Ergativity and Transitivity

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Abstract

Ergative case is said to mark transitive subjects, and it is widely assumed that this is true under the ordinary notion of transitivity, where all and only clauses with a direct object in syntax are transitive. However, Bittner and Hale 1996 propose that languages with ergative case fall into two types, neither of which is based on this ordinary notion of transitivity. In one type, often called active ergative, a direct object in syntax is not necessary for ergative case to be used: any verb with an external argument count as transitive under the definition in Hale and Keyser 1993 (Warlpiri). In the second type, a direct object in syntax is necessary but not sufficient: the subject gets ergative case only when the object moves out of the VP (Inuit). This paper provides additional support for the existence of this second type based on data from Niuean, Dyirbal and Nez Perce, and proposes a formal account of this correlation between object shift and ergative case which builds on the observation in Chomsky 1995 that object shift should create a violation of the Minimal Link Condition. Under this proposal, ergative case can be used as a 'last resort' to prevent a MLC violation. No clear counterexample to Bittner and Hale's hypothesis was found in the research for this paper among languages with overt ergative case, although there remain many languages for which published data is not yet sufficient to conclusively determine whether or not they conform to Bittner and Hale's two types. The only languages that clearly conform to the stereotype that ergativity is governed by ordinary transitivity are ones where only the agreement pattern is ergative, e.g the Mayan languages. Covert ergative case is commonly postulated for these languages, but this is called into question if no language with overt ergative case actually manifests this stereotypic pattern.

1. Introduction

Transitivity is central to the definition of an ergative pattern in typology (e.g. Comrie 1978, Dixon 1979): transitive subjects are marked in a way that is distinct from intransitive subjects and transitive objects. It is often assumed that the word 'transitive' in the typological definition of an ergative pattern has its ordinary/dictionary meaning wherein a clause is transitive if and only if there is a direct object present in syntax. However, Bittner and Hale 1996 argue that languages with ergative case fall into two quite distinct types, neither of which conforms to this stereotypic pattern.

In Bittner and Hale's first type, illustrated with Warlpiri, ergative case marks the subjects of all verbs that are transitive under the definition in Hale and Keyser 1993, where all verbs with an external argument are transitive in that they always have at least a semantically incorporated object:

(1) Ngarrka-ngku   ka   yunpa-rni.   [Warlpiri]
    man-ERG   PRES   sing-NONPAST
    'The man is singing.'   (Levin 1983:149)

The presence of a direct object in syntax is not required in order for ergative case to mark the subject in this first type of ergative language, a type known in the literature and often called active or active ergative.

In contrast, Bittner and Hale's second type is new and surprising. In this second type, illustrated with Inuit, the presence of a direct object in syntax is necessary, but *not sufficient* for ergative case to be used. *The direct object must move out of the VP before ergative case can mark the subject*. In Inuit, specific objects move out of the VP (Bittner 1994), undergoing object shift just as in Icelandic (Diesing 1992), and ergative subjects occur only in clauses where object shift has occurred. In contrast, non-specific objects remains in situ in the VP, and such clauses take a nominative subject. We see this contrast below between (2) with a specific object and an ergative subject, versus (3) with a non specific object and a nominative subject:

(2) Juuna-p   miiqqa-t   paar(i-v)-a-i.   [Inuit]
    Juuna-*ERG*   child-PL(NOM)   look.after-IND-[+tr]-3SG.3PL
    'Juuna is looking after the children.'   (Bittner and Hale 1996 (22b))

(3) Juuna   atuakka-nik   marlun-nik   pi-si-v-u-q   [Inuit]
    Juuna(NOM)   book-PL.INS   two-PL.INS   paid.for-get-IND-[-TR]-3[RD]SG
    'Juuna bought two books.'   (Bittner 1994:72)

Evidence that the object moves out of the VP in Inuit clauses with an ergative subject involves scope; the object is necessarily outside the scope of negation in the ergative construction, indicating that it is higher than the negative (Bittner 1994:35).

(4) Junna-p atuagaq ataasiq tigu-sima-nngi-la-a. [Inuit]
Junaa-ERG book one get-PERF-NEG-IND-3SG.SG
'There is one book which Juuna hasn't got (yet)' (Bittner 1994:35 (71a))

"The corresponding oblique object can only take narrow scope, indicating that it remains below negation, inside the VP (Bittner 1994:35 (71b)."[1]

(5) Juuna ataukka-mik ataasi-mik tigu-si-sima-nngi-la-q [Inuit]
Junna book-INSTR one-INSTR get-AP-PERF-NEG-IND-3SG

  Bittner and Hale's proposal does not include a third type, corresponding to what many linguists assume is the stereotypic ergative language, where any clause with a direct object takes an ergative subject, regardless of whether that object is inside or outside the VP. If Bittner and Hale's two types of languages with ergative case are all that exist, then every ergative language that has been assumed to follow that stereotypic pattern must actually be either an active ergative language, like Warlpiri, or what I will call an object shift ergative language, like Inuit. Investigating this hypothesis is the topic of this paper:

(6) Two Types of Languages with Ergative Case, following Bittner and Hale 1996 [2]:
Active Ergative: Ergative case marks external arguments.[3]
Object Shift Ergative: Ergative case marks external arguments only in clauses where the direct object has moved out of the VP.

  Now, despite Bittner's evidence that specific objects undergo object shift in Inuit, readers could still doubt that anything more than ordinary transitivity is required for the subject to be marked ergative in Inuit, given that nonspecific objects in Inuit get a case that Bittner labels as instrumental. Under a narrow definition of transitive, where only clauses with a direct object with structural case count as transitive, the Inuit examples

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[1] Bittner (1994:35 provides a word by word gloss for the example in (5), but does not give an English translation.

[2]. Bittner and Hale 1996 call the first type 'transparent' and the second type 'opaque', terms which stem from their particular account of the difference between these two types (summarized in section 9 below). They also refer to the first type as morphologically ergative and the second type as syntactically ergative. While this is accurate in the sense that the second type requires a particular syntax (object shift), it remains to be determined if the languages they label as syntactically ergative are actually the same set as those labeled syntactically ergative in the typological literature (languages having grammatical processes which single out transitive subjects). Here I use more neutral descriptive terms for these types.

[3] For those working in other frameworks, the term external argument is equivalent to what has been called a deep or initial subject (e.g. Lexical Functional Grammar) or an initial 1 (e.g. Relational Grammar). In all of these frameworks, the verbs of a language fall into two classes, one which takes an external argument/initial subject/initial 1, and the other which does not. Although the first class is generally more active/agentive, the membership in these two classes differs somewhat cross-linguistically. In the Minimalist Program, external arguments are generated and theta-marked in the specifier position of the highest little v node (Kratzer 1996, Chomsky 1995). Ergative case is the inherent case associated with the theta marking of the external argument (Massam 1994, 1998, Woolford 2006 and other references cited therein).

with a nominative subject and an object marked with instrumental case would be classified as intransitive. The first goal of this paper is to provide additional evidence that there are other ergative languages where ergative case is limited to clauses where object shift (movement of the object out of the VP) has occurred.

Strong evidence for the existence of the object-shift type of ergative language comes from Niuean (section 2). Niuean is like Inuit in that ergative case marks the subject only when the object moves out of the VP (Massam 2000). Massam shows base on evidence from the word order in Niuean that specific objects move out of the VP, while nonspecific objects remain inside the VP, just as in Inuit. Unlike Inuit, however, nonspecific objects are not marked with an oblique case in Niuean; instead, clauses with a non-specific direct object look much like transitive clauses in English and would likely be analyzed as ordinary nominative-accusative constructions, except for the fact that the language also has clauses with an ergative subject. Seiter (1980), working under the assumption that all ergative languages must fit the stereotypic ergative pattern where all and only transitive clauses have an ergative subject, forces Niuean into that mold by claiming that the non-specific object are actually incorporated. However, Massam (2000, 2006) shows, based on the length and complexity of many non-specific objects, that the incorporation account cannot be correct for Niuean.[4] In contrast, under Bittner and Hale's 1996 proposal, the Niuean pattern fits the object-shift type of ergative pattern perfectly; the subject is ergative only when the object moves out of the VP, and there is no need to claim that apparently transitive clauses with a non-specific object are really intransitive.

Other languages where ergative case marks the subject only when the object moves out of the VP include the related language Tagalog (Aldridge 2012) (section 3), and Dyirbal under Dixon's 1972 analysis where the OSV word order is produced by moving the object out of the VP (section 4). However, like Inuit, these languages could also fit the stereotypic ergative pattern because clauses with a nominative subject have objects marked with what looks like an oblique case. In contrast, Nez Perce is like Niuean where object shift has been argued to occur in clauses with an ergative subject, while clauses without object shift have a nominative-accusative case pattern (Woolford 1997, Carnie and Cash 2006). Nez Perce has ditransitive examples with a nominative-accusative-accusative pattern that really cannot be analyzed as intransitive to make it fit the stereotypic ergative pattern. Instead, Nez Perce conforms only to Bittner and Hale's object shift type of ergative language (section 5).

The second goal of this paper is to argue that many other ergative languages that may have been assumed to fit the stereotypic pattern actually belong to the active

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[4] A reviewer points out that there is still a way under the account in Massam 2001 to analyze Niuean as consistent with the stereotypic ergative pattern. Massam hypothesizes that non-specific objects get no case at all in Niuean; if so, such clauses would qualify as intransitive if transitive is narrowly defined as involving an object with structural case.

ergative type. Examples of active ergative languages discussed in this paper include several Caucasian languages, Georgian, Batsbi, Inguish, and Udi, plus Basque and Kashmiri (section 6).

The third goal of this paper is to begin the process of answering the following question raised by Bittner and Hale's 1996 proposal: do we have positive evidence that there are languages with ergative case that do not fit into either the active ergative or object shift ergative type? That is, is there clear evidence that a distinct third type, the stereotypic ergative language, must (also) exist, where ergative case marks the subject whenever there is a direct object in syntax, *even if that object remains inside the VP*? Or is Bittner and Hale's 1996 claim correct, that all languages with ergative case belong to one of the two types in (6)? In the research for this paper, no clear counterexample to Bittner and Hale's claim has yet been found, although there remain a number of languages with ergative case whose type cannot yet be determined. Some of these unclassified languages are discussed in section 7: Archi, Kabardian, Tsez, and Kalkatungu. These languages clearly do not belong to the active type, because they require the presence of a syntactic object in order for the subject to be ergative. What remains to be determined is whether the object in clauses with an ergative subject is always outside the VP in these languages. That not immediately obvious in SOV languages nor in languages with very free word order.

Languages where only the surface agreement pattern is ergative are discussed in section 8, because these languages are commonly assumed to have covert ergative case. In languages of the Selayarese family, the agreement pattern is ergative only when the direct object is definite; transitive clauses with an indefinite direct object have nominative subjects. Thus if these languages have covert ergative case, they may belong to the object shift type. In contrast, if the Mayan languages have covert ergative case, they are clear counterexamples to Bittner and Hale's hypothesis. Agreement in the Mayan languages follows an almost perfect stereotypic ergative pattern. The Mayan languages are not of the active ergative type because a direct object in syntax is required before the ergative agreement pattern can be used. Moreover, we can exclude the possibility that the Mayan languages are of the object shift type because evidence from VSO/VOS word order alternations in some of the Mayan languages shows that only definite objects undergo object shift, and yet the agreement pattern remains ergative even in clauses with an indefinite direct object . However, unless we can find clear evidence that there are languages with overt ergative case that support the existence of this stereotypic type of ergative language, we may be in the ironic situation of positing covert ergative case in languages with an ergative agreement pattern based on a pattern that does not occur among languages with overt ergative case. A possible alternative way to derive the Mayan ergative agreement pattern is presented at the end of section 8.

The final goal of this paper is to answer the theoretical question of why object shift should correlate with the use of ergative case. Two possible formal approaches to answer this question are presented in section 9. Both are case locality approaches,

formalizing the idea that moving the object out of the VP leads to a change in the conditions for subject case licensing. Bittner and Hale 1996 propose that in languages of the object-shift type such as Inuit, VP is a barrier so that objects that remain in the VP are not case competitors with respect to the subject, and thus ergative case cannot be licensed. However, that hypothesis is not compatible with theoretical approaches where case licensing involves only a relationship between a licensing head and a DP. I present an alternate account here which builds on the fact noted in Chomsky 1995 that object shift brings the object into a position where it should interfere with nominative licensing on the subject, creating a violation of the Minimal Link Condition, unless the verb raises. I show that using ergative case (as a 'last resort') is a way to avoid the MLC violation that object shift would otherwise cause. Another 'last resort' strategy to avoid a MLC violation in object shift constructions, which is used in Hawaiian, is to encase the shifted object inside a PP by inserting a preposition. The latter strategy may also be used in some nominative-accusative languages with object shift.

Under this account, the assumptions of the Minimalist Program (Chomsky 1995, 2000) essentially predict that the object shift type of ergative language should occur, in that this account uses only cross-linguistically motivated cases, licensed in the standard manner, with case locality effects following from the Minimal Link Condition. In contrast, I have not yet seen a formal account of the stereotypic ergative pattern that does not require additional cases (e.g. absolutive) and/or non-standard case licensing heads or mechanisms.

2. Niuean

Niuean fits the object shift type of ergative language perfectly. The subject gets ergative case only when the object moves out of the VP. Moreover, unlike Inuit; it requires some special stipulation to make Niuean fit the stereotypic ergative pattern, given that there are apparently transitive clauses with a nominative subject, where the object remains in situ and is not marked with oblique case.

2.1 Morphological Case in Niuean

Before we examine the relevant Niuean examples, we need to note that the case morphemes in Niuean have a different morphological form for proper and common nouns:

(7)   Niuean Case Morphemes (from Massam 2006:28)

	Proper Nouns/Pronouns	Common Nouns
Ergative	*e*	*he*
Absolutive	*a*	*e*

Although Massam 2006 uses the label *absolutive* to gloss the nominative/accusative cases in her Niuean examples, a focus of her article is to determine whether the cases

labeled absolutive are actually all accusative, as proposed by Bobaljik 1993, or all nominative, as argued by Bittner 1994. The conclusion that Massam reaches is that neither of those proposals is correct because some of the cases labeled absolutive in Niuean behave like nominatives while others behave like accusatives. This conclusion is consistent with the view of Legate 2008 and Broekhuis and Woolford (in press) that there are ergative languages where some of the cases labeled absolutive have abstract nominative case, while others have abstract accusative case, but the case morpheme used to spell out these two abstract cases at PF looks/is the same. It seems clear that prepositions license accusative case in Niuean, while intransitive subjects get nominative case, as labeled in the examples below:

(8) Ne   tohitohi   a   Sione   aki   e   pene.
    past   writing   NOM   Sione   with   ACC   pen
    'Sione was writing with a pen.'   (Massam 2006 (8))

(9) Kua   egaega   e   kau kauvehe
    PERF rosy   NOM   PL cheek
    'The cheeks are rosy.'   (Massam 2006 (1b))

The possible identification of the case of objects is discussed below.

2.2 Word Order and Case in Niuean

In Niuean, clauses with a specific object have VSO word order, while clauses with a non-specific object have VOS word order (Massam 2000, 2001).[5] This word order difference correlates with a difference in case of the subject: in clauses with VSO order, the subject is ergative, but in VOS order, the subject is nominative. This is shown in the following minimal pair from Massam 2000:98.

(10) Ne   inu   e   Sione   e   kofe.   [VSO specific object] [6]
     past drink ERG   Sione   NOM   coffee
     'Sione drank the coffee.'   (Massam 2000:98 (2a))

(11) Ne   inu   kofe.   a Sione.   [VOS non-specific object]
     past drink coffee   NOM Sione
     Sione drank coffee.   (Massam 2000:98 (2b))

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[5] I use the terms specific and nonspecific here following Massam 2000, although there is no universal agreement as to the definition of these terms. See Massam 2001 for a careful study of the details of the meaning differences between shifted and unshifted objects in Niuean.

[6] Note that, as shown in the chart above, the ergative case morpheme for proper nouns, *e*, looks just like the absolutive case morpheme for common nouns, *e*. It is difficult to determine what the case of the object in an ergative subject construction is in Niuean, given that it is nominative in some languages, but ergative in other languages (Legate 2006, 2008, Woolford 2007). I will label these nominative here since this pattern is more familiar to readers and it is not crucial for the discussion here.

Massam argues that the non-specific object remains in its base position inside the VP. The VOS order is produced when the VP containing that object fronts.

(12) a. Base order: S [$_{VP}$ V O]   [non specific object]
      b. Order after VP fronting: [$_{VP}$ V O]   S

In contrast, the specific object moves out of the VP before the VP fronts, producing the VSO word order:

(13) a. Base order: S [$_{VP}$ V O]   [specific object]
      b. Order after object shift: S O [$_{VP}$ V t]
      c. Order after VP fronting   [$_{VP}$ V t] S O

Thus Niuean is like Inuit and Icelandic (Diesing 1992) in that specific objects undergo object shift (movement out of the VP to a position below Spec IP). The additional factor affecting word order in Niuean is that the VP fronts in both types of clauses, as has been argued for other verb initial languages such as Malagasy (Pearson 1997). Because of this, we can detect the occurrence of object shift by the change in the surface word order, unlike the situation in Inuit, and thus we can more easily see the correlation between object shift and ergative case in Niuean than in Inuit:

(14) Niuean Word Order:
      non-specific object   [$_{VP}$ V O]   S-nom
      specific object   [$_{VP}$ V   ]   S-erg   O

(15) Inuit Word Order:
      non-specific object   S-nom   [$_{VP}$ O V]
      specific object   S-erg   O   [$_{VP}$ V]

It is thus clear that Niuean fits the object shift type of ergative language proposed by Bittner and Hale 1996 where ergative case marks the subject only in clauses where the object moves out of the VP.

2.3 Seiter (1980) and the Stereotypic Ergative Pattern

Since non-specific objects are not marked with an oblique case in Niuean, clauses with a nominative subject and a non-specific object in Niuean are/appear to be transitive, just as clauses with an ergative subject are. We see this in the following minimal pair from Seiter 1980, in which I have bracketed the VP following Massam's 2000 analysis for clarity:

(16) Neafi,   ne   [tō   huli   talo]   a   au he māla.
      yesterday past   [plant shoot   taro]   abs I   at plantation
      'Yesterday, I planted taro shoots at the plantation.'   (Seiter 1980 (184b))

8

(17) Neafi,   ne   [tō]   e au   e tau huli   talo   he māla.
     yesterday past [plant] erg I   abs pl shoot taro   at plantation
     'Yesterday, I planted taro shoots at the plantation.'   (Seiter 1980 (183b))

Seiter (1980) assumes that all ergative languages must fit the stereotypic ergative pattern where only clauses with an ergative subject are transitive, and thus he reasons that in the example in (16) with a nominative subject "is syntactically intransitive at some levels of structure, as shown by the fact that its subject appears in the absolutive case (Seiter 1980:70)". To make his analysis conform to this assumption, he proposes that the object is incorporated into the verb in examples such as (16), so that the construction with a nominative subject is actually intransitive.

However, Massam (2000) rejects Seiter's proposal that non-specific objects are incorporated in Niuean, pointing out that true noun incorporation involves unmodified nouns, but the non-specific object in VOS clauses with a nominative/absolutive subject can be long and complex:

(18) Ne   kai   [sipi   mo   e   ika   mitaki]   a   Sione.
     past   eat   chip   COM   ACC   fish   good   NOM   Sione
     Sione ate good fish and chips.   (Massam 2000:106 (16a))

(19) Ne   holoholo [kapiniu   kiva] fakaeneena   a   Sione.
     past   wash   dish   dirty   slowly   NOM   Sione
     Sione is washing dirty dishes slowly.   (Massam 2000:106 (16b))

2.4 Massam (2001) and the Type of Niuean

Under standard assumptions, it seems clear at this point that Niuean does not fit the stereotypic ergative pattern: there are transitive clauses such as (18) and (19) which lack an ergative subject. However, as a reviewer points out, under the analysis presented in Massam (2001), Niuean could actually fit the stereotypic ergative pattern. Massam (2001) posits that non-specific objects such as those in (18) and (19) have no case at all. If so, and if a transitive clause is narrowly defined as a clause with an object with structural case, examples such as (18) and (19) would not count as transitive because the object has no abstract case, structural or otherwise.

One motive for the claim that non-specific objects that remain in situ are caseless under Massam's account is that it allows an explanation of why only specific objects move out of the VP in Niuean. Working under the assumption from Chomsky (1986) that case is only licensed in spec-head configurations and that objects must move to get case, Massam proposes that specific objects move out of the VP in order to get case, while non-specific objects remain inside the VP because they do not and cannot get case. However, this account is not available under the more recent version of case theory, e.g. Chomsky 2000, where case is licensed under c-command and objects do not move to get

case. Moreover, a case account of what drives object shift would not extend to all languages with object shift because it is clear that the unshifted object has case in languages such as Icelandic.

Another motive for the claim that non-specific objects have no abstract case in Niuean is that they lack an overt case morpheme, in contrast to other arguments which all have an overt case morpheme. Massam's analysis of why the lack of a case morpheme indicates a lack of abstract case is as follows. Since non-specific objects have no determiner in Niuean, Massam argues that these only project to the NP level, and do not project a DP. This could well be true. Under the assumption that the case morpheme and the abstract case feature are contained in a KP projection above the DP, Massam proposes that without a DP projection, there can be no KP projection above that DP, and without a KP projection, there can be no abstract case. However, it is not clear that these last two assumptions are motivated cross-linguistically. It may be that these objects do have abstract accusative case, but the accusative case morpheme is not spelled out when the object is adjacent to the verb. Why this should be so is not clear, but we do have independent motivation that this happens in other languages. Broadwell 2006 describes a similar phenomenon in Choctaw where the accusative morpheme is optionally dropped when the object immediately precedes the verb, as in (20), but obligatorily spelled out when the object is fronted and thus not adjacent to the verb, as in (21):

(20) John-at   tákkon(-a)   ch<u>o</u>pa-h.
     John-NOM   peach(-ACC)   bought-TENSE
     'John bought a peach.'   (Broadwell 2006:39)

(21) Tákkon-a   John-at   ch<u>o</u>pa-h.
     peach-ACC   John-NOM   buy- tense
     'John bought a peach.'   (Broadwell 2006:39)

In double accusative constructions in Choctaw, the accusative case morpheme on the object adjacent to the verb is optionally spelled out, but the accusative case morpheme on the first object that is not adjacent to the verb must be spelled out.

(22) Hattak-at   alla-yã   towa(-yã)   ĩ-pila-tok.
     man-nom   child-acc   ball(-acc)   appl-throw-past
     'The man threw the child the ball.'   (Davies 1986:7

The one difference between Choctaw and Niuean is that the accusative case morpheme is only optionally missing in the verb-adjacent context in Choctaw, but obligatorily missing in this context in Niuean.

2.5 Niuean Section Conclusion

To conclude this section, we have seen that Niuean fits the object shift type of

ergative language perfectly: ergative case is used only when the direct object moves out of the VP, and not when the direct object remains in situ. Whether Niuean also fits the stereotypic ergative pattern, where all transitive clauses take an ergative subject, depends on whether or not Massam's 2001 claim that non-specific objects in Niuean have no abstract case is warranted. If those non-specific objects merely lack a case morpheme, but have abstract structural case, then Niuean is clear evidence that Bittner and Hale 1996 are correct in postulating that there is a type of ergative language where ordinary transitivity (the mere presence of a direct object) is not sufficient for ergative case to be used; instead the position of that object inside or outside the VP also matters.

3. Tagalog

Although it has been controversial as to whether Tagalog is even an ergative language, recent work by Aldridge (2012) makes a convincing case that Tagalog is ergative, and moreover that object shift occurs in constructions with an ergative subject.

Under Aldridge's analysis, Tagalog is much like Inuit. The subject is ergative only when there is a definite object, as in (24). In contrast, the subject is absolutive/nominative when there is only an indefinite object, as in (23), and that indefinite object takes an oblique case, just as in Inuit:[7]

(23) Bumili   ang babae   ng isda.
      buy   abs woman   obl fish
      'The woman bought a fish.'   (*the fish)   (Aldridge 2012:194 (7a))

(24) Binili   ng babae   ang isda.
      buy   erg woman   abs fish
      'The woman bought the fish.'   (*a fish)   (Aldridge 2012:194 (7b))

Aldridge also shows that Tagalog manifests scope differences in the two types of clauses, paralleling what Bittner describes for Inuit.

(25) Binasa   [ng lahat ng bata]   [ang marami-ng   libro]
      read   ERG all   GEN child   ABS many-LINKER book
      'All the children read many books.'
      MANY > ALL   (Aldridge 2012:195 (9a))

(26) Nagbasa [ang lahat ng bata] [ng marami-ng   libro]
      read   ABS all   GEN child OBL many- LINKER   book
      'All the children read many books.'
      ALL > MANY   (Aldridge 2012:195 (9b))

Aldridge (2012:197) argues that the definite object in the ergative subject construction in

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[7] Aldridge notes that the ergative case written as *ng* in the examples is actually pronounced as *nang*.

11

Tagalog undergoes object shift, while the indefinite object remains in situ. Thus under Aldridge's account, Tagalog fits the object shift type of ergative language, like Inuit. However, like Inuit, Tagalog can be viewed as also conforming to the stereotypic ergative pattern because the object in the absolutive/nominative subject construction gets an oblique case. If we use the narrowest definition of transitive where only a direct object with structural case counts, then all and only transitive clauses have ergative case in Tagalog.

4. Dyirbal

In this section, we see that under Dixon's analysis of the structure of Dyirbal, this language conforms to the object shift type, although it also conforms to the stereotypic ergative pattern.

Although the word order of Dyirbal is very free, the basic word order in clauses with an ergative subject is OVS (Dixon 1994:49), as in the following example:

(27) *ŋuma*   *jaja-ŋgu*   *ŋamba-n*
father(ABS_O)   child-ERG_A hear-NONFUT
the child heard father   (Dixon 1994:162 (23))

In contrast, the typical word order in clauses with a nominative/absolutive subject is SVO. We see this contrast in the following pair of examples:

(28) *yabu*   *ŋuma-ŋgu*   *bura-n*
mother(ABS_O)   father-ERG_A see-NONFUT
father saw mother   (Dixon 1994: 161 (11))

(29) *ŋuma*   *bural-ŋa-n^{y}u*   *yabu-gu*
father(ABS_S)   see-ANTIPASS-NONFUT   mother-DAT
father saw mother   (Dixon 1994: 164 (32))

Dixon 1972:150 gives a structure for OVS clauses in which the object is outside the VP. It thus appears that objects move out of the VP in clauses with an ergative subject in Dyirbal, just as in Inuit and Niuean. In contrast, the object remains inside the VP in SVO clauses with a nominative/absolutive subject in Dyirbal. Unlike Inuit and Niuean, however, it is not specific objects that move out of the VP in Dyirbal; instead it is objects that are topics. According to Dixon 1972:137, "in Dyirbal, every sentence must contain a topic NP." The object is the topic in clauses with an ergative subject, whereas in clauses with a nominative/absolutive subject, the subject is the topic.

(30) subject is topic   S-NOM/ABS   [$_{vP}$ V   O-DAT]
       object is topic   O-NOM/ABS_i V_j [$_{vP}$ S-ERG   [$_{vP}$ t_j t_i]

If the above scenario is right, Dyirbal conforms to the type of ergative language proposed

by Bittner and Hale 1996 where only clauses where the object moves out of the VP have an ergative subject. However, because Dyirbal is like Inuit in marking the object that remains in situ with an oblique case, Dyirbal also fits the stereotype of an ergative language where ergative case marks all and only transitive subjects under the ordinary definition of transitive. So Dyirbal would fit into either type, just as Inuit would.

The point of this section has been to establish that since Dyirbal does conform to one of Bittner and Hale's two types, it cannot be used to prove the existence of a distinct type based on ordinary transitivity.

5. Nez Perce

Nez Perce is like Dyirbal in that the topicality of the object determines whether or not the subject gets ergative case. When the object is topical, the subject is ergative. With non-topical objects, the subject is nominative (Rude 1985, 1988; Deal 2010), as in the following minimal pair:

(31) Ergative subject
Háama+nm   pée+'wi+ye   wewúkiye+ne.   (topical object)[8]
man+ERG   3/3+shoot+ASP   elk+OB
The man shot an elk.   (Rude 1988 (30))

(32) Nominative subject
Háama   hi+'wí+ye   wewúkiye.   (non-topical object)
man   3+shoot+asp   elk
The man shot an elk.   (Rude 1988 (31))

Both examples in this minimal pair have a direct object. Thus ordinary transitivity (the mere presence of a direct object) is not sufficient for an ergative subject to be used in Nez Perce. Deal 2010 notes this fact and cites the following additional minimal pair from Crook 1999:

(33) 'ip-ním   pée-qn'i-se   qeqíi-ne.   (topical object)
3sg-ERG   3/3-dig-IMPERF   edible.root-OB
'He digs qeqíit roots.'   (Crook 1999: 238)

(34) 'ipí   hi-qn'íi-se   qeqíit.   (non-topical object)
3SG   3subj-dig-IMPERF   edible.root
'He digs qeqíit roots.'   (Crook 1999: 238)

Although it is not obvious from the rather free word order of Nez Perce that the topical object moves out of the VP, object shift has been proposed in the literature on

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[8] Rude 1988 glosses the morphologically marked object case in the ergative subject construction simply as OB.

Nez Perce to explain the difference in the agreement pattern in the topical object construction. As indicated in the gloss of the pair of examples above, topical objects in the ergative subject construction contribute to the verbal agreement, but non-topical objects in the nominative subject construction do not. This suggests that the object moves out of the VP in the ergative subject construction, as in (31) and (33), but remains in situ in the nominative subject construction, as in (32) and (34) (Woolford 1997, Carnie and Cash 2006), paralleling the situation in French participle agreement where objects that move out of the VP agree, while in situ objects do not (Kayne 1989).

An additional possible indication that the topical object shifts out of the VP in Nez Perce is the fact that it changes case. The non-topical object in (31) and (33), has a morphologically unmarked case, while the topical object in (31) and (33) takes a morphologically marked case, *-ne*. This is an example of what is called a marked object in the typological literature. Building on Diesing's 1992 work on specificity and object shift in Icelandic, it has been argued in the literature that marked objects have moved out of the VP, whereas the unmarked objects remain in situ (e.g. Hindi (Bhatt and Anagnostopoulou 1996)).

If the object has moved out of the VP in the Nez Perce examples with an ergative subject, Nez Perce can be added to the list of object shift ergative languages. What we can conclude with confidence at this point that the presence of a syntactic object, while necessary, is not sufficient for ergative case to be used in Nez Perce. Thus Nez Perce is not an example of the stereotypic ergative type where ergative case is governed only by ordinary transitivity.

In this section, we have seen that several ergative languages conform to the object shift type of ergative language proposed by Bittner and Hale 1996, where object shift is necessary before ergative case can be used, although some of these also conform to the stereotypic ergative pattern where ordinary transitivity (the mere presence of a syntactic object, regardless of its position) governs the distribution of ergative case. Thus so far, we have not found an ergative language that is only consistent with that stereotypic ergative pattern.

In the next section we will see that several languages that have been assumed to belong to that stereotypic type actually belong to the active ergative type.

6. Active Ergative Languages

In active ergative languages, ergative case marks all external arguments (aside from splits).The features, position or even the presence of an object in syntax are not relevant to whether or not the subject gets ergative case.[9]

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[9] Clauses with ergative case in active ergative languages are classified as transitive by Hale and Keyser 1993 under their view that all verbs with an external argument have at least a semantically incorporated

6.1 Georgian

Harris (1981:237) notes that Georgian does not fit the classic typological definition of an ergative language because ergative case does not depend on transitivity in Georgian; she describes the Georgian case pattern as active/inactive. Harris shows that, as under the unaccusative hypothesis, Georgian has two classes of verbs; one has an initial subject (an external argument), and the other does not. Only verbs in the first class can take an ergative subject.[10]

(35) vanom   itamaša
      Vano-ERG   he-played-II-3
      'Vano played.'   (Harris 1981: 183 (6a))

(36) ninom   daamtknara
      Nino-ERG   she-yawned-II-1
      'Nino yawned.'   (Harris 1981:40 (3a))

(37) Vanom   ipikra   marik̇aze.
      Vano-ERG   he-thought-II-3   Marika-on
      'Vano thought about Marika.'   (Harris 1981:40 (3c))

Verbs in the other class only take a nominative subject, even in the presence of a dative object:

(38) vano   aɣiɣinda.
      Vano-NOM-   came-about-croon-II-2
      'Vano began to croon/sing in a low voice.'   (Harris 1981:251 (31b))

(39) bavšvi   miesalama   deidas
      child-NOM   he-greeted-her-II-2   aunt-DAT
      'The child greeted (his) aunt.'   (Harris 1981:76 (20a))

Unlike the situation in object-shift ergative languages, if an object is present in a Georgian clause, its features play no role in determining whether the subject will take ergative case. Indefinite, non-specific, and property type objects can occur with ergative subjects in Georgian if the verb is in the first class:

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object. In this sense, one can say that even in active ergative languages, all and only transitive clauses have ergative subjects.

   It is important to note that although agents are typical external arguments, the external argument category also includes some other kinds of theta roles in many languages and the exact range of verbs that take an external argument is known to vary from language to language.

[10] There is a split based on tense in Georgian, so that ergative case is only used in Tense II.

(40) glexma   datesa   simindi
      farmer-ERG   he-sowed-it-II-1   corn-NOM
      'The farmer sowed corn.'   (Harris 1981:147 (4b))

In addition, although most objects that occur with ergative subjects take nominative/absolutive (unmarked) case, there are a few Georgian verbs that take an ergative-dative case pattern:

(41) dedam   aḳoca   švils
      mother-ERG   she-kissed-him-II-I child-DAT
      'The mother kissed her child.'   (Harris 1981:188 (10))

Thus in Georgian, the presence of a direct object with structural case is neither necessary nor sufficient for an ergative subject.

6.2 Batsbi

Batsbi is another Northeast Caucasian language that clearly belongs to the active ergative type, although in this language, the same verb may take or not take an external argument depending on factors such as volitionality. Holisky (1987) provides minimal pairs showing that volitional subjects (which are presumably external arguments) take ergative case in intransitives, while non-volitional subjects of the same verbs (which are presumably internal arguments) take a nominative subject:

(42) (as)   vuiž-n-as
      1SG.ERG   fell-AOR-1 SG.ERG
      'I fell down, on purpose.'   (Holisky 1987:105 (5a))

(43) (so)   vož-en-sO
      1SG.NOM   fell-AOR-1SG.NOM
      'I fell down, by accident.'   (Holisky 1987:105 (5b))

Because no syntactic object is required for an ergative subject, Batsbi is of the active ergative type. As in any ergative language, the presence of an object is not sufficient to cause ergative case to be used on the subject if that subject is not an external argument. Holisky gives the following minimal pair where the subject alternates between dative and ergative case, with a change of meaning suggesting an alternation between an experiencer subject and an external argument. Batsbi marks the subject of the perception verb 'see' with dative case, unless the meaning is such that the subject makes a special effort to perform the action and then the subject is ergative (Holisky 1984:187).

(44) oquin   pst'u   jagi^n
      he-DAT   wife-NOM   saw-her
      'He saw his wife'   (Holisky 1984:187 (12a))

(45) oqus   pst'u   jagiⁿ
     he-ERG   wife-NOM   saw-her
     'He saw his wife'   (Holisky 1984:187 (12b))

6.3 Ingush

Ingush (Nichols 2008, 2011), a Dagestani language spoken in the Northeast Caucuses, is another example of an active ergative language. It marks all external arguments with ergative case, regardless of whether or not an object is present in the syntax: [11]

(46) bieruo   nab+j.u
     child.ERG   sleep+J.DO.PRS
     'The child sleeps.'   (Nichols 2008:70 (51))

In contrast, subjects that are not categorized as external arguments in the language get nominative/absolutive case:

(47) so   qeika-j.yr
     1SG(J)   cough-J.AUX.WP
     'I coughed.'   (Nichols 2008:59 (3))

(48) yz   cec+vealar
     3SG   surprise+V.GO.WP
     'He was surprised. (became surprised)'   (Nichols 2008 (49))

If an external argument is added, it will take ergative case:

(49) cuo   yz   cec+veaqqar
     3SG.ERG   3SG   surprise+V.TAKE.WP
     'S/he surprised him.'   (Nichols 2008:70 (50))

When an object is present in an Inguish clause, it need not be definite or specific in order for the subject to be ergative:

(50) aaz   wazhazh   bu'
     1SG.ERG   apple.PL   B.eat
     'I eat apples.'   (Nichols 2011:433 (10))

(51) aaz   meaq   ju'
     1SG.ERG   bread   J.eat
     'I eat bread.'   (Nichols 2011: 433 (11))

    As noted at the beginning of this section, languages differ as to the exact range of

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[11] The B, J and V gloss gender categories (Nichols 2011:431).

verbs that take an external argument. In Inguish, some verbs which express an action take an external argument even if the subject is inanimate and the action is not purposeful:

(52) xiv   k'edzh+jeaqqaai
      water.ERG   boil+J.TAKE.NW.J
      'The water came to a boil.'   (Nichols 2008: 70 (53))

6.4 Udi

Udi belong to the active ergative type, where ergative case marks external arguments, and the presence of an object in syntax is not necessary.

(53) xäyel-en   ọne-ne-xa
      child-ERG   cry-3PL-SAY.PRES
      'The child is crying'   (Harris 2002:8 (7))

(54) merab-en   zavod-a   aš-ne-b-sa
      Merab-ERG   factory-DAT   work-3SG-DO-PRES
      'Merab works in a factory'   (Harris 2002:81 (23a))

When a syntactic object is present, its properties have no effect on whether or not the subject gets ergative case. Clauses with cognate, indefinite, or property type objects can take an ergative subject in Udi:

(55) q'onaγ-en   fi-ne   uγ-sa
      guest-ERG   wine.ABSL-3SG   drink.PRES
      'The guest is drinking wine'   (Harris 2002:67 (3a))

(56) irähät-en   mya-ne   bist'a   cil-l-ux
      peasant-ERG   here-3SG.sow.PRES   seed-OBL-DAT
      'The peasant sows seeds here'   (Harris 2002:95 (3a))

Unlike Inuit, there is no contrast in subject marking in minimal pairs with indefinite and definite objects in Udi.

(57) xinär-en   šum   banest'a
      girl-ERG   bread.ABS   bake
      'The girl is baking bread'   (Harris 2002:7 (5a))

(58) xinär-en   šum-ax   banest'a
      girl-ERG   bread-DAT   bake
      'The girl is baking the bread'   (Harris 2002:7 (5b))

    What is interesting about Udi is that there is a contrast in object marking in the above pair of examples, a fact that suggests that that there may be object shift in Udi,

although it does not affect subject marking. Specific objects are marked with (what looks like) dative case, while non-specific objects are not. So Udi has marked objects, just as in Hindi, and if marked objects move outside the VP, as claimed for Hindi (Bhatt and Anagnostopoulou 1996), then Udi shows us something important: a language can have object shift without belonging to the object shift type of ergative language. In Udi, external arguments are marked with ergative case, independent of whether or not object shift takes place:

6.5 Basque

Basque is another clear example of an active-ergative language. Intransitives in Basque divide into two classes, one without an external argument (unaccusatives) and one with an external argument (Levin 1989)[12]. Verbs that do not take an external argument mark their subjects with nominative case:

(59) Gizon-a   etorri da.
      man-DET.NOM   arrived is
      'The man arrived.'   (Laka 2012 (6b))

(60) Ekaitz-a   sor-tu   da.
      strom-DET.NOM   arise-PERF is
      'A storm arose.'   (Laka 2005:376 (4c))

Verbs that take an external argument mark their subjects with ergative case:[13]

(61) Gizonak   kurritu   du
      man-ERG   ran   has
      'The man ran. '   (Levin 1989:57 (33))

(62) Eguzki-a-k   disdira-tzen   du.
      sun-DET-ERG   shine-IMPF   has
      'The sun shines.'   (Laka 2005:380 (9b))

Verbs that take an external argument always mark that argument with ergative case in Basque, regardless of whether or not an object is present in syntax:

(63) Jonek   jan   du
      Jon-ERG   eat   has
      'Jon ate./ Jon ate it.'   (Levin 1989:50 (23))

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[12]The class of intransitives with an external argument has been called unergative, but this term is confusing since these are exactly the verbs which *do* mark their subjects with ergative case in active ergative languages.

[13] Following Hale and Keyser's 1993 definition, Laka 1993 views all verbs that take an external argument as transitive.

(64) Klara-k   ondo   eskia-tzen   du
     Klara-ERG   well   ski-iMPF   has
     'Klara skis well.'   (Laka 2005:379 (8a))

(65) Mirenek   niri   erantzun   dit
     Miren-ERG   I-DAT   answer   AUX
     'Miren answered me.'   (Levin 1989:56 (31))

(66) Maria-k   hitz egin   du
     Maria-ERG   word-make   has
     'Maria has spoken.'   (Cheng and Demirdache 1993:72 (3))

As in other active ergative languages, the only notion of transitivity that is relevant for ergativity in Basque is that of Hale and Keyser 1993.

6.6 Kashmiri

Kashmiri is an active ergative language, although Kashmiri has an aspect split with ergative case restricted to the perfective aspect (Wali and Koul 1997). Within the perfective aspect, Kashmiri marks all external arguments with ergative case, regardless of transitivity in the ordinary sense of the term. No object need be present in syntax for a subject to be ergative in Kashmiri:

(67) Tse   vod-u-th.[14]
     you-ERG   cry-2PS
     'You cried'   (Wali and Koul 1997:250 (9a))

(68) Me   l'u:kh   bo:ḍas   peṭh   cakɨ   sɨ:th'/sɨ:ten.
     I-ERG   wrote   board-DAT on   chalk-ABL-MSG   with
     'I wrote on the board with a piece of chalk'   (Wali and Koul 1997:162 (4b))

Clauses with an external argument and only an indefinite or property type objects also take ergative subjects:

(69) Me   hech   dangal.
     I-ERG   learn   wrestling
     'I learnt wrestling.'   (Wali and Koul 1997:216 (10a))

(70) Me   phuṭro:v   ḍu:n   kan-i   bagə:r.
     I-ERG   broke-MSG   walnut   stone-ABL without
     'I broke a walnut without using a stone.'   (Wali and Koul 1997:162 (5a))

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[14] Other verbs of this type include *asun* 'to laugh', *laḍun* 'to quarrel', and *gidun* 'to play' (Wali and Koul 1997:153).

In contrast, subjects which are themes/patients (internal arguments) are not marked with ergative case in Kashmiri.

(71) Shi:shɨ   phuṭ.
   glass-NOM   broke
   'The glass broke.'   (Wali and Koul 1997:152 (3c))

Although we will not discuss them specifically in this paper, many of the related languages such as Hindi also fall into the active-ergative type.

6.7 Active Ergative Section Summary

In this section we have seen a range of languages that are examples of the active ergative type. In these languages, all external arguments are marked with ergative case (except in languages with an aspect split where this holds true only in the perfective aspect). Although a syntactic object is not necessary for ergative case in these languages, clauses with an ergative subject qualify as transitive under the Hale and Keyser 1993 proposal that all verbs with an external argument have at least a semantically incorporated object. Given that an object in syntax is not necessary for ergative case to be used in the active-ergative type, it is not surprising that when an object is present, neither its position nor its features are relevant to whether or not the subject gets ergative case.[15]

7. **As Yet Unclassified Ergative Languages**

In this section, we look at a range of ergative languages whose type is not yet entirely clear, but for which a syntactic object is necessary before ergative case can be used. What is not yet clear is whether that object is always outside the VP in ergative subject constructions in these languages (so that the language would belong to the object-shift ergative type), or whether the position of the object is irrelevant (so that the ordinary notion of transitivity is all that governs the distribution of ergative case). The general problem in classifying the languages discussed in this section is that the word order alone, often SOV or free order, does not tell us where the object is located. Further syntactic research is needed before we can determine which type languages belong to. Although readers may be tempted to simply assume that these languages use only ordinary transitivity to govern ergativity, this is not actually a type posited by Bittner and Hale 1996, nor did the research for the current paper identify even one clear example of that commonly assumed type.

7.1 Archi

Archi is a Caucasian language, but in contrast to the group of Caucasian languages discussed in section 6, Archi does not belong to the active ergative type. External

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[15] Additional languages that may be of the active ergative type include the Australian language Pitjantjatjara (Bowe 1990).

arguments do not get ergative case in clauses without a syntactic object; instead they take nominative/absolutive case:

(72) Dija wirx̄$_o$in.
father. NOM works
'Father works.' (Kibrik 1979:67 (2a))

(73) Dija warxarši wi.
Father.NOM lying aux
'Father is lying.' (Kibrik 1979:67 (2b))

In contrast, the subject is ergative in examples such as the following example where a syntactic object is present in the clause:

(74) Dija-mu x̄$_o$alli barši bi.
father-ERG bread.NOM baking aux
'Father is baking the bread.' (Kibrik 1979:67 (2c))

However, the object need not be definite in order for the subject to be ergative in Archi. In the following example the object is translated as indefinite, and yet the subject is ergative:

(75) Un lagum Xabus i.
you.erg song.nom sing-fin be
'You should sing a song.' (Kibrik 1998:459 (6))

Based on this data, Archi initially appears to be a good candidate for an ergative language that used only ordinary transitivity to govern the distribution of ergative case, but what remains to be determined is whether the object in ergative subject constructions in Archi has moved out of the VP. It is not universal that only definite or specific objects undergo object shift, and thus if subsequent research should show that the objects in examples such as (74) and (75) have moved outside the VP, then Archi would belong to the object shift type of ergative language.

7.2 Kabardian

Kabardian is another Caucasian language that clearly does not belong to the active ergative type. External arguments do not get ergative case when no object is present in syntax, even with verbs such as 'dance' that usually take an external argument:

(76) ƛ'ə-r ma-a-k$^{'w}$ə+a
man-ABS 3-pres-move+intr
'The man is coming.' (Colarusso 1992:53 (89))

(77) pśaaśa-r   ʔana-m   q'a-f-a-aɣ-ś.
      girl-ABS   serving table-OBL   HOR-dance-on-PAST-AFF
      'The girl danced on the table'   (Colarusso 1992:54 (90g))

(78) ƛ'ə-ha-r   ma-a-pƛə+a-ha.
      man-PL-ABS   3-PRES-look+INTR-PL
      ' The men are looking'   (Colarusso 1992:75 (135a))

Nevertheless, Kabaridan is an ergative language (Colarusso 1992:52), although
Colarusso glosses the ergative case as 'oblique' because the ergative and dative
morphological cases look alike in Kabardian.[16]

(79) šə+wə-m   ƛ'ə-r   ø-y-a-wək^{'y}ə
      horse+man-OBL   man-ABS   3-3-PRES-kill
      'The horseman is killing the man.'   (Colarusso 1992:85 (158c))

(80) ƛ'ə-m   pśaaśa-r   ø-y-ə-ƛaaɣʷə-aɣ-ś
      man-OBL   girl-ABS   3(ABS)-3(OBL)-NON PRES-see-PAST-AFF
      'The man saw the girl.'   (Colarusso 1992:53 (90a))

     The question now is whether ordinary transitivity is sufficient for ergative case to
be used in Kabardian, or whether Kabardian belongs to the object shift type of ergative
language. The direct objects in the two examples above are definite/specific, and specific
objects would undergo object shift in Inuit. However, we cannot tell from the SOV word
order of Kabardian whether the object has moved out of the VP. As in Inuit, there are
clauses in Kabardian with a nominative-oblique case pattern:

(81) pśaaśa-r   gʸaana-m   ø-y-a-də-a-aɣ-ś
      girl-ABS   shirt-OBL   DAT-sew-INTR-PAST AFF
      'The girl was sewing at the shirt.'(action incomplete) (Colarusso 1992:54 (90h))

(82) šə+wə-r   bźa-m   ø-ø-y-a-fə+a-n-w-ś
      horseman-ABS horn-OBL   3-3-DIR-DAT-drink-DAT-PAST-AFF
      'The horseman will drink the cup (drinking horn).' (Colarusso 1992:178 (294e))

In Inuit, this case pattern occurs when the direct object has not moved out of the VP;
however, we cannot simply assume that Kabardian is like Inuit in this respect. The reason
for this pattern in these two Kabardian examples could be different; these oblique objects
in Kabardian may be like PP objects in English, 'at the shirt', 'of the cup'. Thus at this
point, the question remains open as to which notion of 'transitivity' is relevant for the
distribution of ergative case.

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[16] Ergative case often looks like another inherent or oblique case in the language, sometimes dative,
sometimes instrumental, genitive, or locative.

7.3 Tsez

In Tsez, all intransitive constructions have a subject with nominative/absolutive case, even those with external arguments. Verbs with an external argument such as 'eat' do not mark that subject with ergative case unless a syntactic object is present, as we see in the contrast below:[17]

(83) ʕali   ø-iš-xo
      Ali.abs   I-eat-pres
      'Ali eats.'   (Comrie 2000:366 (17))

(84) žek'-ā   bišʷa   r-ac'-xo
      man-ERG   food.ABS   IV-eat-PRES
      'The man ate the food.'   (Comrie 2000: 363 (5))

However, it appears that the object need not be specific in order for there to be an ergative subject in Tsez:

(85) kidba: łi   raya:r
      girl-ERG   water-NOM   bring-FUT
      'The girl will bring water.'   (Alekseev and Radžabov 2004:149)

Nevertheless, an oblique object is not sufficient for ergative case to be used; clauses with only an oblique object take a nominative subject:

(86) gulu   kuroɬ'a:za   k'oɬis
      horse-nom   fence-tran (on)   jump-past/ev
      'The horse jumped over the fence.'   (Alekseev and Radžabov 2004:156)

It is thus clear that the presence of a direct object in syntax is necessary before ergative case can be used in Tsez, and thus Tsez is not an active ergative language. However, to determine whether it is only ordinary transitivity that determines the distribution of ergative case in Tsez, or whether Tsez belongs in the object shift ergative type, we need to know whether the object is inside or outside the VP in the examples with an ergative subject. Until that is determined, the question of the type of ergative language Tsez belongs to remains open.

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[17] The class I agreement in Tsez is male, human. The class IV agreement is inanimate.

7.4 Kalkatungu

We now turn to an Australian language, Kalkatungu (Blake 1979, 1982, 1983, 1994). We saw in the earlier part of this paper that, as with the Caucasian language family, some Australian languages belong to the object shift type (Dyirbal) and some to the active ergative type (Warlpiri). Kalkatungu is clearly not an active ergative language, but the question of whether it belongs in the object shift type remains open at this point.

We can tell that Kalkatungu is not an active ergative language because external arguments do not take ergative case in Kalkatungu unless an object is present in syntax. We see this in the following examples where the verb 'wash' takes a nominative subject when no object is present in syntax (even though a reflexive object is implied), but an ergative subject when an object is present:

(87) Marapai   karri-ti-mi   thupu-ngku.
     woman.nom   wash-refl-fut   soap-instr
     'The woman will wash with soap.'   (Blake 1994:50 (2b))

(88) Marapai-thu   karri-mi   pirlapirla   thupu-ngku.
     woman-ERG   wash-FUT   child.NOM   soap-instr
     'The woman will wash the child with soap.'   (Blake 1994:50 (2a))

One indication that Kalkatungu might belong to the object shift type of ergative language is that there are pairs of examples where the subject is ergative when the object is specific, but nominative when the object is non-specific:

(89) Maṭu-ju   maa   ṯuji.
     mother-erg   food. NOM   cook
     'Mother cooks the food.'   (Blake 1979:7 (1.4))

(90) Maṭu   maa-ci   ṯuji.
     mother. NOM   food-dat   cook
     'Mother cooks food.'   (Blake 1979:7 (1.5))

This pattern is very like what we saw above in Inuit, which is an object-shift ergative language. However, the word order does not provide much information about the position of the object because the word order in Kalkatungu is rather free (Blake 1994:140) and we lack the scope information that enabled Bittner 1994 to determine that the specific object moves out of the VP in Inuit. Thus at this point, we cannot determine whether Kalkatungu is an object shift type ergative language, like Inuit, or whether Kalkatungu might turn out to be an example of a language where only ordinary transitivity governs the distribution of ergative case.

7.5 Section Summary

In this section, we have seen several ergative languages which require a direct object before ergative case can be used, but whose type is not yet certain. Although it is clear that none of these languages are of the active ergative type, we cannot yet determine if any or all of these languages conform to the other type proposed by Bittner and Hale 1996, called here the object shift type. To do that, we would need evidence as to whether the object in examples with an ergative subject is inside or outside the VP in these languages. What we can say at this point is that no conclusive evidence has yet been found to disprove Bittner and Hale's hypothesis, although some of the languages discussed in this section might turn out to be counterexamples.

8. Ergative Agreement Without Ergative Case

Some languages are typologically categorized as ergative based only on their agreement pattern, in the absence of any morphological case on arguments. It is commonly assumed that such languages must have covert ergative case. If this assumption is correct, then these languages are relevant to the question of what notions of transitivity govern the distribution of ergative case. Even if they do not have covert ergative case, we can ask what notion of transitivity is relevant for their agreement patterns.

This section discusses languages from two families, South Sulawesi and Mayan, which have ergative agreement patterns but no morphological ergative case on arguments. These languages do not appear to fit the active ergative type. The South Sulawesi languages may belong to the object shift type because the agreement pattern is ergative only when the direct object is definite. In contrast, the Mayan languages do not fit the object shift type because, although there is evidence from VSO/SOV word order alternations in some languages that definite objects do undergo object shift, the agreement pattern remains ergative in the Mayan languages even when the direct object is indefinite. Thus, unlike any of the languages with morphological ergative case surveyed in this paper, the Mayan languages do not appear to fit either of the two types of ergative languages postulated by Bittner and Hale 1996. If the Mayan languages really do have covert ergative case, then they are a counterexample to the hypothesis that all languages with ergative case belong to one of Bittner and Hale's two types. On the other hand, if that hypothesis turns out to hold for all languages with overt ergative case, then the motivation for positing covert ergative case in Mayan evaporates.

8.1 South Sulawesi Languages

Selayarese is a South Sulawesi language with no morphological case marking. Selayarese has an agreement prefix that cross-references subjects in transitive clauses, but only when the direct object is definite. The definite object is cross-referenced with a second position pronominal clitic:[18]

(91) Mu-pallu=**i**   juku?-iñjo   ri   koroŋ.
      2NDAGR-cook=3RDCL   fish-DEF   in   pan
      'You cooked the fish in the pan.'   (Finer 1999 (11a))

(92) Ri   koroŋ=**i**   mu-pallu   juku?-iñjo.
      in   pan=3RDCL   2NDAGR-cook   fish-DEF
      'In the pan you cooked the fish.'   (Finer 1999 (11b))

The pattern changes when the direct object is indefinite. Here the agreement affix does not appear, the subject is cross-referenced by the second position pronominal clitic, and the indefinite object is not cross-referenced at all.

(93) N-aro=ko   doe?   ri   lamari.
      int-put=2NDCL   money   in   cupboard
      'You put money in a cupboard.   (Basri and Finer 1987 (6a))

The second position pronominal clitic is also used to cross-reference intransitive subjects:

(94) Ak-keloŋ=ko.
      int-sing=2NDCL
      'You sang.'   (Finer 1994:158 (7d))

        This agreement pattern qualifies as ergative in a typological sense because intransitive subjects and some direct objects are cross-referenced with the same series (the pronominal clitic), and some transitive subjects are cross-referenced with a different series (the agreement affix). If there is covert ergative case in Selayarese, then ergatives control the agreement affix and nominatives are cross-referenced by pronominal clitics. The ergative case pattern would be like that found in Niuean: ergative subjects occur only when the direct object is definite. Thus this pattern is consistent with the object-shift type of ergative language.

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[18] Note that this pattern is the reverse of what we find in languages with overt ergative case (e.g. Kashmiri (Wali and Koul 1997) and Basque (Arregi and Nevins 2012)), where agreement is controlled by nominatives (often labeled absolutive), and pronominal clitics cross-reference arguments with any case, including nominative. There are exceptions to the ergative agreement pattern in related South Sulawesi languages such as Konjo (Friberg 1991, 1996).

8.2 Mayan

Since the Mayan languages do not mark case on arguments, descriptive work on these languages is traditionally neutral concerning the identity of the cross-referencing morphemes, labeling them simply Set A and Set B. However, because the agreement pattern is typologically ergative, the Set A forms are often labeled 'ergative' and the Set B forms 'absolutive':

(95) Ch-ach   w-ila.   [Jacaltec]
     ASP-ABS.2ND ERG.1ST-see
     'I see you.'   (Craig 1977:90)

(96) Ch-ach   toyi.
     ASP-ABS.2ND go
     'You go.   (Craig 1977:90)

The Mayan languages are clearly not of the active-ergative type, because even subjects of verbs that take an external argument such as 'eat' are cross-referenced with the 'absolutive' marker in intransitive constructions:

(97) Max-ach   lo-w   ayach ti.   [Q'anjob'al]
     com- ABS.2ND eat-AP   you   DEM
     'You ate.'   (Mateo-Toledo 2008:48)

However, the Mayan languages are also not of the object shift type. There is evidence that object shift takes place in some Mayan languages, because there is a VSO/VOS word order alternation that correlates with the definiteness of the object (England 1991), much like what we saw in Niuean in section 2. In the following K'iche' examples, the word order is VSO with a definite object, but VOS with an indefinite object:

(98) xuq'aluj   le ala   le achi   VSO   [K'iche']
     hugged   the youth the man
     'The youth hugged the man.'   (England 1991 (26c))

(99) xuq'aluj   jun   achi   le ala   VOS
     hugged   a   man   the youth
     'The youth hugged a man.'   (England 1991 (26d)

Nevertheless, there is no associated alternation in the agreement pattern. The agreement pattern is the same in all transitive constructions, regardless of whether the object is definite or indefinite in all the Mayan languages.

Thus, if there is covert ergative case in the Mayan languages, these languages are counterexamples to the hypothesis that all languages with ergative case fall into one of

28

Bittner and Hale's two types. However, if it turns out that no language with overt ergative case actually manifests the transitivity pattern associated with agreement in Mayan, the motivation for positing covert ergative case in Mayan evaporates.

Regardless of whether or not there is covert ergative case in the Mayan languages, we can ask whether the ergative agreement pattern in these languages is governed by ordinary transitivity, where the subject is cross-referenced by the 'ergative' marker when and only when there is a direct object present in the clause. The answer at this point is maybe. There are several sorts of exceptions to this pattern where the 'ergative' marker cross-references an intransitive subject, but Coon 2010 argues for Chol that all of these actually involve alternate constructions. There is also evidence that the 'absolutive' marker can potentially cross-reference a transitive subject, since it can do so in the agent focus construction (e.g. Hale and Storto 1997). I leave this question open here.

As to how this ergative agreement pattern could be generated in the absence of ergative case, the proposal in Bobaljik 1993 would work with very little modification. Under Bobaljik's proposal an ergative pattern can be generated if one cross-referencing series is associated with a higher head in syntax, and the other with a lower head, and the lower head is always 'active'. This approach could generate an ergative agreement pattern in a language with a nominative-accusative case pattern if the higher head is Infl/T, as Bobaljik proposes, while the lower/other series is a clitic (like) element or incorporated pronoun that can potentially cross-reference either a nominative or an accusative argument. In clauses with one argument, the lower series would be used, while in clauses with two arguments, both series would be used. In the transitive agent focus construction, where agreement is suppressed, the other series could cross-reference either the subject or the object, as described Hale and Storto 1997. This approach is consistent with the fact that the series labeled 'ergative' in Mayan is generally agreed to be an agreement morpheme, while the series labeled 'absolutive' "may not be agreement markers", as these are more loosely connected and have been called incorporated pronouns (Mateo-Toledo 2008:48, citing Kaufman 1990 and Robertson 1992).

9. Theories of the Association Between Object Shift and Ergative Case

In this section, we turn to the interesting theoretical question of why there is an association between object shift and ergative case in the object-shift type of ergative language. This section will describe two approaches to this question in the literature, one from Bittner and Hale 1996 and an updated version of one from Woolford 2007. Both approaches begin with the same basic idea, that *moving an object outside the VP puts that object in a syntactic position that potentially changes the conditions for case licensing of the subject*. The two approaches develop this leading idea in different ways.

9.1 Bittner and Hale 1996

Bittner and Hale 1996 begin with the assumption that ergative case is a dependent case which can only be licensed in the presence of another argument that serves as a case competitor. To maintain this assumption even in active-ergative languages, they do not require that case competitor to be present in syntax, but instead adopt the idea in Hale and Keyser 1993 that verbs with an external argument always have at least a semantically incorporated object, and they allow even this kind of object to serve as a case competitor. To account for why ergative case is restricted to object shift constructions in languages such as Inuit, Bittner and Hale postulate that in these languages, VP is a barrier blocking an object inside the VP from serving as a case competitor for a subject outside the VP. Without a local case competitor, ergative case cannot be licensed under their approach, and thus clauses without object shift cannot have an ergative subject in languages where VP is a barrier.

9.2 Object Shift, Ergative Case, and the Minimal Link Condition

I propose a rather different approach to the question of why ergative case is used only in object shift constructions in some languages.[19] The key to this approach is a prediction of the Minimal Link Condition regarding clauses with object shift that is discussed in Chomsky 1995. Because object shift places the object in a position between Infl and the base position of the subject, that closer object should block the probe-goal relation between Infl and the base position of the subject:

(100) [Subject-nom   Infl   Object-acc   [~~Subject-nom~~ v V   ~~Object-acc~~]]

To account for the fact that clauses with object shift are nonetheless grammatical in Icelandic, Chomsky 1995 proposes that the fact that the verb raises above the shifted object in Icelandic alters the syntactic configuration in such a way that it no longer violates Minimal Link Condition. In contrast, Holmberg 1999 proposes a very different reason for why object shift does not cause expected violation: object shift does not occur until PF. These two proposals make radically different predictions for cross-linguistic variation: If object shift occurs in syntax, we should find that object shift blocks nominative licensing of the subject in some languages; in contrast, if object shift occurs at PF, we should not find any languages where object shift blocks nominative licensing of the subject. I argue here that the first prediction is correct: there are languages where object shift blocks the ability of Infl to license nominative case on the subject, and this is why we so often see deviations from the nominative-accusative case pattern in object shift constructions cross-linguistically.

Object shift should cause the violation of the Minimal Link Condition violation

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[19] The proposal here is an updated version of a proposal in Woolford 2007 which assumed the older idea that nominative can be assigned in a spec-head configuration, in addition to under c-command. The updated version here uses the assumption from Chomsky 2000 that case licensing occurs only under c-command.

sketched above in (100) and thus block nominative licensing of the subject if the intervening shifted object has structural case (accusative). Languages thus have two options to avoid a Minimal Link Condition violation in object shift constructions. One is not to try to license nominative case on the subject, but to use ergative case instead. In the configuration in (101) below, the external argument gets ergative case in its base position from little v, and Infl can probe the object, valuing it with nominative case, without incurring a Minimal Link Condition violation: [20]

(101)   [Subj-erg Infl Obj-nom [~~Subj-erg~~ v V ~~Object-nom~~]] [21]

In this scenario, ergative case is used only as a 'last resort', to avoid a violation of the Minimal Link Condition.[22]

The other way that languages can avoid a Minimal Link Condition violation in object shift constructions is to use P insertion to encase the object inside a PP. This renders the object 'inert' to probing by Infl:

(102) [Subject-nom Infl [$_{PP}$ P Object] [~~Subject-nom~~ v V ~~Object~~]]

A language that uses this P insertion strategy is Hawaiian. Medeiros (2013) shows that Hawaiian has a syntax much like that proposed for Niuean by Massam, discussed above in section 2, where specific objects move out of the VP before it fronts, producing a VSO word order, while nonspecific objects remain in the VP resulting in a VOS order. However, unlike Niuean, the subject does not get ergative case in the object shift construction in Hawaiian, but remains nominative. Instead, a preposition is inserted

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[20] Although the lower copy of the subject does intervene between Infl and the base position of the object, it is known that a closer DP with non-structural case does not block Infl from licensing nominative case on the object in many languages.

There are languages that obey a stronger version of the Minimal Link Condition under which even an intervening DP with lexical/inherent case does block nominative licensing (Broekhuis and Woolford (in press)). In those languages, even an intervening ergative subject would block Infl from licensing nominative case on the object. In such languages, the object gets accusative case regardless of the case of the subject, and whether or not object shift occurs:

(i) [Subj-erg Infl [~~Subj erg~~ v V ~~Object acc~~]]

The fact that some ergative languages have an ergative-nominative case pattern while others have an ergative-accusative pattern is discussed in Legate 2006. Since some of the arguments labeled 'absolutive' in the typological literature are nominative, and others are accusative, it is quite correct to say, as Aldridge (2004) does, that not all arguments labeled as 'absolutives' in the ergative literature are licensed by the same syntactic head.

[21] I put aside word order differences among languages here for ease of exposition.

[22] I assume that ergative case is optionally assigned in these languages, but that nominative is preferred unless the clause would crash due to a Minimal Link Condition violation. The preference for nominatives can be built into the Minimalist Program if an economy condition is added to the grammar making it more economical to use the least marked case that can be licensed on an argument (Broekhuis and Woolford (in press)).

preceding the shifted object:[23]

(103) Inu   kope   hu'ihu'i 'o Noelani.   [Hawaiian]
       drink   coffee cold   Noelani
       'Noelani is drinking cold coffee.   (Medeiros 2013 (10b))

(104) Inu   ana   'o Noelani i   ke kope hu'ihu'i.
       drink   dir   Noelani P   the coffee cold
       'Nolani is drinking the cold coffee.'   (Medeiros 2013 (10a))

With the shifted object safely encased in a PP and thus rendered inert as an intervener, Infl can license nominative case on the subject without incurring a Minimal Link Condition violation.

This P insertion solution may also be used in some nominative-accusative languages with object shift. It is known that many languages 'mark' specific objects, but leave nonspecific objects unmarked, a phenomenon known as Differential Object Marking (DOM) (e.g. Aissen 2003). It is also known that in many such languages, the 'marked' objects have undergone object shift, as argued for Turkish by Diesing 1992). If the DOM marker is an inserted preposition/postposition (or an inserted non-structural case, if this is possible) [24], the reason that it appears on shifted objects in some languages makes sense.[25] As in Hawaiian, encasing the shifted object in a PP (or giving it a non-

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[23] I would like to thank Eric Potsdam for bringing this fact about Hawaiian to my attention. Medeiros (2013) glosses this *i* morpheme as accusative case, even though it does not appear on non-shifted objects, but evidence that it is actually a preposition comes from the fact that it is used as a preposition elsewhere in the language:
(i) i   ka hale ola
     prep the hospital
     'to the hospital'   (Medeiros 2013 (44), from Hawkins 1979)
(ii) i   Kailua
     prep Kailua
     'in Kailua'   (Medeiros 2013 (31), from Hawkins 1982)
Here I follow Cook 1999:50 in identifying the i as a preposition: "The preposition i has many uses in Hawaiian. Among other things, it marks direct objects, goals of motion, temporals, and locative."
[24] The DOM marker is often glossed as accusative case, but in my view this is a carryover from descriptive work that only labels cases that are morphologically marked, ignoring the issue of the abstract case of morphologically unmarked objects; under that approach, the case of an unmarked object in situ in a nominative-accusative language such as Turkish can be ignored, leaving the accusative as a convenient label available for use on the shifted object. It also seems unlikely that the DOM marker is an inherent case (although that would avoid a MLC violation) since it does not mark objects that remain in their theta position. Unless inherent case can be inserted, P insertion may be the only option for altering the shifted object so as to avoid a Minimal Link Condition violation in object shift constructions. However, it is difficult to determine the exact identity of DOM markers cross-linguistically, given the problem of distinguishing postpositions that are case morphemes from postpositions that are Ps.
[25] Some languages add a postposition/'DOM marker' to shifted objects even in clauses with an ergative subject, e.g. Hindi (Bhatt & Anagnostopoulou 1996). This avoids a violation of the stronger version of the MLC discussed above in footnote 20.

structural case) would render it 'inert' as an intervener between Infl and the base position of the subject, thus allowing nominative licensing of the subject in object shift constructions without incurring a violation of the Minimal Link Condition.

10. Conclusion

This paper has provided additional support for Bittner and Hale's 1996 claim that there is a type of ergative language where ergative case cannot be used unless the direct object moves out of the VP. Strong evidence comes from Massam's (2000) work on Niuean, where word order confirms the association of object shift and ergative case, and Aldridge's (2012) similar analysis of the related language Tagalog. Other languages discussed here which belong to this object shift type are Dyirbal and Nez Perce.

Bittner and Hale 1996 propose that ergative languages fall into (just) two types, the object shift type mentioned just above, and the type where all external arguments get ergative case (usually known as the active or active ergative type). They do not discuss what is often considered the prototypic ergative language, one the presence of a direct object in syntax (regardless of its position) is both necessary and sufficient for ergative case to be used. The question is raised here of whether this prototypic/stereotypic ergative pattern ever actually occurs in languages with ergative case. A survey of ergative languages discussed in this paper has so far fail to turn up even one really clear example of an ergative language that *cannot* belong to one of Bittner and Hale's two types. Many ergative languages that have been assumed to use only 'ordinary' transitivity to govern the distribution of ergative case turn out to actually be examples of Bittner and Hale's first/Warlpiri type, where all external arguments get ergative case, regardless of the presence of an object in syntax. However, there remain a number of ergative languages for which the available literature does not allow us to determine their type. These languages do limit ergative case to clauses with an object present in syntax, but there is insufficient data to determine whether the object has always shifted out of the VP in ergative constructions in those languages. Thus the question actually remains open of whether Bittner and Hale's two types of ergative languages are the only types that occur.

With respect to theory, the active type of ergative language is expected under the view that ergative is an inherent case licensed in connection with the theta-licensing of the external argument by little v (Woolford 2006 and references cited therein). However, the association of ergative case and object shift seems unexpected. Bittner and Hale 1996 propose an account under which VP is a barrier in some languages, so that an object is not sufficiently close to serve as a case competitor for the subject. I present here an alternative account wherein ergative case is used as a 'last resort' in object shift constructions to avoid a violation of the Minimal Link Condition which Chomsky 1995 argues object shift should cause. An alternate means of avoiding a Minimal Link Condition violation discussed in this paper is P insertion on the object, a strategy used in Hawaiian.

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