Emily Drummond

University of California, Berkeley

1. Introduction

In traditional Case Theory (Chomsky 1981), a nominal must enter into a syntactic relationship with a functional head, a licensing mechanism familiarly known as abstract Case.¹ This syntactic relationship is said to underlie case and agreement morphology. Over the last 30 years, however, a strand of literature has debated the existence of abstract Case and its licensing function, questioning how Case values are assigned (e.g., Baker 2015), whether DPs and NPs need licensing (e.g., Levin 2015), and whether Case exists in the syntax at all (e.g., Marantz 1991, Diercks 2012). Despite these challenges, recent work has argued in favor of abstract Case in languages that show no morphological case (Sheehan and van der Wal 2016, Halpert 2016). However, languages with this profile are overwhelmingly nominatively-aligned; to my knowledge, there are no documented examples of an abstract ergative alignment with no morphological ergativity.

In the ergativity literature, morphological and syntactic case properties are even more tightly intertwined. Most cross-linguistic work on ergativity assumes that all syntactically ergative languages also show morphological ergative case, a generalization which is originally attributed to Dixon (1994). This generalization is somewhat surprising from a case-theoretic perspective: if abstract Case exists and is subject to general morphological principles, such as null realization, we expect to find a language with syntactic ergativity and no morphological ergativity (as noted by, e.g., Polinsky 2017:30). If such a language is not found, Dixon's generalization calls into question the existence of abstract Case, implying that syntactic operations must instead be sensitive to morphological case distinctions.

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¹Following common practice, I use Case (capitalized) to refer to the abstract syntactic relationship, and case (lowercase) to refer to the morphological marking found on nominals.

In light of these debates, this paper argues for the existence of abstract ergative Case licensing in Nukuoro (Polynesian Outlier). Despite showing no morphological ergativity, Nukuoro shows a restriction on ergative extraction, constituting a counterexample to Dixon's generalization. Furthermore, I show that abstract Case in Nukuoro is required for nominal licensing, a claim supported by two environments where licensing appears to fail: namely, within VP and in non-finite clauses. In this way, Nukuoro provides further support for abstract Case in languages without morphological case (Sheehan and van der Wal 2016), specifically abstract ergative Case, as well as a nominal licensing requirement for DP arguments (i.e., the Case Filter; Chomsky 1981).

2. Nukuoro essentials

Nukuoro is a highly analytic Polynesian Outlier language spoken by about 1,200 people in the Federated States of Micronesia (FSM), Guam, and the United States (Drummond and Rudolph 2021). Unless otherwise cited, all Nukuoro data presented in this paper come from primary fieldwork in Kolonia, Pohnpei and over Zoom from 2015–present.²

The basic word order of Nukuoro is SVO, as shown in (1a). Verb-initial word orders also appear in the language, and when they do, they are invariably VSO: these occur in polar questions, adjunct clauses, and relative clauses. An example of a polar question with VSO order is provided in (1b).

(1)	a.	De gauligi ne lingi de koovee.	
		DET child PFV spill DET coffee 'The child spilled the coffee.'	[SVO]
	b.	Ne llanga goe denga gede?	
		PFV weave 2SG DET.PL basket	
		'Did you weave the baskets?'	[VSO]

All Nukuoro clauses involve predicate fronting, where the DP object moves out of the VP, followed by movement of the remnant VP (Collins 2017, van Urk 2022). I assume that the remnant VP fronts to the specifier of a functional projection just below Infl, which I label FP (following Collins 2017). This structure is schematized in (2).

(2)
$$[_{IP} Infl [_{FP} [_{VP} V \xrightarrow{Obj} Adjuncts] F^0 [... Obj ... [_{VP} V \xrightarrow{Obj} Adjuncts]]]]$$

This predicate fronting occurs regardless of word order. The subject may appear in its base position in Spec, *v*P, yielding VSO, or in a derived position above Infl, yielding SVO.

²Funding for fieldwork was provided by the NSF (REU #1461056), a Hanna Holborn Gray Fellowship (Bryn Mawr College), three Oswalt Endangered Language Grants (UC Berkeley), and a Lewis and Clark Fund Grant (American Philosophical Society). Documentary materials are archived with the Survey of California and Other Indigenous Languages and are available online: http://dx.doi.org/doi:10.7297/X2M32T4N. Non-standard abbreviations include: DIR 'directional', OBL.PRO 'oblique pronoun', PN 'proper noun'.

Evidence for VP-fronting in Nukuoro comes from the position of VP-internal elements, which obligatorily occur between the verb and the DP object. These elements include directionals (3a), VP adjuncts (3a), and the oblique anaphoric pronoun *ai* (3b).

- (3) a. Au ne [VP dugu **ange maalie**] de beebaa gi honga teebele. 1SG PFV put DIR slowly DET book to top DET.table 'I slowly put the book on the table.'
 - b. Au ne [VP dugu **ai**] de beebaa. 1SG PFV put OBL.PRO DET book 'I put the book there.'

The fact that these elements must precede DP objects suggest that they front along with the verb phrase, which no longer includes the object; if objects stayed in their base position, we would expect them to appear between the verb and its adjuncts. This step of object movement is further supported by the behavior of NP objects, which *can* remain in their base position and front with the VP (4b), a pattern that has been described as pseudo noun incorporation (e.g., Massam 2001).³

- (4) a. de hale o tamaahine e [VP tilo ai] **denga dama** DET house GEN DET.girl NPST watch OBL.PRO DET.PL baby 'the house where the girl takes care of the babies'
 - b. de hale o tamaahine e [VP tilo **dama** ai] DET house GEN DET.girl NPST watch baby OBL.PRO 'the house where the girl takes care of babies'

Finally, since this paper concerns syntactic ergativity in \bar{A} -extraction, it is important to establish a basic structure for \bar{A} -constructions. Nukuoro *wh*-questions and focus constructions use a pseudocleft structure, where a predicate *wh*- or focus element takes a headless relative clause as its subject (Drummond to appear). As such, all \bar{A} -extraction contexts involve relativization, which I assume involves movement of a relative operator to the specifier of CP. The relative C head in Nukuoro is obligatorily null.

(5) $\begin{bmatrix} P_{red} & Go & ai_i \end{bmatrix} \begin{bmatrix} DP & \emptyset & [CP & OP_i & aau & ne & gidee t_i]? \\ FOC & who & 2SG.GEN & PFV & see \\ 'Who & did & you & see?' (lit. 'Who & is (the one) & that & you & saw?') & [wh-question] \end{bmatrix}$

Like many other Polynesian languages (e.g., Herd et al. 2011), Nukuoro uses a genitive relative clause strategy, where the subject of the relative clause receives genitive case (6).

³I invoke the term "pseudo noun incorporation" for consistency with previous literature; however, it is not clear that VP-internal objects in Nukuoro are actually incorporated in any way, prosodically or morphologically. Instead, I analyze this pattern in Nukuoro as a generalization about movement and Case licensing, which I flesh out in section 4.2.

Genitive case is marked by a distinct set of genitive pronouns or by the particle a or o before full DPs and proper nouns.⁴

(6)	a.	de	masovaa	{oou	/ o	de	gauligi}	ne	seesee	ai
		DET	time	2SG.GEN	GE	N DET	child	PFV	walk	OBL.PRO
		'the	time that	you/the cl	hild v	valked	,			

b. de masovaa {**aau** / **a de gauligi**} ne saabai ai de gede DET time 2SG.GEN GEN DET child PFV carry OBL.PRO DET basket 'the time that you/the child carried the basket'

If the subject itself is relativized, no argument appears in genitive case, making subject relatives identical in form to matrix clauses.

3. No morphological case

Unlike many Polynesian languages, which have been described as morphologically ergative or accusative, Nukuoro has a neutral alignment in morphological case and agreement. Aside from genitive case, Nukuoro shows no morphological case marking: in the three core grammatical roles, pronominal (7) and full DP arguments (8) must appear unmarked.⁵

(7)	a.	Au ne seni. 1SG PFV sleep 'I slept.'	(8)	a.	De gauligi ne seni. DET child PFV sleep 'The child slept.'
	b.	Soni ne doolohi au . Johnny PFV chase 1SG 'Johnny chased me.'		b.	Soni ne doolohi de gauligi . Johnny PFV chase DET child 'Johnny chased the child.'
	c.	Au ne doolohi Soni. 1SG PFV chase Johnny 'I chased Johnny.'		c.	De gauligi ne doolohi Soni. DET child PFV chase Johnny 'The child chased Johnny.'

Historically, Nukuoro likely showed ergative marking on post-verbal transitive subject pronouns, a pattern which still appears in other Polynesian Outliers. In Kapingamarangi, the most closely related language to Nukuoro, the ergative case marker *e* precedes transitive subject pronouns in post-verbal position, as shown in (9).

(9)	Ku kopoina e ia a Hina.	
	PERF praise ERG 3SG PN Hina	
	'He praised Hina.'	(Kapingamarangi; Elbert 1948:33)

⁴The choice of *a* vs. *o* in nominal possession indicates alienability, with *a* marking alienable possession. In relative clauses, this distinction reflects agentivity of the relative subject, with *a*-class genitives used for highly agentive subjects (Baker 2012).

⁵Nukuoro also lacks tonal case marking on arguments, which has been documented in Sāmoan (Yu 2021): all arguments in Nukuoro are marked by the same LH* contour on the primary stressed, penultimate mora.

The same marking is ungrammatical in Nukuoro, even taking into account word order and pronominality. Transitive subjects can never be post-verbal in Nukuoro declarative clauses, with or without ergative marking (10a); in clauses where post-verbal subjects are permitted, like in polar questions, ergative marking is ungrammatical (10b). It is similarly impossible to have ergative marking on pre-verbal transitive subjects (10c).

- (10) a. *Ne buuludi ange (e) ia Soni. PFV hug DIR ERG 3SG Johnny Intended: 'S/he hugged Johnny.'
 - b. Ne llanga (*e) goe denga gede? PFV weave ERG 2SG DET.PL basket 'Did you weave the baskets?'
 - c. (*E) gilaadeu ne doolohi Soni. ERG 3PL PFV chase Johnny 'They chased Johnny.'

Thus, Nukuoro shows no synchronic ergative case marking on nominals.

Case relations are not marked though verbal agreement either. Nukuoro verbs do not display person agreement with any arguments, although a subset of Nukuoro intransitive verbs show participant number marking (Corbett 2000), where verbs indicate the plurality of their closest argument through suppletion or reduplication (11).

(11)	a.	Ia gu seni .	b.	Gilaadeu gu sseni.
		3SG INC sleep		3PL INC sleep.PL
		'S/he fell asleep.'		'They fell asleep.'

However, participant number is generally assumed to be distinct from verbal agreement carried out by Agree (Bobaljik and Harley 2017, Drummond 2020).⁶ Furthermore, participant number marking only references intransitive subjects in Nukuoro, not transitive subjects or objects (12), and thus is not ergatively aligned.

- (12) a. Denga hadu gu **tige**. DET.PL stone INC roll.PL 'The stones rolled.'
 - b. Gilaadeu gu haga-**dige** denga hadu. 3PL INC CAUS-roll.SG DET.PL stone 'They rolled the stones.'

⁶In Polynesian, participant number has been analyzed semantically, such as verbal reduplication denoting event plurality (Haji-Abdolhosseini et al. 2002) or an affix which imposes a cardinality presupposition on the first argument to compose (Drummond 2020).

In short, Nukuoro shows no morphological evidence of case or case relationships. Despite this neutral morphological profile, I argue in the next section that Nukuoro shows an abstract ergative-absolutive licensing pattern, which is reflected by syntactic phenomena.

4. Abstract ergativity in Nukuoro

Despite a lack of overt case morphology, I argue that Nukuoro nominals require abstract Case licensing, which follows an ergative-absolutive alignment. Nukuoro instantiates a pattern of syntactic ergativity in Ā-movement, which suggests an abstract ergative alignment. In addition to this ergative extraction pattern, I provide evidence that Nukuoro is sensitive to nominal licensing in other areas as well: (i) DP objects cannot remain in their base position inside the VP; and (ii) non-finite clauses fail to license both arguments of a transitive. In other words, Nukuoro constitutes an additional language that shows abstract Case without morphological case (Sheehan and van der Wal 2016).

4.1 Ergative extraction

Nukuoro shows a pattern of syntactic ergativity in Ā-movement: transitive subjects cannot undergo relativization using the same unmarked strategy used for intransitive subjects and transitive objects. In this way, Nukuoro provides a novel counterexample to Dixon's (1994) generalization: syntactic ergativity is attested in the absence of morphological ergativity.

Intransitive subjects (S) and transitive objects (O) can undergo unmarked \bar{A} -movement in Nukuoro, as shown in (13).

(13)	a.	Go ai e anu naa?	
		FOC who NPST dance MED 'Who is dancing?'	(S)
	b.	Go ai a de gauligi ne tugi laa? FOC who GEN DET child PFV hit DIST	
		'Who did the child hit?'	(0)

Transitive subjects, however, cannot undergo this same unmarked movement (14a); instead, an additional -*Cia* suffix plus the postverbal particle *ina* must appear on the verb (14b). -*Cia* is a highly idiosyncratic verbal suffix found across Polynesian, where C represents a lexically-specified consonant (Chung 1978, Pawley 2001). In Nukuoro, the invariant particle *ina* is optional if the verb has a suppletive -*Cia* form, and obligatory if it does not.

- (14) a. *Go ai ne tugi Soni?FOC who PFV hit Johnny'Who hit Johnny?'
 - b. Go ai ne **duugia** (**ina**) Soni? FOC who PFV hit.CIA INA Johnny 'Who hit Johnny?'

(A)

This relativization strategy occurs in all transitive clauses where the subject is extracted: *wh*-questions, as seen above, as well as relative clauses (15a) and focus constructions (15b).

(15)	a.	Au ne gidee [tangada ne unu-mia (ina) denga vai].	
		1SG PFV see DET.person PFV drink-CIA INA DET.PL water	
		'I saw the person who drank the water.'	[relative]
	b.	Go Sigi ne dolohia (ina) denga gaagoo.	
		FOC Sigi PFV chase.CIA INA DET.PL chicken	
		'It was Sigi who chased the chickens.'	[focus]

The extraction restriction holds of all (and only) syntactically transitive constructions, namely those that have DP objects. -Cia + ina is obligatory for extraction of the subject of ditransitives (16a) and derived transitives (16b), which are formed by adding the causative prefix *haga*- to an intransitive verb.

	aa gi Soni?	e ina de beebaa	gaavange	ne	Go ai	a.	(16)
	to Johnny	INA DET book	v give	10 PF	FOC wh		
[ditransitive]		Johnny?'	he book to	gave t	'Who g		
		aguu ina ia? all INA 3SG	haga-ba ST CAUS-fa	e 10 NP	Go ai FOC wh	b.	
[intransitive + causative]			d him?'	rippe	'Who tr		

By contrast, -Cia + ina cannot appear when the subject of an intransitive (unergative) verb is extracted (17a), nor can it appear with "middle" verbs, which are notionally transitive but select for PP objects (17b).

(17)	a.	Go ai e gadagada (*ina) naa?	
		FOC who NPST laugh INA DEM 'Who is laughing?'	[intransitive]
	b.	Go ai e dele (*ina) i de moni? FOC who NPST sail INA PREP DET canoe	
		'Who is sailing the canoe?'	[middle]

These examples indicate that the restriction is sensitive to grammatical structure, not thematic roles—specifically, the restriction only arises when there is a DP object. This conclusion is further supported by the fact that the extraction restriction disappears when the object is an NP that remains in-situ. In these contexts, the object fronts with the VP and -Cia + ina is no longer required to extract the transitive subject (18b).

(18) a. tama laa e [VP **gai ina**] denga gahudi i masoaa alodahi DET.child DIST NPST eat INA DET.PL banana PREP time all 'that child who eats the bananas all the time'

b. tama laa e [_{VP} gai **gahudi**] i masoaa alodahi DET.child DIST NPST eat banana PREP time all 'that child who eats bananas all the time'

On its own, the presence of an ergative extraction restriction in Nukuoro is suggestive of an abstract ergative alignment. Analyses of ergative extraction overwhelmingly appeal to abstract ergative/absolutive Case, either by referring to Case values directly (e.g., Polinsky 2016, Deal 2017) or by appealing to the clause structure needed for abstract Case assignment to occur (e.g., Coon et al. 2014, Clemens and Tollan 2021).⁷ This link between extraction restrictions and abstract Case accounts for why syntactic ergativity is largely restricted to languages that show morphological ergativity (Dixon 1994).

However, as mentioned before, an abstract Case analysis also predicts that syntactic ergativity should be possible without the morphological realization of Case, a profile which was previously considered to be unattested. The Nukuoro pattern demonstrates that languages of this type are in fact possible, a welcome result for Case-based analyses of syntactic ergativity.

4.2 Additional evidence for abstract Case: licensing failures

The syntactically ergative pattern described above provides indirect evidence of abstract ergative Case. I provide further support for abstract Case licensing in Nukuoro by describing two instances where licensing fails, restricting the distribution of DP arguments. First, DP arguments may not appear in their base position, which I attribute to a lack of licensing within VP. Second, non-finite clauses fail to license both arguments of a transitive, suggesting that finite Infl is responsible for Case licensing. I conclude that DPs in Nukuoro are sensitive to an abstract nominal licensing requirement, which requires DPs to be Case-licensed by a functional head.

The first piece of evidence for a licensing requirement in Nukuoro comes from the distribution of DP objects. Recall from §2 that there is an asymmetry between NP and DP objects in Nukuoro: DP objects vacate the VP, while NP objects may remain in their base position. Crucially, DP objects *cannot* remain inside the VP: unlike NP objects, it is not possible for DP objects to appear in their base position (19). In other words, only DP objects undergo obligatory movement out of the VP.

(19) *de hale o tamaahine e [VP tilo **denga dama** ai] DET house GEN DET.girl NPST watch DET.PL baby OBL.PRO 'the house where the girl takes care of the babies'

The ungrammaticality of (19) indicates that NPs and DPs have different licensing requirements in Nukuoro. DPs are not licensed in their base position within the VP, and must undergo movement in order to be Case licensed. NPs, on the other hand, escape this requirement—either because they are licensed by a different mechanism, such as adjacency

⁷One exception is Erlewine (2016), who argues that syntactic ergativity is derived via anti-locality constraints rather than Case-licensing. I show in §5 that anti-locality cannot capture the Nukuoro facts.

with the verb (Baker 2014, Levin 2015), or because they do not need Case licensing at all. One might suggest that DPs move to check an EPP feature on a functional head, which is unrelated to licensing (e.g., Aldridge 2004, Coon et al. 2021); however, it is not clear how such an EPP requirement would be satisfied when there is an NP object, since NP objects do not obligatorily undergo movement out of VP. If object movement were motivated by some need of a higher functional head, we would expect to find obligatory movement of NP objects as well.

A second instance of licensing failure occurs in non-finite clauses. Finite Infl is often thought to be responsible for assigning Case (Sheehan and van der Wal 2016); when finite Infl is absent, we predict that one argument should fail to be Case-licensed. This prediction is borne out in Nukuoro: non-finite clauses fail to license both arguments of a transitive, requiring the same -(C)ia + ina morphology found in ergative extraction contexts.

Nukuoro shows a distinction between finite and non-finite complement clauses. Finite complements require the complementizer *bolo* and can take any aspect marker (20a), while non-finite complements have an optional complementizer and use the subjunctive particle gi, which appears in place of aspect marking (20b).

(20)	a.	Ia	e	lodo bolo	Soni	e	anu.	
		3sg 'S/h	NPST e want	want COMP ts Johnny to	Johnny dance.'	NPST	dance	[finite]
1	b.	Ia 3sg	e NPST	lodo (bolo) want COMP	Soni Johnny	gi SBJV	anu. dance	
		'S/h	e want	ts Johnny to	dance.			[non-finite]

Additional evidence that *gi*-clauses are non-finite comes from its incompatibility with typical TAM marking: *gi* is invariant for tense/aspect (21) and cannot be combined with other aspect markers (22), suggesting that it realizes a non-finite form of Infl.

(21)	a.	Au e	lodo [Mi	na gi	hano daiao].
		1sg nps'	T want Mir	na SBJV	go
		'I want N	lina to leav	ve tomor	row.'

- b. Au ne lodo [Mina gi hano anaahi].
 1SG PFV want Mina SBJV go yesterday
 'I wanted Mina to leave yesterday.'
- (22) Au ne lodo [Mina gi {*e / *ne / *nogo} seni anaahi].
 1SG PFV want Mina SBJV NPST / PFV / PROG sleep yesterday
 'I wanted Mina to sleep yesterday.'

Crucially, non-finite clauses fail to license both arguments of a transitive: transitive non-finite clauses cannot appear with a bare verb (23). Instead, -Cia + ina is obligatory in these clauses, the same morphology that appears in ergative extraction contexts.

a.	Au 1	ne	dugu	(bolo)	Mina gi	*hudi	/ huudia	(ina)	dahi	mamu.
	1SG I	PFV	allow	СОМР	Mina SBJV	catch	/ catch.CIA	INA	one	fish
	'I allo	owed	l Min	a to cat	ch a fish.'					
	a.	a. Au 1sg : 'I alle	a. Au ne 1SG PFV 'I allowed	a. Au ne dugu1SG PFV allow'I allowed Mina	a. Au ne dugu (bolo)1SG PFV allow COMP'I allowed Mina to cat	a. Au ne dugu (bolo) Mina gi1SG PFV allow COMP Mina SBJV'I allowed Mina to catch a fish.'	 a. Au ne dugu (bolo) Mina gi *hudi 1SG PFV allow COMP Mina SBJV catch 'I allowed Mina to catch a fish.' 	 a. Au ne dugu (bolo) Mina gi *hudi / huudia 1SG PFV allow COMP Mina SBJV catch / catch.CIA 'I allowed Mina to catch a fish.' 	 a. Au ne dugu (bolo) Mina gi *hudi / huudia (ina) 1SG PFV allow COMP Mina SBJV catch / catch.CIA INA 'I allowed Mina to catch a fish.' 	 a. Au ne dugu (bolo) Mina gi *hudi / huudia (ina) dahi 1SG PFV allow COMP Mina SBJV catch / catch.CIA INA one 'I allowed Mina to catch a fish.'

b. Ruth e lodo (bolo) au gi **buuludi** *(**ina**) ange Soni. Ruth NPST want COMP 1SG SBJV hug INA DIR Johnny 'Ruth wants me to hug Johnny.'

The appearance of -(C)ia + ina in these two seemingly disparate environments is highly reminiscent of the "crazy antipassive" in Q'anjob'al (Mateo-Toledo 2003), which also appears in both ergative extraction and transitive non-finite contexts (24).

(24) Q'anjob'al ergative extraction and transitive non-finite clauses

- a. Maktxel max-ach il-**on**-i? who ASP-2ABS see-ON-ITV 'Who saw you?'
- b. Chi uj [hach y-il-**on**-i]. ASP be.able 2ABS 3ERG-see-ON-ITV 'She can see you.'

(Coon et al. 2014:1)

To account for this distribution, Coon et al. (2014) propose that *-on* realizes an alternative Case-licensing head, which appears when Case is otherwise unavailable. Specifically, in ergative extraction contexts, typical Case assignment would prevent subject extraction; in non-finite clauses, finite Infl is not present to assign Case. I suggest that the same analysis is tenable for Nukuoro, explaining the appearance of -(C)ia + ina in both ergative extraction and non-finite contexts. Thus, these data suggest that finite Infl is responsible for Case licensing in Nukuoro, a mechanism which also accounts for the distribution of object DPs in matrix clauses and the restriction on ergative extraction.

5. Potential analyses of syntactic ergativity

The phenomena described above in Nukuoro are compatible with a number of different analyses of syntactic ergativity, and distinguishing between them relies heavily on establishing the landing site of object movement in Nukuoro. Crucially, though, all tenable analyses involve abstract ergative Case assignment—I show that one of the only accounts that does not rely on Case, namely Erlewine's (2016) anti-locality account, fails to capture the behavior of Nukuoro ergative extraction with different word orders.

One classic style of analysis attributes ergative extraction restrictions to systematic object inversion (e.g., Aldridge 2004, Coon et al. 2014, Clemens and Tollan 2021, Coon et al. 2021), where DP objects move to a structurally high position above the transitive subject (25). In this position, the object intervenes for the purposes of subject extraction.

(25)
$$\begin{bmatrix} CP & \dots & \begin{bmatrix} vP & DP_{Obj} & DP_{Subj} & V & DP_{Obj} \end{bmatrix} \end{bmatrix}$$

Since there is independent evidence that Nukuoro clause structure involves object shift, this analysis seems promising at first glance: absolutive Case would be assigned by finite Infl, motivating object movement above the subject. However, it is difficult to reconcile systematic object inversion with Nukuoro word order, which is either SVO or VSO, but never VOS. Without significant evidence to the contrary, the word order alone suggests that object inversion may not be a tenable analysis of Nukuoro syntactic ergativity.

That being said, analyses that do not rely on object inversion are few and far between. One possibility is that \bar{A} -movement in Nukuoro is case-discriminating (e.g., Deal 2017), such that \bar{A} -probes are sensitive to the case features of DP goals. While this analysis was originally formulated in terms of morphological case, the same idea can be implemented in terms of abstract Case; for instance, abstract Case discrimination could be formalized as an instance of composite probing (e.g., Coon and Bale 2014), where the \bar{A} -probe would be relativized to search for both [\bar{A}] and [ABS] features on the same goal. The benefit of a case-discrimination analysis is that it requires no particular claims about clause structure, making it applicable in languages with no demonstrable object inversion. It is only necessary that the language assigns abstract Case to be referenced by syntactic operations, a claim that is supported in Nukuoro by licensing phenomena.

Alternatively, one could argue that the extraction restriction described in §4 has nothing to do with abstract Case, but rather can be attributed to an anti-locality condition on subject extraction (Erlewine 2016). On this view, transitive subjects obligatorily occupy a position higher than intransitive subjects, which is too close to the landing site of \bar{A} -movement. If this analysis were tenable for Nukuoro, claims about abstract Case in the language would be significantly weakened.

One key prediction of this account is that transitive subject extraction should be possible from a post-verbal position, since movement would cross the intervening projection that hosts the fronted predicate. This prediction is not borne out in Nukuoro: word order flexibility for subjects has no effect on the extraction restriction. The availability of post-verbal subjects in relative clauses varies across speakers and constructions; consider the data in (26) from one speaker, who allows post-verbal transitive subjects in some relative clauses but not others.⁸

(26)	a.	de masoaa [ne saabai ai de gauligi de gede]	
		DET time PFV carry OBL.PRO DET child DET basket	
		'the time that the child carried the basket'	[VSO]
	b.	*de masoaa [ne hagaili ai de gauligi Soni]	
		DET time PFV hit OBL.PRO DET child Johnny	
		'the time that the child hit Johnny'	[*VSO]

Based on these word order judgements, we predict that extraction of the transitive subject should be possible in (26a), where post-verbal subjects are licit for this speaker, but not in (26b). However, the transitive subject is unable to extract in either construction, as indicated by the presence of -(C)ia + ina morphology (27).

⁸Another speaker does not permit any post-verbal transitive subjects in relative clauses.

- (27) a. Go de gauligi ne saabai ina de gede.
 FOC DET child PFV carry INA DET basket
 'It's the child who carried the basket.'
 - b. Go de gauligi laa ne **hagailia (ina)** Soni. FOC DET child DIST PFV hit.CIA INA Johnny 'It's the child that hit Johnny.'

The persistence of the extraction restriction in (27), despite an available post-verbal position for the subject, suggests that Nukuoro ergative extraction cannot be accounted for under an anti-locality approach. I conclude that the extraction restriction relies on underlying abstract ergative and absolutive Case—either directly, through Case discrimination, or indirectly, through object inversion.

6. Conclusion

Nukuoro lacks morphological case yet shows several behaviors characteristic of abstract Case sensitivity, including an ergative extraction restriction and a restricted distribution of DP arguments. This case study is descriptively novel in several respects. First, Nukuoro constitutes a rare example of a non-African language that is argued to have abstract Case without morphological case, joined only by Mandarin, Thai, and Jamaican Creole (Sheehan and van der Wal 2016). Furthermore, it is the first described example of an abstract ergative alignment, where recent literature focuses on abstract nominative Case (Sheehan and van der Wal 2016) or Case assigned within the DP itself (Halpert 2016). Abstract ergativity in Nukuoro shows that abstract Case languages display the same range of variation as morphological case languages, a desirable result if we wish to unify the mechanisms behind abstract Case licensing and morphological case. Finally, Nukuoro provides a counterexample to Dixon's (1994) proposed correlation between morphological and syntactic ergativity, showing that ergative extraction restrictions are not dependent on morphological case. As such, the Nukuoro pattern cannot be captured by fully morphological theories of case and syntactic ergativity (e.g., Marantz 1991, Deal 2016), and provides evidence against accounts that try to eliminate Case from the syntax entirely.

In addition to a syntactic representation of Case, the Nukuoro facts also provide evidence in favor of a syntactic nominal licensing mechanism (i.e., the Case Filter; Chomsky 1981), and crucially, one that is obligatory for DP arguments. This claim runs counter to recent approaches to Case, which attempt to eliminate the Case Filter altogether (e.g., Marantz 1991) or restrict the scope of the Case Filter to structurally deficient nominals (e.g., Levin 2015). The data presented here also have implications for the mechanism of Case assignment, which is logically independent from the licensing requirement. The non-finite clause data in particular are consistent with theories where Case is assigned to nominals by functional heads (e.g., Chomsky 2000, Legate 2008), since the absence of finite Infl correlates directly with a lack of Case assignment. These data are more challenging to capture under a configurational theory of Case, where functional heads only indirectly affect Case assignment possibilities by delimiting Case assignment domains (e.g., Baker 2015).

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Emily Drummond emily_drummond@berkeley.edu