

1 Ergative vs. accusative patterns

1.1 Morphological nominative-accusative

Subjects (of intransitives), Agents and Objects (of transitives)

(1)	a.	I met him.	I left.
	b.	He met her.	He left.
	c.	She met me.	She left.
		<hr/>	<hr/>
		transitive	intransitive
		<hr/>	<hr/>
		A	S
		agent	subject
		<hr/>	<hr/>

In English, the A and S participants receive the same *Case*—they sound the same—while the O participant receives a different Case from A & S. (A & S: *I, he, she, you*; O: *me, her, him, you*)

Nominative-accusative case marking

- (2) a. domin-us ven-it
master comes
- b. serv-us veni-t
slave comes
- c. domin-us serv-um audi-t
master slave hears
- d. serv-us domin-um audi-t
slave master hears

So, here we see: *-us* marks S and A, *-um* marks O. That is, nominative and accusative.

1.2 Morphological ergative-absolutive

Dyirbal

- (3) a. η uma bamaga-n'u
father returned
'Father(S) returned.'
- b. yabu banaga-n'u
mother returned
'Mother(S) returned.'
- c. η uma yabu- η gu bura-n
father mother saw
'Mother(A) saw father(O).'
- d. yabu η uma- η gu bura-n
mother father saw
'Father(A) saw mother(O).'

We see two forms:

'mother':
yabu (S or O)
yabu- η gu (A)

'father':
 η uma (S or O)
 η uma- η gu (A)

(Dyirbal: Cairns Rain Forest, Australia)

Ergative-absolutive case marking

'mother' yabu (S or O) yabu- η gu (A)
'father' η uma (S or O) η uma- η gu (A)

So, in Dyirbal, S and O are grouped together (marked the same way) to the exclusion of A. (Whereas English and Latin group S and A together to the exclusion of O.)

Dixon (1994) estimates that 25% of the world's languages have ergative patterns of this sort.

1.3 Syntactic nom-acc pattern

Agreement

- (4) a. domin- \bar{i} veni-unt
masters come
- b. serv- \bar{i} domin-um audi-unt
slaves master hear
- c. serv-us domin- \bar{o} s audi-t
slave masters hear

Number agreement on the verb (*audi-t* vs. *audi-unt*) varies with the nominative argument.

Conjunction/subordination: English

(5) [I returned] and [_ saw him]

(6) [I saw him] and [_ returned]

Abstractly:

[S verb] and [A_S verb O] Missing A will “take over” S

[A verb O] and [S_A verb] Missing S will “take over” A

Again: S and A act together... O acts different.

1.4 Syntactic erg-abs pattern

Conjunction/subordination: Dyirbal

(7) ŋuma banag-n'u yabu-ŋgu bura-n.
father(S) returned mother(A) saw
'Father(S) returned and mother(A) saw him(O).'

(8) ŋuma yabu-ŋgu bura-n banaga-n'u.
father(O) mother(A) saw returned
'Mother(A) saw father(O) and he(S) returned.'

Abstractly:

[S verb] and [A verb O_S] Missing O will “take over” S

[A verb O] and [S_O verb] Missing S will “take over” O

Again: S and O act together... A acts different.

1.5 Summarizing nom-acc vs. erg-abs

Ergative/absolute and nominative/accusative

English/Latin [SA] vs. [O] *nominative-accusative* pattern

Dyirbal [SO] vs. [A] *ergative-absolute* pattern

Absolute case marking on S and O (but not A)

Ergative case marking on A (but not S and O)

Nominative case marking on S and A (but not O)

Accusative case marking on O (but not S and A)

Morphological and syntactic ergativity

(9) Morphological ergativity

- a. English: NOM-ACC marking on pronouns.
- b. Latin: NOM-ACC case marking.
- c. Dyirbal: ERG-ABS case marking (*-ŋgu* = ERG).

(10) Syntactic ergativity

- a. Latin: verbs agree with S & A (NOM) but not O.
- b. English: Missing referents: S & A (NOM) but not O.
- c. Dyirbal: Missing referents: S & O (ABS) but not A.

2 Ergative splits

Ergative splits

It turns out that in a lot of languages that show ergative patterns, this pattern only appears in part of the grammar. Commonly, the part of the grammar that is ergative is defined by things like the tense/aspect, main/subordinate clauses, or features of the S/A/O arguments.

Even Dyirbal, which is very ergative, shows occasional bits of nominative-accusative patterning. And even English, which is very accusative, shows occasional bits of ergative-absolute patterning.

Morphological nom-acc in Dyirbal

- (11)
- a. *ŋana* *banaga-n'u*
we-all(S) returned
 - b. *n'urra* *banaga-n'u*
you-all(S) returned
 - c. *n'urra* *Nana-na bura-n*
you-all(A) us-all(O) saw

- d. *ɣana n'urra-na bura-n*
 we-all(A) you-all(O) saw

Look: *ɣana* is 'we-all' in S and A, *ɣana-na* is 'we-all' in O. *N'urra* is 'you-all' in S and A, *n'urra-na* is 'you-all' in O. That's a nominative-accusative pattern.

Syntactic erg-abs anyway

- (12) a. *ɣana banaga-n'u n'urra bura-n*
 we-all(S) return you-all(A) saw
 'We-all(S) returned and you-all(A) saw us-all(O).'
- b. *n'urra ɣana-na bura-n banaga-n'u*
 you-all(A) us-all(O) saw returned
 'You-all(A) saw us-all(O) and we-all(S) returned.'

So even in that case where Dyrbal was morphologically nominative-accusative it is still syntactically ergative.

English ergative

- (13) a. escapee S: *x* escaped.
 b. employee O: Starbucks employed *x*.
 c. employer A: *x* employed John.
- (14) a. the destruction of the house (by the hurricane)
 b. the arrival of the hurricane

So, even in English there seems to be a *tiny* bit of morphological ergativity: [SO] *-ee* vs. A *-er*. Or [SO] *of* in nominalizations.

Thus: Ergativity is *not* really a language-wide characteristic—it is a characteristic of subparts of languages (and the size of those subparts differ).

Split on tense/aspect: Georgian aorist

Georgian, Hindi have a split on tense/aspect. Here's Georgian.

- (15) Georgian Aorist
 a. Student-i mivida.
 student-ABS go(AOR)
 'The student went.'

- b. Student-ma ceril-i dacera.
 student-ERG letter-ABS write(AOR)
 ‘The student wrote the letter.’

Split on tense/aspect: Georgian present

(16) Georgian Present

- a. Student-i midis.
 student-NOM go(PRES)
 ‘The student goes.’
- b. Student-i ceril-s cers
 student-NOM letter-ACC write(PRES)
 ‘The student writes the letter.’

Split on referential features

Silverstein (1976) does a fairly complex and in-depth analysis of a large number of languages (most of them Australian), and comes up with something like the following hierarchy.

Animacy hierarchy

1/2 person pronouns > human noun > animal noun > inanimate

Along with this goes the observation that in a transitive construction, the subject is generally higher on this hierarchy than the object: *John hit the rock*. The ergative splits that Silverstein observes are ones that tend to mark deviations from this.

Inverse in Algonquian

One relatively well-known example of a split (although not in case marking) occurs in Algonquian languages, where “direct” forms correspond to having a subject higher in animacy than the object, and “inverse” forms correspond to the reverse. Fox:

- (17) ne -waapam -aa -wa.
 1sg see DIRECT 3
 ‘I see him.’

- (18) ne -waapam -ek -wa.
 1sg see INVERSE 3
 'He sees me.'

Case marking conditioned on animacy

- Mark O that is high in animacy (accusative)
- Mark O that is high in definiteness (accusative)
- Mark A that is low in animacy (ergative)

These are generally determined independently, so you get ergative case on any A that is below a certain degree of animacy, regardless of the O; and you get accusative case on any O that is above a certain degree of definiteness or animacy, regardless of the A.

Dyirbal again

- (19) balan dyugumbil baṅgul yaṛaṅgu balgan.
 woman-ABS man-ERG hit
 'The man hit the woman.'
- (20) ṅadya ṅinuna balgan.
 I-NOM you-ACC hit
 'I hit you.'
- (21) ṅayguna baṅgul yaṛaṅgu balgan.
 I-ACC man-ERG hit
 'The man hit me.'
- (22) ṅadya bayi yaṛa balgan.
 I-NOM man-ABS hit
 'I hit the man.'

3 Explaining ergativity

Attempts to explain ergative syntax

There have been quite a number of different attempts to try to explain the syntax of ergative languages and how the case marking (and other) facts might be derived.

There isn't really a lot of consensus on how it should work (or even whether different ergative languages work the same way as each other).

3.1 Johns 1992

Inuktitut: Possessives and relative/ergative marking

Johns (1992) goes through some discussion of the case marking and syntax in Inuktitut.

(23) Jaani-up taku-ja-a-nga
John-REL see-PASS.PART-3s/1s
'John saw me.'

(24) Jaani-up nasa-a
John-REL hat-3s
'John's hat'

Inuktitut: relatives

(25) anguti-up kapi-ja-a
man-REL stab-PASS.PART-3s
'the one that the man stabbed' (lit. 'the man's stabbed one')

(26) anguti-up qimmi-a
man-REL dog-3s
'the man's dog'

(27) angut [arna-up kuni-ga-a]
man-ABS woman-REL kiss-PASS.PART-3s.ABS
'the man who the woman kissed'

Inuktitut: Johns' (1992) analysis

(28) a. anguti-up nanuq kapi-ja-a]
man-REL bear-ABS stab-PASS.PART-3s.ABS

'the man stabbed the bear'

b. anguti-up_i nanuq t_i kapi-ja-a

c. 'the bear is the man's stabbed one'

3.2 Mahajan 1997

Two generalizations

Mahajan (1997) highlights two generalizations about languages and ergativity.

- (29) Ergative case-marking patterns are found only in verb-peripheral languages (in SOV and VSO languages—verb medial languages [SVO] are never ergative.
- (30) A lexically distinct form of the verb *have* is generally missing in verb-peripheral languages. That is, *have* is generally confined to SVO languages.

Hindi

Hindi is ergative in the *perfect tenses* (common among Indic Indo-European languages).

- (31) Raam-ne bhindīyāā pakaayii hē
Ram-ERG okra cook-PERF is
'Ram has cooked okra.'
- (32) Raam aayaa hē
Ram come-PERF is
'Ram has arrived.'
- (33) Raam bhindīyāā pakaataa hē
Ram okra cook-IMPERF is
'Ram cooks okra.'

Mahajan considers the ergative suffix to be a *postposition*.

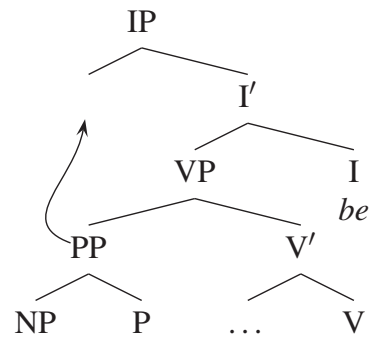
Comparing Hindi and French

- (34) Raam-ne vah kitaabē paṛ'î hē.
Ram-ERG those books read be
'Ram has read those books.' Hindi
- (35) Jean a cuit les tomates
Jean has cooked the tomatoes
'John has cooked the tomatoes.' French

Mahajan takes the view that all languages should be underlying the same—these two sentences have the same meaning, and should have the same structure underlyingly. The French sentence has *have*, the Hindi sentence does not. The Hindi sentence has ergative marking, the French sentence does not.

Hindi/SOV

Suppose the Hindi sentence looks something like this. The ergative marker is a postposition, which means that the subject is a PP. Assume that the subject moves from a lower position (Cf. English *The students have all left*).



Hindi possession

Although we were looking at the auxiliary *have* meaning in the previous sentences, it is also interesting to note that Hindi (like a lot of languages) represent possession with (not *have*, but) *be* and a location.

- (36) larkee-kee paas kuttaa hai.
 boy.OBL-GEN proximity dog is
 ‘The boy has a dog’ (lit. ‘By the boy is a dog.’)

So it isn’t all that strange for something like a PP to be the “subject” of a *be* construction like this.

Other examples of possession via *be* + P

- (37) u menja byla sestra.
 at 1st.GEN was sister.NOM
 ‘I had a sister.’ Russian
- (38) larkee-kee paas kuttaa hai.
 boy.OBL-GEN by dog is
 ‘The boy has a dog.’ Hindi
- (39) yaan huntul ciimin ti? in-paapa.
 be one horse P my-father
 ‘My father has a/one horse.’ Yucatec

- (40) Liisa-lla on mies.
 Lisa-ADESSIVE be man
 'Lisa has a husband.'

Finnish

Portuguese, both options

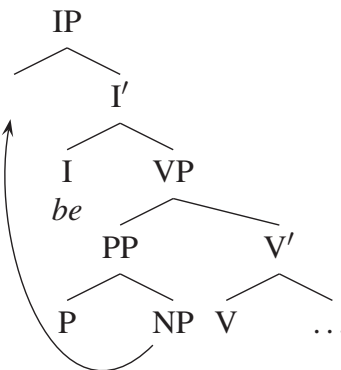
- (41) a. O menino tem fome.
 the child has hunger
 'The child is hungry.'
 b. O menino esta com fome.
 the child is with hunger
 'The child is hungry.'

Portuguese

- (42) o menino_i esta [com t_i] fome.

French/SVO

Now, let's look at French. Suppose that since in Hindi we have a PP subject underlyingly, we must have one in French too. But what appears in the subject position in French is just the NP. And the verb is *have*. Well. What might be happening?

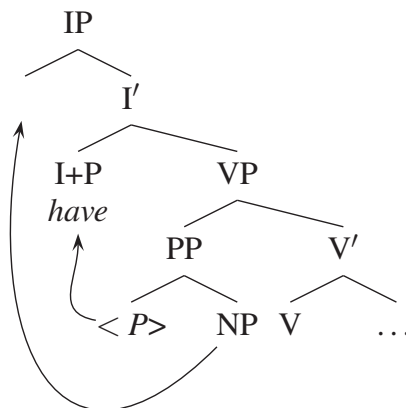


Hint: *à+le=au; de+le=du*.

French/SVO

Now, the proposal: English *have* and French *avoir* and the corresponding words in other languages with *have* are confections of *be* and a preposition.

So, in an SVO language like French, the P is next to *be* and so can fuse with it.



The generalizations again

- (43) Ergative case-marking patterns are found only in verb-peripheral languages (in SOV and VSO languages—verb medial languages [SVO] are never ergative.
- (44) A lexically distinct form of the verb *have* is generally missing in verb-peripheral languages. That is, *have* is generally confined to SVO languages.

Unergative vs. unaccusative

Intransitives fall into two classes: “unaccusatives” and “unergatives.”

Unaccusatives *fall, sink, melt, ...*

Unergatives *dance, walk, ...*

In Hindi, ergative marking is never possible in the subject of unaccusatives. In Romance languages, auxiliary *have* is not possible with unaccusatives (you get *be* instead).

- (45) a. Jean a marché. ‘Jean walked.’ (*have*)
b. Jean est tombé. ‘Jean fell.’ (*be*)

So: unaccusatives don’t take this kind of PP argument (in general). Also: reflexive clitics in Italian/French force *be*; the reflexive morpheme in Inuit blocks ergative.

Problems

Mahajan’s (1997) proposal is only a proposal—there are a number of things that don’t yet fit, and more work needs to be done to see if there is something subtle at work.

- Dutch, German are SOV (at least in embedded clauses) yet they have *have* and do not display case ergativity.
- Kashmiri (V2, but appears to be ergative).

Mahajan makes some suggestions, but in general it is left for further work.

Also

Both Johns’s (1992) and Mahajan’s (1997) proposals aim to account for the syntactic distributions, but there is still a question of how/why there are ergative splits.

References

- Dixon, R.M.W. 1994. *Ergativity*. Cambridge: Cambridge University Press.
- Johns, Alana. 1992. Deriving ergativity. *Linguistic Inquiry* 23(1): 57–87.
- Mahajan, Anoop. 1997. Universal grammar and the typology of ergative languages. In Artemis Alexiadou & T. Alan Hall (eds.) *Studies on universal grammar and typological variation*, 35–57. Amsterdam: John Benjamins.
- Silverstein, Michael. 1976. Hierarchy of features and ergativity. In R.M.W. Dixon (ed.) *Grammatical categories in Australian languages*, 112–171. Canberra: Australian Institute of Aboriginal Studies.