An implemented account of the antipassive/transitive mismatch in Chukchi

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0.   Introduction

This document outlines the Network Morphology account of the use of antipassive forms in Chukchi for the transitive paradigm. The situation in Chukchi is neatly summarized in the typological database for deponency (Baerman 2006a) where it is classified in the feature tree as morphosyntax/verbal argument structure/diathesis/antipassive and the domain tree as paradigmatic/person (i.e. where person is a conditioning feature). The mismatch in Chukchi is described as follows:

> "Transitive verbs mark subject and object. For certain combinations, the verb form is morphologically antipassive, but remains syntactically transitive." (Baerman 2006a, entry for Chukchi)

The reader is referred to the paradigms from Spencer (2000) and Skorik (1977) to be found on the cross-linguistic database (Baerman 2006b, entry for Chukchi).

The use of the antipassive forms as part of the transitive paradigm is interesting for theoretical reasons, because, as Spencer (2000: 219) notes, transitive refers to the antipassive for some of its realizations and, if one understands the issue in terms of the notion markedness, this appears to involve reference to a marked feature value (something which Impoverishment Theory (Halle and Marantz 1993) claims cannot happen).

1.   Overview of the Network Morphology account

Key distinctions in the account

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

- There is a distinction between syntactic transitivity (as represented by the path `<syn transitivity>`) and morphological transitivity (as represented by the path `<mor transitivity>`), which are the same in the default instance.

- The theory makes use of the notions 'syntactic subject' (`<syn subj>`) and 'syntactic object' (`<syn obj>`), as well as 'ergative argument' (`<syn erg-arg>`) and 'absolutive argument' (`<syn abs-arg>`). The syntactic subject (`<syn subj>`) is defined as the absolutive argument (`<syn abs-arg>`) of an intransitive or antipassive verb, or the ergative argument (`<syn erg-arg>`) of a transitive verb. The syntactic object (`<syn obj>`) is defined as the absolutive argument (`<syn abs-arg>`) of a transitive verb.

- There is an additional distinction related to argument structure, that of the 'first argument' (`<syn arg1>`). If a verb is intransitive or antipassive, the first argument (`<syn arg1>`) is the same as the syntactic subject (the sole argument). If a verb is transitive it is, in the default instance, the same as the object. In both cases, this fits with the intuition that the absolutive argument is in some sense the verb's first argument. However, if there is a mismatch between syntactic transitivity and morphological transitivity, such that a word is syntactically transitive but morphologically antipassive then `<syn arg1>` is the same as the syntactic subject (`<syn subj>`), and because the verb is syntactically transitive, this is the same as the ergative argument (`<syn erg-arg>`).

A sketch of the Network Morphology account

1.   The default relationship between syntactic and morphological transitivity

In the default instance, syntactic transitivity and morphological transitivity are the same. As the primary conditioning feature for the mismatch in argument structure is the feature person, the theory determines morphological transitivity by evaluating a word's syntactic transitivity and the person value of its ergative argument (i.e. the subject of a transitive verb). The default correspondence between morphological transitivity and syntactic transitivity may be overridden, *only if* syntax requires a syntactically transitive word with the relevant person values. Therefore, the default syntax-morphology mapping applies for all real (i.e. syntactic) intransitives and antipassives. In other words, syntactically intransitive words are morphologically intransitive, and syntactically antipassive words are morphologically antipassive.

2.   Mismatches between syntactic and morphological transitivity

Mismatches arise when the verb is syntactically transitive. This involves evaluation of arguments to determine morphological transitivity. If the ergative argument is second person, the person and number of the absolutive argument are evaluated. If the ergative argument is third person, the person and number of the absolutive argument are evaluated, and additionally the number of the ergative argument. If the ergative argument is neither second or third (i.e. it is first person), the TAM (`<syn tns>`) is evaluated. This is because the transitive paradigm of first person subjects only exhibits the mismatch in present 2.

If the subjects are second or third person, the morphological transitivity is determined by the following statements:

```
SECONDORTHIRDSUBJ:
    <> == TNS:< "<syn tns>" >
    <on first plural> == antipass2
    <on first sing> == antipass1
    <on first sing if third plural> == "<syn transitivity>"
    <on first plural if third> == "<syn transitivity>"
    <on second> == "<syn transitivity>".
```

For the second and third person subject paradigms where the absolute arguments evaluate to first plural the verb will be morphologically antipassive 2 (using the affix *tku-*). Likewise, where the absolute arguments evaluate to first singular the verb will be morphologically antipassive 1 (using the affix *ine-*). If the object is first singular and the subject third plural, morphological transitivity is the same as the syntactic transitivity (i.e. there is no mismatch). This is also true if the object is first plural and the subject third person. If the object is second person there is no mismatch.

3.   Example Outputs
The form of third person plural subject on first person singular object involves no mismatch, and so morphological transitivity and syntactic transitivity line up. (Note that the morphological transitivity information is irrelevant for syntax. It has been included in the theorem dumps so that the reader may see more clearly where the mismatch arises.)

```
Word43:<mor word> = ne- wiriŋ -ɣəm.
Word43:<syn transitivity> = trans.
Word43:<syn tns> = past-1.
Word43:<syn subj person> = third.
Word43:<syn subj number> = plural.
Word43:<syn obj person> = first.
Word43:<syn obj number> = sing.
Word43:<syn abs-arg person> = first.
Word43:<syn abs-arg number> = sing.
Word43:<syn erg-arg person> = third.
Word43:<syn erg-arg number> = plural.
Word43:<mor transitivity> = trans.
Word43:<syn arg1 person> = first.
Word43:<syn arg1 number> = sing.
```

In contrast, the form of the second person singular on first person plural object involves a mismatch, such that it is morphologically antipassive 2, but syntactically transitive.

```
Word45:<mor word> = wiriŋ - tku -ɣʔi.
Word45:<syn transitivity> = trans.
Word45:<syn tns> = past-1.
Word45:<syn subj person> = second.
Word45:<syn subj number> = sing.
Word45:<syn obj person> = first.
Word45:<syn obj number> = plural.
Word45:<syn abs-arg person> = first.
Word45:<syn abs-arg number> = plural.
Word45:<syn erg-arg person> = second.
Word45:<syn erg-arg number> = sing.
Word45:<mor transitivity> = antipass2.
Word45:<syn arg1 person> = second.
Word45:<syn arg1 number> = sing.
```

2.   Conclusion
As noted, the theory makes use of a distinction between morphological transitivity and syntactic transitivity. As Spencer (2000: 204) notes, the basic function of prefixes in Chukchi is to mark subjects, and the basic function of suffixes is to mark the absolutive

argument. As with the analysis presented by Spencer, we have made use of a distinction between subjects and objects on the one hand, and ergative and absolute arguments on the other. However, Spencer (2000: 217)'s analysis may appear to have the advantage of not requiring a special `<syn arg1>`. However, Spencer (2000: 217) makes a distinction between S and Subj, the latter being both transitive and intransitive subject. It is clear that some distinction of this kind is required. For example, Word45 `wiriŋtkuvʔi` would be `wiriŋtkuvʔmək`, if suffixes are taken as just realizing the absolute argument. The suffix `-mək` is first person absolute plural and the suffix `-vʔi` marks singular subject (Spencer 2000: 217). But there must be some way of determining which realization takes precedence. In fact, it is morphological transitivity which does this.

References

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