



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 Nayer	4 th Nov, 04	0.1	Created
Shanza Nayer	20 th June, 04	0.2	Some modification

POS ID: EPOS106

Part of Speech Name: Verb

Part of Speech String: v

Lexical Entry Template:

v, PRED '<logical form of word>', ^TNS_ASP PERF = {POS/NEG/NULL}, ^TNS_ASP PROG = {POS/NEG/NULL}, ^TNS_ASP TENSE = {PRES/PAST/NULL}, ^_MORPH_FORM = {BARE/PRES/PAST/PERF/PROG}, ^VOICE = {ACTIVE/ PASSIVE}, ^VERB_FORM = 'root of the word'.

Sample Lexical Entry:

sleep : v, ^PRED = 'sleep_v<SUBJ>', ^_MORPH_FORM = {BARE, TO_INF}, ^VOICE = ACTIVE, ^TNS_ASP PERF = NEG, ^TNS_ASP PROG = NEG.

sleep : v, ^PRED = 'sleep_v<SUBJ>', ^_MORPH_FORM = PRES, ~[^SUBJ NUM =c SG && ^SUBJ PERS =c 3], ^TNS_ASP TENSE = PRES, ^VOICE = ACTIVE.

sleeps : v, ^PRED = 'sleep_v<SUBJ>', ^_MORPH_FORM = PRES, [^SUBJ NUM =c SG && ^SUBJ PERS =c 3], ^TNS_ASP TENSE = PRES, ^VOICE = ACTIVE.

slept : v, ^PRED = 'sleep_v<SUBJ>', ^_MORPH_FORM = PAST, ^TNS_ASP TENSE = PAST, ^VOICE = ACTIVE.

slept : v, ^PRED = 'sleep_v<SUBJ>', ^_MORPH_FORM = PERF, ^VOICE = ACTIVE.

sleeping : v, ^PRED = 'sleep_v<SUBJ>', ^_MORPH_FORM = PROG, ^TNS_ASP PROG = POS, ^VOICE = ACTIVE.

be : v, ^PRED = 'be_v <SUBJ, PREDLINK>', ^_MORPH_FORM = BARE, ^VOICE = ACTIVE, ^_VERB_FORM = 'be'.

Description: Verbs carry the idea of being or action in the sentence [1]. The following features describe a verb:

TNS_ASP PERF: POS (positive): *Example:* I had to go.
NEG (negative): *Example:* I am going to school.
It can be null.

TNS_ASP PROG: POS (positive): *Example:* I am going to school.
NEG (negative): *Example:* I had to go.
It can be null.

TNS_ASP TENSE: PRES (present tense): *Example:* I am happy.
PAST (past tense): *Example:* I was happy.



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It can be null.

MORPH_FORM:	BARE (bare form):	<i>Example:</i> I will go to school.
	TO_INF(bare infinitive form):	<i>Example:</i> I want to go to school.
	PRES (present form):	<i>Example:</i> I go to school.
	PAST (past form):	<i>Example:</i> I went to school.
	PERF (perfect form):	<i>Example:</i> I had gone to school.
	PROG (progressive form):	<i>Example:</i> I am going to school.
VOICE:	ACTIVE:	<i>Example:</i> She gave me a book.
	PASSIVE:	<i>Example:</i> A book was given to me by her.

VERB_FORM: This feature is only required in 'be' as PREDLINK entry as it is checked in grammar in predlink rules
^ OBJ PTYPE = NONSEM: This feature is coded only in the lexical entries of verbs having sub-categorization frame as <SUBJ, OBJ> but the OBJ is actually the Non-Semantic Prepositional Phrase in the c-structure. A constraint on PFORM is also added in the lexical entry to make sure that this OBJ is from PP and not from NP, in the c-structure.

Example: The lexical entry for 'relied' in the sentence 'He relied on the book' is:

relied : v, ^PRED = 'rely_v<SUBJ, OBJ>', ^MORPH_FORM = PAST, ^TNS_ASP TENSE = PAST, ^VOICE = ACTIVE, ^OBJ PFORM = c 'on', ^OBJ PTYPE = NONSEM.

For details check the POS file of preposition.

Examples:

1. The girl went to school.
2. She sees the river.
3. She is reading a book.

POS Status: Active

Reference:

[1] <http://webster.commnet.edu/grammar/verbs.htm>

[2] Randolph Quirk et al., "A Comprehensive Grammar of the English Language"

Related Rules: EGR123, EGR124, EGR123, EGR102, EGR103, EGR104, EGR125, EGR126

Related POS: -

Replaces: EPOS003

Reason: TO_INF = MORPH_FORM added

Replaced by: -

Reason: -



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

Analysis 1: Verbs carry the idea of being or action in the sentence. Some verbs require an object to complete their meaning. These verbs are called transitive [1].

Example: i) She gave money to the church.

In the above example, the sentence would be incomplete without the word money. Hence, verbs like “give” are transitive verbs.

On the other hand, some verbs do not require an object. These are called “intransitive” [1].

Example: i) She sleeps.

ii) The building collapsed.

Moreover, some verbs can be both transitive and intransitive.

Example: i) The monster collapsed the building.

A third category of verbs is of di-transitive verbs. Such verbs take a direct object and an indirect object at the same time [1].

Example: i) She gave me money.

Verbs are also said to be either *active* or *passive* in voice. In the active voice, the subject and verb relationship is straightforward: the subject is a be-er or a do-er and the verb moves the sentence along. In the *passive voice*, the subject of the sentence is neither a do-er or a be-er, but is acted upon by some other agent or by something unnamed [1].

Example: i) The executive committee approved the new policy (*active*)

ii) The new policy was approved by the executive committee (*passive*)

iii) The new policy was approved (*passive*)

Analysis 2: Verbs, as a class of words, can be divided into three major categories, according to their function within the verb phrase; we distinguish the open class of FULL VERBS (or lexical verbs) such as LEAVE from the closed class of PRIMARY VERBS (BE, HAVE and DO) and of MODAL AUXILIARY VERBS (will, might, etc.) (p. 96, [2])

Following are the verb forms which verb phrases are composed of:

(1) BASE FORM (call, speak, cut etc.):

a. Occurs as FINITE form in:

i. Present tense: I call regularly

ii. Imperative: Call at once!

iii. Present Subjunctive: They demanded that she call and see them.

b. Occurs as NONFINITE form in:

i. Bare infinitive: He may call tonight

ii. To-infinitive: He want her to call

(2) –S FORM (calls, speaks, cuts etc):

a. Occurs as FINITE form in:

i. Present tense 3rs person singular: He calls everyday

(3) –ING PARTICIPLE (calling, speaking, cutting etc.):

a. Occurs as NONFINITE form in:

i. Progressive aspect following BE: He is calling her now.

ii. –ing participle clauses: Calling early, I found her at home.

(4) –ED PARTICIPLE (called, spoke, cut etc.):

a. Occurs as NONFINITE form in:

i. Perfective aspect following HAVE: he has called twice today.

ii. The passive voice following BE: Her brother is called John.



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iii. -ed participle clauses: Called early, he ate a quick breakfast (p. 97, [2])

Result: We decided to keep the verb POS exclusively for main verbs i.e. FULL VERBS (Analysis 2). The bare form of verb was split into bare infinitive and to-infinitive form as mentioned in Analysis 2.

Future Work: -