

Ergative and Accusative: A Single Representation
of Grammatical Relations with Evidence from Nisgha

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1.0 INTRODUCTION

There has been, in recent years, an upsurge of interest in languages with ergative constructions and in the problem of ergativity. Although a great deal more is now known about the properties of these constructions, the question of what relation they bear to accusative ones has never been satisfactorily answered. Most recent writing on the subject assumes that accusative patterns are basic and ergative ones derived from them in some fashion, a conception that has been strengthened by the discovery that most languages with ergative constructions have accusative ones as well. Attempts to derive both ergative and accusative patterns from a common source on an equal basis have remained vague and ill-defined.

Here, I first review briefly some current attitudes to the subject and the basic, mirror-image features of ergative and accusative patterns; I next present as an illustration of syntactic ergativity a hitherto little-known language, Nisgha,¹ with solidly ergative syntax, showing that ergativity is as full and valid a

¹Nisgha [nɪsgá], spoken in the Nass Valley of British Columbia, is one of the Interior Tsimshian languages along with the very closely related Gitksan; both are more distantly related to Coast Tsimshian (CT), Nisgha is the language described as 'the Niska dialect' in Boas 1911, and the 'Nass' of Rigsby 1975's 'Nass-Gitksan'.

Boas' description is incomplete and in some cases faulty. It cannot be fully relied upon for material on ergativity. Rigsby's 1975 analysis of Gitksan (which applies equally to Nisgha) is also

mode of syntactic expression as accusativity; finally, from observation of the behaviour of the elements in Active, Passive and Antipassive constructions, I arrive at a single schema underlying both ergativity and accusativity without favouring the one over the other.

2.0 ERGATIVITY AND ACCUSATIVITY

2.1 Attitudes towards ergativity

For a Western linguist, to start learning a language with ergative syntax is to find oneself in a topsy-turvy world: nothing works according to familiar patterns, nothing agrees or co-refers with what one expects it should. Eventually patterns get analyzed, become known intellectually, but they still defy one's intuitive feeling of how they should work. And so one tries to interpret the unfamiliar constructions in more familiar terms: perhaps, for instance, ergative constructions should be understood as Passives? Once the linguist has come to the point of being able to use the language with some confidence, and to feel intuitively as well as intellectually at home in it, such learning strategies are recognized

partially inexact. The dearth of material on these languages should be remedied shortly, as grammars of Gitksan (by Rigsby) and Nisgha (by myself), both based on recent first-hand research, are in preparation.

Most of the Nisgha data presented here were collected during the course of my employment with the Bilingual/Bicultural Programme of B. C. School District #92 (Nisgha); I resided on the Gitlakdamix reserve at New Aiyansh in the Nass Valley from May 1977 to July 1980. I wish to thank the Nisgha-speaking personnel of the Programme for their patience and unstinting help, especially Mrs. Nita Morven, Mrs. Rosie Robinson and Mrs. Verna Williams.

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as such, and discarded,² and the looking-glass world of ergative syntax becomes as logical and orderly as the familiar world of accusative syntax.

Much of the recent literature on ergativity reflects this bewilderment of Western linguists trying to come to grips with this unfamiliar phenomenon, and to reduce ergative patterns as much as possible to familiar accusative patterns.³ A major contribution to the debate has been the discovery that most so-called ergative languages in fact have a mix of ergative and accusative structures (Silverstein 1976, Woodbury 1977, Dixon 1979), in varying proportions, obeying a hierarchy of features (Silverstein). In spite of findings that many accusative languages too have some ergative patterning (Moravcsik 1978), the general consensus seems to be that languages are only ergative up to a point (Silverstein, Dixon); the accusative pattern is the basic, underlying one, and ergativity is an overlay, a matter of extra rules (Anderson 1976, Postal 1977), a shallow-structure phenomenon (Dixon 1979).⁴

This recent emphasis on split ergativity and the resulting comforting conclusion that ergativity is after all but a superficial phenomenon, accusativity the unchallenged basic universal, have tended to obscure the deep-seated parallelisms and complementarities

²This is not to say that some ergative constructions may not be Passive in origin.

³At the time of writing this paper I had not read Heath 1976, whose observations on ergativity have much in common with mine.

⁴Although Dixon 1979 considers ergativity and accusativity as irreducible to each other, his notion of a deep structure Subject shows bias in favour of accusativity; see 4.7 below.

between these two modes of syntactic expression. In fact, as pointed out by Woodbury 1977, following a much earlier suggestion by Kurylowicz, the two can be considered mirror-images of each other, and neither can be derived from or reduced to the other. That both types can be found together in the same language under a variety of conditions does not invalidate the basic structural description of each type.

2.2 Basic ergative and accusative patterns

The following reviews the main features of typical ergative and accusative patterns. Exact particulars may differ according to the language.

There are two basic sentence types: transitive and intransitive.

In an intransitive sentence, only one NP (the subject, S) is associated with the verb; in a transitive sentence, there are two NP's (the agent A and the direct object O).⁵

There are languages in which these three NP's are treated differently; in both ergative and accusative patterns, however, one of the NP's of the transitive sentence is treated the same way as the single NP of the intransitive sentence. The difference lies in which of the two NP's, A or O, is equated with the single NP S: the O in ergative patterning, the A in accusative patterning.

This is reflected in verb-agreement: the verb agrees with the S always, and with the A or O that is equated with S; the other NP, treated differently from S and not agreeing with the verb, usually receives special marking: the accusative case marks O, the

⁵For the sake of simplicity the case of the Dative object, the third NP in some transitive sentences, is not considered here as it has no bearing on the matter. See also note 32.

ergative case marks A.

In both types, there exists the possibility of shifting the normal emphasis of the transitive sentence and of transforming it into an intransitive sentence, Passive or Antipassive; the single NP of this new sentence is that NP of the transitive sentence that receives special treatment: in accusative patterns, O becomes S in the Passive sentence; in ergative patterns, A becomes S in the Antipassive sentence. The NP that formerly agreed with the verb is optionally recoverable as I (indirect object) in the intransitive sentence: the A of the accusative pattern is recoverable as I when O becomes S, the O of the ergative pattern is recoverable as I when A becomes S.

These basic features of ergative and accusative patterns are summarized in the following chart:

<u>Pattern type</u>	<u>Accusative</u>	<u>Ergative</u>
Functions equated	S = A ≠ O	S = O ≠ A
Verb agreement	S, A	S, O
Special treatment	O	A
Basic transformation	O → S (A → I)	A → S (O → I)

There is plainly nothing in this basic list that suggests that ergative patterns are derivable from accusative ones, any more than the opposite. Both are internally consistent, both are equally logical alternatives.

Beyond these basic patterns, there are other consequences of the equation of S with A or O which appear in more complex constructions. If a language can be fully accusative in those constructions as well, there is no logical reason why another cannot have fully ergative syntax. We shall see that Nisgha comes close

to this logical ideal.

Some of the more complex features of syntactic ergativity will be mentioned as they arise in the following overview of Nisgha syntax.

3.0 NISGHA ERGATIVITY

Nisgha is a language with basically ergative syntax (Rigsby 1975) and with some morphologically ergative features in the pronominal and verbal system. The noun-marking system, however, operates according to different principles. The overt difference between dependent and independent clauses does not affect their ergative status.⁶

3.1 Basic schemata

Nisgha has two basic schemata, one for dependent and one for independent clauses.⁷ In either case, A is unambiguously marked:

⁶Published references by Silverstein 1976, followed by Dixon 1979, to Tsimshian 'split ergativity' conditioned by sentence status may be right for CT but do not apply to the Interior Tsimshian languages. It is appropriate to point out that Nisgha is the most conservative of all three languages, both phonologically and syntactically, CT the most innovative. It is possible that what appears to be lack of ergative marking in some CT independent sentences is originally due to phonological rather than syntactic causes.

⁷Boas calls these schemata 'subjunctive' and 'indicative moods' respectively. These terms, a carry-over from European, especially German structure, do not adequately reflect the Nisgha facts. Boas correctly observes that the dependent order is far more frequent than the independent one. This is because of the extreme connectedness of Nisgha discourse. In the narrative style especially (where most of his data come from), independent declarative sentences signal a break with the smooth flow of related events, which consist of

- with an ergative suffix on the verb in the independent clause;⁸

- with an ergative clitic pronoun in the dependent clause.

S and O lack these markers, and in most cases the marking of S and O is identical. Only the basic structures are given here:⁹

3.1.1 In *independent clauses*, S and O may be suffix pronouns, attached to the topicalizer *hi-*; or nouns marked by the determinate topic marker (TM) *t* for determinate nouns (personal names, some kinship terms), or by the non-determinate, general connective (ND) *-hɫ (-+)*¹⁰

- intransitives: (1) ts'in hiiy' I came in
 c'in ni - y¹¹
 come in TOP 1S

sentences dependent on a conjunction or subordinator; there are no clause coordinators as distinct from subordinators; as a result most clauses are dependent ones.

⁸This suffix is elusive, however, since it consists of a single unstressed vowel subject to deletion rules in some environments; at the same time, vowel epenthesis rules introduce a similar vowel in similar environments, making some surface structures identical. The complex nature of the vowel deletion and epenthesis rules has prevented the proper identification of this suffix by earlier investigators.

⁹For more details and consideration of exceptions to these general schemata and the conditions under which they occur, see my unpublished paper 'Major features of Nisgha Syntax'.

¹⁰Examples are given in Nisgha orthography (set up by Rigsby), which is broadly phonetic, followed by morpheme by morpheme transcription, ignoring some morphophonemic rules, in Amerindian phonemic transcription. Low-level epenthetic vowels are not indicated in this transcription.

¹¹Suffixed personal pronouns (Boas' 'objective') are unmarked, as

the verb and sometimes also the introductory word.

-intransitives

- (7) ... wil ts'iniy' ... as I came in
 wəl c'fn - y'
 CONJ 1S
- (8) ... wil ts'ins Mary ... as Mary came in
 DM
- (9) ... wil ts'inhl hanak' ... as the woman came in
 †
 ND

-transitives

- (10) ... ni wil hlimooms Mary ... as I helped Mary
 nə wəl təmóm - s M.
 1ERG CONJ help DM 0
- (11) ... wilt hlimoomiy' ... as s/he helped me
 wəl -t təmóm - y'
 CONJ 3ERG help 1S
- (12) ... ni wil hlimoomt ... as I helped him/her
 nə wəl təmóm - t
 1ERG CONJ 3S

3.1.3 Verb agreement

Nisgha verbs commonly have distinct stems for singular and plural. Which stem is used depends on the number of S or O, not on the number of A. This is true in both dependent and independent clauses. Some examples of independent clauses are:

-intransitives

- (13) goshl hlgu tk'ihlkw The child jumped
 qús - † †ku tkʸ'í†kʷ
 jump ND little child
 (sg) (sg)
- (14) gasgoshl k'uba tk'ihlkw The children jumped
 qəsqús - † k'upa tkʸ'í†kʷ
 jump ND little
 (pl) (pl)

-transitives

- (15) niik'an gosgwihl hlgu tk'ihlkwhl lo'op The child jumped
 ní·q'ən qús - kʷ - ə - † †ku over the rock
 over jump TR ERG ND
 (sg)
 tkʸ'í†kʷ - † lóʔp
 ND rock
- (16) niik'an gasgosgwihl hlgutk'ihlkwhl lo'op The child jumped
 ní·q'ən qəsqús - kʷ - ə - † over the rocks
 over jump TR ERG ND
 (pl)
 †ku tkʸ'í†kʷ - † lóʔp
 little child ND rock
 (sg)
- (17) niik'an gosgwihl k'uba tk'ihlkwhl lo'op The children jumped
 ní·q'ən qús - kʷ - ə - † over the rock
 over jump TR ERG ND
 (sg)
 k'upa tkʸ'í†kʷ - † lóʔp
 little child ND rock
 (pl)

- (18) ¹niik'an gasgosgwi^hl k'uba tk'ihlkwhl lo'op The children
¹ni·q'ən qəsqu^s - k^w - ə - † jumped over the
over jump TR ERG ND rocks.
(pl)
k'upa tk^y'í†k^w - † lóʔp
little child ND rock
(pl)

3.2 Derived schemata

3.2.1 Deletion

3.2.1.1 Deletion of recoverable elements

3.2.1.1.1 Deletion of O or S in independent clauses

O or S can be deleted if its referent is inferrable from the context (e.g., in answer to a question). A cannot be deleted.

- intransitive

- (19) -- nda t Mary? Where is Mary?
ntá t M.
where TM S
-- daaw¹ihl. She left (lit. left)
tá·w†
leave
(sg)

- transitive

- (20) -- wilaayinh¹l sim'alga^xa? Do you know Nisgha?
wəlá·x - ə - n - † səm - ʔá|k^yəx̄ - a
know ERG 2S ND real talk Q
(sg) (sg)

syntactically accusative languages like English coordinate a. and b.:

- (28) Fred came in and kissed
Mary

while syntactically ergative languages like Nisgha coordinate a. and c.:

- (29) ts'in t Fred iit humts'axs Mary Fred came in and Mary
c'ín - t F. ?i· - t kissed him¹³
come in TM A and 3ERG
húmc'əx̄ - s M.
kiss DM A

3.2.2 Focused and relative clauses

Focused clauses may be independent clauses, or the focused element may have a role in a preceding sentence, in which case the focused clause corresponds to what we would call a relative clause.

3.2.2.1 Focusing

Either A, S or O may be focused by extraposition to the left of the clause. Marking is different for each: special pronouns for

¹³a. Note that the equivalent of the English coordinate clause is a Nisgha dependent clause introduced by the conjunction ii (?i·).

- b. Note also that there is a potential ambiguity in that ⁴iit humts'axs Mary' could also mean 'and he kissed Mary'. However, this interpretation could only occur if the context made it obvious, and if the main stress fell on 'Mary' rather than on 'humts'ax'. The normal way of saying 'Fred came in and kissed Mary' would be
ts'int Fred ii ⁴nihl ~~wil~~ wilt: humts'axat t Mary
(lit. F. came in and this is what he did: he kissed Mary.)

S and A, word order for O. This is an exception to the generally equal treatment of S and O, which does not, however, result in an accusative-type equation of S and A. In fact, through this exception the surface structures of S and O-focused sentences remain virtually identical.

3.2.2.1.1 Focus on A

A is extraposed and the ergative relative pronoun an (ʔən) 'the one who/which' is inserted before the verb, making the rest of the clause dependent (in effect, A functions as a MC consisting of a single word). The ergative pronoun t may be placed before or after the ergative relative.

(6) MC: hlimoomis Lucy t Mary Lucy helped Mary
 $\text{ʔəmó·m} - \text{ə} - \text{s L. t M.}$
 help ERG DM A TM O

(30) FC: Lucy (ant hlimooms Mary It was Lucy who helped Mary
 (t an
 L. $\text{ʔən t ʔəmó·m} - \text{s M.}$
 A ERG 3ERG help DM O
 REL

3.2.2.1.2 Focus on S

S is extraposed and the general connective -hl ($-\text{ʔ}$) may be inserted.¹⁴ In addition the verb takes the relative suffix -it

¹⁴This may be a fairly recent development on the analogy of O-focusing, see next section; -hl is rarely found in this position in Boas 1902, where in most cases there is no connection between the focused S and the verb.

(-ət)¹⁵:

- (31) MC: daawihl t Mary Mary left
 tá·w† t M.
 leave TM S
- (32) FC: Maryhl daawihlit It was Mary who left
 M. - † tá·w† - ət
 S ND leave REL

3.2.2.1.3 Focus on 0

0 is extraposed and joined to the verb by -hl (-†); there are no other changes:

- (6) MC: hlimoomis Lucy t Mary Lucy helped Mary
- (33) FC: Maryhl hlimoomis Lucy It was Mary that Lucy
 M. - † təmó·m - ə - s L. helped
 0 ND help ERG DM A

3.2.2.1.4 Remarks

- a. The structural shape of the relative pronouns for A and S
-

¹⁵The suffix is -t after vowels and resonants, -it (-ət) after consonants. Thus it cannot be the same as the 3S suffix -t which has no other allomorphs. It cannot be decomposed into -ə -† either, otherwise a y would be inserted between a vowel and it (as it is before -ə- ERG in (46)).

corresponds to that of the personal pronouns used in dependent clauses: a clitic for A, a suffix for S. We would expect the S-relative suffix to be used for O as well.

b. That there is no overt relative object pronoun may be attributable in part to surface morphological constraints: **in sentences like:**

(33) Maryhl hlimoomis Lucy It was Mary that Lucy helped

(34) Maryhl hlimoomit It was Mary that she helped

- ə - t

ERG 3S

there is simply no place in the sentence where the relative suffix -it could be inserted, since only one element (specifier -s or personal suffix pronoun) can come after the ergative suffix.

c. On the other hand, the surface of S and O-focused clauses is remarkably similar, especially if the agent in the O-focused clause is a 3rd person singular pronoun:

(32) S-focus: Maryhl daawihlit It was M. who left

-ət

S REL

(34) O-focus: Maryhl hlimoomit It was Mary that she helped

- ə - t

O ERG 3S

Adding a relative pronoun to the end of the transitive verb, even if it were allowed by the morphology, would destroy the surface similarity of the S and O-focused clauses, expected under ergative syntax.

d. It seems then that when the various factors are considered, the overt presence of a relative object pronoun would disrupt other

deep-seated morphological and syntactic regularities of the language. Since Nisgha ergativity is manifested mostly at the syntactic level, the absence of such a pronoun does not invalidate the general syntactic equation of S and O.

3.2.2.2. Relative clauses

3.2.2.2.1 Relative clauses with NP heads

Two clauses which have an NP in common may be linked by this NP, which will be in the focused position in the second clause, which then becomes a relative clause. The meaning may be restrictive or non-restrictive. Restrictive meaning may be emphasized by the particle hli (†ə) 'the particular (one)' placed after the head noun.

The head NP must necessarily be the rightmost NP in the previous clause (PC) (which may be a subordinate clause); very often it will be an S or an O, or a noun with a secondary role in the PC, as long as it is the rightmost one; more rarely an A. This NP may be the S, O or A of the relative clause¹⁶

PCS = RelS:

(35) kw'ihl t'aahl hlgu tk'ihlkw hlaa kap wiit'isit (B 13.13)

The child, who was now quite big, sat around

kw'ə† t'á· - † †ku tkʷ'í†kw †á· q'əp wí·t'ís - ət
 around sit ND little child now surely grown REL
 (sg) (sg) (sg)

PCS = Rel O:

(36) aamhl gabiihl mugwiy (B 59.2)

¹⁶The following examples are mostly from Boas 1902, with references to page and line number. They are transcribed in Standard Nisgha and Amerindian scripts, and corrected and retranslated if needs be, as the texts contain numerous errors.

I've caught enough fish (lit. the number I've caught is good)

ʔá·m - † qəpí· - † múkw - ə - ý
 good ND number ND catch ERG 1S
 fish

PCS = REL A:

- (37) níh'lk'ii ksibaxhl wii xa'a t an gwin lukwhl galts'ap (B 145.10)

And then the big slave went out, [who was] to tell the people to move away.

ńi - † kʷ'i· ksə - páx̣ - † wi· xáʔ t ʔən kwən lúkʷ - † qəlc'áp
 TOP ND and out run ND big slave 3ERG ERG ind. move ND village
 (sg) REL caus. (pl)

PCO = REL S:

- (38) ga'athl gat want ahl gililx (B 11.12-13)

He saw people sitting up in the woods.

kʷáʔ - ə - t - † kʷát wán - (ə)t ʔa - † kʷəlíl̥x
 see ERG 3S ND man sit REL PREP ND up in the woods
 (pl)

PCO = REL O:

- (39) agu ma gan jah' hoon hli jabiý? (B 118.3)

Why did you eat all the fish I caught?

ʔəkú mə qən cá†(-†) hó·n tə cáp - ə - ý
 what 2ERG why eat ND fish the make ERG 1S
 up one

PCO = REL A:

- (40) níh'lk'ii huwo'ohl bagadilhl wíit'ax gigat dimt an gen'daxhl
 hlgu tk'ih'kw (B 36.5-6)

Then he called two old people who were to chew the child's food for him.

ńi - † kʷ'i· - t huwóʔ - † pəqətíł - † wí·t'əǰ kʷəkʷát
 TOP ND and 3ERG call ND two ND old people
 (pl) (persons) (pl)
 təm - t ʔən qíntəǰ - † †ku t kʷ'í†kʷ
 FUT 3ERG ERG chew food ND little child
 REL for (sg)

An A can only be relativized if the O of the same clause has been deleted, leaving it in rightmost position, as in

PCA = REL A:

(41) hlbiyuwihł axwthł hli ts'ap ahl wilt wilaagwihł ts'imilx t
 an wó'ot (B 145.10)

The porcupine informed his tribe of the way the beaver, who had invited him, had treated him.

†pəyúxʷ - ə - † ʔáxʷt - † †ə c'áp ʔa - † wəl - t
 inform ERG ND porcupine ND the tribe PREP ND as 3ERG
 wəlá·kʷ - † c'amíłx t ʔən wóʔ - t
 treat ND beaver 3ERG ERG invite 3S
 REL (sg)

3.2.2.2.2 Relative clauses without a noun head

Relative clauses without a noun head also occur. Such clauses can function as either S or O of the previous clause, not as its A.¹⁷

¹⁷A headless REL A cannot be the A of a main clause; instead, it can be apposited to a main clause beginning with the topicalizer ńi-, as in :

Dimt an gidiiguuhl gwilks-woxgwit-hitsa, niłnít dim ant nakskwhł
 hlguuhlgiyí (B 141. 8-9)
 The one who kills this self-barker [a bear], that one will marry
 my daughter.

PCS = REL S:

In this case the verb of the relative clause functions as a noun.¹⁸

- (42) hlaa ksisakskwhl t'ist'isitgi (B 41.13-14)

The old people (lit. [the ones] who were old) had now gone out.

ʔá· kse sákskʷ - ʔ t'əst'ís - ət -kʷi
 now out leave ND old REL DISTANT
 (pl) (pl)

PCS = REL O:

- (43) aamhl jabin!

Good work! You did well! (lit.[what] you did is good)

ʔá·m - ʔ cáp - ə - n
 good ND make ERG 2S

PCS = REL A:

- (44) hlaa daxwhl t an saa kwsdaksdiitgi (B 178.8)

[The ones] who had abandoned them were now dead.

ʔa· táxʷ - ʔ t ʔən sa· kʷstáqs - ti·t - kʷi
 now dead ND 3ERG ERG off leave 3P DISTANT
 (pl) REL behind

təm - t ʔən kʷəti· kú· - ʔ kʷəlks wóʃ - kʷ - ə - t - hí - t - sa
 FUT 3ERG ERG holding take ND back on bark TR ERG 3S say 3S PROX-
 REL back self IMATE

ní - ʔ ní - t tēm ʔən - t náks - kʷ - ʔ ʔkú·ʔkʷ - ý
 TOP ND TOP 3S FUT ERG 3ERG spouse TR ND own child 1S
 REL

¹⁸This form however does not have all the privileges of occurrence of a noun, e.g., it cannot be focused or used as a predicate.

PCO = REL S:

Again, the relativized verb functions as a noun.

- (45) wó'ohl k'yoolhl wíit'isit ... ! (B 21.13-14)
 Call some old man ... ! (lit. one who is old)¹⁹
 wó? - † kʸ'ó·l - † wí·t'ís - ət
 call ND one ND grown REL
 (person) (sg)

PCO = REL O:

- (46) hlaat huxw wáhl hli wáyihl wakt (B 202.4-5)
 Again he found the very [place] that his brother had found.
 hla· - t huxw wá - † †ə wá -(y)ə - † wákʸ - t
 now 3ERG again find ND the find ERG ND man's 3S
 one brother

PCO = REL A:

- (47) wilaayin t an guuhl hlguuhlgwina? (B 87.11)
 Do you know who took your child?
 wəlá·x - ə - n t ?ən kú· - † †kú·†kʷ - n - a
 know ERG 2S 3ERGERG take ND own 2S Q
 (sg) REL (sg) child

3.2.2.3

In general, then, S and O-focusing and relativization have similar characteristics, often different from those involving A. The lack of an overt relative object pronoun may be attributed to

¹⁹The word k'yool 'one' is a numeral adjective, not a noun or pronoun and cannot be the antecedent of the relative clause. It is not the grammatical equivalent of English one in one who is old, but of one in one old man.

other causes (see above 3.2.2.1.4) and this absence reinforces rather than deters from the close surface syntactic similarity of the treatment of S and O.

3.2.3 Modal sentences

3.2.3.1. Equivalentents to SAE Equi

Where in SAE languages the desire, intention or other mood of a subject (S or A) to effect an action is expressed by means of subordination to a verb expressing the subject's mental state (e.g., try, want, etc.) Nisgha uses modal proclitics which do not change the status of the sentence describing the action (cf. 3.1.1):

-intransitive

- (48) sik'ihl ts'in t Mary Mary tried to come in
 sikv'† c'ín t M.
 trying come TM S
 in

-transitive

- (49) náam hlimoomis Lucy t Mary Lucy wanted to help Mary
 ná·m †əmó·m - ə - s L. t M.
 wanting help ERG DM A TM O

3.2.3.2. Indirect causation (jussive construction)

Similarly, where an agent gets something done through someone else, (by telling that person to do something), the proclitic gwin (kʷən) is used in front of the verb. The combination gwin + verb is a transitive verb.

If the original verb is intransitive, its S becomes the O of the gwin verb, as in

- (50) gwin ts'inis Donna t Mary

Donna told Mary to come in, Donna had Mary come in.

kʷən c'in - ə - s D. t M.

ind. come ERG DM A TM O<S

caus. in

If the original verb is transitive, its O remains the O of the gwin verb; its A becomes an indirect object, which is usually deleted:

- (51) gwin hlimoomis Donna t Mary (as Lucy)

Donna told Lucy to help Mary; Donna had Lucy help Mary; Donna had Lucy helped (by Mary).²⁰

kʷən təmó·m - ə - s D. t M. (?a - s L.).

ind. help ERG DM A TM O PREP DM < A

caus.

This type of construction shows that indirect causation can indeed be expressed ergatively, without resorting to accusative patterns such as English

Donna asked (told, ordered, begged) Lucy to come in (help Mary) where the O of the main clause becomes the S or A of the dependent

²⁰Note the exact parallelism with the French faire constructions

Marie est entrée > Donna a fait entrer Marie

S

O < S

Lucie a aidé Marie > Donna a fait aider Marie (par Lucie)

A

O

O

< A

In both Nisgha and French, the emphasis in such constructions is on getting something done, not on the means (usually verbal) by which a person is induced to perform the desired action; the identity of that person is often irrelevant. These constructions will be explored further in a forthcoming paper.

clause.²¹

3.3 Nisgha Passive and Antipassive

Nisgha's rich derivational morphology allows for both Passive and Antipassive stems to be derived from transitive stems, e.g.

root wá 'name':	siwa	T 'to name'	(sə Proclitic, to make)
	siwatkʷ	P 'to be named'	(-kʷ Passive suffix; epenthetic t)
	siwe'eskw	AP 'to give names'	(-ʔskʷ Antipassive suffix)

Although these suffixes can potentially be added to any transitive stem, they are not fully grammaticalized, and their actual occurrence is lexically conditioned. Both, however, are productive suffixes.

There is morphological, semantic and syntactic evidence, however, that the Antipassive is much more basic to the language than the Passive, which seems to have gained ground recently as a result of contact with English.

3.3.1 Morphologically

3.3.1.1

There is often overt phonological discrepancy between Antipassive forms and their active counterparts; while most AP forms

²¹Contra Comrie 1978, Dixon 1979, Ramsey 1980, for whom jussive constructions are necessarily accusative.

have fairly predictable phonological shapes, sometimes the two can only be related through historical phonological rules which are no longer productive,²² making the AP stems opaque, e.g.,

t'ak	T 'to forget'	t'iiskw	AP 'to be forgetful'
t'ákʷ < *t'ékʷ		t'í·skw < *t'ékʷ-ʔskw	

More regular examples are

t'axw	'to sweep'	t'awiskw	'to sweep'
t'áxw		t'áxw - ʔskw	
giba	'to wait'	gibe'eskw	'to wait'
kʷəpá		kʷəpá - ʔskw	
mahl	'to tell'	mahla' askw	'to tell everyone, to spread news'
máɬ		máɬ - ʔskw	

3.3.1.2

On the other hand, Passive forms are always transparently derived, pointing to a more recent origin, e.g.,

jap T	'to make'	japkw P	'to be made'
cáp		cáp - kw	
giikw	'to buy'	giikws	'to be bought'
kʷí·kw		kʷí·kw - s (-s allomorph of -kw after dorsal stops)	

Some Passive forms are obviously very recent calques of English

²²These are described in my unpublished paper Nisgha plural formation: An analysis of the morphophonemics.

Passives and betray the fact by their lack of conformity to normal morphophonemic alternations, e.g.,

dilkkw	'to be stuck'	(as in English 'we are stuck')
		(instead of dilks or dilxkw)
yaamakkw	'to be betrayed'	(as in 'the night He was betrayed')
		(instead of yaamaks or yaamaxkw)

3.3.2 Semantically

3.3.2.1

There is often a discrepancy between Active and Antipassive meanings that cannot always be attributed to the inadequacy of the English terms available to translate them. AP forms often have a divergent or specialized meaning, e.g.,

diyee T	'to take (s.o.) for a walk, to lead'	diyee'eskw AP	'to be extremely high tide'
tə - yé•		tə - yé• - ?skw	
along walk (TR. PREF.)			
guxw	'to shoot'	guwiskw	'to fall over, as after being shot'
kúxw		kúxw-?skw	
aat'ix	'to reach, touch, feel'	aat'ikskw	'to arrive'
?á•t'x		?á•t'x - ?skw	

and there are a number of morphologically AP forms whose active counterpart has been lost, e.g.,

?	aw'aawiskw	'to be curly'
	(from root * ?á•w)	

Also, a number of such AP forms have acquired a purely nominal meaning²³ sometimes very specialized (somewhat like English -ing), e.g.,

jakw	'to kill'	jakw'iskw	'(game) animal' (lit. killing)
	cák ^w		cák ^w - ?sk ^w
simiyeen T	'to smoke'	simiyeen'iskw	'smoked spring salmon' (lit. smoking)
	sə - məyé·n prepare smoke		sə - məyé·n -?sk ^w
hap	'to cover'	hap'iskw	'grass' (lit. (ground) covering)
			háp -?sk ^w
	?	lik'in'skw	'grizzly bear'
		?	lək ^y 'ín - ?sk ^w

3.3.2.2

No such shifts are evidenced for Passive forms. On the other hand, while the AP suffix -?sk^w only has the AP or derived nominal meaning, the suffix -k^w/-s has other meanings besides that of Passive; in particular, it has the meanings:

- 'having':

gaytkw	'to wear a hat'	(gayt 'hat')
	qáy ^t - k ^w	

²³This is also the case for other detransitivizing suffixes, since Nisgha syntax makes it easy for the same word to be used as either intransitive verb, or noun.

am'ugitkw 'to be dressed' (am'ugit 'clothing')
 ʔəmʔúkyət - kʷ

- 'resembling':

geskw 'to be thin, narrow' (ges 'hair')
 qís - kʷ

t'uuts'kw 'to be black' (t'uuts' 'charcoal')
 t'ú·c' - kʷ

- reflexive:²⁴

pts'aytkw 'to comb one's hair' (pts'ay' 'comb')
 pc'áy - (t)kʷ

ksiyimkkw 'to shave' (ksi 'out' + yimk 'whiskers')
 ksə - yímq - kʷ

laks 'to bathe, to immerse one self in water' (lak 'to live in water, e.g., fish')

laq - s

There are also, in Nisgha, other Passive suffixes, which are far less productive, if at all e.g.,

- -t 'Passive of state':

kw'ast 'to be broken' (kw'as I to break)
 kw'ás - t

²⁴It can also have Active meaning, as in lipkw 'to sew', níik'angoskw 'to jump over', and it can even be used antipassively as in wo'o 'to invite (tr.)', wo'otkw (a ...) 'to invite (sbdy passing by) on the spur of the moment, without formal invitation'.

akst 'to be wet' (aks 'water')

ʔáks - t

- -kws 'resultative Passive':

daawtkws 'to have become (daaw 'ice')
frozen'

tá·w - (t)kws

It seems likely, then, that the Passive meaning of -kw is a recently derived one, made possible by the wide range of related meanings and the current productivity of this suffix, perhaps at the expense of other Passive suffixes in the language.

3.3.3 Syntactically

3.3.3.1 Active and Antipassive sentences

As befits a language with ergative syntax, Nisgha has a fully fledged syntactic Antipassive construction, while morphological passives do not seem to have any special properties beyond those of intransitives. In particular, Nisgha Passives are always agentless.

The Antipassive construction detransitivizes the verb, normally marked by the AP suffix -ʔskw;²⁵ the agent becomes the subject of the new intransitive verb, and the object is optionally recoverable, after the preposition a (ʔa), as in

(52) gibayis Lucy t Mary Lucy waited for Mary
kʷəpá - (y)ə - s L. t M.
wait ERG DM A TM O

²⁵Sometimes just -ʔs.

- (53) gibe'eskw t Lucy (as Mary) Lucy waited (for Mary)
 kʷəpá - ʔskw t L. ʔa - s M.
 wait AP TM S PREP DM PP

Although the English glosses are the same, there is an important meaning difference between the Active sentence and its Antipassive counterpart: (52) implies not only that Lucy waited for Mary, but that she fully expected Mary to join her, and that Mary did in fact join her after a reasonable amount of time; while in (53) there is no certainty that Mary did join Lucy, or even that Lucy expected her to do so: Lucy might just have been waiting around on the odd chance that Mary might show up. However, in both cases Lucy did indeed wait.

In an Active sentence, the action described by the verb is construed as attaining a specific goal, the object, which is always expressed. The time element expressed or implied by the verb is also more or less definite.

In an Antipassive sentence, the action described by the verb occurs, but the goal may or may not be reached; the object may be left undefined; even if it is expressed in the sentence, it may be indefinite in extent; and even where the object is fully specified, as in the examples above, there is no certainty that the goal of the action will be reached. The indefiniteness of the object and the uncertainty of when, if ever, the goal of the action is reached do not detract from the fact that the action does in fact take place, and that it is controlled by the agent. But if the object is vague in nature or indefinite in extent, the process also takes an indeterminate amount of time and may stretch out indefinitely, in contrast to the more or less predictable or at least definable amount of time required to perform the action in the Active sentence.

These differences are also evident in Nisgha object-incorporation.

3.3.3.2 Object-incorporation after Active and Antipassive

Nisgha has numerous object-incorporating compounds designating habitual activities.²⁶

Relatively few of these are of the type tr. verb + object noun = intr. verb, for example,

²⁶That object-incorporation is common but agent-incorporation is apparently unattested is a case to be explained by semantics or thematics rather than syntax. Object-incorporation occurs in both ergative and accusative languages. However, there seems to be a difference between the meaning of object-incorporating compounds in ergative languages such as Nisgha and in accusative languages such as English or French:

N	yo'oksno'ohl yoʔks - noʔɪ wash dish	to wash the dishes
Eng.	dishwasher dishwashing (*dishwash)	person or machine that washes dishes act of washing dishes to wash dishes)
Fr.	lave-vaisselle	machine that washes dishes

The compound is a verb in Nisgha, a noun in English and French.

Furthermore, the O is not the only element that can be incorporated. Nisgha gives evidence of S-incorporation, as in

N	yeemsk'amksiiwaatkw yé· - ms - q'əmksi·wa· - (t)k ^w walk white person	to walk like a white man (a game)
		- ms — (t)k ^w acting like
	saytk'yoolimsgatkw səyt - k'yó·l - ms - kʷát - k ^w together one person man	to be united

while English had I-incorporation (see note 33):

yo'oksno'ohl	'to wash the dishes'	yo'oks + no'ohl yóʔks nóʔɿ wash dish
yo'oksweentkw	'to brush one's teeth'	wé•n - (t)kʷ teeth POSS
gahlhoon	'to spear fish'	kʷáɿ - hó•n to spear fish
k'ohlhoon	'to fillet fish'	q'úrɿ to cut, cleave
jamhoon	'to jar fish'	cám to boil

These are activities which require the actor's full attention to the object for a definite period of time; the actor carries out the activity without interruption from beginning to end of the process.

A larger number of compounds is formed with detransitivized verbs, including Antipassives.²⁷ In these compounds the adjectival suffix -m is used between verb and object, as in

simiyeen¹isgum-hoon 'to smoke fish'

Eng. spear-fishing	act of fishing <u>with</u> a spear
sleep-walker	person who walks <u>in</u> his sleep

²⁷Note the contrast between Antipassive and other illustrative compounds:

e.g., simiyeen ¹ isgum-hoom	'to smoke fish'
vs.	
iits'a'am-hoon	'to fry fish; fried fish'

The detransitive compound (suffix -ʔaʔ) can be used either predicatively or nominally; the AP compound can never be used nominally, only predicatively (but the AP by itself may be used nominally in some cases, e.g., simiyeen¹iskw).

	sə - məyé·n - ʔskʷ - m - hó·n	(to) process smoke	AP	ADJ	fish
lip'ilsgum-aat		'to mend nets'			
	lípʔl - ʔskʷ - m - ʔá·t	mend up	AP	ADJ	fishnet
lits'ilsgum-daala		'to keep track of money donated at a potlatch'			
	lícʔl - ʔskʷ - m - tá·la	count up	AP	ADJ	money
gílsgum-ts'ak'		'to dig for clams'			
	kʷíí - ʔskʷ - m - c'áq'	search for	AP	ADJ	clam

Here the process might go on indefinitely, or be done at intervals: for instance, simiyéen'isgum-hoon describes a more leisurely and less absorbing process than gahlhoon or k'ohlhoon; the actor may be one of several participants in a group process as in lits'ilsgum-daala. The meaning of these expressions, then, is something like 'to do some ----ing, to do a bit of ----ing, to take part in ----ing.'

3.3.3.3 The uses of the Nisgha Passive

The uses of the Nisgha Passive are closer to those of a passive participle or adjective in SAE languages. It is frequently used as a RelC adjunct to a non-determinate noun, corresponding to an English past participle:

- (54) níh'k'iit wadiithl galts'ap siwatgwit ahl Gingolx²⁸
They reached the village named Kincolith.

²⁸The preposition a before the name is required by any form of the verb siwa 'to name', not because the verb is Passive.

ʰi - t̚ kʷ'i· - t wá - ti·t - t̚ qəlc'áp səwá - (t)kʷ
 TOP ND and 3ERG find 3P ND village to name PASS
 - ət ʔa - t̚ kʷən - qúlɤ
 REL PREP ND place skull

(55) ʰihl ʰi t gunsa hliphlaniy' ginamtgwit as ʰisim'

This is my body given for you.²⁹

ʰi - t̚ ʰi t kún - sa t̚əptán - y' kʷəhám - (t)kʷ - ət ʔa
 TOP ND TOP TM thisPROX- body IS give PASS REL PREP
 - s ʰí - sm' IMATE
 DM TOP 2P

It can also be used as the main predicate in the sentence, under conditions where the agent is irrelevant:

(56) japkw t guni u ligi giikwst?

Was this made or bought? (=Did you buy this or did someone make it for you?)

cáp - kw t kún - i ʔu ləkʷə kʷí·kʷ - s - t
 make PASS TM this Q or INDEF buy PASS 3S

(57) aguhl dim wil hookst?

What will it be used for?

ʔəkú - t̚ təm wəl hó·x - s - t
 what ND FUT CONJ use PASS 3S

No special syntactic or semantic features are associated with the Passive as such, as distinct from other intransitives.

²⁹Excerpt from the Nisgha liturgy, Lilgidim Amadalk'askw, issued by the Anglican Diocese of Caledonia, a Nisgha translation due mostly to Rev. Hubert McMillan and other Nisgha elders.

3.3.4 Summary on Passive and Antipassive

These are morphological, semantic and syntactic reasons to consider the Antipassive construction, not the Passive, as the counterpart of the Active in Nisgha. There is no true Passive construction since the Agent cannot be recovered.³⁰ Elements of Passive meaning are shared among several intransitive suffixes, and the one now most closely associated with the Passive also has a variety of other meanings. Its present productivity in the Passive meaning seems heavily influenced by English.

The respective status of Passive and Antipassive in Nisgha, then, is very different, and the existence of both in the morphology can hardly be taken as evidence for a mixed or split syntax. The Active/Antipassive contrast, both in sentences and in object-incorporation, agrees with the fundamentally ergative character of Nisgha syntax.

3.4 Summary of ergative features

3.4.1 Morphologically, Nisgha has positive ergative features in the ergative suffix used in independent clauses, the ergative clitic pronouns used in dependent clauses, and the ergative relative pronoun used in focusing and relativizing A's. Other elements of the morphology are neutral, except that the other relative pronoun, the suffix -it (-ət), is only used with S, a fact which, however, may be due to specific surface constraints.

³⁰Of course one could say that this is because former Passives have become ergative; but there is not a shred of evidence in Nisgha for such a view.

3.4.2

Syntactically, most constructions differentiate A from S and O which are usually treated the same, and nowhere are A and S treated the same while O is treated differently:

- a. in basic independent clauses, S and O pattern alike, differently from A;
- b. verb agreement is with S and O, not with A;
- c. O or S, not A, can be deleted from independent sentences if recoverable from the context;
- d. in imperative constructions, A, not O or S, can be deleted (deletion of O in imperatives is an instance of deletion of a contextually recoverable element);
- e. in cases of deletion in coordinated sentences, O, not A, of the second clause is deleted under identity with S of the first;
- f. in relative clauses, S and O are treated the same, A slightly differently; while A, S and O may all head relative clauses, it is much more often S or O than A that is relativized; headless relative clauses can be S or O, but not A, of a previous clause;
- g. modal sentences being formed with proclitics, do not require a higher clause with equation of S with A as in SAE languages; the basic clause does not change with the addition of a proclitic;
- h. indirect or jussive causation with the proclitic gwin (kʷən) which makes the verb transitive, does change the form of the sentence; the object of the new transitive verb is the former O or S, never A, which is extraposed as a prepositional phrase.

3.4.3

While Nisgha has both Passive and Antipassive morphology, only the Antipassive is syntactically related to the Active.

3.5 Summary on Nisgha ergativity

I hope to have shown in the above sketch that Nisgha is truly a syntactically ergative language. Nisgha ergativity is not confined to a few sentence types, but pervades the whole of its syntax. Indeed, Nisgha has ergative syntax even in cases where most languages have accusative constructions; indirect causation is a case in point.

There is absolutely no evidence in Nisgha for considering syntactic ergativity as anything but basic and fundamental to the structure of the language, and certainly nothing that suggests that its ergative properties might be derived from accusative ones. Nisgha shows that a fully ergative syntax, although statistically rare, is possible, and that the scope of ergativity need not be limited in theory. Ergativity deserves full status along with accusativity.

4.0 A SINGLE REPRESENTATION OF GRAMMATICAL RELATIONS

4.1

Whether they consider ergative patterns as derived in some fashion from accusative ones, or as their mirror-images, most linguists agree on the desirability for linguistic theory to encompass both types into a single framework. The most recent attempts have been made by linguists developing, or reacting to, the theory of Relational Grammar.

According to RG, basic grammatical categories are Subject of,

Direct Object of, Indirect Object of, ranked as a hierarchy with Subject of as (1), the highest category: Since Subject of designates the subject both of a transitive and an intransitive verb, this schema effectively enshrines accusativity as the basic syntactic universal. Ergativity is clearly secondary:

This leads to the view that an 'ergative' clause pattern is simply an 'accusative' clause pattern, that is, one based on the notions of Subject and Direct Object, which involves in addition one or more rules ... (Postal 1977)

This view has been rightly criticized by linguists more truly familiar with ergative-type languages, notably Woodbury 1977 and Dixon 1979.³¹ It leads to results such as Postal's derivation of the Antipassive, which requires a transitive subject to become an object, then an intransitive subject, a derivation for which there is no evidence in ergative-type languages, and which is also much more complex than the Passive derivation, although the Antipassive, not the Passive, is the fundamental transformation in ergative-type languages.³²

Recognizing the artificiality of such constructs and the desirability of capturing the mirror-image quality of ergative and accusative structures such as Antipassive and Passive, Woodbury 1977 presents a proposal for a universal schema in terms of a linear hierarchy of markedness: in each type there are marked and unmarked relations, but which ones they are varies from one type

³¹Although Dixon seems to consider accusative structures as basic in deep structure, see p. 41-43.

³²Supporting evidence for this derivation is apparently found in Choctaw, an accusative language (Davies 1981).

to the other. This marked-unmarked hierarchy then must be supplemented by two others: the RG hierarchy which is accusative, and a mirror-image one for the ergative type; these two hierarchies in turn, not being compatible, must be supplemented by another hierarchy of more precise grammatical categories, such as $\langle S_t, S_i, O_t \rangle$ (p. 331), with variable cut-off points determining which elements are grouped together as one category. These hierarchies will also be affected by Silverstein's 1976 hierarchy of features governing split ergativity.

In contrast to RG's model, which is too strongly accusative to reflect ergative-type structures, Woodbury's marked/unmarked model is too vague: he does not attribute any content to his basic hierarchy of markedness, and he does not specify how the other hierarchies would interact with it and with each other.

Dixon 1979 also criticizes RG's model as too accusative, and points out that a more generalized framework must treat transitive and intransitive subjects (A and S) as separate grammatical categories. If there is to be a hierarchy, it could be something like 1 = S, 2 = A, 3 = O (p. 124 fn.). However, he cannot find any principled reason for such an ordering, and would prefer to do away with hierarchies altogether.

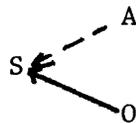
Clearly, none of these models is satisfactory, yet all make some valuable contributions. The fact that the RG model is biased in favour of accusativity, that Woodbury's proposal is too vague and Dixon's not sufficiently thought out does not mean that their positive contributions have to be discarded and that a generalized model cannot be established.

It is indeed possible to conceive of a model which would incorporate the grammatical insights of all these linguists, as well as others, with a single principled representation of the

relations between the main grammatical functions, and which would be valid for both ergative and accusative syntax. It is possible to establish such a model by starting from the observable features of the Active, Passive and Antipassive constructions.

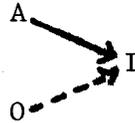
4.2 The basic configuration

Taking S, A and O to be basic grammatical functions, an Active sentence has both A and O in the normal roles. The obligatory feature of the Passive construction is $O \rightarrow S$, while the obligatory feature of the Antipassive construction is $A \rightarrow S$. Since S is generally a less marked function than O (in accusative systems) or A (in ergative systems) (as observed by Woodbury), it can be written on the left (traditionally the weaker position) and the two possibilities can be represented thus (solid arrows = Passive, broken arrows = Antipassive):



The element that does not go to S, if it stays in the sentence, becomes an indirect object (I);³³ the two possibilities are

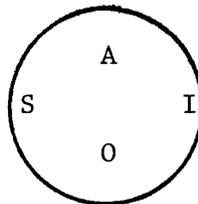
³³In this paper I am only considering the indirect object derived by Passive or Antipassive transformation from an original A, not other types of indirect object such as Dative, which will be the object of a later paper. For examples of other indirect objects treated as I, however, see notes 26 and 36.



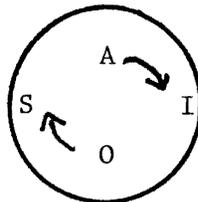
Hence the single schema representing all four possibilities³⁴



Only two of the four possibilities are realizable at the same time, under language-specific circumstances, but the four basic categories S, A, O, I can be represented around a circle:

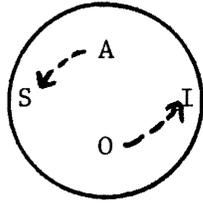


Accusative constructions use a clockwise motion of A and O for the Passive:



and similarly ergative constructions use an anticlockwise motion for the Antipassive:

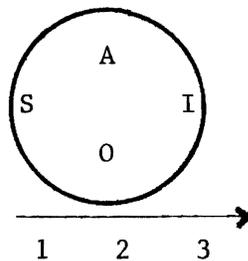
³⁴Since this paper was written I have found that Ard 1978 has proposed a similar schema of grammatical relations; he does not, however, start from the same premises nor pursue the same implications.



4.3 Associated values

S has been written on the left as less highly marked than either A or O, and this representation then implies that I is the most highly marked of all these elements, more so than A or O, which are represented as equally marked. Here the reasoning agrees with Woodbury's: S is the least marked of all categories, since its occurrence is fully predictable. On the other hand, the overt occurrence of I is usually optional; the presence of I in a sentence adds an element of meaning which is not at all predictable, hence is highly marked. And in between, A and O are both equally indispensable in an Active sentence, hence one cannot be said to have more weight than the other: they both have a marked value intermediate between S and I.

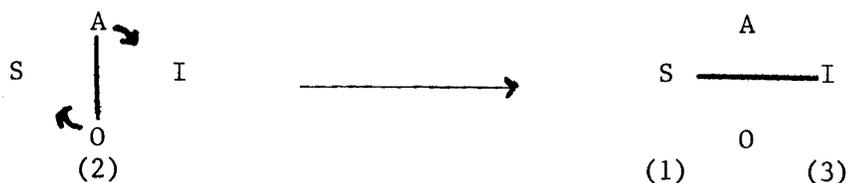
Thus it is possible to associate to the basic configuration, which is a circle, a scale:³⁵



The point of equilibrium is represented by the Active transitive

³⁵The value of 3 attributed to I in this system should not be confused with the Dative = 3 equation in Relational Grammar.

sentence, where both A and O are present with their basic value of 2. This balance may be tipped in a direction determined by the particular language, thus for Passive, clockwise:



and for the Antipassive, anticlockwise:



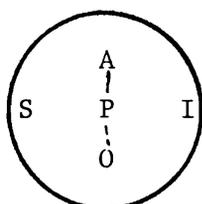
Note that the complete Passive or Antipassive sentence, including I, has the same value (4) as the Active transitive sentence; while the reduced Passive or Antipassive sentence (without I) has only the value of (1) which is that of an intransitive sentence.

Note also that this schema does not give priority to either demotion (to S) or promotion (to I) of one or the other element, since both are necessary to the balance of the sentence, and are part of a unified underlying whole. But, the fact that only the promoted element (now I), never the demoted one (now S) may be deleted, seems to indicate that demotion is less marked than promotion, hence more likely to happen.

4.4 Verb agreement vs. special marking

Our schema can provide a representation not only of the basic grammatical functions S, A, O and I's relations to each other, but

also of their relation to the verb, and also provide an explanation of the complementary distribution between verb-agreement and special case-marking. The verb (P for Predicate) is represented in the centre of the circle:



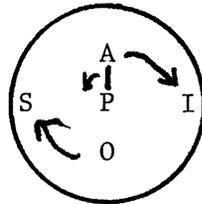
In the transitive sentence, containing A and O, the verb agrees with one of these functions, and the other takes on special marking: thus in accusative-type languages, the verb agrees with A, and O has accusative marking; while in ergative-type languages, the verb agrees with O, and A has ergative marking.

The choice of which element does what is related to the Passive/Antipassive transformation: only the element that may become S gets special marking: in accusative languages O becomes S through the Passive transformation, in ergative languages A becomes S through the Antipassive transformation. The fact that it is the element that may become S that gets special marking is not trivial, but is justified by the necessity of keeping apart the two roles; it is essential to be able to tell whether this element has its original function in the sentence (with special marking), or the S function, which is least marked. The other element, which cannot become S, hence never gets confused with it, normally gets the same marking as S, that is, agrees with the verb.

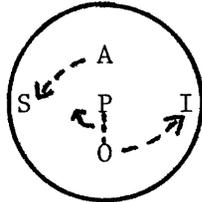
When an A or O moves to S in an Antipassive or Passive transformation, the verb agrees with the new S. This is representable on our schema too.

In accusative languages, the verb agrees with A: we represent this as a P-A radius. When the Passive transformation moves O to S

(and A to I), the verb stops agreeing with A and instead agrees with the new S: thus the clockwise motion of O and A is counterbalanced by a counterclockwise motion of the P-radius:



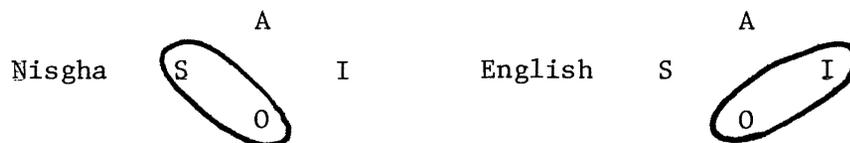
The opposite occurs in ergative languages:³⁶



The element that used to agree with the verb, and has become I, can no longer agree with the verb, since the verb must agree with S; but it does get special marking as an oblique case or prepositional phrase.

In this way both Active and Passive/Antipassive sentences ultimately have the same marking structure: one element agrees with the verb, the other is specially marked. What is different in the structures is the weight given to the different elements: A and O have equal weight in Active sentences, while they are differently weighted in Passive/Antipassive sentences.³⁷

³⁶See also noun-incorporation (note 26): Nisgha incorporates O and S, English O and I, again in mirror-image fashion:



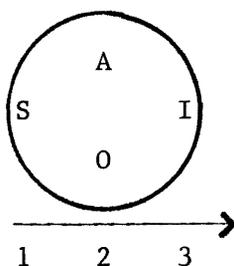
³⁷See below 4.6.2 for a definition of weight.

4.5 Marked/unmarked

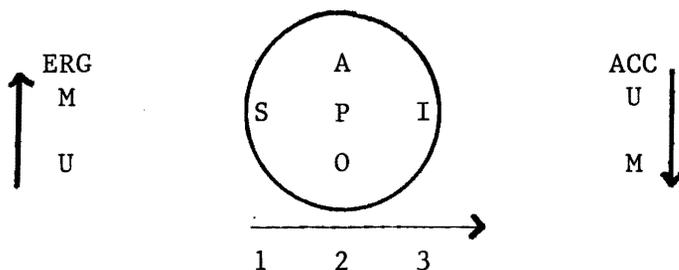
In a Passive or Antipassive sentence, the verb must agree with S as the unmarked or least marked, obligatory element in the sentence. In Active sentences, the verb agrees with only one of A or O, never with both.

If, from the fact of the verb's agreeing with S, one can conclude that the verb agrees with the unmarked element in the sentence, then one of A or O, whichever one agrees with the verb, must be less marked than its non-agreeing, specially marked counterpart. Thus, for accusative languages A is less marked than O, for ergative languages, O is less marked than A.

However, A & O have already been defined as equally necessary to the Active sentence, and therefore each as having the same value of (2). This value was reached by ranking S, A/O and I on a scale represented as parallel with the horizontal axis of the circle:



It is not possible to further differentiate A and O on this axis; but they can be differentiated on the vertical axis: in accusative languages, A is unmarked, O marked; in ergative languages, O is unmarked, A marked:



The basic quadripartite configuration and its associated scale must be universal. The fact that A and O receive U/M rankings may also be universal: if both A and O are necessary to the Active sentence, then the occurrence of one necessarily entails the occurrence of the other, which is predictable,³⁸ hence less marked. Which of A or O is chosen as M or U, and under which conditions (since split-type languages use both hierarchies), is language-specific.

Note that only one hierarchy, vertical or horizontal, is manifested in any one sentence, not both, since a sentence with two NP's has to be either of the A-O or S-I type. If the Active sentence is taken as basic, the effect of the Passive/Antipassive transformation is to reverse the basic vertical hierarchy of the language and transpose it on the horizontal axis:

- in the Passive, O (\rightarrow S) becomes unmarked, A (\rightarrow I) marked;
- in the Antipassive, A (\rightarrow S) becomes unmarked, O (\rightarrow I) marked.

³⁸This is stated here in syntactic terms, but there are semantic consequences as well. A and O influence each other's meaning, as shown in Chomsky's celebrated example of the non-identity of meaning of some Active and Passive counterparts:

(a) Everyone in the room knows two languages.

(b) Two languages are known to everyone in the room.

Only in (b) must the two languages be the same for everyone in the room. In (a), there may be as many sets of two languages as there are individuals described collectively by everyone.

It is no accident that (a) is a transitive sentence. The occurrence of an A in such a sentence predicts, as well as determines, the occurrence of an O; accordingly the meaning of the O, here two languages, is influenced by the indeterminacy of the meaning of the A everyone; but in (b), two languages is an S, an element which stands by itself in the sentence and does not require another NP; accordingly its meaning is not influenced by that of the I everyone.

But since values on the horizontal axis are more differentiated than those on the vertical axis, the relationship between S and I is differently weighted than that between A and O.

4.6 Weight vs. markedness

Although there are cases where weight and markedness overlap, the two notions must be kept apart.

4.6.1 Markedness

Markedness is a polar notion admitting of two values: U and M. Markedness has no meaning unless the U and M elements are opposable to each other in a context. Hence markedness only plays a role when a marked and an unmarked term are both present in a sentence. This is the case in a basic transitive sentence (A-O) or in a full Passive or Antipassive sentence (S-I).

In the A-O sentence, where both A and O are always present (at least in the context), which one of A or O is marked or unmarked depends on language specific factors, which condition ergative (A=M) or accusative (O=M) structure.

In the S-I sentence, S, which is obligatory, can be considered unmarked (U), I, which is optional, as marked (M).

In either sentence type, the unmarked element (S, A or O) agrees with the verb, the marked element (O or A, I) receives special marking (special case, preposition, etc. depending on the language).

In the reduced Passive or Antipassive sentence, however, markedness plays no role, since there is no I to oppose to S.

4.6.2 Weight

Weight, on the other hand, is not a polar notion like markedness,

but an intrinsic property of the basic grammatical elements of the sentence.

Weight can be defined as the normal amount of stress or emphasis placed on the presence of a certain grammatical element. This means, of course, emphasis that is inherent in the grammatical function, not the various means which languages use to either reinforce this emphasis or shift it to other elements in the sentence. The term weight is free of this connotation of exceptionality. Weight is attached to certain elements of the sentence by virtue of their function.

A single obligatory element carries little weight, hence the S of an intransitive sentence gets the lowest value, 1.

In the transitive sentence, both A and O have equal weight, since they are opposable elements; hence they get the value of 2 (further differentiation is not on the weight scale but in terms of markedness as explained above).

In the S-I Passive or Antipassive sentence, one of O or A respectively becomes S, and gets the normal weight value of 1; the other element becomes I; an optional element, when present, carries a great deal of weight, hence I receives the value of 3.

Note that S always has the value of 1, whether or not I is present in the sentence. But when I is present, the 1-3 difference in their weight can be assimilated to a U-M distinction.

In the S-I sentence, then, relative weight and markedness of S and I overlap; while in the A-O sentence, markedness is distinct from weight; A and O are differentially marked, although they have the same weight:

	<u>ACC/ERG</u>			<u>ACC</u>		<u>ERG</u>
	S	— I		U	A	M
				M	0	U
weight	1	3			2	
	(U)	(M)			+	
					2	

4.6.3

This partial overlap of markedness with weight explains the pivotal or equivalent role of S and the unmarked A or O in a variety of processes, for instance

- the least weighted/marked element agrees with the verb;
- S (weight 1) not I (weight 3)
- A(=U) in accusative patterns, O(=U) in ergative patterns;
- deletion occurs under coordination if
 - S (weight 1) = A (=U) in accusative patterns;
 - = O (=U) in ergative patterns.

4.7 Syntactic vs. thematic primes

The model presented here deals with the syntactic properties of ergativity and accusativity and not with any potential semantic/thematic correlates. That there is usually a correlation between the two types of properties hardly needs to be said; for instance, in an A-O sentence the likelihood of A being an animate actor and O an inanimate patient is far greater than the reverse. Languages can be ranked on a hierarchy as to how far they allow semantic elements to occupy less than optimally appropriate syntactic roles. However, transformations such as Passive and Antipassive also alter syntactic relations; if one can establish a hierarchy of

semantic criteria for opposable elements such as A and O, it is much more difficult to do so for S, since almost any NP can be in the S position, whether in a basic or a derived sentence.

No attempt will be made to deal with this problem here except to emphasize that S, A/O and I are syntactic functions, not thematic ones.

It seems appropriate, however, to comment on Dixon 1979's discussion of this point.

Dixon considers S, A and O to be syntactic primes, irreducible to each other, and the S=A or S=O equations of accusativity and ergativity respectively as belonging to a level of shallow structure (apparently the syntactic level) intermediate between surface structure (the morphological level) and deep structure, in which the primes are semantic or thematic. Overriding the accusative/ergative dichotomy is the fact that there is at the deep level a category of Subject, characterized as [+actor] and subsuming both S and A. Dixon finds evidence for this category in the almost universal accusativity of structures like imperatives and jussive constructions.

Such a conception seems to be an attempt to reconcile the ergative language specialist's awareness of the non-derivative status of ergative syntax with the Western linguist's deep intuitive but 'linguocentric' feeling that there is, or ought to be, a level where S=A as in accusative languages. In fact, Dixon's evidence is highly selective and he tends to dismiss it when it does not favour his hypothesis.

For instance, he mentions (p. 113-4) the fact that Nass-Gitksan imperatives do have ergative patterning (see above 3.2.1.1.2) a fact that seems to puzzle him as he expects imperatives to have accusative patterning; he seems to think this has nothing to do

with the ergative syntax of the language, but is only 'a fact about the structure of the verb in Nass-Gitksan' (p. 114). As for jussive constructions, Dixon only takes into account those which literally translate English 'X ordered Y to (do) Z', where Y is S or A of the infinitive clause. He could have found that in the Romance languages the more commonly used equivalents (using an auxiliary verb such as Fr. faire, see note 20) have an S=O equation; these languages, of course, are not ergative, and are beyond the range of those considered by Dixon; but the existence of such patterns does invalidate the claim that jussive constructions necessarily involve the S=A equation. The fact that Dixon gives no such patterns from ergative languages does not mean that they don't exist; they may have been overlooked (for instance, the Nisgha pattern is not described in Boas).

Moreover, even for accusative languages the S=A [+actor] semantic equation is not always valid. Thus, in

(58) John ate
S

(59) John ate the roast
A O

we do have S=A, but in

(60) John broke the window
A O

(61) The window broke
S

the equation is S=O, and in

(62) Mary cooked the roast
A O

(63) Mary cooked
S

(64) The roast cooked
S

S can be equated with either A or O, although A and O each has to have definite semantic properties. To attribute to S in (64) the feature [+actor] is absurd. As well, on the basis of a number of examples of types (60) and (61), or (62) and (64), one could make a case for a deep category $S=O=$ [+Patient] or [+Undergoer]. A linguist whose personal linguistic background was an ergative language would probably find plenty of evidence even in accusative languages for such a category.

In short, Dixon's conclusions about a privileged status for the category of subject outside of specific languages are not acceptable.

4.8 Generalities

The model presented here, starting from the basic properties and transformations of the Active sentence, rather than from theoretical postulates, achieves the goal of unifying the presentation of ergativity and accusativity; it favours neither the one nor the other, but captures their mirror-image relationship, and considers both as equally possible ways of manifesting underlying grammatical relationships.

The model separates S from A and O as suggested by Dixon, and assigns them values on the hierarchy S, A/O, I, not arbitrarily, but on the basis of the observed behaviour of these elements in Active, Passive and Antipassive sentences. This model gives the I in such transformed sentences a status of its own and not just that of a Chômeur A or O as in RG.³⁹ This hierarchy is one of weight, a new notion. It is considered universal.

The model also incorporates a marked/unmarked hierarchy as suggested by Woodbury, with two different realizations conditioning ergativity or accusativity. Here again this hierarchy is not

³⁹See note 33.

an abstract theoretical concept pre-existing actual content, it is applied to actual members (A and O) of the basic configuration, which otherwise have the same weight value. This second hierarchy, although universal in its principle, is language-specific in its realization.

The existence of the two types of hierarchy and the underlying configuration of the basic sentence elements are derived from the facts of Active versus Passive/Antipassive constructions, which they serve to explain, as well as to describe, in related but opposite directions. The existence of Passive/Antipassive constructions is a necessary counterpart to the existence of the differential marking of A and O in the Active construction. The model also provides a principled way to account for ergative and accusative types of verb-agreement and case-marking, and for the complementarity between these phenomena; these are areas which are usually relegated to 'lower rule' status, of no particular significance; they are shown here to tie in with the rest of the model.

This schema is only intended to represent basic relations in the sentence and is not designed to account for the variability of language-specific realizations; but it is compatible with mixed or split types as well as with fully ergative or accusative languages, since all that is needed for a change from one to the other is a reversal in the U/M values of A/O, which may be conditioned by factors such as Silverstein's 1976 hierarchy.

The usefulness of the model is not restricted to ergative and accusative types only; it is also compatible with languages where $S \neq A \neq O$, as well as those with $S = A = O$, since the language-specific features of the model need not all be present at any one time. In particular, it does not seem necessary for all languages

to have a M/U vertical hierarchy.

5.0 CONCLUSION

The syntactic structure of Nisgha shows that a language with truly ergative syntax, although statistically rare, is not just a logical possibility removed from the world of experience, but can be fully functional. It shows that regardless of thematic or semantic criteria there is no type of construction that a priori requires the accusative mode of syntactic expression. There is therefore no justification for relegating ergativity to a lower theoretical status than accusativity.

The model of grammatical relations presented here grants ergativity fully equal status with accusativity, and also underlies mixed or other types of syntactic expression. It reconciles, incorporates and reevaluates the observations and insights of a number of linguists, as well as introduces the notion of weight. It makes a sharp distinction between grammatical versus thematic roles.

It will now be necessary to further test and explore the implications of these findings in both practical and theoretical terms.

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