SOME TYPOLOGICAL IMPLICATIONS
OF MONGOLIAN RESULTATIVES

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Middle Mongolian has two similar constructions which express resultative ideas. One is AP-based, and the other Particle-based. The possible semantic relations the two constructions can express are very different, however. In particular, the AP construction may function only as a Weak resultative (in the sense of Washio (1997a)), whereas the Particle construction can express those ideas which are typically expressed by Strong resultatives. Mongolian is therefore similar to English in using the Particle construction to express a wide range of resultative ideas, but it is also similar to Japanese in that it has only Weak AP-resultatives. The existence of a language like this may shed light on some of the problems related to resultatives and language variation.

Keywords: Mongolian, Resultatives, Particles, Yuan-ch’ao pi-shih

1. Introduction

The Mongolian language that we will examine in this paper is that represented by the historical document known as the Secret History of the Mongols, one of the most important Mongolian texts from the 13th century. Although the text represents the Mongolian language, the original text (generally believed to have been in the Uigur script) has not survived to the present and we only have the Chinese transcription with the title “Yüan-ch’ao pi-shih” (YCPS).

* This is a revised version of Washio (1999a). I wish to thank Toshiaki Oya, Michiyo Saiki and Kevin Varden for helpful comments and suggestions.

1 The exact dating of the original text is a matter of controversy. For discussion, see the Introduction to Cleaves (1982) and references cited therein.

2 Cf. COMMERCIAL PRESS (1936). Commentaries and other scholarly works on YCPS and Middle Mongolian are numerous. The ones from which I have benefited most greatly for the purposes of the present work are: Mostaert (1950–1952), Poppe (1954), Street (1957), Murayama (1951) and Ozawa (1979, 1983–1989).
Mongolian, whether Middle or Modern, is an agglutinative language with a basic SOV word order, with such implicationally associated typological properties as the use of postposition, much like Korean and Japanese. Grammatical descriptions of Mongolian usually recognize word classes like verbs, nouns, adjectives and adverbs, but they also never fail to mention that it is not always easy in Mongolian to differentiate nouns from adjectives or adjectives from adverbs. The following remarks in Street (1963) concisely summarize this situation in Modern Mongolian:

Typically an adjective stem occurs freely as a pre-modifier of nouns, but may not occur alone as subject of a verbal. However, the functions of nouns and adjectives overlap to a great extent, so that it is not always easy to differentiate the two types of stems. In addition, some stems seem to function freely as both noun and adjective [...]. (p. 97)

Typically an adverb occurs as premodifier of a verb but not of a noun. It is sometimes difficult to distinguish an adverb from a dative noun or from an adjective functioning as a complement [...]. (p. 102)

Consider the morpheme \textit{sajn} [sajn]. It functions as an adjective meaning “good” in nominal modification structures such as \textit{sajn üj} [sajn üjl] ‘good deed,’ but it also appears, with the same shape, in verbal modification structures such as \textit{sajn amrax} [sajn amrax] ‘to rest well,’ in which case it corresponds to the adverb “well” in English. Furthermore, the same shape can also function as a noun, expressing the notion of goodness. This kind of multiplicity in function is rather
typical of Mongolian, and it can be illustrated with many other words. In (1), for example, one may clearly observe the multiple function of the word ᠤᠥᠥᠡᠷ [öndöl] 'high.'

(1) a. ᠤᠥᠥᠡᠷ ᠠᠥᠥᠰᠥ ᠢᠶ᠋᠋ᠡ [öndöl gazar] 'highland'
   b. ᠤᠥᠥᠡᠷ ᠠᠥᠥ⏐᠋⏐ [öndöl bolox] 'to become high'
   c. ᠤᠥᠥᠡᠷ ᠨᠠᠥᠥᠡᠥᠥ [öndöl ünelex] 'to value highly'
   d. ᠤᠥᠥᠡᠷ︖ ᠠᠥᠥ⏐᠋ [öndöl-t garax] 'to climb up to a high place'

These illustrate the uses of ᠤᠥᠥᠡᠷ [öndöl] as (a) a prenominal modifier, (b) a complement to a verb, (c) a preverbal modifier, and (d) a case-marked nominal, -T[-t] in (1d) being the dative-marker.

Paradigms like (1) might give the impression, especially to those who are more familiar with Western languages, that syntactic categories in Mongolian are unbearably vague, but it is a mistake to regard this as something "non-Western." If (1) strikes one as exotic, so must the following French paradigm.

(2) a. ciel clair 'clear sky'
   b. être clair 'to be clear' / Il fait clair. 'It is daylight.'
   c. parler clair 'to speak clearly'
   d. clair de lune 'moonlight'

In écrire clair et solide 'to write clear and solid,' for example, it is not immediately clear whether one should call solide an adjective or an adverb — perhaps "an adjective functioning as an adverb" is the answer (Grevisse (1980: 408)).

5 French dictionaries generally list clair as either an adjective or an adverb, but they rarely, if ever, list solide as an adverb. Probably, therefore, expressions like voir clair 'to see clearly/distinctly' would be regarded by many as containing clair as an adverb, but when it appears with solide as in the example cited in the text, people might begin to hesitate, solide generally being recognized only as an adjective.

The following illustrates the various uses of the word meaning “good,” written as 撵因 [sayin] in YCPS, the modern descendant of which is caiñ [sajn], which was cited above.

(3) a. ... sayin nökör ... (§93)
   good friend
b. ... sayin bolju’ui ... (§177)
   good became
c. ... jewűdün sayin jewűdůleba7 ... (§63)
   dream   good dreamed
d. ... mawuí sayin ter’ü si’ira ... (§35)
   bad    good head hoof
These illustrate the uses of sayin as (a) a prenominal modifier, (b) a complement to a verb, (c) a preverbal modifier, and (d) a nominal coordinated with such pure nouns as “head” and “hoof.”

Thus, one also encounters the “uncertainty of analysis” in YCPS, but this is not a problem specific to Middle Mongolian as mentioned above. One can therefore proceed with one’s immediate research even without the final solution to the problems of category definition and identification, exactly as one can with regard to French or other languages.

2. The Preverbal AP Schema

Let us first consider the following syntactic form in YCPS, which I shall call the “Preverbal AP Schema.”8

(4) (NP1) (NP2) AP V

NP1 and NP2 are the subject and the object (respectively) of the verb, V, when the V is transitive. The subject and object nominals may be missing from the surface string, as is common in a language like Mongolian. When the V is intransitive, NP2 would not appear under normal circumstances. In English, however, examples such as The joggers ran the pavement thin are possible, which can apparently be analyzed as NP1-V-NP2-AP, where an intransitive (run) is followed by the

7 The suffix -ba here apparently violates the law of vowel harmony. On this, see Rachewiltz (1972: 3).
8 This is meant to subsume other possible word orders such as (NP1) AP (NP2) V.
so-called fake object *(the pavement)*. It is therefore an empirical ques-
tion whether or not Middle Mongolian has a construction like this.

The AP in the Preverbal AP Schema is realized in various shapes in
Mongolian. As already mentioned, when an adjective is used nomi-
nally, it is “declined” (cf. Poppe (1970: 78)) and may appear with a
case-ending. But even aside from this case, adjectives are sometimes
accompanied with one of the case-endings. A well-known case in
Modern Mongolian is the instrumental case-ending -(r)aan [-(g)aar].
9 which may combine with a word like са́йн [sajn] ‘good’ to form са́йнаа́р [sajnaar] ‘well,’ the latter apparently functioning as a kind of
adverbial. This “instrument marking” on adjectives was not a com-
mon device in YCPS, however (cf. Washio (1999a: 262)).

More common in YCPS is the dative marking on adjectives. The
adjective yéke ‘big,’ for example, appears in the dative form yéke-de
in YCPS and in this form it premodifies a verbal element as in the follow-
ing examples.

(5) yeke-de delíjyuu qarbu’asu ... ($\S$195)
big-DAT draw-ING shoot-IF
‘If, drawing [his bow], in a great manner, he shoot, ...’
[C]10

(6) ... yisui-gadun yeke-de sewürelbi ... ($\S$156)
Yesui Qadun big-DAT sighed
‘Yesui Qadun sighed deeply’ [C]

Although the bare form yéke almost always functions either as a pre-
nominal modifier or as a nominal that expresses the idea of bigness or
greatness (there are over 70 instances of such uses), there is one exam-
ple in which it appears in the preverbal position:

(7) dei-secen temüjin-i üjejyuu masi yeke bayascu ... ($\S$94)
Dei-Secen Temüjin-DEF see-ING very big rejoice-ING
‘Dei Secen, seeing Temüjin and rejoicing exceedingly, ...’
[C]

9 With its variants -(r)oóp [-(g)eer], -(r)oop [-(g)oor], -(r)oop [-(g)oör], the
choice among which is determined by the rules of vowel harmony.
10 I will give either Cleaves’ (1982) or Rachewiltz’s (1971–1982) English transla-
tion under the Mongolian example I cite from YCPS. [C] stands for Cleaves and
[R] for Rachewiltz. By consulting the section number given for each example, the
particular portion of English translation I cite from their work can be easily located
in those works.
The bare form yeke also appears with verbs like bol- ‘be/become’ to form expressions meaning “to be big” etc. (see §70 of YCPS). It is not uncommon in YCPS (as in the modern language) for an adjective in the bare form to be complement to verbs like bol-.

There are other possible forms that adjectives may take when they function as the AP in the Preverbal AP Schema. For example, the word mawu (transcribed as ꜀က ꜀ in YCPS) is an adjective meaning “bad.” This word has mawui (transcribed as ꜀cad in YCPS) as an alternative form. The former shape appears four times in YCPS and, without exception, it is used as a prenominal modifier. On the other hand, the latter shape often appears preverbally, as in the following example.

(8) ... mawui bolju ... (§67)
    bad    become-ING
    ‘... he was bad’ [C]

But the same shape also appears prenominally as in the following example.

(9) ... mawui güüün ... (§112)
    ‘... a bad man ...’ [C]

So it is not clear what this formal alternation indicates. Ozawa (1983–1989: note 1, §17) has an interesting theory about this, which, however, I will not go into here.

In what follows, the term AP will be used to cover all these forms (i.e., the bare form, the dative form and the alternating forms just mentioned) that an adjective can take when it appears as the AP in the Preverbal AP Schema.

With this much background, let us now examine the syntactic and semantic properties of the examples in YCPS that fit into the Preverbal AP Schema.

3. Functions of the AP

3.1. AP as a Simple Adverbial

First of all, the AP in the Preverbal AP Schema may function as a simple adverb, modifying the time, location, manner, etc. of the activity expressed by the verb phrase. The following is such an example where the verb is transitive.

(10) altan jilo’a batu-da tataju ... (§256)
    gold rein strong-DAT pull-ing
It is not difficult to find similar examples with an intransitive verb.

3.2. AP as a Depictive Phrase

In many cases, the preverbal AP functions as a depictive phrase. Here is an example which appears immediately after the description that the Tatar people poisoned Yesugei Ba’atur, who is the unexpressed subject of this sentence.

(11) ... ja’ura mawui otcu ... ($67)
    on the way bad going

‘On the way, [being] bad, he went on and, ...’ [C]

“He went on bad (sick)” would be the literal translation of this sentence, where the AP cannot be a resultative phrase. Rather, it functions as a depictive phrase, describing the state in which he was in when he was moving. The AP “thick” in the following example can also be interpreted in a similar manner.

(12) tere qoyinaca juja’an-a ayisuqun
    that behind-FROM thick-DAT approach-ATTRIB.PL.
    ken buyu ... ($195)
    who be

‘Who are they who thickly draw nigh behind him?’ [C]

Literally, this sentence says something like “they are approaching thick,” which is rather vague. It may mean that they were fully equipped or thickly dressed. Rachewiltz interprets “thick” here as “in a compact mass.” But whatever it means, it cannot be a resultative phrase. If anything, it is a depictive phrase describing the state in which they were in when they were “drawing nigh.”

3.3. Resultatives in YCPS

3.3.1. Strong vs. Weak Resultatives

Languages vary with respect to the possible types of resultatives they permit.11 For example, resultatives like those given in (13) are possi-

11 This subsection is an informal summary of the Strong/Weak distinction of resultatives suggested in Washio (1997a). For different approaches to resultatives and language variation, see Levin and Rapoport (1988), Kaufmann and Wunderlich (1998), Hasegawa (1999), Wunderlich (2000), Wechsler and Noh (2001) and other works.
ble in English, but their equivalents are unacceptable both in French and Japanese.

(13) a. The horses dragged the logs smooth.
    b. He pulled his tie tight.

On the other hand, French and Japanese differ significantly as to whether they permit resultatives like those in (14): French does not, but Japanese does.

(14) a. She dyed the dress blue.
    b. He wiped the glass clean.

Cross-linguistically, therefore, resultatives based on transitive verbs are classified into two types, namely, those like (13a, b), which are possible in English but not in French and Japanese, and those like (14a, b), which are possible both in English and Japanese but not in French.

This classification of resultatives in fact coincides with a fairly natural semantic distinction stated in (15).12

(15) STRONG and WEAK resultatives (An informal characterization)
    a. Resultatives are “strong” if the meaning of the V and the meaning of the AP are completely independent of each other.

12 Wechsler’s (1997: 309) distinction between control and ECM resultatives, defined as in (i), has much in common with the Strong/Weak distinction.

(i) a. control resultative: resultative phrase whose predication subject is a semantic argument of the matrix verb.
    b. ECM resultative: resultative phrase whose predication subject is NOT a semantic argument of the matrix verb.

Wechsler (1997: 309) observes that, while resultatives are known to be “picky about the semantic class of the result phrase, [...] the restrictions on control and ECM resultatives, respectively, are of a very different nature.” Specifically, control resultatives, but not ECM resultatives, “are subject to bona fide semantic sortal restrictions, imposed by the verb.” Although this is similar to the way the Strong/Weak distinction is characterized in (21), the control/ECM distinction is actually quite different from the Strong/Weak distinction. As is clear from the reference to the notion of “argumenthood” in (i), control resultatives correspond to Transitive resultatives, and ECM resultatives to Intransitive resultatives. This contrasts with the Strong/Weak distinction, which is independent of the transitivity of the verb. Thus, ECM resultatives are always “strong” in our sense, but not vice versa.
b. Resultatives are "weak" if the meaning of the V and the meaning of the AP are NOT completely independent of each other. (13a), for example, is a Strong resultative since the meaning of the verb "to drag" does not contain anything like the notion stated by the adjective "smooth" that appears in (13a) so they are semantically independent of each other. This contrasts with the function of the adjective "blue" in (14a). In this case, the verb "to dye" already contains the notion of "color" in its meaning, and the function of the adjective "blue" in (14a) is therefore simply to further specify this notion of "color," which is predictable from the meaning of the verb. (14a) is therefore an example of a Weak resultative.

The most important aspect of this characterization of the Strong/Weak distinction is that it classifies "intransitive" resultatives like (16) as necessarily "strong."

(16)  a. The joggers ran the pavement thin.
      b. The planes flew the ozone layer thin.

This is so, since verbs like run and fly, being intransitive, cannot contain in their meaning anything like the notion "thin" denoted by the adjective.

Notice that if intransitive resultatives are nothing but a special case of Strong resultatives, then one naturally expects that they are impossible in languages like French and Japanese. As is well-known, this is in fact the case. There are thus at least three types of languages, as summarized in (17).

(17)       E     J     F
      a. THE JOGGERS RAN THE PAVEMENT THIN. +   -   -
      b. THE HORSES DRAGGED THE LOGS SMOOTH. +   -   -
      c. SHE DYED THE DRESS BLUE. +   +   -

This shows that resultatives must be classified into at least two types, and it seems that the way languages are distributed in (17) is what one naturally expects, given the Strong/Weak distinction of resultatives, which would group (a) and (b) together as "strong" and classify (c) as "weak."

Let us now consider what types of resultatives are attested in YCPS.

3.3.2. Weak Resultatives in YCPS

Let us first consider the following passage from §156 of YCPS, which appears as a part of Cinggis Qahan's order.
"You arrange all those people that have been assembled here in groups of related families, and set apart from the rest any man who is with a group which is not his own."  [R; emphasis added]

The italicized part corresponds to the following sentence in YCPS.

(19) o'er-ece busu ayimaqun gü'ün-i o'ere
      his own-FROM different tribe-OF person-ACC separate
      böldeyitketkün ($156$)
      isolate-IMP
      '... set apart from the rest any man who is with a group which is not his own' [R]

This is an imperative sentence (so that the subject is missing). Syntactically, it has the following structure, with the prenominally modified direct object (a person “who is with a group which is not his own”).

(20) (NP₁) NP₂ AP V TRANSITIVE

The word o'ere in (19) is the AP in this schema. The Chinese gloss given to o'ere in YCPS is 丙 (ling), meaning “separate(ly).” The verb böldeyitketkün, which is in the imperative form, means something like “to isolate.” The Chinese gloss for this is 教孤零 (jiāo gū líng) ‘to isolate, lit. to make ... isolated.’ Both Rachewiltz and Cleaves use the expression “set apart” for the translation of the AP-V string o'ere böldeyitketkün. Unlike the English word apart, however, o'ere can be used as a prenominal modifier in YCPS, which is attested in the following example.

(21) ... o'ere ni’ur ... ($210$)
      ‘a separate face’ [C] or ‘a different face’ [R]

Thus, o'ere really is an adjective, and this justifies analyzing (19) as (20).

Consider now the meaning expressed by (19). This can be schematized as follows, where SEPARATE corresponds to the AP.

(22) PERSON-ACC SEPARATE ISOLATE-IMP

Since the causative notion of “isolating” someone x naturally implies x’s state of being “separate” (from other people), the semantic relation between the AP and V in (19) is very close, in much the same way as the semantic relation in “sharpen the pencil pointy” or “wipe the table clean.” (19) is therefore a Weak resultative, which suggests that YCPS represents a language which permits this class of resultatives.
3.3.3. Strong Resultatives Based on Transitive Verbs in YCPS

In no instance of the Preverbal AP Schema with a transitive verb can the AP be analyzed as a Strong resultative phrase in YCPS. Thus, I found no example in YCPS in which the preverbal AP is semantically independent of the lexical meaning of the verb and expresses a state resulting from the activity described by that verb.

3.3.4. Strong Resultatives Based on Intransitive Verbs in YCPS

If intransitive resultatives are nothing but a special case of Strong resultatives, then one naturally expects that they are impossible in Middle Mongolian, exactly as they are in languages like French and Japanese, given the observation made in section 3.3.1. This expectation is tentatively borne out since YCPS contains no example of intransitive resultatives.

3.4. Some “Resultative” Expressions in YCPS

There are many sentences in YCPS that one may choose to translate by using the resultative construction in English. Consider first the following English sentences.

(23) a. They danced themselves into the ground.\(^{13}\)
    b. (With an arrow) he shoots the enemies into a string of pearls.\(^{14}\)

The ideas these resultative-like sentences carry are similar to those expressed by the following examples from YCPS.

(24) a. ... qabirqa-ta ha'uluqa ... bolutala debseba (§57)
    ribs-UP TO ground be-UNTIL danced
b. ... nökör-i ... kelkitele ... qarbuyu (§195)
    enemy-ACC transfix-UNTIL shoot
c. ... qotola ulus-i inu qo'osun boltala
    all people-ACC his empty be-UNTIL hau'uluya (§105)
    destroy

If the English sentences given in (23) are characterized as resultatives, then, to the extent that they are appropriate paraphrases of the sen-

\(^{13}\) The phrase “into the ground” here must be interpreted in the literal sense.

\(^{14}\) In other words, he strings them on an arrow.
tences in (24), these Mongolian sentences can also be called “resultatives.” (24a), corresponding to (23a), could then be regarded as an instance of the “intransitive” resultative construction. In fact, however, there are good reasons to believe that these Mongolian sentences involve the adverbial construction headed by the morpheme -tala/-tele, which is the subordination marker roughly with the sense of “until” or “so that” in English. That is, (24a) more literally means “They danced until the ground was up to their ribs,” and should be analyzed abstractly as follows.

(25) they [clause [the ground] [up to their ribs] be]-tala danced

A major support for this analysis comes from the fact that the morpheme -tala ‘until’ attaches only to a verbal stem. It is a “converbial” particle, to use the terminology of Mongolian studies. The morpheme kelki- in (24b) is a verb meaning “to transfix”\(^{15}\) and -tele is directly attached to it. When the predicate is an adjective as in (24c), where qo’osun ‘empty’ is adjectival, -tala requires the presence of the verb bol- ‘be,’ to which it attaches. Thus, examples such as those cited in (24) do not have the “S-V-O-AP/PP” syntax: they are more like the “-key/-tolok” constructions in Korean.\(^{16}\) The actual translations of (24a) suggested by Rachewiltz (1971-1982) and Cleaves (1982) are as follows.

(26) a. ... they danced so much ... that
   They made a path down to their waists ... [R]
   b. ... they danced ..., until there was
   A ditch up to [their] ribs; ... [C]

Similarly, (24b) can be analyzed in the following manner.

(27) [he]₁ [the enemies]₂ [clause pro₁ pro₂ transfix]-tele shoots

Rachewiltz and Cleaves translate this sentence as follows.

\(^{15}\) The modern descendant of this word is xelxex, which is also a verb and still has a similar range of meaning.

\(^{16}\) See Washio (1997b, 1999b). Wechsler and Noh (2001) is a very informative recent work dealing with resultative expressions in Korean, including the constructions based on the two morphemes mentioned in the text. See also Kim (1993), which is the earliest theoretical work on Korean resultatives.

As mentioned in the text, -tala/-tele in Mongolian and -tolok in Korean seem to constitute similar constructions. I do not know what to make of their similarity in shape.
(28) a. He shoots and hits them ...
   Stringing them like pearls. [R]

b. He shooteth so as to join and so as to piece
   The companies ...\[17\] [C]

The ideas these sentences express can be paraphrased by using the S-V-O-AP/PP form. Needless to say, however, no syntactic conclusion can be drawn from this fact.

4. Typological Considerations

4.1. Classifications of Resultatives

Resultative expressions in English have been classified in various ways. The two classes of resultatives identified in Carrier and Randall (1992) reflect a distinction based on transitivity (that is, Transitive and Intransitive resultatives). The two classes of resultatives suggested in Wechsler (1997)—control and ECM resultatives—largely overlap with the classes of Transitive and Intransitive resultatives, though Wechsler’s distinction provides a more principled semantic account for the differences between the two types of resultatives and for some facts about English resultatives.

On the other hand, the particular classification of resultatives adopted in this paper is the one suggested in Washio (1997a) and Kaufmann and Wunderlich (1998) where English resultatives are classified into Strong, Weak and Spurious types.\[18\]

The two kinds of classifications mentioned above have some obvious typological implications. Let us first consider the possible combina-

\[17\] In his notes to this translation, Cleaves says that the word “join” here means “to transfix, as on a spit,” and the word “companies” means “enemies.”

\[18\] As the name suggests, the Spurious type, exemplified by such sentences as He tied his shoelaces tight, does not represent a category of authentic resultatives. We will exclude Spurious resultatives from our discussion.

Rappaport Hovav and Levin (2001) have recently suggested a highly interesting theory of English resultatives, a theory formulated from the perspective of Event Structure, in which the notion “temporally dependent” plays a crucial role in the classification of resultatives. Their theory also has some important implications for linguistic typology, the examination of which, however, goes well beyond the scope of the present paper.
tions of resultative types which languages may have in principle, assum-
ing, for the moment, that both Transitivity and the Strong/Weak dis-
tinction are relevant. This would produce a chart like (29).

(29) L1 L2 L3 L4 L5 L6 L7 L8

| INTRANSITIVE STRONG | + | + | + | + | - | - | - | - |
| TRANSITIVE STRONG | + | + | - | - | + | + | - | - |
| TRANSITIVE WEAK | + | - | + | - | + | - | + | - |

If the Transitive/Intransitive distinction is all there is to the classifica-
tion of resultatives, and if there is no further internal distinction in the
class of transitive resultatives, then the “+/−” value should always be
the same for all transitive resultatives (in any single language). This
means that the first four language types in (30) are the only possibilities
since the others cannot be discriminated on the basis of transitivity
only.

(30) L2 L3 L6 L7

| INTRANSITIVE STRONG | + | + | - | - |
| TRANSITIVE STRONG | + | - | + | - |
| TRANSITIVE WEAK | + | - | - | + |

The language types which have so far been attested are boldfaced. L1
is English, L8 French, and L7 Japanese.

As we can observe from (30), the transitivity-based classifications of
resultatives are inherently unable to predict the existence of L7, the
Japanese-type, which allows only a proper subset of transitive resul-
tatives.

If we compare (30) with the following chart, which shows the possi-
ble language types under the Strong/Weak theory, we observe that all
the attested language types are in fact in the range of its prediction.

(31) L1 L2 L3 L4 L5 L6

| INTRANSITIVE STRONG | + | + | - | - |
| TRANSITIVE STRONG | + | - | - | + |
| TRANSITIVE WEAK | + | - | + | - |

In this sense, the analysis of resultatives into Strong and Weak types
can be said to better account for the observed data than an analysis
based on transitivity.

Of course, we need to raise further questions here. For example,
what about L2? This would be a language in which both (32a) and
(32b) are possible, but not (32c).
(32) E L_2 J F
a. THE JOGGERS RAN THE PAVEMENT THIN. + + - -
b. THE HORSES DRAGGED THE LOGS SMOOTH. + + - -
c. SHE DYED THE DRESS BLUE. + - + -

If L_2 were in fact attested, and if these four language types exhausted the actual possibilities, then the Strong/Weak distinction would be exactly what we need for the explanation of the language distribution.

Suppose, however, that L_2 is never attested, which I tend to believe to be the case. Then, the generalization stated in (33) should hold.

(33) If a language disallows Weak resultatives, then it also disallows Strong resultatives.

If this is true, then no language should have the minus-value for Weak resultatives when it has the plus-value for Strong resultatives. This has the effect of excluding three of the eight language types in (29), namely, L_2, L_4 and L_6, which all have the minus-value for Weak resultatives but the plus-value for Strong resultatives. This would reduce the number of possible language types to those given in (34).

(34) L_1 L_7 L_8 L_3 L_5
INTRANSITIVE STRONG + - - + -
TRANSITIVE STRONG + - - - +
TRANSITIVE WEAK + + - + +

As before, the attested language types are boldfaced. Now, the question is whether we should allow possibilities like L_3 and L_5. If these language types are not attested, then the Strong/Weak distinction, together with the implicational generalization stated in (33), would be quite sufficient to capture the actual linguistic variation.

If, on the other hand, L_3 and L_5 were both attested, then it would suggest that two independent mechanisms are involved in the licensing of Intransitive and Strong Transitive resultatives, and languages can simply choose one or the other of the two mechanisms. I doubt this, however. It is extremely difficult to imagine a natural language like L_3, in which THE JOGGERS RAN THE PAVEMENT THIN and SHE DYED THE DRESS BLUE are both possible, but neither THE HORSES DRAGGED THE LOGS SMOOTH nor THE GARDENER WATERED THE TULIPS FLAT is. This is nothing more than an impression that I have gained, but I believe many people have the same impression. Since neither the transitivity-based classification of resultatives nor the Strong/Weak distinction predicts the existence of L_3, let us simply assume that L_3 is an impossible language.
In contrast to L3, whether L5 is a possibility or not is far from obvious. If L5 is never attested, then that is exactly in accordance with the prediction made by the Strong/Weak theory. Even if it were, however, it would not necessarily undermine this distinction, because it is not particularly unnatural to assume that a language requires some independent mechanism for licensing a “fake” object, in addition to whatever is necessary to license Strong resultatives. The fact is, however, that I have not been able to find any reference in the literature to the kind of languages which have the properties of L5. This is very surprising in view of the fact that L5 represents a highly well-defined language under the transitivity-based typology of resultatives: it can simply be described as a language which lacks the class of Intransitive resultatives (or the class of ECM resultatives). Because of this well-defined nature of L5, the gap it creates in the list of attested languages requires explanation. For this reason, it should not be regarded as an accidental gap until there is unequivocal evidence for its existence.

The same applies to individual languages, and our observation on Middle Mongolian is actually a case in point. Middle Mongolian (the language represented by YCPS) permits Weak resultatives, but neither Intransitive nor Strong Transitive resultatives are attested in YCPS. Since it is precisely the latter types of expressions that constitute the more general category of Strong resultatives, these gaps found in YCPS will receive a natural explanation in the Strong/Weak theory: Middle Mongolian can simply be regarded as representing L7. Notice, however, that this observation itself is also fully compatible with the TRANSITIVITY theory since Middle Mongolian could be regarded as a language representing L5 if it is assumed that Strong Transitive resultatives are accidentally missing from YCPS. As mentioned above, however, we can (and hence should) give a stronger interpretation to the observation.

4.2. Resultatives and Language Groups

Turkish belongs to the class of languages referred to above as L7, the class of “Weak only” languages (cf. Washio (1999b)). As observed above, Middle Mongolian can also be plausibly analyzed as a language of the same type. This is very suggestive. The Altaic family of languages consists of three major groups—Turkic, Mongolian and Tungusic—and Turkish and Mongolian are the representative members of the
Turkic and Mongolian groups. While I have no solid data on resultatives in Tungusic, the fact that Japanese and Korean also display the typical properties of L7 suggests the possibility that L7 may be the unmarked form for a language to assume if it has the so-called "Altaic" properties (such as the SOV basic word order, a high degree of agglutination, the lack of relative pronouns, etc.). Equally suggestive is the fact that Germanic languages tend to pattern with English in respect of the possible types of resultatives they permit (L1), and Romance languages similarly tend to pattern with French (L8). These observations can be summarized roughly in the following manner.19

\[(35) \quad \begin{align*}
    a. & \quad L_1: \text{Germanic} \\
    b. & \quad L_8: \text{Romance} \\
    c. & \quad L_7: \text{"Altaic"}
\end{align*}\]

If further research shows that (35) does in fact hold, then we need to relate the L1-properties to some of the Germanic properties, the L8-properties to some of the Romance properties, and the L7-properties to some of the "Altaic" properties. This should be done in any theory of resultatives.

For example, Hasegawa (1999) suggests a formal theory of resultatives, which is designed to give a principled explanation to the kind of language variation discussed above. By making the crucial use of the abstract element, Res, which designates the pure notion of change of state, Hasegawa (1999) successfully describes the observed patterns of language variation. For this theory to be truly explanatory, however, it is still necessary to relate, for instance, the possibility of Strong resultatives in Germanic to some independent property (or properties) of Germanic and the impossibility thereof in Romance and "Altaic" to some independent property (or properties) that these groups of languages might perhaps share. As for the impossibility of Weak resultatives in Romance, Hasegawa (1999) does suggest that the crucial Romance property here might be the requirement that adjectives agree with the nouns they modify in Romance, which is an idea well

19 This is not to say, of course, that the languages in each group allow exactly the same class of resultative expressions. See, for example, Kaufmann and Wunderlich (1998) and Oya (2002) for some interesting differences between German and English.
worth pursuing. The possibility of Strong resultatives in Germanic or the impossibility thereof in "Altaic," however, has not been related to any of the independent properties of these groups of languages.

In the next section, we will examine a particular class of resultative expressions in Mongolian, which seems to make Mongolian potentially relevant to the issue just discussed.

4.3. Strong Resultatives and Adverbial Particles

Although there is no doubt that YCPS represents a language which permits Weak resultatives, the preverbal AP functioning as a Weak resultative phrase is much less common than that functioning as a depictive phrase or a simple adverbial in YCPS. This rarity of Weak resultatives in YCPS may be due, in part, to the fact that YCPS has a grammatical device different from the Preverbal AP Schema which also expresses some "resultative" ideas.

Consider first a passage in §105 of YCPS which reads as follows in Cleaves' (1982) translation.

Smiting his weighty tent frame
In such a way that it shall fall down flat, ...
Smiting his door frame, ...
In such a way that it shall break to pieces, ...

As we can see, these expressions contain some ideas that are suspiciously "resultative." Although Cleaves' "smite ... in such a way that it shall fall down flat/break to pieces" (and Mostaert's (1950–1952) French version "heurter ... de façon qu'elle croule/qu'il se rompe") are all rather periphrastic in structure, and accordingly, the relation between the activity of "smiting x" and the resulting state of x being "flat" is expressed in a rather indirect manner, the original Mongolian sentences in YCPS cited in (36) below are not as periphrastic as these translations might suggest.

(36) a. ... e'ede inu embüri da'ariju ... (§105)
   ... tent frame his AP? smite-ING
   'Smiting his tent frame flat ...'

b. ... e'ede inu ququru da'ariju ... (§105)
   ... door frame his AP? smite-ING
   'Smiting his door frame to pieces ...'

These sentences have a simple transitive structure, and if the words embüri and ququru were analyzable as APs, then they would exactly fit in the Preverbal AP Schema, being of the form "(S) O AP V,"


where V has such meaning as “strike,” “smash,” “smite,” etc. It is therefore conceivable that the relation between the activity of “smiting x” and the resulting state of x being “flat” expressed by the original sentences is iconically more direct than that which is expressed by their periphrastic paraphrases, i.e., the semantic force of the original may be more like “smite it flat” than “smite it so that it falls down flat.”

What, then, is the status of such morphemes as embūrū and ququru? In his comments on the paragraph containing (36), Mostaert (1950: 331) touches on the adverbial nature of these elements, which I quote here in English translation:

Embūrū “so that [the frame] collapses”; ququru “so that [the door frame] breaks”. Cf. Mo. embūri-, embūre- “to collapse”; ququra- “break”. This adverbial formation is found rather frequently in the Secret History: E.g., §189 kebkerū “so that [the head] broke into pieces” (cf. Mo. kemkere- “to break” [...]); §255 kinggūrū “so as to be cut” (cf. Secret History. §124 kinggūri- “to cut”), etc.

Adverbials like embūrū that Mostaert mentions here all contain the same suffix, these words being analyzable as embū-ru, ququr-ru, kebker-ru and kinggū-ru, with the common suffix -ru/-rū. This suffix is discussed by Street (1957) and Ozawa (1979), for both of whom it is a “converbial” particle, which means that the stem it attaches to is a verb. For example, Street (1957: 38) writes:

-ru1 (‘so that’) occurs in adverbials meaning ‘in such a way as to X, so that [something] Xs’ where X is the meaning of the verbal with which -ru1 is in construction.

If this is correct, then the construction in question is different from the Preverbal AP Schema since V is not a possible realization of the AP in the latter schema.

It is not so obvious, however, that the stem X in the above quote should be regarded as a verb, since none of the stems to which -ru/-rū is attached is actually used in YCPS as an independent verb. The descendants of these morphemes are also not attested as verbs in the modern dialects. Rather, they are some kind of adverb. Sanzheyev

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20 As stressed by Ozawa (1983-1989): see his note 4 to §79, note 17 to §105 and note 10 to §131. It seems that Ozawa has replaced his earlier analysis with a new one, regarding the stem X now as an adverbial, not as a verb.
(1973) calls them “adverbs,” but for Street (1963) they are “preverbs”: what is common to these authors is the claim that they are not verbs in the modern language, and Ozawa’s (1983–1989) position is that they (or the stems they contain) were not verbs even in Middle Mongolian. Even so, this construction is still different from the Preverbal AP Schema since the stem X is not known to have a use as an independent adjective. I will henceforth refer to embūrū and other similar words as “Adverbial Particles.”

Now, what Ozawa (1983–1989: note 17 to §105) says about these adverbial particles is very suggestive. Commenting on (36a), Ozawa says that embūrū describes some aspects of “destructive activities” and that words like this appear with the kind of verbs describing “destructive activities.” Notice that this characterization is very close to our characterization of Weak resultatives. It appears, therefore, that YCPS has a grammatical device (based on adverbial particles such as embūrū) which is different from the Preverbal AP Schema, but which can also express some notions similar to Weak resultatives. Thus, the following structures existed side by side in Middle Mongolian.

\[(37)\]
\[
\begin{align*}
&\text{a. } S \ O \ \text{Particle} \ V \\
&\text{b. } S \ O \ \text{AP} \ V
\end{align*}
\]

Since this Particle construction “is found rather frequently” in YCPS (cf. the quote above from Mostaert), it was apparently a rather common device in YCPS, and this may partly explain why one does not encounter the Preverbal AP Schema expressing Weak resultatives in YCPS as frequently as one might perhaps expect.

Consider now the following examples and descriptions of adverbial particles in Modern Mongolian given by Sanzheyev (1973: 96–97), which show that the same device based on adverbial particles is still in active use in the modern language (I have romanized the Cyrillic script in the original).

\[(38)\] xaga ‘in two’:
\[
\begin{align*}
&\text{a. } xaga \ \text{cavčix} \ ‘\text{to cut (into pieces)}’ \ \text{with cavčix ‘to cut’} \\
&\text{b. } xaga \ \text{coxix} \ ‘\text{to break in two}’ \ \text{with coxix ‘to break’}
\end{align*}
\]

\[(39)\] but ‘into pieces’ (mostly of objects which can be broken into small pieces):
\[
\begin{align*}
&\text{a. } but \ \text{unax} \ ‘\text{to break after falling down}’ \ \text{with unax ‘to fall’} \\
&\text{b. } but \ \text{nirgex} \ ‘\text{to rout}’ \ \text{with nirgex ‘to thunder’}
\end{align*}
\]

\[(40)\] delbe ‘into pieces’ (mostly of objects which burst or break with a certain noise):
a. delbe dajrax ‘to make one’s way through,’ ‘to put asunder’ (as of a crowd, heap of things, etc.) with dajrax ‘to touch,’ ‘to push,’ ‘to attack’
b. delbe üsergex ‘to tear up,’ ‘to burst’ with üsergex ‘to sprinkle’

(41) zad ‘open’ (mainly of objects which while opening up or falling down disclose something):
   a. zad tatax ‘to break open’ (as of a fence or door)
   b. zad coxix ‘to strike, damaging or uncovering’ (as of a wall or a chain of enemy troops)

(42) suga (cannot be translated by itself (of a sharp movement)):
   a. suga tatax ‘to pull out,’ ‘to draw out,’ ‘to snatch out’ with tatax ‘to draw’
   b. suga coxix ‘to knock down’ with coxix ‘to beat’

(43) xuga ‘breaking down’ (cannot be translated by itself (mostly of things breaking under pressure)):
   a. xuga darax ‘to break down under pressure’ with darax ‘to press’
   b. xuga coxix ‘to break down under impact’
   c. xuga tatax ‘to break down while snatching’

(44) nevt ‘through’ (of things which penetrate the entire surface of other things, or the entire environment):
   a. oy nevt garax ‘to go through the entire forest’
   b. nevt norox ‘to be soaked through’ with norox ‘to be wet’

(45) mult (cannot be translated by itself and is used of objects which are snatched away or torn out):
   a. mult tatax ‘to snatch away,’ ‘to tear out’
   b. mult coxix ‘to knock out’

Many of the Particle-Verb combinations listed here seem to express “Weak resultative” notions such as BREAK SOMETHING INTO PIECES. However, some of the examples express the kind of ideas which are more like those typically expressed by Strong resultatives. Consider, for example, the combination xuga coxix listed in (43). The particle xuga combines with the verb coxix to express the notion “break something down (by pressure),” but coxix itself is basically a verb of simple activity meaning “to hit; to beat (at, against); knock (on)” as in xaalaga coxix “knock on the door.” In this respect, the Mongolian particles listed above seem to have essentially the same function as the (adverbial) particles in English. Some of the parallel expressions are given in
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(46).

(46)  a. *zad tatax*: pull apart
      b. *xaga coxix*: break [beat/knock] down
      c. *nevt garax*: go through
      d. *mult tatax*: snatch/pull away
      e. *mult coxix*: knock out

As we have already seen, Japanese does not allow resultative notions like KNOCK DOWN or BEAT INTO PIECES to be expressed in the Preverbal AP Schema. Furthermore, since Japanese does not have adverbial particles of the above sort, no construction similar to the Preverbal AP Schema can be used in Japanese to express the sense of *xuga coxix* ‘hit/beat into pieces; beat/knock down’ unless a causative change of state verb such as BREAK or SMASH is used in the Preverbal AP Schema. In contrast, Mongolian can express “Strong resultative” notions by using the structure which superficially looks very much like the Preverbal AP Schema because adverbial particles like *xuga* can apparently occupy the same syntactic position as the AP in the Preverbal AP Schema. The same was the case in Middle Mongolian as we saw in (37), which is repeated here as (47).

(47)  a. S O Particle V
      b. S O AP V

Although (47b) could not function as a Strong resultative in Middle Mongolian, it seems that (47a) could in fact express a sense typical of Strong resultatives. The following is an example containing the particle *ququru* (already discussed in relation to (36)).

(48) ... i niru’u inu ququru tata’at ... (§140)
     neck  his PARTICLE pull-AFTER
     ‘after pulling his neck so that [it] broke’

The verb *tata-* ‘pull’ in (48) still survives, its descendant being *tatax* ‘pull,’ which appears twice in (46) above. Although this verb can be used to express many different senses, its basic meaning is “to pull something” (as in *qar inu tata-ju* (hand his pull-ING) ‘pulling his hand’ (YCPS, §214)), and as such, it is basically an activity verb.

Observe that (47) is exactly parallel to the situation in English where

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21 This example is also cited in Street (1957: 38). The English translation given in (48) is Street’s.
the following two constructions exist side by side.\textsuperscript{22}

\begin{enumerate}[\textbf{a.}]
\item S V O Particle \textit{(knock him down)}
\item S V O AP \textit{(knock him unconscious)}
\end{enumerate}

Both in English and in Middle Mongolian, the particle construction can be used with either an activity verb or a causative verb. The same holds in the case of the AP construction in English, which can therefore function either as a Strong resultative or as a Weak resultative. In Middle Mongolian, however, the AP construction is restricted to the Weak resultative use. It can never be used as a Strong resultative, unlike English.

These observations suggest that, across languages of different types, Adverbial Particles can more easily combine with verbs of simple activity than Adjective Phrases can. In other words, if a language makes systematic use of Adverbial Particles, it is already equipped with a means of expressing a “Strong resultative” idea in a compact syntactic construction. The similarities and differences between English and Middle Mongolian can then be taken as implying that, first, the existence of the Particle construction in a given language is prerequisite for the development of the AP-based “Strong” resultative construction in that language, and second, whether the latter construction in fact develops or not is determined by some linguistic property, \(X\), which is present in English but not in Mongolian.

It is natural to assume, therefore, that the crucial Germanic property mentioned in the previous subsection either is, or at least can be related to, the presence of the particle construction in Germanic. To identify the nature of Property \(X\), however, we need to know at least as much about adverbial particles in Mongolian as we do about Germanic particles.

\textsuperscript{22} Precisely how one should capture the similarities and differences between the resultative and particle constructions has been a topic of much discussion in the literature on Germanic linguistics. See Neeleman and Weerman (1993). See also Tenny (1994), Lüdeling (2001), Zeller (2001) and Müller (2002), as well as Halliday (1967), Bolinger (1971), Kajita (1977) and den Dikken (1995). In a dissertation in progress (University of California, San Diego), Koichi Miyakoshi suggests a theory of Information Sharing, in which resultative and particle constructions are related in an interesting manner.
REFERENCES


Neeleman, Ad and Fred Weerman (1993) "The Balance between Syntax and Morphology: Dutch Particles and Resultatives," Natural Language and


Rachewiltz, Igor de (1972) *Index to The Secret History of the Mongols*, Indiana University, Bloomington.


Street, John (1963) *Khalkha Structure*, Indiana University, Bloomington.


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