

### What does morphological case tell us about dependent case?

Dependent case theories (Marantz 1991) handle accusative and ergative alignments in a symmetric way, and derive tripartite alignments for free, according to Baker (2015). In Chomsky's (2001) theory of case, two, but not three, argument slots can be accounted for under Agree with *v*, I/C phase heads. The model forces Erg(ative) to be introduced independently of Agree, as an oblique, and allows tripartite alignments only to the extent that at least one of the three cases is an oblique. We argue that actually attested morphological case systems match Chomsky's predictions exactly.

**Dependent case vs Agree.** According to dependent case theories, in a two-DP local configuration where neither DP has been assigned inherent case, Acc(usative) is assigned to the lower DP, Erg to the higher DP and the Elsewhere case is Nom(inative)/Abs(olutive), as in (1).

- (1) a. If NP1 c-commands NP2 and both are in the same domain, value NP1's case as ergative.  
 b. If NP1 c-commands NP2 and both are in the same domain, value NP2's case as accusative.  
 c. If NP has no other case feature, value its case as nominative/absolute. (Baker 2015)

Chomsky (2001) instead singles out Acc and Nom as accruing to the DPs in (2) in virtue of Agree with *v* and I respectively. (2) is simpler than (1) since (1) takes the complex behavior called 'case' to correspond to a primitive of grammar, fixed by its own algorithm. Vice versa under (2), case has no reality except as a surface manifestation of certain clusters of more primitive properties.

- (2) [I [vP DP v [V DP]]  
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What matters here is that the two systems are deeply different from an empirical point of view, since (2) draws a bipartite map of structural/direct case, which excludes Erg – while (1) draws a tripartite map, and treats Erg as parallel to Acc.

**Tripartite alignments: data.** Baker (2015) exemplifies tripartite languages with Diyari in (3). Apart from  $\emptyset$ , other case inflections are syncretic with obliques. Erg *-li* is syncretic with Instr(umental) and Acc *-na* also attaches to the goal of ditransitives, in other words, it is syncretic with the Dat(ive).

(3)	1/2pl	pron/pl N/fem.sg N	masc.sg N	
Erg	$\emptyset$	-li	-li	
Abs	$\emptyset$	$\emptyset$	$\emptyset$	
Acc	-na	-na	$\emptyset$	<i>Diyari</i> (Pama-Nyungan)

Indo-Aryan languages have also been described as tripartite (Comrie 2013) on the basis of example sets like Punjabi (4). If we identify Differential Object Marking (DOM) with Acc, Punjabi in the perfect differentiates Abs ( $\emptyset$ ) in (4a) from Erg (*-ne*) and Acc/DOM (*-nu*) in (4b). In this language as well, Acc/DOM *-nu* also externalizes goal Dat. *-ne* is by now only etimologically connected to Dat (Butt & Ahmed 2011); but *-ne* is still identical to Dat/DOM in Gujarati (Patel & Grosz 2014).

- (4) a. *muṅḍa depea* b. *o-ne mi-nnu/ti-nnu dekkhea*  
 boy-ABS.MSG fall.PERF-MSG s/he-ERG me-DOM/you-DOM see.PERF-MSG  
 'the boy has fallen' 'S/he saw me/you' *Punjabi*

When Differential Subject Marking (DSM)/DOM is considered, Punjabi perfect sentences display a case alignment almost point by point identical to that of Diyari, as in (5) – all that differs is the definition of the nominal classes. Nevertheless, 1/2P is always at one end, common N at another; *pace* Baker (2015) and in substantial agreement with Silverstein (1976), we take it that the same overall D-hierarchy (Kiparsky 2008) is involved (also Müller & Thomas 2017).

(5)	1/2sg	def/anim N	indef/inanim N	
Erg	$\emptyset$	-ne	-ne	
Abs	$\emptyset$	$\emptyset$	$\emptyset$	
Acc	-nu	-nu	$\emptyset$	<i>Punjabi</i>

As for the other tripartite languages reviewed by Baker (2015), in Nez Percé, Erg is largely syncretic with Gen(itive), while Acc (actually DOM) also externalizes goal Dat. In Semelai, the Erg proclitic (restricted to definites, hence DSM) also expresses cause/reason and benefactive; Acc is syncretic with the possessor inflection (Kruspe 2004). Coast Tsimshian has a general oblique relator (Boas's 'connective'), showing up as Erg, goal, instrumental, benefactive, etc. All these obliques

are sensitive to the referential scale (Mulder 1994: 46ff).

**Intermediate conclusion.** By common consent, there are three natural classes of arguments of a verb, namely external argument of a transitive (A), internal argument of a transitive (P) and sole argument of an intransitive (S). In the Agree model in (2) there are exactly two slots that can become visible through Agree. Something must yield – namely one of the three arguments must be attached to the sentential spine by means of the one known alternative to Agree – i.e. by means of a K/P functional head, or variants on it, such as an Appl projection (not discussed here). This exactly predicts overt case paradigms such as (3)-(5). We do not see what compels the morphological asymmetry between Acc and Erg in the dependent case treatment.

**Ergative alignments: Punjabi.** We illustrate the role of oblique in tripartite or more generally ergative alignments with one specific case study, namely Punjabi. Besides the Person-ergativity split in (5), Punjabi has an Aspect-ergativity split. In the progressive, S and A are in the Abs  $\emptyset$  form in (6a), as is inanimate/indefinite P in (6b). Animate/definite Ps are in the DOM *-nu* case as in (6c).

- (6) a.      *muṅḍa*      *deg-d-a*                      b.      *muṅḍa*      *dərvaddza*      *khol-d-a*  
          boy.ABS.MSG   fall-PROGR-MSG              boy.ABS.MSG   door.ABS.MSG   open-PROGR-MSG  
          ‘a/the boy is falling’                              ‘a/the boy is opening a/the door’
- c.      *tu:*                      *o-nu*                      *dekh-d-a*  
          you.ABS              he-DOM                      see-PROGR-MSG  
          ‘You are seeing him’

*Punjabi*

The pattern in (6b) is explained under Agree, with A and P targeting I and *v* respectively as in (7). Though this has not been pointed out by the literature, as far as we can tell,  $\emptyset$  Abs/Nom case is exactly what we expect under the Agree theory. Visibility is provided by  $\phi$ -features checking and literally all that is overtly realized in (6) is the MSG *-a* inflection.

- (7) [IP [VoiceP *muṅḍa* [vP *dərvaddza v*] I] = (6b)

All other cases in Punjabi are obliques and involve embedding of the DP arguments under a P/K layer. Consider first DOM. According to Torrego (2010), Pineda (2016), Manzini & Franco (2016), Romance DOM, introduced by the *a* preposition, looks like a dative because it is one; roughly speaking, ‘call x’ is ‘make/give a call to x’. DOM and goal Dat differ in their behavior (e.g. wrt passivization) because goal Dats are instances of inherent case (selected by a verb), DOMs are instances of structural case (determined by the referential ranking of the argument). Punjabi *-nu* (Hindi *-ko* according to Torrego 1998) reflects the same state of affairs, as in (8).

- (8) [IP [VoiceP *tu* [vP [PP *o-nu*] *v*] I] = (6c)

As for Erg, we are going to propose an analysis parallel to that of DOM. Following Laka (2005), ergative languages, or the relevant TMA forms of split ergativity languages (notably the perfect), have an impoverished syntax. Following Nash (2017), as well as classical ideas about the similarity of ergatives and passives, we take the impoverished layer to be Voice. This forces A (which cannot be attached under Voice) to surface as an oblique (under some oblique P/K), as in (9).

- (9) [vP [PP *o-ne*] [v' *ti-nnu v*]] = (4b)

**Conclusions.** In the Agree model, there is no way of treating Erg as paralleling Acc; not only the model in (2) allows for only two arguments to be lodged, but the only way is the Acc way. Therefore in order to host Erg, obliquization must be deployed. This is in keeping with what we know of Erg morphology cross-linguistically. In the sample of languages in Palancar (2002), Erg is most often lexicalized as an Instr(umental) (44/109 languages), a causer (22/109) or a genitive (11/109). Therefore the two most frequently observed realizations of Erg are Instr and Gen(itive). Instr embeds A as an agent/causer; Gen introduces it as a possessor of a state/event (Benveniste 1966 on Iranian, Johns 1992 on Inuktikut). In a research performed on the 13/109 languages Palancar lists as displaying asyncretic Erg, we found that they still shows Erg occurring as an oblique, given the wide range of contexts in which these morphemes encode non-argumental participants. In short, while the model in (2) imposes restrictions that *prima facie* run counter widely attested typological patterns, it is in fact supported by typological data – and specifically by the shape of overtly attested case systems opposing direct cases (Nom/Abs, Acc) to obliques.