Grammatical relations in the West !Xoon dialect of Taa

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1 Preliminaries

1.1 General grammatical-relation (GR) approach
+ GR = regular, structurally determined status of a nominal constituent with respect to
  a) VERBAL clause nucleus, if it is its argument = most narrow but common sense
  b) VERBAL clause nucleus, irrespective of valence status = in-between sense used here
  > excludes NP relations in non-verbal-predications as well as in complex NPs
  > implies the presence of an independent NP, verb-integrated pronominal
  ≠ GR!!!
  + GRs are language-specific (Dryer 1997), if not construction-specific (Bickel 2011)
  - determined by any formal properties relevant in a given language, notably but not
    exclusively word order, agreement, flagging, prosodic integration etc.
  > GR conceptualized as to how different semantic-functional notions like verb-related
    semantic role, referent type, information structure, etc. are conflated into a manageable
    set of morphosyntactically defined form classes

1.2 The genealogical context of West !Xoon
+ variety of Taa (= Taa [taa1242] in Glottolog, and !Xöö [nnm] in Ethnologue)
> West !Xoon forms primary West branch, as opposed to East Taa which includes East !Xoon
researched by A. Traill (cf. Naumann 2014)

Map 1: The West !Xoon variety within the Taa language complex

+ Taa as part of the Taa-Lower Nossob branch of the Tuu family, an isolate family
  (classified in the past as “Southern South African Khoisan”, Greenberg 1963)
> cf. Figure 1, Map 2

Taa-Lower Nossob
  Taa (DC)  West !Xoon, N[au]en; ’Njoha, East !Xoon, Kakia; ...
  Lower Nossob  ’Auni
                |Haasi
  !Ui  N[ng], N[uu (DC)
        |Ungkue
        |Xegwi
        |Xam (DC)

Figure 1: Classification of Tuu (cf. Güldemann 2014)

Map 2: Approximate historical distribution of Tuu (after Güldemann 2005: 13)
1.3 The areal-typological context and basic structure of WestǀXoon

1.3.1 The Non-Khoe type

+ Tuu family, including Taa, is part of a robust "language type" in the Kalahari Basin called Non-Khoe (as opposed to the other Khoe-(Kwadi) type) (cf. Güldemann and Vossen 2000)
> partly marked morphosyntactic profile, including features crucial for the GR system:
  a) S V (O OTHER) clause order
  b) most verbs with maximal valence of one non-S/A participant
  c) verb serialization (mostly root type, Foley and Van Valin 1984) and verb compounding
  d) prominent flagging by a special type of default marker for most postverbal participants outside the valence of the verb, aka 'multipurpose oblique (MPO)' marker, and, depending on the language, a few more semantically dedicated adpositions
> strict syntactic template of basic clause (subscript n = possible multiple occurrence):

\[\text{SUBJECT - PREDICATE.OPERATOR}_n \text{- ADVERB - VERB}_n \text{- OBJECT - PREP+OBLIQUE}_n\]

+ most extreme case described so far for Tsumkwe Ju'hoan (Southeast Ju, Kx'a family) with a single multi-participant construction:

\[\text{VERB}_n \text{- OBJECT - kò}_n \text{- ADVERB - VERB}_n \text{- OBJECT - PREP+OBLIQUE}_n\]

(1) SBJ PO V OBJ [PREP OBLIQUE]

a. ha ká þöhm-a tàkh màn kò ꙉuł
  3S IPFV [chop-VE, tree] MPO forest

b. ha ká þöhm-a ꙉuł kò tàkh
  3S IPFV chop-VE, forest MPO tree,

He was chopping the tree in the forest. (Dickens 2005: 39)

+ even relevant for ditransitives (rare secundative alignment due to strong animacy effect)
> no obvious ditransitive verbs including 'give' (see König and Heine 2010)

(2) SBJ V OBJ [PREP OBLIQUE]

dà’dàna jàán jàán ha bà kò màři
  child good give 3S father MPO money

The good child gave his father money. (Dickens 2005: 40)

> MPO semantically very broad: most semantic roles except those typically expressed by the subject (agent, experiencer, force), viz. patients, all kinds of oblique and adverbials
> postverbal nominal encoding by position and flagging more sensitive to animacy (?and information structure) than to semantic roles (cf. Güldemann 2004)

1.3.2 Extensive cross-reference as a Taa-specific feature

+ morphological system of cross-reference and agreement on a wide range of hosts like copula (3), adjectives (3), some numerals (4), transitive verbs (4), all prepositions, conjunctions etc.

(3) ù qdrú kù txab-ù
  2P parents.P4 COP:4 big.P-4

Your parents are big/old. (TWb110927-0106.008)

(4)

a. ní sít nà-ì ñìhàl jìn-ì
  1S IPFV see-1 dog.S1 one-1

I see one dog. (TWb090405-0101.001)

b. ní sít nà-àn mdrí jìp-àn
  1S IPFV see-2i > goat.S2i one-2i

I see one goat. (TWb090405-0101.005)

+ entails 5 speech-act-participant forms and 7 agreement classes within a complex gender system (Traill 1974, Güldemann 2000, Kießling 2008)

> prosody of a high/low tone contrast relevant for subtle distinctions within cross-reference system (as well as prepositional flagging, see §2.3)
> person and agreement class markers are grouped into two tone classes - Table 1

<table>
<thead>
<tr>
<th>Person and agreement class</th>
<th>Agreement suffix for following object (‘see-X’ &gt; stone)</th>
<th>Anaphoric pronoun suffix (‘[stone] see-IT’)</th>
<th>Agreement on adjective (‘stone, small-X’)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tone class I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1S</td>
<td>n/a</td>
<td>-ǹg [-j]</td>
<td>-ǹg</td>
</tr>
<tr>
<td>2S</td>
<td>n/a</td>
<td>-à</td>
<td>-à</td>
</tr>
<tr>
<td>1P</td>
<td>n/a</td>
<td>-l</td>
<td>-òz</td>
</tr>
<tr>
<td>2P</td>
<td>n/a</td>
<td>-à</td>
<td>-àz</td>
</tr>
<tr>
<td>ACL 2i</td>
<td>-ǹ [-̀]</td>
<td>-àn</td>
<td>-àn</td>
</tr>
<tr>
<td>ACL 3i</td>
<td>-èd</td>
<td>-è</td>
<td>-è</td>
</tr>
<tr>
<td>Tone class II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACL 1(ii)</td>
<td>-ì</td>
<td>-ì</td>
<td>-ì</td>
</tr>
<tr>
<td>ACL 2ii</td>
<td>-ǹ [-̀]</td>
<td>-àn</td>
<td>-àn</td>
</tr>
<tr>
<td>ACL 3ii</td>
<td>n/a</td>
<td>-è</td>
<td>-è</td>
</tr>
<tr>
<td>ACL 4(ii)</td>
<td>n/a</td>
<td>-ù</td>
<td>-ù</td>
</tr>
<tr>
<td>ACL 5(ii)</td>
<td>n/a</td>
<td>-ǹg [-j]</td>
<td>-ǹg</td>
</tr>
</tbody>
</table>

Table 1: Cross-reference marking and tone classes
2 GRs in West !Xoon

2.1 Encoding of GRs

(5) Clause-PO Pre-verbal Post-verbal "Late" post-verbal
è å qhâdi qhâdi ntâgi ü å Dâ å kê nàñê
3ii PST noon.3i pull-1 hartebeest.S1 GEN:1 meat.S1 MPO:3i house.S3i

He pulled the meat of the hartebeest to the house at noon. (TWb080312-0304.041)

(I) Word order
- basic: preverbal vs. postverbal position
- secondary: preverbal clause-initial vs. immediately preverbal - cf. (5): 'he' vs. 'noon'
- secondary: immediately postverbal vs. "late" postverbal - cf. (5): 'meat' vs. 'house'

(II) Verbal cross-reference
- single slot in 2nd mora of bimoraic transitive verb lexemes within above system, cross-referencing the first postverbal NP - cf. (5): 'pull' indexes 'meat of the hartebeest'
- typologically unusual as only with non-S/A and not with S/A participant

(III) Flagging
- principal distinction between presence vs. absence of flagging (correlating with "later" postverbal vs. other GR positions) - cf. (5): 'meat' vs. MPO + 'house'
- additional distinction within the set of inflected prepositions in the "late" postverbal slot which also must cross-reference their complement according to above system (see §2.2.4)

+ preliminary analysis of formal encoding results in a set of four basic GRs

<table>
<thead>
<tr>
<th>GR</th>
<th>I Clause-initial</th>
<th>II Preverbal</th>
<th>III Postverbal</th>
<th>IV &quot;Late&quot; postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word order (_, = GR slot)</td>
<td>(PO) (GRID) V</td>
<td>V</td>
<td>V</td>
<td>V (GRID) _</td>
</tr>
<tr>
<td>Verbal cross-reference</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Flagging</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Language-specific label</td>
<td>&quot;SUBJECT&quot;</td>
<td>&quot;ADVERB&quot;</td>
<td>&quot;OBJECT&quot;</td>
<td>&quot;PREPOSITIONAL&quot;</td>
</tr>
</tbody>
</table>

Table 2: Preliminary system of basic GRs in West !Xoon defined by formal encoding

> appears to be already defined sufficiently in terms of a linear template
> all postverbal NPs are marked, either by verbal cross-reference or prepositional flagging

2.2 Four basic GRs

I Subject (SUBJ)
+ typologically unremarkable in largely conflating information-structural role of topic and semantic role of S/A
+ positionally defined, also in opposition to fronted initial NP for term focus and thicketness

(6) tuu k[u si qoye] (as opposed to simple: tuu si qoye) people.4 THET:4 IPFV dance.initiation:3
The people dance the initiation dance. [involving topic shift] (TWa040429-0101.057)

II Adverb (ADV)
+ semantically restricted to expressions of manner, time and location
+ GR status only to the extent that filler of syntactic position is nominal
> not universal because of other typical fillers, e.g., true adverbs, locative deictics (nominal fillers identifiable by morphology and possible alternative postverbal occurrence)

(7) ê kàkkh stf Òðtñ
3ii here IPFV sleep
He is sleeping here. (TWb090405-0111.016)

III Object (OBJ)
+ triggered by inherently transitive verbs (as opposed to intransitive and other verb types)
> first in sequence of postverbal constituents before all prepositional NPs of GRIV

+ verbal cross-reference can be true agreement of a GR III Object, as in (8)a., or anaphoric pronounization without a GR, as in (8)b./c.

(8) a. ḥâl si sày-è tâhà Canonical agreement
dog.S1:DEF IPFV bite-3i, person.S3i
The dog bites the person. (TWb090405-0104.004)
b. òqàq rè ḥâl, ḥâl kà sày-è Non-GR anaphoric O pronounization
child.S3i ID dog.S1 FUT bite-3i
It’s a child, a/the dog will bite it. (TWb090405-0104.014)
c. ḥâl si sày-è Òðâà Non-GR anaphoric POSSR pronounization
dog.S1:DEF IPFV bite-3i, offspring.S3i
The dog bites his child, (TWb090405-0104.007)
+ object encoding in verb serialization only relevant for last verb, non-final transitive verb occurs in default form (which varies unpredictably across different verb lexemes)

(9)

a. ṣá ṣá ᵁ ᵁ-

2S IPFV bite-1 meat.S1
You bite the meat (off). (TWb090405-0104.002)

b. ṣá ṣá ᵁ ᵁ-

2S IPFV bite take.off.S-1 meat.S1
You bite the meat off. (TWb090405-0104.003)

IV Prepositional (PREP)
+ prepositionally flagged NPs represent in fact a set of GR (sub)types which is internally structured (see §2.3)

<table>
<thead>
<tr>
<th>No.</th>
<th>Form</th>
<th>Label</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ḗ/M</td>
<td>Comitative</td>
<td>COM</td>
</tr>
<tr>
<td>2</td>
<td>kuM</td>
<td>Similarative</td>
<td>SIML</td>
</tr>
<tr>
<td>3</td>
<td>n/M</td>
<td>Dative</td>
<td>DAT</td>
</tr>
<tr>
<td>4</td>
<td>sM</td>
<td>External object</td>
<td>EXO</td>
</tr>
<tr>
<td>5</td>
<td>kM</td>
<td>Transitive</td>
<td>TRA</td>
</tr>
<tr>
<td>6</td>
<td>k/M</td>
<td>Multi-purpose oblique</td>
<td>MPO</td>
</tr>
</tbody>
</table>

Table 3: List of prepositions

2.3 The prepositional complex

2.3.1 Six different prepositionals

2.3.1.1 Comitative (COM)
+ semantically specific reference to association with a state-of-affairs in a wider sense
> predominantly comitative, instrumental, etc.

(10) ṣá ṣá ᵁ ᵁ-

3ii IPFV come COM:3i spouse:3i
He comes with his wife. (TWb090405-0105.003)

(11) ṣá ṣá ᵁ ᵁ-

3ii IPFV go COM:1 path.S1 LREL:1 straight-ADV stay F.REL:1
She is going on ("with") the path which is straight. (TWb090405-0114.020)

+ also used for NP coordination causing occasional potential syntactic ambiguity between

[V OBJ] [COM NP] vs. [V [NP COM NP]]

2.3.1.2 Similative (SIML)
+ single inherently “prepositional” verb ná ‘appear, look like’ with obligatory similative:

(12) kuM ṭǎqʰathan ná kuM ṭǎqʰ an cattle.1:DEF be.fat appear SIML:1 eland.S1
The cow is as fat as an eland. (TWb080325-0108.014)

+ otherwise triggered by specific semantic reference to similarity, manner etc.

(13) e si tana (ka)kuPeter

3ii IPFV talk SIML:3ii PN:3ii
He speaks/talks like Peter.

2.3.1.3 Dative (DAT)
+ single prepositional verb

taqhm̀̀ 'recover' with obligatory dative:

(14) nhhú́ ù́ n-a qà̀ ò̀ qà̀ ǹ̀ qà̀ ǹ̀ gǃ́ q’à̀ m̀̀ , xa ta qhm̀̀ ǹ̀ è̀ l̀̀ d. S 3i- father. S3i   recent l IPFV be. sick.S and be. weak  but 3i recover DAT:3i
The old man was sick and weak, but he is recovered. (TWb080411-0114.003)

+ otherwise tied to cooccurrence with other GRs and marks also productively benefactives, malefactives, and other goal-like participants
- object-dative combination as default for transfer expressions
> no obvious simple ditransitive verbs including a genuine ‘give’ (cf. Güldemann 2007)

(15) Ḗ d̀̀ ṭʰád̀̀ Ḗ i- nódi ʔnágu

3ii PST NEG grab.S-1 wood.S1 DAT:1S
He did not give the stick to me. [lit.: get the stick for/to him; get him the stick]

(TWB090405-0116.009)

+ originates historically in a transitive verb ʢM ‘give’ (Güldemann 2007)

2.3.1.4 External object (EXO)
+ relevant for a closed class of so far less than 10 prepositional verbs
> NP semantically object-like:
- human: ṣékháa sM ‘ask’ (+ for sth. kM), Ḗ di sM ‘call’, Ḗ ín sM ‘hate’
- alternating with TRA kM: gqoqba-gqoqba sM ‘shake’, dialectally gqoqba sM ‘scratch’

1 The alternation between kuM and kakuM seems to be free and remains unclear.
+ controversial status as an independent GR because sM:
- originates in a transitive verb sM 'get', as in (16), which is still transparent for speakers
- behaves occasionally as a phonetically long bimoraic verb, as in (17)
> alternatively: lexicalized verb compound with canonical GRIII Object (cf. (9)b.)

(16) á á sá-́ pénh
2S PST get-1 pen.S1
You have got a pen. (TWb080312-0201.096)

(17) ŋá fúɛn sá-́ qoŋe /É
1S hate EXO/get-3i ostrich.S3i GEN:1 meat.S1
I hate/don't like the meat of the ostrich. (TWb090405-0107.006)

> predominant phonetic shortness as principal criterion for already viewing sM as a GR-defining preposition but realistically presumably on the threshold of grammaticalization

2.3.1.5 Transitive (TRA)
+ occurs with a second but larger class of prepositional verbs

(18) ŋi sì ńámí k̄e fˈɔyɛ
1SIPFV throw TRA:3i stone.S3i
I throw a stone. (TWb040519-0301.252)

+ also used productively for transitivization of intransitives, among them recurrent loans, e.g., Khoekhoe j'iru 'forget', kārū 'make', jhjāljhjā 'collect'

(19) ŋi sì jənh k̄i tqãhè
4 IPFV talk TRA:1 hunt.1
They talk about the hunt (TWb090405-0113.002)

+ also with clausal constituents after j'ān 'must', nńáni 'want', jɑŋrh 'love', etc.

(20) a. ę jɑŋrh k̄a ɡjoón
3ii love TRA:2i egg.P2i
She likes eggs. (TWb090405-0102.015)

b. ę jɑŋrh k̄a dān-sā
3ii love TRA:2i eat-NOM.2ii
She likes to eat. (TWb090405-0102.013)

c. ę jɑŋrh k̄ek̄e s̄i ɑ-n ɡjoón k̄ẽk̄e
3ii love TRA:3ii IPFV eat-2i egg.S2i COMP
She likes to eat eggs. (TWb090405-0102.016)

2.3.1.6 Multi-purpose oblique (MPO)
+ as opposed to the areal trend, semantically more restricted to truly peripheral roles like, e.g., location, (21), time (22), event quantity (23)
> restricted semantic overlap with other prepositions (instrument in (25) instead of COM)

(21) lóma-k̄e fər̄i k̄e tʃuá̃
eland.P2ii-P be.much MPO:3i GN.3i
Elands are numerous in tʃuá̃. (TWb080411-0111.010)

(22) ę jə-č vɔ̃y̆k s̄e k̄i ʃəd̄i kəρ̄i
3ii stay.at -1 prison.S1 inside.S2ii MPO:1 day.S1 DEM.PROX:1
... He is now ('this day/today') in prison. (TWb080411-0108.003)

(23) ę d̄a ɡfos̄r̆a k̄e n̄iŋ̄h-sã
3ii PST vomit MPO:3i two-ABSTR.3i
He has vomited two times. (TWb090405-0112.013)

2.3.2 Internal structuring

2.3.2.1 Transitive vs. multi-purpose oblique
+ segmentally unitary pattern [VERB kM NP] diverse according to verb valence and resulting GR status of complement

<table>
<thead>
<tr>
<th>Verb + kM pattern</th>
<th>Semantics</th>
<th>Trans. example with kM</th>
<th>Intrans. example without kM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lexicalized transitive inherent object</td>
<td>njámi kM 'throw'</td>
<td>does not exist</td>
</tr>
<tr>
<td>2</td>
<td>Lexicalized alternation ± object</td>
<td>tấ kM 'leave'</td>
<td>tấ 'remain'</td>
</tr>
<tr>
<td>3</td>
<td>Productive alternation possible object</td>
<td>njáŋn kM 'sneak up'</td>
<td>njáŋn 'sneak'</td>
</tr>
<tr>
<td>4</td>
<td>Ad-hoc MPO addition no object</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Verb patterns with kM flagging

+ subtle prosodic difference in tone class II between patterns 1-3 vs. 4
> crucial argument for distinguishing transitive kM and multi-purpose oblique kM

(24) a. Qɔq̆é s̄i xóá k̄i hɨp̄t̄al̄
child.S3i:DEF IPFV write TRA:1 hospital.S1
The child is drawing the hospital. (TWb080829-0101.007)

b. Qɔq̆é s̄i xóá k̄i hɨp̄t̄al̄ s̄ẽ
child.S3i:DEF IPFV write MPO:1 hospital.S1 inside.S2ii
The child is drawing in the hospital. (TWb080829-0101.006)
(25) ʃi PST wipe TRA:1 table.S1 MPO:1 clothing.S1 L.REL:1 be.wet F.REL:1
She wiped the table with a wet cloth. (TWb090405-0116.046)

Table 5: Tonal differentiation between inflected TRA and MPO marker

<table>
<thead>
<tr>
<th>Person and agreement class</th>
<th>Transitive (TRA)</th>
<th>Multi-purpose oblique (MPO)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agreement</td>
<td>Anaphoric Agreement</td>
</tr>
<tr>
<td>Tone class I 1S</td>
<td>n/a</td>
<td>k(ä)</td>
</tr>
<tr>
<td></td>
<td>2S</td>
<td>k(ä)</td>
</tr>
<tr>
<td></td>
<td>1P</td>
<td>k(ä)</td>
</tr>
<tr>
<td></td>
<td>2P</td>
<td>k(ä)</td>
</tr>
<tr>
<td>ACL 2i</td>
<td>kë [kë]</td>
<td>k(ä)</td>
</tr>
<tr>
<td>ACL 3i</td>
<td>kë [kë]</td>
<td>k(ä)</td>
</tr>
</tbody>
</table>

| Tone class II ACL 1(ii)    | kï                | kï                              | kï | kï |
|                            | ACL 2ii          | kï                              | kï | kï |
|                            | ACL 3ii          | kï                              | kï | kï |
|                            | ACL 4(ii)        | kï                              | kï | kï |
|                            | ACL 5(ii)        | kï                              | kï | kï |

3 Summary

+ refined system of GRs which still has four basic GRs
- aligns somewhat unexpectedly two argument prepositionals (EXO, TRA) with the non-flagged OBJ as opposed to the four oblique prepositionals (DAT, COM, SIML, MPO)
- lexicalized GRs privileged over other slots, irrespective of the canonical syntactic sequence
GRI     GRII     GRIII     GRIV
Clause- Pre- Post- “Late” post-
initial verbal verbal verbal

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>PO</th>
<th>ADVERB</th>
<th>V</th>
<th>OBJECT</th>
<th>OBLIQUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBJ</td>
<td>SIML(+LEX)</td>
<td>EXO</td>
<td>DAT(+LEX)</td>
<td>COM</td>
<td></td>
</tr>
<tr>
<td>TRA</td>
<td>MPO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2: Revised system of four basic grammatical relations

+ West !Xoon as an “extreme” variant of the areal theme established by Non-Khoe
> (retained) canonical Non-Khoe features:
  - highly fixed linear syntactic template (despite greater semantic specificity)
  - patient-like participants not conveyed by a unitary morphosyntactic strategy: non-flagged OBJ vs. prepositional EXO and TRA
  - assignment to linear template steered to a considerable extent by animacy (cf. COM-MPO restriction in §2.3.2.3), needs more systematic confirmation by discourse analysis
> (innovative) non-canonical Non-Khoe features:
  - elaborate preposition set (particularly vis-à-vis opposite Ju extreme with single MPO)
  - semantic elaboration and specificity due to increased flagging inventory
  - important exceptions to the generality of the animacy hierarchy with DAT and SIML
  - stricter separation of argument vs. oblique in typologically expected direction

> COM before MPO; apparently impossible inversion due to effect of animacy hierarchy, although conceivable by European standards
(26) ʃi si sɗak ŋqeq ke n)!=̣ûx txe
3ii IPFV go COM:3i child.S3i MPO:3i house.S3i big:S3i
She goes with the child to the big house. (TWb090405-0105.007-11)
Abbreviations
1/2/3/4/5 Agreement class or, if immediately followed by S/P, person; i/ii Tone class
A Agent (as primary transitive argument), ABSTR Abstract, ACL Agreement class, ADV
Adverb, COM Comititative, COMP Complementizer, COP Copula, DAT Dative, DEF Definite,
DC Dialect cluster, DEM Demonstrative, EXO External object, F.REL Final relative, FUT
Future, GEN Genitive, GN Geographical name, ID Identificational, INF Infinitive, IPFV
Imperfective, IREL Initial relative, LEX Lexicalization, M Mora (vowel or nasal segment),
MPO Multi-purpose oblique, NEG Negative, NOM Nominalization, NP Noun phrase, O object
(as second transitive argument), OBJ Object (as GR), OBLIG Obligation, P Plural, PN Proper
name, PO Predicate operator, POSSR Possessor, PREP Preposition, PROX Proximal, PST Past,
S Singular, S subject (as single intransitive argument), SBJ subject (as GR), SIML Similative,
THET Theticity, TRA Transitive, V Verb

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