

# Equidistance returns

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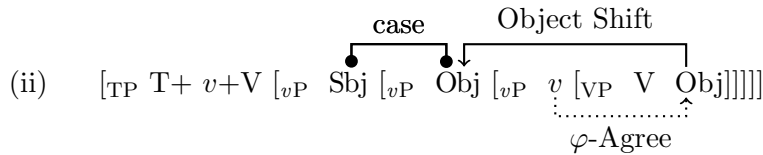
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## 0 Abstract

Modern generative linguistic theory furnishes a variety of general principles that appear to be at work in the grammar of all the world’s languages. One of the most basic and uncontroversial of these principles is that *Agree/Move* operates according to the principle of *attract closest*, whereby the closest suitable goal must be the target for the relevant operation (Rizzi 1990; Chomsky 1995, 2000; Richards 1998). As first pointed out by Seiter (1980), the operation of raising in the Polynesian language Niuean (Tongic subgroup) raises suspicions as to whether this principle is truly at work in all languages. Niuean raising, despite patterning under all relevant diagnostics as A-movement, may felicitously target objects in the presence of subjects that are themselves optionally accessible to the operation.

- (i) To maeke a Sione<sub>1</sub> [ke lagomatai he ekekafo *t*<sub>1</sub>] *Niuean*  
 FUT possible ABS Sione SBJ help ERG doctor  
 ‘It’s possible the doctor can help Sione.’

Niuean lacks any form of scrambling and is rigidly VSO, so that at first glance, that *attract closest* is not at work. In this paper, we argue that Niuean’s challenge to universal principles is only apparent, and that the traditional *attract closest* condition is indeed in force in Niuean. First, we show that the availability of object-to-subject raising reflects a wider subject/object parity whereby subjects and objects appear to be equally accessible to higher probes in general. Then, we argue that this typologically uncommon equal-accessibility follows from the convergence of several otherwise independently attested operations: (i) object shift of case-bearing DPs to Spec(*v*P); (ii) an ergative case system, with case assignment achieved wholly within *v*P; (iii) an EPP on T triggering V/VP fronting, not DP externalization. The resulting basic clause structure is then as below, so that Niuean raising adheres to standard locality constraints as conceived by Chomsky (1995, 2000).



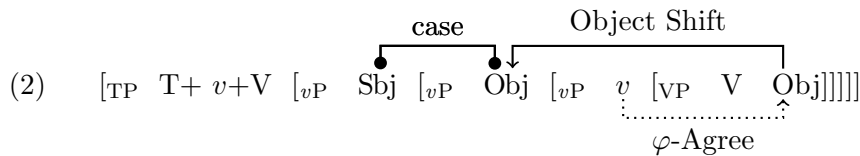
# 1 Setting the stage

The operation of raising in Niuean – a Polynesian language of the Tongic subgroup with VSO order and an ergative-absolutive case system – has puzzled researchers since it was introduced to the wider linguistics community by the work of Seiter (1980). In particular, as illustrated below, Niuean appears to license object-to-subject raising: the semantic object of the embedded subjunctive clause, *Sione*, appears as the syntactic subject of the predicate *maeke*.<sup>1</sup>

- (1) To maeke a Sione<sub>1</sub> [ke lagomatai he ekekafo *t*<sub>1</sub>]  
 FUT possible ABS Sione SBJ help ERG doctor  
 ‘It’s possible the doctor can help Sione.’ (lit.: Sione is possible that the doctor help [him])

Early interest in this construction focused specifically on the cross-clausal object-to-subject dependency, which was particularly surprising when the main empirical point of comparison was English subject-to-subject raising. While the modern theory provides both more resources for analyzing such dependencies and a cross-linguistic array of constructions exhibiting such behavior, the Niuean data still pose a considerable challenge. In particular, the object-raising operation in (0) fails to show the A'-nature characteristic of object-raising constructions cross-linguistically. As we will show below, Niuean raising is neither strictly long-distance, being limited to the highest subject and object of the clause immediately embedded under the licensing predicate, nor does it create islands for A'-movement. Instead, (1) seems to instantiate a sort of non-local A-movement by which the object may skip over the intervening subject. This is both a clear violation of *attract closest* (Rizzi 1992; Chomsky 1995; Richards 1998) and a typological anomaly.

In this paper, we argue that the challenges, theoretical and typological, posed by Niuean raising are only apparent. First, we show that the availability of object-to-subject raising reflects a wider subject/object parity whereby subjects and objects appear to be equally accessible to higher probes in general. Then, we argue that this typologically uncommon equal-accessibility follows from the convergence of several otherwise independently attested operations: (i) a configurational system of case licensing, with a *vP* as the case computation domain; (ii) obligatory object shift to Spec(*vP*); (iii) an EPP on T triggering V/VP-raising rather than DP externalization. The resulting basic clause structure is then as below, so that Niuean raising adheres to standard locality constraints.



In Section 2, we discuss the details of Niuean raising, arguing that the relevant operation is indeed raising and elaborating on the puzzle sketched above. In Section 3 we show that subject/object symmetry in Niuean goes beyond raising, as it is also found in relativization and superiority contexts. We then show, based on the distribution of genitive case marking in nominalizations, that subject does not act as an intervener for a set of higher probes. Our proposal is detailed in Section 4, followed by some predictions and consequences in Section 5. Our main focus is on the overall pattern of subject/object symmetry in Niuean, the symmetry that as we argue arises from a confluence of

<sup>1</sup>Abbreviations: ABS-absolutive, DEP.TNS-dependent tense, DET-determiner, DIR-directional particle, EMPH-emphatic, ERG-ergative; FUT-future, GEN-genitive, INC-inclusive, NFT-non-future, PERF-perfective, PERS-personal/proper noun marker; POSS-possessive, PRED-Predicate marker, PST-past, RP-resumptive pronoun, SBJ-subjunctive.

several independent factors. of all the manifestations of this symmetry, Niuean raising is best known, and thanks to Seiter’s work, best documented. We show that Niuean raising is actually copy-raising; but since its analysis is not central to our paper we postpone this discussion to the Appendix.

## 2 Niuean raising

We begin by considering the raising operation sketched in the previous section in more detail. As mentioned, in descriptive terms Niuean raising involves a dependency between a gap in the subject or object position of a subjunctive clause embedded under the licensing predicate and a DP to the left of the subjunctive complementizer *ke* (Seiter 1980: Ch.3).

- (3) a. To maeke [ke lagomatai he ekekafo a Sione].  
FUT possible SBJ help           ERG doctor   ABS Sione  
‘It’s possible the doctor can help Sione.’  
b. To maeke e ekekafo<sub>1</sub> [ke lagomatai *t*<sub>1</sub> a Sione].  
FUT possible ABS doctor   SBJ help           ABS Sione  
‘The doctor can help Sione.’  
c. To maeke a Sione<sub>1</sub> [ke lagomatai he ekekafo *t*<sub>1</sub>].  
FUT possible ABS Sione   SBJ help           ERG doctor  
‘The doctor can help Sione.’

A variety of predicates license this operation, with the majority falling within the set of canonical raising triggers, cross-linguistically. For the remainder of this paper, we will illustrate the pattern using the verbal raising triggers *kamata* and *maeke*.

- (4) Niuean raising verbs:  
*maeke* ‘possible’, *liga* ‘likely’, *fakaai* ‘really (polarity item, used with negation and interrogatives)’, *teitei* ‘be on the brink of; be almost; be just about’, *kamata* ‘begin’, *tumau* ‘continue, go on’, *tuku* ‘stop’

Our first aim in this section is to show that Niuean raising is indeed a raising operation, so that the target DP is a syntactic argument of the higher predicate and the semantic argument of the lower predicate. William Seiter (1978, 1980, 1983) has made this point in great detail, so we stick here to a brief summary of his core arguments. Concerning the first point, there is a variety of evidence that the target DP is a syntactic argument of the higher predicate. The first argument has to do with the realization of morphological case. Because it will also be important in the ensuing discussion, we pause to comment on the basic paradigm for morphological case marking in Niuean. The language exhibits a uniform ergative system, with case manifesting on prenominal particles. These particles are different for pronouns and proper names, on the one hand, and common nouns, on the other, as below. Niuean does not have quirky-case subjects; all subjects appear either in the absolutive (intransitive predicates) or ergative (transitive predicates).

(5)

Case marking	Proper names & pronouns	Common nouns
Absolutive	a	e
Ergative	e	he
Genitive	ha	he

With this in mind, the first argument in support of raising is that the target DP in the raising constructions always appears in absolutive case (regardless of the case associated with that DP in the lower clause), which is consistent with it being the subject of an intransitive predicate. It is of particular import that target DPs associated with a transitive subject gap also appear marked with absolutive case, not the ergative expected on a transitive subject (cf. (4-a,b)).

A second argument concerns conversion to genitive. In certain nominalizations, finite-clause arguments that are in the absolutive (intransitive subject and direct object) may appear in the genitive case. Ergatives, obliques, and adjuncts cannot undergo such case conversion (we will return to this asymmetry below, in sections 3.2 and 4.1; see also Seiter 1980 for more empirical data). The target DP in Niuean raising may undergo this operation, again identifying it as an argument of the higher predicate (cf. (6-a,b)).

- (6) a. Kua oti tei [e maeke **a au**<sub>1</sub> [ke ahi he kapitiga haaku *t*<sub>1</sub>]].  
 PERF finish EMPH DET possible ABS 1.SG SBJ visit ERG friend 1.SG.POSS  
 ‘The possibility of me being visited by my friend is through.’  
 b. Kua oti tei [e maeke **haaku**<sub>1</sub> [ke ahi he kapitiga haaku *t*<sub>1</sub>]].  
 PERF finish EMPH DET possible 1.SG.GEN SBJ visit ERG friend 1SG.POSS  
 ‘The possibility of me being visited by my friend is through.’  
 (Seiter 1980: 180)

We refer the interested reader to Seiter’s work for more arguments and discussion on this point, and adopt his conclusion that the target DP is a syntactic argument of the higher predicate. It remains to be shown, then, that the target DP is a semantic argument of the embedded, but not the matrix, predicate. This point may be made most clearly with idiom chunks, which may appear as the subject of the licensing predicate but still contribute to an idiomatic reading in the embedded clause. In (7), the idiom in question is *oeli e tau matahui*, ‘to get drunk (lit. to oil one’s knees)’ (see (7-a)), while in (8) it is *kai a kookoo haana*, ‘to eat one’s words; to walk back a statement (lit. to eat one’s vomit)’.<sup>2</sup>

- (7) a. Loto a au [ke **oeli e tau matahui**], ti koli.  
 like ABS 1.SG SBJ oil ABS PL knee then dance  
 ‘I like to get a little drunk, then dance.’ (lit. I like to oil the knees)  
 b. Kua kamata tei **e tau matahui**<sub>1</sub> [ke **oeli e** lautolu *t*<sub>1</sub>]  
 PERF begin EMPH ABS PL knee SBJ oil ERG 3.PL  
 ‘They’ve begun to get a little drunk.’  
 (Seiter 1980: 191)

<sup>2</sup>The first example is from Seiter’s work; our consultants never accepted *oeli e tau matahui* as an idiom; the second idiom seems more current.

- (8) a. Kua **kai** e ia ni e **kōkō haana**  
 PERF eat ERG 3.SG EMPH ABS vomit 3.SG.POSS  
 ‘S/he’s walking back on something s/he said.’ (lit.: S/he’s eating his/her vomit)  
 b. Kua kamata e **kōkō haana**<sub>1</sub> [ke **kai** e ia *t*<sub>1</sub>].  
 PERF begin ABS vomit 3.SG.POSS SBJ eat ERG 3.SG  
 ‘S/he’s beginning to walk back on what s/he said.’

Seiter (1980) compiles additional arguments to this end based on quantifier float and applicative constructions, which we omit here partly for reasons of space and partly because they may be amenable to a different interpretation.<sup>3</sup> Overall, we follow Seiter in concluding that Niuean raising meets the definition of standard raising: the target DP is a syntactic argument of the higher predicate and the semantic argument of a lower, distinct predicate.<sup>4</sup>

Having established that we are dealing with raising, let us now explore in more detail the particular puzzle posed by the data under discussion. To this end, it is helpful to compare Niuean raising with another well-known instance of cross-clausal object-to-subject dependencies, *tough*-movement (TM). Like Niuean raising, TM involves a dependency between the thematic object position of a DP and its surface position as the syntactic subject of the licensing predicate (Rezac 2006; Hicks 2009). In (9), then, the surface subject, *Sue* and *that cafe*, respectively, serves as a syntactic argument of *hard* and *enjoyable*, respectively, but is interpreted as an internal argument of predicate within the embedded infinitive, *give* and *write*, respectively. The dependencies involved are thus highly reminiscent of TM. Indeed, TM has been proposed for a construction similar to Niuean raising in the closely related Tongan (Otsuka (2000), but see Polinsky (2016) for an alternative analysis), further highlighting the potential parallels.

- (9) a. Sue<sub>1</sub> was hard [<sub>Inf</sub> to give the book to *t*<sub>1</sub>].  
 b. That cafe<sub>1</sub> was enjoyable [<sub>Inf</sub> to write papers in *t*<sub>1</sub>].

Despite their superficial similarity, however, even a cursory examination of the dependencies present in these two constructions reveals marked differences, highlighting our puzzle. With TM, whatever the relevant derivational mechanisms are, it is clear that the A'-system is involved. In particular, TM may cross an arbitrary number of clauses (see (10-a)) and intervening DPs (see (9), (10-a)), and

<sup>3</sup>See section §5 below for the discussion of the applicatives.

<sup>4</sup>As documented by Seiter (1980: Sec 3.5), Niuean also has what appears to be raising to object, as in (i), where the raising target surfaces as a so-called “middle object” marked by *ke he/kia*, as shown in (i-b).

- (i) a. Fakatali a Sione ke lagomatai he ekekafo e faiaoga  
 expect ABS Sione SBJ help ERG doctor ABS teacher  
 ‘Sione expects that the doctor will help the teacher.’  
 b. Fakatali a Sione ke he ekekafo ke lagomatai e faiaoga  
 expect ABS Sione OBL doctor SBJ help ABS teacher  
 ‘Sione expects the doctor to help the teacher.’

That said, this construction has more in common with the “oblique copying” operation discussed below in that it creates islands for A'-movement (see (ii) and (iii), respectively) and does not give rise to idiomatic readings when it displaces idiom chunks.

- (ii) a. \*Ko hai ne manako a koe ke he faiaoga ke lagomatai?  
 PRED who PST want ABS 2.SG OBL teacher SBJ help  
 ‘Whom do you want the teacher to help?’  
 b. Ko hai ne manako a koe ke lagomatai he faiaoga?  
 PRED who PST want ABS 2.SG SBJ help ERG teacher  
 ‘Whom do you want the teacher to help?’

it creates (weak)-islands for further A'-extraction (see (10-b); see Longenbaugh 2016b and references cited therein for discussion of the A'-nature of TM).

- (10) a. Sal<sub>1</sub> was easy [to convince Jen [to ask Bob [to hire t<sub>1</sub>]].  
 b. ??Which cafe<sub>2</sub> was the paper<sub>1</sub> enjoyable to write t<sub>1</sub> in t<sub>2</sub>?

None of these properties hold of Niuean raising. The operation is limited to arguments of the highest clause embedded under the licensing predicate (see (11-a)) and cannot cross an arbitrary number of clauses (see (11-b)). This means that, object-over-subject movement aside, Niuean raising cannot cross intervening expressions.

- (11) a. Kua kamata [ke lali a au [ke kitia e tama ko]].  
 PERF begin SBJ try ABS I SBJ see ABS child that  
 'I began to try to see that child.'  
 b. \*Kua kamata e tama ko<sub>1</sub> [ke lali a au [ke kitia t<sub>1</sub>]].  
 PERF begin ABS child that SBJ try ABS I SBJ see  
 'I began to try to see that child.'
- (12) a. Kua kamata e pikopiko haana<sub>1</sub> [ke maaliali t<sub>1</sub> ki a au].  
 PERF begin ABS lie 3SG.POSS SBJ be.clear to ABS 1SG  
 'His lies began to be clear to me.'  
 b. \*Kua kamata (ki) a au<sub>1</sub> [ke maaliali e pikopiko haana t<sub>1</sub>].  
 PERF begin to ABS 1SG SBJ be.clear ABS lie 3SG.POSS  
 'His lies began to be clear to me.'

Finally, Niuean raising does not create islands for A'-extraction:

- (13) a. Ko hai<sub>2</sub> ne maeke e ekekafo<sub>1</sub> [ke lagomatai t<sub>1</sub> t<sub>2</sub>]?  
 PRED who NFT possible ABS doctor SBJ help  
 'Who is it possible for the doctor to help?'  
 b. Ko e heigoa<sub>2</sub> ne kamata a Sione<sub>1</sub> [ke lali t<sub>1</sub> [ke kitia t<sub>2</sub>]]?  
 PRED ABS what NFT begin ABS Sione SBJ try SBJ see  
 'What did Sione begin to try to see?'

These data show that unlike TM, Niuean raising does not appear to involve the A'-system. These differences between TM and Niuean raising are put in further relief if we consider another construction available in Niuean: oblique copying. This operation, licensed by what are cross-linguistically traditional TM triggers, features the displacement of an underlying oblique argument to the subject position of the licensing predicate, with an obligatory resumptive pronoun in the base position. Subjects and objects are barred from participating in this operation.

- (14) Ai mukamuka e tagata ia<sub>1</sub> [ke fakamaama e au e tau mena \*(ki ai<sub>1</sub>)]  
 not easy ABS man that SBJ explain ERG I ABS PL thing to RP  
 'That man isn't easy for me to explain things to.'  
 (Seiter 1980: 224)

Like TM, and unlike Niuean raising, oblique copying shows clear evidence for the involvement of the A'-system: oblique copying can be long-distance (see (15-a)) and creates islands for further A'-extraction (see (15-b)).

- (15) a. Ne uka e tama ko<sub>1</sub> [ke lali a au [ke fakamaama ki ai<sub>1</sub> ha mena]]  
 PST difficult ABS child that SBJ try ABS I SBJ explain to RP NSPF thing  
 ‘That boy was hard for me to try to explain anything to.’  
 (Seiter 1980: 224)
- b. \*Ko hai<sub>2</sub> ne uka e vaka<sub>1</sub> [ke heke t<sub>2</sub> ai<sub>1</sub>]?  
 PRED who NFT difficult ABS canoe SBJ ride RP  
 ‘Who has a hard time riding in the canoe?’

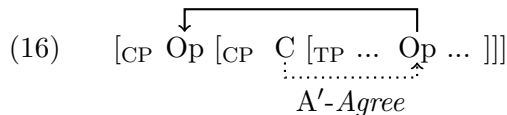
We now have the necessary background in place to describe the central puzzle addressed in this paper: Niuean raising does not have A'-characteristics (which are independently available in Niuean), yet it allows for apparent violations of locality conditions on A-movement (objects can raise over subjects). Our aim in the subsequent sections will be to provide a principled analysis of this fact without abandoning familiar notions of locality. The first step, which we turn to now, is to show that subject/object parity is not limited to raising environments in Niuean; in a variety of constructions throughout the language, subjects and objects appear to be equally licit targets for a variety of operations, in apparent violation of familiar principles of locality.

### 3 Suspension of locality in Niuean: Beyond Raising

In this section, we turn our attention to other cases where, descriptively, an operation that should be blocked by the subject may nevertheless target the object. We focus on two specific cases in order to highlight the phenomenon at stake: multiple *wh*-questions and conversion to genitive. On the basis of these two examples, we argue that both A' and A-probes appear to be capable of targeting the object over the subject, even if the subject counts as a viable goal. We then propose to cast the subject/object symmetry under Niuean raising in terms of accessibility to A-probes, so that the core puzzle in Niuean reduces to the origin and nature of this suspension of locality in a number of contexts.

#### 3.1 A'-probing: Relative clauses and superiority

We begin with the data from multiple *wh*-questions, where we argue that objects may be targeted by A'-probes even in the presence of subjects that are themselves possible goals for the probe. Questions in Niuean are formed via clefting or pseudo-clefting (Potsdam and Polinsky 2011); the *wh*-phrase is in the predicate phrase whos subject includes a (headless) relative clause. Thus the mechanism at stake in the derivation of questions involves relative-operator movement. We assume that this movement is triggered by a generalized A'-probe at C which attracts the relevant operator:



Relative clause formation is identical for subjects and objects in Niuean; both arguments must relativize with a gap:

- (17) Subjects & objects relativize with a gap
- a. e tama [ne hau (\*a ia) i Makefu]  
 ABS child DPT.TNS come ABS 3SG PRP Makefu  
 ‘the child that comes from Makefu’

- b. e tagata [ne hoka (\*e ia) a Maka]  
 ABS man DPT.TNS stab ERG3SG ABS Maka  
 ‘the man that stabbed Maka’
- c. e tagata ne moto e koe (\*a ia)  
 ABS man DPT.TNS punch ERG 2SG ABS 3SG  
 ‘the man that you punched’ (Seiter 1980: 94-95)

In contrast, the relativization of obliques, time nominals, stative agents, benefactives, and other non-core arguments requires a resumptive pronoun in the base position (cf. (18), (19)); finally, comitatives cannot be relativized with either strategy (Seiter 1980).<sup>5</sup>

(18) Constituents other than subjects and objects must relativize with a resumptive pronoun

- a. e taga [ne tuku \*(ai) e ia e uga ]  
 ABS bag DPT.TNS put RP ERG 3SG ABS crab  
 ‘the bag in which he put the coconut crab’
- b. e maga-aho [ne kua makona \*(ai) a ia]  
 ABS moment DPT.TNS PFV be.full RP ABS 3SG  
 ‘the moment he was full’
- c. e fakamatalaaga [ne fanogonogo a au \*(ki ai)]  
 ABS speech DPT.TNS listen ABS 1SG to RP  
 ‘the speech which I listened to’  
 (Seiter 1980: 94-95)

The relative clause constitutes the non-*wh* material in Niuean questions. Under the pseudo-cleft analysis, it occupies the subject position (Potsdam and Polinsky 2011). The *wh*-word is the predicate and is introduced by the predicate marker *ko*. A sketch of the corresponding derivation of a *wh*-question is provided below.

- (19) Ko WH [CP  $\overbrace{\text{Op}_{[A':7]}}^{\text{A'-Agree}}$  [CP C<sub>[A':.]</sub> [ ... [ ... Op<sub>[A':7]</sub> ... ]]]]

Now, in multiple questions, the basic structure involves one *wh*-phrase in the pivot of the cleft and the remaining *wh*-phrase(s) *in situ* within the relative clause. The choice of which *wh*-phrase appears as the pivot is governed by superiority considerations: in particular, an oblique *wh*-phrase cannot appear as the pivot of the cleft in the presence of a subject or object *wh*-phrase (see (20-b)), nor can an embedded subject or object *wh*-phrase appear as the pivot of the cleft in the presence of a subject or object *wh*-phrase in a higher clause (see (21-b)).

- (20) a. Ko hai ne fano ki fe?  
 PRED who NFT go to where  
 ‘Who went where?’
- b. \*Ko fe ne fano a hai ki ai?  
 PRED where NFT go ABS who to there  
 (‘Where did who go?’)

<sup>5</sup>While the relativization of both subjects and objects with a gap is common situation cross-linguistically, it is worth pointing out that it is impossible in the closely related Tongan, where only absolutive arguments relativize with a gap (Otsuka 2000; Polinsky 2016); we set aside the precise details of the relative clause and *wh*-question constructions beyond this cursory overview, as they do not concern our argument.




- (21) a. Ko hai ne pehe ne kaihaa e koe e heigoa?  
 PRED who NFT say PST steal ERG 2.SG ABS what  
 ‘Who said that you stole what?’  
 b. \*Ko e heigoa ne pehe a hai ne kaihaa e koe?  
 PRED ABS what NFT say ABS who PST steal ERG 2.SG  
 (‘What did who say that you stole?’)

However, when the subject and object within the same clause are both *wh*-phrases, either may appear as the pivot of the cleft. That is, there are no superiority effects between clausemate subjects and objects.

- (22) a. Ko hai ne kai e heigoa?  
 PRED who NFT eat ABS what  
 ‘Who ate what?’  
 b. Ko e heigoa ne kai e hai?  
 PRED ABS what NFT eat ERG who  
 ‘What did who eat?’

We conclude that the intervening interrogative subject does not block the probing for the interrogative object, although familiar superiority effects do obtain in the language. The pattern that emerges is thus identical to what we observed with raising: normal locality conditions apply in general, but seem to be suspended when the relevant targets are clausemate subjects and objects. Phrased in the language of the probe-goal framework, the conclusion is that A'-probes may target an object even if the associated subject is also a licit goal.

- (23) a. [ C<sub>[wh:..]</sub> ... Sbj<sub>[wh:5]</sub> Obj<sub>[wh:6]...</sub> ]      b. [ C<sub>[wh:..]</sub> ... DP<sub>[wh:5]</sub> ... [ ... DP<sub>[wh:6]</sub> ... ] ... ]  


### 3.2 A-probing: Conversion to genitive

The apparent suspension of locality constraints for clausemate subjects and objects is also observed when the relevant probe is an A-probe. The clearest case concerns nominalizations, where, as mentioned in section 2, the absolutive argument may optionally appear marked with genitive case (cf. intransitive example in (6)). This operation is limited to the absolutive argument of the nominalized predicate. Highest-clause obliques and adjuncts cannot undergo genitive conversion either (see (24-a)). More deeply embedded absolutive subjects or objects (see (24-b)) are also barred from appearing in genitive. Finally, ergative subjects are likewise blocked from participating in conversion to genitive (see (24-c)).<sup>6</sup>

- (24) a. \*e talaatu **haau**<sub>1</sub> e au e tala t<sub>1</sub>  
 DET tell 2SG.GEN ERG 1SG ABS legend  
 (‘my/me telling you a legend’; lit.: your being told...)  
 b. \*e lali **haana**<sub>1</sub> a au [ke kitia t<sub>1</sub>].  
 DET try 3.SG.GEN ABS I SBJ see  
 (‘his trying to be seen by me’)  
 c. \*e talaatu **haaku**<sub>1</sub> e tala kia koe  
 DET tell 1SG.GEN ABS legend to 2SG  
 (‘my telling you a legend’)

<sup>6</sup>We discuss this latter fact in great detail in §4, where we show that it follows from principles of case realization in Niuean.

For the purposes of the present discussion, we focus our attention on the behavior of nominalized transitive clauses, where the absolutive object may appear in the genitive form. In such structures, the object moves over the subject to appear adjacent to the verbal complex.

- (25) a. E kotofa e lautolu a au.  
 PERF choose ERG 3PL ABS 1SG  
 ‘They chose me.’ (VSO)  
 (Seiter 1980: 120)
- b. e kotofa haaku<sub>1</sub> e lautolu t<sub>1</sub>  
 DET choose 1SG.GEN ERG 3PL  
 ‘my/me being chosen by them’ (VOS)  
 (Seiter 1980: 120)
- c. \*e kotofa e lautolu haaku  
 DET choose ERG 3PL 1SG.GEN  
 (‘my/me being chosen by them’) (VSO)  
 (Seiter 1980: 120)

Taking conversion to genitive, and specifically the associated movement operation, to be triggered by an A-probe associated with the nominalizing functional head *n* (see Section 4.1 for discussion; Picallo (2002), Rezac (2008), Alexiadou et al. (2010), Sichel (2010)), these data once again attest to the suspension of locality for clausemate subjects and objects, in this case to A-probing: as a DP and thus a potential goal for an A-probe, we expect the subject to intervene for any A-movement of the object into a higher domain, and yet transitive objects may freely appear in the genitive case.<sup>7</sup>

- (26) [ *n*<sub>[φ:·]</sub> ... Sbj<sub>[φ:5]</sub> Obj<sub>[φ:6]...</sub> ]      b. [ *n*<sub>[φ:·]</sub> ... DP<sub>[φ:5]</sub> ... [ ... DP<sub>[φ:6]</sub> ... ] ... ]
- 

Superficially, these data might seem to break the pattern that holds with raising and multiple-question/relative clause formation, as transitive subjects are apparently not accessible to the relevant operation. However, the crucial, and indeed the surprising, observation concerning Niuean is not *per se* that the relevant operations can equally target subjects and objects. Rather, the unexpected fact is that subjects, which should under any reasonable notion of locality intervene for a given probe, somehow fail to block probing for the object. This failure to intervene cannot be explained by the apparent inaccessibility of the ergative subject to the conversion operation. An extensive literature on so-called *defective intervention* effects has established, in language after language, that a even if a DP is not itself accessible as a goal to an A-probe, it still serves as an intervener to *Agree* with lower goals (see Chomsky 2001; Holmberg and Hróarsdóttir 2004; Preminger 2014, among others).

The conclusions to be drawn from these data are threefold. First, Niuean subjects do not count as interveners for operations on clausemate objects, even when the subjects are licit goals for the relevant operation; second, this fact holds irrespective of the type of operation involved, be it A- or A'; third, the apparent suspension of locality is limited to clausemate subjects and objects.

<sup>7</sup>One could counter this observation by proposing that it is not the object that moves left but the subject extraposes to the right. However that does not explain the facts either; if ergative extraposition is generally available, why can't the ergative ever extrapose past absolutive objects?

Returning to Niuean raising, we take the core mechanism responsible for raising to be an A-Agree relation between the  $v$  associated with the licensing predicate and the highest subject or object of the clausal argument to the predicate.<sup>8</sup> Assuming that Niuean raising depends on A-Agree, the descriptive pattern of raising exactly matches this profile: an operation can apparently target an object, despite the fact that the subject should count as a licit operand and thus intervene, and this operation is limited to clausemate subjects and objects.<sup>9</sup>

- (27) Subject raising:

$$[{}_{vP} \underbrace{v_{[\varphi:]} \dots [Sbj_{[\varphi:5]} Obj_{[\varphi:6]} \dots]}_{\uparrow}]$$

(28) Object raising:

$$[{}_{vP} \underbrace{v_{[\varphi:]} \dots [Sbj_{[\varphi:5]} Obj_{[\varphi:6]} \dots]}_{\uparrow}]$$

We can now unite the Niuean raising, relativization, superiority, and conversion to genitive data under a single descriptive generalization. The broader puzzle then becomes how to derive this typologically unusual state of affairs.

(29) **Suspension of locality:**

Locality is suspended for clausemate subjects and objects in Niuean, so that Agree may target the object even if the subject is also a licit goal.

## 4 Deriving the equal accessibility of arguments

As we have now seen, the challenge initially posed by Niuean raising is more general, reflecting an equal accessibility of Niuean subjects and objects to higher probes which can be either of the A- or A-bar type. With this established, we turn our attention to addressing this general pattern. When considering any set of typologically and theoretically unusual data such as this, there is a strong temptation to respond with theory building and modification. While the value of such an exercise is undeniable, we believe that the present set of data does not warrant any departure from well-established principles. The analytical tools necessary to describe the Niuean data are directly furnished by the current theory, and moreover are firmly rooted in readily observable cross-linguistic empirical phenomena. To this end, our proposal is that the equal accessibility of Niuean arguments is a derivational effect brought on by the particulars of argument licensing and the EPP in the language. Once these particulars are taken into account, no additional theoretical tools are needed.

Specifically, we argue that Niuean arguments are licensed and receive their morphological case wholly within the  $vP$ , and that combined with the cross-linguistic tendency of specific objects to move out of VP, this conspires to license a structure whereby the subject and object come to be in specifiers of the same functional projection. This renders them equidistant to higher probes à la Chomsky’s (2000, 2001) equidistance principle, effectively suspending locality. We would like to underscore that the resulting equidistance, observed across several constructions of Niuean, is a side effect of Niuean case licensing and Agree operations.

Because our analysis is fundamentally concerned with argument licensing and morphological case in Niuean we begin by laying out our assumptions in this domain. First, we adopt *a configurational view of case licensing* (Marantz 1991), and specifically the recent implementations of this system (Levin and Preminger 2015) which assumes the following basic principles (we introduce further theoretical tools below as needed). DPs enter the derivation from the lexicon with an unvalued case feature, here encoded in a special case projection, KP. These case features may then valued

<sup>8</sup>This is a well-established and generally uncontroversial assumption, so it does not force us to make any changes in the theory to accommodate the Niuean facts.

<sup>9</sup>Further details are beyond the present scope. In the Appendix, we provide formal arguments in favor of a copy-raising analysis.

in one of two ways. The first is direct valuation by a specified lexical head to its complement DP. Case valued in this way is lexical case. The second method of case assignment involves an algorithm that values case depending on the presence or absence of DPs in a given domain, the so-called licensing domain. Both clausal and nominal projections are associated with their own unique licensing domains, which roughly correspond to the CP and DP phase (Baker & Vinukurova 2010). Now, in an ergative/absolutive system, as in Niuean, the case assignment algorithm assigns ergative case to a DP just in case that DP asymmetrically *m-commands* another DP in the licensing domain. This is what qualifies the ergative as a dependent case; it is only assigned in the presence of another case-competitor in the licensing domain. Absolutive and genitive cases, on the other hand, reflect an absence of case valuation on a given DP in the clausal and nominal domains, respectively. On this view, then, the absence of valuation is not associated with ungrammaticality (see Preminger 2014 for extensive arguments in favor of this point). We also assume these valuation procedures take place in syntax proper (following Baker and Vinokurova 2010, Preminger 2014 but contra Marantz 1991, Bobaljik 2008).

Next, following Bobaljik (2008), we take it that  $\varphi$ -Agree is case-discriminating, preferring to target DPs that surface with some types of morphological case over others. Descriptively, this case discrimination can be seen to adhere to the following hierarchy, where unmarked case is most accessible.

(30) **Moravcsik Hierarchy:**

unmarked case > dependent case > lexical/oblique case

Languages can then differ according to which level of the hierarchy they allow  $\varphi$ -probes to target, with the most restrictive languages licensing  $\varphi$ -Agree only with unmarked case, and more tolerant languages with dependent case as well and that morphological case is correlated with the availability of  $\varphi$ -Agree. With this background in place, we turn to detailing our analysis.

#### 4.1 Clausal case computation in Niuean

To begin, we argue that all case computation in Niuean is localized to the *vP*, so that arguments need not move beyond this domain for case purposes. As mentioned above, Baker and Vinokurova (2010) propose that licensing domains directly correspond to phases in the sense of Chomsky (2000, 2001), with *vP*/VP constituting one licensing domain and CP another distinct domain. Moreover, for these authors the canonical nominative/accusative case morphology is explicitly associated with the CP licensing domain, at least in Sakha, so that the appearance of accusative case morphology is dependent on movement of the object out of *vP*/VP.

In Niuean, it appears instead that *vP* constitutes the main clausal licensing domain in which ergative and absolutive case are computed. The main evidence in favor of this view derives from the pattern of case morphology in event nominalizations, where, as we saw above (e.g., (25-a)), ergative and absolutive case can freely appear (cf. (31-a) with its nominalized counterpart (31-b)).

- (31) a. **Kua** kotofa **e** lautolu **a** au.  
 PERF choose **ERG** 3PL **ABS** 1SG  
 ‘They chose me.’  
 (Seiter 1980: 120)
- b. **e** kotofa **e** lautolu **a** au  
**DET** choose **ERG** 3PL **ABS** 1SG  
 ‘them choosing me’  
 (Seiter 1980: 120)

Given the absence of tense, aspect, mood morphology (TAM) in cases like (31), the nominalizing head  $n$  must be merged below the introduction of aspect, the first of the TAM projections. For simplicity, we take it that  $n$  is merged directly above  $v$ , although nothing hinges on this assumption. Recall now that the configurational approach to case posits unique licensing domains associated with clausal and nominal projections. We argue that the optional preservation of the absolutive case in nominalizations entails that the clausal licensing domain must terminate no higher than the projection directly below the nominalizing head  $n$ . Under present assumptions, this is  $vP$ . To see why this must be so, consider the alternative, so that the clausal licensing domain is some projection  $XP$  that contains  $vP$ . In nominalizations, as we have proposed,  $n$  merges directly with  $vP$ ; it follows that there is no higher clausal functional structure present, for example  $XP$ , only the nominal projections associated with  $n$ . Accordingly, the minimal licensing domain containing  $vP$  is the nominal licensing domain associated with  $n$  (or one of its projections). We should thus expect that unvalued case surface obligatorily as genitive, not absolutive, contrary to fact. It follows that the clausal licensing domain can be no bigger than  $vP$ ; it can also be no smaller than  $vP$ , as it must contain the basic merge site of the subject so as to allow case competition between subjects and objects. We conclude, then, that  $vP$  delineates the left edge of the clausal licensing domain in Niuean.

- (32) a. Clausal licensing domain:  $vP$   
 $\underbrace{\dots [nP \ n \ \dots [vP \ KP_{ERG} [vP \ v \ [ \dots KP_{abs} \ \dots ]]]}_{\text{Nominal licensing domain} \quad \text{Clausal licensing domain}}$   
 b. Licensing domain:  $> vP$   
 $\underbrace{\dots [nP \ n \ \dots [vP \ DP_{ERG} [vP \ v \ [ \dots DP_{gen} \ \dots ]]]}_{\text{Nominal licensing domain}}$

Further evidence for this proposal comes from case licensing in nominalizations. On the surface, there seem to be two case-licensing mechanisms involved in nominalizations, one that preserves the cases that appear in the clausal domain, and the other that involves conversion to genitive.<sup>10</sup>

- (33) a. e kotofa haaku/\*a au e lautolu  
 DET choose 1SG.GEN/1SG.ABS ERG 3PL  
 ‘my/me being chosen by them’  
 b. e kotofa e lautolu a au/\*haaku  
 DET choose ERG 3PL ABS 1SG/1SG.GEN  
 ‘them choosing me’

The conversion to genitive in nominalizations is contingent on the relevant argument appearing adjacent to the verbal complex. We contend that the two types of nominalizations in (33) thus represent two different structures; the structure of (33-a) is shown in (34-a), and the structure of (33-b), in (34-b):

- (34) a.  $[nP \ n \ [ \dots [vP \ SBJ_{[case:ERG]} \ \dots \ OBJ_{[case:DEF=ABS]} \ \dots ]]]$   
 b.  $[nP \ OBJ_{[case:DEF=GEN]} \ [nP \ n \ [ \dots [vP \ SBJ_{[case:ERG]} \ \dots \ OBJ_{[case:DEF=ABS]} \ \dots ]]]]$   
A-Agree

In transitive clauses, the underlying absolutive object must thus raise over the subject in order

<sup>10</sup>Because some of the case markers in Niuean are homophonous with prepositions, we will be using pronominal arguments to illustrate nominalization patterns; the marking of these arguments does not involve homophony.

to appear in genitive, (34-a). This follows straightforwardly if  $vP$  and  $nP$  constitute two distinct licensing domains: in order to appear in genitive case, the relevant argument must move out of the clausal licensing domain ( $vP$ ) and into the nominal licensing domain ( $nP$ , or some larger nominal projection). Genitive (unvalued) case therefore arises because the displaced KP has no lower case competitors; the subject DP, if present, is in a different licensing domain and does not count for the case assignment algorithm. In conformity with the logic of the previous section, we maintain that an A-probe on  $n$  is responsible for the observed movement into the nominal domain.

This conception of the licensing domain, combined with our stance on the nature of ergative case, also provides a solution to the puzzle set aside in the previous section, namely that ergative-genitive conversion is impossible in nominalizations:

- (35) \*e kotofa ha lautolu a au  
 DET choose GEN 3PL ABS 1SG  
 ('their choosing me')

In our system, the obligatory presence of ergative on the subject in examples like (34) indicates that case computation in the clausal domain applies before the object moves into the nominal domain, presumably upon completion of the  $vP$  phase (Baker & Vinukurova make a similar proposal).

- (36)  $[_{nP} DP_{[case:DEF=GEN]} [_{nP} n [ \dots [_{vP} DP_{[case:ERG]} \dots \overset{\text{case}}{\underset{\text{A-Agree}}{\uparrow}} DP_{[case:DEF=ABS]} \dots ]]]]$

In other words, ergative case will always have been assigned to the transitive subject by the time the A-probe on  $n$  searches for an argument to attract. We contend that the ergative case is the spell-out of a valued case feature, in contrast to absolutive and genitive, which mark an absence of valuation (cf. Levin and Preminger 2015 for a similar approach). Accordingly, even if the ergative subject is attracted into the nominal domain, it will never surface as a genitive, absent a mechanism for devaluing case features.<sup>11,12</sup>

- (37) \*e kotofa ha lautolu<sub>1</sub> t<sub>1</sub> a au  
 DET choose GEN 3PL ABS 1SG  
 ('their choosing me')

Indeed, the only way for the subject of a two-place predicate to appear in the genitive is to invoke the antipassive, which involves demoting the internal argument to an oblique adjunct (Polinsky in-press).<sup>13</sup> Accordingly, the  $vP$  licensing domain contains only the thematic subject, ensuring its case feature remains unvalued and further confirming the present analysis.

- (38) a. e kotofa he lautolu **e** au  
 DET choose ERG 3PL **ABS** 1SG  
 'their choosing me'  
 b. e kotofa ha lautolu **i** au  
 DET choose GEN 3PL **OBL** 1SG  
 'their choosing me'

<sup>11</sup>This also furnishes a novel argument that the case assignment algorithm operates in syntax proper, namely before the A-probe on  $n$  attracts the underlying object into the nominal licensing domain.

<sup>12</sup>We set aside an important question raised by this analysis, which we return to in the Appendix: how can ergative subjects undergo raising to become absolutive subjects of the higher predicate if ergative cannot be devalued?

<sup>13</sup>Seiter (1980: 120-123, 302-303) refers to this Niuean structure as Fake Accusative.

This analysis also permits us to dispense with the apparent optionality of conversion to genitive by assigning two different structures to nominalizations and therefore reducing this optionality to a side effect of suspended locality restrictions for subjects and objects. While the ergative subject cannot appear in genitive, there is nothing to stop the A-probe on  $n$  from agreeing with it and attracting it into the nominal domain. The head  $n$  always has an A-probe that must target a suitable goal. Both the subject and object are suitable goals, and per the general suspension of locality in Niuean, either can be attracted into the  $nP$  domain. If the subject, whose case feature has already been valued, is attracted, it will be spelled out with the erstwhile case feature, namely as ergative. Because the subject is the leftmost constituent in  $vP$ , its attraction into the  $nP$  domain is string-vacuous. Alternatively, if the object, whose case feature is unvalued, is attracted, it will appear with the unmarked case associated with the  $nP$  domain, genitive. On this view, then, the conversion to genitive facts are no different than the Niuean raising or superiority facts: locality is suspended, and both arguments are accessible to the relevant operation. We can now revise the structural representations in (34) above as follows:

- (39) a.  $[_{nP} \text{SBJ}_{[CASE:ERG]} [_{nP} \text{ } n \text{ } [ \dots [_{vP} \text{SBJ}_{[CASE:ERG]} \dots \text{OBJ}_{[CASE:ABS]} \dots ]]]]$   
A-Agree
- b.  $[_{nP} \text{OBJ}_{[CASE:DEF=GEN]} [_{nP} \text{ } n \text{ } [ \dots [_{vP} \text{SBJ}_{[CASE:ERG]} \dots \text{OBJ}_{[CASE:DEF=ABS]} \dots ]]]]$   
A-Agree

To summarize, all morphological case computation for the Niuean clause takes place internal to the  $vP$  and prior to the merger of higher agreement probes. Moreover, there are theory-internal reasons to suspect that while conversion to genitive is only possible for absolutive arguments, the underlying operation, *A-Agree* with  $n$  and concomitant movement into the  $nP$  domain, is available to both subjects and objects, in keeping with the general suspension of locality in this domain. We turn our attention now to a more detailed consideration of case and licensing within the  $vP$ .

## 4.2 Pseudo noun-incorporation and object shift

With  $vP$  broadly identified as the licensing domain for morphological case in Niuean, the second major component of our analysis concerns the  $vP$ -internal behavior of arguments. Specifically, we detail how absolutive marked objects must appear VP-externally, and how the EPP in Niuean appears to target verbal, not nominal projections. The primary empirical focus of this section is the alternation between so-called pseudo noun-incorporation (PNI) examples (Massam 2001) and ordinary transitive clauses. We propose a novel treatment of this alternation couched in the configurational theory of case which in turn feeds our final analysis of equidistance.

Let us consider first the basic details of the alternation under discussion. In PNI examples, a caseless object appears adjacent to its selecting verb and before canonical post-verbal material (adverbs, etc.), resulting in V-O-Adv-S order.

- (40) a. Takafaga ika tuumau ni a ia.  
 hunt fish always EMPH ABS 3.SG  
 ‘He’s always fishing.’
- b. Neafi, ne to huli talo a au he mala.  
 yesterday PST plant shoot taro ABS 1SG at plantation  
 ‘Yesterday, I planted taro shoots at the plantation.’  
 (Seiter 1980: 69)

This contrasts with overtly absolutive-marked objects, which appear after the subject, resulting in V-Adv-S-O word order. Absolutive objects may not surface adjacent to the verb under any circumstances.

- (41) \*Takafaga a ika tuumau ni a ia.  
 hunt ABS fish always EMPH ABS 3.SG  
 ('He's always hunting fish.')

In addition to their position linearly adjacent to the verb, a variety of diagnostics point to PNI objects remaining *in situ* within the VP at LF (Massam 2001; Clemens 2014). To briefly enumerate a few of these arguments, PNI is limited to NPs that i) are verbal complements (see (42)) (with one complication to be discussed in the next section), ii) are indefinite/non-specific (Massam 2001: 172), an issue which we will take up below, and iii) take narrow scope with respect to VP-level operators such as modals and negation (see (43)) (Massam 2001: 169). We refer the reader to Massam (2001) and Clemens (2014) for a thorough discussion of this topic.

- (42) Subjects, obliques, other non-VP complements cannot incorporate
- a. Fā totou (\*faiaoga) (he tau faiaoga) e tau tohi.  
 HAB read (teacher) (ERG PL teacher) ABS PL book  
 'The teacher often reads books.'
- b. Ne tutala (\*tagata) a au (ke he tau tagata)  
 PST talk (people) ABS 1.SG (to PL people)  
 'I was talking to people'
- (43) PNI object takes narrow scope with respect to VP-level operators
- a. nākai muhu mena mahuiga e falu a atu-motu Polinesia  
 NOT have=plenty thing sought=after ABS some ABS group-island Polynesian  
 '... some Polynesian islands don't have a surplus of material goods.'  
 (Massam 2001: 174)
- b. ka e nākai fai mena ke tipu aki.  
 because NOT have thing SBJ open with  
 '... because (he) didn't have anything to open (it) with.'  
 (Massam 2001: 176)

There are two main approaches to deriving these facts. According to Massam's (2001) analysis and its successors, the EPP in Niuean triggers VP, rather than DP, fronting to Spec(TP). PNI examples then involve the fronting of a VP whose object has remained *in situ*, and the result is VP-Adv-S order (see (44-a)). Absolutive objects, in contrast, evacuate the VP before it is attracted to TP, shifting to a position below the subject. The result is VP-Adv-S-O order, as observed on the surface (see (44-b)).

- (44) a. PNI: [TP [VP V NP] ... [vP DP [vP v [ ... [VP V NP] ]]]]
- b. Non-PNI: [TP [VP V DP] ... [vP DP [vP v [ ... DP ... [VP V DP] ]]]]

More recently, Clemens (2014) has argued that the EPP in Niuean triggers V, not VP, fronting, with V-O-Adv-S order in PNI examples derived via a post-syntactic movement operation that displaces the case-less NP into the local domain of the verb (see (45)). This movement is driven by the need to parse the VP into a single prosodic unit at PF (see also Clemens and Coon 2016).



$$(45) \quad \text{PNI: } [\text{TP } \text{T+V } \text{NP} \dots [\text{vP } \text{DP } [\text{vP } v [\text{VP } t_V \text{NP} ]]]]$$

PF movement

The choice between these analyses is not directly relevant to our proposal, given that both approaches include what are the fundamental details of the PNI construction for our purposes: that PNI objects but not absolutive objects remain *in situ*, and that the EPP in Niuean does not trigger DP movement. We therefore remain agnostic as to the precise details of V/VP fronting in Niuean.

A final important detail concerning PNI is that the morphologically bare object is also syntactically reduced, so that it cannot occur with any kind of extended nominal category (plural, adjectival, finite relative clauses, etc.; Massam 2001). In present terms, we follow Levin (2015) in assuming that bare NP objects thus lack a KP projection altogether, explaining the absence of morphological case.

- (46) a. Ne inu kofe (\*ne taute) e au a Sione.  
 PST drink coffee NFT make ERG I ABS Sione  
 ‘Sione drank coffee that I made.’  
 b. Kua holoholo (\*tau) kapiniu a Mele.  
 PERF wash PL dishes ABS Mele  
 ‘Mele washes the dishes.’  
 (Massam 2001: 168)

To summarize, Niuean verbal complements may appear in one of two positions: within the fronted verbal complex, right-adjacent to the verb (VOS order), or in a VP external position, to the left of the subject (VSO order). In the former case, the complement must be a reduced nominal projection, here assumed to be a KP-less NP, without any overt exponence of morphological case. In the latter case, the complement is a full DP marked with morphological case.

For present purposes, three major questions arise in this domain. First, why must KP-less objects remain *in situ*? Second, why must objects bearing KP shift out of VP? Third, what position does object-shift target in Niuean? The first question has been recently and explicitly addressed by Levin (2015), and we tentatively adopt his conclusions. He proposes to recast the traditional case filter so that it tolerates unvalued case features but forbids KP-less nominals, *ceteris paribus*. These KP-less forms must then make recourse to special licensing mechanisms if the derivation is to converge, where one such mechanism is head-head adjacency between N and V. Accordingly, the KP-less NP in Niuean must remain adjacent to V (or potentially the trace of V, on Clemens account), precluding object-shift.

Concerning the second question, extant treatments are limited to Massam’s (2001) proposal and variants thereof, which associate object movement with the need to check absolutive case with a vP-level functional head. This clashes with a variety of our underlying assumptions concerning case and licensing, so a new treatment is in order. To this end, we capitalize on the association between the presence of KP and the obligatory shift of the object by proposing that KP-less DPs are simply not accessible to  $\varphi$ -Agree in Niuean. To begin, recall that the external argument in PNI examples surfaces with absolutive case.

- (47) Takafaga ika tuumau ni a/\*e ia.  
 hunt fish always EMPH ABS/\*ERG 3.SG  
 ‘He’s always hunting fish.’

Given present assumptions, this means that the PNI object does not count as a case competitor for the external argument. There are two conclusions consistent with this behavior. First, following Baker & Vinukurova (2010), who assume that case licensing domains are co-extensive with phases,

these data could be taken to indicate that the *in situ* object and the subject are in different phases, say VP and *v*P, and hence do not compete with each other for case. In the absence of any independent theoretical or empirical evidence in favor of treating VP as a phase, we dismiss this conclusion. Second, these data could be taken to indicate that KP-less DPs do not count as case competitors, which is the position we adopt. Intuitively, it appears that the presence of functional structure supporting case features, KP, is a prerequisite for entering into case computation. Now, recall that we are assuming, following Bobaljik (2008), that morphological case is itself a prerequisite for accessibility for  $\varphi$ -Agree. Our proposal directly equates the impossibility of  $\varphi$ -Agree with a KP-less DP with the inability for such DPs to enter into the morphological case computation system in Niuean.<sup>14</sup>

Now, to see how this proposal explains the obligatory shift of KP-bearing objects, let us take it that there is a head in the *v*P domain, call it X, that bears unvalued  $\varphi$ -features, by analogy to the head that licenses overt object agreement in many languages. Following Preminger (2014), if there is a suitable DP goal in the search space of X, *Agree* must take place, so that *Agree* is obligatory with KP-bearing objects. The obligatory nature of object shift in Niuean may then be encoded as a concomitant of this obligatory agreement by positing that X in Niuean has an EPP feature which mandates movement of the goal in cases of agreement (see Longenbaugh 2016a for an argument that this same property holds of *v*P-internal  $\varphi$ -Agree in a wide variety of languages). In total, then, KP-less objects are not accessible goals for  $\varphi$ -Agree, on account of their inability to enter the morphological case computation system. They therefore remain *in situ* within the VP. KP-bearing objects, on the other hand, are accessible goals and must therefore be targeted by  $\varphi$ -Agree and the concomitant object-shift. On this view, the essential role of KP in licensing object shift reduces to the cross-linguistically common fact that KP is a necessary prerequisite for  $\varphi$ -Agree.

Before moving on, it is worth commenting briefly on the interpretive effects of the PNI alternation. Cross-linguistically, it appears that object shift is closely associated with definiteness/specificity (see Diesing 1992, Thráinsson 2001, Vikner on Germanic; Enç 1991 et seq. on Turkish; Bhatt and Anagnostopoulou 1996 on Hindi Urdu), and in Niuean, there is likewise a tendency to treat non-PNI objects as specific.

(48) DP object with non-specific reading: #

- a. #Ne kumi he tama e kapitiga he nakai fai kapitiga a ia.  
 PST seek ERG child this ABS friend PRP NEG exist friend ABS 3SG  
 ‘This child was looking for a friend because he did not have any.’

(49) DP object with specific reading: ✓

- a. Ne kumi he tama e (taha) kapitiga kae ai iloa au ko e kapitiga  
 PST seek ERG child this ABS one friend but NEG know 1SG PRED friend  
 f haana ne kumi.  
 which 3SG.POSS DEP.TNS seek  
 ‘This child is looking for a friend of his but I don’t know which one.’

That said, this is at best a unidirectional tendency; while specific objects cannot remain *in situ*, not all shifted objects must be specific. Thus Seiter (1980: Ch 1.2.2) catalogues a variety of indefinite,

<sup>14</sup>We are not associating the absence of overt morphological case with inaccessibility to  $\varphi$ -probes. As encoded in the nomenclature, unmarked case tends to surface with zero or reduced morphology cross-linguistically. While it is true that Niuean PNI objects lack case morphology, there is also extensive evidence that such objects also lack articulated functional structure above the NP level (see (46)). True instances of unmarked case are not subject to this restriction, so that we take the reduced structure of PNI objects, not the associated absence of morphological case, to be their defining characteristic.

possibly non-specific uses of case=marked object DPs, which we provide a sample of below. In these examples, *taha* and *ha* are analyzed as overt indefiniteness markers.

- (50) a. Mua atu foki e fulufuluola ka moua e koe e taha tohi...  
 EXCEL DIR also ABS beauty KA get ERG 2.SG **ABS** INDF letter  
 ‘It’s also great when you get a letter...’  
 b. Kua tā e au e ha vahega lologo ni he kofe fakatagi nei.  
 PERF play ERG 1.SG ABS INDEF type song EMPH on guitar this  
 ‘I play any sort of song on this guitar.’  
 c. Ne nākai kitia foki e mautolu e ha ika he aho nei.  
 PST not see also ERG 1.PL.EX ABS INDEF fish on day this  
 ‘We didn’t even see a fish today.’ (Seiter 1980)

It thus appears that there is a preference for case-marked DPs to be specific, although a non-specific reading is sometimes possible; conversely, as Seiter (1980) points out, non-specific (unergative) subjects in Niuean preferentially lack an overt case marker, although the marker need not be absent.

- (51) a. Fano ki fē (e) taha tagata ke moua taha lagomatai?  
 go to where (ABS) INDEF person SBJ get INDEF help  
 ‘Where does a person go to get help?’  
 b. Ai fia loto (e) ha tagata i Niu Silani ki a ia.  
 not want want ABS INDEF person in New Zealand to PERS 3.SG  
 ‘Nobody in New Zealand wanted him.’

Unlike in Germanic, then, specificity does not appear to be the categorical factor in precipitating object shift, although there is clearly some correlation between case and specificity. Because this is not directly relevant to our present point, we leave a precise formalization of this link to further research.

Finally, concerning the third question, the landing site of object-shift is Spec(XP) in present terms, so this question reduces to where X lies in the *v*P-structure. This will be the main topic of the next section.

We thus arrive at the following picture of Niuean *v*P-internal structure. In PNI examples, the KP-less NP is licensed via head-head adjacency with V; the unvalued  $\varphi$ -features on X and case-features on the external argument receive default valuation. In non-PNI examples, the internal KP-bearing argument is obligatorily agreed with by the  $\varphi$ -probe on X, with concomitant movement to Spec(XP); the unvalued case feature on the external argument is valued via case competition with the shifted internal argument. In both cases, the subject remains *in situ* in the *v*P, with the EPP on T being satisfied instead by V/VP fronting. This is consistent with our proposal in the last section, namely that all morphological case computation for the clause takes place in the *v*P domain, so that movement out of *v*P is in no way correlated with or demanded for reasons of morphological case assignment.

- (52) PNI: [<sub>v</sub>P DP<sub>[case:default]</sub> [<sub>v</sub>P *v* ... [XP X<sub>[ $\varphi$ :default]</sub> [VP  $\overbrace{\text{V [NP N ... ]} }^{\text{licensing}} \dots ] ] ] ] ]$
- (53) Non-PNI: [<sub>v</sub>P DP<sub>[case:ERG]</sub> [<sub>v</sub>P *v* ... [XP  $\overbrace{\text{DP}_{[case:default=ABS; \varphi:7]} }^{\text{case}}$  [XP X<sub>[ $\varphi:7$ ]</sub> [VP V DP<sub>[case:.; \varphi:7]</sub> ] ] ] ] ]  
A-Agree

### 4.3 Deriving equidistance

The necessary background is now in place for the final proposal around which our analysis coalesces. Specifically, we posit that the head  $X$  from the previous section is  $v$ , so that one and the same head is responsible for triggering object shift and introducing the external argument. Object shift thus brings the subject and object into specifiers of the same head, a consequence of which, following Chomsky (2000:122, 130, 2001:27), is that the subject and object are equidistant from higher probes and thus equally accessible to them (see also Reinhart 1979; Comorovski 1986; Rudin 1988).

(54) **Equidistance:**

Terms of the minimal domain (= edge) of  $H$  are “equidistant” to probe  $P$   
(Chomsky 2000:122, 130, 2001:27)

This analysis relies heavily on the results established in the previous two sections, both implicitly and explicitly, so that we now review in detail how the different proposals converge to yield the final result. Consider first the proposal from Section 4.1 that all morphological case computation is localized to  $vP$  in Niuean. A consequence is that argument externalization from  $vP$  is neither motivated by nor associated with case. While we eschew the causal link between case and  $\varphi$ -Agree, there is a precedent even within the configurational approach to case to associate morphological case computation with argument externalization. Thus, as mentioned briefly above, Baker & Vinukurova (2010) associate the spell-out of nominative case with the CP case computation domain, so that arguments must be VP-external to surface with this forms. This is crucially not the case in Niuean, a fact which, when combined with the fact that the EPP in Niuean is sensitive to verbal, not nominal, projections, removes what are traditionally the main motivations for the cross-linguistically common phenomenon of subject externalization from the  $vP$ .<sup>15</sup> This, in turn, supports the essential conclusion, from the perspective of our analysis, that the subject remains *in situ* in  $vP$ .

Concerning the results from Section 4.2, the crucially important proposal for the core analysis is the posited association between absolutive case and VP-external position. It is this mandatory object shift that displaces the object into the local domain of the subject, inducing the equidistance and associated equal accessibility. While we have proposed a novel treatment of this effect couched in the obligatory operations framework of Preminger (2014), the core descriptive generalization is not unique to our work and stands independent of our particular approach.

The end result is that external arguments in Niuean are subject to no external pressure to evacuate the  $vP$ , and that absolutive objects obligatorily shift out of VP. At the risk of repetition, the final component of the analysis is then simply that it is  $v$  which is responsible for triggering object shift. This places the subject and object in the specifier of the same head, so that their equal accessibility follows without further issue under Chomsky’s proposal.

$$\begin{array}{ccc}
 (55) & [ \underset{\substack{\vdots \\ \alpha\text{-Agree}}}{H_{[\alpha:1]}} \dots [_{vP} \underset{\substack{\uparrow \\ \alpha\text{-Agree}}}{Sbj_{[\alpha:5]}} [_{vP} Obj_{[\alpha:6] \dots}]] & (56) & [ \underset{\substack{\vdots \\ \alpha\text{-Agree}}}{H_{[\alpha:1]}} \dots [_{vP} Sbj_{[\alpha:5]} [_{vP} \underset{\substack{\uparrow \\ \alpha\text{-Agree}}}{Obj_{[\alpha:6] \dots}}]] \\
 & \alpha\text{-Agree} & & \alpha\text{-Agree}
 \end{array}$$

Now, before moving on to discuss consequences, there is an issue raised by this analysis that warrants discussion. To illustrate, observe that Niuean word order is rigidly V-Adv-S-O in non-PNI contexts; absolutive objects are thus not only barred from appearing in the verbal complex (as we saw in (41)), but also from appearing to the left of the subject in general.

<sup>15</sup>While an EPP sensitive to V/VP might seem atypical from the perspective of English and related languages, similar behavior has been observed in a variety of genetically distinct language families (Alexiadou and Anagnostopoulou 1998), including Austronesian (see Clemens and Polinsky 2016 for an overview).

- (57) Ne lagomatai (\*a Sione) fakaeneene (\*a Sione) he ekekafo (a Sione).  
 PST help ABS Sione carefully ABS Sione ERG doctor ABS Sione  
 ‘The doctor carefully helped Sione’

Given that the subject and object occupy specifiers of the same head, it is not obvious that this should be the only order possible. In fact, it’s not immediately clear how linearization proceeds at all in such cases, if we take the relevant ordering mechanism to be asymmetric c-command. To address the basic linearization problem, we take the position that, despite the equidistance condition, multiple specifiers of a given head are hierarchically ordered, with asymmetric c-command the relevant metric. This necessitates a strict version of c-command that is sensitive only to the structure of the tree, not the label of its nodes.

- (58) **Strict c-command:**

A node X c-commands a node Y iff the mother of X dominates Y

Accordingly, in a configuration like (59), which approximates the proposed structure of the Niuean transitive *vP*,  $DP_1$  asymmetrically c-commands  $DP_2$ , ensuring that  $DP_1$  will be linearized to the left of  $DP_2$  under standard approaches to linearization.<sup>16</sup>

- (59) [<sub>vP</sub>  $DP_1$  [<sub>vP</sub>  $DP_2$  [<sub>vP</sub> *v* VP ]]]

This allows us to phrase the ordering question as follows: why must the subject always occupy the outer specifier of *vP*? Our solution to this puzzle relies on the Strict Cycle Condition of Chomsky (1973), and specifically its implementation in the work of Müller (2010). Müller’s (2010) version of the condition is summarized below.

- (60) **Strict Cycle Condition (SCC)**

Within the current domain  $\Gamma$ , a binary syntactic operation may not exclusively apply to positions  $\alpha, \beta$  if  $\alpha$  and  $\beta$  are both included within another domain  $\Delta$  that is dominated by  $\Gamma$ .

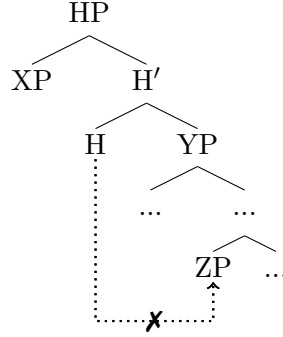
(Müller 2010: 50)

At present, what is relevant is that (60) blocks *Agree* on any probe that is not the daughter of the root of the tree. To demonstrate, suppose that head H ( $\alpha$  in the terms of (60)) projects a specifier, XP, and takes a complement YP containing phrase ZP ( $\beta$  above). In such a configuration, a probe on H cannot target ZP for agreement, given that H and ZP are both contained within a domain, H’ ( $\Delta$  above), that is dominated by the current domain HP ( $\Gamma$  above).<sup>17</sup>

<sup>16</sup>There are probably ways of achieving the same association between being in the outer specifier and being linearized to the left that do not require this strict version of c-command. That said, we discuss evidence in the next section suggesting that the subject does asymmetrically c-command the object, so that we explicitly take this position here.

<sup>17</sup>See Muller (2010: 50) for brief discussion of “tucking in” in this system.

(61)



Returning to Niuean, the SSC thus ensures that object shift triggered by *v* must take place *before* the subject is merged to Spec(*v*P), thus ensuring the correct basic word order.

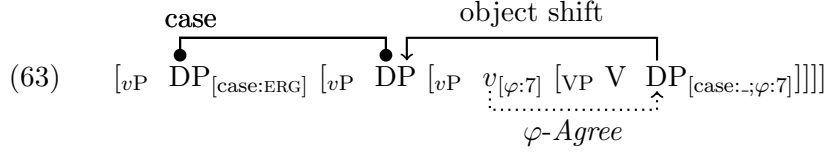
Before moving on, it's worth pointing out that this proposal violates the spirit of Rackowski and Richards (2005) claim that “tucking in” is impossible below a thematic specifier. However, we believe that the general theoretical shift away from positing  $\theta$ -features on heads makes it unclear why such a restriction should ever hold. In particular, supposing that the theoretical task of  $\theta$ -role saturation is subsumed under general interpretive constraints that demand a syntactic tree be well formed with respect to the type system, there is no need for a formal syntactic device such as  $\theta$ -role to ensure that argument positions are saturated by LF. Structures with unsaturated argument positions are ill formed and the derivation crashes at the LF interface. Likewise, movement to the specifier of a head which is a semantically unsaturated predicate – type  $\langle e, \tau \rangle$  – does not saturate the relevant argument position, provided movement induces abstraction at LF (Heim and Kratzer 1998). In the purely syntactic sense, then, the “thematic” specifier of *v*P is no more distinguished than the specifier of TP or CP, where related “tucking in” phenomena do seem to be licensed cross-linguistically.

Moreover, there is empirical evidence suggesting that Niuean is not alone in allowing object-shift to a position below the surface position of the subject. Perhaps the clearest case involves quantifier float in Romance. Let us assume, following Sportiche (1988), that Romance floated quantifiers may be stranded in any of the base or intermediate positions of an A-chain. Assuming that Romance object-clitic movement involves an (optional) step of A-movement to the *v*P-phase, as evidenced by, e.g., the optional participle agreement possible in such contexts (Kayne 1989), the relative position of quantifiers floated from the subject and from a fronted clitic allows us to diagnose the intermediate landing site of object-clitic A-movement relative to the base position of the subject. As it so happens, quantifiers floated from an object clitic must always follow quantifiers floated from the subject, suggesting that in Romance, as in Niuean, object-shift to Spec(*v*P) – here in the form of clitic movement – obligatorily lands below the base position of the subject.

- (62) a. Les filles<sub>1</sub> les<sub>2</sub> ont toutes<sub>1</sub> tous<sub>2</sub> lu. *French*  
           the girl.F.PL 3.PL.CL have.PL all.F.PL all.M.PL read  
           ‘All girls have read them all.’  
       b. \*Les filles<sub>1</sub> les<sub>2</sub> ont tous<sub>2</sub> toutes<sub>1</sub> lu.  
           (Cinque 1999: 116)

To summarize, the obligatory subject-before-object word order in Niuean (in the absence of PNI) reflects the derivational constraint imposed by the Strict Cycle condition, which forces all probing from head *H* to take place before *H*’s specifier is merged. Under our proposal, the derivation of a transitive *v*P proceeds as follows: i) the clause is constructed up to *v*P; ii) following merger of *v*, the probe on *v* searches for a KP-bearing DP in its c-command domain; iii) the highest KP-bearing

internal argument (if present) is attracted to  $\text{Spec}(vP)$ ; iv) the subject is merged, saturating the open semantic argument position at  $v$  (receiving its  $\theta$ -role); v) the case computation algorithm runs, assigning ergative to the subject under asymmetric c-command with the object.



Niuean subjects and objects thus end up in the specifier of the same head  $v$ , where they are equally accessible to higher probes.

## 5 Consequences, predictions, and further evidence

The posited structural configuration of the Niuean  $vP$  has a variety of consequences on phenomena as varied as binding, processing, and intervention effects. We argue that insofar as it is possible to test, the behavior that is manifest in these constructions patterns as expected under our analysis.

### 5.1 Binding

Consider first our predictions concerning binding. object shift brings object and subject into the same specifier, but the subject asymmetrically c-commands both copies of moved object, a necessity for purposes of linearization and a cross-linguistically standard pattern as well. It is therefore expected that it should be possible to observe binding-theoretic asymmetries between subject and object. Empirical evidence supports this prediction, but it is subtler than usual, because Niuean (as most other Polynesian languages) does not have dedicated anaphors.

The strongest binding-theoretic data point has to do with weak-crossover.<sup>18</sup> Descriptively, weak-crossover refers to intervention effect associated with certain XPs on *wh*-movement. To intervene in the relevant sense, XP must i) be asymmetrically c-commanded by the head of the *wh*-chain and asymmetrically c-command the tail of the chain, and ii) contain a pronoun that is coindexed with the *wh*-phrase in question. A prevalent approach to weak-crossover (Lasnik and Stowell 1991; Sauerland 1998; Ruys 2000, 2004) explicitly relates the effect to binding theory under the proposal that A'-moved phrases are incapable of binding pronouns, so that only the tail of an A'-chain may bind. The "intervention" effect then reflects the fact that a pronoun crossed over by A'-movement cannot be bound by the moved phrase. Niuean exhibits classic weak-crossover effects, so that, for example, an A'-extracted oblique cannot bind a pronoun contained within an absolutive subject:

- (64) \*Ko hai e tama<sub>1</sub> ne hea e matua haana<sub>1</sub> ki ai?  
 PRED who DET boy NFT call ABS parent 3.SG.GEN to RP  
 'Which boy<sub>1</sub> did his<sub>1</sub> mother call?'

Now, this effect also obtains when an absolutive *wh*-phrase is A'-extracted past an ergative subject (see (65-a)). Ergative *wh*-phrases, however, may be freely extracted in the presence of absolutive DPs containing coindexed pronouns, as shown by (65-b). If we embrace the binding-theoretic view of weak-crossover, these examples indicate that the subject can bind into the object, but not vice versa, as predicted under the present account.

<sup>18</sup>Thanks to Amy Rose Deal and Jason Merchant for suggesting this.

- (65) a. \*Ko hai e tama<sub>1</sub> ne filifili he faiaoga haana<sub>1</sub>?  
 PRED who DET boy NFT select ERG teacher 3.SG.POSS  
 'Which boy did his teacher select?'  
 b. Ko hai e mataua<sub>1</sub> ne filifili e tama haana<sub>1</sub>?  
 PRED who DET boy NFT love ABS son 3.SG.POSS  
 'Which mother loved her son?'

We started with a more involved diagnostic because some other, more traditional tests, based on the principles of the binding theory are harder to apply in Niuean. As we just mentioned, Niuean lacks dedicated anaphors; reflexive and reciprocal readings are a subset of general coindexation readings reinforced by the presence of the particle *ni* which can follow the verb ((66-a)) or the DP/PP that needs to be coindexed with another clausal constituent ((66-b)). Crucially, non-subject pronouns can co-occur with *ni* in coreference with a c-commanding constituent, but subjects are uniformly barred from appearing with *ni*, as shown by (66-b).

- (66) a. Kua kitia ni he tama fifine a ia.  
 PERF see EMPH ERG child girl ABS 3.SG EMPH  
 'The girl saw herself.'  
 b. Kua kitia he tama fifine (\*ni) a ia (ni).  
 PERF see ERG child girl EMPH ABS 3.SG EMPH  
 'The girl saw herself.'  
 c. Ko e telle kia e koe (\*ni) a koe (ni).  
 PRES kick Q ERG 2.SG EMPH ABS EMPH  
 'Are you kicking yourself?'

Based on these data, the distribution of *ni* seems to confirm a subject-object asymmetry of the sort we are looking for. That said, the distribution of *ni* in general does not appear to be constrained by local c-command of a co-referential phrase (Massam 2001). A possessor can thus license *ni* marking on an oblique (see (67-a)), and "binding" can be cross-clausal (see (67-b)).

- (67) a. Mahele tuai e lima ha Sione<sub>1</sub> i a ia<sub>1</sub> ni.  
 cut ASP ABS hand of Sione to PERS 3.SG EMPH  
 'Sione cut his own hand.'  
 (Seiter 1980: 78)  
 b. Pete he kelea a ia ka e nonofo oti e fanau haana ni.  
 though OBL be.bad ABS 3SG but DEP.TNS live.PL all ABS child 3SG.POSS EMPH  
 'Although she was a bad mother all her (herself's) children survived'  
 (Sperlich 1997: 335)

In fact, as argued by Massam (2001b), *ni* shows a number of behaviors that call its status as an anaphoric marker into question: it is always optional, and can appear more than once per clause

- (68) Kua fetutuliaki (ni) he tau fanau a lautolu (ni).  
 PERF chase NI ERG PL children ABS 3.PL EMPH  
 'The children chased one another.'  
 (Sperlich 1997: 335)

While the subject-object asymmetry in *ni*-marking is suggestive, it is ultimately uninformative for our purposes, and we have to conclude that Principle A is untestable.

Turning to Principle C, we are again faced with tantalizing hints of the predicted subject-object asymmetry. An object R-expression may thus not co-refer with a subject pronoun



- (69) \*Kua kitia e ia<sub>1</sub> a Sione<sub>1</sub>.  
 Perf saw Erg 3.sg Abs Sione  
 ‘He saw Sione.’

Unfortunately, it is again unclear that c-command is the relevant notion in predicting Principle C violations. Thus possessive pronouns in subject position may not co-refer with object R-expressions (see (70-a)), and R-expressions in high (TP-adjoined) adjuncts may not co-refer with subject or object pronouns (see (70-b)).<sup>19</sup>

- (70) a. \*To lagomatai he matua haana<sub>1</sub> a Sione<sub>1</sub>.  
 Fut help Erg parents 3.sg.pss Abs Sione  
 ‘His parents helped Sione.’  
 b. Kua fakamuli hifo a ia<sub>\*1/2</sub> i kaina he gagao he Sione<sub>1</sub>.  
 Perf remain Dir Abs 3.sg at home because sickness of Sione  
 ‘He stayed home because of Sione’s sickness’

Once again, while the data do suggest a subject-object asymmetry, it is difficult to confirm that asymmetric c-command is the source of the observed behavior.

## 5.2 Equal accessibility and processing asymmetries

The second major consequence we investigate involves processing (a)symmetries in subject versus object relative clauses. It has been documented in a wide variety of genetically unrelated languages that there is a strong, general processing advantage associated with A’-dependencies that involve a subject gap over those that involve a non-subject gap (see King and Kutas 1995; Traxler et al. 2002 for English; Schwartz 2007 and further references therein for German, Frazier 1987, 1989 for Dutch, Miyamoto and Nakamura 2003; Ishizuka et al. 2003 for Japanese; Kwon et al. 2006, 2010, 2013 for Korean; Levy et al. 2013 and further references therein for Russian; Demiral et al. 2008; Özge et al. 2009 for Turkish; Kwon et al. 2010 for a full list). This processing advantage, measured variously by a number of methodologies, appears to hold even once other factors, such as morphological cueing, are controlled for, and constitutes one of the strongest arguments for a correlation between syntactic position and ease of processing. Furthermore, this advantage also holds in some ergative languages, in particular, in Mayan where the word order is also verb-initial as in Niuean (Clemens et al. 2015).

Now, given the posited equal accessibility of Niuean subjects and objects, we might expect the processing advantage conferred to subjects to be absent. Results from a recent processing study of Niuean (Longenbaugh & Polinsky 2016) indicate this prediction is borne out. The relevant portion of the study compares the ease of processing, based on accuracy and response time, of relative clauses involving subject and object gaps. In transitive clauses, the results are as below, with no significant difference in the processing time (Wilcoxon test,  $p < 0.01$ ) or accuracy (Fisher’s Exact test,  $p = 0.08$ ) of subject and object gaps.

- (71) Results summary

Condition	Response Time	Accuracy
SUBJECT gap	4377ms	71.8%
OBJECT gap	4419ms	79.5%

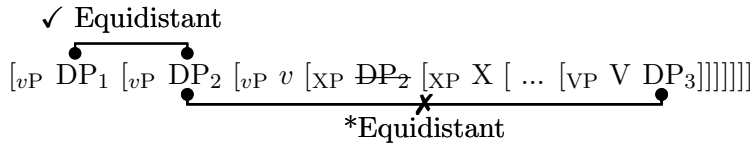
<sup>19</sup>As extensively documented by Bruening (2014), the fraught nature of the Niuean data is reflected cross-linguistically as well, where there are a number of open puzzles concerning the distribution of pronouns and coreferential R-expressions.

While it would take us too far afield to further elaborate on the relationship between syntactic/structural accessibility and processing cost, these results offer further confirmation that Niuean subjects and objects achieve equal accessibility via relative structural parity.

### 5.3 Disrupting equidistance

Since the parity between Niuean subjects and objects is a side effect of their appearing at the edge of the *vP*, we expect that such subject/object parity would disappear in those configurations where the equal accessibility of subjects and objects to higher probes is somehow disrupted by an intervening constituent. At first glance, two constructions in Niuean may serve as testbed for such intervention effects: causatives and applicatives. If a causative or an applicative is derived from a transitive verb, we can anticipate that the another object would intervene between the subject and the original object, thus disrupting their parity. To represent this schematically, the presence of an argument introducing head between transitive *v* and *V* ensures that, at the very least, one of the three arguments within the *vP* will not be in the local domain as the others, provided *v* can only attract one argument.

(72) Causatives and applicatives interrupt symmetry (X=CAUSE/APPL):



Starting with causatives proper, although potentially possible, this prediction is simply untestable in Niuean. The causative prefix *faka-* can be used to derive transitive verbs from intransitive, but deriving a ditransitive requires that the applicative marker *aki* be used:

(73) Kua faka-totō \*(aki) e ia e kato e tama haaku.  
 PERF CAUSE-hold AKI ERG 3.SG ABS basket ABS child 1.SG.GEN  
 ‘She made my child hold the basket.’  
 (Gould et al. 2009)

As a consequence, the discussion in this section will be limited to the forms with the applicative *aki*. This exponent alternates between a preposition and a particle in the verb complex (see also Massam 2015):<sup>20</sup>

(74) a. Kua hele tuai e Sione e falaoa aki e titipi haana.  
 PERF cut ASP ERG Sione ABS bread AKI ART knife 3G.POSS  
 b. Kua hele aki tuai e Sione e titipi haana e falaoa.  
 PERF cut AKI ASP ERG Sione ABS knife 3SG.POSS ABS bread  
 ‘Sione has cut the bread with his knife.’  
 (Seiter 1980: 244)

In her analysis of verbs suffixed with *aki* Massam (2015) suggests that these verbs simultaneously have properties of high and low applicatives; on the one hand, they relate the low-adjoined applied object (instrument or comitative) and the internal argument, which is typical of low applicatives, on the other hand, they locate these objects (or at least the applied object) outside the VP domain, which is characteristic of high applicatives. Thus, depending on our assumptions, we might expect the lower base (non-applied) argument not to show equal accessibility effects with the subject.

<sup>20</sup>Massam (2017) proposes that *aki* which appears in the verb complex is actually a secondary verb.

The empirical data on these applicative constructions are quite subtle. First, raising seems to target applied object and underlying object:

- (75) a. Kua kamata e toki ke hio aki e Sefa e akau motua.  
 PERF begin ABS axe SBJ chop AKI ERG Sefa ABS tree old  
 ‘Sefa has begun to chop down the old tree with the axe.’  
 (Seiter 1980: 250)
- b. Maeke e fakatino ke ta aki oti e Lemani e tau malala.  
 possible ABS picture SBJ draw AKI all ERG Lemani ABS PL coal  
 ‘The picture might be drawn by Lemani with all the charcoals.’  
 (Seiter 1980: 171)

Next, there are no superiority effects between the subject and applied or underlying object:

- (76) a. Ko hai<sub>1</sub> ne fakamania aki e hai e pipi t<sub>1</sub>?  
 PRED who NFT hit AKI ERG who ABS belt  
 ‘Whom did who hit with the belt?’
- b. Ko e heigoa<sub>1</sub> ne fakamania aki e hai t<sub>1</sub> a Sione?  
 PRED DET what NFT hit AKI ERG who ABS Sione  
 ‘What did who hit Sione with?’

Taken at face value, these data might seem problematic, but it appears that the underlying object and the applied object can vary in terms of which is merged as the verbal complement. The result is structural ambiguity of the applicative constructions similar to the alternation observed in the English verbs *spray/load* (Levin 1993: 117-119; Arad 2005) which appear in two different syntactic structures so that each of their internal arguments may be realized as a direct object:

- (77) a. The workers sprayed paint on the wall.  
 b. The workers sprayed the wall with paint.

The difference between English and Niuean is that Niuean has three possible structures: a regular transitive verb with an internal argument and a PP headed by *aki*, and two ditransitive verbs (Verb-*aki*), each with a different internal argument. Support for this proposal comes from several empirical observations. First, while Seiter emphasized the order where the applied object precedes the base (direct) object, word order variation is in fact possible. The relative order of the applied and base object depends on a number of factors, such as their givenness in discourse or the need to focus one of the referents (Massam 2017); the object whose referent is given typically follows the subject, and the object that is in focus appears after that object. For instance, (78-a) is an appropriate answer to the question ‘What did Sione use to cut the bread?’, whereas (78-b) is more appropriate as an answer to the question ‘What did Sione cut with his knife?’:

- (78) a. Kua hele aki tuai e Sione e falaoa e titipi haana.  
 PERF cut AKI ASP ERG Sione ABS bread ABS knife 3SG.POSS  
 ‘Sione cut the bread with his knife.’
- b. Kua hele aki tuai e Sione e titipi haana e falaoa.  
 PERF cut AKI ASP ERG Sione ABS knife 3SG.POSS bread ABS  
 ‘With his knife, Sione cut the bread.’

The same pattern is observed when *aki* follows the causative verb. In (79-a), the emphasis is on the baby, and that sentence could have a continuation expanding on the baby’s state; in (79-b), the emphasis is on the state of the ice-cream.

- (79) a. Kua faka-epo aki he matua e asekulimi e muke.  
 PERF CAUS-lick AKI ERG parent ABS ice-cream ABS baby  
 'The mother let the baby taste the ice-cream.' (Sperlich 1997: 56)
- b. Kua faka-epo aki he matua e muke e asekulimi.  
 PERF CAUS-lick AKI ERG parent ABS baby ABS ice-cream  
 'The mother let the baby taste the ice-cream.'

As further indication that the verbs with *aki* appear in two different syntactic structures, we find that either the underlying or the applied object can undergo PNI:<sup>21</sup>

- (80) a. To kai titipi mo e huki (aki) e tautolu e vala povi.  
 FUT eat knife with DET fork AKI ERG 1.PL.INC ABS piece beef  
 'We'll eat the beef with knife and fork.'  
 (Seiter 1980: 73)
- b. ke holoi pelu (aki) e ia e makaholoi  
 SBJ sharpen bushknife AKI ERG 3.SG ABS grinding stone  
 '... for him to sharpen the bushknife with the grinding stone...'

Based on these empirical facts, we suggest that either the base or the applied object can be merged as the complement to V:

(81) **Proposal:**

One argument is merged as the complement to V and can either undergo PNI or shift out of the VP (either to *aki* or a nearby functional head); one argument is merged higher, in the specifier of *aki*, and can be attracted to *v* as in simple transitive clauses.

This is consistent with the approach developed by Massam (2015); however she attempts to derive all the properties of verbs with *aki* from a single structure, whereas we posit two. The interpretive properties associated with the argument that is merged as complement to V is also consistent with our proposal. As with the regular object shift, which we discussed in section 4.2, there is a correlation between case, definiteness, specificity or givenness and object shift to *aki* (and between the absence of these properties and PNI). The object shift to *aki* thus has similar interpretive effects, whichever formalization they may eventually receive.

If this proposal is on the right track, the data on the interaction between the applied object and the base object in the presence of *aki* do not have a bearing on the intervention effects in Niuean.

## 6 Conclusion

We began this paper with a puzzle concerning non-local A-movement in Niuean raising. The premise from which the puzzle derives is the common minimalist assumption that movement/*Agree* follows the basic logic of *attract closest*. Given that subjects are merged higher in the structure than objects, this principle entails that if both subjects and objects are suitable targets for a given operation, the subject must be targetted first. Stated in these terms, then, the challenge posed by Niuean raising can be viewed as the optional non-intervention of the subject for A-movement of the object. As we expanded our empirical domain of investigation, it became clear that this non-intervention is not limited to raising contexts, showing up in other constructions plausibly involving both A- and A'-movement. This is not a breakdown of intervention in general in Niuean, as familiar locality effects do surface when we consider pairs of phrases not involving clausemate subjects and objects,

<sup>21</sup>At least for some speakers, the *aki* exponent seems optional when PNI involves either of the arguments.

nor does it involve intermediate movement of the object over the subject, as the apparent parity of subjects and objects does not affect those relationships that are determined on the basis of c-command alone, for example, WCO and binding. Descriptively speaking, then, we concluded that Niuean subjects and objects are equally accessible to higher probes, be they of the A'- or A-type.

At first glance, this conclusion seems to call into question our underlying assumption, which is one of the most fundamental postulates of modern minimalism. However, as we have argued, the apparent challenge is just that, and the unusual equal accessibility of subject and objects to higher probes is an epiphenomenon brought on by the convergence of several otherwise cross-linguistically well-attested properties: (i) object shift of case-bearing DPs to Spec(*v*P); (ii) an ergative case system, with case assignment achieved wholly within *v*P; (iii) an EPP on T attracting V/VP not DP. The typological abnormality of Niuean equal accessibility reduces, then, to an unusual combination of unexceptional properties. Thus equal accessibility to higher probes is limited to clause-mate subjects and objects, so that *attract closest* holds.

On a more general level, our results suggest that unfamiliar patterns may be quite standard, although reducing the exotic to the familiar calls for a closer, theoretically-informed investigation. Finally, given this general state of affairs, we might expect to see familiar patterns in other languages instantiating the core Niuean properties. Indeed, Niuean is not the only language where we observe object movement over a subject, which may or may not interact with morphology, depending on the language. The overall result is the appearance of subject/object symmetry at least with respect to some properties. Other instances include A-scrambling in Japanese (Miyagawa 2001, but see Fukui 2006 for an alternative analysis); Indonesian “second passive” (Chung 1978; Guilfoyle, Hung, and Travis 1992) where the agent is present, usually as a pronoun immediately before the bare verb stem, while the object fronts to what appears to be the normal subject position; the Passamaquoddy inverse (and possibly related phenomenon in other Algonquian languages), where the object moves above the subject for purposes of agreement and binding (Bruening 2009); Spanish (Ordez 1998, 2007). More work is clearly needed to elucidate the commonality among these constructions, but the appearance of related subject/object symmetries cross-linguistically supports our general conclusion that such behavior can arise from the convergence of otherwise unexceptional properties.

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## 7 Appendix: Niuean raising is copy-raising

As mentioned earlier, there is a tension between treating Niuean raising as a movement operation, on the one hand, and treating ergative case as the spell-out of a case feature valued in competition with a lower DP. In this Appendix, we propose a detailed analysis of Niuean raising that reconciles the full array of facts with the results obtained thus far.

To illustrate the particular challenge our analysis faces in the context of Niuean raising, recall that we are taking morphologically ergative and absolutive/genitive case to be the spellout of a valued and an unvalued case feature, respectively. As we discussed in the context of conversion to genitive, this association of ergative with case valuation predicts that once a DP has been assigned ergative case (had its case feature valued), it should be impossible for that DP to surface as an absolutive/genitive, independent of the particular operations it undergoes. This captures the fact that ergative subjects never undergo conversion to genitive, despite being accessible to the  $\varphi$ -probe on *n* and thus capable of moving into the nominal domain (of course, we have yet to establish that  $\varphi$ -Agree in Niuean can target marked case). This same inability to transition from marked to unmarked case, however, presents a problem in the context of raising. Recall that raised DPs associated with an transitive subject gap surface in absolutive case, not the ergative they would be expected to receive in the embedded clause subject position. This is despite the abundance of evidence, reviewed in Section 2 and fully documented by Seiter (1980), that the raised DP is an argument of the lower predicate. This is especially problematic given that we have argued that subject case assignment occurs *in situ* and is uninfluenced by the presence or character of the functional structure above *vP*. The challenge we face can be summarized thus: raised underlying subjects have a clear syntactic salience in the lower clause, yet their case marking is inconsistent with them appearing in the embedded subject position.

The solution we propose is that Niuean raising is really an instance of copy raising (Rogers 1971; Ura 1994; Potsdam & Runner 2001; Asudeh 2004; 2012; Rezac 2004, a.o.). Following Potsdam &

Runner (2001) and Rezac (2004), in particular, we take copy-raising to be a construction where a A-chain is formed between a higher DP and a lower coindexed pronoun. Crucially, the relevant chain must show canonical A-properties, chief among which is that only the lowest link in the chain occupies a semantic argument position (the links in the chain share a  $\theta$ -role). As an example, a variety of perception verbs in English license this construction, as diagnosed by i) the presence of a lower pronoun coindexed with the relevant DP, and ii) the ability of idiom chunks and expletives to participate, indicating that the higher position in the chain is not a semantic argument.

- (82) a. The cat<sub>1</sub> appears like it<sub>1</sub>'s out of the bag.  
 b. There<sub>1</sub> seems like there<sub>1</sub>'s going to be a riot.

The relevant dependency is crucially limited by familiar locality constraints, so that objects and more deeply embedded subjects may not participate. Thus, while examples like (82) involving coindexed object or embedded subject pronouns are possible, there is an absence of familiar A-chain behavior, suggesting a different construction is at stake.

- (83) a. \*There seems like John said there would be a riot.  
 b. #The bag appears like the cat is out of it.

Now, despite the A-chain like behavior, movement is not involved in copy-raising, so that the higher chain link is never present in the lower clause. In English, this primarily manifests in an absence of reconstruction effects (cf. raising and copy-raising in (84-a,b), (85-a,b)).

- (84) a. Three students seem to like every book (3 >>  $\forall$ ,  $\forall$  >> 3)  
 b. Three students seem like they like every book (3 >>  $\forall$ , \* $\forall$  >> 3)  
 (85) a. Students in his<sub>1,2</sub> class seemed to every professor<sub>1</sub> to be intelligent.  
 b. Students in his\*<sub>1,2</sub> class seemed to every professor<sub>1</sub> like they were intelligent.

Returning to Niuean, the raising construction shows the key characteristics of copy-raising outlined above. First, a Niuean raising chain may involve an optional downstairs pronoun in the gap site. This pronoun must crucially be from the personal series, not the separate resumptive series. The optionality of the relevant pronouns follows from the general ability to drop third person animate pronouns in Niuean when they are sufficiently salient in the discourse (Massam 2001: 236).

- (86) a. Kua kamata e ekekafo ke lagomatai (e ia) a Sione.  
 PERF begin ABS doctor SBJ help ERG 3SG ABS Sione  
 'The doctor began to help Sione.'  
 b. Ne mukamuka a Mele ke kitia e au (a ia).  
 PST easy ABS Mele SBJ see ERG 1.SG ABS 3.SG  
 'Mele is easy for me to see.'

Similar pronouns are not licensed in other filler-gap situations, for instance, in argument relative clauses.

- (87) a. ke he tama ka hai (\*e ia) e tau pateta  
 to child FUT eat ERG 3.SG ABS PL potato  
 'to the child who's going to eat the potatoes'  
 b. e tama ne hau (\*a ia) i Makefu  
 ABS child NFT come ABS 3.SG from Makefu  
 'the child who comes from Makefu'  
 (Seiter 1980: 94, 12(a,b))



Next, as we have already seen, the raised DP in the construction under consideration is not a semantic argument of the higher predicate, which is an indication of an A-chain. We repeat the crucial data involving idiom chunks below.

- (88) a. Loto a au [ke **oeli e tau matahui**], ti koli.  
 like ABS 1.SG SBJ oil ABS PL knee then dance  
 ‘I like to get a little drunk, then dance.’ (lit. I like to oil the knees)  
 b. Kua kamata tei **e tau matahui**<sub>1</sub> [ke **oeli e** lautolu *t*<sub>1</sub>]  
 PERF begin EMPH ABS PL knee SBJ oil ERG 3.PL  
 ‘They’ve begun to get a little drunk.’ (= (9))  
 (Seiter 1980: 191)
- (89) a. Kua **kai e ia ni e kōkō haana**  
 PERF eat ERG 3.SG EMPH ABS vomit 3.SG.POSS  
 ‘S/he’s walking back on something s/he said.’ (lit.: S/he’s eating his/her vomit)  
 b. Kua kamata e **kōkō haana**<sub>1</sub> [ke **kai e ia** *t*<sub>1</sub>].  
 PERF begin ABS vomit 3.SG.POSS SBJ eat ERG 3.SG  
 ‘S/he’s beginning to walk back on what s/he said.’ (= (10))

Finally, the raised DP appears to have never been present in the embedded clause.

The ability to “raise” ergative DPs to absolutive subject position constitutes one of the main arguments for this point, although there is independent evidence from the absence of reconstruction effects.

- (90) a. Kua maeke ke kai he pusi oti e ua ika.  
 PERF possible SBJ eat ERG cat all ABS two fish  
 ‘It’s possible that all the cats will eat two fish.’  
 $\forall >> 2, 2 >> \forall$   
 b. Kua maeke e ua ika ke kai he pusi oti.  
 PERF possible ABS two fish SBJ eat ERG cat all  
 ‘Three fish could be eaten by all cats.’  
 $*\forall >> 2, 2 >> \forall$

With the feasibility of a copy-raising treatment of Niuean raising thus established, the final task is to provide an analysis that is consistent with our previous findings. To this end, we adopt the  $\varphi$ -Agree-based approach to copy-raising developed by Rezac (2004). The account explicitly links  $\varphi$ -Agree with the establishment of a derived predicate, thus allowing the higher DP to be interpreted as the semantic argument of the lower predicate despite never appearing in the clause. To accomplish this, Rezac posits an “index feature” that is unvalued on  $\varphi$ -probes but valued and interpretable on DPs (like number). Index features are interpreted at LF as inducing  $\lambda$ -abstraction via a modified version of the predicate abstraction rule (Heim and Kratzer, 1998), as below.

(91) **Predicate Abstraction:**

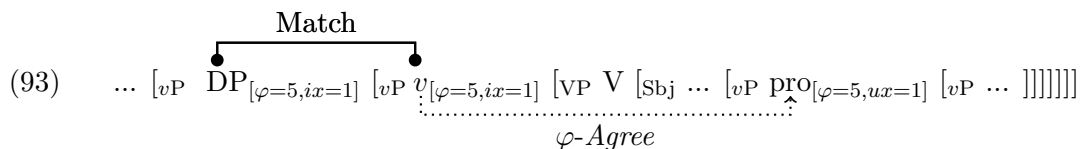
Let  $\alpha$  be a tree dominating two sub-trees,  $\beta$  and  $\gamma$ , such that  $\beta$  has an index feature [ $ix = 1$ ]. Then for any variable assignment  $a$ ,  $\llbracket \alpha \rrbracket^a = \lambda x \in D_e. \llbracket \gamma \rrbracket^{a[x/1]}(\beta)$   
 (Rezac 2004: 296)

Rezac then assumes the following condition on MERGE, which ensures that the interpretable index feature on a DP matches the Agree-valued index feature identifying the variable to be bound in its sister subtree.

(92) **Match Condition:**

If  $\text{Merge}(\alpha, \beta)$ , then for any  $\varphi$ -feature  $F$ , the value of  $F$  on the label of  $\alpha$  and the label of  $\beta$  do not differ

CR is then derived in this system as follows: a pronoun bearing an interpretable index feature is merged as the subject of the embedded clause. A  $\varphi$ -probe (with an unvalued index feature) associated with the functional structure of the raising verb agrees with the subject pronoun, and the index feature is copied to the associated head. A DP whose  $\varphi$ -features *and index feature* match those on the relevant probe then merges into the structure, ensuring the establishment of an appropriate chain. The result is then interpreted via the modified predicate abstraction rule above, triggered by the index feature on the highest DP. Given that we have independently posited the existence of  $\varphi$ -features on Niuean *v*, we take it that this is the locus of copy-raising in the language, so that the ultimate derivation and LF are as below.



The association of copy-raising with  $\varphi$ -Agree ensures that this analysis is compatible with our previous findings. Finally, because we are assuming  $\varphi$ -Agree targets an underlying ergative pronoun, we posit that  $\varphi$ -Agree in Niuean may target DPs bearing dependent case, as in, for example, Nepali (Bobaljik 2008). This assumption is also necessary if we are to maintain our treatment of conversion to genitive, which holds that the syntactic operations responsible for the conversion – movement to  $\text{Spec}(nP)$  – are available for both ergatives and absolutes, with the overt manifestation of this movement, namely genitive case, blocked for ergatives by other mechanisms.

(94) **Niuean Agreement Accessibility:**

unmarked case > dependent case > lexical/oblique case  
 Accessible to  $\varphi$ -Agree

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