

Split Absolutive*

Julie Anne Legate
University of Delaware

1 Introduction

This paper has two goals. The first is to provide an analysis of split ergativity in Warlpiri using standard mechanisms of structural case and agreement licensing. The task is of theoretical interest, both due to the nature of the split (ergative-absolutive case marking, nominative-accusative agreement), and due to the implications for the non-configurationality debate. While Warlpiri split ergativity has been taken as evidence for a non-configurational syntactic structure (Jelinek 1984), recent work has argued that Warlpiri is in fact configurational (Legate 2002b). This paper supports the latter position by demonstrating that even the split ergative pattern is best analysed through configurational means.

The second goal is to clarify the possible roles of the “absolutive” in case systems, towards the elimination of absolutive as a distinct case. It is now recognized that for a subclass of ergative-absolutive languages, absolutive case can be reduced to nominative case. However, for other ergative-absolutive languages, including Warlpiri, this is far more problematic. I demonstrate that absolutive case in Warlpiri must be reduced to both nominative case (on intransitive subjects) and accusative case (on intransitive objects). This is required on empirical grounds, and allows for a restrictive typology of possible ergative case systems.

The paper is organized as follows. Section 2 introduces the split ergative pattern in Warlpiri. Section 3 examines the grammatical subject position in Warlpiri, and demonstrates that it is occupied by the highest argument in the clause. Section 4 presents evidence that morphological absolutive case in Warlpiri masks structural nominative and accusative case. Section 5 considers the implications of the analysis for Warlpiri nonconfigurationality, and section 6 considers the implications for the phenomenon of ergativity crosslinguistically.

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2 Warlpiri Split Ergativity

We begin in this section by considering the nature of the split ergative system in Warlpiri. Warlpiri exhibits a pattern whereby agreement clitics supplete according to a nominative-accusative pattern, whereas independent pronouns and DPs inflect according to an ergative-absolutive pattern.

- (1) a. **Ngajulu-rlu -rna-ngku** nyuntu nya-ngu
1-ERG -1SG-2SG.OBJ 2.ABS see-NPAST
“I saw you”
- b. **Ngaju -rna** parnka-ja
1.ABS -1SG run-PAST
“I ran”
- c. Nyuntu-rlu -npa-ju **ngaju** nya-ngu
2-ERG -2SG-1SG.OBJ 1.ABS see-NPAST
“You saw me”

This pattern is taken by Jelinek (1984) as a reflection of the nonconfigurational structure of Warlpiri whereby, according to her analysis, the agreement clitics function as the arguments of the verb, while the overt DPs are sentential adjuncts related to the clitics by language-specific case-compatibility rules.

In this paper, I provide a configurational analysis of the Warlpiri split-ergative pattern. The literature on ergativity is exceptionally rich (see Levin 1983, Marantz 1984, Levin & Massam 1985, Bok-Bennema 1991, Johns 1992, Murasugi 1992, Bobaljik 1993, Jelinek 1993, Philips 1993, Dixon 1994, Mahajan 1994, Bittner & Hale 1996a,b, among others), as is the crosslinguistic variation shown by ergative languages. Here, I begin with an examination of the Warlpiri case, an instance of morphological ergativity, and subsequently consider the implications for the phenomenon of ergativity crosslinguistically.

To begin, I examine the nature of the external subject position in Warlpiri.

3 The External Subject Position

A controversial and crucial question when considering ergative case systems is whether the ergative or the absolutive functions as the subject.¹ We take the now-standard approach in assuming that the answer differs from language to language; that is, there does not exist a single model of ergativity applicable to all ergative case systems. Furthermore, we take subjecthood to consist of two distinct notions—(i) an underlying or thematic subject, to be identified with the DP generated in the specifier of *v*P and receiving the external theta-role (agent/experiencer/causer); and (ii) a grammatical subject, to be identified with

¹The issue is in fact broader, arising for non-nominative subject constructions in general; see for example Andrews 1976, Thráinsson 1979, Zaenen et al 1985, Sigurdsson 1989, 2002; Holmberg & Hróarsdóttir 2003, and references therein.

the DP appearing in a designated A-position outside of the verb phrase, which we refer to as the specifier of TP (see for example McCloskey 1997 for discussion). It has indeed been proposed (notably in Marantz 1984) that ergative case systems differ from nominative in the thematic subject position, that is, ergative agents appear as the complement to the verb. I assume that such a radical difference between languages is not provided for by universal grammar, noting when appropriate data from Warlpiri that argue against this type of “deep ergative” hypothesis. I am thus concerned in this section with the second notion of subjecthood—is it the ergative or the absolutive that fills the specifier of TP in Warlpiri? I argue that the highest argument fills the specifier of TP, that is the ergative thematic subject in a transitive clause, and the single (absolutive) argument of an intransitive clause.

The question of subjecthood is partially related to a second controversial and crucial question related to ergative case systems—what is the source of ergative and absolutive case? Thus, a common analysis of ergativity maintains that absolutive case is nominative case associated with finite T (see *inter alia* Murasugi 1992, Bittner 1994, Ura 2001). Such an analysis requires an agreement relationship be established between finite T and the nominative object. If this relationship is established through overt movement of the object to the specifier of TP, then we may expect the object to exhibit grammatical subject properties. If this relationship is established through covert movement of the object of the specifier of TP, then we expect the object to only exhibit those grammatical subject properties that diagnose syntactic positioning at LF. Finally, following recent work by Chomsky (2000, 2001), if the relationship is established in situ (through the *Agree* operation), with no movement of the object, then we expect the object not to exhibit grammatical subject properties. Thus, although the questions of grammatical subjecthood and source of absolutive case are partially interrelated, they are distinct questions, and so I treat them separately. This section concerns the question of grammatical subjecthood, and the following section examines the question of case source.

To begin the discussion of the grammatical subject position in Warlpiri, I present two tests which demonstrate that the ergative DP behaves as though it asymmetrically c-commands the absolutive DP in transitive clauses. These data speak in support of an analysis whereby the ergative subject occupies the grammatical subject position, rather than the absolutive subject.

First, the ergative subject in Warlpiri behaves as though it asymmetrically c-commands the absolutive object for the purposes of Condition A. Thus, a reflexive object may be bound by the ergative subject, but not vice-versa:

- (2) a. Purlka-jarra-rlu ka-pala-nyanu nya-nyi
 old.man-DUAL-ERG PRESIMPF-3DUAL-ANAPH see-NPAST
 “The two old men are looking at each other” (Simpson 1991:163)
- b. * Purlka-jarra ka-nyanu-palangu nya-nyi
 old.man-DUAL PRESIMPF-ANAPH-3DUALOBJ see-NPAST
 Lit: Each other are looking at the old men. (Legate 2002b)

It is important to realized that these data cannot be explained by claiming the reflex-

ive/reciprocal is formed by detransitivization in Warlpiri. A number of considerations demonstrate that reflexive/reciprocal sentences in Warlpiri are transitive, as noted by Hale (1983:24 ftn 10, 1983:43): (i) the subject receives ergative case; (ii) the object switch reference marker *-kurra* is licensed, indicating control of the embedded subject by the matrix object (see below for discussion of the switch reference system); (iii) an overt body-part noun related to the object may be present. To this we may add, (iv), the fact that a secondary predicate related to the object may be present. These properties are illustrated in the following examples (note that *jurru* “head” and *wati* “man” appear in the unmarked absolutive case, indicating that they are related to the object position, rather than bearing the ergative case suffix that would be required if they were related to the transitive thematic subject position):

- (3) a. **Wati-ngki-nyanu** paka-rnu **jurru**
 man-**ERG**-ANAPH hit-PAST **head**
 “The man hit himself (on) the head”
- b. **Wati-lki-li-nyanu** nya-ngu kurdu-warnu-**rlu**.
man-then-3PL-ANAPH see-PAST child-ASSOC-**ERG**
 “The young people saw each other (to be) men then.” (Hale et al 1995:1441)
- c. Kurdu-**ngku** ka-nyanu nya-nyi, karri-nja-**kurra**
 child-**ERG** PRESIMPF-ANAPH see-PAST stand-INFIN-**OBJ.C**
 “The child sees himself standing” (Hale 1982:295)

These data clearly indicate the presence of an absolutive object in addition to the ergative subject. I conclude that there is a phonologically null anaphor in object position of reflexive/reciprocal sentences in Warlpiri, which triggers the special agreement morpheme *-nyanu*. Therefore, the data in (2) demonstrate that the ergative subject asymmetrically c-commands the absolutive object.

Second, the ergative subject also behaves as though it asymmetrically c-commands the absolutive object for the purposes of Condition C:²

- (4) a. Purlka-jarra-rlu ka-pala-nyanu nya-nyi
 old.man-DUAL-ERG PRESIMPF-3DUAL-ANAPH see-NPAST
 “The two old men are looking at each other” (Simpson 1991:163)
- b. *Purlka-jarra ka-pala-nyanu nya-nyi
 old.man-DUAL PRESIMPF-3DUAL-ANAPH see-NPAST
 “They_i (two) are looking at the old men_i.” (Legate 2002b)

² The reflexive/reciprocal agreement clitic *-nyanu* is used in (4b) to force the coreferent interpretation. If the clitic is replaced by the 3rd dual object agreement clitic *-jana*, the sentence remains ungrammatical on the coreferent interpretation, but becomes grammatical on a non-coreferent interpretation. As is, (4b) is grammatical on the irrelevant interpretation whereby *purlka-jarra* “two old men” is a secondary predicate rather than the object—“They (two) see each other as two old men”, cf (3b) above.

In (4a), the overt R-expression is marked with ergative case, as the thematic subject; whereas in (4b) the overt R-expression is in the (unmarked) absolutive case, as the transitive object. The grammaticality of (4a) as opposed to the ungrammaticality of (4b), then, may be explained in terms of Condition C. In (4a), the ergative R-expression occupies the grammatical subject position and thus c-commands the coreferent anaphoric *pro* in object position, resulting in no Condition C violation. In (4b), on the other hand, the absolutive R-expression is c-commanded by the coreferent ergative *pro* in the grammatical subject position and the sentence is ungrammatical as a Condition C violation.³

One additional point about (4b) should be mentioned. Consider the alternative analysis whereby the absolutive is generated in object position and then raises to the grammatical subject position. In its merged position within the verb phrase, the absolutive R-expression is c-commanded by the coreferent pronominal thematic subject. Could this be the source of the Condition C violation in (4b)? The answer is clearly no. It is now well-established that A-movement repairs Condition C violations (see Mahajan 1990, Saito 1992, Lebeaux 1995, Fox 1999, *inter alia*). This phenomenon is illustrated below with data from English:

- (5) a. John's_i mother seems to him_i t_i to be wonderful.
 (*It seems to him_i that John's_i mother is wonderful.) (Lebeaux 1995:[91b, 92b])
 b. John's_i picture struck him_i t_i as a good likeness. (Saito 1992:90)

Indeed, Legate (2002b) argues from independent data that Condition C violations are also repaired through A-movement in Warlpiri. Therefore, the ungrammaticality of (4b) cannot be explained by the existence of a configuration before A-movement that would violate Condition C. Rather, (4b) shows us that the thematic subject c-commands the object after A-movement, which then results in the Condition C violation.

Next, I turn to three tests that demonstrate that the ergative subject of a transitive and the absolutive subject of an intransitive pattern together on tests of grammatical subjecthood, to the exclusion of absolutive objects. Furthermore, I demonstrate that this is equally true of intransitive absolutive subjects that, on thematic and crosslinguistic grounds, are plausibly generated as the object of an (unaccusative) intransitive predicate.

First, as mentioned above, ergative and absolutive subjects trigger subject agreement morphology, as distinct from object agreement:

- (6) a. Nya-ngu-**rna**-ngku
 see-PAST-1SG-2SGOBJ
 "I saw you"
 b. Parnka-ja-**rna**
 run-PAST-1SG
 "I ran"

³Note that in (4b) the ergative *pro* is pronominal rather than anaphoric, as indicated by the 3rd dual subject agreement *-pala* rather than the reflexive/reciprocal agreement *-nyanu*. Therefore Condition A is not implicated. See (2b) and footnote 2.

- c. Mata-jarri-ja-lku nganta-**rna**
 tired-INCH-PAST-NOW supposedly-**1SG**
 “I seem to be tired” (Warlpiri Dictionary Project 1993)
- d. Nya-ngu-**npa-ju**
 see-PAST-2SG-**1SGOBJ**
 “You saw me”

Second, ergative and absolutive subjects are treated as a natural class for switch reference morphology. Warlpiri displays a system of switch-reference morphology on nonfinite clauses: *-karra* indicates control of the embedded PRO by the matrix subject,⁴ *-kurra* indicates control of the embedded PRO by the matrix object, and *-rlarni* is the default used when there is an overt embedded subject, or when the embedded PRO is controlled by a matrix adjunct:

- (7) a. Karnta_i ka-ju wangka-mi [PRO_i yarla
 woman_i PRESIMPF-1SGOBJ speak-NPAST [PRO_i yam
 karla-nja-**karra**]
 dig-INFIN-**SUBJC**]
 “The woman is speaking to me while digging yams” (Hale 1983:21)
- b. Purda-nya-nyi ka-rna-ngku_i [PRO_i
 aural-perceive-NPAST PRESIMPF-1SG-2SGOBJ_i [PRO_i
 wangka-nja-**kurra**]
 speak-INFIN-**OBJC**]
 “I hear you speaking” (Hale 1983:20)
- c. Wati-rla jurnta-ya-nu karnta-ku_i [PRO_i jarda-nguna-nja-**rlarni**]
 man-3DAT away-go-PAST woman-DAT_i [PRO_i sleep-lie-INFIN-**OBVC**]
 “The man went away from the woman while she was sleeping” (Hale et al
 1995:1442)

These switch reference markers are also used in other contexts, as illustrated in (8):

⁴For some speakers, *-karra* has an additional use whereby it co-occurs with *-rlarni*, to mark the non-finite clause as contemporaneous with the matrix clause. This use is illustrated in (1):

- (1) Manu yangka wurna-rlangu yinga-lu ya-ni munga-puru-**rlarni-karra-ju**.
 or go-NPAST that.one travel-ALSO REL.C-3PL night-during-**OBV.C-while-TOP**
 “Or like when people travel to another place while it’s still dark.”

This suggests an alternative analysis for these speakers whereby the subject control marker is \emptyset , *-karra* being used to signal contemporaneity in subject control environments as well. The object control *-kurra* thus would be a portemanteau morpheme signaling both contemporaneity and object control. This more precise picture does not affect the argument in the text, in that we still find a morphological distinction between subject control, ($-\emptyset$), object control, (*-kurra*), and the default (*-rlarni*) for adjunct control or no control. For simplicity’s sake, I continue to refer to *-karra* as the subject control marker. I would like to thank Mary Laughren for pointing out this additional use of *-karra*.

- (8) a. Kala-lu nya-ngu mala-lku rdululu-nyina-nja-kurra.
 PAST.C-3PL see-PAST hare.wallaby-THEN scatter-sit-INFIN-OBJ.C
 Kala-lu ngula-**kurra** wapirdi-wapirdi-paka-rnu.
 PAST.C-3PL that-**OBJ.C** approaching-approaching-hit-PAST
 “Then they saw the Hare Wallabies scattering. They came up and killed them while (they were doing) that.”
- b. Yama-kari-rla kala-rnalu nyina-ja-rni
 shade-OTHER-LOC PAST.C-1PL.EXCL sit-PAST-HITHER
 wanta-ngka-ja, ngarntajari-**karra**.
 sun-LOC-INDEED orange-**SUBJ.C**
 “We came and sat down under another shady tree as it was hot, (eating) Bush Oranges.”
- c. Munga-puru-rlarni-**karra**, ngula-ji yangka wirlinyi ya-ni.
 dark-while-OBV.C-**SUBJ.C**, that-TOP like hunting go-NPAST
 “While it’s still dark, like one will go hunting.” (Warlpiri Dictionary Project 1993)

Analysis of the range of uses of the switch reference morphology must be left to future work. The crucial point for our purposes is that the subject switch reference marker *-karra* is used for the ergative argument, the absolutive argument of an unergative verb, and the absolutive argument of unaccusative predicates, as illustrated in (9).

- (9) a. Ngarrka-ngku ka karli jarnti-rni,
 man-ERG PRESIMPF boomerang trim-NPAST,
 wangka-nja-**karra**-rlu
 speak-INFIN-**SUBJC**-ERG
 “The man is trimming a boomerang while speaking.”
- b. Ngarrka ka wangka-mi, karli jarnti-rninja-**karra**
 man PRESIMPF speak-NPAST, boomerang trim-INFIN-**SUBJC**
 “The man is speaking while trimming a boomerang.” (Granites et al 1976)
- c. Nyangurla-**karra**-rlipa rdakurlpa-rra pi-nyii?
 when-**SUBJC**-1PLINCL enclosed.space-HITHER VF-NPAST
 (rdakurl(pa)-pi-nyii “arrive, enter”)
 “When will we get there?” (Warlpiri Dictionary Project 1993)

Thus, the switch reference morphology treats subjects–ergative, absolutive unergative, and absolutive unaccusative, as a natural class.

Third, these subjects are also treated as a natural class by control. Only grammatical subjects may be controlled PRO in a nonfinite clause. This is illustrated by (10), where the interpretation involving control of the object is impossible.

- (10) Ngana-kurra-*npa* Jakamarra-kurlangu maliki nya-*ngu* [paji-rninja-kurra]?
 who-OBJC-2SG Jakamarra-POSS dog see-PAST [bite-*INFIN-OBJC*]
 “Who_{*i*} did you see Jakamarra’s dog_{*j*} PRO_{*j*} *t_i* biting?”
 * “Who did you see Jakamarra’s dog being bitten by?”
 = who_{*i*} you see Jakamarra’s dog_{*j*} *t_i* PRO_{*j*} biting

As illustrated below, ergative and absolutive subjects may all be controlled PRO:

- (11) a. Yurnturru-lu-*rla* yirra-*ka* panu-kari-*rli*, ngaju yi-*rna*
 surround-3PL-3DAT put-*IMPERATIVE* many-other-ERG I RELC-1SG
 kurlarda-*rlu* panti-*rni* – [PRO ngapa-kurra-juku nga-rninja-kurra.]
 spear-ERG spear-*NPAST* [water-OBJC-STILL drink-*INFIN-OBJ.C*]
 “You others surround it so I can spear him while (he’s) still drinking the water.”
- b. Luurnpa-jarra-lpa-pala-*rla* ngarlarri-*ja* kalwa-*ku* [PRO
 kingfisher-DUAL-PASTIMPF-3DUAL-3DAT laugh-PAST heron-DAT [
 wirntinja-kurra-*ku*.]
 dance-*INFIN-OBJ.C-DAT*]
 “The two kingfishers laughed at the heron while (the latter was) dancing.”
- c. Yapa-kari *ka-rla* yapa-*ku* yaarlpa-*nyina* kankarla-rni-*nginti*
 person-other PRESIMPF person-DAT on.top-sit.*NPAST* above-HITHER-side
 – miyalu-*rla* marda, pawiyi-*rla* marda – [PRO nguna-nja-kurra-*ku*.]
 belly-LOC maybe back-LOC maybe [lie-*INFIN-OBJ.C-DAT*]
 “Another person sits on top of someone – either on the belly, or on the back –
 as (he is) lying down.” (Warlpiri Dictionary Project 1993)

To summarize, we have seen that the ergative thematic subject behaves as though it asymmetrically *c*-commands the absolutive object for Condition A and Condition C, indicating that the absolutive object does not raise over the ergative thematic subject to the specifier of TP. We have also seen that ergative and absolutive subjects are treated as a natural class for agreement, switch reference morphology, and control, to the exclusion of the absolutive object. These data are naturally accounted for if the grammatical subject position in Warlpiri hosts the highest argument, be it ergative or absolutive.

This result, important independently, also impacts on the source of absolutive case in Warlpiri. Thus, the data discussed to this point are compatible with an analysis whereby absolutive case in Warlpiri is licensed by finite T, but only if this licensing relationship is not accomplished through (or accompanied by) movement of the absolutive to the specifier of TP. In the following section, I examine the issue of case source in detail.

4 Split Absolutive

In this section, I examine the source of absolutive case licensing in Warlpiri, and argue for a distinction between absolutive case borne by intransitive subjects and absolutive case

borne by transitive objects. In doing so, I also provide analyses of ergative case source and nominative-accusative agreement patterns. Throughout, I contrast the analysis with an alternative whereby absolutive case is uniformly licensed by a high functional head, be it finite T (*inter alia* Murasugi 1992, Bittner 1994, Ura 2001) or C (*inter alia* Bittner & Hale 1996a,b). I begin by outlining my proposal, and then provide supporting arguments.

The core of my proposal is that absolutive case is non-uniform in Warlpiri. Absolutive case on the subject is structural nominative case licensed by finite T. Absolutive case on the object, on the other hand, is structural accusative case licensed by *v*. Morphological realization of both nominative and accusative case as absolutive is due to the status of the absolutive as the morphological default. The absolutive as a default is supported on crosslinguistic grounds (see Dixon 1994), and is supported internally to Warlpiri by the absolutive appearing as the morphologically unmarked citation form. To illustrate, a partial case paradigm is provided for the subsection name *Nungarrayi* below.

(12)

Nungarrayi-ri	Nungarrayi-ki	Nungarrayi-rla
Nungarrayi-ERG	Nungarrayi-DAT	Nungarrayi-LOC
Nungarrayi-kirra	Nungarrayi-ngirli	Nungarrayi
Nungarrayi-ALL	Nungarrayi-EL	Nungarray(ABS)

Thus, whereas all other cases are morphologically represented as a suffix, the absolutive consists solely of the bare stem. It is important to note that my claim is that the absolutive in Warlpiri is the *morphological* default, used when no suffix expressing the specific case is available, as distinct from the *syntactic* default case, assigned when no appropriate syntactic case licenser is available.⁵ Although morphemes have been proposed that have a zero phonological realization but do not correspond to the morphological default (e.g. Halle & Marantz 1993, Sauerland 1995), morphemes with zero phonological realization are typically defaults, and indeed the zero default may be universally available (Halle & Marantz 1993:133-134). Thus, the Warlpiri absolutive is highly plausible as a morphological default.⁶

Turning to ergative case, I analyse this as inherent case licensed by the light verb that introduces the external argument in a transitive clause. A detailed defence of ergative as inherent case is articulated in Woolford (1997); in this volume, Anand & Nevins provide support for this position in Hindi, and Massam for Niuean. Arguments from the Warlpiri data for this position and against alternative conceptions of ergative case licensing are noted when appropriate.

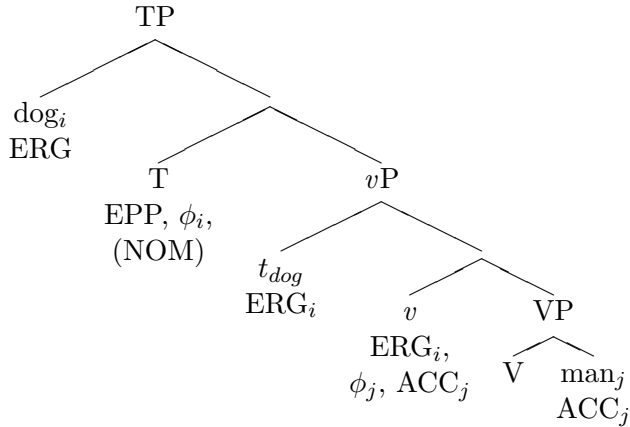
To exemplify how this case licensing system works, and its interaction with agreement, consider the derivation of a transitive sentence.⁷

⁵Indeed, I do not have clear data bearing on the issue of the default syntactic case in Warlpiri.

⁶Massam 2002, this volume, argues that in Niuean absolutive case in clauses with ergative subjects is accusative case (in her terms an “internal case”); in addition she suggests that absolutive may be a default case in Niuean. Although she also considers absolutive in intransitive clauses to be an “internal case”, it is natural from our perspective to consider Niuean a possible split absolutive language like Warlpiri.

⁷The tree in (13) ignores irrelevant details, including the possible head-final nature of the Warlpiri verb phrase. The tree also assumes that Warlpiri has a hierarchical verb phrase; see Legate 2002b for supporting

- (13) Maliki-rli ngarrka yarlku-rnu
 dog-ERG man bite-PAST
 “A dog bit a man”



The object “man” undergoes ϕ -feature agreement with transitive v , resulting in object agreement and the licensing of accusative case. This object agreement will later raise as a second position clitic.⁸ Since Warlpiri lacks an accusative case suffix, the accusative case will be morphologically realized as the default unmarked absolutive. Transitive v also assigns inherent ergative case to the subject “dog”. Subsequently, T undergoes ϕ -feature agreement with the highest DP, here the thematic subject “dog”, and the EPP feature of T attracts this DP to the specifier of TP. Nominative case is not licensed on “dog”, as “dog” already bears inherent ergative case.

In an intransitive clause, neither structural accusative case nor inherent ergative case is assigned. The single argument (be it a thematic object or the thematic subject) undergoes ϕ -feature agreement with T, has its nominative case licensed by T, and is attracted to the specifier of TP to satisfy the EPP feature of T. Since Warlpiri lacks a nominative case suffix, the nominative case will be realized as the default unmarked absolutive.

Thus, nominative case is licensed in intransitive clauses but not transitive clauses. The status of nominative case in transitive clauses bears further comment: if nominative case is an obligatory uninterpretable feature on T, failure to check nominative case should cause the derivation to crash. This issue is not unique to my analysis of Warlpiri, but also arises in languages like Faroese with inherent dative subjects and accusative objects, see section 6.

A possible resolution is that nominative case is an uninterpretable feature, but this feature is not present on T in convergent transitive clauses. The absence of the nominative case feature on T in transitive clauses may result from this feature being *optionally* added to finite T on entering the workspace, or from the presence of two finite Ts in Warlpiri,

evidence.

⁸Morpho-syntactic mechanisms of second position clitic placement in Warlpiri compatible with the current analysis are developed in Legate 2004.

one with the nominative case feature and one without. In either case, the optionality is unproblematic, since for transitive clauses, only derivations without the nominative case feature on T will converge, and (as we shall see momentarily), for intransitive clauses, only derivations with the nominative case feature on T will converge.

Another possible resolution is that nominative case on T is not an uninterpretable feature. Structural case is a theoretical anomaly in involving uninterpretable features on both the probe and the goal. The claim that nominative case on T is not an uninterpretable feature is compatible with a return to earlier conceptions of case as involving assignment rather than feature checking (e.g. Chomsky 1981). It is also compatible with recent work that reinterprets case as an uninterpretable feature on DP checked by an interpretable feature on a functional head (see Pesetsky & Torrego 2001, Svenonius 2001, Johns, this volume): nominative case being interpretable tense on T and uninterpretable tense on DP.

The choice between these explanations of the status of nominative case in transitive clauses thus depends on the mechanics of the structural case system. I leave the choice open for now.

To summarize, my account places the ergative case property of Warlpiri into the lexical entry of the light verb. I have (to this point) proposed two distinct light verbs in Warlpiri:

- (14) a. v_{TRANS} :
 -assigns a θ -role to the thematic subject
 -assigns inherent ergative case to the thematic subject
 -licenses structural accusative case
 -has unvalued ϕ -features
 -combines with a transitive verb
- b. $v_{INTRANS}$:
 -assigns a θ -role to the thematic subject
 -combines with an intransitive verb

The crucial innovation of my analysis is the splitting of absolutive case into nominative case licensed by finite T and accusative case licensed by transitive v . In what follows, I provide empirical motivation for this innovation.

4.1 Nonfinite Clauses

In this section, I examine the case patterns found in nonfinite clauses in Warlpiri. These patterns are crucial in that they clearly demonstrate a split between absolutive case on intransitive subjects and absolutive case on transitive objects. Nonfinite clauses in Warlpiri appear to be gerunds (see Simpson 1991, who argues that they are nominalized). For example, they undergo both the verbal reduplication pattern (reduplication of the first two syllables):

- (15) a. Lulju ka-lu yurrampi-rli **kiji**-kiji-rninja-parnka
 dirt PRESIMPF-3PL ant-ERG REDUPL-throw-INFIN-run.NPAST
 “The honey ants run back and forth dumping their clods of dirt”

- b. Pirli ka **parnta**-parntarri-nja-mpa-ya-ni
hill PRESIMPF REDUPL-crouch-*INFIN*-by-go-NPAST
“The mountain extends in a series of humps” (Nash 1986:137)

and the nominal reduplication pattern (reduplication of entire stem):

- (16) a. **wapa-nja-ngu**-wapa-nja-ngu-rna wirliya-ju wanka-ju pardi-ja
REDUPL-walk-*INFIN*-*RESULT*-1SG foot-TOP raw-TOP rise-PAST
“From walking around a lot my feet got raw”
b. **wangka-nja-rla**-wangka-nja-rla ka-rna-ju jurru paji-ni
REDUPL-speak-*INFIN*-*SEQ* PRESIMPF-1SG-1SG.OBJ head cut-NPAST
“As I was talking, I cut my head” (Nash 1986:133-134)

Furthermore, word order in nonfinite clauses is fixed. Following Legate (2002b), I assume that word order variations in Warlpiri are determined by: (i) A-scrambling, and (ii) movement to the left periphery motivated by information structure. Thus, fixed word order in nonfinite clauses indicates that the functional categories above the verb phrase targeted by scrambling and movement to the left periphery are absent. This again supports the status of nonfinite clauses as gerunds, lacking higher functional material.

Consider now the case patterns of nominals within these nonfinite clauses. Transitive subjects may bear either ergative case or dative case:

- (17) a. Kurdu-lpa manyu-karri-ja, [ngati-nyanu-**rlu** karla-nja-rlarni.]
child-PASTIMPF play-stand-PAST [mother-*POSS*-**ERG** dig-*INFIN*-OBVC]
“The child was playing, while his mother was digging (for something).” (Laughren 1989:[44a])
b. Nyalali-rli ka warlu yarrpi-rni, [karnta-**ku** kurdu-ku
girl-*ERG* PRESIMPF fire.ABS kindle-PAST [woman-**DAT** child-DAT
miyi yi-nja-rlarni.]
food.ABS give-*INFIN*-OBVC]
“The girl is building a fire, while the woman is giving food to the baby.” (Hale 1982:296)

The presence of dative case on the subject of these nonfinite clauses also supports the gerundive status of these nonfinite clauses. The possessive subjects of nominals may bear the possessive suffix *-kurlangu*, or they may bear dative case:

- (18) Nangala-ku jaja-nyanu
Nangala-DAT maternal.grandmother-ANAPH
“Nangala’s granny” (Warlpiri Dictionary Project 1993)

In corpus data, intransitive subjects are only rarely found bearing absolutive case, and such examples are routinely judged ungrammatical (Simpson 1991:107).⁹ Instead, intransitive subjects must bear dative case:

- (19) Kurdu ngaju-nyangu-lu paka-rnu, [ngaju-**ku** jarda-nguna-nja-rlarni.]
 child 1SG-POSS-3PL hit-PAST [I-**DAT** sleep-lie-INFIN-OBVC]
 “They hit my child, while I was asleep.”

Transitive objects, on the other hand, uniformly bear absolutive case in nonfinite clauses, and may not bear dative case:

- (20) Ngarrka-patu-rlu ka-lu-jana puluku turnu-ma-ni,
 man-PAUC-ERG PRESIMPF-3PL-3PLOBJ bullock muster-NPAST
 [karnta-patu-rlu miyi/*miyi-ku purra-nja-puru.]
 [woman-PAUC-ERG food.**ABS**/*food-DAT cook-INFIN-TEMPC]
 “The men are mustering cattle while the women are cooking the food.”

To summarize, ergative case is available in nonfinite clauses, absolutive case for intransitive subjects is not available (see footnote 9), whereas absolutive case for transitive objects is available. In addition, dative case is available for transitive and intransitive subjects.

The first point to notice about this pattern of data is that it reveals two distinct sources of absolutive case—one for intransitive subjects and a second for transitive objects, since absolutive case is licensed in nonfinite clauses for transitive objects but not for intransitive subjects. Second, this pattern of data demonstrates that the source of absolutive case on intransitive subjects is dependent on finiteness, or at minimum dependent on a functional head above the verb phrase; the source of absolutive case on transitive objects, on the other hand, is independent of finiteness and functional projections above the verb phrase. This pattern is thus exactly as predicted on the present analysis whereby absolutive case on the intransitive subject is nominative case, whereas absolutive case on the transitive object is accusative case. On the alternative whereby absolutive case is uniformly nominative, the pattern is simply puzzling.

This pattern of data is also partially revealing of the source of ergative case in Warlpiri. Absolutive case on intransitive subjects and ergative case on transitive subjects must have a distinct source, since the former is licensed in nonfinite clauses and the latter is not. This rules out an alternative analysis whereby both ergative case and absolutive case on subjects are licensed by finite T, with the distinction in case marking being a purely morphological fact. See Bobaljik & Branigan (2002, this volume) for such an analysis of ergativity in Chukchi. More generally, ergative case licensing in Warlpiri must be accomplished independently of finite T and functional projections above the verb phrase, since it is available in

⁹ The existence of rare examples in which an intransitive subject does bear absolutive case may be due to speech error, or may be related to the status of absolutive as the default case, see above.

gerundive nonfinite clauses. The proposed analysis, whereby ergative case is licensed within the verb phrase by a transitive light verb, meets these criteria.¹⁰

In conclusion, the case patterns in nonfinite clauses provide strong support for the proposed analysis, indicating distinct sources for absolutive case on intransitive subjects, ergative case on transitive subjects, and absolutive case on transitive objects. Furthermore, they reveal that only absolutive case on intransitive subjects is dependent on finiteness or functional projections above the verb phrase.

The following two sections identify two additional pieces of empirical evidence for the proposed analysis.

4.2 Person-based Split

This section provides an additional argument for two distinct sources for absolutive case in Warlpiri. The argument comes from a person-based ergative split in Warlpiri. The split consists of the pronouns *ngaju* ‘‘I’’ and *nyuntu* ‘‘you (singular)’’ when used as thematic subjects optionally appearing without ergative case marking:

- (21) Ngaju ka-rna yankirri nya-nyi.
 I(ABS) PRESIMPF-1SG emu(ABS) see-NPAST
 ‘‘I see an emu.’’

This type of split is common in ergative languages (see for example Dixon 1994). What is interesting about the Warlpiri instantiation is the resulting case pattern. As can be observed in (21), the split results in two DPs bearing absolutive case in a single clause.

Person-based splits are often attributed to functional concerns—first and second person make ‘‘good’’ thematic subjects and so do not need explicit marking as such, see Dixon (1994). Independent of any functional explanation, the split necessarily involves the failure of ergative case to be assigned to first and second person thematic subjects. Again, this may be encoded in the features of the light verb heads.¹¹

On the proposed analysis, nothing more need be said about the split. The object receives accusative case as usual, morphologically realized as absolutive because Warlpiri lacks an accusative case suffix. Finite T licenses nominative case on *ngaju/nyuntu*; nominative case licensing by finite T is always an option, as required for intransitive subjects. Again, since Warlpiri lacks a nominative case suffix, the nominative case on *ngaju/nyuntu* are morphologically realized in the unmarked absolutive case.

On an alternative analysis, whereby absolutive case is uniformly nominative case licensed by finite T (or C), the split must involve more than simply the failure of ergative case assignment to *ngaju/nyuntu*. In addition, and concomitantly, the higher functional

¹⁰A question remains: why is ergative case *optional* in nonfinite clauses? This is clearly related to the optionality found in English gerunds: *his laughing* versus *him laughing*, but further research is needed on this point.

¹¹A variety of options for this encoding suggest themselves; at present, I have no reason to prefer one over another.

projection that licenses absolutive case, finite T or C, must be able to license two occurrences of absolutive case, and this only when the thematic subject is *ngaju* or *nyuntu* and the lexical verb is transitive.¹²

I conclude that the person-based split is more plausibly explained on the present split absolutive analysis.

4.3 Dative Objects

In this section, I focus on the source of absolutive case on the transitive object. A clear feature of my proposal, whereby the object bears accusative case, in contrast to the alternative whereby the object bears nominative case, is that on my proposal the case borne by the object is determined within the verb phrase. Section 4.1 supported this aspect of the proposal by demonstrating that absolutive case on the object remains available in gerundive nonfinite clauses. Here I provide additional evidence from selectional restrictions.

The majority of transitive verbs in Warlpiri take absolutive objects; a few examples of such verbs are given in (22).

- (22) *nyurlami* “knead”, *purami* “follow”, *purrami* “burn”, *turlkami* “pinch”, *kijirni* “throw”, *mardarni* “hold”, *parntarni* “withdraw from fire”, *pakarni* “hit”, *wardirni* “straighten”, *yilyiwirrpirnri* “slurp up”, *yurraparni* “grind”, ...

However, a class of verbs in Warlpiri select for a dative object; examples of such verbs are provided in (23).¹³

- (23) *warrirni* “seek”, *kurriyi-mani* “entrap, ambush”, *riwarri-mani* “consume completely”, *wurru-mardarni* “ambush”, *ngurru-ngarni* “desire strongly”, *pun-pun-ngarrirni* “advise”, *lawa-nyanyi* “fail to see”, *wapal-nyanyi* “search for”, *yarnta-yarntarlun-nyanyi* “stare angrily at with an intent to harm”, *wapalpa-pangirni* “search by digging”, *pulka-pinyi* “praise”, *pututu-pinyi* “warn”, ...

¹²Transitivity is an issue, for example, for intransitive verbs combining with an applicative object. The thematic subject appears with absolutive case and the applicative object with dative; the applicative may never bear absolutive case regardless of the person of the thematic subject. See Legate 2002b for analysis of applicative constructions in Warlpiri, where this type of applicative is analysed as merged into the specifier of an applicative light verb phrase dominating the intransitive lexical verb phrase.

¹³Note that this is independent of the “conative” construction, whereby a verb which normally takes an absolutive object appears with a dative object with the semantics of an unachieved goal:

- (1) a. Ngarrka-ngku ka marlu luwa-rni
 man-ERG PRESIMPF kangaroo shoot-NPAST
 “The man is shooting the kangaroo.”
 b. Ngarrka-ngku ka-rla-jinta marlu-ku luwa-rni
 man-ERG PRESIMPF-3DAT-3DAT kangaroo-DAT shoot-NPAST
 “The man is shooting at the kangaroo.” (Hale et al 1995:1439)

These datives behave as objects rather than prepositional phrases with respect to the standard tests for objecthood in Warlpiri; thus they trigger object switch reference morphology and object agreement:¹⁴

- (24) Kurdu-ku kapu-rna-**rla** warri-rninji-ni pirnki-ngka
 child-DAT FUT.C-1SG-**3DAT** seek-ASSOC.MOTION-NPAST cave-LOC
 warru-wapa-nja-**kurra**-ku
 around-go-**INFIN-OBJ.C**-DAT
 ‘I’ll go and look for the child while he’s walking around in the cave.’ (Simpson 1991:327)

The analysis proposed here may be naturally extended to account for these data, by positing an additional light verb:

- (25) $v_{TRANS-DAT}$:
 -assigns a θ -role to the thematic subject
 -assigns inherent ergative case to the thematic subject
 -licenses structural dative case
 -has unvalued ϕ -features
 -combines with a transitive verb from the class exemplified in (23)

On an analysis whereby absolutive case on the object is nominative, on the other hand, such data are problematic. First, the dative case cannot be licensed identically to the absolutive by finite T (or C); the verb is not in a selectional relationship with finite T (or C), and so cannot ensure that these objects are correctly assigned dative rather than absolutive case. Second, if the dative case on objects were licensed by V or v , while the absolutive case on objects is licensed by finite T (or C), we would expect the two classes of objects to exhibit differences in behaviour. However, as noted above, both types of object trigger object switch reference morphology and object agreement. In addition, both retain their case marking in nonfinite clauses: objects that are dative in finite clauses must also appear as dative in nonfinite clauses, and objects that are absolutive in nonfinite clauses must also appear as absolutive in nonfinite clauses. Indeed, no distinction between the two classes of objects has been found.

To summarize, case on the dative objects must be determined in the verb phrase; since dative objects and absolutive objects behave identically, case on the absolutive objects must be determined in the verb phrase as well.

4.4 Conclusions

In this section, I have presented an analysis of the case licensing and agreement patterns in Warlpiri. I have argued for a split absolutive analysis, whereby absolutive case in Warlpiri

¹⁴A typo from Simpson (1991) in the segmentation and gloss of the verb *warrirninjini* has been corrected in (24); thank you to Mary Laughren, pc, for the corrected version.

is a morphological default, masking structural nominative and structure accusative cases, and ergative case is inherent case licensed by the light verb that introduces the external argument. I presented evidence from the case patterns in nonfinite clauses, as well as evidence from selectional restrictions and a person-based split. In the following section, I discuss the implications of the analysis of Warlpiri split ergativity developed in this paper to the issue of nonconfigurationality.

5 Implications for a Nonconfigurational Analysis

In this section, I consider the implications of my analysis for Warlpiri nonconfigurationality. Most obviously, split ergativity in Warlpiri no longer need be considered indicative of a nonconfigurational syntax. However, we may push the point further. Not only is a configurational analysis adequate, the previous nonconfigurational analysis of Warlpiri split ergativity, Jelinek (1984), can be shown to be inadequate. According to Jelinek, the agreement clitics in Warlpiri, which show a nominative-accusative paradigm, are the true arguments of the predicate. The ergative-absolutive DPs, on the other hand, are optional adjuncts, which receive semantic case suffixes and are linked to the clitics through case compatibility rules. These rules are as follows:¹⁵

- (26) a. NOM is compatible with ABS in an intransitive sentence, and with ERG in a transitive sentence.
- b. ACC is compatible with ABS in a transitive sentence, and with DAT in a ditransitive sentence (for first and second person clitics).
- c. DAT is compatible with DAT (for third person clitics). (Jelinek 1984:53)

One obvious difficulty with this approach is that nonfinite clauses have no agreement clitics to serve as the arguments of the verb and to license the adjuncts through the rules in (26). A number of possibilities arise. One is that the overt DPs are arguments of the verb in nonfinite clauses but not in finite clauses. This seems unattractive. Under such an account, in finite clauses nominative-accusative case would be licensed on arguments, whereas in nonfinite clauses ergative/dative-absolutive case would be licensed on arguments. Furthermore, the fact that overt DPs interpreted as the subject appear in ergative case and overt DPs interpreted as the object appear in absolutive case (or dative case, for the class of dative-object verbs) in both finite and nonfinite clauses would be accidental.

More generally, Jelinek's claim that overt DPs are adjuncts in Warlpiri is designed to account for all four core nonconfigurational properties: split ergativity, free word order,

¹⁵ These are supplemented with lexical specifications that ACC is compatible with DAT (for first and second person clitics) in a sentence with a member of the class of verbs that take dative objects. In all rules, the reference to person is due to the fact that object agreement with a third person dative DP has a designated agreement clitic, whereas first and second person do not. This is informally illustrated below:

- (1) *Object Agr Morphemes*: -rla ↔ 3sg dative; -∅ ↔ 3 sg; -ju ↔ 1sg; -ngku ↔ 2sg; ...

discontinuous constituents, and free pro-drop of all arguments. By claiming that Warlpiri DPs are arguments in nonfinite clauses, Jelinek could thus account for the lack of discontinuous DPs and fixed word order in nonfinite clauses, but not the fact that pro-drop is still available:

- (27) Purra-nja-rla nga-rnu
 cook-INFIN-PRIOR.C eat-PAST
 “Having cooked (it), (he/she/it) ate (it).” (Laughren 1989:326)

The other option is that overt DPs remain adjuncts in nonfinite clauses, and that there are null clitics filling the argument positions. Regarding the core nonconfigurational properties, such a proposal would have the inverse problem from above. The lack of discontinuous DPs and the fixed word order would be surprising and unexplained. This is a general problem with any analysis of Warlpiri nonconfigurationality that links the core nonconfigurational properties to a single source: one of the four (pro-drop) is maintained in nonfinite clauses, two others (free word order and discontinuous constituents) are not, and the fourth is only partially maintained (split ergative case-agreement patterns); this clearly indicates that these must have a distinct source.¹⁶

Regarding the case patterns, the case compatibility rules for objects could be maintained, under the assumption that nonfinite clauses contained unpronounced clitics.

- (28) a. ACC is compatible with ABS in a transitive sentence, and with DAT in a ditransitive sentence (for first and second person clitics).
 b. DAT is compatible with DAT (for third person clitics).

However, in the rules for finite clauses, ergative case and absolutive case on the subject are licensed identically, by compatibility with nominative. Since in a nonfinite clause, absolutive is not licensed but ergative (optionally) is, we must posit a new rule, perhaps the following:

- (29) NOM¹⁷ is compatible with DAT in a nonfinite intransitive sentence, and with ERG or DAT in a nonfinite transitive sentence.

Although this rule is adequate, it leaves a number of issues unexplained. First, since the overt DPs are adjuncts rather than arguments, there seems to be no motivation for their case patterns to differ between finite and nonfinite clauses at all. Second, there is no explanation for why the case patterns would change in this manner, i.e. why the the ergative may be (optionally) present on adjuncts in nonfinite clauses, whereas the absolutive

¹⁶See Legate 2002b for configurational analyses of the nonconfigurational properties of Warlpiri.

¹⁷ Alternatively, the null clitic could bear dative rather than nominative morphology, given the above discussion that nonfinite clauses are gerunds, thus nominalized, and that the subjects of nominals may be dative. However, this alternative raises difficulties when taken with the case compatibility rules for objects, which also involve a dative clitic. Thus, ergative case should optionally appear on dative objects in nonfinite clauses, contrary to fact. In addition, the discussion in the text largely carries over to this option.

may not. Recall that ergative and absolutive have the same status in Jelinek's theory, being cases reserved for adjuncts, and being licensed through compatibility with nominative. These considerations in fact point to an overall difficulty with Jelinek's system. The case compatibility rules are language-specific, and unconstrained. Thus, although adequate rules may be written to describe the observed patterns, adequate rules could also be written to describe unattested alternative patterns (see Baker 1996:96 for a related point). The system does not seem to make any predictions about possible case-agreement patterns crosslinguistically. This is despite the fact that Jelinek intended her analysis to rule out a language with ergative-absolutive case marking on arguments and nominative-accusative case marking on adjuncts, in other words, nominative-accusative case marking and ergative-absolutive agreement. Such a pattern appears unattested crosslinguistically:

Both case-marking and cross-referencing affixes can be accusative, or both can be ergative; but if there is a split, then bound forms will be accusative and free forms ergative (as in Murinypata) – never the other way around. (Dixon 1994:93)

However, Jelinek explicitly allows for languages with ergative-absolutive case marking on arguments (1984:69-70) and for languages with nominative-accusative case marking on adjuncts (1984:69-70). Furthermore, case compatibility rules relating the two are easily formulated:

- (30) a. ERG is compatible with NOM.
b. ABS is compatible with NOM in an intransitive sentence, and with ACC in a transitive sentence.

Therefore, the desired restriction on possible case-agreement patterns is not made under her system.

Under the current proposal, the desired restriction does seem to be predicted. In order to derive an ergative-absolutive agreement pattern on the current system, the morphological realization of subject agreement must be sensitive to the case features of the DP; that is agreement with an ergative DP triggers a distinct set of agreement morphemes. Such morphological sensitivity is theoretically unremarkable, and is in fact empirically attested in Warlpiri. As mentioned in footnote 15, third person singular object agreement morphology is sensitive to the case borne by the object, appearing as $-\emptyset$ if the object is accusative, and as *-rla* if the object is dative.¹⁸ Therefore, in a system with nominative-accusative case morphology, ergative agreement cannot arise; in such a system, there is no case distinction between transitive and intransitive subjects for the agreement morphology to be sensitive

¹⁸This pattern does not refute my previous claim that dative DPs behave as objects with respect to object agreement. Note that object agreement morphology is indeed triggered by third person singular datives, although it is morphologically distinct from third person singular accusatives. In addition, first and second person dative objects trigger identical agreement morphology to first and second person accusative objects.

to. Therefore, in a nominative-accusative case system, any agreement morphology must follow a nominative-accusative pattern.¹⁹

I conclude that the case-agreement patterns in Warlpiri split ergativity are most appropriately analysed in a configurational rather than nonconfigurational structure.²⁰

6 Ergativity

The previous section demonstrated that the analysis of Warlpiri split ergativity presented here accounts for the Warlpiri pattern better than an account based on nonconfigurationality. An additional benefit of a configurational analysis of Warlpiri is that it allows Warlpiri to be placed within a broader typology of case-agreement systems. Also, by claiming that ergative case is inherent case borne by thematic subjects, we place ergativity within the broader context of non-nominative subjects. This section outlines a partial typology of ergative languages.

One manner in which ergative languages differ, which I do not discuss, is in the licensing conditions for ergative case. Thus, in some languages, the light verb assigns ergative case only to certain types of DPs (cf section 4.2 above); or only in the presence of certain tenses/aspects. These restrictions may be simply encoded in the relevant *v* heads, or may have a deeper explanation. In particular, the relationship between case assignment and aspect may be synchronically related to vP-internal aspectual features, selectional restrictions, or, as argued by Laka (2002, this volume) for Basque, they may be the result of distinct syntactic structures among the aspectual constructions. (See also Ura 2002, this volume for discussion of aspect-based ergative splits.)

Perhaps the most significant point of variation among ergative languages, and among non-nominative subject languages in general, is in the behaviour of the object. In some non-nominative subject languages, most famously Icelandic, when the subject bears non-nominative case the object bears nominative case and triggers (partial) subject agreement (see *inter alia* Andrews 1976, Thráinsson 1979, Zaenen et al 1985, Sigurdsson 1989, 2002;

¹⁹This raises a question regarding the analysis of languages with ergative-absolutive agreement, but no overt case marking. One possibility of course is inherent ergative case unexpressed morpho-phonologically, although this would require empirical support. Another possibility is that such systems in fact do not exist. Woolford (1999) argues that the type of ergative agreement patterns found in languages with no overt case marking are observationally distinct from true ergative agreement patterns, and have a distinct syntactic source, which is independent of case. See that work for details.

²⁰Notice that the criticisms levelled in the text apply to any account whereby the split ergative pattern in Warlpiri is taken as evidence for a nonconfigurational syntactic structure, in which the agreement morphemes are arguments and the overt DPs are adjuncts. On an alternative nonconfigurational analysis whereby the arguments are null pros, and the agreement is true agreement (see Baker 1996, although Baker explicitly does not extend his analysis to Warlpiri-style nonconfigurationality), the analysis of split ergativity proposed here could carry over, on the assumption that the DP adjuncts must agree with the null pros in number and case. On such an alternative, the split ergative pattern in Warlpiri would not provide evidence for the nonconfigurational nature of Warlpiri. Rather, the pattern would be neutral between the two approaches, with the decision between the two theories made elsewhere. Arguments against such a nonconfigurational analysis of Warlpiri are provided in Legate 2002b.

Holmberg & Hróarsdóttir 2003). In other cases, when the subject bears non-nominative case the object bears accusative case and cannot trigger subject agreement.²¹

(31) *Nominative object*

- a. Mér finnst tölvurnar ljótar (Icelandic)
me.DAT find.PL the.computers.NOM ugly.NOM
“I find the computers ugly.” (Holmberg & Hróarsdóttir 2003)
- b. Kumaar-ukku cila ninaivu-kal-∅ va-nt-ana (Tamil)
Kumar-DAT a.few memory-PL-NOM come-PAST-3PL.N
“Kumar got some memories” (Ura 1996:355, citing Lehmann 1993)
- c. Siitaa-ko laRke pasand the (Hindi)
Sita-DAT boys.NOM like be.PAST.MASC.PL
“Sita likes the boys” (Mahajan 1990:[7])
- d. Saše nrajatsja knigi (Russian)
Sasha.DAT like.3PL book.PL
“Sasha likes books” (Bailyn 1991:81)

(32) *Accusative object*

- a. Kumaar-ukku raa,jaav-aip pitikk-um (Tamil)
Kumar-DAT Raja-ACC like-3SG.N
“Kumar likes Raja” (Ura 1996:352, citing Lehmann 1993)
- b. Maer líkar henda filmin (Faroese)
me.DAT likes this film.ACC (*NOM)
“I like this film” (Woolford 2003, citing Barnes 1986:[12])

This variation is replicated in ergative languages. The class of languages in which objects bear accusative case when the subject is non-nominative, is instantiated by so-called “three-way” case systems, showing ergative-nominative-accusative case pattern. Dixon (1994) catalogues a number of such systems, including Dyrbal, Kuku-Yalanji, Ngiyambaa, Waga-Waga, Warrgamay, Yidin^y (all Australian), and Cashinawa (Panoan from Peru). Bittner (1994:13-14) also discusses such languages, citing Nez Perce (see discussion below), Kham (West Tibetan), and Hindi (with human/specific-animate/definite-inanimate objects).

- (33) a. no-e nga-lay cyu:-na-ke-o (Kham)
he-ERG me-ACC watch-1SG-PAST-3SG
“He watched me” (Bittner 1994:13, citing Watters 1973)

²¹In many such languages, the dative-marked subject also fails to trigger subject agreement, the verb surfacing with default agreement marking. On the parallel with ergative systems, discussed below, we expect to also see languages in which inherent dative subjects trigger subject agreement. One candidate is Udi, in which “absolute”, ergative, and dative subjects all trigger subject agreement. (One complication is the existence of two subject agreement paradigms, “direct” and “inversion”; the choice between these is dependent on the lexical verb. All verbs that allow dative subjects use the “inversion” paradigm, regardless of whether the subject bears ergative or dative case.) See Crysmann (2000), who cites Harris (1984).

- b. niinaa-ne kuttoN-ko khariid-aa hai (Hindi)
 Nina-ERG me-ACC buy-PERF.SG.M be.3SG
 “Nina has bought the dogs” (Bittner 1994:13)

Woolford (1997) considers the four-way case systems of Nez Perce, including a second case for objects. Subsequent work by Cash Cash & Carnie (to appear; see also Carnie this volume) argues that Nez Perce is in fact a three-way system—ergative-nominative-accusative, but that like Turkish non-specific objects may fail to trigger agreement and appear unmarked for case, possibly due to pseudo noun incorporation into the verb (see Massam 2001 on pseudo noun incorporation in Niuean; pseudo noun incorporation differs from standard noun incorporation in involving phrasal objects). Crucial for our purposes is that again we find ergative and accusative co-occurring and overtly marked with distinct morphemes:²²

- (34) a. Háama-**nm** péé-’wi-ye wewúkiye-**ne** (Nez Perce)
 man-**ERG** 3/3-shoot-ASP elk-**ACC**
 “The man shot the elk”
 b. cf: Háama hi-’wi-ye wewúkiye (Nez Perce)
 man 3-shoot-ASP elk
 “A man shot an elk” (Carnie 2002)

Further, Woolford discusses the Australian language Thangu (based on the data in Schebeck 1976), which shows a three-way system with co-occurrence of ergative and accusative case marking:²³:

- (35) a. Yūngu-Tu taykka-Na puyan (Thangu)
 man-ERG woman-ACC hit
 “Man hit woman”
 b. cf: Taykka ɾakkun^yTin (Thangu)
 woman(NOM) died
 “Woman died” (Woolford 1997:214, citing Schebeck 1976)

Indeed, I have argued in this paper that Warlpiri instantiates a three-way case system, although accusative case is not morphologically marked.

One important point to take from these cases is that we cannot claim that ergative is equivalent to accusative case and posit a parameter whereby ergative-absolutive languages differ from nominative-accusative by (something akin to) directionality of accusative case assignment, contra Marantz (1991), Ura (2001), *inter alia*. Indeed, to maintain the ergative = accusative hypothesis would require both allowing multiple case checking of accusative

²²I use “accusative” to refer to the overtly marked case used on specific objects, which trigger agreement; Woolford refers to this as “objective”, reserving “accusative” for the unmarked pseudo noun incorporated objects.

²³In the Thangu data I represent the velar nasal as ng; *T* and *N* should be marked dental.

in all languages that allow co-occurrence of ergative and accusative, and differential morphological realization of this accusative case based on the θ -role borne by the DP. I thus consider the hypothesis untenable.

The pattern of nominative objects in the presence of a non-nominative subject is also instantiated in the ergative languages. In Hindi, ergative subjects may co-occur with nominative objects, the nominative triggering subject agreement:

- (36) Raam-ne roTii khaayii thii. (Hindi)
 Ram-ERG bread.FEM.NOM eat.PERF.FEM be.PAST.FEM
 “The woman likes oranges” (Mahajan 1990:73)

Bittner (1994:14-16) also discusses ergative-nominative patterns, including Archi (Northeast Caucasian), in which the nominative object triggers subject agreement:²⁴

- (37) dija-mu x_oalli b-ar-si b-i (Archi)
 father(I)-ERG bread(III) III.SG-bake-GER III.SG-AUX
 “Father is baking the bread” (Bittner 1994:15, citing Kibrik 1979)

The case borne on the object–nominative or accusative, is thus a crucial point of variation among ergative case systems.²⁵

A point in which ergative case systems perhaps do not vary is in the source of ergative case as inherent case licensed by a light verb.²⁶ To date, no convincing example of structural ergative case has been identified. One relevant attempt is Bobaljik (1993) (following earlier proposals by Levin & Massam 1985) who claims that ergative is nominative case. On this theory ergative-absolutive languages differ from nominative-accusative in which case is obligatorily assigned. In ergative-absolutive languages accusative case must be assigned, and

²⁴Bittner also includes Warlpiri, which we have seen is more appropriately analysed as ergative-nominative-accusative, and Enga (Papuan), in which the ergative triggers subject agreement. Further research is needed to determine if Enga is truly ergative-nominative, or rather disguised ergative-nominative-accusative.

²⁵Another often cited point of variation among ergative systems is whether the language is “syntactically ergative” or not, that is whether the intransitive subject (S) and transitive object (O) pattern together for syntactic processes. Dyrbal is the most cited exemplar of a syntactically ergative language, in that S and O pattern together for relativization and deletion under clause coordination (interestingly, regardless of case marking). It should not be thus concluded, however, that S and O occupy the grammatical subject position in Dyrbal. Imperative deletion targets A and S, and A acts as a subject for control (see e.g. Bittner & Hale 1996b:533). It may be that the phenomena for which S and O pattern together are sensitive to topichood in the language rather than subjecthood. I leave this question unresolved.

²⁶This claim is potentially partially definitional. Consider the class of languages Dixon (1994) refers to as “split S” languages, in which the subjects of one class of intransitive predicates (perhaps unergatives) bear case marking identical to transitive subjects, while subjects of the other class of intransitive predicates (perhaps unaccusatives) bear case marking identical to transitive objects. This pattern has two clear potential analyses. The first is that inherent ergative case is assigned to the thematic subject of unergatives, either because of an underlying transitive structure for unergatives (see e.g. Hale & Keyser 1993, Laka 1993), or because inherent ergative case is independent of transitivity in these languages. The second is that structural accusative case is not dependent on the presence of a thematic subject, so that the object of unaccusatives also receives accusative case. The first would thus be appropriately labelled an ergative language, whereas the second would not.

so is borne by the argument of an intransitive, whereas in nominative-accusative languages nominative case must be assigned, and so is borne by the argument of an intransitive.

Bobaljik (1993) presents two arguments for this proposal. The first argument is based on data illustrating that the ergative *c*-commands the absolutive in Basque, Abkhaz (Caucasian), and Inuit languages. Section 3 above illustrated that Warlpiri fits this pattern as well. However, this type of evidence demonstrates only that the thematic subject raises to TP to satisfy the EPP feature of T; it is not revealing about the source of case licensing.

Bobaljik's second argument comes from nonfinite clauses in Inuit languages. By claiming that ergative case is nominative and absolutive case is accusative, he predicts that ergative case should be unavailable in nonfinite clauses, while absolutive case should be available. As confirmation of this prediction, he shows that ergative agreement disappears in nonfinite clauses, while absolutive agreement remains:

- (38) a. Miiqqat [Junna ikiu-ssa-llu-gu] niriursui-pput (WG)
 children Junna help-FUT-INFIN-3SG.ABS promise-IND.3PL.ABS
 “The children promised to help Junna.” (Bobaljik 1993:64)
- b. [taku-tlu-gu] tusâ-laut-taga (LI)
 see-INFIN-3SG.ABS hear-PAST-PART.1SG/3SG
 “While I saw it, I heard it.” (Johns & Smallwood 1999:[5a])

We should not conclude, however, that the prediction is thus borne out. Overt thematic subjects of nonfinite clauses do bear ergative case (Johns & Smallwood 1999):²⁷

- (39) a. **Alana-*up*** ujakak atja-tlu-gu ani-vuk (LI)
Alana-*ERG* rock(ABS) carry-INFIN-3SG.ABS go.out-INDIC.3SG.ABS
 “While Alana was carrying the rock, she went out.”
- b. **arna-*p*** atisassat irrur-lu-gitirinarsur-puq (LI)
woman-*ERG* clothes wash-INFIN-3SG.ABS-INDIC.3SG.ABS
 “While the woman was washing the clothes...” (Johns & Smallwood 1999:[8a,b])

Furthermore, Johns & Smallwood observe that ergative agreement is not simply unavailable in Inuit languages, but rather the languages differ as to the extent of ergative agreement

²⁷Bobaljik (1993:64) disregards data from case marking of DPs on the following grounds:

Inuit having generally free word order and rampant pro-drop, we will focus primarily on the agreement morphology, assuming that the relations expressed by this morphology are the essential relations of the clause. In this I am obviously learning towards the view that Inuit is typologically akin to “polysynthetic” languages such as Warlpiri, (Jelinek 1984) or Mohawk (Baker 1996). This view would maintain that the agreement morphemes are themselves the arguments of the verb ..., or that they license a null pro in the argument position.

However, simply ignoring the case data because the language is polysynthetic (or nonconfigurational) is inappropriate—if the data are to be accounted for by the polysynthetic nature of the language, this must be explained. Jelinek's (1984) theory is inadequate (see section 5). Baker does not offer a theory of case marking on overt DPs since Mohawk does not show any case marking, a fact that Baker considers necessary.

allowed (some indeed disallowing it altogether). For example, West Greenlandic allows 1/2 person ergative agreement with 3 person absolutive (Fortescue 1984), and Labrador Inuttut allows 3 person reflexive ergative agreement with the full range of absolutive arguments.

- (40) atja-tlu-**ni**-nga kata-vânga (LI)
 carry-INFIN-**3SG.ERG.REFLEX**-1SG drop-INDIC.3SG.ERG/1SG
 “While he was carrying me, he dropped me.” (Johns & Smallwood 1999:[9])

Therefore, Inuit nonfinite clauses do not provide evidence for equating ergative with nominative. Indeed, these clauses seem particularly unrevealing about case source. All cases are available, including absolutive case on the intransitive subject:

- (41) [arnaq irinarsur-lu-ni] atisassat
 [woman(ABS) sing-INFIN-3SG.REFL] clothes(ABS)
 irrur-p-a-i (Inuit)
 wash-INDIC-TRANS-3SG.ERG/3PL.ABS
 “While the woman was singing, she washed the clothes (Bittner 1994:18)

These clauses in Inuit thus appear to allow nominative case assignment independent of finite tense, in this way patterning with European Portuguese:

- (42) será difícil [eles aprovarem a proposta] (EP)
 be.FUT difficult they approve.INFIN.3PL the proposal
 “It will be difficult for them to approve the proposal” (Raposo 1987)

In sum, ergative case systems form part of a larger typological class of non-nominative subject constructions. Apart from the specific case of variation in the conditions of availability of inherent ergative case, variation among ergative languages is to be traced to variation among the larger class of non-nominative subject constructions, for example whether the object bears nominative or accusative case, and variation in the morphological realization of case and agreement found in all languages. Other macroparametric variation specific to ergative languages is not posited.

7 Conclusions

In this paper I analysed Warlpiri split ergativity in terms of structural case-agreement mechanisms. First, I demonstrated that the grammatical subject position in Warlpiri is occupied by the highest argument in the verb phrase, regardless of case. Next, I developed and motivated an analysis whereby ergative case in Warlpiri is inherent case licensed by a light verb, whereas absolutive case is a morphological default, corresponding to structural nominative (on intransitive subjects), and structural accusative (on transitive objects). I discussed that the proposed analysis compares favourably to the nonconfigurational approach of Jelinek (1984). Finally, I considered the broader typology of ergative languages, arguing that they

form a subset of non-nominative subject languages. I noted that Warlpiri exemplifies the case of the object bearing accusative case in the presence of a non-nominative subject, patterning with the nominative-accusative language Faroese in this sense, in contrast with languages in which the object bears nominative case in the presence of a non-nominative subject. Further research is needed to determine how many other ergative-absolutive languages are actually hidden ergative-nominative-accusative languages like Warlpiri.

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