

An analysis of the interaction of deponency and polarity in Tübatulabal

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0. Introduction

In the Uto-Aztecan language Tübatulabal, described by Voegelin (1935), reduplication is employed to express the value telic (perfective) for typical verbs, whereas the basic stem expresses the value atelic (imperfective). (We mark in bold the typical verbs in table 1 which appear in the actual fragment `tubatulabal_deponents.dtr`).

| atelic | telic |
|--------------|--------------------------|
| ela- | e?ela 'jump' |
| tik- | it ik 'eat' |
| tana- | andana 'get down' |
| pa:abi- | a:ba:abi 'be tired' |
| yu?udz- | uyu?uts 'throw' |

Table 1: Typical stem alternations in Tübatulabal (Voegelin 1935: 95, 102)

In contrast with this typical situation there are about 30 verbs which reverse the morphological expression so that the telic value is realized by the basic stem, and the atelic value is realized by the reduplicated stem. In table 2 we give the three example reverse polarity pairs which appear in our account. (A larger list can be found by looking at Baerman's (2006a) entry for Tübatulabal on the typological database. Tübatulabal is accessible by selecting from the Feature tree morphosyntax/TAM/aspect.)

| atelic | telic |
|--------|------------|
| anaŋ- | naŋ 'cry' |
| andaŋ- | taŋ 'kick' |
| uŋuŋ- | nŋ 'pound' |

Table 2: Aspectual pairs with the reverse morphological relationship (Voegelin 1935: 95-96)

It is important to note that the atelic (imperfective) requires further suffixation, whereas the telic (perfective) can occur without further affixation. This generalization holds independently of whether the stem is reduplicated or not, and this suggests that the deponency involving polarity is not a matter of reversing the morphological expression of a whole word form for a particular inflectional class, but is instead a matter of stems.

1. Overview of the Network Morphology account

Key distinctions in the account

The Network Morphology account as represented in the file `tubatulabal_deponents.dtr` makes a number of key distinctions.

- The formation of reduplicated stems is separate from the morphosyntactic function with which they may be associated. In the Network Morphology/DATR theory this is expressed by a separate node called REDUP. This takes the basic stem and reduplicates the vowel of the initial syllable.
- The lexical entries contain information about the consonants and vowels of the stem. The node BASIC_STEM concatenates these to form the basic stem.
- There is a default statement at the node VERB which says that the basic stem is the imperfective (atelic) stem, and the reduplicated stem is the perfective (telic) stem. This is done by referring to the nodes REDUP and BASIC_STEM.
- Verbs of the type in table 2 are a lexically defined class specified at the node POLAR_VERB, which inherits from VERB but reverses the morphological expression.

A sketch of the Network Morphology account

The node VERB

The node VERB looks like this.

```

VERB:
  <> ==
  <mor> == MOR_VERB
  <syn cat> == verb
  <stem perf> == REDUP:<stem>
  <stem imperf> == BASIC_STEM:<stem>.

```

The morphology of verbs is defined at MOR_VERB. The perfective stem is the reduplicated stem, and the imperfective stem is the basic stem.

The node POLAR_VERB

The nodes REDUP and BASIC_STEM define reduplication and the basic stem without reference to morphosyntactic content. The POLAR_VERB class reverses the relationship.

```

POLAR_VERB:
  <> == VERB
  <stem perf> == BASIC_STEM:<stem>
  <stem imperf> == REDUP:<stem>.

```

The POLAR_VERB class still inherits information about syntactic category and other morphology from VERB.

Example Lexical Entries

The verb *ela-/eʔela* 'jump' is a typical verb and therefore inherits from VERB. We have given the lexical entry node for this verb the label *Verb1*. Any label can be used for the name of a node, such as 42, for example.

```

Verb1:
  <> == VERB
  <gloss> == jump
  <stem vowel1> == e
  <stem cons2> == l
  <stem vowel2> == a.

```

The verb *andaŋ-/taŋ* ‘kick’ is a polar verb and therefore inherits from POLAR_VERB. We have given the lexical entry node for this verb the label Verb4.

```

Verb4:
  <> == POLAR_VERB
  <gloss> == kick
  <stem cons1> == t
  <stem vowel1> == a
  <stem cons2> == ŋ

```

Example Outputs

These lexical entries will inherit the appropriate information so that *ela-/e?ela* has the reduplicated stem for the perfective, and *andaŋ-/taŋ* has the reduplicated stem for the imperfective.

```

Verb1:<gloss> = jump.
Verb1:<syn cat> = verb.
Verb1:<mor perf> = e ? e l a.
Verb1:<mor imperf> = e l a -.

Verb4:<gloss> = kick.
Verb4:<syn cat> = verb.
Verb4:<mor perf> = t a ŋ.
Verb4:<mor imperf> = a n d a ŋ -.

```

The hyphen indicates that the form is a bound one and must undergo further affixation. We have left this part of the morphology out of consideration, as it has been our aim to demonstrate the fundamental aspects of the analysis and confirm that we can generate the correct stems.

2. Conclusion

If reduplication and basic stem are treated as separated from morphosyntax to a degree, it is possible to account for the polarity effects. A default inheritance approach has the added advantage of classifying the polar verb class as less typical, because the node associated with this class inherits from the more general class.

References

- Baerman, Matthew. 2006a. *Typological Database on Deponency*. <<http://www.smg.surrey.ac.uk/deponency/>>.
- Voegelin, Charles F. 1935. *Tibatulabal grammar*. Berkeley: University of California Press.

