



# 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
Omar Javed	6 <sup>th</sup> November, 04	0.1	Created
Sara Hussain	18 Dec, 2004	4.1.0.0	modified for compatibility with grammar/Lexicon file (added NEG and ADVFORM features)
Sara Hussain	6 <sup>th</sup> Jan, 2005	4.1.0.1	Added SEM_TYPE feature with PLACE, TEMPORAL options

POS ID: UPOS12

Part of Speech Name: Adverbs

Part of Speech String: adv

## **Lexical Entry Template:**

<word>: adv, ^ PRED = '<logical form of word>', ^ NUM = {SG, PL}, ^ GEND = {M, F}, ^ FORM = {NOM, OBL}, ^
RESPECT = {NORESPECT, FAMILIAR, USUAL, EXTRA}, ^ ADVTYPE = {VERB, ADJECTIVE, ADVERB,
SENTENCE}, ^ SEM\_TYPE = { PLACE, TEMPORAL}, ^ NEG = {NEG, POS}, ^ ADVFORM = '<logical form of word in
roman > '.

### Sample Lexical Entry:

: adv,^Pred = 'ببت',^ NUM = {SG, PL}, ^ GEND = {M, F}, ^ FORM = {NOM, OBL}, ^ RESPECT = {NORESPECT, FAMILIAR, USUAL, EXTRA}, ^ ADVTYPE = {ADJECTIVE, ADVERB}.

: adv,^Pred = 'تهوڑا' : adv,^Pred : تهوڑا' : adv,^Pred = NOM, ^ RESPECT = NORESPECT, ^ ADVTYPE = {ADJECTIVE, ADVERB}.

ُ تهوڑے: adv,^Pred = 'تُهوڑ',^ NUM = SG, ^ GEND = M, ^ FORM = OBL, ^ RESPECT = {NORESPECT, FAMILIAR, USUAL, EXTRA}, ^ ADVTYPE = {ADJECTIVE, ADVERB}.

ے adv,^Pred ='تبوڑ',, ^ NUM = SG, ^ GEND = M, ^ FORM = NOM, ^ RESPECT = {FAMILIAR, USUAL, EXTRA}, ^ ADVTYPE = {ADJECTIVE, ADVERB}.

z adv,^Pred = 'تهورُّا',^ NUM = PL, ^ GEND = M, ^ FORM = {NOM,OBL}, ^ RESPECT = {NORESPECT, FAMILIAR, USUAL, EXTRA}, ^ ADVTYPE = {ADJECTIVE, ADVERB}.

: adv,^Pred = 'تهورُّا' : adv,^Pred : تهورُّا : adv,^Pred : ",^ NUM = {SG,PL}, ^ GEND = F, ^ FORM = {NOM,OBL}, ^ RESPECT = {NORESPECT, FAMILIAR, USUAL, EXTRA}, ^ ADVTYPE = {ADJECTIVE, ADVERB}.

نېين: adv, ^ NEG= POS, ^ADVFORM = 'nahin'.

: adv,^Pred = 'بيان,^ NUM = {SG, PL}, ^ GEND = {M, F}, ^ FORM = {NOM, OBL}, ^ RESPECT = {NORESPECT, FAMILIAR, USUAL, EXTRA}, ^SEM\_TYPE=PLACE, ^ ADVTYPE = {SENTENCE}.

adv,^Pred ='ہمیشہ',^ NUM = {SG, PL}, ^ GEND = {M, F}, ^ FORM = {NOM, OBL}, ^ RESPECT = {NORESPECT, FAMILIAR, USUAL, EXTRA}, ^SEM\_TYPE=TEMPORAL,^ ADVTYPE = {SENTENCE}.

**Description** Adverbs often tell when, where, why, or under what conditions something happens or happened. Adverbs can modify verbs, adjectives, sentences and other adverbs.

The description of the features is following:

NUM (Number) can be: SG (singular): Example:نهورُا

**EGD Urdu Localization Project - Grammar Rule Document** 





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PL (plural): Example: نهوڑے

It cannot be null

GEND (Gender) can be: M (masculine): Example: نهورًا

F (feminine): Example:نهوڑی

It cannot be null

FORM can be: NOM (Nominative): Example: نهورًا

OBL (Oblique): Example:نبوڑے

It cannot be null

RESPECT can be: NORESPECT: Example: نَورُا

تهوڑے :Example تهوڑے :USUAL: Example تهوڑے :EXTRA: Example

It cannot be null.

ADVTYPE can be: VERB: Example : آبستہ

ADJECTIVE: Example: بېت ADVERB: Example: نېايت SENTENCE: Example:

It cannot be null.

يبان:SEM\_TYPE (Semantic type) can be: PLACE: Example

TEMPORAL: Example: ميشه

It can be null.

NEG can be: NEG: Example : بېت

POS: Example: نېين

This is an optional feature.

**Examples:** 

آبستہ، بہت، نہایت، بہت زیادہ، کم، یکایک (خطرناک طوفان آیا)، تقریباً، زیادہ، بالکل (صحیح بات)، اکثر (وہ اکثر صحیح بات کرتّے ہیں)، ، [2]انتا (جھوٹا آدمی)، کتنا (جھوٹا شخص ہے)

یبان، وہان، ادھر، ادھر (Place)

(Temporal) ہمیشہ





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POS Status: Under Process			
Reference:			
Related POS: UPOS104, UPOS110			
Replaces: -UPOS12			
Reason: -			
Replaced by: -			
Reason: -			





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**Analysis:** Following is the in-depth analysis of the POS.

#### Analysis:

. تهوڑا آنهوڑا، تهوڑای تهوڑے } The predicate of the adverbs is its logical form. The PRED of

NUM (number) of an adverb can be singular (SG) or plural (PL). It is a mandatory feature. If any adverb has both singular and plural values they will be written in the form of set, e.g. {SG, PL}.

Gender of an adverb can be masculine (M) or feminine (F). It can also have both values (masculine and feminine) and they are represented as {M, F}. The example of adverb having both values is 'نبایت'

Respect can have the four values {NORESPECT, FAMILIAR, USUAL, EXTRA} It is same as written in the pronouns document (UPOS05)

Adverb is a generic part of speech that is used in many contexts. Usually it is said to be garbage box of the POS. A word, that can not classified in any other POS, can be classified as adverb. Usually Adverbs are used to show manner of the verb, modifying an adjective, modifying another adverb. The examples are:

(Adverb modifying Verb) وه آبست چلا (Adverb modifying Adjective) ببت اچهی لڑکی آئی۔ (Adverb modifying Adverb) وہ نیایت آبستہ چلا۔

Some adverbs can occur as specifiers in genitive phrases. Consider the following examples:

یہاں کے کھیت ادھر کی آبادی اوپر کے مکانات ہمیشہ کی طرح ادھر کی آبادی

Due to such nominal behavior of adverbs additional semantic feature with options of PLACE and TEMPORAL can be added. This behavior is also seen in some words (such as اوپر، نیچے، آگے) which act as nominal post positions in text also. These words can have two separate entries one in which they act as nominal post positions and the other in which they are categorized as adverbs with SEM TYPE of PLACE feature.

This kind of analysis will also work in postpositional phrases where the postpositions can follow adverbs or adverbial phrases. Consider the following examples:

یہاں سے ادھر تک اوپر میں ہمیشہ سے ہمیشہ کے لیے

This behavior can also be modeled by indicating PLACE / TEMPORAL in SEM\_TYPE feature in such adverbs.

Result: We decided on Analysis.

### **Future Work:**