THE NOUN PHRASE ACCESSIBILITY HIERARCHY REVISITED:
A VIEW FROM ERGATIVE LANGUAGES[*]

HSIU-CHUAN LIAO

This paper reexamines the Noun Phrase Accessibility Hierarchy proposed by Keenan and Comrie (1977). A careful study of relative clauses in sixteen ergative languages reveals that the Noun Phrase Accessibility Hierarchy is not able to account for the relativization facts found in ergative languages; instead, Fox's (1987) Absolutive Hypothesis can characterize the relativization constraints for absolutive NPs and ergative NPs in ergative languages. Although Fox's Absolutive Hypothesis correctly predicts the relativization behavior of absolutive NPs and ergative NPs in ergative languages, Fox does not discuss the behavior of other NPs. Based on the relativization facts found in these languages, I suggest a revised noun phrase accessibility hierarchy for ergative languages. Furthermore, this paper will suggest a different interpretation of the nature of 'syntactic ergativity'.

1. INTRODUCTION. On the basis of data from about fifty languages (primarily accusative languages), Keenan and Comrie (1977:66) posit the Noun Phrase Accessibility Hierarchy (AH), an implicational scale that 'expresses the relative accessibility to relativization of NP positions in a simplex main clause'.

THE NOUN PHRASE ACCESSIBILITY HIERARCHY (AH)

SUBJECT > OBJECT > INDIRECT OBJECT > OBLIQUE > GENITIVES > OBJECT OF COMPARISON

According to the AH, a language must be able to relativize subjects (i.e., the relativized position can be a subject). This claim has been re-examined by Fox (1987) from a discourse perspective. Based on data from English conversations and supporting evidence from two Western Austronesian languages (Tagalog and Batak), Fox proposes the Absolutive Hypothesis. The Absolutive Hypothesis states that every language that has a strategy for relativization must be able to relativize on at least S (Subject of an intransitive sentence) and P (Direct Object of a transitive sentence).

The purpose of this paper is to reexamine the Noun Phrase Accessibility Hierarchy and to suggest a different interpretation of the nature of 'syntactic ergativity'. It will be shown that the AH is not able to account for the relativization facts found in ergative languages; instead, the Absolutive Hypothesis can characterize the relativization constraints in ergative languages better than the AH. Although Fox's Absolutive Hypothesis correctly predicts the relativization behavior of absolutive NPs and ergative NPs in ergative languages, Fox does not discuss the behavior of other NPs. In this paper, the behavior of NPs other than absolutives and ergatives will also be discussed. Based on the relativization facts found in these languages, a revised noun phrase accessibility hierarchy for ergative languages will be proposed. Data used in this study are from ergative languages only. All sixteen languages used in the study are justified to be ergative by the semantic, morphological, and syntactic tests proposed in Gibson and Starosta (1990).

2. RELATIVE CLAUSES IN ERGATIVE LANGUAGES. Ergative languages are commonly described as only allowing relativization on S (Subject of an intransitive sentence) and O or P (Direct Object of a transitive sentence), but not the A (Subject of a transitive sentence). In this section, relativization in sixteen ergative languages will be examined. Before discussing relativization in ergative languages, I would like to define some terms used in this study.

First, what is 'ergativity'? Traditionally, ergative languages have been characterized as languages in which the subject of an intransitive sentence and the direct object of a transitive sentence have the same morphological marking (usually understood to include case inflection/case marker and *agreement*), but the subject of a transitive sentence has a distinct marking (Dixon 1972, 1979, and 1994). In this paper, ergative languages refer to languages in which the subject of an intransitive sentence and the direct object of a transitive sentence have the same grammatical relation coding (case marker and/or *word order*), but the subject of a transitive sentence has a distinct grammatical relation coding. In this study, agreement is not used as a criterion to help determine whether a language is ergative or accusative.

Second, what is the 'primary' relativization strategy? Keenan and Comrie (1977:67–68) define the primary strategy as the relativization strategy that can be used to relativize subjects (of transitive and intransitive sentences). It appears that this definition does not fit the relativization pattern found in ergative languages. In this paper, the primary strategy refers to the [-Case] gap strategy[1] that applies to the easier-to-process position(s) (typically, subjects (S/A) in accusative languages and Absolutives (S/O) in ergative languages) (see Hawkins 1999:256–57).

DATA ON RELATIVIZATION IN ERGATIVE LANGUAGES

DYIRBAL is a Pama-Nyungan (Australian) language spoken in North Queensland, Australia. Dyirbal is a split ergative language with ergative/absolutive inflection on nouns and third person pronouns, but nominative/accusative inflection on first and second person pronouns. In Dyirbal, relative clauses[2] occur after the head that they modify. Nouns can be relativized by the gap strategy. Only the absolutive NP can be relativized, but the ergative[3] NP cannot. As shown in (1a, b) and (1d, e), when the relativized nominal is an absolutive, the NP can be relativized by leaving a gap in the relative clause. However, in the case of (1c), when we want to relativize the NP *ya ɟa* 'man' in the relative clause, it is necessary to first apply antipassivization, converting the ergative NP into the absolutive NP. Then it can be relativized.

(1) **Dyirbal** (data from Dixon 1972:99–105; Dixon 1994:169–71)

a. *Relativization of the Absolutive (S) in an intransitive clause; gap strategy is used*

    Numa   [_ banaga-Nu]   yabu-Ngu   bura-n
    father.ABS [_ return-REL]   mother-ERG   see-REAL
    'Mother saw father who was returning.'

---

[1] A strategy is [-Case] if it does not contain a resumptive pronoun or a case-coding relative pronoun. However, a strategy that contains a case-invariant relative pronoun is considered to be [-Case] (See Hawkins 1999:256).

[2] Stanley Starosta has pointed out to me that relative clauses in Dyirbal are in fact nominalizations.

[3] The form of the ergative is often identical to other markers in ergative languages. For example, the ergative and instrumental are homophonous in Dyirbal and some other Australian languages; the ergative and genitive are homophonous in Atayal, Kavalan, Tagalog, Karo Batak, and Inuit.

b. *Relativization of the Absolute (S) in an intransitive clause; gap strategy is used*

Numa   yabu-Ngu   [_ banaga-Nu-rru]   bura-n
father.ABS mother-ERG   [_ return-REL-ERG]   see-REAL
'Mother, who was returning, saw father.'

c. *Relativization of the Absolute (S) in an antipassive clause; gap strategy is used*

bayi   ya}a   [_ bagal-Na-Nu   bagul   yu}igu]   banaga⌡u
DET.ABS   man.ABS   [_ spear-ANT-REL   DET.INST   kangaroo.INST]   return
'The man who speared the kangaroo is returning.'

d. *Relativization of the Absolute (O) in a transitive clause; gap strategy is used*

balan   δϑugumbil   baNgul   ya}a-Ngu balga-n   yugu-Ngu
DET.ABS   woman.ABS   DET.ERG   man-ERG hit-REAL   stick-INST

[Naδϑa   _   maNga-Nu-ru]
[1S.NOM   _   pick.up-REL-INST]
'The man hit the woman with the stick that I picked up.'

e. *Relativization of the Absolute (O) in a transitive clause; gap strategy is used*

baNgu   yugu-Ngu [gunba-Nu-ru _   baNgul   ya}a-Ngu] Nayguna
DET.ERG   tree-ERG   [cut-REL-ERG _   DET.ERG   man-ERG] 1S.ACC

biriδϑu   balga-n
almost(EMPH) hit-REAL
'The tree which the man had cut nearly fell on me.' (i.e., it could have fallen on
me but luckily it did not.)

ATAYAL (Mayrinax dialect) is a Western Austronesian language spoken in Taiwan. In
Mayrinax Atayal, relative clauses occur both prenominally and postnominally. The post-
nominal relative is the predominant type in Mayrinax. NPs can be relativized by the gap
strategy. Only absolutive NPs can be relativized. As illustrated in the following examples,
when the NPs are the focused (absolutive) NPs in sentences (Actor NPs in AF sentences (2a,
b); Patient NPs in PF sentences (2c); Benefactive NPs in BF sentences[4] (2d)), they can be
relativized by leaving a gap in the relative clauses.

(2) **Mayrinax Atayal** (data from Huang 1995:209–12)

a. *Relativization of the Absolute Actor[5] in an AF clause; gap strategy is used*

talan=mu   ku'   cuquliq [ka' yakaat minuwah   _   cu' hisa']
see.LF=1S.ERG ABS.REF person [LIG NEG   AF.PST.come _   PTL yesterday]
'I saw the person who did not come yesterday.'

---

[4] In this study, all AF sentences in Atayal, Kavalan, Ilocano, Tagalog, and Balinese are considered to be
intransitive (including antipassives); the non-AF sentences (PF, BF, IF, LF, … etc.) are considered to be
transitive.

[5] Following Healey (1960:19) and most of the literature on Formosan and Philippine languages, the 'actor'
in an Actor Focus sentence refers to 'the doer or influence responsible for the action or the experiencer of the
state'.

b. *Relativization of the Absolutive Actor in an AF antipassive clause; gap strategy is used*

mingilis	ku'	kanairil	[ka'	minaniq	cu'	goqiluh	_]	la
AF.cry	ABS.REF	woman	[LIG	AF.PST.eat	OBL	banana	_]	PTL

'The woman who ate a banana is crying.'

c. *Relativization of the Absolutive Patient in a PF clause; gap strategy is used*

awuni	la	ku'	'ulaqi	[ka'	tinuting=si'	_	cu'	hisa']
come.AF	PTL	ABS.REF	child	[LIG	PF.PST.beat=2S.ERG	_	PTL	yesterday]

'The child whom you beat yesterday has come.'

d. *Relativization of the Absolutive Benefactive in a BF clause; gap strategy is used*

ini'=mu	s'wa'i	ku'	'ulaqi'	[ka'	sighahapuy	nku'	kanairil	_]
NEG=1S.ERG	like.LF	ABS.REF	child	[LIG	BF.cook		ERG.REF	woman	_]

'I don't like the child for whom the woman cooks.'

KAVALAN is a Western Austronesian language spoken on the east coast of Taiwan. As in Mayrinax Atayal, Kavalan relative clauses can occur both prenominally (3b, 3d, and 3e) and postnominally (3a and 3c). NPs can be relativized by the gap strategy. Only absolutive NPs can be relativized. As illustrated in the following examples, when the NPs are the focused (absolutive) NPs in the sentences (Actor NPs in AF sentences (3a-c); Patient NPs in PF sentences (3d, e); Referential (Benefactive or Instrumental) NPs in RF (BF or IF) sentences), they can be relativized by leaving a gap in the relative clauses.

(3) **Kavalan** (data from Li 1996:96–98; my translation)

a. *Relativization of the Absolutive Actor in an AF clause; gap strategy is used*

tmanan	ti	ya	sunis	yau	[Ribaut	_]
AF.come.back	already	ABS	child	that	[AF.catch.fish	_]

'That child who caught fish came back already.'

b. *Relativization of the Absolutive Actor in an AF antipassive clause; gap strategy is used*

quiraan	na	tamana	[pmukun	tu	wasu _]	sunis	a	yau
scold.PF	ERG	father.3S.GEN	[AF.beat	OBL	dog _]	child	LIG	that

'That child who beat a dog was scolded by his father.'

c. *Relativization of the Absolutive Actor in an AF antipassive clause; gap strategy is used*

quiraan	na	tamana	sunis	a	yau	[pmukun	tu	wasu	_]
scold.PF	ERG	father.3S.GEN	child	LIG	that	[AF.beat	OBL	dog	_]

'That child who beat a dog was scolded by his father.'

d. *Relativization of the Absolutive Patient in a PF clause; gap strategy is used*

mtaqas ti   [niparumaan=ku   _] b↔nina
AF.ripe already   [PRF.grow.PF=1S.ERG _] banana.ABS
'The bananas that I grew were ripe already.'

e. *Relativization of the Absolutive Patient in a PF clause; gap strategy is used*

qananna ti   na   tama=ku   [niparumaan=ku   _] ya
b↔nina
eat.PF.3P already GEN father=1S.GEN [PRF.grow.PF=1S.ERG _] ABS   banana
'My father ate the bananas that I grew.'

ILOCANO is a Western Austronesian language spoken in the Philippines. In Ilocano, relative clauses occur after the head NPs that they modify. Nouns can be relativized by the gap strategy. As in Atayal and Kavalan, only absolutive (focused) NPs can be relativized in Ilocano. As illustrated in the following examples, when the NPs are the focused (absolutive) NPs in the sentences (Actor NPs in AF sentences (4a); Patient NPs in PF sentences (4c and 4e)), they can be relativized by leaving a gap in the relative clauses. However, when the NPs are not the focused NPs in the sentences, they cannot be relativized (*4b, *4d, and *4f).

(4) **Ilocano** (data from Schwartz 1976:529)

a. *Relativization of the Absolutive Actor in an AF antipassive clause; gap strategy is used*

ti   lalaki [nga   agkabil _   iti   babai]
ABS/OBL boy   [that   AF.hit   _   OBL   girl]
'the boy that hits a girl'

b. *Relativization of the Oblique in an AF antipassive clause: impossible*

*ti   babai [nga   agkabil   ti   lalaki _]
ABS/OBL girl   [that   AF.hit   ABS   boy   _]
'*the girl that the boy hits'

c. *Relativization of the Absolutive Patient in a PF clause; gap strategy is used*

ti   babai [nga   kabilen   ti   lalaki _]
ABS/OBL girl   [that   hit.PF   ERG   boy   _]
'the girl that the boy hits'

d. *Relativization of the Ergative Actor in a PF clause: impossible*

*ti   lalaki [nga   kabilen _   ti   babai]
ABS/OBL boy   [that   hit.PF   _   ABS   girl]
'*the boy that hits the girl'

e. *Relativization of the Absolutive Patient in a PF clause; gap strategy is used*

ti   kankanta [nga   ipawit=ko   _ ka-dagiti babbai]
ABS/OBL songs   [that   PF.send=1S:ERG   _ OBL.P   girls]
'the songs that I send to the girls'

f. *Relativization of the Oblique in a PF clause: impossible*

> *dagiti babbai [nga ipawit=ko ti kankanta _]
> ABS girls [that PF.send=1S.ERG ABS songs _]
> '*the girls that I send the songs to'

TAGALOG is a Western Austronesian language spoken in the Philippines. In Tagalog, relative clauses occur to the right of the head NPs that they modify. Nouns can be relativized by the gap strategy. Absolutive (focused) NPs can be relativized. As illustrated in the following examples, when the NPs are the focused (absolutive) NPs in the sentences (Actor NPs in AF sentences (5a); Patient NPs in PF sentences (5b); Benefactive NPs in BF sentences (5d); Locative NPs in LF sentences (5f)), they can be relativized by leaving a gap in the relative clauses. However, when the NPs are not the focused NPs in the sentences, they cannot be relativized (*5c, *5e, and *5g).

(5) **Tagalog** (data from Ceña 1979:119–23)

a. *Relativization of the Absolutive Actor in an AF antipassive clause; gap strategy is used*

> matapang ang doktor [na sumulat _ ng liham sa Pangulo
> brave ABS doctor [LIG AF.write _ OBL letter LOC President
>
> para sa bilanggo]
> for LOC prisoner]
> 'The doctor who wrote a letter to the President for the prisoner is brave.'

b. *Relativization of the Absolutive Patient in a PF clause; gap strategy is used*

> mahaba ang liham [na sinulat ng doktor _ sa Pangulo
> long ABS letter [LIG PF.PRF.write ERG doctor _ LOC President
>
> para sa bilanggo]
> for LOC prisoner]
> 'The letter which the doctor wrote to the President for the prisoner is long.'

c. *Relativization of the Oblique in an AF antipassive clause: impossible*

> *mahaba ang liham [na sumulat ang doktor _ sa Pangulo
> long ABS letter [LIG AF.write ABS doctor _ LOC President
>
> para sa bilanggo]
> for LOC prisoner]
> 'The letter which the doctor wrote to the President for the prisoner is long.'

d. *Relativization of the Absolutive Benefactive in a BF clause; gap strategy is used*

> maysakit ang bilanggo [na isinulat ng doktor ng liham
> sick ABS prisoner [LIG BF.PRF.write ERG doctor OBL letter
>
> sa Pangulo _]
> LOC President _]
> 'The prisoner for whom the doctor wrote a letter to the President is sick.'

e. *Relativization of the Oblique in an AF antipassive clause: impossible*

*maysakit	ang	bilanggo	[na	sumulat	ang	doktor	ng	liham
sick	ABS	prisoner	[LIG	AF.write	ABS	doctor	OBL	letter

sa	Pangulo	_]
LOC	President	_]

'The prisoner for whom the doctor wrote a letter to the President is sick.'

f. *Relativization of the Absolute Locative in a LF clause; gap strategy is used*

mapagpatawad	ang	Pangulo	[na	sinulatan	ng	doktor	ng
forgiving	ABS	President	[LIG	PRF.write.LF	ERG	doctor	OBL

liham	_	para	sa	bilanggo]
letter	_	for	LOC	prisoner]

'The President to whom the doctor wrote a letter for the prisoner is forgiving.'

g. *Relativization of the Oblique in an AF antipassive clause: impossible*

*mapagpatawad	ang	Pangulo	[na	sumulat	ang	doktor	ng	liham	_
forgiving	ABS	President	[LIG	AF.write	ABS	doctor	OBL	letter	_

para	sa	bilanggo]
for	LOC	prisoner]

'The President to whom the doctor wrote a letter for the prisoner is forgiving.'

As pointed out by Ceña (1979:121–23), Tagalog allows not only relativization on absolute NPs, but also relativization on genitive NPs, comitative NPs, and a type of object of comparison. Consider the following examples. When the relativized NPs are (inalienable) genitive NPs (5h), comitative NPs (5i), and objects of comparison (5j), the NPs can also be relativized through the gap strategy. Ceña (1979:123) comments that genitive NPs, comitative NPs, and objects of comparison are relativizable because these NPs cannot advance to "subject" (absolute).

h. *Relativization of the (inalienable) Genitive NP[6]; gap strategy is used*

nadismaya	ang	doktor	[na	palaging	umiiyak	ang	anak	_]
disappointed	ABS	doctor	[LIG	always	crying	ABS	child	_]

'The doctor whose child is always crying was disappointed.'

i. *Relativization of the Comitative NP; gap strategy is used*

nadismaya	ang	doktor	[na	kasama	_	ang	anak]
disappointed	ABS	doctor	[LIG	KA-'with'	_	ABS	child]

'The doctor who is with his/the child was disappointed.'

---

[6] Relativization of the inalienable genitive NP in Tagalog may be interpreted as an instance of possessor ascension. This matter obviously merits further investigation, but I am unable to obtain the needed data at this time.

j. *Relativization of the Object of Comparison; gap strategy is used*

nadismaya	ang	doktor	[na	kasingtaas _	ang	anak]
disappointed	ABS	doctor	[LIG	as.tall.as _	ABS	child]

'The doctor whom the child is as tall as was disappointed.'

BALINESE is a Western Austronesian language spoken in Bali and Lombok. In Balinese, relative clauses occur after the head NPs that they modify. Nouns can be relativized through the gap strategy. Only absolutive (focused) NPs can be relativized. As illustrated in the following examples, when the NPs are the focused (absolutive) NPs in the sentences (Actor NPs in AF sentences (6c); Patient NPs in PF sentences (6a)), they can be relativized by leaving a gap in the relative clauses. However, when the NPs are not the absolutive NPs in the sentences, they cannot be relativized (*6b, *6d, and *6f).

(6) **Balinese** (data from Artawa 1994; Wechsler and Arka 1998:390)

a. *Relativization of the Absolutive Patient in a PF clause; gap strategy is used*

anake	cenik	[ane	_	gugut	cicing]	ento
person.DEF	small	[REL	_	PF.bite	dog]	that

'the child whom the dog bit'

b. *Relativization of the Ergative Actor in a PF clause: impossible*

*cicing	[ane	anake	cenik	ento	gugut _]
dog	[REL	person.DEF	small	that	PF.bite _]

'the dog that bit the child'

c. *Relativization of the Absolutive Actor in an AF antipassive clause; gap strategy is used*

i	Warta	[ane	_	maca	koran]
ART	Warta	[REL	_	AF.read	newspaper]

'Warta who read the newspaper'

d. *Relativization of the Oblique in an AF antipassive clause: impossible*

*koran	[ane	I	Warta	maca	_]
newspaper	[REL	ART	Warta	AF.read	_]

'the newspaper that Warta read'

e. *Before Relativization applies:*

ia	ngejang	pipisne	di	paron
3.ABS	AF.put	money.3.GEN	at	kitchen

'He put his money in the kitchen.'

f. *Relativization of the Locative in an AF antipassive clause: impossible*

*di	paon	[ane	ia	ngejang	pipisne	_]
at	kitchen	[REL	3.ABS	AF.put	money.3.GEN	_]

'in the kitchen, where he put his money'

KARO BATAK is a Western Austronesian language spoken in northern Sumatra, Indonesia. In Karo Batak, relative clauses occur to the right of the head NPs that they modify. Nouns can be relativized by two different strategies: the gap strategy and the pronoun strategy. Only the absolutive NP can be relativized by the gap strategy. Ergative NPs, dative NPs, and (alienable) genitive NPs are relativizable only by the pronoun strategy. Examples (7a-d) show that absolutive NPs can be relativized by leaving a gap in the relative clauses. Examples (7e-g) illustrate that when ergative NPs, dative NPs, and (alienable) genitive NPs are relativized, pronouns must be retained in the relative clauses.

(7) **Karo Batak** (data from Woollams 1996:291–96)

a. *Relativization of the Absolutive (S) in an intransitive clause; gap strategy is used*

   kalak [si ni[7] _ rëh   ndai]   agingku
   person [REL   _ come before]   younger.brother.1s
   'The person who came before is my younger brother.'

b. *Relativization of the Absolutive (S) in an intransitive clause; gap strategy is used*

   man   me   kerina [si   _ enggo pulung]
   ITR.eat EMPH all   [REL _ already gather]
   'All those who had assembled ate.'

c. *Relativization of the Absolutive (O) in a transitive clause; gap strategy is used*

   kai   [si ni sungkun kalak   ah   _ ndai]?
   what [REL ask.TR   person(ERG) that(ERG) _ before]
   'What did that person ask?'

d. *Relativization of the Absolutive (O) in a transitive clause; gap strategy is used*

   perik [si   dat   kami _] é
   bird [REL   get.TR 1P.ERG _] that
   'the bird which we caught'

e. *Relativization of the Ergative (A) in a transitive clause; pronoun strategy is used*

   kalak [si   akap=**na**   ia   pinter], situhuna ia   bodoh
   person [REL   TR.think=3S.ERG 3S.ABS clever], in.fact   3S.ABS stupid
   'A person who considers himself to be clever, is actually stupid.'

f. *Relativization of the Dative Object in a transitive clause; pronoun strategy is used*

   sada-sada jelma [si   niberéken kekuasan man   **bana**]
   one-one   person [REL TR.give   power   to   3S.OBL]
   'a person to whom authority is given'

g. *Relativization of the (alienable) Genitive; pronoun strategy is used*

   kalak [si   ku=dat   duit**na**],   ia   perbinaga i tiga

---

[7] Woollams (1996:294) points out that the relative marker *si* has a variant *si ni*. When *si ni* is used, the sentence sounds archaic to the informant.

person [REL   1S.ERG=find   money.3S], 3S.ABS   trader   at market
'The man whose money I found is a trader in the market.'

SAMOAN is a Polynesian language spoken in Samoa, Fiji, New Zealand, the United States (Hawai'i and USA west coast), and some other countries. In Samoan, relative clauses occur after the head NPs that they modify. Nouns can be relativized by two strategies: the gap strategy and the pronoun strategy. Absolutive NPs can be relativized by the gap strategy in Samoan. Ergative NPs can be relativized by either the gap strategy or the pronoun strategy. Oblique NPs, locative NPs, and (alienable) genitive NPs are relativizable only by the pronoun strategy. Examples (8a-b) illustrate that absolutive NPs are relativized by leaving a gap in the relative clauses. Example (8c) shows that the ergative NP is relativizable by either leaving a gap or having a resumptive pronoun in the relative clause. Examples (8d-f) show that when the (alienable) genitive NP, the oblique NP, and the locative NP are relativized, pronouns must be retained in the relative clauses.

(8) **Samoan** (data from Cook 1991:84–85; Mosel and Hovdhaugen 1992:638–41)

   a. *Relativization of the Absolutive (S) in an intransitive clause; gap strategy is used*

      le   tama   [na   sau   _   ananafi]
      ART   boy   [PST   came   _   yesterday]
      'the boy who came yesterday'

   b. *Relativization of the Absolutive (O) in a transitive clause; gap strategy is used*

      le   mea   [na   fai e   le   tama   _]
      ART   thing [PST   do ERG ART   boy   _]
      'the thing that the boy did'

   c. *Relativization of the Ergative (A) in a transitive clause; either gap or pronoun strategy can be used*

      le   tama   [na   **(ia)**   opo-ina le   teine]
      ART   boy   [PST (3S)   hug-TR   ART   girl]
      'the boy who hugged the girl'

   d. *Relativization of the (alienable) Genitive; pronoun strategy is used*

      le   tama   ['ua   pē   **lana**   maile]
      ART   boy   [PRF   die   3S.GEN   dog]
      'the boy whose dog has died' (lit., 'the boy his dog has died')

   e. *Relativization of the Oblique in an intransitive clause; pronoun strategy is used*

      'o   le   mea   [na   'e   va'ai i   **ai**]
      PRS   ART   thing [PST 2S.ABS see   LOC   PRO]

      'the thing that you saw'

   f. *Relativization of the Locative in an intransitive clause; pronoun strategy is used*

      'o   le   mea   [sā   'ou   nofo **ai**]
      PRS   ART   place [PST 1S.ABS stay PRO]
      'the place where I stayed'

TONGAN is a Polynesian language spoken in Tonga, Fiji, American Samoa, New Zealand, United States (Hawai'i, California, and Utah), and some other countries. In Tongan, relative clauses occur to the right of the head NPs that they modify. Nouns can be relativized by two strategies: the gap strategy and the pronoun strategy. The gap strategy is required for relativizing absolutive NPs (9a-c, and 9e). When ergative NPs are relativized, they can be relativized by the pronoun strategy (9d). Oblique NPs, locative NPs and (alienable) genitive NPs are relativizable only by the pronoun strategy (9f-h).

(9) **Tongan** (data from Chung 1978:223–25; Churchward 1953:70–71, 91; Keenan and Comrie 1977:86)

a. *Relativization of the Absolutive (O) in a transitive clause; gap strategy is used*

ko   e hā   'a   e me'a na'e hoko   ki he tamakí
PRED the what ABS the thing PST happen to the children

[na'a ke tafulu'i   _]?
[PST   2S scold   _]
'What (is the thing that) happened to the children that you are scolding?'

b. *Relativization of the Absolutive (S) in an intransitive clause; gap strategy is used*

na'a ku fie   lea   ki he siana [kuo 'alu   _]
PST   1S want speak to the man [PRF go   _]
'I wanted to speak to the fellow who has gone.'

c. *Relativization of the Absolutive (S) in an intransitive clause; gap strategy is used*

ko   e kakai ia [na'a nau hiki _ ki Tonga he ta'u kuo 'osi]
PRED the people that [PST 3P move _ to Tonga the year PRF done]
'Here are the people who moved to Tonga last year.'

d. *Relativization of the Ergative (A) in a transitive clause; pronoun strategy is used*

na'a mau tuli   'a e tangata [na'a **ne** kaiha'asi 'a e telefisi   _]
PST 1PEX chase ABS the man   [PST 3S steal   ABS the televison _]
'We chased the man who stole my television.'

e. *Relativization of the Absolutive (S) in an intransitive clause; gap strategy is used*

ko   e   tangata eni [na'e sio _   ki he afi]
PRED the man   this [PST see _   to the fire]
'Here is the man who saw the fire.'

f. *Relativization of the Oblique in an intransitive clause; pronoun strategy is used*

ko   e Siale   eni   [na'a ku lau ki **ai**]
PRED the Charlie this [PST 1S refer to PRO]
'This is the Charlie to whom I referred.'

g. *Relativization of the Locative in an intransitive clause; pronoun strategy is used*

ko	e	hā	‘a	e	me‘a	[na‘a	ke	fanongo	ki	**ai**	‘i
PRED	the	what	ABS	the	thing	[PST	2S	hear	to	PRO	on

he	sāpate]?
the	Sunday]

'What was the thing that you heard on Sunday?'

h. *Relativization of the (alienable) Genitive NP; pronoun strategy is used*

fakahā	mia	kiata	au	‘a	e	tamasi‘i	[na‘e	ngalo
show	towards	to-PS	1S	ABS	ART	child	[PST	disappear

‘ene	polosi	fulunifo]
his	brush	toothbrush]

'Show me the boy whose toothbrush disappeared.'

ROVIANA is an Austronesian language, a member of the New Georgia group of Oceanic languages, spoken on the island of New Georgia, Solomon Islands, and in surrounding areas within the Solomon Islands. Roviana is a split ergative language with main clauses exhibiting split ergative case marking system and subordinate clauses neutral case marking system. In Roviana main clauses, proper nouns, pronouns, and enumerated NPs distinguish absolutive from ergative by the use of case marking particle, all other NPs have a neutral system of case marking—that is, A, S, and O are not formally distinguished by particles. In subordinate clauses, Roviana exhibits a neutral pattern of case marking. In both main clauses and subordinate clauses, verbs agree with O NP but not the A or S NP. In Roviana, relative clauses are introduced by an invariant relative marker *sapu* and occur to the right of the head NPs that they modify. In Roviana, the gap strategy can be used to relativize both absolutive and ergative NPs[8]. However, relativization of absolutive NPs (10a-b) differs from relativization of ergative NPs (10c-e) in that relativization of ergative NPs requires the use of clausal nominalization.

(10) **Roviana** (data from Corston 1996:20–24)

a. *Relativization of the Absolutive (S) in an intransitive clause; gap strategy is used*

hierana	sa	tie	[sapu	kote	taloa	__]
this	DEF	man	[REL	FUT	leave	__]

'This is the man who is going away.'

b. *Relativization of the Absolutive (O) in a transitive clause; gap strategy is used*

hierana	sa	koreo	[sapu	tupa-i-a	e	Zone	_]
this	DEF	boy	[REL	punch-TR-3S.DO	ART	John	_]

'This is the boy that John punched.'

---

[8] According to Keenan and Comrie (1977:78), Roviana allows the gap strategy to be applied to subject, object, and indirect object, whereas the pronoun retention strategy to genitive, ...in the oblique cases the function of NPrel is coded, either in the form of a standard adverb or in the variable form of the relativization marker. However, Corston (1996:22) comments that 'I shall present details of relative clauses on the core arguments A, S, and O ... Native speaker judgments suggest an extreme reluctance to relativize on other position.'

c. *Relativization of the Ergative (A) in a transitive clause; gap strategy plus obligatory nominalization is used*

seke-i-a   rau   sa koburu [sapu seke-na   _   sa   siki]
hit-TR-3S.DO 1S.ERG DEFchild [REL   hit-3S.NSUF _   DEF   dog]
'I hit the child that hit the dog.'

d. *Relativization of the Ergative (A) in a transitive clause; gap strategy plus obligatory nominalization is used*

hierana sa   tie   [sapu tupa-qu   _   rau]
this   DEF   man   [REL punch-1S.NSUF _   1S]
'This is the man that punched me.'

e. *Relativization of the Ergative (A) in a transitive clause; gap strategy is used without nominalization*

*hierana sa   tie   [sapu tupa-i-u   _]
this   DEF   man   [REL punch-TR-1S.DO   _]
'*This is the man who punched me.'

PASHTO is a North-Eastern Iranian (Indo-Iranian, Indo-European) language spoken in Afghanistan, North-West Frontier Province in Pakistan, and large enclaves of refugees and migrant workers elsewhere. In Pashto, relative clauses occur after the head NPs that they modify, but head NPs and relative clauses do not have to be adjacent to each other. Nouns can be relativized by two strategies: the gap strategy and the (clitic) pronoun strategy. In Pashto, only absolutive NPs can function as head of a relative clause (compare (11c) with (*11d)). Absolutive NPs in relative clauses can be relativized by the gap strategy, as shown in (11a, b). Ergative NPs, oblique NPs, and genitive NPs are relativizable by the pronoun strategy but not the gap strategy, as in (11c), (11e), and (11f).

(11) **Pashto** (data from Babrakzai 1999:108–10)

a. *Relativization of the Absolutive (O) in a transitive clause; gap strategy is used*

mA   a⊗a   spay   w↔lid-↔ [ce   tA   _   mor-ta
1S.ERG that dog.ABS saw-3MS [COMP you.ERG   _   mother.OBL-to

w↔rk↔rʃay w-↔]
given   was-3MS]
'I saw the dog which you had given to mother.'

b. *Relativization of the Absolutive (S) in an intransitive clause; gap strategy is used*

mA   a⊗a   jin↔y w↔lid-a [ce   _   p↔-kAbal-ke osig-i]
1S.ERG that   girl.ABS saw-3FS [COMP _ at-Kabul-in live-3]
'I saw the girl who lives in Kabul.'

c. *The Absolutive NP in the matrix clause can be modified by a relative clause; Relativization of the Ergative (A) in a transitive clause; pronoun strategy is used*

a⊗a   x↔za   [ce   kitAb-**ye**   wAΞist-↔]
that.ABS   woman.ABS [COMP book.ABS-she(CL) took-3MS]

payse-ye	mA-ta	rAkr♠-e
money.ABS.FP-she	1S.OBL-to	gave-3FP

'That woman who took the book gave me the money.'

d. *The Ergative NP in the matrix clause cannot be modified by a relative clause:*

*a⊗e	x↔ze	[ce	kitAb-**ye**	wAΞist-↔]
that.ERG	woman.ERG	[COMP	book.ABS-she(CL)	took-3MS]

payse-ye	mA-ta	rakrʃ-e
money.ABS.FP-she	1s.OBL-to	gave-3FP

'That woman who took the book gave me the money.'

e. *Relativization of the Oblique in a transitive clause; pronoun strategy is used*

mine	a⊗a	spay	w↔-tArʃ-↔	[ce	tA
					adʒʒukay
Meena.ERG	that	dog.ABS	PRF-tie-3MS	[COMP you.ERG	bone.ABS

tre	wAΞist-↔]
from.it	took-3MS]

'Meena tied the dog from which you took the bone.'
(**tre < t↔r + ye** 'from 3')

f. *Relativization of the Genitive NP; pronoun strategy is used*

a⊗a	x↔za	[ce	wror-**ye**	tAriΞ	lw↔l-i]	zmA
	gAw↔nd♠↔y	da				
that	woman	[COMP	brother-she(CL)	history	study-3]	my

that woman [COMP brother-she(CL) history study-3] my neighbor.FS be.FS
'That woman whose brother is studying history is my neighbor.'

BASQUE is a language isolate spoken in northern Spain and southwestern France. Basque differs from most of the ergative languages that we have examined so far. In Basque, relative clauses occur to the *left* of the head nouns, and the primary relativization strategy can apply to not only absolutive NPs, but also to ergative NPs and dative NPs. As illustrated in the following examples, when the absolutive (12b), the dative (12c), and the ergative (12d) are relativized, they leave a gap in the relative clauses.

(12) **Basque** (data from Brettschneider 1979:374–75)

a. *Before Relativization applies:*

gizona-k	neska-ri	pelota-ø	eman	d-io- ø
man.the-ERG	girl.the-DAT	ball.the-ABS	given	3S.ABS-3S.DAT-3S.ERG

'The man has given the ball to the girl.'

b. *Relativization of the Absolutive (O) in a transitive clause; gap strategy is used*

[gizona-k	neska-ri	_	eman	d-io- ø-n]	pelota
[man.the-ERG	girl.the-DAT	_	given	3S.ABS-3S.DAT-3S.ERG-REL]	ball.the

'the ball which has been given to the girl by the man'

c. *Relativization of the Dative in a transitive clause; gap strategy is used*

[gizona-k   _   pelota-ø   eman   d-io-ø-<u>n</u>]   neska
[man.the-ERG   _   ball.the-ABS   given   3S.ABS-3S.DAT-3S.ERG-REL]   girl.the
'the girl to whom the man has given the ball'

d. *Relativization of the Ergative (A) in a transitive clause; gap strategy is used*

[_   neska-ri   pelota-ø   eman   d-io-ø-<u>n</u>]   gizona
[_   girl.the-DAT   ball.the-ABS   given   3S.ABS-3S.DAT-3S.ERG-REL]   man.the
'the man that has given the ball to the girl'

INUIT is an Eskimo-Aleut language spoken in Canada and the northern part of Alaska. In Inuit, relative clauses[9] occur to the right of the head nouns that they modify. Only absolutive NPs can be relativized by the gap strategy, but the ergative NPs cannot. As shown in 13a-c, when absolutive NPs are relativized, they leave a gap in the relative clauses.

(13) **West Greenlandic Inuit** (data from Manning 1996:84 and 170)

a. *Relativization of the Absolutive (S) in an intransitive clause; gap strategy is used*

miiraq   [_   kamat-tu-q]
child.ABS   [_   angry-REL.ITR-S]
'the child who is angry'

b. *Relativization of the Absolutive (O) in a transitive clause; gap strategy is used*

miiqqa-nut   [Juuna-p   _   paari-sa-i-nut]
child-P.TERM   [Juuna-ERG   _   look.after-REL.TR-3S.P-TERM]
'the children that Junna is looking after'

c. *Relativization of the Absolutive (O) in a transitive clause; gap strategy is used*

qilalugaq   [piniartu-t   _   malirsu-ga-at]
whale.ABS   [hunter-GEN.P   _   chase-REL.TR-3P.S]
'the whale that the hunters are chasing'

QUICHÉ is a Mayan language spoken in Guatemala. In Quiché, all extraction rules (*Wh*-questions, relativization, and left-dislocation, … etc.) apply to absolutive NPs, but not to ergative NPs. Examples of Quiché relativization are shown in (14a–c). (14a–c) illustrate that when absolutive NPs are relativized, the sentences are grammatical. However, if we interpret *lee ixoq* 'the woman' as an absolutive NP and the ergative NP is the NP being relativized (14 c), the sentence is ungrammatical.

(14) **Quiché** (data from Larsen and Norman 1979:357)

a. *Relativization of the Absolutive (S) in an intransitive clause; gap strategy is used*

x-ø-inw-il   lee achih   [(lee)   _   x-ø-tzaaq-ik]
PRF-3S.ABS-1S.ERG-see   the man   [(the)   _   PRF-3S.ABS-fall-SUF]
'I saw the man who fell.'

---

[9] The relative clauses in Inuit are participial nominalizations (Manning 1996:83).

b. *Relativization of the Absolutive (O) in a transitive clause; gap strategy is used*

x-ø-inw-il	lee ixoq	[(lee) _ x-ø-u-ch'ay	lee
PRF-3S.ABS-1S.ERG-see	the woman	[(the) _ PRF-3S.ABS-3S.ERG-hit	the

achih]
man]
'I saw the woman who the man hit.'

c. *Relativization of the Absolutive (O) of a transitive clause; gap strategy is used*
(Relativization of the Ergative (A) in a transitive clause is impossible.)

x-ø-inw-il	lee achih	[(lee) _ x-ø-u-ch'ay	lee
PRF-3S.ABS-1S.ERG-see	the man	[(the) _ PRF-3S.ABS-3S.ERG-hit	the

ixoq]
woman]
'I saw the man who the woman hit.'/ *'I saw the man who hit the woman.'

COAST TSIMSHIAN (SM'ALGYAX) is a Tsimshianic language spoken north and south of the mouth of Skeena River, coastal British Columbia. In Coast Tsimshian, relative clauses occur to the right of the head nouns. The gap strategy can be applied to absolutive NPs (15a–c) as well as ergative NPs (15d). However, relativization of absolutive NPs differs from relativization of ergative NPs in the following way: relativization of absolutive NPs either does not require the use of any relativizer at all (15c) or requires the use of the relativizer *gu* (15a–b), whereas relativization of ergative NPs requires the use of the relativizer *in* (15d).

(15) **Coast Tsimshian (Sm'algyax)** (data from Mulder 1994:141–42)

a. *Relativization of the Absolutive (S) in an intransitive clause; gap strategy is used*

ada	sgüü-t,	siipg-it	gi-sga	n-ts'm-waab-t-ga	[gu	haytg-it
and	lie.down-3	sick-3	DEM-CN	POSS-in-house-3-CN.POSS	[REL	stand-3

gi-sga	na-süül-ga	t'aa].
DEM-CN	POSS-middle-CN.POSS	lake]

'And he laid sick in his lodge which stood in the middle of the lake.'

b. *Relativization of the Absolutive (O) in a transitive clause; gap strategy is used*

ada-t	wil	aaytg-isga	na-waa-t	[gu	nah	k'yinam-s	nagwat-gas
and-3	then	call.out-CN	POSS-name-3	[REL	PAST	give-CN	father-CN

'niit,	Gunaxniismgyad].
3S	Gunaxniismgyad]

'And then she named the name which his father had given to him, Gunaxniismgyad.'

c. *Relativization of the Absolutive (O) in a transitive clause; gap strategy is used*

al	sgüü-ga	hakwdak	[dzab-is	niyaa-t].
in.evidence	be.lying.down-CN	bow	[make-CN	grandfather-3.POSS]

'He already had a bow which his grandfather had made.'

d. *Relativization of the Ergative (A) in a transitive clause; gap strategy is used*

ada	al	γ=aks	wil	da-txalyaa	γ==at-γ=ot'iks-at	[in	hu-waat-a
and	EMPH	yet	that	P-increase	PL-arrive-3	[REL	P-trade-CN

txa'nii ligiwaal-ga].
all   things-DEM]
'And still those arriving who were trading all kinds of things increased.'

LEZGIAN is a Nakho-Daghestanian language spoken in southern Daghestan and northern Azerbaijan in the eastern Caucasus. In Lezgian, relative clauses occur before the head NPs that they modify. In Lezgian, nouns can be relativized by two strategies: the gap strategy and the pronoun strategy. The gap strategy can be used to relativize absolutive NPs, ergative NPs, indirect object NPs, some oblique NPs, and inalienable genitive NPs. The pronoun strategy can be used to relativize some oblique NPs and alienable genitive NPs, and objects of comparison. As shown in the following examples, when absoultive NPs (16a–b), ergative NPs (16c), indirect object NPs (16d), some oblique NPs (16e–f), and inalienable genitive NPs (16h) are relativized, they leave a gap in the relative clauses. However, when some oblique NPs (16g), alienable genitive NPs (16i), and objects of comparison (16j), reflexive pronouns are required to occur in the relative clauses.

(16) **Lezgian** (data from Haspelmath 1992:340–42)

a. *Relativization of the Absolutive (S) in an intransitive clause; gap strategy is used*

[_	θHfe-j]	jac	žanawur-r.i	req'-e	kuk'war-na.
[_	go.away.AOP]	bull	wolf-PL.ERG	way-INESS	tear-AOR

'The bull which had gone away was killed by wolves on the way.'

b. *Relativization of the Absolutive (O) in a transitive clause; gap strategy is used*

[itim-r.i	čül-ler-a	_ iji-zwa-j]	wiri	k'walax-ar	dišehli-jr.i-n
[man-PL.ERG	field-PL-INESS	_ do-IMPF-PTP]	all	work-PL	woman-PL-GEN

xiw-e   hat-na.
neck-INESS   fall-AOR
'All the work that the men used to do in the fields fell on the women.'

c. *Relativization of the Ergative (A) in a transitive clause; gap strategy is used*

[_	pačah.di-n	xazina	čünüx-aj]	učri-jar	čun	ja.
[_	king-GEN	treasury	steal-AOP]	thief-PL	we.ABS	COP

'We are the thieves who stole the king's treasury.'

d. *Relativization of the Dative in a transitive clause; gap strategy is used*

[Mu?minat-a	_	ktab	ga-ji]	ruš-a	θHfe-na.
[Mu?minat-ERG	_	book	give-AOP]	girl-ERG	go.away-AOR

'The girl to whom Mu?minat gave the book went away.'

e. *Relativization of the Oblique NP; gap strategy is used*

[Lezgi-jar	_	jašamiš	že-zwa-j]	xür-er	Azerbajdžan.d-a-ni	awa.

[Lezgian-PL _ living   be-IMPF-PTP] village-PL Azerbaijan-INESS-also be.in
'There are also villages in Azerbaijan where Lezgians live.'

f. *Relativization of the Oblique NP; gap strategy is used*

[_ k'wač-er kut'un-nawa-j]   jeb
[_ foot-PL tie-PRF-PTP]   string
'the string with which the feet were tied'

g. *Relativization of the Oblique NP; pronoun strategy is used*

[čun   **wiči-kaj** raxa-zwa-j]   kas
[we.ABS   self-SBEL   talk-IMPF-PTP] man
'the man we're talking about.'

h. *Relativization of the (inalienable) Genitive NP: gap strategy is used*

[_ čin.i-z   cl.a-n   rang   ata-nwa-j]   ada-n   g(ül.
[_ face-DAT wall-GEN   color come-PRF-PTP] she-GEN   husband
'her husband, whose face had become white as a wall'
(lit., 'to whose face the wall's color had come.')

i. *Relativization of the (alienable) Genitive NP: pronoun strategy is used*

[**wiči-n**   sät   čünüx-nawa-j]   ruš   šeξ∫-zawa-j.
[self-GEN clock steal-PRF-PTP]   girl   cry-IMPF-PST
'The girl whose watch was stolen was crying.'

j. *Relativization of the Object of Comparison: pronoun strategy is used*

[**wiče-laj**] Šahdag(q'aq'an tir]   dag(hina   awa?
[self-SREL Šahdağ   high   COP.PTP] mountain where be.in
'Where is the mountain that Šahdag(is taller than?'

3. CONCLUDING REMARKS. Based on the discussion in the previous section, we can summarize the relativization facts in these sixteen languages in Table 1 on the next page.

As we can see from the table, all sixteen languages allow relativization of the absolutive NPs by the primary relativization strategy (i.e., the gap strategy). Some languages allow the gap strategy to be used only in absolutive NPs; other languages allow the use of the gap strategy not only to the absolutives, but also to the ergatives, datives/locatives, obliques, genitives (inalienable, alienable), and objects of comparison. This finding apparently contradicts Keenan and Comrie's Noun Phrase Accessibility Hierarchy, repeated below, which predicts that if a language permits relativization of the direct object, it should also permits relativization of the subject.

THE NOUN PHRASE ACCESSIBILITY HIERARCHY (AH)

SUBJECT > OBJECT > INDIRECT OBJECT > OBLIQUE > GENITIVES > OBJECT OF COMPARISON

However, the relativization facts support Fox's Absolutive Hypothesis which suggests that the Absolutive relation occupies the leftmost position of the hierarchy.

FOX'S ABSOLUTIVE HYPPOTHESIS FOR ERGATIVE LANGUAGES

ABSOLUTIVE > ERGATIVE > ...

	ABSOLUTIVE	ERGATIVE	DATIVE/ LOCATIVE	OBLIQUE	GENITIVE	OBJECT OF COMPARISON
DYIRBAL	gap	---	----	---	---	---
ATAYAL	gap	---	---	---	---	---
KAVALAN	gap	---	---	---	---	---
ILOCANO	gap	---	---	---	---	---
TAGALOG	gap	---	---	---	gap (inalienable)	gap
BALINESE	gap	---	---	---	---	---
KARO BATAK	gap	pronoun	pronoun	---	pronoun (alienable)	---
SAMOAN	gap	gap or pronoun	pronoun	pronoun	pronoun (alienable)	---
TONGAN	gap	pronoun	pronoun	pronoun	pronoun (alienable)	---
ROVIANA	gap	gap (+ nominalization)	---	---	---	---
PASHTO	gap	pronoun	pronoun	pronoun	pronoun	---
BASQUE	gap	gap	gap	---	---	---
INUIT	gap	---	---	---	---	---
QUICHÉ	gap	---	---	---	---	---
COAST TSIMSHIAN (SM'ALGYαX)	gap	gap				
LEZGIAN	gap	gap	gap	gap or pronoun	gap (inalienable)/ pronoun (alienable)	pronoun

TABLE 1: Relativization Strategy

Although Fox's Absolutive Hypothesis correctly predicts the relativization behavior of absolutive NPs and ergative NPs in ergative languages, Fox does not discuss the behavior of other NPs. In terms of the relativization behavior of other NPs, our study shows that Keenan and Comrie are generally right in predicting their behavior. However, there is one position (i.e., the genitives) deserving further discussion.

As shown in Table 1, relativization of genitive NPs may involve the use of the gap strategy or the pronoun strategy. In languages like Lezgian, two strategies can be used to relativize genitive NPs: the gap strategy is used for inalienable genitive NPs, whereas the pronoun strategy is used for the alienable genitive NPs. In languages like Tagalog, only inalienable genitive NPs can be relativized (by the gap strategy). In languages like Karo Batak, Samoan, Tongan, and Pashto, alienable genitive NPs can be relativized by the pronoun strategy (but not the gap strategy). Based on the behavior of genitive NPs in these

languages, we may suggest that inalienable genitive NPs are more likely to be relativized by the gap strategy,[10] while alienable genitive NPs are more likely to be relativized by the pronoun strategy. However, there are no sufficient data to support this claim at this point of time. A careful study of the relativization behavior of inalienable genitive NPs and alienable genitive NPs is required to prove this claim.

Based on our observation of relativization in these sixteen ergative languages, we can formulate a revised noun phrase accessibility hierarchy for ergative languages.

<div align="center">REVISED NOUN PHRASE ACCESSIBILITY HIERARCHY</div>

ABSOLUTIVE > **ERGATIVE** > INDIRECT OBJECT > OBLIQUE > **INALIENABLE GENITIVES** > **ALIENABLE GENITIVES** >OBJECT OF COMPARISON

According to this revised noun phrase accessibility hierarchy, we can predict that an ergative language must be able to relativize absolutive NPs. Moreover, we can predict that inalienable genitives are more likely to be relativized than alienable genitives.

In addition to revising the noun phrase accessibility hierarchy for ergative languages, I suggest a new interpretation of syntactic ergativity based on the relativization facts found in these sixteen ergative languages. In this paper, I suggest that morphologically ergative languages are also syntactically ergative unless proven otherwise, just as morphologically accusative languages are taken to be syntactically accusative unless proven otherwise. The fact that a morphologically ergative language may allow ergative NPs to be relativized by the primary strategy does not suggest that the language is 'syntactically accusative'. It only suggests that the language allows more positions to be relativized by the primary strategy. An ergative language can be said to be 'syntactically accusative' only if it allows relativization on absolutive NPs of intransitive sentences and ergative NPs, but not on absolutive NPs of transitive sentences. None of the languages investigated here meets this criterion. This suggests that all the languages in this study are 'syntactically ergative' and points toward the possibility that all morphologically ergative languages are syntactically ergative too. More studies need to be done to confirm this claim.

<div align="center">LIST OF ABBREVIATIONS</div>

?	agreement	INST	instrumental
1	first person	ITR	intransitive
2	second person	LF	Locative Focus
3	third person	LIG	ligature
ABS	absolutive	LOC	locative
ACC	accusative	M	masculine
AF	Actor Focus	NEAR I	near the speaker
ANT	antipassive	NEG	negative
ART	article	NSUF	nominal suffix
BF	Benefactive Focus	OBL	oblique

---

[10] The observation that inalienable genitive NPs are more likely to be relativized by the gap strategy may be explained from a processing point of view. The gap strategy has the advantage of economy of expression and requiring less form processing, so it is favored in cases (e.g., inalienable genitive NPs) where the referents of NPs can easily be identified without difficulties.

CLS	classifying particle		P(L)	plural
CMPAR	comparative		PF	Patient Focus
COMP	complementizer		POSS	possessive
COP	copula		PRED	predicate
CN	connective		PRF	perfective
DAT	dative		PRO	pronoun
DEF	definite		PS	person
DEM	demonstrative		PST	past
DET	determiner		PTL	particle
DIST	distal		REAL	non-future
EMPH	emphatic		REF	referential
ERG	ergative		REL	relative pronoun or suffix
EX	exclusive		S	singular
F	feminine		SUF	suffix
GEN	genitive		TERM	terminative
IMPF	imperfective		TOP	topic
INCPT	inceptive		TR	transitive

REFERENCES

ARTAWA, K. 1994. Ergativity and Balinese syntax. Bundoora: La Trobe University Ph.D. dissertation.

BABRAKZAI, FAROOQ. 1999. Topics in Pashto syntax. Honolulu: University of Hawai'i at Mânoa Ph.D dissertation.

BRETTSCHNEIDER, G. 1979. Typological characteristics of Basque. Ergativity: Towards a theory of grammatical relations, ed. by Frans Plank, 371–384. London and New York: Academic Press.

CEÑA, R. M. 1979. Tagalog counterexamples to the Accessibility Hierarchy. Studies in Philippine Linguistics 3.119–124.

CHUNG, SANDRA LYNN. 1978. Case marking and grammatical relations in Polynesian. Austin and London: University of Texas Press.

CHURCHWARD, MAXWELL. 1953. Tongan grammar. Nuku'alofa, Tonga: Vava'u Press.

COOK, KENNETH WILLIAM. 1991. The search for subject in Samoan. Currents in Pacific linguistics: papers on Austronesian languages and ethnolinguistics in honor of George W. Grace, ed. by Robert Blust, 77–98. Pacific Linguistics C-117. Canberra: Australian National University.

CORSTON, S. H. 1996. Ergativity in Roviana, Solomon Islands. Canberra: Australian National University.

DIXON, R. M. W. 1972. The Dyirbal language of North Queensland. Cambridge: Cambridge University Press.

———. 1979. Ergativity. Language 59.781–819.

———. 1994. Ergativity. Cambridge: Cambridge University Press.

FOX, BARBARA A. 1987. The Noun Phrase Accessibility Hierarchy reinterpreted: Subject primacy or the Absolutive Hypothesis? Language 63.856–870.

GIBSON, JEANNE D., and STANLEY STAROSTA. 1990. Ergativity east and west. Linguistic change and reconstruction methodology, ed. by Philip Baldi, 295–321. Trends in Linguistics, Studies and Monographs 45. Berlin: Mouton de Gruyter.

HASPELMATH, MARTIN. 1993. A grammar of Lezgian. Berlin and New York: Mouton de Gruyter.

HAWKINS, JOHN A. 1999. Processing complexity and filler-gap dependencies across grammars. Language 75.244–85.

HEALEY, PHYLLIS M. 1960. An Agta grammar. Manila: Bureau of Printing.

HUANG, LILLIAN M. 1995. A study of Mayrinax syntax. Taipei: The Crane Publishing Company.

KEENAN, EDWARD L., and BERNARD COMRIE. 1977. Noun phrase accessibility and universal grammar. Linguistic Inquiry 8.63–99.

LARSEN, T. W., and W. M. NORMAN. 1979. Correlates of ergativity in Mayan grammar. Ergativity: Towards a theory of grammatical relations, ed. by Frans Plank, 347–70. London and New York: Academic Press.

LI, PAUL JEN-KUEI. 1996. The Formosan tribes and languages in I-Lan [in Chinese]. I-Lan, Taiwan: I-Lan Prefecture Government.

MANNING, CHRISTOPHER D. 1996. Ergativity: Argument structure and grammatical relations. Stanford: CSLI.

MOSEL, ULRIKE, and EVEN HOVDHAUGEN. 1992. Samoan reference grammar. Oslo: Scandinavian University Press.

MULDER, JEAN GAIL. 1994. Ergativity in Coast Tsimshian (Sm'algyα=x). Berkeley, Los Angeles, and London: University of California Press.

SCHWARTZ, ARTHUR. 1976. On the universality of subject: The Ilocano case. Subject and Topic, ed. by Charles N. Li, 519–43. London and New York: Academic Press.

WECHSLER, STEPHEN, and I WAYAN ARKA. 1998. Syntactic ergativity in Balinese: An argument structure based theory. Natural Language and Linguistic Theory 16.387–441.

WOLLAMS, GEOFF. 1996. A grammar of Karo Batak, Sumatra. Pacific Linguistics C-130. Canberra: Australian National University.