

The Ergativity Hypothesis and the Argument Hierarchy in Nisgħa*

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The Northwest Coast area of North America in aboriginal times was inhabited by groups speaking languages belonging to a number of families, and the historical connections among these families are not as yet fully understood. A problem that is encountered in investigating these family affiliations is the presence of numerous areal features, ranging from phonology to syntax, that appear to have been diffused or "borrowed" from one language to another, independently of possible family relationships. Conspicuous among these features is the presence of constructions where most (if not all) lexical items in the language may appear in clause initial position and serve as predicates, while various clitics and affixes serve as the clausal arguments. Languages where the sentential arguments are present in the inflectional morphology have been termed Pronominal Argument languages, in contrast to Lexical Argument languages such as English, where subjects and objects are independent words (Jelinek 1985). Examples of Nisgħa (Tsimshian) sentences with pronominal arguments are:

- | | |
|---|--|
| 1) hałals ni-y
work ABS-1sg
I worked. | 3) Iimoom-i-y ni-n
help-ERG-1sg ABS-2sg
I helped you. |
| 2) hałals ni-n
work ABS-2sg
You worked. | 4) Iimoom-i-n ni-y
help-ERG-2sg ABS-1sg
You helped me. |

These examples also show the presence of ergativity (constructions where intransitive subjects are marked the same as transitive objects), a syntactic feature that is found in many languages of the Northwest Coast area.

The purpose of this paper is two-fold: 1) to show the presence in Nisgħa of an argument hierarchy, a syntactic feature that has also been identified in other Northwest Coast languages; and 2) to show that the Ergativity Hypothesis (Marantz 1981) is irrelevant to the analysis of Nisgħa. I will try to show instead that there is a dependency between ergativity and the distribution of argument types in Nisgħa, as reflected in the argument hierarchy.

What have been termed "agent hierarchies" or "animacy hierarchies" have been identified in Salish (Jelinek and Demers 1981, 1983; Gerdts, 1983;

Kinkade, 1984). These hierarchies are found only in languages with pronominal arguments (Jelinek 1985). A ranking of referential elements is shown in constraints on argument combinations -- certain agent/patient combinations are excluded. The central feature of these hierarchies is that (some or all) pronominal arguments outrank lexical arguments or lexical adjuncts; thus, the designation 'argument hierarchy' seems to be more suitable.

Nisgħa presents important evidence on this point. A crucial feature of Nisgħa is that it is "mixed" with respect to argument type. While first and second person are always and only pronominal elements present in the inflectional morphology, third person arguments may be either pronominal or lexical. Examples (1-4) above show first and second person pronominal arguments. These person-marking elements cannot be instances of agreement (with some "underlying" lexical subject or object that has been "pro-dropped"; Chomsky 1982) since there are no independent first or second person pronouns in Nisgħa for them to agree with. The complete sets of main clause pronominal Ergative and Absolutive suffixes are:

5) Ergative		6) Absolutive	
Singular	Plural	Singular	Plural
-i-y	-i-m	ni-y	nu-m
-i-n	-i-sim	ni-n	ni-sim
-i-t	-i-tiit	ni-t	ni-tiit

It is apparent that aside from the change in first person plural, the pronominal affixes are the same in Ergative vs. Absolutive. The suffixes follow the Ergative marker -i- on the transitive predicate, and are attached to the deictic Absolutive base ni-.¹

In the third person, the speaker may employ either pronominal or lexical arguments:

- | | |
|--|--|
| 7) Iimoom-i-t ni-t
help-ERG-3sg ABS-3sg
He helped him. | 9) Iimoom-i=s Ann=t John
help-ERG=DET Ann=DET John
Ann helped John. |
| 8) Iimoom-i-t ni-tiit
help-ERG-3sg ABS-3pl
He helped them. | 10) Iimoom-i=I hanaq'=I k ^y at
help-ERG=DET woman=DET man
The woman helped the man. |

Examples (7,8) show third person pronominal arguments; (9,10) show lexical arguments. Note that in (9,10) the pronominal inflection seen in (7,8) is absent, so that again agreement is ruled out. Examples (9,10) include the determiners (also called "connectives") that precede Tsimshian nominals,

and are post-cliticized to the preceding word. These determiners are mutually exclusive with the pronominal inflection that serves an argumental function (7,8). The determiner -I precedes common nouns; the distribution of the -s and -t before proper nouns and other determinate expressions varies across clause type (see Tarpent 1982).

In the construction types that we have seen so far, the following generalization applies:

11) Ergative arguments precede Absolutive arguments.

This is true of constructions with either all pronominal arguments or all lexical arguments. What happens if argument types are mixed within the sentence? If the ERG argument is pronominal, and the ABS argument is lexical, the generalization still holds:

- 12) a. Iimoom-i-y=t Ann b. Iimoom-i-t=I k^yat
 help-ERG-1sg DET Ann help-ERG-3sg DET man
 I helped Ann. He helped the man.
 c. Iimoom-i-n=I hanaq'
 help-ERG-2sg DET woman
 You helped the woman

The examples in (12) show ERG pronominals preceding ABS lexical arguments. But with constructions with a lexical ERG and a pronominal ABS argument, an inconsistency appears. If the ABS is third person pronominal, there is no problem, and (11) still holds:

- 13) a. Iimoom-i=s Ann ni-t b. Iimoom-i=I k^yat ni-tiit
 help-ERG DET Ann ABS-3sg help-ERG DET man ABS-3pl
 Ann helped him/her. The man helped them.

But if the ABS pronominal argument is first or second person, the construction is not parallel:

- 14) a. Iimoom-i-t ni-y=t Ann b. Iimoom-i-t ni-n=I k^yat
 help-ERG-3sg ABS-1sg DET Ann help-ERG-3sg ABS-2sg DET man
 Ann helped me. The man helped you.

In (13), third person ABS follows the ERG argument, while in (14) first and second person ABS must precede a lexical ERG argument. The expected construction type, where the ERG argument precedes the ABS one, does not appear where ERG is lexical and ABS is first or second person. Accordingly, the argument hierarchy in Nisgha is:

- 15) 1,2 > NP

That is, a lexical argument cannot precede 1,2. There are no constraints on the relative order of third person pronominal with 1,2 or nominals, so 3 is unordered in (15).

Alternatively, we could take the position that the third person suffix -t on the predicate is the pronominal ERG argument, and that the nominal is just an adjunct. The constructions in (14) are grammatical without the nominals; they are complete pronominal argument sentences, as in (7,8). This would preserve the generalization stated in (11). However, I know of no prosodic or syntactic evidence to support the view that the nominals in (14) are adjuncts. Since nominals can serve as arguments in Nisgha, I am assuming that when the third person suffix -t and an ERG nominal co-occur, the -t is functioning as agreement rather than as an argument. (Evidence that the -t suffix functions as agreement in dependent clauses is given below.)

It is of interest that if we did analyze the -t as the ERG argument in (14), and the nominals as adjuncts, the hierarchy given in (15) would still hold. Under such an analysis, we would have to say that sentences with a lexical ERG argument and a 1,2 ABS argument are excluded, and that constructions with all pronominal arguments are employed instead, with an optional nominal adjunct to the ERG pronominal argument. This excluded sentence type

- 16) *Pred_{trans} NP-ERG 1,2 ABS

would still result in

- 15) 1,2 > NP

Under either analysis, we would need to stipulate that 1,2 pronominal out-rank nominals as arguments.

The ranking of first and second person over other arguments (pronominal or lexical) is frequently seen in argument hierarchies. In Lummi, transitive sentences of the type 3 > 1,2 are excluded, and passive sentences where the 1,2 are "advanced" to subject position are employed instead.

- 17) leŋ-t-ŋ-səŋ (ə cə swəy'qə')
 see-TRANS-PASS-1sg (by DET man)
 I was seen (by the man).

(Jelinek and Demers, 1981, 1983.) Lummi is a Coast Salish language.

In another language family of the Northwest Coast area, Nootkan, Whistler (1986) shows that the distribution of inverse forms exactly parallels the distribution of passives in Lummi. When the agent is third person and the patient is first or second person, the inverse must be employed; when the opposite argument combination occurs, the inverse cannot be employed; and when both arguments are third person, the speaker is free to choose

between direct and inverse constructions. In Nootkan as in Lummi, the argument hierarchy is:

18) 1,2 > 3 (NP)

The Lummi speaker can "override" the hierarchy by using the passive, and the Nootkan speaker uses the inverse.

There are no inverse constructions in Nisgha, and only a lexical passive (that is, oblique agents cannot be stated). Furthermore, this passive occurs with relatively few predicates. If a Nisgha speaker wishes to describe some event where a third person acts upon a first or second person, and he wishes to specify the agent by using a nominal argument, he can do so without violating the argument hierarchy by employing a 'focus' construction in which either the nominal agent or the 1,2 patient are the single constituent of a main clause, followed by a 'headless' relative clause.

19) ni-y=I Iimoom-i=s Mary

ABS-lsg=DET help-ERG=DET Mary
I am the one that Mary helped.

20) Mary t-'an Iimoom-y (or 'an-t)

Mary ERG-REL help-lsg-ABS
Mary is the one who helped me.

In (19), the headless relative is patient-centered; in (20), it is agent-centered (Jelinek and Demers, 1985). Note that in (20) it is the ABS argument, rather than the ERG argument, that is suffixed to the relative clause predicate, and that the order of the ERG pronominal affix and the particle 'an are variable. The distribution of the pronominal arguments in relative clauses in Nisgha is as follows:

21) Intransitive relative clauses (third person only)²

haIals-it
work-REL:INTRANS
the one who worked

22) Transitive Agent-Centered relative clauses (any person patient)

- | | |
|--|--|
| a. 'an-t Iimoom-y
REL-ERG help-lsgABS
the one who helped me | b. 'an-t Iimoom-sim
REL-ERG help-lplABS
the one who helped you pl. |
| c. 'an-t Iimoom-t
REL-ERG help-3sgABS
the one who helped him/her | d. 'an-t Iimoom=s Mary
REL-ERG help=DET Mary
the one who helped Mary |

23) Transitive Patient-Centered relative clauses (any person agent)

- | | |
|---|---|
| a. Iimoom-i-y
help-ERG-lsg
the one that I helped | b. Iimoom-i-n
help-ERG-2sg
the one that you helped |
| c. Iimoom-i-t
help-ERG-3sg
the one that he helped | d. Iimoom-i=s Mary
help-ERG DET Mary
the one that Mary helped |

By definition, a relative clause shares an argument with the main clause to which it is subordinate. Relative clauses pose no problem for the hierarchy stated in (15). One argument of the relative clause is necessarily third person; this is the "head" or the argument which the clause is "centered" on or coreferential with ("the one that helped me"; the one that Mary helped"). Since, as we have seen, there are no constraints in Nisgha on argument combinations involving third person pronominal, these complex sentences are consistent with the argument hierarchy.

The hierarchy can be observed in subordinate propositional clauses in Nisgha also. In these dependent clauses, as in main clauses, first and second person arguments are pronominal only, but the speaker may choose between a pronominal or a lexical argument in the third person. Here the ergative pronominal inflection is distinct. Dependent propositional clauses differ from relative clauses in a crucial respect; it is not the case that one argument must be third person in propositional clauses. All possible pronominal argument combinations occur, as in main clauses. The paradigms are:

24) <u>Ergative</u>		25) <u>Absolutive</u>	
Singular	Plural	Singular	Plural
-ni-	-tip-	-y	-m
-mi-	-misim-	-n	-sim
-t-	-t (Pred)-tiit	-t	-tiit

The Ergative pronominal elements are not suffixed to the predicate, as in main clauses, but are attached to a preverbal element, such as the factive complementizer wil.

- | | |
|--|---|
| 26) ...ni=wil Iimoom-t
ERG1sg COMP help-ABS3sg
....that I helped him/her | 27) ...mi=wil Iimoom-y
ERG2sg COMP help-ABS1sg
....that you helped me |
| 28) ...wil=t Iimoom-sim
COMP ERG3sg help-2plABS
....that he helped you pl. | |

The Ergative pronominals given in (24) vary in their order relative to the particular pre-predicate particle that they are associated with. The Absolutive pronominals are suffixed to the predicate; they appear also in intransitive dependent propositional clauses:

- 29) a. ...wil haʔals-y b. ...wil haʔals-t
 COMP work-1sgABS COMP work-3sgABS
 that I worked that he worked

The Ergative pronominal for third person plural given in (24) is discontinuous. In these constructions, the clausal arguments are distributed across three elements, instead of the usual two:

- 30) luu-'aam=I qoot-y wil-t Iimoom-tiit ni-y
 in-good DET heart-my COMP-3ERG help-3plERG ABS-1sg
 I am happy that they helped me.

In dependent clauses, third person arguments may also be lexical.

- 31) ...wil haʔals=s Mary
 COMP work-3sABS DET Mary
 that Mary worked
- 32) ...wil=t Iimoom=s Mary=t Bill
 COMP=3sgERG help DET Mary DET Bill
 that Mary helped Bill

In (32), the Ergative -t is present on the complementizer, along with two lexical arguments. It seems highly unlikely that the first nominal could be an adjunct to the -t, since it is followed by the Absolutive lexical argument. I take this as evidence that the -t attached to COMP in (32) is functioning as agreement with the lexical argument. When argument types are mixed, the situation is as follows:

- 33) ...ni=wil Iimoom=s Mary
 1sgERG=COMP help DET Mary
 that I helped Mary
- 34) ...wil=t Iimoom-y=t Mary
 COMP=3sgERG help-1sgABS DET
 that Mary helped me

In (34), there is agreement between the -t suffix and the Ergative nominal, and note that here also the Absolutive 1,2 precedes the Ergative nominal. Again, the third person constructions are different:

- 35) ...wil=t Iimoom=s Mary
 COMP=3ERG help=DET Mary
 a.that he helped Mary
 b.that Mary helped [him]

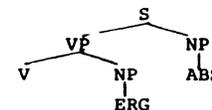
Example (35), as written, is ambiguous. On the reading given in (35a), the -t is interpreted as an Ergative pronoun, and the nominal Mary is the lexical Absolutive argument. On the reading given in (35b), the -t is taken as agreement with the lexical Ergative argument, Mary. Here the listener must also assume that the absolutive third person pronoun has been omitted as a discourse topic. The complete sentence would be:

- 36) luu-'aam=I qoot-t wil=t Iimoom=s Mary ni-t
 in-good DET heart-his COMP=3ERG help DET Mary ABS-3sg
 He is happy that Mary helped him.

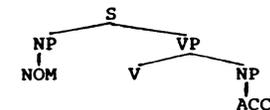
When ni-t is present, no ambiguity is possible, and the -t must function as agreement.

I turn now to a few remarks on the irrelevance of the Ergativity Hypothesis (Marantz 1981) to the analysis of Nisgha. Marantz follows Dixon (1979) in distinguishing between morphological and syntactic ergativity. Morphological ergativity is the marking of arguments according to an ergative pattern; syntactic ergativity is the organization of syntactic principles and processes such as control and anaphora along ergative lines. The Ergativity Hypothesis is designed to be consistent with the Government and Binding framework (Chomsky 1981) and presupposes an S-structure VP (verb phrase) as a language universal. According to Marantz, a language is syntactically ergative if the agent argument of a transitive verb is the "internal" argument, the argument dominated by the VP node, while it is syntactically accusative if the internal argument is the patient argument of a transitive verb, as in English.

37) Syntactic Ergativity



38) Syntactic Accusativity



The order of the agent vs. patient is not a factor, but one or the other must be consistently under the VP node. The data on the distribution of the person marking affixes and lexical arguments given above amply demonstrates that there is no VP in Nisgha. It is not the case that for all clause types there is a lexical item, either agent or patient, that is always dominated by a VP node. The split between pronominal and lexical arguments in Nisgha is conditioned by person; 1,2 are pronominal only. And if we assume that pronominal arguments have been merged with the predicate by some process, producing a "morphological" VP, the problem is that the argument suffixed to the predicate has no consistent thematic

role. As we have seen, either Ergative or Absolutive arguments may be suffixed to the predicate in Nisgha.

Tarpen (MS) proposes that the person-marking suffixes that appear on the Nisgha predicate are unmarked or undifferentiated as to case; that the arguments that precede (Ergative) or follow (Absolutive) the predicate determine how these suffixes are to be interpreted. This seems correct. The table in (39) gives the distribution of pronominal arguments in Nisgha.

Arguments			Clause Type
On Pre-predicate Particle/COMP	On Predicate	On Post-predicate deictic base	
ERG	ERG ABS ERG ABS	ABS	Main clauses Agent rel. Patient rel. Intrans. rel. Dep. Prop. (third pl.)
ERG	ABS		
ERG	ERG	ABS	

This table demonstrates the generalization given in (11), that Ergative arguments precede Absolutive ones; but the point is that this happens without regard to where the predicate may be: initial in main clauses, and second in dependent clauses and agent centered relatives. Dependent clauses are statistically far more frequent than independent ones (Boas 1902; Tarpen 1982). The table does not show the argument hierarchy, since it does not include main and dependent clauses with both pronominal and lexical arguments, where Absolutive 1,2 precede Ergative nominals.

Belvin (1985) argues that Nisgha is morphologically ergative and syntactically accusative, employing the Marantz framework. His analysis does not include the predominant dependent clause type, and does not confront the evidence against a VP node in Nisgha. Belvin assumes that in D-structure Nisgha is SVO, and he postulates a Verb Movement rule that places the verb in clause initial position at S-structure; this makes the language fit the Government and Binding framework. Objects and prepositional phrases appear under a VP node, making Nisgha syntactically accusative, just like English.³ It seems preferable to expand and develop current theory so as to enable it to account for this typologically interesting language.

Argument hierarchies, non-accusative case, and the absence of a VP node are all syntactic features frequently found in languages with pronominal

arguments (Jelinek 1985). These languages are non-configurational, and lack a unique [NP,S] that receives nominative case, as apposed to objects that are [NP,VP] and have accusative case or are governed by prepositions. The presence of constructions without free lexical items serving as the clausal arguments is the crucial attribute. These typological features present questions of some interest for the theory of Government and Binding, where the government of lexical (or Empty Category) objects by the verb, and of lexical (or EC) subjects by INFL are assumed to be language universals.

NOTES

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¹ Tarpen (1982) calls ni- a Topic Marker.

² I have left the Intransitive Relativizing suffix -it unanalyzed here. If we decompose it into -t, third person, preceded by -i-, then we can identify this -i- with the element preceding transitive subject markers in relative clauses. This would result in a nominative/accusative case system in relative clauses in Nishga -- an "ergative split".

³ I have not discussed Nisgha prepositional phrases and oblique arguments here. They follow other arguments, pronominal and lexical, and are a part of the evidence against a VP node that Belvin attempts to overcome with his Verb Movement rule.

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NISGHA POSSESSIVES

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As a grammatical category, possession typically refers to a relation of dependency between two nouns, one of which is considered to belong to or with the other, which controls it. Nisgha¹ makes precise distinctions between different kinds of possession through morphological and syntactic means. Nisgha, like many other languages, distinguishes between the point of view of the possessor of an object, and that of the observer concentrating on a feature of the possessor. Within the point of view of the possessor, it differentiates between singular and collective 'possessions'.

1. IDENTIFYING THE POSSESSOR: Any possessed noun must end in a morpheme identifying its possessor. This morpheme is either a personal suffix pronoun, or a connective suffix which links the possessed noun to its possessor. (Both types of suffixes are used under a much greater variety of conditions, see Tarpent 1981, 1982). In addition, if the possessed noun refers to a single type of object possessed in equal measure by a number of possessors (as in 'our faces'), the possessed noun must obligatorily begin with the distributive prefix *qa-*.

1.1. Suffixes identifying the possessor:

1.1.1. Connective suffixes:

1.1.1.1. The connectives (Boas' term, which he uses also for other morphemes, 1911:) are *-s* (D) in front of determinates (mostly proper names), and *-t* (N) in front of non-determinates (most nouns). Thus²

<i>?à:t-s BÍÍ³</i>	'Bill's net'
net-D	
<i>?à:t-t k'át</i>	'the man's net'
-N man	
<i>wìlp-s Máry</i>	'Mary's house'
house-D	
<i>wìlp-t hanáq'</i>	'the woman's house'
-N woman	

1.1.1.2. Both connectives merge phonetically with a preceding identical consonant, as in