# Ergativity in Relational Grammar and in Functional Grammar

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#### **Abstract**

Linguists have been fascinated by the phenomenon of "ergativity", but the kinds of questions and analyses in, e.g. a Chomskyan, a Relational Grammar framework, and a Functionalist framework, etc..., seem quite different from each other. This paper aims to compare and evaluate how "ergativity" is analyzed in Relational Grammar and Functional Grammar.

## ملخص

لقد فتن علماء اللغة بظاهرة «اللزوم والتعدي» ولكن أنواع الأسئلة والتحاليل المقدمة لهذه الظاهرة النحوية تختلف من إطار إلى آخر، فمثلا تختلف معالجة هذه الظاهرة في النظرية التشومسكية (القواعد التوليدية التحويلية) عنها في إطار القواعد العلاقية أو القواعد الوظيفية. وفي هذا السياق تهدف هذه الدراسة الى مقارنة وتقييم تحليل هذه الظاهرة في إطاري القواعد العلاقية والوظيفية.

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Originally the term 'ergative' was coined from a Greek verb meaning 'cause', 'bring about', 'create'. Consider the following examples (adopted from Lyons):

(1) The stone moved.

(2) John moved.

(3) John moved the stone.

In (1) and (2) move is intransitive, whereas in (3) it is transitive. Moreover, there is an important relationship between (1) and (3). With reference to the information conveyed by (1), we might rightfully ask 'who moved it?'. In other words, 'who was the 'actor' or 'agent' responsible for the movement of the stone?'. And if this question is put more explicitly, the answer might be 'John did'. The term that is generally used by linguists for the syntactic relationship that holds between (1) and (3) is 'ergative': the subject of intransitive verb 'becomes' the object of a corresponding transitive verb, and a new ergative subject is introduced as the 'agent' (or 'cause') of the action referred to. This suggests that a transitive sentence, like (1), by means of an ergative, or causative, transformation. Moreover, it is worthwhile to observe that the ergative agent in (3) is animate, hence, the tendency for subjects of transitive verbs is to be animate. Now the question that poses itself is: Where does the ergative construction belong to?. In order to answer this question, case marking systems should be brought up to attention to see where the ergative case fits.

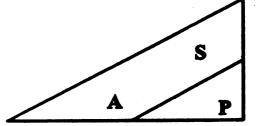
If we take S, A, and P as primitives that stand for, Subject, Agent, and Patient respectively, we can observe the following four kinds of case marking systems<sup>2</sup>:

(1) Nominative/ Accusative: S and A are marked alike,

#### P different

He ran Intransitive

He saw HIM Transitive

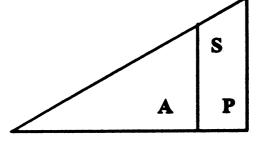


(2) Ergative/ Absolutive<sup>3</sup>: S and P marked alike,

A different

HIM ran Intransitive

HE saw HIM Transitive



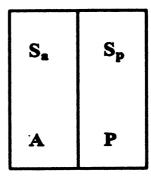
(3) Active/ Inactive: Agent-like S's marked like A

Patient-like S's marked like P

HE ran Intransitive

HIM (is) fat

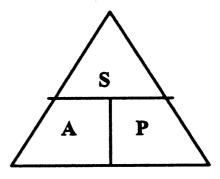
HE saw HIM Transitive



(4) Transitive/ Intransitive: S marked different from both A & P

HEEK ran Intransitive

HE saw HIM Transitive



However, Comire (1981) maintains that there is a fifth possible kind which would mark A, S, and P in the same way.

For our own purposes, I shall illustrate the second type (i.e. Erg./ Abs.) by an example from an 'ergative' language, Tongan:

1. (a) na'e taamate'i 'e teevita 'a kooliate

past-kill erg David abs Goliath

'David Killed Goliath'

(b) na'e lea 'a teevita past speak abs. David

'David spoke'

Thus in the above example, a' is the "absolutive marker" and 'e is the "ergative marker". 'e teevita can be called the 'ergative case'. The construction in (1.a) which contains an ergative case is called an "ergative construction". A language which has ergative constructions is often referred to as an "ergative language". However, the term is somehow misleading, because one cannot claim that all the grammatical (i.e. syntactic) processes of so-called ergative languages operate on the basis of ergative/absolutive system. In Yidiny (an Australian language of Northeastern Queensland), for example, pronouns have a nominative/accusative case marking system, while other noun phrases have an ergative/absolutive case marking system, as in the first clause of the following examples<sup>4</sup>:

(1) Bimbi: gud<sup>y</sup> ugud<sup>y</sup>u

father- Erg. rainbow- Abs.

Wawa:1, biri gud<sup>y</sup>i: n<sup>y</sup>

saw particle returned

'father saw the rainbow, and it returned'.

- (2) n ayu n<sup>y</sup> unin<sup>y</sup> band<sup>y</sup> a:r, wanda: n<sup>y</sup>
   I- Nom you- Acc followed fell down
   'I followed you, and I fell down'
- (3) n ayu bama band<sup>y</sup> a:r, wanda: n<sup>y</sup>
  I- Nom person- Abs followed fell down.
  'I followed the person and I/ he fell down'.

A relevant issue to this problem is the controversial assumption that ergativity appears only in case marking and agreement. Judging from his analysis of Greenlandic, Woodbury<sup>5</sup> demonstrates that such a claim is false. He argues that many rules (i.e. in Greenlandic) aside from Case Marking and Agreement refer crucially to ergative relational categories (e.g., Anti passive, Clause Union, and Infinitive Assignment).

1. Ergativity in Relational Grammar: One of the basic tenets of RG is that it treats grammatical relations such as 'subject of' and 'object of' as primitives of clause structures not defined in terms of any other properties, but rather the basic relations that determine the makeup of clauses. This view has been established by some of the leading linguists of RG such as Perlmutter and Postal (1974), and Johnson (1974; 1976). Our concern here is, how the notion of 'ergativity' is analyzed within this framework.

Anderson argues that the notion of subject in ergative languages is, despite the morphological indications which appears to indicate otherwise, essentially the same as that in accusative languages. He adds that "an alternative view of morphological processes, for which considerable evidence can be adduced, shows that there is in fact no reason to expect the notion of subject to be related in maximally simple way to morphological theory<sup>6</sup>". An exception to this is Dyirbal, which, as Anderson notes, shows that there is a distinctively "ergative" notion of subject, which is analogous to the usual "accusative" notion but which is inapplicable to the vast majority of morphologically ergative languages. Thus, Anderson seems to deny the relation of ergative and absolutive. A similar position along these lines is taken by George (1974) who also rejects the proposal that in an ergative language the terms absolutive and ergative must replace subject and object.

Perlmutter and Postal (1974) proposed that the absolutive be considered the lowest ranking primary, and that there be a separate secondary term hierarchy of the form

abs

erg

III

nonterms

for use in formulating the ergative rules found in a language. Woodbury (1977) maintains that such a hierarchy is necessary; yet this does not mean that the existence of two hierarchies is crucial at all times. An example of this given by Woodbury is a rule like Copying, which refers to primitives as functioning categories rather than as subjects or absolutives. He also notes that the behavior of the categories 'absolutive' and 'ergative' in ergative rules is parallel, respectively, to that of the categories 'subject' and 'direct object' in accusative rules. Thus, for example,

a Greenlandic clause may not contain an ergative argument but it must always contain an absolutive argument because of the ergative nature of the case- marking and agreement rules. This leads one to conclude that the laws which apply to subjects can also apply to absolutives, and that the laws which apply to direct objects can also apply to ergative, a measure independently necessary to constrain the set of possible ergative rules. Furthermore, Woodbury argues that, given two NP hierarchies, each with its own parallel set of laws, we must see whether it is the case that ergative relational categories are defined derivatively in terms of ergative relational primitives, or that both ergative and accusative relational categories are derivative, and defined in terms of some neutral, more general set of primitive grammatical relations.

Thus, according to this position and as has been indicated earlier in the discussion, ergative and absolutive are considered to be genuine relations to which syntactic rules should refer. Dixon (1972), in his study of Dyirbal language, gives examples demonstrating that Conjunction Reduction operates on absolutives. Consider the following examples:

bayi yara bangun dugumbiru balgan baninu 'man-Abs woman-Erg hit came here' Lit 'woman hit man  $i/\emptyset$  i came here' 'The man was hit by the woman and came here'

Equi NP Deletion also operates on Absolutives and so if the embedded coreferential NP is Ergative, the -nay transformation (relativization transformation) must be applied, converting the underlying Ergative to Absolutive status. Examine the following examples:

a. balan dugumbil bangul yarangul gigan
'woman- Abs man- Erg told'
[balan buni bangun dugumbiru mabali]

SFire Abs woman- Erg light + purposive

-nay transformation

b. balan dugumbil bangul yarangul gigan
'woman- Abs man-Erg told'
[balan dugumbil bangun banugu mabalnaygu]
S'woman- Abs fire-Oblique light + nay + purposive

Equi NPDeletion

c. balan dugumbil bangul yarangul gigan 'woman- Abs man-Erg told' [s\infty i bagun bamigu mabalnaygu]

'fire- Oblique light + nay + purposive'
'The man told the woman to light the fire'

Judging from examples like these and other ones discussed in detail in Dixon's study, Johnson (1974; 1976) proposed the Ergative Hierarchy to account for the ergative property in Ergative languages<sup>8</sup>.

#### THE ERGATIVE HIERARCHY (EH)

 $S_{I}$ ,  $DO \geqslant S_{I} \geqslant IO \geqslant Oblique NP \geqslant ......$ 

Thus with respect to the EH, it can be seen that the - nay transformation functions to move in accessible Np<sub>s</sub> up the EH so that they become accessible to various transformational rules such as Relativization, Equi Np Deletion, and Conjunction Reduction.

Fruthermor, if we were to compare the passive of nom./acc.

languages, and the antipassive urle of erg./abs. languages, we would see that they take NP<sub>s</sub> that are in the second slot of their respective herarchy and hook them up to the top, demoting thus the NP<sup>s</sup> that were occupying the top slot. Taking this into account Johnson proposes the Generalized Accessibility Hierarchy (GAH):

#### GAH:

Primary ≥ Secondary ≥ IO ≥ Oblique NP ≥ .......

In line with this argument, Woodbury presented his Neutral NP Hierarchy:

## Neutral NP Hierarchy:

Unmarked relation ≥ marked relation ≥ III (IO) ≥ nonterms

In order to attest the validity of the Unitary hierarchy, it seems to me, however, that we have to look into the languages which have 'split ergatively'. Suppose that there is a language X whose pronominal case marking is based on Nom./ Acc. and non-pronominal case marking is based on Erg./ Abs., and a syntactic Rule R<sub>i</sub> crucially refers to absolutive relation. The questions to be raised are: should we say that the rule refers to the primary (or unmarked) relation?. Does this mean that Ri should refer to the subject relation which is primary? If not, what is the use of the Unitary hierarchy? These are empirical questions facing RG, and will be left unanswered pending further research.

# 2. Ergativity in Functional Grammar:

The Functionalist framework, i.e. Functional Grammar (FG) is based on a functional view of the nature of natural language. According to FG, linguistic theory is concerned mainly with the role language plays in communicative competence and in the

actual implementation of this competence in social interaction.

FG is called 'functional' not only because it is based on a functional view of the nature of language but also because functional or relational notions, as opposed to categorial notions are given a central role in the description of linguistic expression<sup>9</sup>.

From the outset, I would like to indicate that much of the following discussion is based on the theory of FG as outlined by Dik (1980) in his *Studies in Functional Grammar*. FG specifies functional relations at the different levels:

- (A) Semantic functions: Agent, Goal, Recipient.
- (B) Syntactic functions: Subject and Object.
- (C) Pragmatic functions: Theme and Tail, Topic and Focus.

It is worthwhile to cite the following quote from Dik:

In terms of the well- known distinction between syntax, semantics, and pragmatics, the functional approach to language regards pragmatics as the all- encompassing framework within which semantics and syntax must be studied. It regards semantics as subervient to pragmatics, and syntax as subervient to semantics. Syntax is there in order to allow for the construction of formal structures by means of which complex meanings can be expressed; and complex meanings are there for people to be communicate with each other in subtle and differentiated ways<sup>10</sup>.

Thus FG is a theory of syntax and semantics conceived of within the framework of this functional paradigm. In its semantic functions, FG specifies the role which the referents of the terms involved play within the "state of affairs" designated by the predication in which they occur. Syntactic functions specify the perspective from which that state of affairs is presented in the linguistic expression. Pragmatic functions specify the

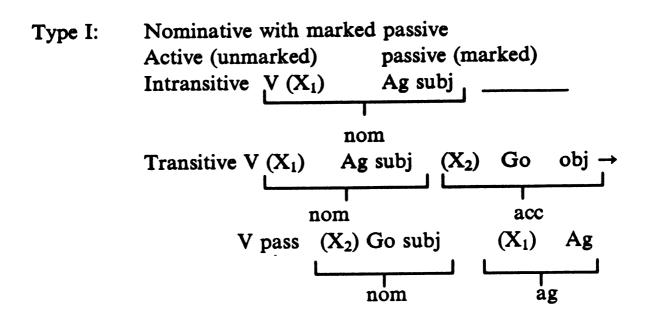
informational status of the constituents within the wider communicative setting in which they are used.

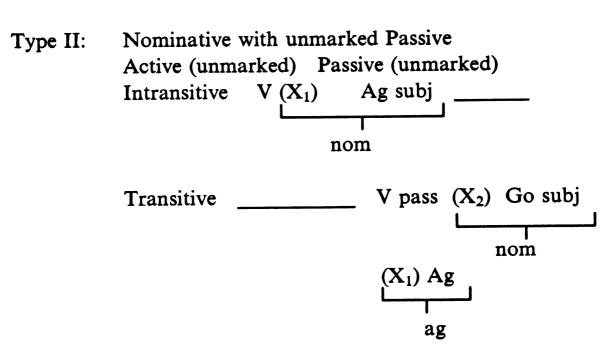
With this background in mind, I'll now proceed to investigate how the phenomenon of "Ergativity" is treated within this framework.

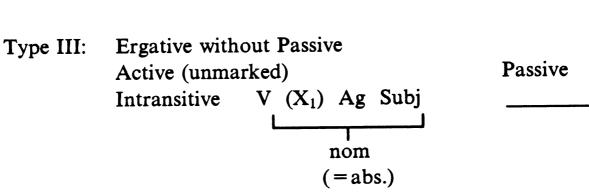
Dik (1980) presents a theoretical reconstruction of ergative systems which, if correct, predicts a cyclical development involving several well- defined intermediate system types. He based his conclusions on the analysis he offered of Dyirbal. His basic arguments boil down to the claim that Dyirbal could be interpreted as being of one such intermediate type called "nominative system with unmarked passive", in which the so-called "absolutive" can be interpreted as nominative subject of a passive construction which, however, lacks a corresponding active.

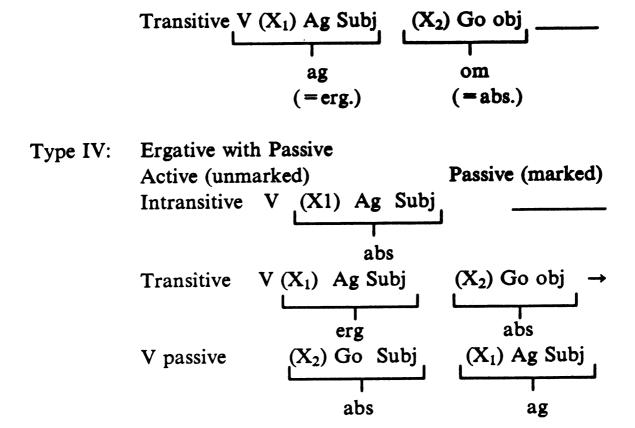
If this interpretation turns out to be true, the consequences, for an ergative language such as Dyirbal, would then be that Dyirbal relativization possibilities are different from the ones proposed by Johnson (discussed earlier in paper) and are therefore in the accordance with the constraint of the Accessibility Hierarchy proposed by Keenan and Comrie (1977). Thus, while Johnson (a follower of RG) proposes a Hierarchy for Dyirbal which he calls the ergativity Hierarchy to account for its facts, we see, here, that Dik gives it a different analysis. Hence Dik claims that Dyirbal can be interpreted as a natural intermediate stage in the development from nominative systems to ergative systems of types III and IV below.

Dik recognizes four types of languages with respect to passivization outlined below<sup>11</sup>.









The main strength of Dik's approach as a whole is the integration of Syntax with Semantics and Pragmatics into a single model. As pointed out by Comrie (1980), many of the examples cited by Dik, as well as others, point out the necessity, in syntactic description, of directly correlating syntactic phenomena with semantic and/ or pragmatic parameters<sup>12</sup>.

In Dik's theory, subject and object assignment operate in principle according to a Semantic Function Hierarchy. On the other hand, case marking expresses either the semantic or the syntactic functions of arguments. FG is thus compatible with evidence that ergative systems may develop from nominative ones, and with evidence that nominative systems may derive from ergative ones. Moreover, FG not only allows for different types of ergative systems, but it also specifies precisely what the properties of these systems will be, as well as their diachronic development.

The theory also accounts for the phenomena which seem to relate the ergative construction to the Passive construction. Consider the following examples<sup>13</sup>:

Pukapukan (a Polynesian language)

- (1) Active
  na patu mātou i te tamaiti
  past hit we go the child
  "we hit the child"
- Passive
  na patu-a te tamaitie e matou
  past hit- pass the child Ag we
  "the child was hit by us"
- (3) Ergative
  na-patu te tamaitie e matou
  past hit the child Ag we
  "the child was hit through us"
- (1) is a straightforward active and (2) is a straightforward passive construction. (3), however, is identical to the passive, except for the absence of the passive marker on the verb.

One final point to be made here relates to Dik's interpretation of the Dyirbal system. The unmarked transitive construction (called the "antipassive") seems to present itself as a counter argument to Dik's analysis. This can be demonstrated in the following examples<sup>14</sup>.

- (a) balan dyugumbil bangul yaragu balgan det- abs woman- abs det- Erg. man- Erg hit "the man is hitting the woman"
- (b) bayi yara bangun dyugmbiru balgananyu

det- abs. man- abs. det- erg. woman- erg. hitnai "the man is hitting the woman"

In (a) and (b) the unmarked transitive and the marked "antipassive" are exhibited, respectively.

# 3. Concluding Remarks:

In this paper, my concern has been the investigation of the phenomenon of "Ergativity". The discussion has dealt with the phenomenon by first defining the problem of ergativity as "the relation that holds when the subject of an intransitive verb becomes the object of a corresponding transitive verb, and a new ergative subject is introduced as the 'Agent' of the action referred to". In the second portion of the paper, I showed how ergativity has been analyzed in the RG framework. In the third section of the paper, the notion of ergativity was examined from the point of view of FG as represented by Dik.

In conclusion, it seems to me that the predictions of the FG model appear to fit in very well with the observed distribution of case marking systems across the languages of the world. Indeed FG makes a further prediction that is borne out by actual distribution. In a case system where one of the two cases used for indicating these three primitives is formally less marked than the others, for example, when one of the forms is simply the stem of the noun in question whereas the other has some overt affix, it is nearly always the case that the formally unmarked item is used to indicate S when A is in the nominative- accusative system and P is in the ergative- absolutive systems.

## **Notes**

- 1. See John Lyons, *Introduction to Theoretical Linguistics*, (Cambridge, England, Cambridge University Press, 1968), 352.
- 2. Agent is a term used in grammatical description to refer to a form or construction whose typical function in a sentence is to specify the 'agent' or means whereby a particular action came about. In languages, the term is used as one of the cases for nouns, along with accusative, etc. In English, the term has especial relevance with reference to the passive construction, where the agent may be expressed or unexpressed (agentless) (e.g. the man was bitten [by a snake]). In active construction in English, the agent is usually the grammatical subject. Patient, on the other hand is a term used by some linguists as part of the grammatical analysis of a sentence: it refers to the entity which is affected by the action of the verb, e.g., The dog bit the man. 'Goal' and recipient have been used as alternative terms.
- 3. Absolutive is a term used in the grammatical description of some languages such as Eskimo and Georgian, where there is an ergative system. In this system, there is a formal parallel between the object of a transitive verb and the subject of an intransitive one (i.e. they display the same case), and these are referred to as 'absolutive', the subject of the transitive verb is then referred to as 'ergative'.
- 4. Bernard Comrie, Language Universals and Linguistic Typology (Chicago, The University of Chicago press, 1981), 67.
- 5. See A. Woodbury, "Greenlandic Eskimo, Ergativity, and Relational Grammar", in Syntax and Semantics: Grammatical

- Relations. Edited by Peter Cole and Jerrold Sadok ) New York: Academic Press), 8, (1977), 327.
- 6. See S.R. Anderson, "On the Notion of Subject in Ergative Languages", in *Subject and Topic*. Edited by Charles Li (New York: Academic Press, 1976), 23.
- 7. Ibid, 328.
- 8. See D. Johnson, "On the Role of Grammatical Relations in Linguistic Theory", CLS 10 (1974), 274.
- 9. See Simon Dik, Studies in Functional Grammar (London: Academic Press, 1980).
- 10. Ibid., 2.
- 11. Ibid., 115.
- 12. See Bernard Comrie, Language Universals and Linguistic Typology, (Chicago: The University of Chicago Press, 1981), 29.
- 13. These examples are taken from Sandra Chung, "On the gradual nature of syntactic change", in *Subject and Topic*. Edited by Charles Li (New York: Academic Press, 1976), 3-55.
- 14. R.M.W. Dixon, *The Dyirbal Language of North Queensland* (Cambridge: Cambridge University Press, 1972), 65.

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