Distribution of Tobelo Property Concept Words Across Lexical Categories

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1. Introduction.

Recent interest in the universality of lexical categories has led to a flurry of cross-linguistic typological studies that seek to characterize the various parameters along which languages distinguish lexical categories. In spite of occasional arguments to the contrary, usually based on limited evidence from only part of the lexicon, it appears that all languages distinguish the major categories of Noun and Verb. These categories can be defined externally, both on classical semantic grounds (Nouns denote objects, Verbs denote actions) and on pragmatic grounds (Nouns refer, Verbs predicate) (cf. Hopper and Thompson 1984; Schachter 1985; Croft 1991).

Yet many languages have been identified which apparently lack a lexical category of Adjective. In most of those languages the work of Adjectives is done by either Nouns or Verbs. Thus, among such non-adjectival-verb and adjectival-noun (cf. Schachter 1985). Here I present evidence from the Papuan language Tobelo which suggests that some non-adjectival languages may express adjective-like words as either Nouns or Verbs, depending on discourse context.

2. Property Concepts.

In a seminal study of the cross-linguistic typology of Adjective, Dixon (1977) identifies seven semantic types which make up the (English) category Adjective, as in (1). I adopt Thompson's (1988) term "property concept" to refer to these words, which can in general be considered to denote properties or qualities.

(1)   DIMENSION — big, long, wide, thick, ...
        PHYSICAL PROPERTY — heavy, rough, ...
        COLOR — black, white, red, ...
        HUMAN PROPENSITY — jealous, happy, kind, clever, ...
        AGE — new, young, old
        VALUE — good, bad, delicious
        SPEED — fast, slow

Non-adjectival languages distribute property concept (PC) words in these seven classes across the lexical categories of Noun and Verb. The category which subsumes PC words is characteristic for adjectival-verb and adjectival-noun languages. But as Thompson (1988) notes, this need not be the case. For example, in Japanese some PC words behave morphosyntactically as Nouns while some behave more like Verbs (Dixon 1977). In fact, some non-adjectival languages distribute individual semantic classes in (1) across lexical categories. In Yup'ik, some COLOR terms are Nouns while other are Verbs (Jacobson 1995:253). Such languages can be said to represent points on a continuum from adjectival-verb languages to adjectival-noun languages, sot hat some PC words are morphosyntactically indistinguishable from Nouns, while others are morphosyntactically indistinguishable from Verbs.

Quite a different picture emerges in the "switch-adjective" language Tobelo. Unlike Tobelo Nouns and Verbs, Tobelo PC words do not exhibit distinguishing morphological characteristics, but rather are distributed across the categories of Noun and Verb. Individual Tobelo PC words sometimes occur as Verbs, with requisite agreement morphology, and sometimes occur as Nouns, morphologically marked by the relational prefix *ma-* (glossed REL). For example,[1]

(2)   *o-gakana*   *i-doto*
        NM-knife   3A-sharp
        'a sharp knife'

(3) *o-otoimi*   *ma-doto*   *wo-diai*
     NM-spear   REL-sharp   3MASC:A-make
     'he made a sharp spear'

The existence of forms like (2) is consistent with Tobelo being an adjectival-verb language, in which PC words form a subclass of Verbs. The existence of forms like (3) is consistent with Tobelo being an adjectival-noun, in which PC words form a subclass of Nouns.

3.   Tobelo Lexical Categories.

Tobelo provides interesting insight into the problem of lexical categorization because Tobelo Nouns and Verbs exhibit clear and distinct morphological reflexes. Before considering the distribution of Tobelo PC words across the categories Noun and Verb, it is important to carefully examine the syntactic behavior of both nominal and verbal forms of PC words. In contrast to some free-adjectival languages, such as Japanese, there is no basis for distinguishing a separate lexical category of Adjective in Tobelo. Verbal PC words are true Verbs, and nominal PC words are true Nouns.

3.1 Verbs.

Tobelo Verbs cross-reference the person and number of at least one and as many as two core arguments via an active-stative system of verbal cross-referencing. In addition, Verbs may be optionally inflected for aspect and negation. Complex verbal constructions are formed paratactically with no distinction between matrix and subordinate Verb. With respect to these verbal properties, Tobelo verbal PC words (i.e., PC words which are expressed as verbs) exhibit no special or restricted distribution.

3.1.1. Cross-Referencing.

First, let's consider verbal cross-referencing. Tobelo distinguishes two lexical classes of Verb: Active and Stative. Active verbs may take on or two core arguments, while Stative verbs take only one core argument. As with other active-stative languages, the cross-referencing system does not treat the single argument of intransitive Verbs uniformly. One-argument (i.e., intransitive) Active Verbs cross-reference their single "actor" (A) argument via one paradigm of verb prefixes, as in (4), while one-argument Stative Verbs cross-reference their single "undergoer" (U) argument via a different paradigm, as in (5).

(4)   *o-Yahe*   *wo-lio*
      NM-Y.   3MASC:A-return.home
      'Yahe is going home'

(5)   *o-Yahe*   *i-wi-ihumu*
      NM-Y.   3A-1MASC:U-tremble
      'Yahe is trembling'

Verbal PC words always occur as one-argument (i.e., intransitive) Verbs, either Active or Stative. Notice that the PC words in (6) and (7) below take the same cross-referencing pronouns as do the intransitive verbs in (4) and (5) above.

(6)   *o-Yahe*   *wo-pako*
      NM-Y.   3MASC:A-big
      'Yahe is big'

(7)   *o-Yahe*   *i-wi-bole*
      NM-Y.   3A-3MASC:U-tired
      'Yahe is tired'

Two argument (i.e., transitive) Verbs employ both actor and undergoer cross-referencing, as in (8).

(8)　　*o-ode*　　　*t-a-toimi*
　　　　NM-pig　　　1A-3U-shoot
　　　　'I shot a pig'

The fact PC words cannot occur as transitive Verbs does not represent a morphosyntactic restriction. Rather, PC words are semantically restricted to being a property or quality of a *single* argument and thus do not occur as two-argument Verbs.

3.1.2. Aspect and Negation.

Aspect and negation are indicated on Tobelo verbs via a system of suffixal morphemes. Verbs need not be specified for aspect, and are only so marked in contrastive contexts. Verbal PC words occur with the full range of aspectual and negative suffixes available for other Verbs. For example,

(9)　　*i-hi-timono-oka*
　　　　3A-1U-old-PERF
　　　　'I'm old' (Paltiel)

(10)　　*i-wi-hiri-oli*
　　　　3A-3MASC:U-old-ASP
　　　　'He's sick again' (Hueting 1936)

(11)　　*i-mi-hiri-ahi*
　　　　3A-3FEM:U-old-IMPERF
　　　　'She's still sick' (Hueting 1936)

(12)　　*ona*　　　　*y-a-magawe-ua*
　　　　3PL:PRO　　3A-3U-diligent-NEG
　　　　'They aren't hard-working' (Paltiel)

However, PC words do not occur with modal or imperative particles.

(13) *tanu*   *wo-ma-jobo*
     should   3MASC:A-RFLX-leave
     'He should leave' (Hueting 1936)

(14) *uha*   *ni-gigoro*
     NEG   2PL:A-make.noise
     'Be quiet!' (Paltiel)

Again, such facts represent a semantic restriction on PC words, rather than a syntactic one. PC words are semantically characterized as non-agentive and non-volitional, and hence cannot take modal or imperative particles.

3.1.3. Clause Combining.

Tobelo complex verb constructions are paratactic, consisting of a series of verbs each cross-referencing one or more arguments and fully inflected for aspect. There is no morphological marker of subordination and no indication of finiteness. Verbal PC words combine with other verbs just as other intransitive Verbs do.

(15) *ngohi*   *t-a-poa-oka-ua*   *i-hi-gogama*
     1PRO   1A-1U-able-PERF-NEG   3A-1U-ill
     'I'm not able [to go] any more because I'm ill'

(16) *i-wi-bole*   *wo-ruba*
     3A-3MASC:U-tired   3MASC:A-trip
     'He was tired so he tripped'

3.2. Nouns.

Some Tobelo nouns, including nominal PC words, must be marked with relational prefix *ma-*. The relational prefix indicates that the Noun to which it is affixed stands in relation to another (not necessarily expressed) referent. The relation expressed by the relational prefix may be achieved in three ways: linking a genitive construction; previous mention in discourse; and inherent possession. Some Nouns are related to other referents within the

same clause. Such a relationship is expressed in Tobelo in what might be termed a possessive construction. The possessive construction is head-initial, as in the English 'N or N' construction, and the relational prefix marks the dependent Noun.

(17) *o-hepata*   *ma-daluku*
      NM-aren.palm   REL-palm.wine
      'the palm wine from the aren palm'

(18) *o-ngotiri*   *ma-ʎeha*
      NM-canoe   REL-keel
      'the keel of the canoe'

(19) *o-Tobelo*   *ma-nyawa*
      NM-T.   REL-person
      'a person from Tobelo'

   In connected discourse, nominal referents are usually introduced with the noun marker *o-* (glossed NM). Subsequent full nominal mentions tend to be marked by the relational prefix. This pragmatic use of the relational prefix led early researchers to classify *ma-* as a definite article. However, this is merely another relational use of *ma-*, differing only in that the relationship to the other referent is established across clause boundaries.
   Some Nouns have an inherent relationship to other referents, regardless of discourse context. These Nouns, which include nominal PC words, must obligatorily occur with the relational prefix. Visser and Voorhoeve describe this subset of Nouns as one "whose referents are conceived as being 'possessed', or standing in some sort of relation to something else. Nouns belonging to this subset are those denoting parts of wholes, instruments, abstract nouns, titles, and kinship terms when used to refer to one's own relative" (1987:37). Nouns which are inherently possessed include those which stand in an intrinsic relationship to other referents, such as (20) and (21).

(20) *ma-roehe   t-a-doa*
REL-trunk   1A-3U-climb
'I climbed the trunk (of a tree)'

(21) *o-wange   ma-dokara*
NM-sun   REL-red
'the sun is red'

Inherently possessed Nouns cannot be envisioned without relationship to another. (And if such a detached construal is intended, the relational prefix is not used). It is easy to see that nominal PC words share many semantic properties with inherently possessed Nouns marked by the relational prefix. Like inherently possessed Nouns, a PC word cannot be envisioned independently of the Noun which it modifies. So again, the constraint that nominal PC words occur only with the relational prefix is a semantic restriction. Nominal PC words do not form a subclass of the category Noun.

3.3. Derivation and Basicness.

Property concept words are not the only lexical items which may occur as either Nouns or Verbs. Tobelo has a number of morphological processes which derive Nouns from Verbs and vice versa. These processes yield clues as to which category — Noun or Verb — of a particular word is more basic than the other, and hence are relevant to any consideration of a typology of PC words in Tobelo. For example, if it turns out that the Verb forms of Tobelo PC words are the morphologically basic forms from which Noun forms are derived, then we might want to argue that Tobelo is actually an adjectival-verb language. The apparent categorical "switch" could then be relegated to a derivational process. Several pieces of evidence argue against such an interpretation.

Some Tobelo verbs may be nominalized either via reduplication or voicing of the initial consonant of the stem. However, neither process is entirely productive, and many homophonous noun and verb forms exist, as in (22) and (23).

(22)　*i-hi-pokoro*
　　　3A-1U-abdomen
　　　'I'm sick to my stomach'
　　　('I have dysentery')

(23)　*ahi-pokoro*
　　　1POSS-abdomen
　　　'my abdomen'

The preponderance of such forms argues against a derivational interpretation of nominalization.

The problem is more complicated for PC words, because PC words alternate between noun and verb forms without a concomitant change in meaning. For example, both the noun and verb forms of *dokara* 'red' retain the modificational meaning 'red'. Croft (1991) suggests that the basic category of a PC word should be reflected in its ability to participate in scalar constructions such as superlative, equative and comparative constructions corresponding to English 'the strongest', 'as strong as', and 'stronger' constructions. Under this analysis, the lexical category — Noun or Verb — of a PC word which occurs exclusively in such scalar constructions should be taken as the basic form. Unfortunately, such criteria do not unambiguously decide basic category for Tobelo PC words.

Comparative constructions are formed by affixing the durative aspectual suffix on a verbal PC word, as in (24).

(24)　*o-ngoheka　i-mi-torou-ohi　　　de　　ma-nauru*
　　　NM-woman　3A-3FEM:U-bad-DUR　with　NM-man
　　　'the woman is worse than the man' (Hueting 1936)

Yet equative constructions are formed by affixing an equative marker on the noun denoting a thing, which is then used in apposition with an nominal PC word, as in (25).

(25)　*o-wuhi-ani　　　ma-ago-agomo*
　　　NM-comb-EQAT　NM-RDP-large
　　　'as large as a comb'

Superlative constructions are not specifically marked in Tobelo, but rather are subsumed under the comparative construction.

(26)   *o-Yahe   i-wi-kuata-ohi*
       NM-Y.   3A-3MASC:U-strong-DURATIVE
       'Yahe is stronger/strongest'

Thus, some scalar constructions occur as Nouns, and some occur as Verbs. This severely weakens any analysis of basic category based on scalar constructions.

4.   Distribution of PC Words.

The fact the Tobelo PC words may occur as either nouns or verbs merely indicates that there is an alternation between nominal PC words and verbal PC words. This alternation does not necessarily reflect free variation between the two forms. Clearly some linguistic property must govern the distribution of Tobelo property concept terms across the lexical categories Noun and Verb, else there would be no reason for the speaker to employ such categorical alternation. What we have seen is that this distribution is not governed by the semantic type of the PC word: all semantic types exhibit categorical alternation. For example, the PHYSICAL PROPERTY term 'sharp' denoted by the Tobelo stem -*doto* can occur as either Noun or Verb. Thus, we must consider the discourse pragmatic context of the distribution of PC words.

4.1. Attribution and Predication.

Up to this point we have not distinguished the attributive and predicating functions of Tobelo adjectives. This is basically a pragmatic distinction, in that a predicating PC word predicates a property of a discourse referent but is not itself a part of that referent. In contrast, an attributive PC word forms an integral part of a referring expression within a discourse. Yet we have seen that verbal PC words cross-reference the person and number of the noun which they modify. This fact would seem to indicate that verbal PC words are used in a predicating function, while nominal

PC words — which do not exhibit cross-referencing — are used in an attributive function. Under this analysis the distribution of Tobelo verbal and nominal PC words could be seen to parallel the distribution of English predicate adjectives (27) and modifying adjectives (28).

(27)   The knife is sharp.

(28)   The sharp knife.

At least in the case of nominal PC words, the correlation between lexical category and modifying function is quite regular. Attributive PC words are almost always expressed as nouns, as in the following examples.

(29)   *o-akere   ma-ago-agomo   mi-dobongo*
        NM-water   REL-RDP-wide   1INC:A-cross
        'we [inc.] crossed a wide river'

(30)   *o-tau   ma-hungi   wo-diai*
        NM-house   REL-new   3MASC:A-make
        'he made a new house'

However, predicating PC words are not always expressed as verbs. Both verbal PC words (31) and nominal PC words (32) may be used in a predicating function.

(31)   *o-mariam   ma-ago-agomo   mi-ihene*
        NM-k.o.gun   REL-RDP-large   1INC:A-hear

→   *de   duru   i-rame*
        and   very   3A-loud

        'We heard a large gun and it was very loud.' (Kukihi)

(32) *o-senjata   ma-ilingi   i-maka-duhuku   ma-rame*
NM-gun   REL-voice   3MASC:A-RECIP-shoot   NM-loud
'the sound of the shooting guns was loud' (Kukihi)

Nominal PC words which occur in the predicating function are syntactically indistinguishable from predicate nominal constructions, which occur without a copula, as in (33). Notice especially, that such equational expressions do not exhibit nominal cross-referencing.

(33) *una   o-pendeta*
3MASC:PRO   NM-priest
'He is a priest'

Thus it is perhaps not surprising that nominal PC words can serve a predicating function.

A closer examination of connected discourse confirms the pattern implied by the examples above. I examined a 4000 word corpus composed of three spoken narrative texts produced by Tobelo speakers Paltiel Oga, Pak Kukihi and Jason Moloku. Each of the PC words in the corpus was classified as having a predicating or attributive function. The results are listed in (34), grouped by lexical category.

(34)   Attributive vs. Predicating function of Tobelo PC words.

	Attributive	Predicating	Total
nominal PC word	11	5	16
verbal PC word	1	38	39
Total	12	43	55

The data in (34) lend quantitative support to my previous statement that attributive PC words are almost always expressed as nouns. In addition, there is a fairly strong tendency for

predicating PC words to occur as verbs. Nearly 90 percent of the 43 predicating PC words in the sample occur as verbs. However, the map between function and lexical category is not injective. More than 30 percent of the nominal PC words in the corpus have a predicating function. Thus, we find no statistical association between nominal PC words and the attributive function. Nor do we find a statistical association between the predicating function and a particular lexical category of PC word. In order to explain the distribution of Tobelo PC words we must look beyond the attributive versus predicating distinction.

4.2. Information Flow.

In the previous section we discovered a rather incomplete correlation between lexical category of PC words and the attributive vs. predicating distinction. Tobelo PC words which serve a predicating function are most often coded as verbs. However, the number of exceptions to this tendency are great enough to cast doubt on the controlling role of the attributive vs. predicating distinction. But the attributive vs. predicating distinction is not the only pragmatic distinction which is reified in the lexical categorization of Nouns and Verbs. Hopper and Thompson (1984) suggest that the major discourse function of Nouns is to introduce new participants into the discourse, while the major discourse function of Verbs is to "report an actual event of the discourse". This hypothesis implies that lexical categories are intimately ties to information flow. More specifically, Nouns are associated with new referents, while Verbs are associated with established referents.

Thompson (1988) pursues this idea in a text-based study of PC words in two languages, English and Mandarin. She finds that PC words function both to modify Given referents, as Verbs do, and to introduce New referent, as Nouns do. Thus, in adjectival-verb languages we would expect PC words to be associated with Given referents. And indeed, more than 70 percent of PC words in Thompson's study of Mandarin, an adjectival-verb language, function to modify referents which have already been introduced into the discourse.

Though Thompson's study does not specifically address non-adjectival languages, her characterization of the lexical category of PC words in terms of their discourse function suggests that factors relating to information flow may be relevant to our investigation of the lexical category of PC words in Tobelo. A closer look at connected text reveals that Tobelo verbal PC words often modify nouns which have already been established in the discourse, as with *kangela* 'suffering' and *tiwi* 'money' in (35), whereas, nominal PC words often modify nouns which are newly introduced into the discourse, as with *iwi* 'rattan' in (36).

(35) ... (1.5)

> *i-ma-tero-ua*   *ma-kangela,*
> 3A-RFLX-equal-NEG   REL-suffering
>
> *de ... ma-tiwi.*
> and   REL-money
>
> *ma-tiwi*   *i-hutulu,*
> REL-money   3A-small
>
> *ma-kangela*   *i-ʃamoko.*
> REL-suffering   3A-large
>
> 'The suffering and the money are not equal.
> The money is small and the suffering is great' (Paltiel)

(36) *de*   *i-sobo-oli*   *i-ʃahini,*
     and   3A-depart-ASP 3A-float

> *ka*   *yo-dotoaka*   *o-iwi*   *ma-pako.*
> because 3PL:A-break.off   NM-rattan   REL-large
>
> 'and they floated away again,
> because the big rattan lines broke' (Tjileni)

Notice that in (35) the referents *kangela* 'suffering' and *tiwi* 'money' are introduced in the first and second lines. This establishes, or activates, these referents in the discourse. Further modification of these referents is achieved by the use of verbal PC words (from the DIMENSION category). Example (36) describes two islands breaking away from the shore. The islands have already been established in the discourse, but the rattan used to tie them up is mentioned for the first time in the second line of (36). Thus, the referent *iwi* 'rattan' is being introduced into the discourse modified by a nominal PC word.

4.3. Identifiability.

The corpus contains four examples of verbal PC modifying nouns which represent New information. These examples constitute exceptions to the hypothesis that activation state governs the choice of lexical category for PC words. All of these four exceptions are of a similar type. The modified noun is the possessed member in a possessor relationship with a previously mentioned noun phrase, yet the possession relationship is not necessarily an intrinsic one. Referents which are intrinsic properties of Given referents can usually be said to be semi-active in the speaker's consciousness, and hence accessible to the hearer. For example, 'branch' might be considered to be an intrinsic prototypical property of 'tree', so that a mention of 'tree' would activate 'branch', causing the latter referent to also be interpreted as Given information. However, in (2=37) the noun *ija* 'price' is not an intrinsic property of the *gaharu* wood. A mention of *gaharu* 'kind of tree' does not activate *ija* 'price', because the notion of price is not intrinsically associated with the notion of tree.

(37)   *o-gaharu*   *yo-ija,*
       NM-k.o.tree   3PL:A-buy

       yo-uti ...   *o-LabiLabi-iha.*
       3PL:A-descend   NM-L.-DIR

       o-LabiLabi-iha.
       NM-L.-DIR

→   *ma-ija,*
       REL-price

       i-ʎamoko.
       3A-large

       'They came down to Labi-Labi to buy gaharu wood.
       The price was high.' (Paltiel)

What is interesting here is that although referent *ija* 'price' in the fourth line of (37) may not be Given, it is clearly identifiable. That is, although 'price' is mentioned for the first time in the fourth line of (37), this referent is already assumed to be shared by the listener, sufficiently verbalized, and contextually salient — precisely the features which Chafe describes as characterizing identifiability (1994:94). 'Price' may not be an intrinsic, culturally associated property of 'tree', but once the event of buying has been mentioned, the concept of price becomes contextually salient within the narrative frame. This difference merely reflects the fact, observed by Du Bois and Thompson (1991), that there are many pathways to identifiability, any one of which suffice to make a referent identifiable to the hearer. Here, *ija* 'price' achieves identifiability not via a shared cultural frame, but rather via a frame invoked by the previous reference to the event of buying.

This suggests that the relevant dimension of information flow is identifiability, not activation state. In a sense, the existence of multiple pathways allows the dimension of identifiability to offer more flexibility than the dimension of activation. Non-identifiable

referents will always be New, but not all New referents will be non-identifiable, as example (37) attests. It thus seems that Identifiability, not Givenness, is the crucial discourse factor governing the choice of lexical category for Tobelo PC words. Recognizing the important role of Identifiability, I propose the Identifiability Hypothesis (38) to explain the distribution of Tobelo PC words across lexical categories.

(38)   Identifiability Hypothesis (IH): Tobelo speakers express a PC word as a Noun when the noun it modifies represents "Non-Identifiable" information, and as a Verb when the noun it modifies represents "Identifiable" information.

Data from my Tobelo corpus lend strong support to the IH. As shown in (39), there is near complete correlation between Identifiability and the lexical category of PC words.

(39)

	Identifiable	Non-Identifiable	Total
nominal PC word	1	15	16
verbal PC word	39	0	39
Total	40	13	55

The one exception to the IH in (40) consists of a nominal PC word modifying a referent which is Identifiable only via its association with an Identifiable referent. However, the "body part" frame invoked here is far from prototypical.

(40)   *ma-Yahe*   *ma-medemo,*
        REL-Y.   REL-speech

        ma-pako ...   *hokona.*
        REL-large   like.this

        'Yahe's speech was big ... like this.' (Paltiel)

5. Outlook.

Evidence from Tobelo PC words actually supports the traditional, intuitive notion that the Adjective category represents a hybrid of the two major categories of Noun and Verb. PC words share some properties with Nouns and some with Verbs. However, this study argues against the notion that this hybrid is built on semantic properties. The lexical categorization of Tobelo PC words is not sensitive to ill-defined semantic parameters such as time-stability or modification. A nominal usage of a Tobelo COLOR term is no more time-stable than a verbal usage. And both nominal and verbal usages serve the modification function. The hybrid nature of Tobelo PC words derives from the fact that they may occur as either Nouns or Verbs, depending on their discourse function. In general, PC words may function both to modify Given referents, as Verbs do, and to introduce New referents, as Nouns do. In Tobelo, where speakers have a choice between Noun form and Verb form for any particular PC word, we expect speakers to use Noun forms with Non-Identifiable referents and Verb forms with Identifiable referents. Thus, the "split" between Nouns and Verbs is based on discourse factors relating information flow.

Notes

1. Citations in parentheses following English glosses of Tobelo data cited in this paper refer to names of Tobelo speakers Paltiel Oga, E. Kukihi, Jason Moluku and Tobias Tjileni. Data which is not cited is from the author's field notes.

Glossary

1,2,3	1st, 2nd, 3rd person
A	actor
ASP	aspect
DIR	directional
FEM	feminine
IMPERF	imperfective
INC	inclusive
MASC	masculine
NEG	negative
NM	noun marker
PERF	perfective
POSS	possessive
RDP	reduplication
RECIP	reciprocal
REL	relational marker
RFLX	reflexive
U	undergoer

References

Chafe, Wallace. 1994. Discourse, Consciousness, and Time. Chicago: University of Chicago Press.

Croft, William. 1991. Syntactic Categories and Grammatical Relations. Chicago: University of Chicago Press.

Dixon, R.M.W. 1977. Where have all the adjectives gone? Studies in Language 1.19–80.

Du Bois, John W., and Sandra A. Thompson. 1991. Dimensions of a theory of information flow. MS, University of California, Santa Barbara.

Hopper, Paul J., and Sandra A. Thompson. 1984. The discourse basis for lexical categories in universal grammar. Language 60.703–52.

Hueting, Anton. 1936. Iets over de spaakkunst van de Tobeloreesche taal. Bijdragen tot de Taal-, Land- en Volkenkunde 94.295–407.

Jacobson, S.A. 1995. A Practical Grammar of Central Alaskan Yup'ik. Fairbanks: Alaska Native Language Center.

Schachter, Paul. 1985. Parts-of-speech systems. Language Typology and Syntactic Description, vol. 1, ed. T. Shopen, 3–61. Cambridge: Cambridge University Press.

Thompson, S.A. 1988. A discourse approach to the cross-linguistic category 'adjective'. Explanations for Language Universals, ed. John Hawkins. London: Blackwell.

Visser, L.E., and C.L. Voorhoeve. 1987. Sahu-Indonesian-English Dictionary and Sahu Grammar Sketch. (Verhandelingen van het Koninklijk Instituut voor Taal-, Land- en Vookenkunde 126). Dordrecht: Foris.