Center for Research in Urdu Language Processing
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Reference No:

Revision History:

Name	Change Date	Version	Description of Changes
Omar Javed	06th November, 04	0.1	Created
Sara Hussain	18th Dec, 04	4.1.0.0	modified for compatibility with grammar/ lexicon file (changed _MORPH FORM to _MORPH_FORM, PERSON to PERS and added _ALLOWED_FORM and TENSE features)

POS ID: UPOS16

Part of Speech Name: Tense Auxiliary

Part of Speech String: tense_aux

Lexical Entry Template:
<word>:tense_aux, ^ _AUX_FORM = {ho, tha, ga}, ^ _MORPH_FORM = {SUBJUNCTIVE, PERF, BARE}, ^CAUSATION = {NO, SINGLE, DOUBLE}, ^NUM = {SG, PL}, ^ GEND= {M, F}, ^ PERS= {1, 2, 3}, ^ RESPECT = {NORESPECT, FAMILIAR, USUAL, EXTRA}, ^_ALLOWED_FORM = {PERFECTIVE, HABITUAL, SUBJUNCTIVE}, TENSE = {PAST,FUTURE,PRES}

Sample Lexical Entry:
تھیں : tense_aux,^ __AUX_FORM = 'tha', ^_MORPH_FORM = PERFECTIVE, ^CAUSATION = NO, ^ NUM = PL, ^ GEND = F, ^ PERS = {1, 2, 3}, ^ RESPECT = {NORESPECT,FAMILIAR, USUAL, EXTRA}, ^_ALLOWED_FORM = {PERFECTIVE, HABITUAL}, ^ TENSE = PAST.
گا : tense_aux,^ _AUX_FORM = 'ga', ^_MORPH_FORM = PERFECTIVE, ^CAUSATION = NO, ^ NUM = SG, ^GEND = M, ^ PERS = {1, 2, 3}, ^ RESPECT = NORESPECT^ _ALLOWED_FORM = SUBJUNCTIVE, ^ TENSE = FUTURE.
گے : tense_aux,^ _AUX_FORM = 'ga', ^_MORPH_FORM = PERFECTIVE, ^CAUSATION = NO, ^ NUM = PL, ^ GEND = M, ^PERS = {1, 2, 3}, ^RESPECT = {NORESPECT, FAMILIAR, USUAL, EXTRA}, ^ _ALLOWED_FORM = SUBJUNCTIVE, ^ TENSE = FUTURE.

Description
Light Verbs are used after a noun or verb to make a new verb. Different inflectional forms of it can be represented using following features: _Aux_Form, Form, Gender, Number, Person and Respect. These features are discussed in [1].

The description of the features is following:

_AUX_FORM can be: ho: *Example:* ہے
 tha: *Example:*تھا
 ga: *Example:*گا
 It cannot be null or more than one.

_MORPH_FORM can be: SUBJUNCTIVE: *Example:* ہے

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PERFECTIVE: *Example:*تھا
BARE: *Example:* ہو
It cannot be null or both.

CAUSATION can be: NO: *Example:* اتر
        SINGLE: *Example:*اتار
        DOUBLE: *Example:*اتروا
        It cannot be null.

NUM (Number) can be: SG (singular):   *Example:* تھا
         PL (plural):   *Example:*تھے
         It cannot be null or both.

GEND (Gender) can be: M (masculine):   *Example:* تھا
         F (feminine):   *Example:*تھی
         It cannot be null or both.

PERS (Person) can be:

        3 (3rd person):   *Example:*ہو
        2 (2nd person):   *Example:*ہو
        1 (1st person):   *Example:*ہوں
        It cannot be null.

RESPECT can be: NORESPECT, FAMILIAR, USUAL, EXTRA
        It cannot be null. It is used for agreement.

_ALLOWED_FORM can be:
        SUBJUNCTIVE: *Example:*گا
        PERFECTIVE: *Example:* تھا
        HABITUAL: *Example:*تھا
        It cannot be null.

TENSE can be:
        PAST: *Example:* تھا
        PRES: *Example:*جاتا
        FUTURE: *Example:*ہوں
        It cannot be null or more than one.

Examples:

ہے، ہیں، ہوں، تھا، تھی، تھے، تھیں، گا، گی، گے، ہوں، ہو

POS Status: Active

Reference: [1] Urdu Verbs Forms and Features (MT-02_Verb Features.doc)

Related POS: UPOS0113

Replaces: -UPOS16

Reason: -

Replaced by: -

Reason: -

Analysis:

Analysis:

There are three undisputed tense auxiliaries: *hey*, *tha* and *ga* with there inflectional forms. They show present, past and future tense respectively. Past tense can also be shown with absence of tense auxiliary. "*ho ga*" also acts as tense auxiliary. There are two issues about it which are not agreed upon by different writers. a) Is "*ho ga*" a single word or two words coming together? It was decided that *ho* and *ga* are two separate words and ho ga should not be a separate word. b) Second question is what tense these words show. They can give sense of all three tenses depending on the context. As we are not dealing with context, default sense is decided to be future.

As mentioned in Verb document, tense auxiliaries are subjunctive form of *ho* or *ga* and perfective form of *tha*. Combination of two tense auxiliaries also act as tense auxiliary phrase, where first one is *ho* in bare form and second one is *ga*. This combination shows agreement on the basis of their number and person. Gender agreement is only reflected on *ga* which will be dealt in VP rule.

Different inflectional forms of a verb can be represented using following features: _AUX_FORM, _MORPH Form, Causation, Gender, Number, Person, and Respect. The description of these features is given in [1].

The feature _ALLOWED_FORM has been added to indicate the morpheme form of the word that occurs before this tense auxiliary.

Result: We decided on Analysis.

Future Work: Passive voice is not being dealt yet. Analysis of that may add some word in class of auxiliaries.