

# Typology of Ergativity

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## Abstract

Ergativity refers to patterning in a language whereby the subject of a transitive clause behaves differently to the subject of an intransitive clause, which behaves like the object of a transitive clause. Ergativity can be manifested in morphology, lexicon, syntax, and discourse organisation. This article overviews what is known about ergativity in the world's languages, with a particular focus on one type of morphological ergativity, namely in case-marking. While languages are rarely entirely consistent in ergative case-marking, and the inconsistencies vary considerably across languages, they are nevertheless not random. Thus splits in case-marking, in which ergative patterning is restricted to certain domains, follow (with few exceptions) universal tendencies. So also are there striking cross-linguistic commonalities among systems in which ergative case-marking is optional, although systematic investigation of this domain is quite recent. Recent work on the diachrony of ergative systems and case-markers is overviewed, and issues for further research are identified.

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## 1. Introduction

The term ergativity or ergative patterning refers to the situation in which, in a given language, the agent or 'subject' of a transitive clause (henceforth Agent)<sup>1</sup> shows patterning distinct from the actor or 'subject' of an intransitive clause (henceforth Actor), which patterns like the patient or undergoer ('object') of a transitive clause (henceforth Undergoer). This distinctive patterning may be morphological, syntactic, lexical (in the argument structure of verbs), or discourse. The notion of ergativity was first applied to morphological patterning, specifically to the case-marking pattern in which the Agent is case-marked differently from an Actor and Undergoer, which are case-marked identically. This is illustrated by the following Nyungu-marta (Pama-Nyungan, Australia) examples:<sup>2</sup>

- |     |            |      |           |
|-----|------------|------|-----------|
| (1) | mirtawa-lu | kuyi | kampa-rna |
|     | woman-ERG  | meat | cook-NFUT |

'The woman cooked the meat'. (Sharp 2004: 335)

- |     |         |            |            |
|-----|---------|------------|------------|
| (2) | partany | karnti-nyi | mungka-nga |
|     | child   | climb-NFUT | tree-LOC   |

‘The child climbed the tree’. (Sharp 2004: 333)

In (1) the Agent is marked by *-lu* ERG, whereas the Undergoer appears in the unmarked citation form, referred to as the absolutive in ergative systems, as does the Actor of intransitive (2).

Unlike Nyangumarta, most languages of Europe case-mark according to the nominative-accusative system. This system is found in the pronouns of English (Indo-European), where Agent and Actor are accorded the same case form (as in *She* cooked the meat and *She* climbed the tree), while the Undergoer normally appears in a different case (as in *She* saw *her*). Latin (Indo-European, Europe) has a nominative-accusative case system for nouns and pronouns. More generally, accusative refers to patterns in which Agents and Actors behave alike, and differently from Undergoers.

The existence of ergative case-marking systems has been known for a long time. Thus Fabricius (1801/1791) realised that Greenlandic (Eskimo-Aleut, Greenland) had a case-marking system of this type; Threlkeld (1834) likewise realised this for Awabakal (Pama-Nyungan, Australian). Numerous terms have been used for the ergative case, including: operative, agent(ive), instrumental, and transitive-nominative. The term ‘ergative’ in its modern sense seems have been first employed by Fr. Wilhelm Schmidt (1902), who probably misinterpreted a term used earlier by Ray and Haddon (1893) for a type of locative (Manaster-Ramer 1994). The term was subsequently used by the Caucasianist Adolf Dirr (1912, 1928), though it really took off from the 1970s. (See further Seely 1977; Manaster-Ramer 1994.)

For considerations of coherence and length, I deal mainly with morphological ergativity, focussing in particular on the typology of ergative case-marking. This is also the best studied type of ergative patterning in linguistic typology. I identify and discuss some of the main typological parameters of variation in ergative case-marking in §3. Following this, I turn to an issue that has only recently become topical in the literature on ergativity, optional ergative case-marking. I also discuss origins and evolution of ergative case-markers and systems (§5). Constraints of length necessitate highly selective exemplification of the phenomena discussed. However, I have selected illustrations from a reasonable diversity of languages, covering most of the regions in which morphological ergativity is reasonably widespread, namely: Australia, Papua New Guinea, Polynesia, the Himalayas and nearby regions, the Caucasus, northern North America, Central America, and the Amazon. Australian languages are somewhat over-represented; this is partly because these are languages I am personally most familiar with, and partly because ergativity has been the subject of intensive investigation in Australian languages over the past three decades. Section 6 concludes the paper with brief mention of some theoretical problems and further

interesting issues raised by ergative languages. But before beginning our presentation of the typology of morphological ergativity, it is essential to situate these morphological patterns in relation to other types of ergative patterning manifested in the world's languages. This is the concern of §2.

## 2. *Loci of Ergative Patterning*

As indicated above, ergative patterning is manifested at morphological, syntactic, lexical-semantic, and discourse levels. Few, if any, languages are entirely ergative in patterning at each of these levels. On the other hand, it is possible that all languages show ergativity on some level. If this is so, it follows that languages typically manifest asymmetrical patterns across levels; as it turns out, asymmetries within levels are also common. Some of the main ones are discussed in §3.

### 2.1 MORPHOLOGICAL ERGATIVITY

Morphological ergativity is discernible in two domains: case-marking ('dependent marking') and cross-reference (or agreement) morphology ('head marking').

We have already given an example of an ergative case-marking system in examples (1) and (2). The Nyangumarta system is typical: the ergative case is always overtly marked in ergative systems; the absolutive is usually formally unmarked, though occasionally it is also marked, as in the Papuan language Kaluli (Schieffelin 1985). In this regard the ergative is like the accusative in most nominative-accusative case systems. However, while in a small fraction of nominative-accusative languages, including some languages in North-East Africa (see König 2006, 2008: 138–203) and the Americas, the nominative case is formally marked and the accusative unmarked – these are referred to as marked nominative systems – in ergative-absolutive languages the absolutive is never marked while the ergative is unmarked.

It might be remarked in this context that ergative case-markers often serve other functions as well as marking Agent NPs. For instance, the same marker marks instrumental case in a number of Australian languages (e.g. Dyirbal (Pama-Nyungan) – Dixon 1972); locative case in some Australian languages (e.g. Umpithamu (Pama-Nyungan) – Jean-Christophe Verstraete, pers. comm.) and Kuikúro (Carib, Brazil); and genitive or oblique case in Ladakhi (Tibeto-Burman, Tibet) and Burushaski (isolate, Pakistan).

Ergative patterning in cross-referencing morphology is exhibited in the following Sacapultec (Mayan, Guatemala) data (from Du Bois 1987: 809–810):

- (3) š-ax-war-ek  
 C-1PL.ABS-sleep-IF  
 'We slept'.

- (4) š-at-qa-kuna-:x  
 C-2SG.ABS-1PL.ERG-cure-TA  
 'We cured you (sg).'
- (5) š-ax-a:-kuna-:x  
 C-1PL.ABS-2SG.ERG-cure-TA  
 'You (sg) cured us'.

It will be observed that the 1PL bound pronominal has the same form, *-ax-*, when cross-referencing the Actor in (3) and the Undergoer in (5), but a different form, *-qa-*, for cross-referencing the Agent in (4).

Some cross-referencing systems show ergative patterning not in the forms of the bound pronominals, but in their order and/or what may be cross-referenced. In Arikapú (Macro-Jê, Brazil), Actors and Undergoers are cross-referenced by a pronominal prefix to the verb, while Agents are not (Hein van der Voort, pers. comm.).

Ergativity in case-marking is the more frequent of the above two morphological phenomena. In a sample of 190 languages, 17% showed ergative case-marking of non-pronominal NPs; in a slightly smaller corpus, 12% of pronominal NPs followed ergative case-marking (Comrie 2008). Ergativity in cross-referencing morphology, by contrast, is represented in just 5% of a corpus of 380 languages (Siewierska 2008).

## 2.2 LEXICAL-SEMANTIC ERGATIVITY

Pairs such as (6) and (7) are sometimes considered to display ergative orientation at the lexical or semantic level: the Undergoers of the (a) sentences correspond semantically with the Actors of the (b) sentences,<sup>3</sup> while the Agents of the (a) sentences have no corresponding roles in the (b) sentences. Verbs that pattern in this way have been referred to as ergative verbs, as distinct from accusative verbs like *eat* (*John ate* and *John ate a sandwich*).

- (6) a. The warder marched the prisoners  
 b. The prisoners marched
- (7) a. The boys broke the window  
 b. The window broke

Some linguists object to the use of the term ergativity in relation to lexical alternations like these (e.g. Dixon 1994: 20; Matthews 2007: 126). It is not clear to this writer on what principled basis patterns such as (6) and (7) can be excluded from ergative patterning. Dixon (1994: 20) objects to this usage as 'potentially most confusing', which it may well be to the unwary. However, one might equally object to all usages extending beyond case-marking for the same reason.

## 2.3 SYNTACTIC ERGATIVITY

Syntactic ergativity refers to situations in which syntactic rules or generalisations in a language treat the Actor and Undergoer in the same way, but differently from the Agent. The term has a wide range of applications depending on how syntactic rules are construed theoretically. In the typological literature, syntactic ergativity is normally understood to refer to patterns in interclausal syntax, in contrast to the interclausal patterns discussed above (e.g. Dixon 1979: 124–130, 1994: 143–181; Kazenin 1994). More specifically, it is understood to refer to ergative patterning revealed by cross-clause coreference conditions that must be met in certain types of clause combination. For instance, in Dyirbal two clauses can be coordinated with omission of the shared argument in the second clause if they show coreferentiality of Actor or Undergoer (Dixon 1972, 1979: 61–63). Thus (8) and (9) can be coordinated to form (10a) and (10b), because the Actor in (8) is coreferential with the Undergoer in (9).<sup>4</sup> Notice that the Undergoer has been omitted from the second clause in (10); this is optional, however.

- (8) nguma            banaga-nyu  
 father.ABS    return-NFUT  
 ‘Father returned’.
- (9) nguma            yabu-nggu        bura-n  
 father.ABS    mother-ERG    see-NFUT  
 ‘Mother saw father’.
- (10a) nguma            banaga-nyu    yabu-nggu        bura-n  
 father.ABS    return-NFUT    mother-ERG    see-NFUT  
 ‘Father returned and mother saw him’.
- (10b) nguma            yabu-nggu        bura-n            banaga-nyu  
 father.ABS    mother-ERG    see-NFUT        return-NFUT  
 ‘Father was seen by mother and returned’.

Coordination with omission of the shared argument is not possible, however, for (8) and (11): here the Agent of (11) is coreferential with the Actor of (8), and (12) is ungrammatical. To coordinate (8) and (11) it is necessary for the latter clause to be antipassivised, as in (13), which can then be coordinated with (8), as shown in (14).<sup>5</sup>

- (11) yabu                nguma-nggu        bura-n  
 mother.ABS    father-ERG        see-NFUT  
 ‘Father saw mother’.
- (12) \*nguma            banaga-nyu        yabu                bura-n  
 father.ABS    return-NFUT        mother.ABS        see-NFUT  
 ‘Father returned and saw mother’.

- (13) nguma            bural-nga-nyu    yabu-gu  
 father.ABS    see-APASS-NFUT    mother-DAT  
 'Father saw mother'.
- (14) nguma            banaga-nyu            bural-nga-nyu    yabu-gu  
 father.ABS    return-NFUT            see-APASS-NFUT    mother-DAT  
 'Father returned and saw mother'.

Syntactic ergativity is also revealed by most other types of complex sentence construction in Dyirbal. For instance, relative clauses must have an Actor or Undergoer NP coreferential with an NP in the main clause (Dixon 1979: 127–128). And in purposive complements, the coreferential NP must be Actor or Undergoer in both main and complement clause (Dixon 1979: 128).

Few languages are, like Dyirbal, consistently syntactically ergative, and these are all also morphologically ergative; no morphologically accusative languages are syntactically ergative. Some languages occupy an intermediate position, showing ergative syntax in some complex sentence constructions, while other complex sentences reveal accusative syntactic patterning. A number of languages (e.g. Gooniyandi (Bunuban, Australia), Nyulnyul (Nyulnyulan, Australia)) show neither pattern, and exhibit few if any cross-clause coreference constraints on clause combinations.

I wind up this section with brief discussion of two other types of ergative patterning on the syntactic level. First are patterns in word order whereby the Agent of a transitive clause is treated differently from the Undergoer and the intransitive Actor, which are treated the same. Few languages show this type of syntactic ergativity. One such language is Pãri (Nilotic, Sudan), which has relatively rigid word order patterns in which the Actor and Undergoer immediately precede the verb (as in (15)–(17)), while the Agent occurs following the verb in the unmarked transitive, as in (16), but precedes the Undergoer if topicalised, as in (17) (Andersen 1988).

- (15) dháagò    á-ŋèeth-ò  
 woman    c-laugh-SUF  
 'The woman laughed'.
- (16) dháagò    á-yàapa            ùbúrr-ì  
 woman    c-insult            Ubur-ERG  
 'Ubur insulted the woman'.
- (17) ùbúrr    dháagò            á-yáapa'-è  
 Ubur    woman            c-insult-3SG  
 'Ubur insulted the woman'.

Second, a language can manifest syntactic ergativity in terms of grammatical roles or relations. Halliday (1967, 1970, 1985) argues that pairs such as (6) and (7) indicate not features of lexical verbs, but rather the existence in

English of covert grammatical relations Agent and Medium (a grouping of Actor and Undergoer). Once again, if we extend the term ergative from case-marking patterns to other phenomena, it is not clear that there is any principled basis for excluding these grammatical role patterns from ergativity. The morphological marking of NPs in some ergative languages has been taken as evidence for overt grammatical roles Agent and Medium (e.g. McGregor 1990).

#### 2.4 DISCOURSE ERGATIVITY

Aspects of discourse organisation can also exhibit ergative patterning. It has been proposed (Du Bois 1987) that languages observe a universal preference to present new information in the roles Actor and Undergoer rather than in the Agent role, which is strongly associated with given information. Du Bois (1987) refers to the dispreference for new Agents as 'the Given-A[gent] constraint', and presents evidence in favour of this constraint from narratives in Sacapultec. Studies of a number of other languages – including also various morphologically accusative languages – reveal the same patterning, including: Acehnese (Austronesian, Indonesia) (Durie 1987: 391–392); Chamorro (Austronesian, Guam) (Scancarelli 1986); Hebrew (Afroasiatic, Israel) (Smith 1996); Hindi (Indo-European, India) (Kachru 1987); and Papago (Uto-Aztec, USA) (Payne 1987).

The universality of ergative patterning in the distribution of information is questionable. Thus O'Dowd (1990) observes that it need not hold for genres other than narrative, and McGregor (1989: 136–139, 1998: 528–532) presents evidence against it in Gooniyandi narratives.

### 3. *Split Ergative Case-Marking Systems*

Many morphologically ergative languages show asymmetries in case-marking, whereby the ergative system operates only in certain circumstances, and elsewhere a different system applies. In many languages the conditions under which the various systems apply are lexically or grammatically determined. This is referred to as split-ergativity.<sup>6</sup> Split-ergativity has been the subject of numerous investigations both in particular languages (e.g. Comrie 1981; Tiffou and Morin 1982; Camp 1985; Potts and James 1988; Takeuchi and Takahashi 1995; Valenzuela 2000; Roberts 2001; Guillaume 2006; Li 2007), and typologically (e.g. Silverstein 1976; Dixon 1979: 79–98, 1994: 70–110; Tsunoda 1981; DeLancey 1981).

Four main factors condition split-ergativity: (a) the nature of the lexical verb; (b) the nature of the Agent NP; (c) tense, aspect, and/or mood; and (d) the construction type, e.g. whether the clause is main or dependent. We discuss each of these in turn. Splits also occur in bound person marking systems, where the same factors are relevant. We restrict attention here to splits in case-marking.

Before we begin, however, it might be pointed out that there are alternative interpretations of the facts. Thus Goddard (1982) effectively argues that in most Australian languages split systems do not exist; in his view, split systems are really systems in which there are three cases, two of which are syncretic in specifiable circumstances. This use of the term syncretism, it seems to me, denudes it of real significance. (See further Iggesen 2004: 17fn, 104–105.) Moreover, Goddard's syncretic analysis can work only in languages where the case-marking is inflectional; it is inapplicable to languages in which case-marking is by means of clitics or adpositions.

### 3.1 SPLITS ACCORDING TO VERB SEMANTICS

In some languages Actors pattern in case-marking and/or verbal cross-referencing like Agents with some verbs, and like Undergoers with other verbs. Such systems are traditionally called active or active-stative, sometimes 'split intransitive' or 'split-S' (where S = Actor). The former pattern is generally associated with active verbs (e.g. 'go', 'climb', 'run'), while the latter is associated with verbs of state ('sit') and happenings ('fall'). In many active languages a subset of verbs is labile. Such languages include Acehnese (Durie 1987), Batsby (North Caucasian, Georgia), and Eastern Pomo (Hokan, USA). The single argument of a labile monovalent verb (e.g. 'fall', 'slip, slide') is marked differently depending on whether or not the referent is in control. This is illustrated by the following Batsby examples (cited in DeLancey 1981: 629):

- |      |  |           |        |
|------|--|-----------|--------|
| (18) | txo  | naizdrax  | kxitra |
|      | we.ABS   | to.ground | fell   |
|      | 'We fell to the ground (unintentionally, not our fault).'              |           |        |
| (19) | a-txo  | naizdrax  | kxitra |
|      | ERG-we   | to-ground | fell   |
|      | 'We fell to the ground (intentionally, through our own carelessness).' |           |        |

DeLancey (1981, 2006) and Mithun (1991) object to treating these systems as split ergative, and argue that they are better regarded as constituting a distinct type of active system. Nevertheless, these systems do show some sort of split in role marking, with one pattern more ergative-like, the other more accusative-like.

Such languages raise the additional question as to whether a unified category of Actor is viable; Durie (1987) argues to the contrary for Acehnese. No unified macrocategory of intransitive verb would thus exist in Acehnese; instead there would be two formally and functionally distinct intransitive types depending on the marking of the single inherent grammatical role.

A different type of split in case-marking is found in languages such as Tonga (Austronesian, Tonga), where bivalent verbs show different patterns

in case-marking. For instance, verbs of violence have an ergative marked Agent and an unmarked Undergoer; verbs of feeling have an unmarked experiencer and a second argument in the locative or dative; the ‘have’ verb takes two unmarked NPs; various other patterns exist (Tsunoda 1981: 405–406). Thus in Tongan, ergative patterning in case-marking is restricted to higher transitivity event types, events that are more effective (Tsunoda 1981). These facts further challenge the adequacy of the transitive/intransitive dichotomy, and indicate that other types of verb (or clause) must be recognised (see also e.g. McGregor 1990: 317–329, 1998, 2002, 2006). McGregor (1997: 109–110) proposes a hierarchy of event types (actually at the clause rather than verb level) extending from cognition and speech through violence, causation, and states, to existentials. Events to the left of the hierarchy, he suggests, tend to show accusative patterns in their role types, those to the right, ergative patterns.

### 3.2 SPLITS ACCORDING TO THE NATURE OF THE AGENT NP

We have already seen (§2.1) that fewer languages show ergative case-marking of free pronominals than nominals or NPs. In many languages ergative case-marking is restricted to nominals, while pronominals operate on an accusative basis. This is the case for instance in Wambaya (Mirndi, Australia) (Nordlinger 1998), as well as numerous Pama-Nyungan languages of Australia, including Kugu Nganhcara (Smith and Johnson 2000). Thus in (20) the Agent *kuyu* ‘woman’ is marked by the ergative clitic, while the Undergoer *pama* ‘man’ appears in the unmarked absolutive form (the clitic *-nha* attached to it is a bound pronominal). In (21) the Actor *kuyu* ‘woman’ appears in unmarked form, like the Undergoer of (20). Kugu Nganhcara permits for each argument an associated coreferential free pronoun, that usually occurs adjacent to the argument NP. This pronoun occurs in the appropriate case form for that role. Thus the same form of the third person plural occurs for the Agent of (20) and the Actor of (21), while a different form is used for Undergoers, *thaarana* 3PL.ACC ‘them’.

(20) *thana kuyu-ng nhunha pama-nha pigo-dhan*  
 3PL.NOM woman-ERG 3SG.ACC man.ABS-3SG.ACC hit-3PL.PST  
 ‘The women hit the man’. (Smith and Johnson 2000: 385)

(21) *thana kuyu wa-wununa-yin*  
 3PL.NOM woman.ABS sleep-sleep-3PL.PRS  
 ‘The women are sleeping’. (Smith and Johnson 2000: 385)

And in Wariapano (Panoan, Peru) all pronouns follow a nominative-accusative system of the marked nominative type, while nouns observe an ergative system (Valenzuela 2000).

Splits do not always fall at the boundary between pronominals and nominals. For instance, in Dyirbal first and second person pronominals observe an accusative system, while third person pronominals and most nominals (with a few exceptions) are inflected according to an ergative system (Dixon 1972: 60). Yaminawa (Panoan, Bolivia, and Peru) shows an almost identical split (Valenzuela 2000).

Silverstein (1976) showed that these sorts of split in case-marking are not randomly distributed across languages, but follow a hierarchy, a simplified version of which is shown in Figure 1. Following standard practice, it is referred to here, somewhat misleadingly, as the ‘animacy hierarchy’. As indicated, if a form of a given type shows ergative marking, then everything to the right of it on the hierarchy will observe ergative case-marking. Similarly, if an expression type shows accusative marking, so also will everything to the left of it.

Ergative and accusative systems can cross-over, with the result that nominals in the overlapping region show tripartite marking: ergative when serving as Agent, accusative when serving as Undergoer, and absolutive when serving as Actor. Tripartite marking is found in Dyirbal on the indefinite/interrogative *wanya* ‘someone, who’ (suggesting that it should be placed to the left of third person pronouns on the animacy hierarchy). In Duungidjawa (Pama–Nyungan, Australia), tripartite marking is found on pronouns and human and canine nouns, while other nouns follow an ergative system (Kite and Wurm 2004: 25).

The animacy hierarchy accounts for a good deal of the cross-linguistic variation in split ergativity according to nominal type. Nevertheless, not all systems are entirely consistent with the form shown in Figure 1. For instance, while in many systems first person is to the left of second person, there are systems where the second person is left of first person (see Dixon 1994: 88–90). Indeed, Silverstein himself was aware of differences in the placement of the personal categories (first and second person, and their numbers) in different languages (1976: 126–129).

More serious problems are presented by the Australian language Kala Lagaw Ya (KLY) (Pama–Nyungan, Torres Strait Islands), as shown in

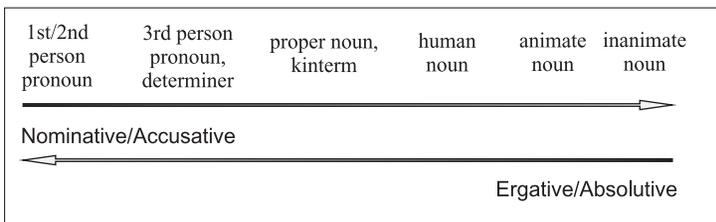


Fig. 1. The animacy hierarchy.

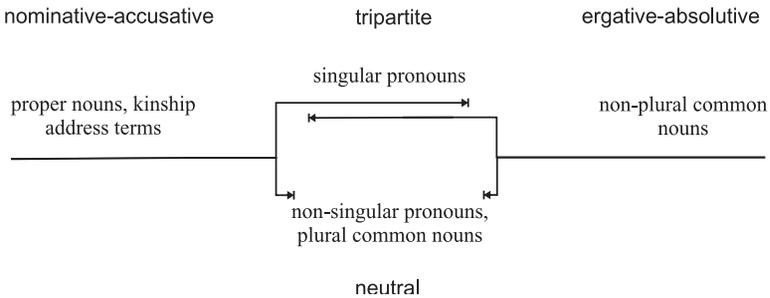


Fig. 2. Case-marking split in Kala Yagaw Ya, based on Comrie (1981: 11).

Figure 2. Observe that both tripartite and neutral marking (in which Agent, Actor, and Undergoer all take the same case form) are found in between accusative and ergative marking, and that pronouns are outranked by proper nouns and kinship address terms. Recently, Round and Stirling (2008) have shown that this problematic split can be accounted for by incorporating the effects of two typologically well-attested principles of markedness neutralisation onto a system with a simple split between proper nouns and common nouns. Filimonova (2005) identifies other violations to the animacy hierarchy.

Various explanations for the relevance of the animacy hierarchy to split case-marking have been suggested. Perhaps the most common is that it relates to the naturalness of entities at the higher end of the scale as agents, and those at the lower end of the animacy scale as patients (e.g. Comrie 1978; Dixon 1994: 84–85; Silverstein 1976: 113, however, phrases the observation in terms of linguistic categories). Wierzbicka (1981) questions the validity of this alleged natural association; cf. however the critique by Silverstein (1981). DeLancey (1981) considers the hierarchy to represent empathy, and that explanation in terms of naturalness as agent is only part of the story, pertaining to the lower end of the hierarchy. He suggests that splits in case-marking can be accounted for more generally in terms of mismatches between natural viewpoint and starting-point assignments in attention flow. Splits such as in Wariapano (see above) present serious difficulties for these explanations, first and second person pronouns being case-marked according to the marked nominative system.

### 3.3 TENSE, ASPECT, AND MOOD SPLITS

Some languages show splits in case-marking according to tense, aspect, and mood (TAM). In systems that are split according to tense it is normally past tense that is associated with ergative organisation. In Burushaski nominals and singular pronouns are ergatively marked in past tenses (preterit, perfect, past participle, pluperfect); in other tenses they follow a neutral

system. In Kurmanji Kurdish (Indo-European, Turkey), most nouns and pronouns (except masculine singular nouns and third person plural pronouns, which have neutral case-marking in all tenses), and all demonstratives, follow an ergative-absolutive case system in past tenses (past, continuous past, perfect, pluperfect). But in present tense a nominative-accusative system is found, where Actor and Agent are in the same case (elsewhere absolutive), and the Undergoer in a different case (an oblique):

- (22) min            hon            dit-in  
 1SG.ERG        2PL.ABS        saw-2PL  
 'I saw you (plural)'. (cited in Tsunoda 1981: 411)
- (23) ez                we                di-bin-im  
 1SG.ABS        2PL.OBL        PRS-see-1SG  
 'I see you (plural)'. (cited in Tsunoda 1981: 414)

Verb agreement is also ergatively oriented in past tenses, where Actor and Undergoer are cross-referenced; in other tenses, Agent and Actor are cross-referenced.

Aspectual splits are found in Indic and many Tibeto-Burman languages. Ergative is typically associated with perfective aspect, and dissociated from the progressive. For instance, in Hindi, Agents are ergative marked in perfective aspect, while Undergoers are marked in either the absolutive or the dative depending on animacy, definiteness, and specificity. In the imperfective, the Agent is not ergative marked. Similarly in Basque (Isolate, Spain), Agent NPs do not take ergative marking in progressive aspect (regardless of tense), and in Tsakhur (Northeast Caucasian, Azerbaijan), the Agent does not take the ergative marker in durative aspect.

In some languages, imperative mood is associated with accusative organisation, other moods with ergative patterns. Thus in Pāri, ergative marking of Agents occurs in moods other than the imperative; in the imperative, the erstwhile ergative marks Agents and Actors, unless the NP is topicalised (Andersen 1988). That is, in the imperative mood, case-marking is according to the marked nominative system (except in topicalisation contexts). Related to mood splits are splits according to polarity. Ergative marking in Marubo (Panoan, Brazil) is associated with positive but not negative clauses, where no morphological marking is used on any argument roles (Dixon 1994: 101).

Explanations for TAM splits usually invoke markedness correlations. Thus Dixon (1994: 98–101) accounts for the ergative patterning of past, perfective, non-interactive, and realis moods and accusative patterning of non-past, imperfective, interactive, and irrealis moods according to the naturalness of the Actor–Undergoer grouping to the former, and Actor–Agent grouping to the latter. For instance, he suggests, a natural perspective for viewing non-realised events is from the initiator of the action, the

Actor or Agent, and what they might do, whereas past events are more likely to be viewed as happenings involving a certain participant, the Actor or Undergoer. And the most natural orientation for the imperative is to the initiator of the action, and thus accusative organisation. DeLancey (1981: 646–647) makes the similar suggestion that perfective aspect associates with a terminal viewpoint, and so is analogous to a passive for transitive clauses, giving an ergative orientation. Imperfective, by contrast, associates with an agent viewpoint, thus resulting in the unmarked situation of starting-point and viewpoint coinciding; thus the accusative orientation requires no special explanation.

Again, as in the case of NP-based splits, TAM splits do not always follow entirely consistent patterns in distribution. Shokleng (Macro-Jê, Brazil) shows an aspectually conditioned split in main clauses (Urban 1985), but it is in the stative aspect that the ergative marking of the Agent is found. In active aspect, case-marking is according to an accusative system (of the marked nominative type). The explanation of this discrepancy is uncertain.

### 3.4 SPLITS ACCORDING TO CONSTRUCTION

It is perhaps not surprising given the close relation observed between mood and subordination in many languages (e.g. Merlan 1981; Verstraete 1998, 2002) that splits in ergative case-marking are occasionally according to the status of a clause as (a particular type of) subordinate or main. According to Andersen (1988: 316) in most types of subordinate clause in Pãri, as in the imperative mood (see §3.3), case-marking is according to a marked nominative pattern in which Agent and Actor NPs take the erstwhile ergative marker (except when topicalised). Moreover, Actor and Agent are treated alike in terms of verbal cross-referencing.

Shokleng is again unusual: ergative marking is consistent in all subordinate clause types, though it is conditioned by aspect in main clauses (Urban 1985). On the other hand, granted that subordinate clauses typically present backgrounded information, this is consistent with the (atypical) ergative patterning of stative aspect in this language.

Finally, to wind up the discussion of split ergative case-marking, it is observed that many languages (including some discussed above: Burushaski, Pãri) show splits involving combinations of the two or more of the above factors.

## 4. Other Case-Asymmetries Involving the Ergative

Two other asymmetries in ergative case-marking are worthy of discussion – partly because of their intrinsic interest, and partly because of the light they potentially throw on phenomena such as split case-marking and diachrony. They are optional and differential case-marking.

## 4.1 OPTIONAL ERGATIVE CASE-MARKING

## 4.1.1 Definition

Optional ergative case-marking refers to the situation in which the ergative marker may be present or absent from the Agent NP without affecting the grammaticality or interpretation of the clause in terms of who is doing what to who. The term ‘optional case-marking’, like ‘free variation’, is potentially misleading, and as we will see, does not mean that the marker is used randomly. Literary Central (Lhasa) Tibetan shows optional ergative case-marking, as shown by the following minimal triplet, from (Tournadre 1995: 264):

- (24) khōng      khāla’      s<sub>Q</sub>-kiyo:re’  
 he            food            make-IPFV.GNOM  
 ‘He prepares the meals’.
- (25) khōng-ki’ khāla’      s<sub>Q</sub>-kiyo:re’  
 he-ERG      food            make-IPFV.GNOM  
 ‘*He* prepares the meals’.
- (26) khāla’      khōng-ki’ s<sub>Q</sub>-kiyo:re’  
 food            he-ERG      make-IPFV.GNOM  
 ‘He is the one who prepares the meals’.

Although these three clauses show the same representational meaning – that a certain person prepares the meals – they are not identical in meaning. According to Tournadre (1995: 264) (24) is an informationally neutral clause that might be uttered in response to ‘what does he do?’, whereas (25) contrasts the particular individual with someone else who fulfils a different role, e.g. serves the food. (26) focuses on the person’s role as an agent in contrast to other possible fillers of the role.

The existence of languages with optional ergative case-marking has been known since at least the 1960s (e.g. Capell 1962: 111), though it has enjoyed little prominence in linguistic theory, description, or typology. Doubtless this is partly due to a tendency for investigators to normalise and standardise their data and to exclude exceptions from their grammatical descriptions; it is also surely partly due to the inordinate focus of linguistics on single isolated sentences. There are signs of change, and the last decade or so has seen increasing attention devoted to optional ergative case-marking in particular languages (e.g. Tournadre 1991, 1996; McGregor 1992, 1998; see McGregor 2007 for further references).

## 4.1.2 Distribution of optional ergative case-marking across and within languages

Optional ergative marking is attested in over 100 morphologically ergative language from around the world: indeed, it is found in all

regions where ergative case-marking is areally distributed (McGregor 2007). It is likely that at least 10% of morphologically ergative languages show optional ergative case-marking; there are concentrations in the Australia-Papua New Guinea and India-Nepal-Tibet-Western China regions (McGregor 2007). Scatterings of optional ergative marking are also found in Africa (in at least Shilluk (Nilotic, Sudan) – Miller and Gilley 2001: 52), the Caucasus (four languages in my corpus, including Adyghe (Circassian) – Polinskaja and Nedjalkov 1987: 262), and the Americas (eight languages in my corpus, including Shiwilu (Kawapanan, Amazonia) – Valenzuela 2008).

In some languages optional ergative marking is entirely across the board, and occurs in all grammatical environments; this is the case in Warrwa (Nyulnyulan, Australia) and Gooniyandi. Gooniyandi examples (27) and (28) illustrate omission of the ergative marker from nominals at opposite extremes of the animacy hierarchy. In (27) the initial Agent NP can be ergatively marked, as can the initial Agent NP of the second clause of (28). Nor are there any restrictions on presence or omission of the ergative according to TAM or any other grammatical feature.

- (27) aa, ngidi garndiwangoorroo, garndiwirri ngidi yoowooloo-yoorroo,  
 aa we many two we man-DU  
 baraj-jirr-ø-a-yi, thinga,  
 track-1EXC.NOM-3SG.ACC-extend-DU foot  
 ‘We all . . . we two Aborigines tracked him on foot’.

- (28) thinga gilba-yi-ø-di-yi, gamba,yilij-jin-ø-a  
 foot find-1EXC.NOM-3SG.ACC-catch-DU water rain-1EXC.ACC-3SG.NOM-extend  
 garr . . . garrwaroo,  
 after . . . afternoon  
 ‘We found his tracks, but it rained on us that afternoon’.

In some languages, however, optional ergative marking is grammatically distributed. That is to say, it is found in certain grammatically specifiable circumstances only. In such languages optional marking is usually distributed according to the same factors as splits in case-marking systems. For instance, its locus is conditioned by the animacy hierarchy in some languages: optional ergative marking is found to the left of obligatory ergative marking. Thus in Umpithamu, ergative marking is obligatory for inanimate nouns, but optional for all other NP types (Verstraete 2006). In Tibetan the ergative is obligatory on Agent NPs in the perfective, but optional in the imperfective; and in Tsez (North Caucasian, Russia) optional ergative marking is restricted to a certain periphrastic construction (Comrie 2000).

Even in languages where optional ergative marking is across the board, its frequency of use can correlate with these factors. Thus, in Gooniyandi omission of the ergative marker almost never occurs on inanimate

nominals, while it is more frequent on nominals higher on the animacy scale (McGregor 1998).

#### 4.1.3 Motivations for use of the ergative case-marker

What motivates the presence or absence of the ergative marker in optional ergative systems? The most common explanation (e.g. Comrie 1978; Dixon 1979: 73; LaPolla 1995) is that the ergative is used when there is a chance of confusing the Agent and Undergoer of a transitive clause, and omitted when the Agent and Undergoer are unlikely to be confused due to knowledge of the world (e.g. a person is more likely to cut meat than meat to cut a person) or grammatical considerations such as word order and cross-referencing pronominals. For instance, it might be used in marked but not unmarked word order.

Although frequently invoked, this explanation is not (to the best of my knowledge) substantiated by a careful discourse investigation in any language. A typical instance is Williams (1980: 98), who proposes this account for Yuwaalaraay (Pama-Nyungan, Australia), and provides just two illustrative examples, (29) being one. Examination of this work reveals other similar examples in which there is no chance of confusing who is doing what to who (by grammatical information and knowledge of the world), yet the ergative is used. This is illustrated by (30).

- (29) giirr        rnama        maardaay    rdinggaa     rdala-baay  
 DECL        that        dog        meat.ABS    eat-C.NFUT  
 'The dog ate all the meat'. (Williams 1980: 98)
- (30) bulaarr-u    rdayn-du    rdinggaa    rdaldarna  
 two-ERG    man-ERG    meat.ABS    eat.PROG.PRS  
 'Two men are eating meat'. (Williams 1980: 36)

It is not that this explanation is entirely wrong: examination of discourse in a selection of languages suggests that the ergative is used when there is likelihood of confusion of Agent and Undergoer. But it is typically found in other circumstances as well.

Other explanations link the use or non-use of the ergative to information structuring and/or agency. Information structuring was invoked in the discussion of Literary Central (Lhasa) Tibetan examples (24)–(26) above, following Tournadre (1991): non-use of the ergative was associated with unmarked information distribution; use of the ergative marker with marked information focus on either the identity of the Agent, or the agency of the Agent. Similar suggestions linking use of the marker to focus include Quesada (1999) for Bribri and Cabécar (Chibchan, Costa Rica); Aikhenvald (1994) for Tariana (Maipurean, Brazil); and Bromley (1981) for Dani (Papuan, Papua New Guinea).

Agency is associated with use versus non-use of ergative markers in Folopa (Papuan, Papua New Guinea) according to Anderson and Wade (1988): ergative marking of an Agent NP foregrounds wilful agency while omission of the marker downplays individual will. Similarly Coupe (2007: 157) suggests that for Mongsen Ao (Tibeto-Burman, Nagaland) wilfulness, volitionality, and self-motivation of the Agent condition the ergative case,<sup>7</sup> while this case-marker will be omitted from an NP designating an Agent acting in accordance with social expectations. For instance, (31) describes a neutral situation in which the chickens are eating paddy they have been fed, whereas (32) invokes the nuance that they are wilfully stealing it.

(31) a-hən            a-tʃak            tʃãʔ-əɪ-ùʔ            Mongsen Ao  
 NRL-chicken    NRL-paddy    consume-PRS-DECL  
 ‘The chickens are eating paddy’.

(32) a-hən            nə            a-tʃak            tʃãʔ-əɪ-ùʔ            Mongsen Ao  
 NRL-chicken    ERG        NRL-paddy    consume-PRS-DECL  
 ‘The chickens are eating paddy’.

By contrast, in some languages it is the non-use of the ergative marker that is meaningful: in Gooniyandi and Warrwa its omission serves a backgrounding function (McGregor 2005, 2006), while its use conveys no meaning nuance at all. These languages show slight differences, however. In Gooniyandi an Agent that is not marked by the ergative is low in agency. In example (27) non-marking of the Agent is for reasons to do with the construal of the narrative world; the person being followed has just expended an enormous of energy trying to find his way home, but failed and died of thirst. By contrast, the trackers easily follow his tracks, and find his body. A key point of the narrative is to contrast the ineffectuality of the white person with the complete control of the situation by the trackers, who succeeded without even trying. (28) downplays the agency of the rain: as the immediately following text indicates, it did not obliterate the tracks of the person being followed. In Warrwa, by contrast, an unmarked Agent is both low in agency and expected (roughly informationally given). In Kuuk Thaayorre the situation seems similar (Gaby 2006, forthcoming). These suggestions accord with the observation that ergative marking is the norm in these languages, and is used in over 80% of transitive clause tokens in each language.

In Umpithamu, by contrast, use of the ergative marker is more marked, and only slightly under two-thirds of Agent NPs are accorded ergative marking. This marking appears to be associated with contrastive focus on human Agents (Verstraete 2006); the situation in Kâte (Papuan, Papua New Guinea) seems similar, though ergative marking of Agent NPs is only about half as frequent as their non-marking (Suter forthcoming, Edgar Suter, pers.

comm.). In neither language does non-use of the ergative marker convey any specific meaning.

The motivations for optional ergative case-marking have been explored in depth in only a few of the world's languages, and this is an area that is in need of careful research informed by corpus investigations. The time is ripe for this sort of study in a larger and more representative set of languages, and employing larger and more diversified corpora including more representative samples of discourse genres, not just narratives. Implicit in this is a need for new hypotheses concerning motivations: current explanations seem stuck on information and agency. Further work is also required to test the extent to which optional marking follows the same distribution patterns as split case-marking.

#### 4.2 DIFFERENTIAL ERGATIVE CASE-MARKING

Related to optional ergative case-marking is the perhaps even rarer phenomenon of differential ergative case-marking, in which a language shows two or more distinct ergative case-markers. (The existence of more than one ergative allomorph is common and unremarkable.) An example is provided by Warrwa, where (in addition to optional ergative marking) we find two sets of ergative case-markers, *-na* ~ *-ma* and *-nma*. McGregor (2006) argues that the former represent an ordinary ergative marker, the latter a focal ergative marker that accords contrastive information focus to the Agent and/or focalises its agency. Both focal senses are evident in (33), which introduces the crocodile into the narrative for the first time, and as a potent actant. Thus Warrwa has strategies to both background and to focalise Agents of transitive clauses.

- (33) kaliya yaab,  $\emptyset$ -na-ndi-ny-ngayu                      kaliya buka-nma  
 finish away 3MIN.NOM-CM-get-PF-1MIN.ACC finish crocodile-FERG  
 ‘‘A crocodile has got me,’’ (she said)’.

In Warrwa, differential ergative marking is, like optional marking, across the board. So also is it in Kaluli, where Agent NPs can be marked by the ergative to assign focus, but by the non-zero absolute marker if neutral. In some languages, however, it is at least partially grammatically conditioned. Kuku Yalanji (Pama-Nyungan, Australia) has two sets of ergative allomorphs: one with the shape  $-(V)ngkV$ , the other,  $-(V)bu \sim -njV \sim -dV$ , where  $V$  is determined by vowel harmony (Patz 2002: 47). Which set of allomorphs is used is at least partly predictable grammatically. Pronouns, human nouns, and the interrogative ‘who’ take only allomorphs from the former set; the interrogative ‘what’ and nominals denoting plants and tools take just the latter set of allomorphs. Nominals occupying intermediate positions on the animacy scale take allomorphs from either set. Choice of an allomorph of the first set indicates that the Agent is potent (conceived of as acting

under its own volition or energy-source), whereas allomorphs from the second set indicate neutral agents.

Information status and agency are not the only semantic features relevant to differential ergative marking. In Wajarri (Pama-Nyungan, Australia), according to Douglas (1981: 214), the *-lu* ergative allomorph that is normally used with proper nouns can replace the regular *-ng(k)u* on common nouns when the speaker wishes to show deference, indicate personal involvement in the event, or its relevance to them. For instance, the *-lu* allomorph might be used to indicate that the event involves the speaker's spouse rather than just any woman. Notice that in Wajarri the contrasting markers are allomorphs that are normally conditioned by animacy features of the Agent NP. Sahaptin (Sahaptian, USA) is a split ergative language in which only third person Agents are ergatively marked. One ergative marker occurs only in constructions with a third person Undergoer, the other only in constructions with a first or second person Undergoer (DeLancey 2006: 11). This is reminiscent of direct and inverse systems of Algonquian languages (Mithun 1999: 222).

## 5. *Origins and Development of Ergative Case-Marking*

### 5.1 ACCUSATIVE TO ERGATIVE, ERGATIVE TO ACCUSATIVE

Early investigators (e.g. Pott 1873; Schuchardt 1896; Uhlenbeck 1916) tended to see ergative constructions as passives, though linguists who were actually familiar with ergative languages often rejected these claims (e.g. Vinson 1895 on Basque); indeed, Trombetti (1923) suggested the ergative was an emphatic marker.

The passive interpretation is not so popular today, though some investigators still insist on a necessary diachronic source of ergative constructions in passives (e.g. Estival and Myhill 1988: 445). Trask (1979) suggests this is the origin of many ergative systems, including in Australian languages and Basque, though for languages showing TAM splits he suggests the ergative arose from reanalysis of perfectives. There is, however, no discernible evidence for passive origins of ergative constructions in the bulk of ergative Australian languages, where passives are conspicuous for their absence. Passive origins have been suggested for ergativity in some Indo-Iranian languages (e.g. Anderson 1977; Comrie 1978; Payne 1980), though recent research casts doubt on this hypothesis (e.g. Klaiman 1987; Bynon 2005; Butt 2008; Haig 2008). The ergatives of Tongan and Samoan have also been suggested to derive from passives, though this story is also problematic (Dixon 1994: 191). But even if passives are not the source of the ergative constructions in Indo-Iranian languages, Tongan and Samoan, the ergative case-marking systems do seem to have emerged via reanalysis of earlier accusative systems.

Accusative to ergative is not the only direction of diachronic change. A set of accusative languages in the Ngayarda subgroup of Pama-Nyungan (Australia), including Panyjima, Ngarluma, Yinjibarnti, and Martuthunira, evidently derive from previously ergative languages (Dench 1982). Dench argues that (contra Dixon 1980) this is unlikely to have happened via reanalysis of an antipassive (none exist in the vicinity). More likely, as Dench (1982) suggests, it arose through replacement of the original transitive construction by a variant in which the Agent was marked by the absolutive, the Undergoer by the dative (which construction is found in the area). Marked nominative systems (see §2.1 above) in some languages of Sudan may well have arisen via reanalysis of formerly ergative constructions (Dimmendaal 2007; cf. however König 2006: 708, 2008: 117).

See Dixon (1994: 182–206) and Palancar (2002: 219–224) for further discussion of these issues.

## 5.2 ORIGINS OF ERGATIVE CASE-MARKERS

Intimately connected with the diachronic origins and development of ergative case-marking systems is the origin of ergative markers themselves; ideally, a viable developmental story needs to account for both morphological forms and constructions (e.g. Hopper and Traugott 2003). In this section we focus on sources of ergative markers, ignoring the question of what they might develop into.

Among the most widely attested sources of ergative markers are other case-markers. These include ablatives, genitives, locatives, and instrumentals (e.g. Palancar 2002). Thus in Basque and Trumai, there is an evident formal similarity between the ablative and the ergative markers. For instance, in Trumai the ergative *-(V)k* closely resembles the ablative *-ak*, and the former sense may well have arisen as an extension of the latter more concrete sense (Guirardello 1999). This possibility is supported by languages such as Kija (Jarrakan, Australia), where Agents can be focalised by marking them with the ablative (although Kija is not morphologically ergative); and in morphologically ergative Jaminjung (Mirndi, Australia), the ablative can replace the ergative marker to assign focus to the Agent (Schultze-Berndt 2000: 168). This grammaticalisation pathway is evidently motivated by metaphorical transfer (Heine, et al. 1991): the target domain of agency is represented in terms of a source spatial domain, namely source/origin, agents being conceptually the source or origin from which activity emanates. The other sources mentioned above, genitives, locatives, and instrumentals, are readily explained in similar ways, and it is not difficult to find languages where they represent plausible historical sources of ergatives (see further Palancar 2002: 224–228). Proposals such as these are founded on observed polysemies in case-markers on the one hand, and on the other on the assumption that grammaticalisation proceeds from concrete to abstract senses.

Another source of ergative case-markers is in demonstrative and pronominal elements. In Kabardian and Ubykh (North-West Caucasian), ergative markers *-m* and *-n* can be traced back to the definite article and demonstrative pronouns *m* and *jəna* ‘this’ (Kumaxov 1971: 43, 158); and Modern Georgian ergative *-ma* ~ *-m* derives from Old Georgian *-man*, which comes ultimately from a third person ergative pronominal (Boeder 1979: 457–458). Kikusawa (2002: 155) suggests that the most likely source of the proto-Polynesian ergative preposition *\*e* is a personal noun marker *\*i* or *\*ii*; Corston (1996: 61) is in agreement, and suggests that the ergative preposition in the Oceanic language Roviana *e* derives from a proto-Western Oceanic personal article *\*e* (Ross 1988: 98–100). McGregor (2008) argues that indexical items are likely sources for ergative markers in a range of Australian languages, including Warrwa, Jaminjung, Wangkumara (Pama-Nyungan), and others.

What motivates this grammaticalisation pathway? McGregor (2008) suggests that in some Australian languages it may have arisen from an appositional construction in which an indexical element was juxtaposed to the NP, in the manner of *The farmer he/this killed the duckling*. Such constructions are attested in Australian and other languages, and indeed in the Paarruntyi dialect of Paakantyi (Pama-Nyungan), alongside the usual ergative marker *-rru* another mode of expression is also used for singular Agents: a free ergative pronoun is employed alongside of (though not necessarily adjacent to) the unmarked NP (Hercus 1982: 62):

- (34) *nganha karli-wa thatya wuthu-rru nguma*  
 my dog-EMP bite PST.3SG-ERG<sup>8</sup> 2SG.ACC  
 ‘My dog bit you’.

Constructions such as this are often associated with focalisation. If, as per the Given Agent constraint (see §2.4 above), new Agents are exceptional, it could be that the appositional construction was increasingly associated with new (or focal) Agents, until ultimately it became invariably associated with them, and thus marked them. This scenario could thus account for the emergence of some optional ergative systems.

## 6. Conclusions

Perhaps what emerges most prominently throughout the discussion of this paper is that no languages consistently show ergative patterning across the board, in all domains. Even restricting attention to ergative case-marking, numerous asymmetries exist. These asymmetries, though, are not randomly distributed, but tend to cluster around parameters that correlate with the transitivity features identified in Hopper and Thompson (1980). A second phenomenon that shines through is the relevance of markedness as an

explanatory device: all of the asymmetries we have identified correlate formal markedness with functional or semantic markedness. Third there is the question of what counts as a genuine ergative pattern. We have seen that there are differences of opinion as to what counts as ergativity, even as to what counts as ergative case.

Implicit in much of the discussion is the importance of usage to the grammar of ergativity. Linguists have only recently begun to pay more than lip-service to usage. Assuming a natural progression will proceed from optional ergative marking to obligatory marking, usage is highly significant to grammar, and the time is ripe for us to bring usage into our descriptive and theoretical compass.

The paper is framed in a typological approach. As indicated in §1, ergativity raises a number of important problems for linguistic theory. Some problems are theory specific: for instance, whether an ergativity parameter exists is specific to recent generative theories (e.g. Holmer 2001; Ndayiragije 2006); see Johns, Massam and Ndayiragije (2006) and Aldridge (2008) for discussion of further problems raised for generative theory. Other problems emerge for both functional and formal theories. One such problem is the status and universality of subject (and to a lesser extent, object) as a grammatical relation, given the morphological groupings of ergative languages, and the role groupings in syntactically ergative languages; this question has attracted a considerable amount of attention over recent decades. Implicit in this question are concerns of how 'deep' morphological and syntactic are; thus many linguists have seen the morphological groupings assigned by ergative languages as superficial phenomena. Ultimately we are led to questions of how grammatical relations are theorised. Another set of questions of significance to theory is: are ergative-absolutive and nominative-accusative homologous, and if so, to what extent? To what extent can the marked members of each dyad, ergative and accusative, be equated? To what extent can the unmarked members, absolutive and nominative, be equated? Are ergative-absolutive and nominative-accusative cases assigned in identical ways? Sufficient data have been mentioned in this paper to allow one to be wary of such homologies. Pushing these questions a little further back, does an absolutive case exist alongside the ergative? Finally, an important question concerns how to account for splits and other asymmetries in case-marking. In §3 we invoked markedness considerations; within generative theory, attempts have been made to account for splits in terms of features associated with certain syntactic categories and the ergativity parameter (see papers in Part II of Johns, Massam and Ndayiragije 2006).

Space constraints preclude discussion of a raft of fascinating issues in ergativity. We have not touched on the occasional use of ergative markers on Actor NPs in intransitive clauses, a relatively common phenomenon in morphologically ergative languages. Nor have we touched on the stability of ergative systems over time, or in the face of language obsolescence,

though there is evidence that it is not unstable, and can survive even in the face of high levels of endangerment. Interestingly, it seems that in some endangerment situations ergative marking can move from obligatory to optional, as documented in Schmidt (1985), and Meakins and O'Shannessy (2004). The acquisition of ergative systems by children is a virtually unstudied domain which would repay careful research; see however Ochs (1982, 1988); Pye (1990); O'Shannessy (2006); see also Goldin-Meadow (2003) for a rather different take. Another issue that has attracted the attention of some scholars is a Whorfian one: do speakers of ergative languages conceptualise the world in different terms to speakers of accusative languages? Some early (and not so early) sources attribute primitive and passive conceptualisations of the world to speakers of ergative languages (e.g. Uhlenbeck 1916). Supporting evidence is absent.

Finally, we must raise the question of whether being ergative is of any typological significance. According to Dixon (1994), ergativity is not a significant typological parameter: 'there is no necessary connection between ergative characteristics and any other linguistic feature'. DeLancey (2006) agrees, and likens being ergative of a language to being blue of a bird. This seems to me to be a rather too negative view, a product of a too holistic a vision. Another way of looking at ergativity is to zero in to the constructional level, where it does seem that certain phenomena are more or less predictable from the existence of ergative patterning in a given construction type (as per §4 and §5).

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### *Short Biography*

William B. McGregor (FAHA) is professor of linguistics in the University of Aarhus, Denmark, where he teaches general linguistics. His primary research focus is on the languages of the Kimberley region of the far north-west of Australia, on which languages he has done extensive fieldwork. He has published four grammars and sketch grammars languages (with a fifth nearing completion), as well as numerous articles and a general book on Kimberley languages (*The Languages of the Kimberley, Western Australia*, RoutledgeCurzon, 2004). He maintains a long-time interest in descriptive and theoretical challenges raised by the languages, including optional ergative case-marking and mood and modality, both of which raise questions concerning the interface of semantics and pragmatics. His most recent book, *Encountering Aboriginal Languages: Studies in the History of Aboriginal Linguistics*

(Pacific Linguistics, 2008) is an edited collection of articles on the history of Aboriginal linguistics, a topic that has recently attracted his interest because of its significance to language documentation.

### Notes

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<sup>1</sup> I use the terms Agent, Actor, and Undergoer in preference to the more commonly employed labels A, S, and O (sometimes labelled P instead) for a number of reasons – see e.g. Mithun and Chafe (1999); McGregor (2002); DeLancey (2006) for discussion of a range of difficulties with the notions of S, A, and O. My terms (in contrast to A, S, O) are presumed to represent grammatical relations (e.g. McGregor 2002, 2006); however, nothing in this paper, hinges on this presumption, and they may be read as per A, S, and O.

<sup>2</sup> The following abbreviations are used: ABS – absolutive; ACC – accusative; APASS – antipassive; C – completive; CM – conjugation marker; DAT – dative; DECL – declarative; DU – dual; EMP – emphatic; ERG – ergative; EXC – exclusive; FERG – focal ergative; GNOM – gnomic (nonevidential); IF – intransitive final suffix; IPFV – imperfective; LOC – locative; MIN – minimal; NFUT – non-future; NOM – nominative; NRL – nominaliser; OBL – oblique; PF – perfective; PL – plural; PROG – progressive; PRS – present; PST – past; SG – singular; SUF – suffix; and TA – transitive active voice.

<sup>3</sup> Confusingly, some writers refer to the Actor–Undergoer pair in the alternations of (6) and (7) as ‘ergative’ (e.g. Burzio 1981; Pesetsky 1982), rather than ‘absolutive’, the term normally employed for the Actor–Undergoer pairing.

<sup>4</sup> It should be noted that these examples, taken from Dixon (1979), are given, following that source, in a somewhat simplified form, without the noun markers that are required in each NP (Dixon 1979: 61, fn.3). As Dixon remarks, this has no effect on the discussion.

<sup>5</sup> Found in some ergative languages, antipassivisation is a marked voice option in which the Agent of the ordinary transitive corresponds to an absolutive NP in the antipassive, and the Undergoer NP of the transitive clause, if present, corresponds with some oblique role in the antipassive; in Dyrirbal it is marked by the dative.

<sup>6</sup> The term is something of a misnomer, since many such systems could equally be called split-accusative; it is in some ways preferable to refer to them as split case-marking systems. DeLancey (2006) in particular objects to the term ‘split ergative’.

<sup>7</sup> Coupe (2007) speaks instead of the agentive case in Mongsen Ao, preferring to use the term ergative when the marking of Agent is systematic and grammatically predictable. McGregor (2007) discusses reasons for retaining the term ergative in systems in which pragmatic factors are relevant to the use and/or non-use of the Agent-marker.

<sup>8</sup> Note that this is a tensed free ergative pronominal.

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