_TYPE =c
- {COMPARITIVE,SUPERLATIVE}];) p:^ = !; NPmain:^OBJ = !, ^OBJ CASE = ACC;.
- 2) PPn_obj -> p:^ PFROM=!PFROM; NPmain:^ = !, ^CASE = ACC;.

3) PPn -> p: ^_ALLOWED_PFORM = !_ALLOWED_PFORM , ^ CORR_CONJ = ! PFORM ; NPmain:! \$ ^ ; p:

^CONJ_FORM = ! PFORM, ^CONJ_FORM = ^_ALLOWED_PFORM; NP: ! \$ ^;.

Frequency: -

Description: This production gives the detail of the Preposition Phrase.

c-structure: Prepositional phrase has preposition as the head of PP followed by its dependent noun phrase.

f-structure: If preposition has the semantic value (as in, *put the box <u>on</u> the table),* p subcategorizes NP(production 1). Note that an adverb can also be added (with ADV_TYPE as P_MOD) to intensify the prepositional phrase. If preposition does not have the semantic value, NP becomes the OBJ of the verb and p merely acts like a connector (as in, *he relies <u>on</u> this book*) (production 2).

In case of production 3, the preposition from contained an ALLOWED PFORM constraint which asks for the preposition "to". It is modeled so the F-structure looks like the F-structure for correlatives. Between "from" and "to" NP's can exist.

Examples:

- 1) She puts the book <u>on the table</u> (for production 1)
- 2) She is sitting <u>right behind you</u> (for production 1 with adv)
- 3) She relied <u>on him</u> (for production 2)
- 4) She works from Sunday to Monday. (for production 3)





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Rule Status: Active Reference: [1] "A Grammar Writer's Cookbook", Miriam Butt, Tracy Holloway King. [2] Correspondence with Miriam Butt, Universität Konstanz, Germany. Related Rules: EGR205 Related POS: EPOS016 Replaces: EGR119 Reason: PPxcomp analyzed separately in the rule of VPinf (EGR106), PCASE changed to PFORM Replaced by: -Reason: -





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Analysis: Following is an in-depth analysis of the rule.

Analysis: Prepositions are usually subdivided into two major classes: semantic and non-semantic.

Semantic prepositions usually give rise to adjunct PPs: *Example: i) The book is on the table.*

The most common type of PP involves a preposition which has a clear semantic content of its own, such as the locative *on, in, under etc.,* the instrumental *with,* and the directional *into, onto etc.* These prepositions are endowed with a PRED value and a sub-categorization frame which indicates that preposition requires an object.

In certain other constructions, a particular preposition is required by the verb for its particular meanings: *Example: i) I referred to the book.*

In these cases, the preposition makes no or very little semantic contribution of its own. As such these PPs are treated as arguments of the verb. [1, pp. 125 - 129]

For English it is safe to treat all PPs as obliques and to use the OBJ2 for 'the book' in She gave him the book. [2]

Refer to [1, p. 50] for details on Obliques: *Example: i)* She gave the book to him.

Result: If verb sub-categorizes a PP, it becomes an OBL, else it becomes ADJUNCT in the f-structure.

Future Work: