On Inherent and Dependent Theories of Ergative Case^{*}

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** DRAFT v.10 February 2015 **

Abstract: This chapter compares the view that ergative case is an inherent case assigned by v to an NP that it theta-marks (the ICT) to the view that ergative case is a dependent case assigned to a higher NP when there is a lower NP in the same local domain (the DCT). First we present instances in which a nonagent receives ergative case when there is another NP nearby, in applicative constructions in Shipibo, Kalaallisut (West Greenlandic), and Chukchi. Conversely, we present instances in which an agent fails to receive ergative, either because the second NP has been rendered invisible, or because the clause is subsumed within a larger case domain (ECM, causatives). Both data sets support the DCT over the ICT. Finally, we argue that no known language displays a straightforwardly active case pattern—a fact that can be explained by the DCT but not the ICT.

Keywords: ergative case, inherent case, dependent case, ergative alignment, active alignment, unaccusatives, unergatives, applicatives

^{*} For discussion of the material presented here we thank Jessica Coon, Laura Kalin, Julie Legate, Omer Preminger, Koji Shimamura, and Susi Wurmbrand, as well as audiences and seminar participants at CUNY, MIT, UConn, McGill, and Rutgers University.

X.1 Introduction

The phenomenon of ergative case, in which a specially marked case is found only on the subject of a transitive clause (see (1)) has long posed a special challenge for the 'Case Theory' of GB and its descendants.¹

a. Maria-nin-ra ochiti noko-ke. (Shipibo, Baker 2014: 342)
 Maria-ERG-PRT dog find-PRF
 'Maria found the dog.'

b. Maria-ra ka-ke.
Maria-PRT go-PRF
'Maria went.'

This is partly because in this theoretical tradition the structural configurations posited as being relevant for the assignment of structural case are the same as the structural configurations that characterize grammatical functions. For example, nominative case is assigned to the subject of a

¹ We use the following abbreviations in glosses: ABL ablative; ABS absolutive; APASS antipassive; APPL applicative; AUX auxiliary; CAUS causative; DAT dative; ERG ergative; FUT future; GEN genitive; IMPF imperfective; INDIC indicative; ING gerund(-like); INSTR instrumental; LOC locative; O⁺ objective/patientive case marking (Pomo); PL plural; PRES present; PRF perfective; PRT (evidential) particle; SM singular masculine; VAL valence; VOL volitionality; 1SG>3PL indicates an unsegmented agreement morpheme for 1SG subject and 3PL object. Source abbreviation: PV = Valenzuela (2003).

finite clause, interpreted as either a particular position (Spec,IP) or a configurational relation with a functional head (governed by Tense). The problem, then, is that ergative and absolutive cases simply do not align with the grammatical functions of subject and object. Nevertheless, many theories of ergativity that are broadly consistent with a GB-style Case Theory have been offered. The most prominent such approach in recent years is one that treats ergative case as an inherent case. We call this the IC theory (ICT). This approach maintains a conservative version of Case Theory, but restricts its scope: the subject of a transitive clause in an ergative language receives case in a manner fundamentally different from either the subject or object in a nominative-accusative language.

An alternative approach to ergative alignment, initiated by Marantz (1991) and developed extensively in Baker (2015), among others, is the *dependent case* theory (DCT). The syntactic configuration that matters for the DCT is not the absolute position of an NP or its relationship to a functional head, but rather its position relative to other NPs within a particular syntactic domain: if there is only a single NP in the domain (e.g., an intransitive clause like (1b)), then the NP bears unmarked case (NOM/ABS); if there are two NPs, then at least one of the NPs may bear a dependent case—so called because its appearance on one NP depends on the presence of another NP in the same domain. On this view, NOM-ACC and ERG-ABS/NOM systems are distinguished by a simple parameter: if the lower of two NPs in a domain is marked, then the dependent case is named accusative; if the higher is marked, as in (1a), it is named ergative. Languages may choose to mark one or the other (or both or neither; yielding further alignment types). For concreteness, we may express the DCT view of ergative as follows (see Baker 2015 for refinements).

- (2) a. If NP₁ c-commands NP₂ and both are contained in the same domain (say, clause), then value the case feature of NP₁ as ergative.
 - b. Otherwise NP is nominative/absolutive.

In this chapter, we put these two approaches to ergative case side by side, comparing some of their predictions and assessing them empirically.² In doing this, we review some of the arguments that have been given for treating ergative as inherent case. We show that these arguments fail to generalize, and indeed provide evidence that ergative in some languages is not an inherent case; rather, it is best characterized under the dependent case viewpoint (at least for many canonical ergative languages). On the DCT side, (2) will already do as a starting point for comparison. There is, however, more to say about the roots of the ICT, so we begin by reviewing the defining characteristics of inherent case.

X.2 Inherent case

X.2.1 The roots of inherent case

It is well-known that in languages with even moderately rich systems of case morphology, there seems to be a rough division between structural cases, which are determined by the surface-syntactic context that an NP finds itself in, and inherent cases, which are more restricted, linked

 $^{^{2}}$ There is, of course, a third major theoretical contender: the view that case is assigned to an NP by a functional head under a relationship of Agree. However, that sort of theory is known to be particularly hard to apply to ergative case (see, for example, Baker 2015: ch. 2), so we do not consider it here.

either to particular semantic functions (theta-roles) or assigned as a quirky lexical property of particular heads. Structural case is typically blind to thematic roles: a surface subject bears nominative, regardless of its exact theta-role, and an object bears accusative. The ECM/Raising-to-Object configuration (*I believe him to be my friend*) provides a canonical example of structural case: the subject of the non-finite complement of a verb like 'believe' may bear no thematic relation to the matrix predicate, only a structural one, yet because of that structural relation, the NP has accusative case. Conversely, passive and unaccusative clauses show that the thematic object (patient) of a verb can bear either nominative or accusative case, depending on the larger structure that contains it.

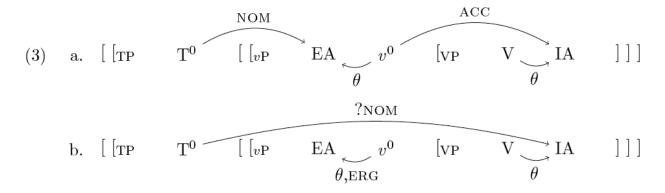
Inherent case, by contrast, is tied to theta-roles and/or to specific predicates. Verbs meaning 'help' in many languages assign dative to their object, rather than accusative. As theta-roles are a property of an object's base position, it is this base position, rather than any subsequent post-movement configuration, that matters. As a result, inherent case NPs typically do not undergo case-alternations. Thus in a language like Icelandic, the internal argument of 'help' is dative not only in a simple active sentence, but also in the corresponding passive, in a passive under an ECM predicate like 'believe', and in a passive under the passive of an ECM predicate (see Andrews 1990). Inherent case comes to this argument from the verb along with its thematic role.³ Since, in the normal instance, a given NP bears a unique theta-role, unchanged

³ This holds at least in the canonical A-movement environments. Inherent dative case is apparently not preserved in s-passives/unaccusatives, and 'get'-passives (Maling & Zaenen 1984). It is debated whether these constructions involve simple NP-movement, or a more complex structure with a binding dependency between the nominative NP and the theta-position. See Shimamura (2014a) and Wood (2014) for contrasting views.

throughout the derivation, inherent case cues this 'base' position of the NP, and remains constant. Structural cases, by contrast, appear to alternate among closely related derivations, such as active and passive, where the theta role of an NP remains constant but its surface grammatical relation (highest A-position) varies.

X.2.2 Ergative as an inherent case.

Against this background, a prominent line of reasoning within the recent Chomskian tradition holds that ergative is an instance of inherent case (see Aldridge 2004, 2008, 2012; Anand and Nevins 2006; Coon 2013; Laka 2006b; Legate 2006, 2008, 2012; Mahajan 2012; Massam 2006; Nash 1996 and Woolford 1997, 2006). These authors hold that ergative is assigned by v to the external argument in Spec,vP together with that argument's theta role, much as dative case is assigned to the internal argument of 'help' along with the beneficiary theta-role in Icelandic. The difference between a NOM-ACC alignment and an ERG-ABS alignment under this view can be schematized as in (3).



In the NOM-ACC alignment (3a), v assigns a theta-role to the external argument, but assigns structural accusative case to the internal argument. The external argument receives its case from (finite) T. By contrast, in the ERG-ABS alignment, the EA receives case along with its theta-role from v ((3b)). The IA is left to get case by other means: it may get nominative case from finite T,

either at a distance via Agree or by moving to SpecTP; it may get (covert) accusative case from v (Legate 2008), or it could conceivably be left to get default case, as in the DCT.

Proponents of such a view may point to ostensible differences between ergative subjects and nominative subjects. For example, they may claim (i) that ergative case is associated with a particular thematic role, such as agent, and (ii) that ergative does not alternate with other cases in ECM or raising-type constructions (e.g. Woolford 2006).⁴ Subsumed under point (i) are two ways in which ergative case in certain languages may depart from the canonical ergative pattern of being associated with all and only the subjects of transitive verbs. On the one hand, there are languages, such as Georgian, Basque and Hindi, in which the subjects of (some) agentive intransitive verbs (unergatives) bear ergative case. Examples of this sort suggest that ergative case is tied to the external (agent, actor) theta-role, not to transitivity as such. On the other hand, in some ergative languages, there are subjects of two-argument verbs that fail to receive ergative case. This latter point can be formulated as the Ergative Case Generalization (ECG, cf. Marantz 1991: 236):

(4) Even when ergative case may go on the subject of an intransitive clause, ergative case will not appear on a derived subject.

⁴ Ergative and nominative subjects may also differ with respect to controlling agreement on the verb, or in their scope properties (Anand and Nevins 2006); these differences are not systematically correlated with ergative versus nominative alignment however. On the interaction of case and agreement, see Baker (2008, 2015) and Bobaljik (2008).

Legate (2012: 183) emphasizes this generalization, noting that: "If the Ergative Case Generalization holds, it constitutes a powerful argument for the inherent analysis of ergative case – since this analysis predicts the generalization to hold. Ergative is assigned by v to thematic subjects, and thus should not appear on derived subjects." If derived subjects move from a thetaposition to a non-thematic position, then they will be ineligible to receive a theta-related case in their surface position.

We can now put the ICT and the DCT side by side. According to the ICT, the main factor in ergative case assignment should be what head a given NP gets its thematic role from. It should not matter (much) how many other NPs are in the clause. As a result, one would expect ergative case assignment to be relatively stable, little affected by properties of the larger structure, just like dative case on the complement of 'help' in Icelandic. In contrast, according to the DCT, the main factor in ergative case assignment should be how many NPs are in the same local domain. It should not matter (much) what the thematic roles of those NPs are. As a corollary to this, we might expect ergative case assignment to be relatively fluid, with the same NP getting different cases in different clauses depending on its context.

Indeed, there are some constructions in some languages that look promising for the ICT, and have helped get it fixed in the beliefs of many in the field, as mentioned above. However, we want to show that, looking more broadly at other languages, there is much evidence of the sort that supports the DCT and looks problematic for the ICT. Indeed, our assessment is that the bulk of the data for the ergative languages we know about is on the side of the DCT.

We look first with some care at cases in which nonagents (non-external arguments) get ergative case despite having the wrong theta-role, as long as there is another NP around, contrary to the ECG. Then we look more briefly at situations in which agents (theta-marked by v) fail to

get ergative case even though they have the right theta-role, because there is no other suitable NP in the vicinity. Finally, we take a broader typological view, pointing out that the ICT really predicts an *active* case pattern, rather than an ergative case pattern, but no paradigm instance of a dependent-marking language with an active alignment pattern is known to typology. This gap is however expected on the DCT.

X.3 Ergative case on internal arguments

Our most complete instance of ergative case on internal arguments comes from Shipibo, a uniformly ergative language of the Panoan family, spoken in Eastern Peru; see Valenzuela (2003) (PV) for a thorough description; our synopsis here follows Baker (2014). In this language, it is particularly clear that derived, nonagentive subjects can receive ergative case because Shipibo happens to have productive, morphologically overt applicative constructions. Legate (2012:183) points out explicitly why such applicative constructions are significant for theories of ergative case. She writes that:

An additional way around the confound would be a two-argument verb in which both arguments are internal, for example, the passive of a double object verb, *or the applicative of an unaccusative verb*. If the [ICT] holds, the subject of such verbs would not bear ergative case, despite the presence of two DP arguments.

We accept this prediction, and the reasoning behind it, but observe that Shipibo shows it to be false, such that the ICT fails whereas the DCT succeeds for this language.

In Shipibo, all dyadic verbs with agentive subjects get ergative case (-n, -nin, -kan) (see (1a)), but no intransitive subjects do in simple clauses. This is shown in (5a) for unergatives and in (5b) for unaccusatives.⁵

(5) a. Joni-bo-ra teet-ai; Rosa-ra bewa-ke. (see also PV: 336-337)
person-PL-PRT work-IMPF Rosa-PRT sing-PRF
'The people are working.' 'Rosa sang.'

b. Kokoti-ra joshin-ke; Maria-ra mawa-ke.
fruit-PRT ripen-PRF Maria-PRT die-PRF
'The fruit ripened.' 'Maria died.'

Shipibo also has three applicative affixes (*-xon*, *-anan*, *-kin*; see Valenzuela 2003: ch.17); we focus on *-xon*, since it makes all the essential points. This affix can attach productively to transitive verbs and unergative verbs, adding an argument that is interpreted as affected by the event—either a benefactive or a malefactive. This argument is structurally lower than the agent, but higher than the theme. Notice that the unergative subject in (6b) with the applicative bears ergative case, in contrast to (5a).

(6) a. Jose-kan-ra Rosa atapa rete-xon-ke. (also PV: 695-699) Jose-ERG-PRT Rosa hen kill-APPL-PRF

⁵ For discussion of four possible exceptions to this ('row', 'pole', 'breathe', and an alternative word for 'die' (*rebes*-), mentioned by Valenzeula (2003), see Baker (2014: 350-352).

'Jose killed a hen for Rosa.'

b. Papashoko-n-ra Rosa bewa-xon-ai. (also PV: 689-690)
grandfather-ERG-PRT Rosa sing-APPL-IMPF
'The grandfather is singing for Rosa.'

This is a high applicative in the sense of Pylkkänen (2008), and it fits well into the standard theory in which an applicative head theta-marks the applied object, takes a VP potentially including the theme as its complement, and itself serves as the complement of the agent-assigning head v.

Now crucially, *-xon* can also attach to unaccusative verbs. Two examples are given in (7). Other attested examples have glosses like 'spoil on', 'get sick on', 'grow up for', 'turn sour (ferment) for', and 'sink on' (also PV:691, 694).

- (7) a. Nokon shino-n-ra e-a mawa-xon-ke. (*shino-ra)
 my.GEN monkey-ERG-PRT me-ABS die-APPL-PRF monkey.ABS-PRT
 'My monkey died on me.'
 - b. Bimi-n-ra Rosa joshin-xon-ke. (*bimi-ra)
 fruit-ERG-PRT Rosa ripen-APPL-PRF (*fruit-PRT)
 'The fruit ripened for Rosa.'

Note that the examples in (7) (and all similar examples) have theme arguments bearing ergative case; we do not, for example, get a double absolutive configuration in this construction. This goes against Legate's (2012) prediction, derived from the ICT. However, the DCT can account for this, since the examples in (7) have a second NP, not present in (5b). Hence it is not surprising that the theme argument is ergative in (7) but not (5b). More generally, comparing (5a) with (6b) and (5b) with (7) shows that what theta role an NP has (agent or theme), or what head it gets its theta role from (v or V), does not determine whether it is ergative or not, whereas how many NPs are in the clause (one or two) clearly does.⁶ Thus, we see that the ECG is spurious, although clear violations are seen only when various factors converge (see discussion of (13) below)

Shipibo is special in that it has productive morphological applicative constructions, and we have independent evidence whether a verb is unaccusative or unergative (see Baker 2014: 368-371). Other ergative languages may not present quite as clear a picture, either because we know less about them, or because they lack productive applicatives of unaccusatives. Nevertheless, we do not think that Shipibo is unique in any important sense; rather there is evidence from other ergative languages that, although more fragmentary, seems to go in the same direction. For example, Kalaallisut (West Greenlandic) is another ergative language that has a morphological applicative (underlyingly *–uti-*, Fortescue 1984: 89-90). When this affix is added to an intransitive verb, the result is a transitive clause with ergative case on the argument that

⁶ See Baker (2014) for further details and refinements, including an explanation for why applicatives of unaccusatives are different from dyadic verbs with experiencer subjects, which do take two absolutive arguments and no ergative argument, in apparent support of the ECG (see also Baker (this volume) on analogous predicates in Burushaski).

bears absolutive in the intransitive version. The affix is not fully regular and productive, but among the predicates that *–uti–* may attach to are non-agentive predicates of emotion:

- (8) a. kamap-p-uqangry-INDIC-3SG.ABS'He/she is angry.'
 - b. Arna-p angut kama-ap-p-aa
 woman-ERG man.ABS be.angry-APPL-INDIC-3SG>3SG
 'The woman is angry with the man.' (Michael Fortescue, p.c.)

Note that in English, roots like 'anger' undergo a kind of transitivity alternation (*Chris is angry* vs. *Pat angered Chris*), suggesting that the experiencer can count as an internal argument. The corresponding experiencer is nevertheless marked for ergative case in the applicative version in (8b). Therefore, if predicates like 'be angry' are confirmed to be unaccusative in Kalaallisut (as claimed also by Spreng 2012), then (8b) replicates (7) from Shipibo—additional evidence for the DCT over the ICT.

Chukchi is an ergative language that does not, apparently, have a productive morphological applicative that combines with unaccusatives, but it does have inchoative and locative alternations that seem relevant, according to Nedjalkov's (1976) survey of Chukchi's many diathesis alternations. First, Chukchi has a morphologically unmarked causative-inchoative alternation, which applies to verbs like 'fill', among others:

- (9) a. ətləg-e jər?en-nin ə?tv?et miml-e
 father-ERG fill-3SG>3.SG boat.ABS water-INSTR
 'Father filled the boat with water.'
 - b. ə?tv?et jər?et-g?i miml-e
 boat.ABS fill-3SG water-INSTR
 'The boat filled with water.'

Comparison with (9a) strongly suggests that both 'boat' and 'water' are internal arguments of 'fill' in (9b), and thus that 'fill' with these two arguments counts as an unaccusative verb with a derived subject. Further evidence for this is the fact that either 'water' or 'boat' can incorporate into the verb 'fill' (Nedjalkov 1976: 189, 208; cf. Baker 1988). Chukchi also happens to have conative and locative-type alternations, where a given argument can be projected as either a PP (realized as semantic case) or as a bare NP (Nedjalkov 1976: 193, 206, etc.). In particular, the locatum argument that is projected as an instrumental PP in (9a,b) can alternatively be projected as an NP. When this happens with the agentless version of 'fill', it has two NPs as internal arguments—and one of them (the locatum argument) is crucially marked with ergative case:

(10) ə?tv?et jər?en-nin miml-e

boat.ABS fill-3SG>3.SG water-ERG

'Water filled the boat.'

(Nedjalkov 1976: 195, 206)

Note that instrumental case and ergative are syncretic on inanimate NPs in Chukchi, but they are distinguished by agreement: the verb agrees with an ergative NP, but not an instrumental one. In particular, 'fill' agrees with 'water' in (10) but not in (9b), confirming that 'water' is ergative in (10), despite it being a theme-type internal argument. (10) is thus another probable counterexample to the ICT (as noted in Bobaljik and Branigan 2006). In contrast, the DCT can explain why a theme subject gets ergative case if and only if there is another internal NP (not a PP) in the clause. 'Cover' is another verb that exhibits this diathesis pattern (Nedjalkov 1976: 195).

Yup'ik is yet another ergative language that seems relevant. It has a type of malefactive applicative in which the affix -i- is added to the verb along with an additional NP that expresses someone adversely affected by the event, as seen in (11b). Note that in this example the agent argument of 'eat' is ergative and the malefactee is absolutive, showing that the malefactee is a lower, internal argument.

(11)	a.	arnar	neqa-mek	ner'-u	ıq	
		woman.ABS	fish-ABL	eat-IN	NDIC.3SG	
		'The woman ate a fish.'		(Mithun 2005: 565)		
	b.	qimugte-m	ner-i-a		angun	akuta-mek
		dog-ERG	eat-APPL-3SG	>3SG	man.ABS	mixture-ABL

'The dog ate some 'akutaq' on the man (ate the man's akutaq).'(Mithun 2000: 97)

Now (12a) is a typical unaccusative clause, and (12b) is a related malefactive construction derived from the same verb root. Crucially the malefactive argument bears ergative case in (12b).

- (12) a. Maklagaq kit'e-llru-uq
 bearded.seal.ABS sink-PAST-INDIC.3SG
 'The bearded seal sank.'
 - b. Ing-um maklagaq kic-i-lq-aa
 that.one-ERG bearded.seal.ABS sink-APPL-PAST-INDIC.3SG>3SG
 'The bearded seal sank on that guy.' (Yup'ik; Woodbury 1981: 332-3)

We clearly cannot say that 'that guy' in (12b) is an external argument, or that it receives ergative case along with its malefactee theta-role by (a generalization of) the ICT, because 'man' gets the same theta-role from the same head (-i) in (11b) but does not have the same case. The DCT, however, can work, because there is another NP in (12b) (but not in (11b)) which 'that guy' c-commands, namely the theme 'bearded seal'. Hence the dependent-case rule in (2) can apply correctly.

While (12) in Yup'ik is similar to (7) in Shipibo in that ergative case is assigned in the applicative of an unaccusative, the languages differ in which of the two internal arguments (theme or affectee) moves to Spec,TP and serves as the subject of the clause. Baker (2014) argues that applied arguments in Shipibo are NPs embedded in a null-headed PP; this PP shell prevents the applied argument from moving to Spec,TP. Therefore, the theme argument must move, and it ends up c-commanding the applied argument and getting ergative case.⁷

⁷ Crucially the null P in this construction is not a phase head. That is why its complement is still visible to trigger ergative case on the theme after the theme moves to Spec,TP, whereas canonical PPs do not trigger ergative on the subject. Even overt Ps occasionally fail to be phase heads; see for example Baker and Vinokurova (2010: 623) on three such Ps in Sakha.

Evidently, in the Yup'ik example in (12) (and similar examples in distantly related Kalallisut, Fortescue 1984: 269) the applied argument is truly an NP, so it can and does move to Spec,TP as the closer NP argument and gets ergative. Despite this difference, both languages provide instances of derived subjects receiving ergative case, contrary to the ECG.

In this section, we have presented a series of examples that plausibly involve derived transitive subjects getting ergative case, which the ICT predicts to be impossible. Note that we are not claiming that applicatives of unaccusatives always yield an ERG-ABS array in ergative languages. The DCT leaves room for arrays other than ERG-ABS, thus permitting the analysis of a broader range of languages. Niuean provides a prominent example of an ergative language in which some applicatives yield an ABS-ABS array; (13) is an example (from Massam 2006: 33, cf. Legate 2012).⁸

⁸ This example is complicated by having a causative prefix in addition to the applicative *aki*, as Massam notes. This might suggest an alternative analysis in which it is a concealed ditransitive with a third, hidden (ergative) argument, hence an ERG ABS ABS array. Legate (2012) also considers ERG-DAT and ABS-DAT arrays in Warlpiri, arguing that the distribution of verbs selecting these frames supports the ECG. She notes, however, that the difference in the arrays may be due to differing properties of the DAT argument in the two verb classes (NP versus PP), an analysis pursued in Baker (2015, this volume).

Niuean also has locative applicative-like transitive clauses formed from intransitive verbs that yield an ERG ABS array. Massam treats these as agentive intransitives, but some ('sleep', 'sit/stay') may actually be unaccusatives, given that they show reduplication for plural number of the NP that is the subject of the intransitive, and the ergative of the derived transitives (Seiter

(13) Ne faka-kofu aki e vaka e tau lauakau. PAST CAUS-cover with ABS canoe ABS PL leaf 'The canoe was covered with leaves.'

Note that this example is thematically similar to (10) from Chukchi, where ergative is assigned. Similar ABS-ABS patterns with nonagentive subjects are also found with reciprocals derived from ditransitive verbs and with a few psych verbs in Shipibo; these contrast with the applicatives of unaccusatives discussed above. Baker (2014, 2015) develops one particular version of the DCT in which two arguments are ABS if three conditions hold: (i) the two arguments both start out inside the vP phase (hence are nonagentive), (ii) their initial c-command relationship is not reversed by NP-movement (as happens in Shipibo (7) but not Yup'ik (12b)), and (iii) ergative case is assigned at the spell out of TP but not VP. If these conditions do not hold, the higher argument will be ergative, even if it is nonagentive. Encouraging for a theory of this kind is the fact that the "location" argument appears to be the subject in Niuean (13) but the 'locatum' argument is the subject in (10) from Chukchi; this suggests that NP-movement does reverse the arguments in Chukchi but not in Niuean. See Baker (this volume) for a review of this proposal and some additional discussion, making connections to variation in ditransitive constructions. We can see, then, some room for variation in how derived subjects are case marked within a DCT, whereas in the ICT the ban on ergative case on derived subjects is expected to be quite rigid.

1980: 64). This process of participant number marking seems to be otherwise limited to internal arguments; no non-derived ergative triggers plural number marking on the verb.

Overall, then, the examples in this section fit with the DCT and go against a core prediction of the ICT. One could of course question whether these subjects are 'derived' in precisely the right sense picked out by the ECG. Since the advent of the VP-internal subject hypothesis, there is a sense in which all subjects are derived. What our examples show, we claim, is that there is no type of theta-role that is totally immune to ergative case: malefactives, locations, locatums, and even themes can all receive ergative case, if they end up as subjects with another NP lower in the same clause. Thus what is relevant cross linguistically for ergative case assignment is transitivity within a local domain, not particular theta-roles. If these configurations are somewhat rare, it is because the lower an NP is on the theta-hierarchy, the more likely it is that, in a transitive context, the other NP will be the one that becomes the subject. If themes, for example, are quite low, then a configuration in which a theme becomes a transitive subject arises only when the higher argument fails to raise to subject position for some special reason, as in Shipibo.

X.4 Absolutive case on external arguments

In section X.3, we argued for the DCT over the ICT approach to ergative case by looking at themes and other internal arguments in noncanonical situations in which there is a second internal NP, showing that in many such situations they receive ergative case. In this section, we look more briefly at the converse situation: agents (external arguments) in 'noncanonical' situations in which an internal argument that would otherwise be there somehow becomes unavailable. According to the ICT, we would not expect this to matter much: the external argument presumably gets the same theta-role from the same head (v) as it does in canonical transitive constructions; therefore it should get the same inherent ergative case from v, all things

being equal. In contrast, the DCT takes the presence of a suitable second argument to be essential to the subject receiving ergative case, so if something happens to that second argument, the subject should receive default absolutive case, by (2). In section X.4.1, we show that again it is the DCT that makes the right prediction. In section X.4.2, we then critically discuss proposals by Woolford and others to patch the ICT by supplementing it with a transitivity condition.

X.4.1 Ergative lost under detransitivization

One relevant thing that can happen to the internal argument of a transitive verb in some ergative languages is that it can incorporate into the verb. This happens productively in Chukchi, for example. (14) gives a prototypical noun incorporation (NI) pair (Polinskaja and Nedjalkov 1987: 240).

- (14) a. ətləg-e mətqəmət (kawkaw-ək) kili-nin
 Father-ERG butter.ABS bread-LOC spread.on-3SG>3SG
 'The father spread the butter (on the bread).'
 - b. ətləg-ən (kawkaw-ək) mətqə-rkele-nen
 Father-ABS bread-LOC butter-spread.on-3SG>3SG
 'The father spread butter (on the bread).'

When the object is not incorporated, the subject is ergative, as expected ((14a)), but when the object is incorporated, the subject is not ergative but absolutive ((14b)). We know of no reason to say that the subjects in these two examples are theta-marked any differently, yet they differ in

case. This is problematic for the ICT, since inherent case is supposed to remain constant when the surrounding syntactic context changes (as dative does in Icelandic). In contrast, this pattern follows from (2), as long as we assume that incorporated objects are inaccessible to the rule of dependent case assignment. This could be either because incorporation happens by compounding in the lexicon, so that there is no object present in the syntax at all, or (as we believe) because the trace of the syntactic movement that creates incorporation is invisible to rules of case and agreement.⁹ The same effect can be seen in Kalaallisut, with the slight complication that some verbal morphemes require NI in Kalaallisut and others forbid it, so one needs to compare different verbs with similar meanings in that language.

A second thing that can happen to an internal argument in some ergative languages is that it can be projected not as an NP but as a PP (with P a phase head). We observed above that Chukchi is rich in these conative/locative-type alternations, and that is relevant here as well. In particular, the location argument which is expressed as a PP in (14b) can alternatively be expressed as a bare NP (compare English: *I smeared butter on the bread* vs. *I smeared the bread with butter*). When the locatum argument is incorporated but the location argument is projected as an NP, then the agent-subject is marked ergative again, as shown in (15).

(15) ətləg-e kawkaw mətqə-rkele-nen
Father-ERG bread butter-spread.on-3SG>3SG
'The father spread the bread with butter.' (Polinskaja and Nedjalkov 1987: 240)

⁹ For example, Baker et al. (2005) argue that the phi-features of the trace of head movement are deleted in Chukchi and some other languages, making it invisible to agreement. This deletion would bleed (2) if we understand 'NP' as 'phrase bearing phi-features'.

It is very possible that (15) means something slightly different from (14b), with 'bread' counting as a location in (14) but as a theme in (15). But it is very doubtful that the subject gets different theta-roles in (14) and (15): it looks like a canonical agent in both. Comparing these three examples, then, it seems evident that the theta-role of the subject does not determine whether it is ergative or not, but whether there is another NP in the same domain as the subject does. In (15), 'bread' is another NP in the same domain as the subject, but in (14b) it is not, given that PPs are usually separate domains (phases), the internal constituents of which are invisible to the outside world for purposes of case and agreement (see Baker this volume, but see note 7 for some exceptions).

A third thing that can happen to a theme object in some ergative languages is that it can be removed as an object by antipassive. Descriptively speaking, antipassive is a morphological process that removes the object of a transitive verb from the core syntax, leaving it either unspecified or expressed as an oblique/PP. Chukchi illustrates again: (16a) is a normal transitive; (16b) is the corresponding antipassive (Nedjalkov 1976: 201).

- (16) a. ətləg-e qərir-ə-rkən-en ekək.
 father-ERG seek-PRES-3SG>3SG son.ABS
 'The father is seeking the son.'
 - b. ətləg-ən ine-lqərir-ə-rkən (akka-gtə).
 father-ABS APASS-seek-PRES.3sS son-DAT
 'The father is searching (for the son).'

Again, the subject is ergative in (16a) and absolutive in (16b), even though there is no detectable change in its theta-role – a problem for the ICT. However, whether a theme argument is syntactically present in the clause, and if so whether it is expressed as an NP or a PP, clearly does affect the case of the subject, exactly as expected under the DCT (although we do not commit to any particular view of the antipassive here). Similar facts can be given for Kalaallisut, and for various Australian languages.

X.4.2 Against supplementing the ICT with a transitivity condition

Unlike the facts surrounding the Ergative Case Generalization, the facts outlined in this section are well-known and not in dispute. Prima facie, they seem (to us) to provide a strong argument against the ICT, although the issue is oddly under-discussed. Where the issue is addressed, proponents of the ICT contend that the thematic condition on ergative case assignment needs to be supplemented (in some languages) with a transitivity condition (Woolford 2006:119-120; Massam 2006:32; Legate 2012: 182). However the exact nature of this transitivity condition and its theoretical implications are usually left unexplored (It is not obvious, for example, how v can 'see' whether there is an NP inside VP, and if so why that should affect its relationship with its specifier, as pointed out to us by Laura Kalin.¹⁰). Canonical instances of inherent case

¹⁰ Omer Preminger suggests one possible way of working this out. He points out that a v that assigns accusative case to an NP in its domain under Agree could be considered a distinct lexical item from a v that does not. Given this, the agent-subject in a detransitivized structure (or unergative structure) is theta-marked by a different v from one in a transitive structure, even though the thematic role is the same. This could account for their different cases, if the first v is not an assigner of inherent ergative case whereas the second v is.

assignment, such as dative in Icelandic, are patently not subject to a transitivity condition, since dative case in Icelandic is possible on the subjects of monadic predicates.

Only Woolford (2006) makes a real effort to give independent motivation for a transitivity condition on inherent case, by arguing that a similar condition holds for dative case in Japanese and Basque. Much could be said about her particular examples. For example, in Japanese the putative transitivity condition is far from general, holding if at all in matrix clauses only (Shibatani 1977). Moreover, for languages in which it is true that dative arguments never occur as the sole NP in a clause, there are at least two ways in which this might be explained without recourse to a stipulated (and as yet unformulated) transitivity condition on inherent case assignment. First, it could well be that in some languages dative case is not an inherent case at all, but rather another instance of dependent case—specifically dependent case assigned to the higher of two NPs generated inside the same VP (see Baker 2015; Baker and Vinokurova 2010 and Bobaljik and Branigan 2006 for analyses of this type). Second, there could be languages in

This approach in essence builds a version of the DCT (ergative is dependent on accusative in the same domain) into the lexical entries for *v* heads. It strikes us as providing no insight into why this condition might hold. For example, the same machinery would allow one to stipulate that only the *v* that does not assign accusative assigns inherent ergative to the NP it theta-marks. This would yield a pattern where only unergative subjects are ergative, while transitive (and unaccusative) subjects are nominative. This pattern cannot be readily described on the DCT approach, and as far as we know it never occurs. Moreover, even if workable, the theoretical possibility sketched here addresses only the narrow issue of how a transitivity condition on ergative might be formulated within an ICT; it does not address the other evidence we have collected in favor of treating ergative as a structural (dependent) case.

which dative case is inherent, but in which inherent case nominals may not function as true subjects. Icelandic and German famously contrast in whether datives may (Icelandic) or may not (German) serve as grammatical subjects (Zaenen et al. 1985). Rezac (2008) (see also Davison 2004) argues that the Basque datives pattern with German rather than Icelandic with regard to subjecthood diagnostics. If there is a requirement of a syntactic (EPP) or morphological (possibly default agreement) subject in every clause, then clauses with dative arguments will always appear to have an additional, possibly null, argument. This effect arises without a stipulated transitivity condition on inherent case. Importantly, since ergative NPs cross-linguistically satisfy subjecthood tests, this reasoning about Basque datives cannot be extended to ergative. Thus, we conclude that there is no independent motivation for putting a transitivity restriction on the assignment of ergative case, as IC theorists need to do.

Indeed, there are syntactic configurations in which the arguments that receive ergative in simple transitive clauses undergo case alternations even though there is no loss of transitivity. Rezac et al. (2014) present Basque perception verbs as part of an extended argument against the ICT. As in many languages, perception verbs may take a full CP complement ((17a)), or a reduced complement ((17b)):

(17) a. Katu-ek sagu-ak harrapa-tu dituzte-la ikusi dut.
 cat-PL.ERG mouse-PL.ABS catch AUX-that see AUX.1SG
 'I saw that the cats caught the mice.'

b. Katu-ak sagu-ak harrapa-tzen ikusi ditut.
cat-PL.ABS mouse-PL.ABS catch-ING seen AUX.1SG>3PL
'I saw the cats catch mice.' (Rezac et.al. 2014:1280)

The configuration (17b) is a species of ECM environment. Rezac et al. show carefully that the NP *katu-ak* 'cats' is thematically the external argument of the embedded clause, which is transitive, but it behaves syntactically as the object of the higher clause, and therefore bears absolutive case. On the DCT, (17b) is unremarkable; 'cats' does not get ergative case because it is in a case domain with the matrix subject (presumably because CP is missing, contrast (17a)) and it is not the highest NP in the domain.¹¹ Yet on the ICT, the alternation is surprising: inherent case is supposed to be retained on arguments in ECM environments, as inherent dative case is in Icelandic, a model for the ICT. Stipulating that inherent ergative is only realized in a transitive clause—even in the manner of fn.10—does not avoid the problem in (17b), since both the matrix and embedded clauses are fully transitive.

Causative constructions make a similar point. As in many languages, the causee (the embedded subject) in Basque is marked absolutive if the embedded predicate is intransitive but dative if the embedded predicate is transitive, as in (18).

¹¹ Omer Preminger very rightly asks why, even given that (17b) is a single case domain, the lower subject 'cats' does not get ergative simply by virtue of c-commanding the lower object 'mice'. For us, the ERG-ABS-ABS pattern in (17b) is exactly parallel to the ERG-ABS-ABS pattern found with simple ditransitive verbs in ergative languages ((almost) never ERG-ERG-ABS). However, there is indeed more to say about why this is so: Baker (2014, 2015) attributes it to a cyclicity effect related to vP also being a phase; see Baker (this volume) for a reprise. Jon-ek Xabier-ri Mikel hil-arazi dio
 Jon-ERG Xabier-DAT Mikel.ABS kill-CAUS AUX.3SG>3SG.3SG.DAT
 'John made Xavier kill Michael.' (DeRijk 2008:378; our gloss)

Here again, there is a case alternation (between ergative and dative) such that an agent argument gets different cases in different syntactic environments, contrary to the view that ergative case is an inherent case. Moreover, since 'kill' still has its theme argument in (18), no appeal to a transitivity restriction will explain why its subject 'Xavier' is not ergative in (18). Although ECM constructions like (17) may be rare across languages, morphological causatives are fairly common; the same argument can be constructed in Inuit languages, for example.¹²

In sum, there is abundant evidence that the appearance of ergative case is tied to surface transitivity. On the ICT, this requires a special condition on the assignment of ergative case. We suggest that once the transitivity condition is brought fully into the light and elaborated properly, as it is in a DCT, there is no further need for a thematic condition that the ergative must be an agent—at least for the pure ergative languages we are focusing on here, like Shipibo, Chukchi,

¹² Julie Legate (personal communication) reminds us that the causee of a causative construction might be projected as an internal argument of the causative verb in a control-like structure in some languages, rather than as the external argument of the lower verb in an ECM-like structure. When that happens, it is not expected to get ergative case even within an ICT. However, one would still expect the transitive causee to be invariantly ergative in some subset of ergative languages with a morphological causative (namely those with an ECM-style causative), whereas we know of no ergative language with this pattern. and Kalaallisut. Moreover, there is evidence from embedded environments that transitivity alone is insufficient as a condition on ergative case, even for canonical agents, whereas the DCT seems to draw the right distinctions.

X.5 Typological considerations: on the rarity/absence of active case systems

X.5.1 Preliminaries

In fact, the challenges for the ICT mentioned in the previous section are arguably even more general. Following the ICT's leading idea in its purest form naturally leads us to expect ergative case not only on the subjects of detransitivized transitive verbs, but also on the subjects of simple unergative verbs, given that they also receive the agent theta-role from v on standard generative accounts. In other words, the widespread view that v assigns inherent case to the agent NP that it theta-marks most naturally generates an active case pattern rather than a true ergative case pattern—a pattern in which one case appears on the subjects of transitive verbs and unergative verbs, and a different case appears on the objects of transitive verbs and the subjects of unaccusative verbs. This is not the situation in languages like Shipibo, Inuit, and Chukchi, for which the ICT must invoke something like Woolford's (2006) transitivity condition. But if the ICT is the right leading idea, then we might expect to see it working in purer form in some other languages, unalloyed with a transitivity condition. If this is not so—if there are no genuinely active case marking languages-we may begin to doubt not only whether the ICT should be the primary theory of ergative case, but whether it is even allowed by universal grammar. With this in mind, we argue that current typological knowledge does not offer any promising paradigm case of a dependent-marking language with a true active case system. Space limitations (and

some knowledge limitations) prevent us from discussing any putatively active language in depth, but we outline what we see as the major issues, as a spur to further work.

Typological sources say that the active-inactive/stative alignment pattern (also called a split-S or fluid-S pattern) is attested in languages of the world: see, for example, Comrie (2005), Dixon (1994: 70-83), Merlan (1985) and Mithun (1991). But our certainty that this is so is marred by the fact that these discussions generally conflate data from morphological case marking on nouns with data from agreement patterns on verbs. Mithun (1991) is a typical example: of the five active languages that she discusses at some length, four are head-marking languages (Lakhota, Guaraní, Caddo, Mohawk), and only one (Central Pomo) has overt case marking on NPs. Dixon's discussion is similar, and he notes in passing (1994:76) that "...for most languages of this type morphological marking is achieved by cross-referencing on the verb"; see also Merlan (1985: 353). The only languages Dixon mentions as having active case marking on NPs other than (Eastern) Pomo are two Caucasian languages: Laz and Tsova-Tush.

Data from the *World Atlas of Language Structures* confirms that there is a strong interaction between Nichols's (1986) head-marking/dependent-marking distinction and the distinction between active languages and true ergative languages. Siewierska (2005) lists 26 out of 380 languages as having an active agreement pattern, a respectable 6.8%. Indeed, in agreement-oriented languages, an active system is slightly more common than a straight ergative system (19/380, 5%). In contrast, Comrie (2005) lists only 4 out of 190 dependent marking languages as having an active case pattern (2.1%), and in this language type a straight ergative pattern is much more common than an active one (32/190, 16.8%). For what it is worth, a rough chi-squared contingency table test confirms that marking type and alignment type are not independent in this data (χ 2=25.998, p < 0.00001), suggesting that one should *not* combine

head-marking and dependent-marking languages in discussions of this topic. Once we refrain from doing so, we face the fact that active dependent-marking languages are at best extremely rare. Comrie lists only Basque, Georgian, Imonda, and Drehu, to which we can add the Pomo languages discussed by Mithun and Dixon, Dixon's Laz and Tsova-Tush, and Lhasa Tibetan discussed by DeLancey (1984, 1985, 2011). Of these languages, the first two are well-known to generativists, and have (together with Hindi) encouraged the idea that ergative case is inherent case; in contrast, the others are little-known to generativists. We briefly survey why we do not think that any of these languages provides a good prototype for the ICT to build on.

X.5.2 Split active languages

Our first observation is that there are many languages such as Shipibo, Inuktitut, Tsez, and Chukchi, whose morphological ergativity shows a clean pattern, in the sense that transitivity alone is the determining factor for ergative case. By contrast, in many potential active languages, 'ergative' case is conditioned not only on the subject of the clause having an agent thematic role (as the ICT would lead one to expect), but also on a variety of other factors. In Hindi, for example, cited in support of the ICT, only a small subclass of unergative verbs ('cough', 'bark') permit ergative subjects, and even with those verbs ergative is optional. Moreover, Hindi is famously a split ergative language, in which ergative only occurs in the perfect aspect (cf. Butt and King, 2003), never in the imperfective. Similarly in Georgian, the subjects of transitive verbs and some intransitive verbs are famously ergative only in aorist and perfect clauses (see Harris 1981). Similar remarks hold for Lhasa Tibetan, in which subjects of agentive intransitive verbs are sometimes marked with the ergative particle, but only in perfective clauses, never in imperfectives, as illustrated in (19) (DeLancey 1984: 133).

- (19) a. ŋa-s Seattle-la phyin-pa-yin. (DeLancey 1984:133)
 I-ERG Seattle-to went-PRF-VOL
 'I went to Seattle.'
 - b. ŋa-(*s) Seattle-la 'gro-gi-yin.
 I.NOM(*ERG) Seattle-to go-FUT-VOL
 'I will go to Seattle.'

Yet another example is Drehu, an Austronesian language spoken in New Caledonia (Moyse-Faurie 1983, Tyron 1967), which actually draws a three-way distinction among the subjects of present clauses (nominative), past clauses (marked nominative) and other tenses (canonical ergative, with rare exceptions). This interaction with tense-aspect is well known, but its theoretical implications are not always kept clearly in mind. It strongly suggests that Tense and Aspect heads are heavily involved in the assignment of case—or, for the DCT, in establishing the relevant case domains—in these languages, not the theta-role assigning head *v*.

In none of these so-called active languages is the subject marked 'ergative' if and only if it receives an agent theta-role from v, as the ICT would expect.¹³ They are quite different in this

¹³ We admit that we do not have a fully-worked out DCT analysis for these "split active" languages. But see Baker (2015, this volume) for a proposal in which some aspect heads are extra phase heads, affecting when two NPs count as being in the same domain for (2). See also Nash (this volume) for a new DCT-style approach to the core facts of Georgian. Note also that in Drehu, noun incorporation of the object bleeds ergative case marking of the subject in relevant respect from Icelandic, where verbs that take inherent dative case subjects do so in every tenseaspect, just as we would expect on theoretical grounds. Since ergative case varies across clauses in this way, it seems very doubtful that it should be thought of as an inherent case on the Icelandic model.¹⁴

Tsova-Tush (aka Batsbi) also shows a split, but in terms of person, rather than tenseaspect. This language has been claimed to be a particularly good candidate for an active language, in that ergative case tracks the agentivity (volition and control) of the intransitive subject very closely (Holisky 1987; thanks to Omer Preminger for pointing this out). However, only first and second person pronouns may bear ergative in intransitives; third person pronouns and NPs are always nominative in this role, though they must be ergative as transitive subjects (Holisky 1987: 104-105, 119). In addition, nuances of volitionality and control, which Holisky characterizes as components of meaning distinct from thematic roles, come into play in caseselection only with intransitive subjects (Holisky 1987:122). Both the person split and the fluidity of interpretation are differences between transitive agents and intransitive agents that are entirely unexpected by the ICT, and they prevent Tsova-Tush from counting as its missing prototype.

clause types (nonpast, nonpresent, Moyse-Faurie 1983:159). We took parallel facts in Chukchi to be evidence in favor of the DCT in section X.4.1.

¹⁴ We set aside here the possibility of a hybrid model, in which inherent case-marked NPs need abstract (structural) licensing in addition, as proposed for Icelandic by Cowper (1987); see Shimamura (2014b) for an extension of this to account for subject-object extraction asymmetries in syntactically ergative languages.

X.5.3 Active languages with unmarked 'ergative'

The next group of putatively active dependent marking languages to consider includes the Pomo languages (Hokan family, spoken in California; see especially O'Connor 1987) and Imonda (Papuan; Seiler 1985). These languages are all quite similar in that the putative ergative case on agentive subjects is actually morphologically unmarked (\emptyset); what is overtly marked is a kind of nonagentive case found on (some) direct objects and (some) nonagentive subjects of intransitive verbs: -al on pronouns in Northern Pomo; - m in Imonda. This is already somewhat suspicious for the ICT, since it is extremely rare for ergative case to be morphologically unmarked in a canonical ergative language (Nias is perhaps the only attested example; see Baker 2015: ch.3 for an analysis). Bittner and Hale (1996) refer to these as "accusative active languages", suggesting that it is an extension of the objective case that yields the pattern, rather than the existence of a thematically-restricted but phonologically null ergative case. Indeed, O'Connor argues in some detail against the idea that Northern Pomo's null-marked case forms are connected to a particular theta-role in the way that the ICT would hope, concluding that "the A case is semantically unmarked, it does not convey any information about volition, control, agentivity, etc." (p.196). Most importantly, it is clear that the putative ergative marking found on intransitive subjects in these languages extends well beyond the canonical unergative class to include many typical unaccusative predicates: for example, 'die', 'sleep', and 'misspeak' in Northern Pomo, and 'startle' in Imonda. Indeed, Seiler (1985:145-148) reports that only eight known verbs take the nonagentive case marker on their subject in Imonda. These languages, then, are not good prototypes for the ICT either.

Instead, our tentative analysis of these languages is that they are really neutral languages, in which neither dependent ergative case nor dependent accusative case is consistently assigned.

Rather -al in Northern Pomo and -m in Imonda are fundamentally *dative* case markers. As such, their core use is on the goal arguments of ditransitive verbs (indeed Seiler's gloss for -m is GL, short for 'goal'). These case markers can also be used on the theme arguments of monotransitive verbs, but only as so-called differential object markers (Aissen 2003; Bossong 1985). Thus, overt affixes like -al are used in Pomo only on pronouns, proper nouns, and (with a clitic or demonstrative) animate or human nouns used as direct objects; inanimate common nouns do not show overt case inflection. Similarly, in Imonda the case marker -m marks only high-animate objects (Seiler 1985: 163-165). This is very reminiscent of markers such as Hindi -ko, which serve both as differential markers for animate and/or specific direct objects, and in dative functions such as marking recipients (the most common DOM pattern, Bossong 1985).

Once we think of the overt cases in these languages as datives rather than accusatives, an easy hypothesis becomes available for why they are found on the subjects of a proper subset of the unaccusative predicates: these are simply predicates that select for quirky dative case on their subjects, like those known from Icelandic (cf. Marantz's (1984) generalization that only direct internal arguments—nonagents—of a verb can receive lexical case from that verb in Icelandic). This fits well with the fact that only eight known verbs have case-marked subjects in Imonda, not the whole class of unaccusatives. It also fits with O'Connor's (1986) observation that having overt case-marking on the subject in Northern Pomo sometimes expresses 'empathy' with the subject rather than agentivity; we interpret such subjects as being experiencers rather than themes, with lexical dative case being assigned to experiencer arguments only. If this is right, then, Imonda and the Pomo languages are not the result of *v* assigning null ergative to agents, but the result of dative case being extended to some objects via DOM and to some nonagentive subjects as an instance of dative subject constructions—two familiar developments that happen

to come together in these languages. If this is on the right track, then these so-called active languages are not directly relevant to comparing the ICT and the DCT as theories of ergativity.

X.5.4 Languages with concealed transitives

This leaves only Basque and Laz to consider. Basque also proves problematic for the ICT (though it is in some ways also challenging for the DCT). In Basque, ergative case is indeed found on the subjects of some intransitive verbs as well as on the subjects of transitive verbs; an example is (20).

(20) Euskara-k noiz arte iraungo du?
Basque-ERG when until last AUX.3SG>3SG
'How long will Basque last?' (DeRijk p.265; our gloss)

However, the generative literature on this language has shown clearly that the case of the subject does not match up perfectly with whether the verb is unaccusative or unergative, as the ICT would hope. The verb 'last' in (20), for example, is a likely unaccusative verb; 'boil' is another that takes an ergative subject. Basque even has raising predicates like *behar* 'need' that take ergative subjects, as argued at length by Rezac et al. (2014). Moreover, as Preminger (2012) notes, examples where nearly synonymous verbs—or even the same verb across different dialects—take subjects with different cases seem to speak against a view that ties case too closely to theta-roles. Instead, some kind of lexical idiosyncrasy seems called for, as in Pomo and Imonda.

However, it does not seem right simply to say that verbs like 'last' assign quirky/lexical ergative case to their theme arguments. The reason is because ergative case on the subject of 'last' varies across syntactic structures, just as 'regular' ergative subjects do in Basque (see (17) and (18)). For example, (21) embeds 'last' in a causative construction: some varieties of Basque use dative case on the argument of 'last', as in (21), others use absolutive case, but none preserve ergative case on this argument.

(21) Norbaite-k eta zerbaite-k iraun-arazi dio hizkuntz-ari.
 Someone-ERG and something-ERG last-CAUS AUX.3SG>3SG.3SD language-DAT
 'Someone and something has caused the language to last.' (DeRijk p.380; our gloss)

Similarly, intransitive verbs with ergative subjects can be embedded under a perception verb like 'see' to give sentences like 'I saw the milk boiling.' Then 'milk' has absolutive case (Karlos Arregi and Ikuska Ansola-Badiola, p.c.), the result of ECM, not ergative case. The case of the subject in examples like (20) thus behaves like structural case, not inherent case.

Given this, our DCT view leads us to locate the lexical idiosyncrasy of verbs like 'last' elsewhere: we suggest that they are concealed transitives, taking a second argument that is approximately meaningless and phonologically null, but nevertheless counts for triggering ergative case on its coargument by the dependent case rule in (2). For the more unergative verbs in this class, especially semantically monadic predicates that are syntactically expressed as a light (or 'compound') verb construction (e.g., *lo egin* 'sleep do' [='sleep']), this is a conventional analysis (cf. Bobaljik 1993; Hale and Keyser 1993; Laka 1993).¹⁵ This view predicts that verbs like 'dance' and 'last' should also behave like transitive verbs for other syntactic diagnostics (where available). In this connection, we take it to be significant that the causative form of 'last' in (21) has a causee in dative case, not absolutive case, in standard/conservative/Southern Basque dialects.¹⁶ This is crucially a property of transitive verbs, not intransitive ones (see (18)), supporting the claim that some kind of null object is indeed present with verbs of this type. If this hypothesis holds true in general, then a DCT approach to Basque may be tenable, whereas an ICT approach seems not to be.

A concealed transitive approach may well be a promising analysis for the Kartvelian language Laz, as well. (22) shows an active-style contrast between unergative and unaccusative verbs in this language:

(22) a. Himu-k i-bgar-s. (Öztürk and Pöchtrager 2011: 26)

¹⁵ Preminger (2012) argues that not all clauses with unexpected ergatives in Basque should be analyzed as having a null absolutive nominal. However, his most compelling point is that dummy absolutive agreement on the auxiliary is not a positive argument for this view. It is still possible that these clauses have a null argument that is active for dependent case but inert for agreement—indeed, so inert that it does not even count as a defective intervener, as dative NPs do in Basque. See Baker (2014) for an analysis of this sort for the small class of verbs in Shipibo mentioned in note 5.

¹⁶ In innovative dialects where the causee is absolutive, we might tentatively say that 'last-CAUS' has evolved into a lexical item in its own right, not composed syntactically from 'last' and 'CAUS'. As such, its case pattern is simply that of an ordinary transitive verb.

s/he-ERG VAL-cry-PRES.3SG 'S/he is crying.'

b. Him ulu-n
s/he.NOM go-PRS.3SG
'S/he is going.'

In related Georgian, ergative marking is limited to the aorist (perfect) tenses, but in Laz, it has spread to both major tense/aspect classes (Harris 1985). This lack of an aspect split leads Woolford (this volume) to cite Laz as the prime example of the pattern predicted by the ICT. Yet even without the split, there is an important point of comparison to Georgian: Nash (this volume) analyzes the prefix *i*- in Georgian unergatives parallel to (22a) as a reflexive marker, occupying the internal argument position and providing a case competitor for the subject NP. Note that the cognate prefix (glossed VAL for valency) is present in (22a) but not (22b), and Öztürk and Pöchtrager (2011: 68) suggests that this difference is (reasonably) systematic in Laz.¹⁷ If correct, this suggests that in Laz, as in Basque, it is formal-syntactic transitivity (possibly partially concealed), not theta-roles per se, that determines case marking, as expected under the DCT.

X.5.5 Theoretical Implications

¹⁷ In contrast, Harris (1985) argues that the correspondence between *i*- prefixation and ergative case-marking on unergatives is weaker in Laz than in Georgian. Harris provides evidence that even (some) non *i*-marked unergatives are concealed transitives, though she ultimately does not accept this as a general synchronic account.

Whatever the ultimate account of some of the putatively active languages surveyed here turns out to be, we have found no clear case of a uniformly active dependent marking language in the literature. This leads us to conjecture about why active alignment patterns are attested in head-marking languages but not in dependent-marking languages. This is, of course, quite a mysterious distribution from the point of view of standard Chomskian theory, which holds that case and agreement are two sides of the same coin; from that perspective, one expects the very same alignment patterns to show up in languages that realize case overtly and languages that realize agreement overtly.

But dependent case theory is not committed to there being a deep parallelism between case and agreement. On the contrary, dependent case crucially indicates a relationship between two NPs, with possibly agreeing functional heads playing no direct role. As a result, the transitivity of the clause is crucial, but the absolute position of a single NP within the clause (the unergative-unaccusative distinction) will typically not be crucial. Therefore, we observe ergative case marking patterns, but few or no truly active case marking patterns. In contrast, agreement is crucially a relationship between an agreeing functional head and an NP. It is perfectly plausible, then, that the location of a single NP within a clause could make a difference for this: for example, the closest c-commanding head with agreeing features for a negent argument (it could be v as opposed to T, for example; see Baker this volume for examples from Burushaski). Therefore, the DCT can contribute to a plausible theoretical explanation of why active-inactive systems are not uncommon in languages with agreement systems, but are extremely rare or impossible in languages with overt case marking on nominals. In contrast, a straightforward ICT

might expect languages with active case patterns to be at least as common as those with pure ergative patterns, contrary to fact.

X.6. Conclusion

In this chapter, we have compared two contrasting theories of ergative case in some detail: a theory in which it is an inherent case assigned by v along with an external theta-role, on analogy with inherent dative case in Icelandic, and a dependent case theory in which it is assigned to the higher of two NPs in the same local domain. We have found many advantages for the second sort of theory: it can explain why nonagentive verbs with two NP arguments can have ergative case on one of those NPs when conditions are right, it can explain why agentive verbs that are detransitivized in one way or another typically lose ergative case on the subject, and it can explain why uniformly ergative languages are far more common than uniformly active case (as opposed to agreement) patterns throughout the world. Along the way, we have criticized the move of supplementing the ergative-as-inherent-case theory with a transitivity condition, claiming that this sneaks the dependent case idea in through the back door and renders the thematic condition superfluous. We therefore submit that the inherent-case view of ergative fails to find support over the dependent-case view, at least for many canonical ergative languages. Indeed, the current typological record makes us question whether the inherent-ergative case view is even allowed as an option by universal grammar.

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