Ergativity in Eskimo (Central Alaskan Yupik)

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Contents

1. Introductory Remarks

Eskimo, spoken in arctic and subarctic North America (Alaska, Canada, and Greenland) and in the northeasternmost Asia (Chukchee Peninsula), has been widely known and cited in the linguistic literature as an "ergative" language. This paper, after introductory summary of the fundamental grammatical features of the language, will survey the way in and the extent to which ergativity manifests itself in the language.[1] It also attempts to point out the more important problems connected with this main topic, particularly what kind of peculiarity in the language is correlated with the ergative construction.

The description below refers to, unless otherwise stated, Central Alaskan Yupik, abbreviated hereafter as CAY, which is currently spoken by approximately 14,000 people in southwestern Alaska, concentrating on its most widespread dialect called General Central Yupik. CAY is one of the five Western Eskimo languages or Yupik, a branch commonly contrasted with Eastern Eskimo or Inuit (or Inupiaq) which is a single dialect continuum.[2] The Eskimo languages are much less differentiated grammatically from each other than phonologically and lexically to the extent that the grammatical outlines of CAY, which are to be presented in this section, would basically be relevant to the other Eskimo languages as well.[3]

1.1. Fundamental Grammatical Features

To begin with, CAY may be characterized as a language which is polysynthetic in view of the degree of synthesis (i.e. combinability of morphemes into a word), highly agglutinative in view of the mechanical cohesiveness of the morphemes within a word and the more or less one-to-one correspondence between expression and content of morphemes (despite a certain amount of

phonological fusion), and almost exclusively suffixing in view of the mor-
phological process (despite the existence of one prefixal element which occurs
with demonstrative stems).

CAY has three word classes: nominals, verbs, and particles. Only the
first two inflect. Particles are adverbial, conjunctional, or interjectional.
Inflecting words consist morphologically of one stem, nominal or verbal,
followed by derivational and inflectional suffixes in that order. The stem and
the inflectional suffix are obligatory, but derivational suffixes are not.

Some of the derivational suffixes semantically modify their immediately
preceding stem or derived stem (i.e. stem with one or more derivational
suffixes), but the others carry important morphological and/or syntactic
functions (e.g. changing of the stem class [nominal or verbal], verb valency,
etc.). Words may contain a considerable number of derivational suffixes,
thereby revealing the polysynthetic nature of the language. But words may
contain no derivational suffix, in which case the stem is immediately followed
by the inflectional suffix. In general, derivational suffixes are very high in
productivity, although some are more or less limited therein.

An inflectional suffix encode such grammatical categories as case, number,
person, and mood. Nominals inflect according to case, number, and person,
although not all (subclasses of) nominals fully inflect according to every
category. Case is the most important nominal category in that no nominals
lack case inflection. There are seven cases: absolutive (abbreviated as ABS),
relative (REL), ablative (ABL),[4] allative (ALL), locative (LOC), translocative
(TRL), and aequalitive (AEQ). The absolutive and the relative are the
fundamental cases which are syntactically most important. Of the two the
former should be regarded as the higher in the case hierarchy which con-
ditions case marking to be presented in 3. 2. A relative nominal is genitive
in construction with its head nominal (whose obligatorily marked third
person agrees in number with the relative nominal), but is ergative in con-
struction with a transitive verb (whose subject marker agrees in number with
the relative nominal). All the rest are "oblique" cases mostly having adverbial
functions (connected with spatial or temporal location except for the aequali-
tive), although the ablative, allative, and locative have some syntactically
related uses as well. There are three numbers, i.e., singular (s), dual (d), and
plural (p), and four persons, i.e., first (1), second (2), third (3), and reflexive
third (3R), each of which distinguishes the singular, dual, and plural. Person
in nominals, though it is not obligatory, refers to the possessor ('3s.p' in
glosses, for instance, stands for the third person singular possessor and the
plural possessed). The reflexive third person in nominals means that the third
person subject of the sentence is the possessor.

Verbs inflect according to mood and person. There are four independent
moods which are required by a main-clause verb, i.e., indicative (IND),
participial (PAR), optative (OPT), and interrogative (INT), and two de-

pendent moods which are required by a subordinate-clause verb, i.e., apposi-
tional (APP) and relative (REL). Person in verbs refers to the subject and the
object, the former of which functions as the syntactic pivot as in reflexivi-
zation and subordination (4. 1). An intransitive (INTR) verb is marked for
the subject ('3s' in glosses, for instance, stands for the third person singular
subject), and a transitive (TRAN) verb is marked for the subject and the
object ('3s. 3p', for instance, stands for the third person singular subject and
the third person plural object). The reflexive third person only occurs in
a subordinate-clause verb, indicating the coreferentiality with the third person
subject of the main-clause verb.

Thus an inflectional suffix is morphologically composed, with a certain
extent of fusion, of markers for these grammatical categories. In exemplifying
CAY forms in this paper, however, an inflectional suffix is not analysed into
its constituent markers, unless particular need be (as in 3. 5).

1. 2. Verb Classification

In terms of valency, i.e. the number of nominals (or "arguments") in-
trinsically involved in a verb, verbs can be classified into "mononominal"
with S (subject) nominal involved, "binominal" with A (agent) nominal and
P (patient) nominal involved, and "trinominal" with A nominal and two
P nominals, P_1 and P_2, involved where P_2 is the recipient. Of the mono-
nominal verbs, some are adjectival (*mike-* 'to be small'). Trinominal verbs
are very few in number.

A derivational suffix of a certain kind increases the valency of a verb
by one nominal. Since a verb may take more than one such valency-increasing
suffix, it happens that a derived verb may be tetranominal, pentanominal,
and so forth. Whatever the underlying valency of a verb, however, may
be, a surface verb is either intransitive with one nominal marked as the
subject or transitive with two nominals marked as the subject and the object.
The other nominal(s), if any, involved in an underlying verb is (are) not
marked in the verb, thus being "demoted" or "deleted" (see below). Mono-
nominal verbs can naturally occur only as an intransitive verb unless expanded
by a valency-increasing suffix, whereas binominal verbs can either occur as
a transitive or an intransitive verb.
Examples:

(1) kuime- [mononominal]   Kuim-uq. [INTR]
     to swim   swim-IND. 3s
                            'He [S] is swimming.'

(2) nere- [binominal]   (2a) Ner-aa. [TRAN]
     to eat   eat-IND. 3s. 3s
                          'He [A] is eating it [P].'

               (2b) Ner'-uq. [INTR]
                          eat-IND. 3s

                              'He [S(A)] is eating (something [(P)]).'
                              [anti-passive]

(3) payugc- [trinominal]   Payugt-ai. [TRAN]
       to take (food) to   take (food) to-IND. 3s. 3p
                                  'He [A] took (some food [(P$_1$)]) to
                                  them [P$_2$].'

"S(A)" in brackets means a derived S from A, and "(P)" means a "demoted"
P. (2b), as contrasted with the transitive (2a), has the same intransitive suffix
-uq as in (1), with only A, i.e. derived S, being marked and P being demoted.
Intransitive verbs as (2b) are the so-called "anti-passive". See 3. 3 for
semantic difference between transitive and anti-passive constructions with
verbs like (2a) and (2b) respectively. (3) is a transitive verb in which A and
P$_2$ (recipient) are respectively the subject and the object with the P$_1$ being
demoted. See 3. 1. 1 for sentences where these verbs occur with overtly ex-
pressed nominals marked for an appropriate case.

                         2. Lexical Ergativity

2. 1. Non-agentive, i.e. Ergative, Verbs.
     Binominal verbs such as *nere-* (2) may be called "agentive" in that it is
A which is retained in their intransitive verb such as (2b). Not all the
binominal verbs behave in this way, however: There is another class of
binominal verbs. Compare (2) with the following (4):

(4) allg- [binominal]   (4a) Allg-aa. [TRAN]
       to tear   tear-IND. 3s. 3s
                                    'He [A] tore it [P].'

                              (4b) Alleg-tuq. [INTR]
                                    tear-IND. 3s
                                    1) 'It [S(P)] was torn.' [passive]
                                    2) 'It [S(P)] tore.' [medial]

Binominal verbs such as *allg-* (4) may be called "non-agentive" verbs in that
it is not A but P which is retained as a derived S in their intransitive verb
such as (4b).[5] Intransitively inflected non-agentive verbs such as (4b) have
two readings as shown in glosses 1) and 2), which distinction is syntactically
relevant in CAY, and may be called "medio-passive" in contrast with anti-
passive (2b). In (4b-1) P, i.e. derived S, is marked but A is" deleted" (passivi-
zation) rather than "demoted", cf. P demotion in (2b). Difference between a
"demoted" and a "deleted" nominal lies in that the former can be overtly
expressed by a nominal marked for an oblique case but the latter can never.
In (4b-2) the binominal opposition between P and A is lost (medialization).
     In the case of agentive verbs the transitive *subject* and the intransitive

(derived) subject are the same nominal, namely A, while in the case of non-agentive verbs the transitive *object* and the intransitive (derived) subject are the same nominal, namely P. It accordingly follows that CAY non-agentive verbs lexically reveal the ergative pattern of: transitive object = intransitive subject ≠ transitive subject. Lexical ergativity is certainly far from being characteristic of Eskimo in particular but it should be mentioned in its own right in this overview of ergativity all the more so because the distinction between agentive and non-agentive binominal verbs has important syntactic relevance in this language.

In addition, CAY has a considerable number of what may be called "impersonal non-agentive" verbs where A is something impersonal (like natural force or process).[6] As non-agentive verbs, their intransitive (derived) subject is P, with the impersonal A being deleted. But in contrast to the other classes of binominal verbs, the impersonal A subject is always in the third person singular (but not dual or plural) and naturally marked as such in transitive verbs, though hardly if ever expressed overtly by a noun or any other nominal.

(5)   ciku- [imp. binominal]   (5a)   Ciku-i. [TRAN]
      to freeze   freeze-IND. 3s. 3p
                                      'It [impA] froze them [P].'

                                (5b)   Ciku-ut. [INTR]
                                        freeze-IND. 3p
                                        'They [S(P)] are frozen.' [passive]

(5b) has only one reading given in contrast to (4b) with two readings: This is correlated with the fact that impersonal non-agentive verbs have no "half-transitive" construction (see 2. 2.).[7]

Turning now back to th difference between agentive and non-agentive verbs, the following pair (6) and (7) both refer to the cutting of fish, one of the most important activities for Yupik women, but they are different in the semantic role of the subject in the respective intransitive verb (6b) and (7b), that is, A in the former but P in the latter. Hence (6) is agentive and (7) non-agentive.

(6)   seg- [agentive]   (6a)   Seg-aa. [TRAN]
      to cut (fish)   cut-IND. 3s. 3s
                                      'She [A] is cutting it [P].'

                                (6b)   Seg-tuq. [INTR]
                                        cut-IND. 3s
                                        'She [S(A)] is cutting
                                        (something [(P)]).'

(7)   ulligc- [non-agentive]   (7a)   Ulligt-aa. [TRAN]
      to cut (fish)   cut-IND. 3s. 3s
                                        'She [A] is cutting/has cut it [P].'

(7b)   Ulligt-uq. [INTR]
       cut-IND. 3s
       'It [S(P)] is cut.'

(6b) refers to the woman's progressive rather than completed action of cutting
fish (i.e. removing the abdominal cavity), while (7b) refers to the fish's
resultant state of being cut for drying (i.e. with cuts to make the air reach
all parts of the flesh).

Semantic distinction between two major classes of CAY binominal verbs
could be provisionally stated in the following way: attention is (apt to be)
directed, in the case of agentive verbs, to the agent's action or process itself,
but, in the case of non-agentive verbs, to the change or effect as the result
of the action or process upon the patient. Such a resultant change or effect
in the patient is most obvious in intransitively inflected non-agentive
binominal verbs (in which P is the derived subject).

Another measurable distinction between agentive and non-agentive (in-
cluding impersonal non-agentive) is aspectual. As is partly mentioned above
and implied in the glosses, agentive verbs tend to be either progressive or
perfective but non-agentive verbs—intransitively inflected ones in particular
—tend to be perfective or resultative, unless a specific aspect-tense marker
(either a derivational suffix or an independent word) concurs. This should
be easy to see, given the above-mentioned nature of non-agentive verbs where
attention is directed to the change or effect as the result of the action or
process upon the patient.

In spite of the basic contrast between agentive and non-agentive verbs,
it would be interesting to note in this connection that agentive verbs can
also reveal the ergative pattern. If an aspect-tense marker concurs, P can
stand as the intransitive subject for agentive verbs. Compare (2b) with the
following examples each of which has two readings 1) and 2):

(8) Ak'a   ner'-uq.   1) 'He [S(A)] has eaten already.'
       already   eat-IND. 3s   2) 'It [S(P)] has been eaten already.'

(9) Ner-uma-uq.   1) 'He [S(A)] has been eating.'
       eat-CONT-IND. 3s   2) 'It [S(P)] is being eaten.'

(10)   Ner'-arkau-guq.   1) 'He [S(A)] is supposed to eat.'
       eat-should-IND. 3s   2) 'It [S(P)] should be eaten.'

The distinction between the two classes of binominal verbs reveals itself
also when occurring with certain derivational suffixes. An intransitively
inflected non-agentive verb with the suffix -sug- 'to want to', commonly called
desiderative, implies tendency, constancy or nature rather than wish. This
should be easy to see, given that the derived S(P) is typically inanimate with-
out desire or volition. Compare (12b) and (13) with (11a, b) and (12a):

(11)   nere- [agentive]   (11a)   Ner-yug-aa. [TRAN] (y from s)
       to eat   eat-DES-IND. 3s. 3s
                                           'He wants to eat it.'

(11b) Ner-yug-tuq. [INTR]
       eat-DES-IND. 3s
       'He wants to eat (something).'

(12) allg- [non-agentive]   (12a) Alleg-yug-aa. [TRAN]
      to tear   tear-DES-IND. 3s. 3s
                                            'He wants to tear it.'

                                    (12b) Alleg-yug-tuq. [INTR]
                                           tear-DES-IND. 3s
                                           'It tends to tear.'

(13) ciku- [imp. non-agentive]   Ciku-yu-llru-uq. [INTR]
      to freeze   freeze-DES-PAST-IND. 3s
                                           'It (e.g. carburetor) kept freezing.'

Non-desiderative implication is, however, not limited to intransitively inflected non-agentive verbs but is also the case with those mononominal verbs whose S is inanimate:

(14) take- [mononominal]   tak-sug-tuq. [INTR]
      to be long   be long-DES-IND. 3s
                             'It is usually (too) long.'[8]

Lexical ergativity manifests itself also in nominalization. Compare the following three deverbal nominals with the infinitival -llr:

(15) kuime-lleq-∅   '(way of) swimming'   cf. (1)
      swim-NOM-ABS. s

(16) ner'-lleq-∅   '(way of) eating'   cf. (2)
      eat-NOM-ABS. s

(17) alle-lleq-∅   '(way of) being torn'   cf. (4)
      tear-NOM-ABS. s

Again the nominalizer -saraq 'how to' (see example 21) reveals lexical ergativity. Relativization (4. 2), which is considered a kind of nominalization, operates also on the ergative basis. Parenthetically speaking, unlike many other languages of the world, lexical ergativity does not naturally reveal itself in stem-compounding and noun-incorporation simply because these morphological processes are never employed in this almost exclusively suffixing language.

2. 2. "Half-transitive" Verbs

As shown above, non-agentive verbs have P as the intransitive (derived) subject, lexically revealing the ergative pattern, while agentive verbs have basically A as the intransitive (derived) subject, revealing the "accusative" pattern (transitive object ≠ intransitive subject = transitive subject). In other words, intransitive verbs of the former are not of the anti-passive but of the medio-passive nature. The language has, however, a device for deriving from

non-agentive verbs a class of intransitive verbs which are of the anti-passive
nature. This is nothing but what has traditionally been called "half-transitive"
in Eskimo linguistics since Kleinschmidt wrote his well-known excellent
grammar (1851 [1968]) of West Greenlandic (Eastern Eskimo). Half-transitive
verbs in CAY are derived by means of one of a few specific suffixes, by far the
most productive of which is -gi-. Note that it is the following (18a), not (4b),
as contrasted with (4a) which is syntactically and semantically parallel to
(2b) as contrasted with (2a):

(18)   allg-gi- (cf. 4)   (18a)   Allg-i-uq. [INTR=halfTRAN]
        to tear-GI   tear-GI-IND. 3s
                                     'He [S(A)] is tearing (something [(P)]).'
                        (18b, c)   *below*

It appears that a non-agentive verb is as it were "agentivized" by means of
the suffix -gi-. And, as a matter of fact, anti-passive "half-transitive" verbs
are productively formed with this suffix from any non-agentive verbs but a
few which select a different suffix for the same purpose. It would probably
be superficial, however, to regard the function of the suffix simply as agentivi-
zation of a non-agentive verb. It seems to this writer that the function should
be understood in a wider perspective.

   As is documented in Miyaoka (1984), CAY uniquely among Eskimo
languages has a considerably productive system of what he calls "experiencer"
verbs. The verbs refer to the experiencer (E), which is adversely or favorably
affected by the action or process intrinsically connected with S as in (27a, b)
or with P and A as in (25d, e). The term experiencer as such is employed
here in a different sense from its recent use (as in Fillmore 1971). Identifi-
cation in CAY of such an E role in addition to S, P (with P_1 and P_2) and
A is necessitated by the fact that an E nominal holds a distinct position in
the nominal hierarchy (3. 2), and distinction of these roles (together with
an A role specific to "complex verbs", 3. 2) is necessary and sufficient for case
marking. The following is an example of an adversative experiencer verb:

(18b)   Allg-i-a. [TRAN]
         tear-GI-IND. 3s. 3s
         'He [A] tore (something [(P)]) *on* (to the
         disadvantage of) him [E].'

(18b) has the same underlying verb with the suffix -gi- as (18a). Morphologi-
cally the only difference that obtains between (18a) and (18b) is that the
former has the intransitive 3s marker and the latter the transitive 3s.3s. In
(18b) it is clear that the function of the suffix -gi- should be to add an E nomi-
nal to the verb thereby increasing the valency from binominal to trinominal.
Remarkable is the fact that, although the anti-passive reading (18a) is a much
more common interpretation of *allgiuq*, the same form may also be interpreted
as adversative like (18c):

(18c) Allg-i-uq. [INTR]
       tear-GI-IND. 3s
       '(Something [(P)]) was torn *on* him [S(E)].'

Finding it difficult to raise any doubt as to the identity of this E-adding suffix with the one that occurs in the "half-transitive" verb (18a), one is led to think that a "half-transitive" verb is nothing but an intransitively inflected non-agentive verb with the E-adder. This view as to the identity would find a support in another remarkable fact that there is a suffix, namely *-uc-*, which has both the function of "agentivizing" non-agentive verbs (though limited in number) and of deriving an experiencer verb (though with benefactive rather than adversative implication). See Miyaoka (1984) for a tentative explanation of the semantic relation between a half-transitive (i.e. "agentivized") verb and an experiencer verb as well as for examples of *-uc-* experiencer verbs.

To return to the adversative construction with *-gi-*, it can occur with any class of verbs, i.e., mononominal, binominal and trinominal. Adversative verbs with *-gi-* inflect both transitively and intransitively, although an intransitively inflected non-agentive (apart from impersonal non-agentive) verb with *-gi-* is much more commonly interpreted as "half-transitive" rather than adversative. An intransitively inflected impersonal non-agentive verb with *-gi-* has only the adversative reading. The half-transitive construction is not possible with impersonal non-agentive verbs and this with necessary reason (Miyaoka 1984: 211).

Owing to the semantic and syntactic difference between agentive and non-agentive verbs, nominalizing suffixes such as *-st* 'one who do(es)' and *-ssuut* 'instrument for -ing' require "agentivization" by *-gi-* in order to occur with a non-agentive verb. Compare (19a, b) from an agentive verb with (20a, b) from a non-agentive:

(19) nere- [agentive]
      to eat

(19a) nere-sta-∅
       eat-one who-ABS. s
       'louse (i.e. eater)'

(19b) ner'-ssuun-∅
       eat-instrument-ABS. s
       'fork, eating utensil'

(20) cuqec- [non-agentive]
      to measure

(20a) cuqc-i-sta-∅
       measure-GI-one who-ABS. s
       'judge'

(20b) cuqc-i-ssuun-∅
       measure-GI-instrument-ABS. s
       'ruler'

By the same token, nominalizing suffixes such as *-saraq-* 'way how to' disclose a semantic difference between a non-agentive verb with and without *-gi-*, i.e., between (a) non-agentive and (b) "agentivized":

(21) naaqe- [non-agentive]   (21a) naaq-saraq-∅
        to read   read-how to-ABS. s
                                     'the way how (something) is to be read'

                               (21b) naaq-i-yaraq-∅ (*y* from *s̹*)
                                   read-GI-how to-ABS. s
                                   'the way how (someone) reads'

Likewise (17) *alle-lleq* '(way of) being torn' contrasts with *allg-i-lleq* '(way of) tearing'.

3. Morphological Ergativity

Morphological marking of nominals for syntactic cases operates on the ergative basis. It is here that ergativity manifests itself most clearly and extensively in Eskimo (3. 1). Case marking rules, which are responsible for the ergative pattern, are presented (3. 2), the ergative construction is semantically compared with the anti-passive one in the hope of elucidating the function of the syntactic cases and their shift (3. 3.), and the significance of the case shift in CAY is tentatively suggested (3. 4). In addition, mention is made of the distribution of verbal person markers, a phenomenon which shows at least partly the ergative pattern (3. 5).

3. 1. Ergative Pattern of Case Marking

3. 1. 1. At the surface it is always the case that both a nominal for an intransitive subject and one for a transitive object occur in the absolutive case whereas a nominal for a transitive subject occurs in the relative case, thereby revealing the ergative pattern. Accordingly a transitive construction (i.e. consisting of a transitive verb with its subject and object nominal) is always ergative. This is illustrated by the following sentences containing the verbs cited in the preceding section:

(22) Neqa-∅   kuim-uq.   cf. (1)
     fish-ABS. s   swim-IND. 3s.
     'The fish [S] is swimming.'

(23a) Angute-m   neqa-∅   ner-aa.   cf. (2a)
      man-REL. s   fish-ABS. s   eat-IND. 3s. 3s
      'The man [A] is eating the fish [P].'

(23b) Angun-∅   neq-mek   ner'-uq.   cf. (2b)
      man-ABS. s   fish-ABL. s   eat-IND. 3s
      'The man [S(A)] is eating a fish [(P)].'

(24) Arna-m   angute-t   akuta-mek   cf. (3)
     woman-REL. s   man-ABS. p   ice cream-ABL. s
     payugt-ai.
     take-IND.3s. 3p

'The woman [A] took ice cream [(P₁)] to the men [P₂].'

(25a) Arna-m   kuvyaq-∅   allg-aa.   cf. (4a)
      woman-REL. s   net-ABS. s   tear-IND. 3s. 3s
      'The woman [A] tore the net [P].'

(25b) Kuvyaq-∅   alleg-tuq.   cf. (4b)
      net-ABS. s   tear-IND. 3s
      1) 'The net [S(P)] was torn.'
      2) 'The net [S(P)] tore.'

(25c) Arnaq-∅   kuvya-mek   allg-i-uq.   cf. (18a)
      woman-ABS. s   net-ABL. s   tear-GI-IND. 3s
      'The woman [S(A)] is tearing a net [(P)].'

(25d) Arna-m   angun-∅   kuvya-mek   allg-i-a.   cf. (18b)
      woman-REL. s   man-ABS.s   net-ABL. s   tear-GI-IND. 3s. 3s
      'The woman [A] tore a net [(P)] on the man [E].'

(25e) Angun-∅   kuvya-mek   allg-i-uq.   cf. (18c)
      man-ABS. s   net-ABL. s   tear-GI-IND. 3s
      'A net [(P)] was torn on the man [S(E)].'

Four of the nine sentences above contain transitive verbs: (23a) from agentive binominal verb, (24) from trinominal, (25a) from non-agentive binominal, (25d) from non-agentive binominal with adversative -gi-. Irrespective of the difference of the underlying verbs, they are all of the same transitive construction where the subject nominal—namely A—and the object nominal —namely P in (23a) and (25a), P₂ in (24), E in (25d)—are marked respectively for the relative and the absolutive case and are cross-referenced by the subject and the object marker in the respective transitive verb. In (23b) P ('a fish'), which occurs in an oblique (viz. ablative) case and is not referred to by the verb, is *not* an object: it is demoted. Likewise in (24), as shown by the verb agreement, P₂ is the object whereas P₁ is *not*.

The five others have intransitive verbs: (22) from mononominal verb, (23b) from agentive binominal, (25b) from non-agentive binominal, (25c) from non-agentive binominal with "agentivizing" -gi-, and (25e) from non-agentive binominal with adversative -gi-. (23b) is anti-passive, (25b) medio-passive, (25c) anti-passive ("half-transitive"), and (25e) an experiencer verb. Accordingly (23b) and (25c) have A nominal as the (derived) subject, (25b) has P nominal as the (derived) subject, and (25e) has E nominal as the (derived) subject. Whatever the derivation may be, they are all of the same intransitive construction where the subject nominal is marked for the absolutive case and is cross-referenced by the subject marker in the intransitive verb. The P nominal in (23b), (25c), and (25e), which occurs in an oblique (viz. ablative) case and is not referred to by the verb, is *not* an object: it is demoted. It should be noted, on the other hand, that the A nominal in (25a) and (25d) does not show up in its corresponding intransitive (25b) and (25e). Even if the

agency is felt in (25b-1) and (25e), the agent nominal can never be expressed in any nominal case whatever: it is "deleted".

It should be clear from examples (22) through (25e) that, while the intransitive subject and the transitive object are identically treated in case marking (occurring in the absolutive case), the transitive subject behaves separately (occurring in the relative case). Hence we have the ergative pattern in case marking. This ergative pattern is always the case in CAY. Notably it does not show "split" in any respect, for example, aspect-tense, verbal mood, affirmative vs. negative, dependent vs. independent clauses, or kind of verbs and nominals involved.

3. 1. 2.   The ergative pattern of case marking, which is thoroughgoing in itself, can nevertheless be somewhat veiled by the fact that morphological distinction between the absolutive and the relative case is neutralized in some forms. This is the case with dual and plural nominals with no person inflection. While the absolutive and the relative cases for the singular are distinctly marked by -ϕ- and -m respectively, the two cases are neutralized for the dual and for the plural, being identically marked by -k and -t respectively. The neutralization is responsible for the ambiguity of the type seen in the following example where two readings with inverse nominal roles are possible.

(26)   Arna-t   angute-t   apt-ait.
       woman-ABS/REl. p   man-ABS/REL. p   ask-IND. 3p. 3p
       1) 'The women [A] asked the men [P].'
       2) 'The men [A] asked the women [P].'[9]

The distinction between the absolutive and the relative case is also neutralized in the first and the second person pronouns but not in the third. Some examples (singular) are *wii ~ wiinga* (ABS/REL. 1s), *elpet* (ABS/REL. 2s), *ellii* (ABS. 3s), *elliin* (REL. 3s). See Reed *et al.* (1977) for a full list of CAY personal pronouns.

3. 2.   Case Marking Rules

3. 2. 1.   As is now seen, the morphological marking of syntactic cases is very simple, i.e. the absolutive case for intransitive subject and transitive object nominals and the relative case for transitive subject nominals, but this only as far as the surface nominals are concerned: Correlation between morphological case markings and syntactic relations of nominals is very high. It does not explain, however, which syntactic relation (subject, object, or adverbial adjunct) a particular nominal carries. The apparent simplicity dissolves as soon as one tries to consider the problem in view of the semantic role of the nominals (A, P, S, and E) intrinsically involved in a verb: Correlation between morphological case markings and semantic roles of nominals is not direct. An A nominal, for instance, may occur in as many as five different cases, i.e. absolutive, relative, ablative, allative, and locative.

Involved here are those processes of nominal promotion/demotion, and dele-
tion, and medialization which determine the grammatical relation and the
case of a particular nominal.

Case marking operates according to the case hierarchy of ABS > REL
(the symbol > reads 'higher than') and to the nominal hierarchy of $\left\{ \begin{matrix} S \\ P \end{matrix} \right\}$ >
E > A (where $P_1 > P_2$ is for two P's of trinominal verbs).

Rule I: The absolutive case is assigned to the first nominal along the
nominal hierarchy.

Rule II: The relative case is assigned to the next higher nominal if
one is present.

Rule III: The relative nominal is promoted to the absolutive with the
absolutive nominal being demoted to the ablative except that non-agentive
verbs are intransitivized by deleting the agent nominal (IIIa) or by mediali-
zation (IIIb).

Rule I is obligatory. Rules II and III are also obligatory if there should
remain nominals to be case-assigned. Rule III can be applied twice but
hardly any more times. Three occurrences of a demoted nominal in a single
clause in the ablative case seem hardly acceptable.

Rule application is illustrated by the sentences cited in the preceding
section: (22) by I; (23a) and (25a) by I and II; (23b) by I, II and III; (25b-1)
by I, II and IIIa; (25b-2) by I, II and IIIb (whereby binominal opposition
between A and P is lost); (24) and (25d) by I, II, III and II; (25e) by I, II,
III, II and IIIa; (25c) by I, II, III, II and IIIb (whereby binominal oppo-
sition between A and E is lost). The contrast between the passive (25b-1)
and the medial (25b-2) is parallel to that between the adversative (25e) and
the half-transitive (25c) which are both derived by -gi-. The parallelism is
certainly suggestive of the nature of half-transitive verbs (Miyaoka 1984).

An additional illustration may be given with respect to (27a), a transitive
construction with a mononominal verb (with S) plus the adversative -gi-
(with E), and (27b), the corresponding intransitive construction. The former
has S nominal in the absolutive and E nominal in the relative required by
Rule I and II, while the latter has S nominal in the ablative and E nominal
in the absolutive required by Rule I, II and III:

(27a) Angute-m   nayiq-∅   kic-i-a.
      man-REL. s   seal-ABS. s   sink-GI-IND. 3s. 3s
      'The seal [S] sank *on* the man [E].'

(27b) Angun-∅   nayir-mek   kic-i-uq.
      man-ABS. s   seal-ABL. s   sink-GI-IND.3s
      'A seal [(S)] sank *on* the man [E].'

Note also that E nominal is in the relative in (27a) but in the absolutive
in (25d) although both are transitive constructions.

Parenthetically, the primacy of P in relation to A as reflected in the

nominal hierarchy above can also be recognized in a number of facts in CAY, e.g. the contrast already illustrated that A deletion can occur but P deletion cannot.

3. 2. 2.   An additional rule specific to "complex verb" constructions will complete the case marking rules for CAY. A complex verb consists of an embedded verb expressed by a verbal stem, a higher verb expressed by a complex-verbalizing suffix (or "compound verbal postbase", Reed *et al.* 1977) and an inflectional suffix. An A of different types is involved in such a higher verb, e.g. *-sqe-* 'A (indirect-commander) to ask/want that', *-ni-* 'A (communicator) to say that', *-zuke-* A (thinker) to think that', *-vkar-* [postvocalic] / *-cic-* [post-consonantal] 'A (causer) to make, let'. A complex verb as such may be embedded iteratively into a higher verb, thereby increasing the valency, so that it can be binominal, trinominal, tetranominal, pentanominal, and so forth. An A for a higher verb is indicated by A', A'', and so on. Promotion coupled with demotion concerning a complex verb construction can be made either by Rule III or by Rule IV below.

　　　Rule IV: The relative case is assigned to the agent of the higher verb with the relative nominal for the embedded verb being demoted to the allative case.

　　　Rule IV can be applied iteratively, though to a certain limited extent. Compare the two indirect commands (28a) and (28b) by means of *-sqe-*:

(28a) Arna-m　　　　　angut-mun　　neqa-∅　　　　nere-sq-aa.
　　　woman-REL. s　man-ALL. s　fish-ABS. s　eat-ask-IND. 3s. 3s
　　　'The woman [A'] asks the man [(A)] to eat the fish [P].'

(28b) Arna-m　　　　　angun-∅　　　neq-mek　　　nere-sq-aa.
　　　woman-REL. s　man-ABS. s　fish-ABL. s　eat-ask-IND. 3s. 3s
　　　'The woman [A'] asks the man [A] to eat a fish [(P)].'

The complex verb *neresqaa* is trinominal from the binominal *nere-* (with A and P) and the complex-verbalizer *-sqe-* (with A' [indirect-commander]). The case marking in (28a) is made by Rules I, II and IV, but that in (28b) by Rule I, II and III. It should be noted that the semantic difference between (28a) and (28b) corresponds to that between (23a) and (23b) with the same demotion rule (III) being applied to (28b) and (23b). Thus it could be said that (23a) is embedded in (28a) but (23b) in (28b). These complex-verb constructions, which are transitive, can also be put into an intransitive (i.e. "half-transitive") construction as in the following:

(29) Arnaq-∅　　　　angut-mek　　nere-sq-i-uq.
　　　woman-ABS. s　man-ABL.s　eat-ask-GI-IND. 3s
　　　'The woman [S(A')] asks a man [(A)] to eat (something [(P)].'

This is a "half-transitive" sentence derived from (28b), but without P being expressed. It, however, has another reading 'the woman asks (someone) to eat a man', in which case it is the 'man' that is taken as P but without A

being expressed.

On the other hand, a complex-verb construction can be, in turn, embedded in a higher complex verb like the following example derived from (28a) with the complex-verbalizer -ni- (with A″ [communicator]), thereby giving rise to a tetranominal verb:

(30) Aata-ma   arna-mun   angut-mun   neqa-∅
      father-REL. 1s.s   woman-ALL. s   man-ALL. s   fish-ABS. s
      nere-sqe-ñi-a
      eat-ask-say-IND. 3s. 3s
      'My father[A″] says that the woman[(A′)] asked the man[(A)] to eat the fish [P].'

Case marking in (30) is made by Rules I, II, IV and IV.

With another complex-verbalizer (30) can further be embedded into a higher verb, which in turn can be embedded into a still higher verb, and so on, the result being three or four occurrences of allative nouns in a single sentence. The language has certainly greater tolerance with multiplication of allative nouns than of ablative ones (3.2.1). See Woodbury (1985: 275) as to the relative word order of the two or more allative nouns. Such multi-stratified complex verbs with as many nominals involved are highly characteristic of CAY, contributing to the polysynthesis of the language. Naturally, however, the more multiplied a verb becomes, the more difficult its interpretation becomes. A multi-nominal verb with, say, six or more nominals seems to be hardly used, although possible in principle. The experience of this writer shows that many speakers find such a verb very confusing, occasionally interpreting (if ever) two (or three) nominals coreferential. Marie Blanchett (p.c.) once said that a verb with seven nominals is nearly the maximum to interpret adequately. As contrasted with an ablative or an allative nominal, an absolutive nominal cannot be doubled in a clause unless one is adverbial (e.g. a nominal indicating time), a fact suggestive of the function of the absolutive case.

The nominal hierarchy for syntactic case marking, which defines ease of accessibility to the absolutive position, can now be completed in the following representation:

$$\begin{matrix} & S & \\ P & > E > A > A' > A'' \ldots \\ (P_1 > P_2) & \end{matrix}$$

3.2.3. The only exception that this writer is aware of to the syntactic case marking occurs in nouns which refer to the first or to the second person. It seems that Rule V below for this exception represents a type of demotion which should probably be understood in view of the tendency characteristic of CAY to avoid straightforwardness in linguistic expression (cf. Miyaoka 1985):[10]

Rule V: The absolutive noun which refers to the first or the second person is demoted to the locative.

(31) Wangkuta   arna-ni   manar-yar-aq-luta
      we-ABS/REl. p   woman-LOC. p   fish-go to-habitually-APP. 1p
      iqallua-nek.
      cod-ABL. s
      'We women (habitually) go (hook-)fishing for tomcods.'

Since it is clear from the person marker of the verb as well as from the
(optional) appositive personal pronoun that the 'women' refers to the first
person, the absolutive (plural) arna-t instead of the locative (plural) arna-ni
in this sentence is ungrammatical. Compare the following (32) with (33):

(32) Elpet   taangiq-suil-ngur-mi   ayuqnia-narq-uten.
      you-ABS/REL.s   get drunk-never-PAR-LOC. s   envy-be ed. -IND. 2s
      'You who never get drunk are to be envied.'

(33) Ellii   taangiq-suil-nguq-∅   ayuqnia-narq-uq.
      he-ABS.s   get drunk-never-PAR-ABS. s   envy-be ed. -IND. 3s
      'He who never gets drunk is to be envied.'

The nominal participle ('one who never gets drunk') is in the locative case
in (32) where it refers to the second person but in the absolutive case in
(33) where it refers to the third person.

    What has been treated as a vocative use of the locative case (Reed et al.
1977: 261) should be taken as this type of nominal demotion since the
addressed nominal necessarily refers to the second person:

(34) Tan'gaurlur-ni   nepa-u-naci   pissu-lar-ci.
      boy-LOC. p   noise-have no-NEG•APP.2p   hunt-always-OPT.2p
      'Always hunt quietly, (you) boys!'

(35) Classa-mni   wi   tai-qer-ci.
      class-LOC. 1s.p   1s   come-POLITE-OPT. 2p
      '(You) my class (students), come here!'

3. 3. Ergative vs. Anti-passive Constructions

    There are a number of differences between an ergative construction with
a transitively inflected verb and an anti-passive (including "half-transitive")
construction with an intransitively inflected verb. One of the differences can
be seen by comparing (23a) with (23b) or (25a) with (25c). The P nominal
in the absolutive case in (23a) and (25a) is glossed with a definite article
but the demoted P nominal in the ablative case in (23b) and (25c) is glossed
with an indefinite article, a more or less established tradition in Eskimo
grammars written in a number of European languages. A similar contrast
seems to exist even where an interrogative word is the P nominal. Compare
the transitively inflected (36a) and the intransitively inflected (36b):

(36a) Ca-∅   ner-yug-ciu?
       what-ABS. s   eat-DES-INT. 2s. 3s
       'What (specific food) do you want to eat?'

(36b) Ca-mek   ner-yug-cit?
      what-ABL. s   eat-DES-INT. 2s
      'What (kind of food) do you want to eat?'

The contrast between definiteness and indefiniteness of a P nominal does not, however, always apply in CAY or any other Eskimo language. Accordingly an attempt has been made to see an absolutive nominal (in ergative constructions) as carrying given information and an ablative nominal (in anti-passive constructions) as introducing new information (e.g. Kalmár 1977, 1979a, 1979b). This view naturally has become a point of scholarly debate, since there is doubt, for instance, whether an absolutive nominal is always the one already known (e.g. Klokeid and Arima 1977, Fortescue 1982). Likewise the view which was sometimes suggested that an absolutive nominal is always the topic of a sentence may possibly be simplistic. For all this, however, pragmatic factors should still remain a problem in CAY to be further explored in relation to the absolutive case.

As a matter of fact, both an ergative and an anti-passive construction can be used where the contrast between definite and indefinite or between known and new information does not seem to be necessarily relevant (in view of, say, the context and a possessed or a proper noun). Note the difference in the following pairs:

(37a) Arna-m   qalta-ni   kuve-llru-a.
      woman-REL. s   pail-ABS. 3Rs. s   spill-PAST-IND. 3s. 3s
      'The woman spilled her (own) water pail (*deliberately*).'

(37b) Arnaq-∅   qalta-minek   kuv'-i-llru-uq. [half-TRAN]
      woman-ABS. s   pail-ABL. 3Rs. s   spill-GI-PAST-IND. 3s
      'The woman spilled her (own) water pail (*accidentally*).'

The accidentalness as in (37b) is implied in the following example as well which has another "half-transitivizing" suffix -*kenge*- with much less productivity than -*gi*-.

(38) Pupsu-keng-uq   ulluva-mnek. [half-TRAN]
      pinch-HTR-IND. 3s   cheek-ABL. 1s. s
      'He pinched my cheek / tried to pinch somewhere but *happened* to catch my cheek.'

Compare the following pairs as well:

(39a) Angute-m   nangteqe-llria-∅   takumcuk-aa.
      man-REL. s   sick-PAR-ABS. s   pity-IND. 3s. 3s
      'The man has pity on the sick person (*lit.* one who is sick).'

(39b) Angun-∅   nangteqe-llria-mek   takumcuk-i-uq. [half-TRAN]
      man-ABS.s   sick-PAR-ABL. s   pity-GI-IND. 3s
      'The man is *now pitying* the sick person.'

(40a) Massiina-ni   kitugte-llru-a.

     machine-ABS. 3Rs. s   fix-PAST-IND. 3s. 3s
     'He fixed his (own) machine.'

(40b) Massiina-minek   kitugc-i-llru-uq. [half-TRAN]
     machine-ABL. 3Rs. s · fix-GI-PAST-IND. 3s
     'He was *fixing* his (own) machine.'

3. 4.　Case Shift as Multipolar Voice

    After having surveyed the major construction types and their nominal case markings, it should now be clearly understood how even a multinominal (complex) verb can be put into a transitive or an intransitive construction. The process involved herein is so constructed that any nominal—S, P, E, A, and higher A's (causer, indirect-commander, communicator, thinker, etc.)— can be promoted into the absolutive case at the cost of the other nominal(s) being demoted or deleted. It could be said that nominals are arranged in a row according to their hierarchy, as if waiting to be foregrounded to the highest, i.e. absolutive, position one after another.

    In this connection one may possibly wonder whether the P_1 nominal of a trinominal verb can ever be accessible to the absolutive position if the Rules concerned require that the nominal, highest in the hierarchy, be obligatorily demoted first of all. There is a device for putting it into the absolutive position, however: The derivative suffix -*utke*- performs the specific function of demoting the P_2 nominal of a trinominal verb into the allative, thereby securing the absolutive position for the P_1 nominal. Compare (24) with the following particularly with respect to the verbal person marker as well as the case marking:

(41)   Arna-m   angut-nun   akutaq-∅
      woman-REL. s   man-ALL. p   ice cream-ABS. s
      payug-utk-aa.
      take-UTKE-IND. 3s. 3s
      'The woman [A] took the ice cream [P_1] to the men [(P_2)].'[11]

    The reverse of the coin is that a nominal with the same semantic role may occur in a number of cases. As suggested above (3. 2. 1), an A nominal may occur in the absolutive, relative, ablative, allative, and locative case. Note the absolutive case for the agent 'a man (who eats fish)' in (23b) and (28b), the relative in (23a), the ablative in (29), and the allative in (28a). An A nominal in the locative case could be illustrated by using the same construction as (31).

    Elucidation of this kind of case shift combined with nominal promotion/ demotion or deletion may lead one to endorse the view that setting a nominal into the absolutive case, which is morphologically unmarked, is to foreground the nominal with the strong spotlight of attention from the view of the speaker by relegating another nominal to an oblique case, which is marked, or by eliminating it. What we are dealing with here turns out to be

a wide range of voices. The alternation of the voice occurs not simply between two nominals (say A and P) but among various kinds of nominals hierarchically ordered, with the choice of one rather than another of the options available being pragmatically motivated in all likelihood. If this is the case, it may well be characterized as a "multipolar" (or perhaps better, multistratified) voice rather than a bipolar voice. (The "polarity" here has nothing to do with affirmative vs. negative.)

Although any detailed explanation will have to be dispensed with because of space limitation, we should at least mention in this connection a device that the language adopts which has the functional unity with case shift, "conspiring" for absolute position: A number of derivational suffixes perform the function of replacing the primary P nominal of a binominal verb with a nominal of various kinds or of adding a P nominal to a mononominal verb to build a binominal verb (in which case the primary S becomes A), so that the new P nominal can be put into the absolutive position for the sake of foregrounding. Such a P category encompasses several semantic roles: companion, possessed thing, place, instrument, cause/reason, etc.

TABLE: VERBAL PERSON MARKERS

	TRANSITIVE OBJECT	INTRANSITIVE SUBJECT	TRANSITIVE SUBJECT
FIRST PERSON (singular)			
indicative-participial	-nga	-nga	-qa/-m-
optative	-nga	-nga	-∅-/-m-
interrogative	-nga	-nga	*N.A.*
appositional	-nga	-nga	*unmarked*
relative	-nga	-nga	-m-
SECOND PERSON (plural) Some peculiarity in the singular.			
indicative-participial	-ci	-ci	-ci/-peci-
optative	-ci	-ci	-ci
interrogative	-ci	-ci	-ci
appositional	-ci	-ci	*unmarked*
relative	-ci	-peci	-peci
THIRD PERSON (plural) Some peculiarity where both transitive subject and object are in the third person.			
indicative-participial	-ngi-	-t	-t
optative	-ki	-t	-t
interrogative	-ki	-t	-t
appositional	-ki	*N.A.*	*N.A.*
relative	-ki	-ngata	-ngat-
REFLEXIVE THIRD PERSON (singular)			
appositional	*N.A.*	-ni	*unmarked*
relative	-ni	-mi	-mi-

3. 5.   Person Markers

3. 5. 1.   As already seen above (3. 1), the subject and the object are encoded by the person marker in a surface verb, agreeing in number with the subject and the object nominal if overtly expressed. Those person markers in verbal inflectional suffixes differ according to the mood, and their distribution reveals not only the ergative but also the accusative and the "neutral" (transitive object = intransitive subject = transitive subject) patterns. Markers of any one person (first, second, third, or reflexive third), however, reveal the same pattern irrespective of number (singular, dual, or plural).

CAY has basically the same system of person markers as Central Siberian Yupik or Chaplinskiy the ergativity of which was once discussed by Vakhtin (1979), each marker showing high degree of phonological correspondence between the two languages. The general pattern of the distribution would present itself more clearly in the following tabulation method as different from Vakhtin's. Examples show markers of only one number for each person: see Reed et al. (1977) for a full list.

The "indicative-participial" in the table implies that the two moods share the same set of person markers. The two forms separated by a slash (/) depend upon the object person. The first person marker before the slash occurs with the third person object (as in '1s. 3s') and that which follows occurs with the second (as in '1s. 2s'), while the second person marker before the slash occurs with the third person object (as in '2p. 3s') and that which follows occurs with the first (as in '2p. 1s'). The "N.A." (not applicable) for the first person marker implies that transitive verbs with the first person subject do not occur in the interrogative mood. "N.A's" otherwise as well as "unmarked" are all related to the appositional mood whose idiosyncrasies will soon be presented. The relative mood with its own peculiarity will be mentioned in the next section on syntactic ergativity.

As far as the independent moods (indicative, participial, optative, and interrogative) where the reflexive third person is irrelevant are concerned, it can be seen from the tabulated examples that the distribution of person markers reveals the ergative pattern for the first person, the neutral (as a whole) for the second, and the accusative for the third. This is generally the case with the other (unexemplified) numbers for each person.

3. 5. 2.   To turn to the appositional, this dependent mood indicates a circum-stance attendant upon what is expressed by the main clause with an inde-pendent verb. Note that the first and the second person markers evidently show the ergative pattern. The appositional mood has two idiosyncrasies which are not shared by any other mood. (1) The subject of an appositional verb is always coreferential with the main-clause subject, showing the accusa-tive pattern syntactically. (2) Only one nominal, that is, the nominal which should occur in the absolutive case, is marked in an appositional verb: In other words, an appositional verb does not mark the transitive subject, which

is evident anyway from the main clause because of the coreferentiality (1).
The "N.A." for an appositional verb reflects the coreferentiality (1), which
requires the reflexive third person to be its subject and consequently the third
person to be the object. The "unmarked" for an appositional transitive
subject reflects the absolute nominal marking (2), which requires the transi-
tive object and the intransitive subject to be marked. A few examples follow
which contain a dependent-clause verb in the appositional mood, with the
marked nominal being italicized in the gloss.

(42)   Tekit-ua   piyua-lua.   (Final -a is both from -nga '1s'.)
       arrive-IND. 1s   walk-APP. 1s [INTR]
       'I arrived, *I* walking (i.e., on foot).'

(43)   Tekit-uq   tangerr-sug-lua.
       arrive-IND. 3s   see-DES-APP. 1s [TRAN]
       'He arrived, (he himself) wanting to see *me*.'

(44)   Tekit-uq   tangerr-sug-luku.
       arrive-IND. 3s   see-DES-APP. 3s [TRAN]
       'He arrived, (he himself) wanting to see *her*.'

(45)   Tekit-uq   piyua-luni.
       arrive-IND. 3s   walk-APP. 3Rs [INTR]
       'He arrived, (*he himself*) walking.'

    The first person singular marked in the appositional verb *piyualua* in
(42) and *tangerrsuglua* in (43) is the (intransitive) subject for the former but
the (transitive) object for the latter. The subject for the latter is the
unmarked reflexive third person singular which is coreferential with the
main verb subject as the syntactic pivot. This shows that an appositional
verb reveals the ergative pattern morphologically (in that the only marked
nominal is the intransitive subject or the transitive object) as far as the first
and the second person are concerned but that it reveals the accusative pattern
syntactically (in that the nominal coreferential with the main verb subject
is the intransitive subject or the transitive subject).

4. Syntactic Ergativity

    While CAY is highly ergative morphologically, the accusative pattern
is predominant syntactically. It is the transitive subject (morphologically
marked for the relative case) or the intransitive subject (marked for the
absolutive case) which functions as the syntactic pivot, e.g., in reflexivization
and subordination (4. 1). The accusative pattern is also the case with an
imperative addressee. Syntactic ergativity, however, is recognized at least in
relativization (4. 2).

4. 1. Reflexivization and Subordination
    Reflexivization requires a reflexive third person to be marked in nouns

and dependent-mood verbs. In nouns the person marker indicates that the person (possessor) is coreferential with the third person subject of the sentence:

(46) Arnaq-∅   qavar-tuq   ene-mini.
      woman-ABS. s   sleep-IND. 3s   house-LOC. 3Rs. s
      'The woman is sleeping in her (own) house.'

(47) Arna-m   angun-∅   utaq-aa
      woman-REL. s   man-ABS. s   wait for-IND. 3s. 3s
      ene-mini.
      house-LOC. 3Rs. s
      'The woman is waiting for the man in her (own) house.'

The reflexive third person in the locative noun *enemini* necessarily refers back to the 'woman' which is the intransitive subject in (46) and the transitive subject in (47). It never refers back to the transitive object 'man' in (47). Compare (47) with the following (48), in which the 'house' is marked for the third person (instead of reflexive third):

(48) Arna-m   angun-∅   utaq-aa
      woman-REL. s   man-ABS. s   wait for-IND. 3s. 3s
      eni-ini.
      house-LOC. 3s. s
      'The woman is waiting for the man in his house.'

(48) is usually, though not obligatorily, interpreted as glossed above. But the third person simply implies that the possessor is someone other than the 'woman'. Thus contextually it can also be someone other than the 'man'. The same type of ambiguity concerning the third person recurs in (50) below.

    A reflexive third person marker in a dependent-mood verb indicates that the person (subject or object) is coreferential with the third person subject of the main clause in an independent mood on which it depends. Since an appositional verb with a reflexive third person marker has already been seen in (45), only a relative verb with that marker is exemplified here:

(49) Tupag-ngami   egmian   arna-m   angun-∅
      wake-REL. 3Rs   immediately   woman-REL. s   man-ABS. s
      tange-llru-a.
      see-IND. 3s. 3s
      'The woman saw the man as soon as she woke up.'

    The reflexive third person in the relative-mood verb *tupagngami* necessarily refers back to the main-clause subject 'woman' but not to the object 'man', cf. (47). Compare (49) with the following (50) in which the relative mood verb *tupagngan* is marked for the third person subject (instead of reflexive third):

(50) Tupag-ngan   egmian   arna-m   angun-∅
      wake-REL. 3s   immediately   woman-REL. s   man-ABS. s

tange-llru-a.
see-IND. 3s. 3s
'The woman saw the man as soon as he woke up.'

(50) is usually, though not obligatorily, interpreted as glossed above. But the third person simply implies that the 'one who woke up' is someone other than the 'woman'. Thus contextually it can also be someone other than the 'man', cf. (48). It should be noted that the identification of the 'one who woke up' with the main-clause object 'man' could not be taken as a case of syntactic ergativity (cf. Vakhtin 1979: 287).

Thus, reflexivization by means of the reflexive third person operates on the accusative pattern both in nouns and in dependent mood verbs.

As seen in 3. 5. 2, subordination carried out by means of an appositional-verb clause, irrespective of the person, indicates that the subject of the verb, whether marked or unmarked, is always coreferential with the main-clause subject but not the object: Hence again the accusative pattern.

4. 2.   Relativization

What may be regarded as a relative clause in CAY has no specific marker for the clause but consists of a head nominal and a deverbal nominal which are in apposition agreeing in case and number. The types of deverbal nominals concerned are ones nominalized by means of certain derivational suffixes and (both intransitive and transitive) nominal participles.

A deverbal nominal with the nominalizing suffix -llr- (with perfective connotation) involves relativization on the absolutive nominal. Compare (51) and (52) below with (22) and (23a) respectively:

(51)   neqa-∅   kuime-lleq-∅   cf. (22)
       fish-ABS. s   swim-NOM-ABS. s
       'the fish which was swimming (lit. the fish, the one
       which was swimming)'

(52)   angute-m   neqa-∅   nere-llr-a   cf. (23a)
       man-REL. s   fish-ABS. s   eat-NOM-ABS. 3s. s
       'the fish which the man ate (lit. the fish, the one
       which the man ate)'

It should be clear that the absolutive nominal 'fish' in (22) and (23a), which is the intransitive subject in the former and the transitive object in the latter, is the head nominal both in (51) and (52). In (51) the deverbal nominal *kuimelleq* agrees in case and number with the head *neqa* and that in (52) the deverbal nominal *nerellra* agrees likewise in case and number with the head *neqa* but has, in addition, the person marker agreeing in number with the relative noun *angutem*. This nominalizing, viz. relativizing, suffix -llr- should be distinguished from the homophonous nominalizing suffix -llr- of an infinitival nature as exemplified in (15) through (17).[12] Both share the ergative pattern, however.

A deverbal nominal and, for that matter, a nominal participle exemplified below as well can stand by itself, forming a headless relative clause.

A relative clause construction with a nominal participle also involves relativization on the absolutive nominal, whether it is an intransitive participle marked by *-lria / -lnguq* like (53b) below or a transitive one marked by *-ke-* like in (54b). Compare (53a) with (53b) and (54a) with (54b):

(53a) Arnaq-∅   aqui-guq.
      woman-ABS. s   play-IND. 3s
      'The woman is playing.'

(53b) Arnaq-∅   aqui-lria   alqa-q-aqa.
      woman-ABS. s   play-PART. s   elder sister-have-IND. 1s. 3s
      'The woman who is playing is my elder sister (*lit.* I have the woman, the one who is playing, as an elder sister).'

(54a) Ner'-arpuk   u-na   neqa-∅.
      eat-IND.1d.3s   this-ABS. s   fish-ABS. s
      'We₂ are eating this fish.'

(54b) Ner-ke-vvuk   u-na   neqa-∅   assiite-llini-uq.
      eat-PART. 1d. 3s   this-ABS. s   fish-ABS. s   not good-evidently-IND. 3s
      'Evidently (I now see) this fish we₂ are eating (*lit.* this fish, the one we₂ are eating) is not good.'

It should be clear that the absolutive nominal 'woman' as the intransitive subject in (53a) and the absolutive nominal 'this fish' as the transitive object in (54a) are the head nominal of the relative clause in (53b) and (54b).

It seems, therefore, that relativization in CAY is predominantly made on the absolutive nominal (instead of the subject nominal). This means that the ergative pattern is syntactically recognized at least in relativization.

There is, however, a device for relativizing a relative nominal as well, namely, by means of the nominalizing suffix *-st-* (agentive) followed by the perfective *-llr-*.   Compare the following with (52):

(55)   angun-∅   nere-ste-llr-a
      man-ABS. s   eat-NOM-PERF-ABS. 3s. s
      'the man who ate it (*lit.* the man, the one who ate it)'

But it still remains to be seen how frequent the use of this construction is as compared with an absolutive nominal relativization.

5.   Concluding Remarks

In sum, lexical ergativity is crucial to the classification of CAY binominal verbs into agentive and non-agentive, which in turn is highly relevant to a number of syntactic phenomena. One of them is the so-called "half-transitive" verb. This is an anti-passive verb derived from a non-agentive binominal verbs, though it should probably be understood adequately in

view of the adversative experiencer verb system characteristic of CAY in particular. It is in its morphology that the language is remarkably ergative since intransitive subjects and transitive objects always occur in the absolutive case and transitive subjects in the relative case except for the nouns referring to the first or second person which occur in the locative case instead of the absolutive. Dual and plural nouns with no person inflection lack morphological distinction between the absolutive and the relative, hence the neutral pattern. Person markers in verbs manifest not only the ergative but also the accusative and the neutral patterns mainly depending upon the person concerned. Syntactically the language is accusative except for the predominant type of relativization made on an absolutive noun.

Morphological case marking is highly correlated with syntactic relations of nominals but is not directly so with semantic roles. The ergative pattern of case marking in CAY should be viewed in terms of nominal hierarchy together with case promotion / demotion and deletion. It could provisionally be assumed that the voice phenomenon, in which a number of nominals in addition to the more fundamental S, P, and A are involved, is a process of foregrounding a certain nominal to the absolutive position for either "topical" or "thematic" privilege and that, accordingly, the complex but systematic case shift functions as a device for the alternation in multipolar voice.

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NOTES

1) This is basically an English version, albeit with considerable revision, of the writer's Japanese paper (Miyaoka 1986), which was previously presented at the Symposium "On Ergativity" at the 92nd General Meeting (June 14th, 1986, University of Tsukuba) of the Linguistic Society of Japan.

2) The linguistic data is taken from the writer's fieldnotes. See Woodbury (1984) and Krauss (1985) as to the classificatory definitions of the six Eskimo languages.

3) Grammatical interpretations of CAY basically follow Miyaoka (forthcoming).

4) The ablative case in CAY as well as in the other Western Eskimo languages represents a merger of two cases, ablative and modalis, which are distinct in Eastern Eskimo.

5) An alternative interpretation by inverse derivational relation may seem possible or even preferable that a transitive verb like (4a) should be derived from a mononominal verb with something like causativization. But there is evidence to the contrary. The following list of CAY non-agentive verbs is merely representative: *amu-* 'to pull/be pulled out', *cagc-* 'to scatter', *ciru-* 'to cover/be covered', *elivc-* 'to flatten', *ervig-* 'to wash/be washed (clothes)', *iquc-* 'to make a skin pliable by scraping it', *ikirc-* 'to open', *kepec-* 'to dye/be dyed', *kitugc-* 'to fix, repair/be fixed, repaired', *kuve-* 'to spill', *makec-* 'to get up', *mumigc-* 'to turn over', *nalaqe-* 'to find/be found', *navg-* 'to break', *nepec-* 'to stick', *killerc-* 'to tie/be tied', *qipe-* 'to twist', *tamar-* 'to lose/be lost', *tunu-* 'to give, sell s.t. (to s.o.)/be given, sold' (cf. trinominal *cikir-* 'to give (s.t.) to s.o.').

6) The following list of CAY impersonal non-agentive verbs is again not exhaustive, but covers at least the more important ones: *igur-* 'to jell', *kenec-* 'to ebb', *kinr-* 'to dry', *mame-* 'to heal', *qallr-* 'to rust', *qaur-* 'to have sores on scalp', *qutag-* 'to rotten (of meat)', *ure-* 'to melt', *usc-* 'to erode, cave in', *verc-* 'to get/have a foreign object in an eye'.

7) Although extensive cross-linguistic comparison as well as exhaustive study of CAY non-

agentive verbs still remain to be done, it would nevertheless be interesting to mention a preliminary comparison made by Hayatsu 早津 (1986). Of the seventy-nine non-impersonal non-agentive verbs which she identified in *Yup'ik Eskimo Dictionary* (Jacobson 1984), no less than seventy-four have correspondence in Japanese "paired verbs 有對動詞" (e.g. *yaburu* 'someone tears something' [TRAN] / *yabureru* 'something tears' [INTR] — sometimes referred to as "relative transitive / relative intransitive 相對他動詞 / 相對自動詞"), although there are many Japanese paired verbs which have no correspondence in Eskimo non-agentive verbs. In the case of impersonal non-agentive verbs, on the other hand, only fifteen of the thirty-two have correspondence in Japanese paired verbs. It should be no wonder if it turns out that there tends to be a meaningfully high degree of cross-linguistic correspondence in ergative verbs, although each language may possibly be more or less skewed, with diachronic and synchronic fluctuation, in favor of or against certain verbal meanings being expressed by ergatively patterned verbs.

8) Additional examples of mononominal verbs with desiderative *-sug-*: *takaryugtuq* 'he feels shy' (*takar-* emotional root), *ellalliryugtuq ayakata'arqama* 'it rains (tends to rain) when I am about to go' (*ellallir-* 'to rain').

9) Word order is relatively free in CAY, but the S-O-V order seems to be the most neutral. It is accordingly possible that at least for some speakers the reading 1) is more natural in unmarked contexts.

10) As a whole CAY is a language which is highly sensitive to indirectness in linguistic expression. It seems that straightforward expression is regarded as more or less childish. There are a good number of 'cushions' to avoid such directness. These cushions are not so much something like polite forms to be used in certain situations as very normal and common ways of speaking in almost any situation irrespective of whom a person is speaking to, when, or where (Miyaoka and Mather 1984).

11) Additional examples of trinominal verbs with *-uthe-*: *ciki-utk-aa* 'he gives it (to someone)' vs. *cikir-aa* 'he gives (something) to him,' *apy-utk-aa* 'he asks it (of someone)' vs. *apt-aa* he asks (something) of him'.

12) Ambiguity arises from this homophony: e.g. *kuime-lleq* may mean '(way of) swimming' as well as (51) 'the one which was swimming', and *nere-llr-a* may mean 'his (way of) eating' as well as (52) 'the one which he ate'.