Ergativity and nominalization: The case of Samoan*

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November 26, 2015

Abstract

1 Introduction

Contemporary theories of ergativity are diverse. There is little doubt that the theoretical diversity reflects diversity in the instantiation of ergativity crosslinguistically. This paper evaluates some theories of ergativity with reference to the Polynesian language Samoan. Samoan[1] demonstrates ergative-absolutive alignment in its case marking system. Throughout the paper, I examine how the distribution of ergative and absolutive forms of nominals is sensitive to the surrounding syntactic context. In particular, I argue that the appearance of ergative case on the transitive agent depends on the transitive patient receiving structural case. I further argue that appearance of absolutive case on the sole argument of an intransitive depends on the finiteness of the clause, however finiteness plays no role in the assignment of absolutive case to the transitive patient. These generalizations are derived by investigations into the syntax of both finite clauses and two varieties of deverbal nominalization in Samoan, which I will refer to as bare nominalization and *-ga* nominalization (named after the nominalizing suffix). The paper highlights the value of investigating the syntax of nominalizations in any study of morphological case and ergativity.

The basic facts are demonstrated in (1-2) below. (1) demonstrates the case marking pattern of nominal arguments of transitive verbs. The more agentive arguments of transitive verbs are marked with the case marking particle *e*, while the less agentive argument is left unmarked. (2) shows that the sole argument of an intransitive argument is also unmarked. Throughout the paper, I refer to the more agentive argument of a

*With thanks to Emily Sataua, Vince Schwenke-Enoka, Reuben Mauga, and Iakopo Leleimalefaga for their time and generosity as consultants. Thanks also to Vera Gribanova, Beth Levin, Paul Kiparsky, Maria Polinsky and Ivan Sag, the audiences at Austronesian Formal Linguistics Association 19 (2012), the 12th International Conference on Austronesian Linguistics (2012), the Stanford University Syntax-Morphology Circle (2013), the UC Berkeley Syntax-Semantics Circle (2013), and the UC Santa Cruz Syntax-Semantics Circle (2013) for helpful and insightful comments.

[1]Spoken by approximately 370,000 speakers in Samoa, American Samoa, and by significant immigrant populations in New Zealand, Australia, the U.S., and elsewhere.

transitive verb as A, the less agentive argument as P, and the sole argument of an intransitive as S, following the Australianist tradition exemplified by Dixon 1994.[2]

(1) a. *e sogi [e le teine]$_A$ [le tama]$_P$ i le to‘i*
PRES cut ERG SPEC girl SPEC boy OBL SPEC axe
‘The girl cut the boy with the axe.’ (Grinder 1969:27)

b. *‘ia mau-a ai [e lau fanau]$_A$ [se ‘āmata-ga lelei i le ōla-ga]$_P$*
SUBJ get-INA LOC ERG your family NSPEC begin-NOMZ good OBL SPEC live-NOMZ
‘So your family can get a good start in life.’ (BFP)

c. *‘olo‘o fafao [e le tama]$_A$ [le pusafa‘i]$_P$*
PROG pack ERG SPEC boy SPEC banana.case
‘The boy is packing the banana case.’ (Milner 1966: 59)

(2) a. *‘ua nofo pea [le teine lenei ‘o Sina]$_S$*
PERF stay continue SPEC girl that TOP Sina
‘That girl Sina was still waiting.’ (Mo)

b. *e pu‘upu‘u [le fafine]$_S$*
PRES short SPEC woman
‘The woman is short.’ (Chung 1972: 9)

c. *‘ua to‘a [le vai]$_S$*
PERF settle SPEC water
‘The water settled down.’ (Milner 1966: 269)

The appearance of ergative case relies on the transitive patient being realized as a full DP. For example, if P is realized as a bare NP, interpreted as a nonspecific indefinite, A may not take ergative case (3). In order for A to receive ergative case, P must also receive structural case. In (4), the emotion verb selects for a dative case marked stimulus which blocks the appearance of ergative on the experiencer. Thus, the licensing of ergative case must be sensitive to the syntactic status of P as a case-marked direct object.

(3) *e fufulu ipu *(e) le tamāloa*
PRES wash dish ERG SPEC man
‘The man washes dishes/a dish.’

(4) *e alofa *(e) le tamāloa ‘i le fafine*
PRES love ERG SPEC man DAT SPEC woman
‘The man loves the woman.’

[2]Where the source of the example is not given, the data comes from my own consultation with native speakers. This includes ungrammatical variations on naturally occurring examples. Judgements reported in this paper represent the variety of Samoan spoken in Samoa, and by immigrant communities in Australia and California from Samoa, except where noted. The extent of dialect variation between American Samoa, Samoa, and Samoan diaspora is somewhat unclear, and is deserving of careful empirical investigation.

The next set of facts which needs to be accounted for is the differential distribution of so-called absolutive forms of nominals under nominalization. Within a bare nominalization, P may appear in its absolutive form, i.e. (at least orthographically) without any case marker (5). However, S may not appear in its absolutive form in a bare nominalization (6). Based on these and similar facts, I argue that the appearance of absolutive case on S, but not on P, is licensed by the finiteness of the clause. Thus, absolutive case on P is insensitive to the finiteness of the clause, allowing it to appear within a nominalization. The data suggest that the absolutive case should not be treated as a unified phenomenon applying in the same manner to both P and S, contra several other theories of ergativity.[3]

(5) *sā alu ane loa Paʻupaʻu i [le fau [le pā]$_P$]*
PAST go DIR then Paʻupaʻu OBL SPEC build SPEC fishing.hook
'Then Paʻupaʻu went to fix the pearl-shell lure.' (Mosel and Hovdhaugen 1992: 13.106)

(6) *ʻua iʻi vale [le fe-tagi-si [*(a) namu]$_S$]*
PERF squeak stupid SPEC PL-cry-PL GENII mosquito
'The cry of the mosquitos was a stupid squeak.' (Mosel and Hovdhaugen 1992: 13.80)

This paper proposes a particular theory of ergativity designed to derive these generalizations. The details of case marking within nominalization allow us to differentiate precisely between several theories of ergativity. The theory owes much to the theories of ergativity proposed by Legate 2008 and Deal 2010. Like Legate, I argue that the appearance of absolutive case is purely a morphological phenomenon, derived by syncretism between two cases: the case assigned to subjects and the case assigned to objects. The central argument for this analysis comes from data like (5) and (6), which motivate a non-unified analysis of absolutive case on S and P. I argue that this approach makes better predictions than some other theories of absolutive case in Polynesian (such as Massam's (2001) theory of ergative-absolutive alignment in the closely related Niuean). However, I argue Legate's proposal that ergative case is licensed on nominals occupying the specifier of transitive *v* is too weak, making unclear predictions in clauses with pseudo noun incorporation or dative case assigning verbs (3-4). I argue for a theory of ergative case which is similar to Deal's (2010). Like Deal, I argue that ergative is licensed by the assignment of structural case to an object, though I weaken her requirement that the structural case in question is accusative, and show that it may also be genitive. I also argue that Deal's proposal that ergative is also licensed by T overgenerates, not predicting the appearance of ergative case in *ga-* nominalizations, as in (7).

(7) *le fe-togi-ga o mea e Tapale*
SPEC PL-throw-NOMZ GENI thing ERG Tapale
'The throwing of things by Tapele.' (Mosel and Hovdhaugen 1992: 13.260)

[3]Samoan demonstrates two genitive case markers, *o* and *a*, which I will gloss as GENI and GENII respectively. Descriptively, they correspond closely to the categories of inalienable genitive (*o*) and alienable genitive (*a*), though there are considerable intricacies involved in providing a precise account of the semantic and morphosyntactic distinctions between the two. I will leave a fuller exploration of the two Samoan genitives as a topic for future work.

2 Split absolutive, nominalized clauses, and *v*

In this section, I discuss the distribution of the absolutive forms of nominals in Samoan. Orthographically, absolutive DPs lack any case marking, though Yu (2011, 2015), Yu and Stabler (2015) argue that absolutive in Samoan is marked by a high boundary tone on the syllable preceding the DP. Here, I defend a theory of absolutive following Aldridge 2004; Legate 2006, 2008, 2010, 2012. Under this account, in at least some ergative-absolutive languages, absolutive case is assigned to S and P via distinct mechanisms. Under her theory, absolutive case appears on S if S is licensed by agreement with a functional head (finite T) which determines that the clause is finite. Absolutive case appears on P if P is licensed by agreement with a functional head (transitive *v*) which determines that the clause is transitive. Thus, in these languages, absolutive case on S depends on the clause being finite, and absolutive case on P depends on the clause being transitive, though not vice versa. I refer to this theory as the "split absolutive" theory. I argue that this approach captures the Samoan data. Additional evidence from Samoan for this view comes from the behaviour of pronominal clitics and cases where ergative case marking is dropped in casual speech.

This viewpoint contrasts with perhaps the dominant approach within theories of ergativity, which hold that S and P receive absolutive case via the same morphosyntactic mechanism. For example, Bittner and Hale (1996) analyze unmarked absolutive case (with reference to data from Samoan) as assigned by a complementizer to both the S and P arguments via the government relation. Massam (2001) has absolutive case in Niuean assigned to both the S and P arguments via spec-head agreement with a dedicated case-assigning functional head Abs. Both accounts predict that absolutive case on S and P should be sensitive to the same set of syntactic contexts.

In section 2.1, I lay out the relevant Samoan data, showing that even though Samoan lacks a clear finite/non-finite distinction in the verbal domain, the relationship between finiteness and case can still be investigated in the domain of nominalization. As supporting evidence, I also provide data from pronouns and cases of 'ergative drop' in casual speech. Altogether, the data support the "split absolutive" theory and do not support some competing theories. In section 2.2, I show in detail how Legate 2008 formally characterizes the split absolutive theory. She takes the morphological case of a DP to be the morphological reflex of an agreement relation between the DP and a c-commanding functional head. Her theory relies on the existence of the functional head *v*. I argue there is independent motivation for positing a *v* head in Samoan in virtue of structural factors relating to Samoan's clause structure and predicate initial word order (stemming from the analysis of Samoan clause structure in Collins 2015). Finally, in 2.4, I posit a modification to Legate's account. Where Legate (and others including Aldridge 2004, 2006; Coon and Preminger 2012) argues for a split between transitive and intransitive *v*, I argue instead that a split between a *v* head which assigns an agentive thematic role, and a *v* head which does not, does better in accounting for the data, and comes closer to the original proposal and motivation for *v* in Kratzer 1996.

2.1 Two sources of absolutive

Under an account which assumes that S and P receive absolutive case from two different sources, certain predictions are made. First, we predict that their distribution should be somewhat distinct and thus there should be some syntactic context in which absolutive case on P is licensed, but not on S, or vice versa. Secondly, we predict that absolutive case on S and P should co-occur in some contexts. Neither of these pattern are predicted by an account which assumes a unique source of absolutive for both S and P. In this section I demonstrate patterns of both these varieties in Samoan.

Under Legate's account, there is no notion of absolutive case on either S and P in the syntax proper. S and P are syntactically licensed via distinct mechanisms (discussed below). However, the mapping of this syntactic licensing to morphology results in S and P receiving identical morphological forms. Legate refers to syntactic licensing as 'abstract Case' (following Vergnaud 1977), though I will use the term licensing to avoid the potential confusion of abstract Case with morphological case (the latter referring to the morphological marking on the DP which systematically relates to the DP's licensing/abstract Case).

First, I discuss syntactic contexts which differentiate the distribution of absolutive case marking on S and P. Under Legate's account, S is licensed by agreement with finite T, while P is licensed by transitive *v*. This account makes the prediction in (8).

(8) *Finiteness and S:* S is only marked as absolutive in a finite clause.

In nonfinite contexts, S should be licensed by some other mechanism and not receive absolutive case marking. Investigating in this prediction in Samoan is complicated by Samoan's weak finite/nonfinite distinction in the verbal domain. Complement clauses in Samoan are either introduced by the set of tense-aspect-mood (TAM) markers found in matrix clauses (9a), by the subjunctive TAM marker *ʻia* (9b-c), or the complementizers *ona* or *ʻinā* (9c-d). In all instances, the S argument may appear in its absolutive form. A fully detailed investigation of clausal complementation in Samoan remains a topic for future research.

(9) a. *ʻua iloa e Tigilau [ʻua sau [Sina]$_S$]*
PERF know ERG Tigilau PERF come Sina
'Tigilau knows that Sina has come.' (Mosel and Hovdhaugen 1992: 15.6)

b. *ʻou te manaʻo ai [ʻia avea [aʻu]$_S$ ma se soʻo*
1SG PRES want LOC SUBJ become 1SG ABL NSPEC follower
moni o Iesu Keriso]
true GENI Jesus Christ
'I want to become a true follower of Jesus Christ.' (lit. I want that I...)[4]

c. *e mafai [ona faigatā [le ʻavea ma mātua]$_S$]*
PRES can COMP difficult SPEC become ABL parent
'Becoming a parent can be difficult.' (lit. It is possible that the becoming a parent is difficult.) (BFP)

[4]https://www.lds.org/general-conference/2015/10/through-gods-eyes?lang=smo

d. *ʻua* *faʻasolosolo* *[ʻinā* *leai* *[ni* *suāvai]$_S$]*
PERF continue COMP not.exist NSPEC.PL water
'There is still no water (...in this child's body).' (lit. it proceeds that there is no water) (Mosel and Hovdhaugen 1992: 15.164)

However, clear evidence for the split absolutive theory comes from nominalization. Samoan makes extensive use of nominalizations in order to express embedded propositions or event descriptions. All varieties of nominalizations are characterised by embedding a verb within a DP. The two kinds of nominalizations I focus on within this paper are bare nominalizations and *-ga* nominalizations. Bare nominalizations involve embedding the verb within the DP without any affixation. *-ga* nominalizations involve embedding the verb with a nominalization suffix *-ga*. The two kinds of nominalizations are syntactically distinct. (10a) is an example of a bare nominalization, while (10b) is an example of a *-ga* nominalization.

(10) a. *le* *tafana* *o* *puaʻa* *e* *lua*
SPEC PL-shoot GENI pig PRES two
'The shooting of the two pigs (the pigs that are two)'
(Mosel and Hovhaugen 1992:13.33)

b. *le* *asiasi-ga* *a* *le* *puaʻa* *ulavale*
SPEC inspect-NOMZ GENII SPEC pig naughty
'The naughty pig's inspection.' (Mosel and Hovhaugen 1992:13.263)

In this section, I focus on bare nominalizations as in (10a), returning to *-ga* nominalizations in the section 3.2. In particular, I discuss how bare nominalizations are able to include an absolutive case marked P argument, as in (11). This is a prediction of the split absolutive theory, which argues that P is licensed by clausal transitivity, and is insensitive to the finiteness of the clause.

(11) *Siʻi* *pea* *le* *viʻi-ga* *ma* *[le* *faʻafetai* ***Le*** ***Atua]***
raise continue SPEC praise.NOMZ and SPEC thanks SPEC lord
'Continue crying out praise and thanks to God.'[5]

Following Bresnan (1997), I represent nominalization structures as a verbal constituent embedded within a nominal constituent. Specifically, I take Samoan bare nominalizations to be characterized as the embedding of a constituent (arbitrarily labelled FP) within a DP. FP must be large enough to contain the verb and its subcategorized arguments, as well as any functional head which records the transitivity of the clause (*v* under Legate's account). Thus, FP may be characterized as the constituent which is common to both tensed verbal clauses and untensed nominalized clauses. (12) is a simplified way of looking at this characterization, in (12a), FP is embedded beneath a determiner creating a nominalization, while in (12b), FP is embedded beneath the head controlling tense (which I will assume is instantiated in Samoan by TAM markers, following Collins 2015, see also Massam and Smallwood 1997 and Otsuka 2005 for a similar conclusion in Niuean and Tongan respectively). Thus, nominalization characteristically exclude the functional head T. (12) makes the simplifying assumption that D and T directly select for FP, though this may prove to be false under closer scrutiny.

[5] www.instagramkusu.com/momoiseababe

(12) a. DP

b. TP

Below I lay out some evidence that nominalizations exclude the head T. The clearest and simplest piece of evidence comes from the observation that nominalizations lack TAM markers (13). Likewise, nominalizations never contain the complementizers *ona* or *ʻina*.

(13) a. *le* *(*ʻua/sā/e)* *tafana* *o* *puaʻa* *e* *lua*
SPEC PERF/PAST/PRES PL-shoot GENI pig PRES TWO
'The shooting of the two pigs. (the pigs that are two)'

b. *sā* *ʻou* *matamata* *i* *le* *(*ona/ina)* *ta-fana* *o* *puaʻa*
PAST 1.SG watch OBL SPEC COMP PL-shoot GENI pig
e *lua*
PRES TWO
'I watched the shooting of the two pigs.'

Additional evidence for (12) comes from fronted DPs. Embedded tensed clauses may include a fronted DPs marked with the topic and/or focus marker *ʻo*. Nominalizations may not include fronted DPs marked with *ʻo*. In (14a), a complement clause which includes the tense marker *e*, also includes a fronted DP *ʻo ʻoe*. In (14b), nominalization of this constituent may not include the fronted DP marked with *ʻo*, either before or after the determiner. We can take (14a) to be evidence that the *ʻo*-marked DP fronts to a syntactic position at least as high as TP (including the TAM marker). Thus, the lack of *ʻo*-marked DPs suggests that nominalizations exclude the syntactic position which hosts *ʻo*-marked DPs. This is expected under (12a), which excludes TP (and any higher projection) from nominalizations.

(14) a. *ʻua* *ʻou* *vaʻai* *mai* *lava* *[**ʻo** **ʻoe*** *e* *tū* *atu* *i ʻinei]*
PERF 1.SG see DIR EMPH TOP 2.SG PRES stand DIR there
'I myself saw that it was you that stood there.' (Mosel 15:119)

b. *(*ʻo* *ʻoe)* *le* *(*ʻo* *ʻoe)* *tū* *atu* *i ʻinei*
TOP 2SG SPEC TOP 2SG stand DIR there
'I know that it was you that stood there.'

Along the same lines, a certain class of sentence-level modifiers come to the left of the tense marking particle, suggesting that they attach at the TP-level or higher (15a). These modifiers are unable to be included in a nominalized clause.

(15) a. *ʻailoga* *na* *lā* *mo-moe* *anapo*
doubtful PAST 2.DUAL PL-sleep last.night
'It's doubtful that they slept last night.'

b. *sā* *ʻou* *manatu* *i* *[le* *(*ʻailonga)* *moe* *a* *le* *fafine]*
PAST 1.SG think OBL SPEC doubtful sleep GENII SPEC woman
'I thought about the (doubtful) sleeping of the woman.'

I take these examples as evidence of the nominalized constituent FP being smaller than TP, as in (12). Under the split absolutive theory, absolutive case on S is the morphological reflex of the finite tense head T's licensing of S. Thus, as the structure for nominalizations in (12a) excludes T, S must be licensed by some other mechanism, and thus we predict that S is unable to receive absolutive case under nominalization. This prediction holds in Samoan. In a nominalized clause, S must take one of Samoan's two genitive case markers, *o* and *a*.

(16) a. *ʻua iʻi vale [le fetagisi *(a) namu]*
PERF squeak stupid SPEC PL-cry-PL GENII mosquito
'The cry of the mosquitos was a stupid squeak.'
(Mosel and Hovdhaugen 1992:546)

b. *ʻua maulalo ai [le lele *(o) le vaʻalele]*
PERF low there SPEC fly GENI SPEC plane
'The flying of the plane was low there.' [6]

I turn now to the licensing of the P argument. Under Legate's account, P is licensed by the functional head which determines that the clause is transitive, which she labels as transitive *v*. Thus, the account makes the following prediction (17), parallel to (8).

(17) *Transitivity and P:* P is only marked as absolutive in a transitive clause.

Thus in clauses where the verb which subcategorizes for a patient is intransitive/detransitivised, absolutive case should not be found on the patient DP. Note that under this account, there is no requirement that absolutive case on P depend on the finiteness of the clause. Thus we predict that so long as the clause is transitive, P should be able to take absolutive case in a nominalization. This prediction is supported by the following examples of nominalization.

(18) a. *soʻo se taʻitaʻi e tāua [lona iloa* ***le Upu a***
any NSPEC leader PRES tell.CIA his know.CIA SPEC word GENII
le Atua]
SPEC lord
'Any leader who shares his knowledge of the word of God."[7]

b. *Siʻi pea le viʻi-ga ma [le faʻafetai* ***Le Atua]***
raise continue SPEC praise.NOMZ and SPEC thanks SPEC lord
'Continue crying out praise and thanks to God."[8]

c. *e matamata le tamaitiiti [ʻi le siʻi ane e lona*
PRES watch SPEC child DAT SPEC lift up ERG his
tama ***le matatao]***
father SPEC spear
'The child watches his father lifting up the spear.'
(Mosel and Hovdhaugen 1992:546)

[6] 208.109.238.104/viewstory.php?storyid=30342
[7] www.samoatimes.co.nz/2011/03/28/e-afua-mai-mauga-le-manuia-o-le-nuu-21- mati-2011
[8] www.instagramkusu.com/momoiseababe

d. *Sā alu ane loa Paʻupaʻu [ʻi le fau* ***le pa]***
PAST go away then Paʻupaʻu DAT SPEC build SPEC hook
'Then Paʻupaʻu went away to fix the hook.'
(Mosel and Hovdhaugen 1992:546)

e. *ʻUa tiga manava [i le ʻai* ***naʻo pota]***
PERF hurt stomach LOC SPEC eat only starch
'Their stomachs hurt because of eating only starch.'
(Mosel and Hovdhaugen 1992:546)

Under Legate's account, the P argument is licensed by transitive *v*. Following Kratzer's (1996) original proposal, *v* is the functional head which projects a specifier hosting an agentive argument. Thus we predict that the licensing of P should co-vary with the presence or absence of an agentive argument. Further, following Legate's proposal that absolutive case on P is actually better characterized as accusative case, these kinds of generalizations fall squarely within Burzio's generalization (Burzio 1982) that the availability of accusative case depends on the assignment of an agentive thematic role.

We can test the prediction in (17) by examining transitivity alternations in Samoan which involve case alternations on the P argument. Samoan demonstrates several verbal affixes which change the valence of the verb. For example, the relatively non-productive prefix *ma-* has the effect of converting a small group of bivalent roots, including *goto* 'sink (tr.)', into monovalent roots. In either form of the alternation, the theme argument of the sinking event receives absolutive case marking in a finite clause. These data alone are not helpful in confirming (17), as we expect that S and P have identical case marking in a finite clauses.

(19) a. *na goto e le fafine le vaʻa*
PAST sink ERG SPEC woman SPEC boat
'The woman sank the boat.'

b. *na magoto le vaʻa*
PAST ANTICAUS.sink SPEC boat
'The boat sank.'

However, when we embed these alternative predicates within a nominalization, the prediction can be adequately tested. Under nominalization, we observe that only the P argument of the transitive form can receive the unmarked case, while the S argument of the intransitive form must receive genitive.

(20) a. *sā matamata le teine ʻi [laʻu goto le vaʻa]*
PAST watch SPEC girl DAT my sink SPEC boat
'The girl watched me sink the boat (my sinking the boat).'

b. *e gata ai [le magoto *(o) se vaʻa]*
PRES complete LOC SPEC ANTICAUS.sink GENI NSPEC boat
'A boat has sunk there (the sinking of a boat is completed there).' [9]

[9] http://www.palemene.ws/new/wp-content/uploads//01.Acts/Acts%201998/Shipping_Act_1998_-_Sam.pdf

Thus, as absolutive case marking on P is licensed by transitivity of the clause, absolutive case should be licensed in (20a) as P's containing clause is transitive. Although P's containing clause is nonfinite, this should not matter for the purposes of absolutive case assignment to P.

The absolutive morphological case which is observed on S and P arguments can in fact be analyzed as being licensed by two distinct mechanisms. On the S argument, it is licensed by finite tense, and is therefore absent in non-finite clauses, such as nominalized clauses. On the P argument, it is licensed by transitivity. The prediction is therefore that absolutive case marking should be available on P, but not on S, in nominalizations which may be transitive but may not be finite. I claim that Samoan bare nominalizations provide a testing ground for predictions about the relationship between absolutive case marking, finiteness, and transitivity. The data in this section supports the split absolutive approach.

2.2 Licensing DPs and case marking

In this subsection, I lay out Legate's account of case assignment in detail and apply it to the data provided in the above section. I also discuss some additional predictions of the account and show how they are borne out in Samoan, namely the distribution of pronouns, and the possibility of instantiating both A and P as bare DPs within the same clause in casual registers of Samoan (including the register which is usually referred to as *tautala leaga*, see Mosel and Hovdhaugen 1992: 8–12). I also compare the account presented in Legate 2008 to other accounts which have been proposed in order to deal with ergativity in Polynesian languages.

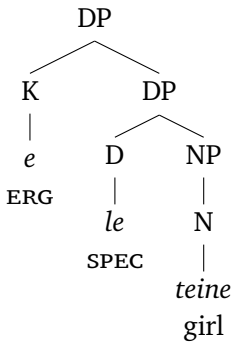
Legate assumes that morphological case marking predictably relates to the distribution of abstract features on DPs within the syntax proper. Following much work (Hale and Keyser 1993, 2002; Chomsky 1995, 2000, 2001; Woolford 1997) distinguishes two categories of abstract features relating to the determination of morphological case: inherent Case features and structural Case features. DPs bear inherent Case features by virtue of being occupying a particular syntactic position which is a position which determines the thematic role of the DP. DPs inherit structural Case features by virtue of being c-commanded by a higher functional head (following Chomsky 2000, 2001 *et seq*). The identity of the functional head determines the identity structural Case feature to be inherited by the DP. The morphological component of grammar maps abstract Case features to phonological forms by a series of mapping rules. I will return to the nature of inherent Case in the next section, for now I focus on the assignment and instantiation of absolutive case marking within this system.

Structural Case features are assigned to DPs by c-commanding functional heads. To avoid confusion with the term "case" in its morphological sense, I will refer to structural Case features as "licensed by agreement" features, or LiA features. I will also refer to inherent Case features as "licensed by selection" features, or LiS features. I will assume DPs in general bear no inherent licensing feature, capturing the structural determination of case by ensuring that DPs are licensed within the syntactic structure. Formally, this is spelled out in minimalist parlance by assuming that DPs bear an uninterpretable feature [*u*Lic]. As is typical in minimalist syntax, uninterpretable features must be eliminated via entering into particular relations with material in the broader syntactic structure,

otherwise ungrammaticality results.

While the theory of inherently unlicensed DPs is intended to be universally applicable, it is of course subject to the language's nominal syntax: the language may have a more or less syntactically complex nominal phrase. An additional, language-specific assumption I will make in order to deal with Samoan is that a case-marking clitic K bears the uninterpretable feature, and that K is adjoined to DP. A basic nominal syntax follow in (21) for the ergative DP *e le teine*, with an adjoined ergative case marker.

(21)



Thus, the theory of case assignment developed here should predict how a structure like (21) is derived, namely, how is K valued as ergative (or absolutive or genitive)?

LiA features are assigned by c-commanding functional heads. More specifically, they are assigned to DPs which enter into a particular relation, Agree (Chomsky 2001), with a higher functional head. Since Chomsky 2001, Agree has become the fundamental mechanism by which constituents are licensed in minimalist syntax. Intuitively, Agree is characterized as the "swapping" of features between a functional head (a probe) and a c-commanded constituent (a goal). The typical instantiation of Agree has the probe inheriting the person-number features (ϕ-features) of a DP goal, which in turn, is licensed by the probe. This intuition is spelled out by the following definition of Agree in (22).

(22) **Agree**:
For any α with a [*u*Case] feature, and head H with a [Case] feature, α and H are in an Agree relation iff:

a. H asymmetrically c-commands α, and

b. H and α occupy the same phase[10], and

c. α bears the [Case] feature of H, and

d. There is no constituent β, which bears the [Case] feature of H, such that H asymmetrically c-commands β, and β asymmetrically c-commands α, and

e. H bears the ϕ-features of A, and

f. There is no head G, which bears the ϕ-features of A, such that H asymmetrically c-commands G, and G asymmetrically c-commands α.

[10] there is no head γ such that H c-commands the maximal projection of γ, γ c-commands α, and γ is C, D, or *v*.

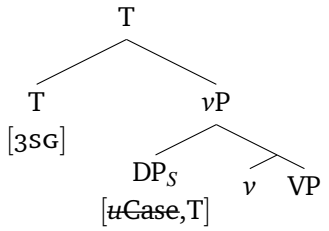
The definition here is a variation on the original proposal Chomsky (2000, 2001) though stated in terms of static syntactic relations. Clauses (a) and (b) ensure that the target of agreement (the goal) is sufficiently syntactically local to the licensing head (the probe). Clause (c) ensures the goal "inherits" the abstract Case feature of the probe and is the clause which is primarily responsible for ruling out syntactic structures in which DPs are somehow blocked from recieving abstract Case. Structures are ungrammatical if a constituent has an uninterpretable [*u*Case] feature without inheriting a [Case] feature from a higher head. Clause (d) ensures that the probe may only license the closest goal in terms of c-command.

The inclusion of clause (e) ensures a version of Agree which has the probe, as well as the goal, inherit features by virtue of entering into the Agree relation (as in Chomsky 2000, 2001). It inherits the person-number features of the goal, which may in turn be morphologically instantiated as agreement. Clause (f) ensures that the probe may only inherit the features of the nearest goal.

We say that if a constituent α has a [*u*Lic] feature, and inherits a categorial feature from a head H via entering an Agree relation, then α's [*u*Lic] feature is valued. If α does not inherit any categorial feature, then [*u*Lic] feature is not valued. I represent valued [*u*Lic] features as [~~*u*Lic~~]. Any tree structure with an unvalued [*u*Lic] feature is ungrammatical.

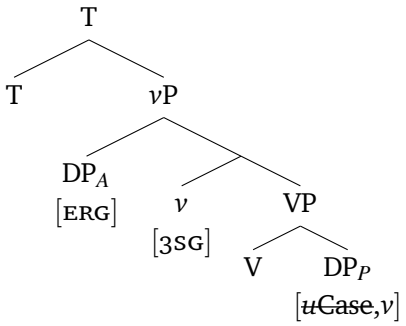
Legate's proposal is that S is licensed by entering an Agree relation with T. The kind of structure she proposes is represented in (23) which is admitted by the definition in (22). The structure contains an S argument, merged in a low position, which is c-commanded by T. T and DP (the sole argument of an intransitive) are in the right syntactic configuration (T c-commands DP, which is sufficiently local without interveners), and therefore swap ϕ-features and categorial features, thus eliminating their uninterpretable features.

(23)



In a transitive clause, P is licensed by entering an Agree relation with transitive *v*. This is represented in (24), in which P, a DP occupying the complement position within VP and transitive *v* exchange features.

(24)



In (24), the transitive agent A receives ergative case, an inherent Case under Legate's theory, licensed by virtue of being selected by transitive *v*. The transitive patient P receives abstract Case from *v*.

In (22), the probe H does not itself have an uninterpretable feature. This stands in contrast to the original proposal in Chomsky 2000, 2001, according to which both the probe and goal eliminate uninterpretable features via Agree. (24) reveals the motivation for positing that the probe lacks an uninterpretable feature. As P is licensed by *v*, and A receives inherent ergative case, T does not enter into an Agree relation with anything. If T had an uninterpretable feature, say a [$u\phi$] feature which is eliminated by Agree, (24) would be incorrectly ruled out as ungrammatical. Legate's account explicitly assumes that T lacks an uninterpretable feature: "When merged into the derivation, T probes down the tree for a DP with an unvalued Case feature. If one is found, T values the feature to nominative. If none is found, the derivation continues unaffected." (Legate 2008: 59, citing Pesetsky and Torrego 2001, Svenonius 2001 for earlier versions of this analysis). In this paper, this intuition is captured within the definition of Agree in (22) by not requiring that the probe have an uninterpretable feature, and thus potential probes (as in (24)) which fail to enter into Agree relations pose no problem.

The other key component of Legate's analysis is the mapping of abstract Case features, assigned via Agree, to phonological material. S and P are licensed by distinct functional heads, and thus receive different abstract Case features [T] and [*v*]. However, under this theory, these features end up being mapped to the same morphological form, namely the absolutive form. The situation is no different to, for example, English non-pronominal DPs. English DP subjects and objects are not mapped to morphologically distinct forms, though they are uncontroversially analyzed as being licensed via distinct mechanisms under standard accounts which assume abstract Case.

But what form does absolutive case marking take? Throughout I have represented absolutive morphological case as null. Recent work (Yu 2009, 2015, Calhoun 2014) suggests that absolutive morphological case in Samoan is realized as a high boundary tone (**H-**) on the final mora of any phonological material preceding the DP in question.[11] If these findings are correct, they should be incorporated into the present theory by stating that abstract Case features assigned by T and *v* are realized as a high boundary tone.

The Samoan-specific rules which map abstract Case features to morphological case marking are represented in table (25). Absolutive case marking (orthographically bare with a high boundary tone), is the morphological reflex of agreement with either T or *v*. Genitive case marking is the morphological reflext of agreement with D. Note that I simplistically treat genitive as one case, despite its instantiation by two case markers *o* and *a*.

[11] Furthermore, as noted by Hovdhaugen (1987:154), Mosel and Hovdhaugen (1992:764), and Yu (2015), Samoan speakers optionally allow absolutive case to be realised by the case marker *ia*, especially in spoken Samoan and especially by informants from American Samoa. Yu (2015) argues that *ia* is marked by a high tone, and that the 'null' version involves the deletion of *ia*, and reassociation of its high tone to the preceding material. Although more investigation is required to see if *ia* is simply an optional means of expressing absolutive case, or a marker of some other significance, such as topic or focus marking. Depending on the results of future investigation, we may additionally need the morphological rule to allow for the realization of absolutive case as *ia*.

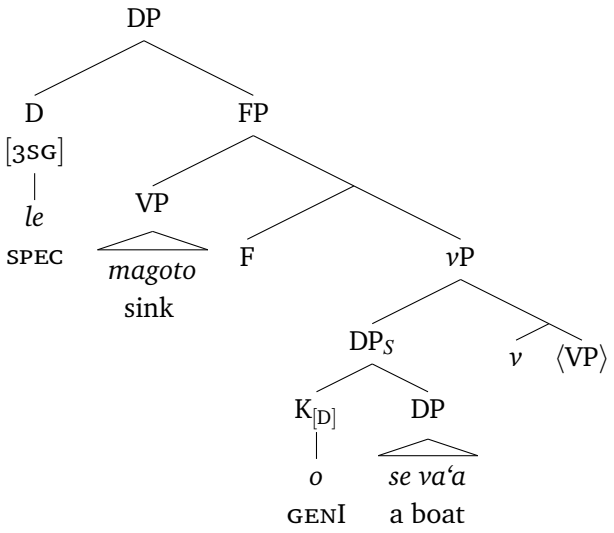
(25)

Case licensor	morphological case
T	absolutive (^{H})
v	
D	genitive (*o*/*a*)

The theory presented so far predicts the link between absolutive case marking on S and finiteness as well as the link between absolutive case on P and transitivity. According to the previous subsection, Samoan nominalizations exclude T. Thus, no arguments within the nominalization should be able to inherit abstract Case from T.

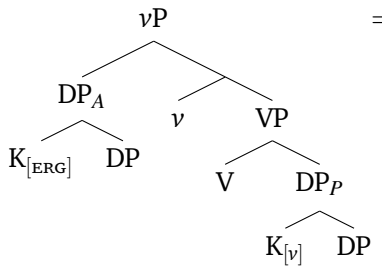
Following the arguments Collins 2015, I assume that the predicate in Samoan (a VP in clauses with verbal predicates) fronts to a specifier position higher than the subject, labelled FP in (26). This derives Samoan's verb-initial word order, following Massam's (2001) analysis of Niuean. As Samoan bare nominalizations are also predicate initial, I take the constituent which is embedded beneath the determiner to be at least as large as FP, hosting the fronted predicate. (26) sketches the structure for the nominalization in (20b), with an obligatorily genitive S argument.

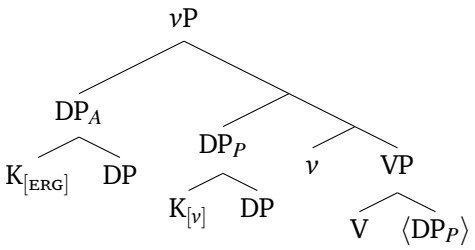
(26)



The S argument *le vaʻa* agrees with the determiner, which inherits the person-number features of S (though this does not result in any morphological reflex). S receives the abstract Case feature [D], assigned to its adjoined K head, which maps onto the genitive case marker *o*. As no T head is available, there is likewise no [T] abstract Case feature and thus no absolutive case marking.

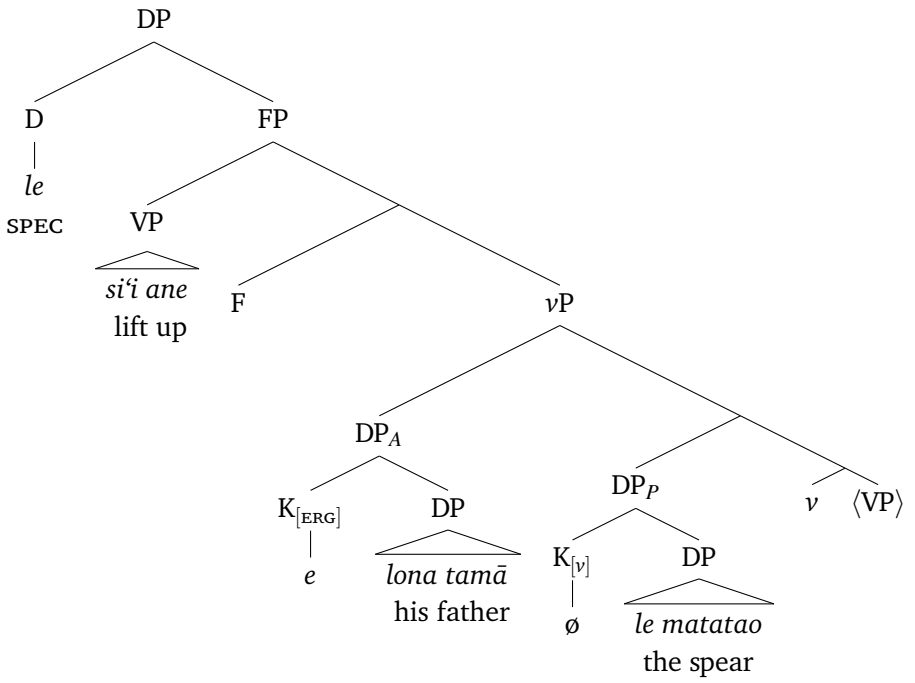
The transitive case is somewhat more complex. (27) shows just the *v*P constituent, which entirely determines the case marking of its two core arguments. Ergative is an inherent case licensed on the DP selected by transitive *v*. P is licensed by transitive *v*. Based on these licensing mechanisms, we derive the ergative-absolutive case marking pattern in transitive clauses. (27b) shows how the P argument fronts to an inner specifier of *v*, following the analysis in Collins 2015.

(27) a. 

$\Longrightarrow$ b. 

Next, the structure (27b) is embedded as the complement of a functional head F, which triggers the fronting of the predicate to its specifier position. The maximal projection of F is the constituent which is nominalized in a bare nominalization. Thus we generate the observed case marking and VSO word order observed in a bare nominalization. (29) models the nominalization in (28).

(28) *le* *si'i* *ane* *e* *lona* *tama* *le* *matatao*
SPEC lift up ERG his father SPEC spear
'The child watches his father lifting up the spear.'
(Mosel and Hovdhaugen 1992:546)

(29) 

Thus, absolutive morphological case which is observed on S and P arguments can in fact be analyzed as being licensed by two distinct mechanisms. On the S argument, it is licensed by T, and is therefore absent in non-finite clauses, such as nominalized clauses. On the P argument, it is licensed by *v*. The prediction is therefore that this morphological case should be available in nominalizations which involve the embedding of a constituent at least as big as a *v*P. I claim that Samoan bare nominalizations provide a testing ground for this prediction, and the data falls in favour of the split absolutive approach: the morphologically unmarked case which unites S and P arguments in finite clauses is only available to P in bare nominalizations.

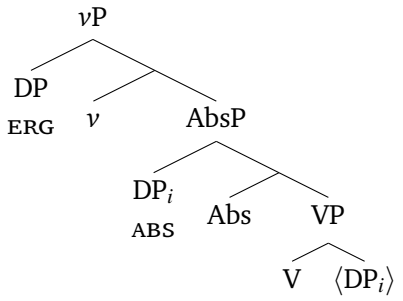
Before ending this section, I wish to compare the account to some competing approaches. This kind of account stands in direct opposition to other notable accounts of absolutive which maintain the absolutive is assigned to S and P via the same mechanism. Perhaps the most well-known analysis of ergativity in Samoan within generative syntax is Bittner and Hale's (1996a).

Under their account, S and P arguments (referred to as nominatives in their system), are licensed by being c-commanded and governed by the same functional head, regardless of the clause type.[12] In finite clauses, both S and P are licensed by the complementizer C in the Bittner and Hale system. In nominalizations, both S and P are licensed by the nominalization's case marker K, if such case marking exists. The account therefore makes a clearly different prediction from the split absolutive account. The possibilities for case on S and P should vary according to clause type uniformly, as they are licensed via the same mechanism in both nominalized and non-nominalized clauses, and so the Samoan nominalization data is not predicted.

Massam (2001) provides an account of ergativity for the Polynesian language Niuean, closely related to Samoan. Under her account, S and P are case licensed via the same mechanism. As in this paper, Massam proposes that verb initiality is derived via fronting an XP constituent to a position higher than the subject.

For Massam, Case is a feature which is checked via Spec-Head agreement. Thus, DPs enter the structure already specified for ergative or absolutive, and must appear in the specifier of a particular head. For absolutive-marked DPs, they must occur in the specifier of a specialised functional projection AbsP (similar to Bobaljik's (1993) AgrOP for ergative languages). Massam assumes that the P argument originates in Comp,VP, and moves to Spec,AbsP within the course of the derivation. This is due to a *strong feature* on AbsP which demands that its specifier must be filled by a DP.

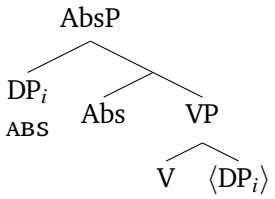
(30)



For unaccusative and unergative sentences alike, the S argument is merged into Comp,VP, and then, like the P argument of a transitive sentence, moves to Spec,AbsP. In a clause without an A argument (i.e., a transitive clause), the *v*P projection is simply not generated.

[12] In addition, both S and P have something like an "anti-licensing" requirement. This means that neither S nor P may be "Case bound", where Case binding is the operation which results in the assignment of ergative and accusative Case. For a precise definition of Case binding, and a discussion of their theory as applied to Samoan in greater detail, see the Appendix.

(31)



As absolutive case on both S and P is checked within AbsP, a relatively low functional projection, we again make the prediction that the presence or absence of absolutive case on S and P will vary uniformly with the presence or absence of the licensing Abs head. For example, if we expect that Niuean nominalized clauses include an AbsP, we expect that absolutive case should be possible on both S and P. If instead Niuean nominalized clauses exclude AbsP, absolutive case should not be possible on either S or P. The structure of Niuean nominalizations is an open question as far as this paper goes. However, it is clear that in Samoan nominalizations, the distribution of absolutive case marking on S and P is not uniform, thus not predicted by an analysis employing AbsP.

2.3 Realizing absolutive and genitive

Turning to genitive case, it appears that the morphologically null case on P is optional when P is contained within a nominalised clause. We also find instances of nominalisations where P takes genitive case.

(32) a. *le* *fafaga* ***o*** ***le*** ***pepe*** *i* *le* *fagu* *susu*
SPEC feed GENI SPEC baby LOC bottle milk
'The feeding of the baby with the milk bottle.' (Mosel and Hovdhaugen 1992: 546)

b. *'o* *le* *ala* *lena* *'o* *[le* *fau* *o* *ni* *potu]*
TOP SPEC reason that TOP SPEC build GENI NSPEC.PL room
'It is for this reason that some rooms are built.' (Mosel and Hovdhaugen 1992: 546)

We also find that the A argument may receive genitive case marking, but only if the P argument does not, either because the P argument is unpronounced or because the P argument takes absolutive case marking. In (33a), the A argument takes ergative, while the P argument takes genitive. The genitive P may be dropped with no change to the ergative case of A (33b), or if the genitive P is dropped, the A may take genitive case (33c).

(33) a. *e* *fa'alelelei* *le* *fa'asusu* *fagu* *e* *tinā* *palagi* *o*
PRES not.good SPEC feed bottle ERG mothers white GENI
pepe
babies
'The white mothers' bottle feeding of the babies is not good.' (MH:13.97)

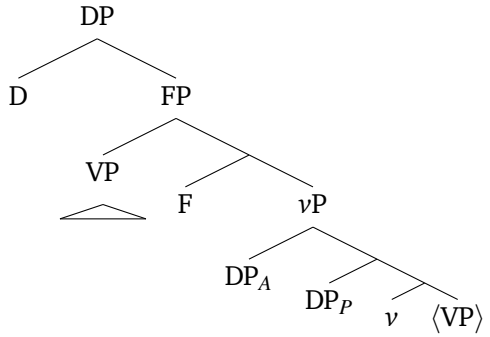
b. *e* *fa'alelelei* *le* *fa'asusu* *fagu* *e* *tinā* *palagi*
PRES not.good SPEC feed bottle ERG mothers white
'The white mothers' bottle feeding is not good.' (MH:13.98)

c. *e* *faʻalelelei* *le* *faʻasusu* *fagu* *a* *tinā* *palagi*
PRES not.good SPEC feed bottle GENII mothers white
'The white mothers' bottle feeding is not good.' (MH:13.99)

The first puzzle arising from this data is that the P argument may take either genitive or absolutive case marking within a bare nominalization. What accounts for this optionality? A potential solution is that there is an alternate *v* head which is unable to assign abstract Case to the P argument. In an interest to limit the proliferation of functional heads, I propose an alternative solution.

Following much work (e.g., Abney 1987, Marantz 1991, Baker and Vinokurova 2010), genitive case on arguments within nominalization is licensed by D head which projects the nominalization. I follow this route, suggesting that in Samoan, genitive case on arguments within a nominalization is an abstract Case, assigned to DPs via agreement with D. Thus, in order to receive genitive case, DPs must be in the c-command domain of D. The structure I assume for bare nominalizations is sketched above in (29). A key feature of this account is that both the A and P arguments occupy specifier positions projected by *v*.

(34)



The two DPs occupy adjacent specifier positions projected by *v*. Thus, they are "equidistant" for the purposes of syntactic operations. For example, the definition of Agree (22) includes a requirement that there is no other potential goal which intervenes between the probe and the goal, where intervention is defined in terms of asymmetric c-command. The assumption here is that a DP does not intervene in an Agree relation between a probe and a goal, if the goal is in an adjacent specifier position. Larson et al (2015) reach the same conclusion about A and P in Niuean. They also propose a clause structure which has Niuean A and P occupying adjacent specifier positions of *v*P (as in (34)). Under their analysis, A and P are equidistant due to the branching node which separates them (the sister node to DP$_A$) is unlabelled. Taking this intuition, we can define a notion of c-command which is sensitive to the notion of labelled nodes.

(35) **C-command** (version referencing labelling):
A node α c-commands β iff:

i. neither α nor β dominates the other, and
ii. the first branching and labelled node which dominates α also dominates β

Under this definition of c-command, DP$_A$ and DP$_P$ c-command each other, and thus do not count as interveners by the definition of Agree in (22). Therefore, under this

account, D may license either DP_A or DP_P via Agree. Assuming that Agree only applies once, D may only license *one* of A or P.

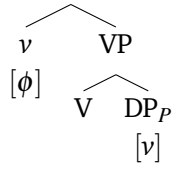
So far, we have an explanation of why genitive case is able to appear on at most one of A or P. But why is genitive case merely an option? Why can A take either genitive or ergative, and P either absolutive or genitive?

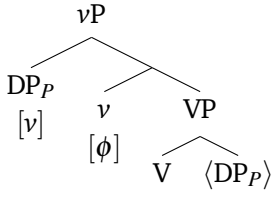
In Samoan, ergative case marking is always only optional. I discuss this property in more detail in section 3.1. For now it suffices to say that in nominalizations like (33c), ergative case may be dropped in favour of genitive. Outside of nominalizations, the dropping of ergative case in Samoan is well known, discussed extensively in Ochs 1982. Her examples below demonstrate that both A and P are able to take absolutive case marking in Samoan. I suggest that the realization of the ergative abstract Case feature as ergative case marking is always optional, so long as another source of abstract Case is available, such as D in (33c), or T in (36). I discuss the assignment of the abstract Case which maps to ergative case marking in more detail in the following section.

(36) a. *Sau loa. Ia, ʻai loa [Koʻokoʻo]$_A$ [falaoa]$_P$*
come now ok eat now Koʻokoʻo bread
'Come now, Ok. Koʻokoʻo is going to eat your bread' (Ochs 1982;(8))

b. *ʻUa ʻai [oe]$_P$ [le pusi]$_A$? ʻUa felaʻu [oe]$_P$ [le pusi]$_A$*
PERF eat 2SG SPEC cat PERF scratch 2SG SPEC cat
'The cat has bitten you? The cat has scratched you?' (Ochs 1982;(9))

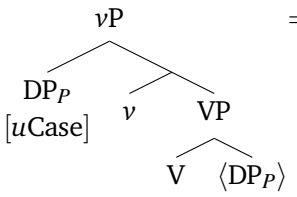
Absolutive case marking on P also alternates with genitive case marking in a nominalization. I take this optionality to be derived by variable ordering in the application of operations triggered by *v*. In Samoan, an "EPP" feature on *v* triggers movement of the P argument from the complement of V to Spec,*v*P. Further, as argued in this paper, *v* licenses abstract Case on P. I suggest the optionality of genitive and absolutive case on P in Samoan nominalizations is derived by variable ordering of these operations. First, in (37), *v* enters an Agree relation with DP_P while DP_P is VP-internal, thus assigning it abstract Case which is morphologically instantiated as absolutive. After this operation takes place, the DP moves to Spec,*v*P.

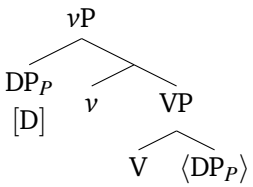
(37) a. 

⟹ b. 

Alternatively, *v* triggers the movement of DP_P to its specifier without entering an Agree relation (38a). The DP thus moves out of the c-command domain of *v*, and therefore the conditions necessary for Agree do not hold, and *v* is unable to license abstract Case on the DP. The DP thus must receive abstract Case from a higher licensor, i.e., D.[13]

[13]Nothing in this account so far prevents DP_P from ostensibly being licensed by T. This is due to a collection of independent factors: movement of P to T's local domain, equidistance between A and P, variable ordering of *v*'s EPP feature and abstract Case licensing. I take this to be a harmless consequence of

(38) a. 

⟹ b. 

2.4 Argument structure

Legate's account has both ergative case marking on A and absolutive case marking on P licensed by the functional head transitive *v*. This section explores the implications of the idea that the head *v* comes in two varieties, transitive and intransitive, an account also pursued by Aldridge 2004, 2006. I propose an alternate characterization, showing where the updated account makes does better in accounting for Samoan data. In this paper, the head *v* also comes in two varieties, a *v* which introduces an agentive thematic role, and a *v* which does not. The distinguishing case are clauses with agentive but syntactically intransitive predicates, such as unergative verbs, pseudo noun incorporating verbs, and dative case assigning verbs. This account is close in spirit to Kratzer's (1996) original proposal.

Following much work (Hale and Keyser 1993, Chomsky 1995, Kratzer 1996, *et seq.*), Legate takes the external argument of a transitive to be introduced by *v*. *v* may be transitive or intransitive, where only the transitive variant licenses abstract Case (sketched in (27) for example). But what is the status of intransitive *v*? According to Aldridge's (2006) account of Tagalog, intransitive *v* license no Case at all.

The first question which arises is how this account syncs with the Unaccusativity Hypothesis (Perlmutter 1972)? According to this hypothesis, unergative sole arguments are external arguments, and unaccusative sole arguments originate as complements of V. Thus, do we expect the same *v* head in both varieties of intransitive clauses (39b,c)?

(39) **Hypothesis 1: intransitive v with variable argument structure**

a. $[_{vP}\ \text{DP}_A\ [_{v'}\ v_{tr}\ [_{VP}\ \text{V}\ \text{DP}_P\ ]\ ]\ ]$: Transitive

b. $[_{vP}\ \text{DP}_S\ [_{v'}\ v_{intr}\ [_{VP}\ \text{V}\ ]\ ]\ ]$: Unergative

c. $[_{vP}\ v_{intr}\ [_{VP}\ \text{V}\ \text{DP}_S\ ]\ ]$: Unaccusative

Under this account, it is unclear how to represent the selectional properties of v_{intr}. One possible way of getting the alternation in (39b,c) is stating that v_{intr} is able to select for any V as a complement, but projects a specifier if and only if the V is unergative. Although this approach is adequate, it is somewhat unsatisfying to claim that the property of introducing an external thematic role is precisely coextensive with the selection of an unergative complement, thereby concluding that intransitive *v* has dual behaviours, conditioned on the semantics of the main verb. The dual behaviour may be better accounted for by positing two distinct functional heads with different selectional properties.

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the analysis, given that DP$_P$ will be realized with absolutive case marking regardless of whether it receives abstract Case from T or *v*. In a finite, transitive clause where both T and *v* are available, the choice of P's licensor is underdetermined by the surface form.

More problematic for this view are pseudo noun incorporating verbs. In Samoan, certain transitive verbs may optionally select for bare NP patients. For example, in (40a), the transitive verb *su'e* 'search' selects for a DP patient. In this case, its agent appears with ergative case marking. Alternatively, *su'e* can select for an NP patient, in which case the NP remains VP internal, and fronts along with the predicate to the pre-subject position. In this case, the agent receives absolutive case.

(40) a. *e* *[su'e]$_{VP}$* *pea* *e* *le* *teine* *[ni* *maile* *ula]$_{DP}$*
PRES search still ERG SPEC girl NSPEC.PL dog mischievous
'The girl is still searching for mischievous dogs.'

b. *e* *[su'e* *[maile* *ula]$_{NP}$]$_{VP}$* *pea* *(*e)* *le* *teine*
PRES search dog mischievous still ERG SPEC girl
'The girl is still searching for mischievous dogs.'

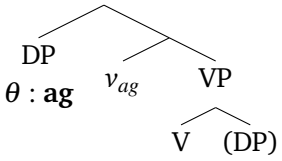
Consider the following premises of an account involving transitive *v*: (i) transitive verbs are selected for by transitive *v*, and (ii) the transitive variant of *v* licenses ergative case on the agent and absolutive case on the patient. Following (i) and (ii), we must conclude that *su'e* is a transitive verb, selected by transitive *v*, thus ergative is licensed on its agent (40a). However, if *su'e* selects for an NP patient, ergative case is not licensed (40b). This suggests that pseudo noun incorporating structures involve *intransitive v* instead. But this contradicts our prior assumption that transitive verbs like *su'e* are selected for by transitive *v*. One unsatisfying fix is that *su'e* comes in two variants, a transitive variant which selects for a DP, and an intransitive variant which selects for an NP. I instead suggest that *v* heads should not be differentiated based on the transitivity of the predicate, but instead by agentivity.

I propose that *v* comes in two "flavours", though transitivity is not the relevant differentiating factor. I propose that one *v* head assigns an agentive thematic role, while the other does not. I refer to these as agentive *v* and non-agentive *v*.

Predicates associated with agentive *v* include transitive predicates (*'ave* carry, *'ai* eat), unergative predicates (*siva* dance, *galue* work), middle predicates with dative or locative case marked objects (*alofa* love, *va'ai* see), predicates with a pseudo incorporated objects (*inu vai* drink water, *tapē pua'a* kill pig). These predicates have the property of co-occurring with a thematically agentive argument. It is important to note that of all of these predicate types, only transitive predicates are able to appear with an ergative case marked agent. Thus, the choice of agentive *v* does not by itself determine that the agent receives ergative case. I will return to this point in section 3. Non-agentive *v* does not project a specifier and does not assign an agentive thematic role. Non-agentive *v* is associated with unaccusatives (*taunu'u* arrive, *iai* exist) and weather verbs (*timu* rain).

Two structures are sketched below. Under this account, agentive *v* selects for a VP, which may or may not be transitive. Agentive *v* projects a specifier. The DP occupying the specifier receives an agentive theta role. In (41a), non-agentive *v* selects for a VP, which similarly may or may not contain a complement. Non-agentive *v* does not select for a specifier and therefore does not appear with an agentive argument. In both cases, *v* triggers movement of the complement of V (if any) in the derivation of predicate initial word order, see Collins 2015 for details. This movement is not represented in (41).

(41) a.



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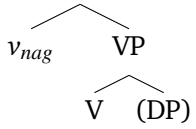
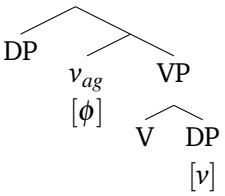
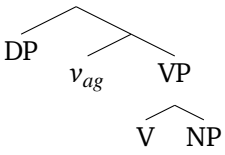


In terms of case marking and licensing, I propose that agentive *v* is responsible for licensing the P argument. Under the terminology of this analysis, agentive *v* has a Case licensing feature which it may assign via Agree. Under the definition of Agree in (22), a transitive verb selects for a object which requires licensing. The object may be licensed by agreement with *v*. The *v* head in turn inherits the person-number features of the DP (42). If the verb does not select for a DP, as in (42b), the Agree relation does not take place, as no constituent requires licensing. Recall that the definition of Agree in (22) does not posit an uninterpretable feature on probes, and thus Agree is not *required* to take place in structures where there is no argument to license.

(42) a.



b.



The structures in (22) have the additional benefit of structurally differentiating transitive agents from other kinds of agents. Transitive agents (which may take ergative case) are DPs which co-occupy a *v*P with a structurally case marked patient. We can characterize these DPs syntactically as those DPs which are selected by *v* so long as *v* is (i) agentive, and (ii) bears the person-number features of the transitive patient. This is the essential insight of the analysis in Deal 2010. In the following section, I show how this analysis resolves the problem of ergative case marking failing to appear on agents of unergatives and pseudo noun incorporating verbs. I also propose some refinements of the analysis in order to deal with problematic cases involving optional ergative case marking and the appearance of ergative case in nominalizations.

3 Refining a theory of ergative case

In this section I discuss the licensing of ergative morphological case. A central premise of Legate's (2008) account of ergativity is that ergative morphological case is the morphological spell out of an ergative abstract Case. The ergative abstract Case is an *inherent Case* under the terminology of Woolford 1997. It is assigned by *v* to a DP which occupies a particular thematic posiiton. In Legate's system, the thematic position in question is the specifier of transitive *v*, which is associated with the agentive theta role.

In the system built in this paper, this analysis has a direct corollary. I have been making use of a functional head agentive *v*, which projects a specifier position. The DP occupying the specifier position receives an agentive thematic role. Tying ergative abstract Case to this position (by stating that any DP which occupies this position

receives the ergative abstract Case feature) accounts for why ergative case marked DPs are always agentive. However, the account overgenerates. Recall that agentive *v* is employed for all agentive predicates, including transitives, unergative intransitives, middle predicates (with dative or locative objects) and pseudo incorporating predicates. In Samoan, ergative case is not possible on the agents of unergatives, middles, or pseudo incorporating predicates. It is only possible on the agents of transitive predicates.

(43) a. *sā* *ʻave* *e* *le* *tama* *le* *fagu*
PAST carry ERG SPEC boy SPEC bottle
'The boy was carrying the bottle.' Transitive

b. *sā* *galue* *(*e)* *le* *tama*
PAST work ERG SPEC boy
'The boy was working.' Unergative

c. *sā* *ʻinoʻino* *(*e)* *le* *tama* *ʻi* *le* *maile*
PAST angry ERG SPEC boy DAT SPEC dog
'The boy is angry at the dog.' Middle

d. *sā* *tausi* *pepe* *(*e)* *le* *tama*
PAST care baby ERG SPEC boy
'The boy cares for babies.' Psuedo incorporating

Assuming that ergative abstract Case maps onto ergative morphological case, the generalization that ergative abstract Case is assigned to DPs in the specifier of agentive *v* is too weak. It incorrectly predicts that ergative case marking appears on any agent.

The approach I will pursue draws from Deal 2010. Deal proposes that ergative is assigned to a DP which occupies the specifier of *v*. Additionally, for Deal, *v* may enter into an Agree relation with the direct object. Via the Agree relation (22), *v* inherits the person-number features of the direct object, and the direct object receives abstract Case. So far, the analysis corresponds closely to Legate's, and the analysis pursued in this paper.

Deal's insight is her claim that ergative abstract Case on A *requires* the assignment of abstract Case to P. Only *v* heads which have entered an Agree relation with P (and thus assigned abstract Case to P) may project an agent which takes ergative case marking. A version of this condition is stated in (44). Deal also posits an additional condition on ergative DPs that they must also Agree with T. I will discuss this condition below.

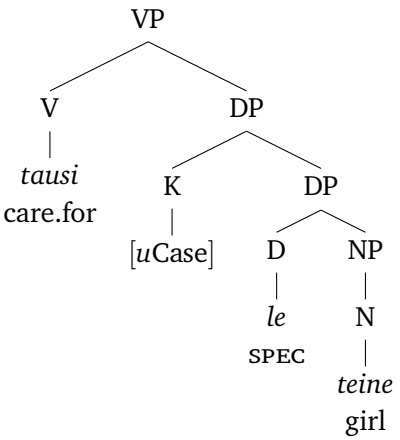
(44) *Licensing condition for ergative*: if A has ergative case marking, then it occupies the specifier position of *v* which bears the ϕ-features of P

This constraint in (44) the desired effect for the data in (43). In (43a), under this paper's account, P is assigned abstract Case via entering an Agree relation with *v*. Thus *v* inherits the person-number features of P and ergative Case is licensed on A. In the unergative clause (43b), no P argument exists to provide person-number features to *v*, thus ergative Case on the agent is not possible.

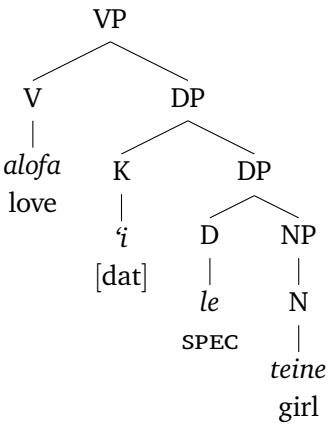
(43c) and (43d) both include a patientive argument, however, they the arguments are the wrong syntactic shape to enter an Agree relation with *v*.

(43c) has a dative case marked object. In Samoan, a subset of verbs select for dative case marked objects. We can account for the absolutive-dative case marking pattern in (43c) by positing that dative case marked objects enter the syntactic structure with a valued Case feature. I assume that Samoan verbs are lexically specified to select for a DP complement without inherent case marking, as in (45a). Here, the DP must be assigned abstract Case by entering an Agree relation with some higher functional head. Other verbs, like verbs of emotion, perception, and so on, select for complements which bear a particular Case feature (45b). Thus, dative case marked objects are not the right kind of constituent to enter into an Agree relation, by the definition in (22), which requires that the goal bear a [*u*Case] feature.

(45) a.

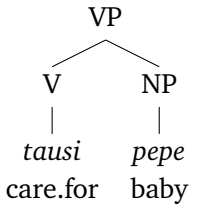


b.



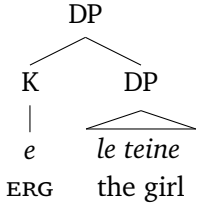
Pseudo incorporated objects are bare NPs in Samoan (Collins 2014, 2015). Based on the premise that case features are syntactically housed within the D/K syntactic layer, we correctly predict that pseudo incorporated objects are "caseless", and thus do not enter into Agree relations.

(46)



The proposal is that A can take ergative if it occupies the specifier of agentive *v* (thus accounting for the generalization that only agents are ergative in Samoan), and agentive *v* has entered an Agree relation with P (thus accounting for the generalization that ergative requires a structurally Case marked direct object).

(47)



3.1 Optional ergative

Speakers of Samoan frequently “drop" ergative case in spoken Samoan. The following examples, repeated from above, are from Ochs 1982.

(48) a. *Sau loa. Ia, ʻai loa Koʻokoʻo falaoa*
come now ok eat now Koʻokoʻo bread
‘Come now, Ok. Koʻokoʻo is going to eat your bread’ (Ochs 1982;(8))

b. *ʻUa ʻai oe le pusi? ʻUa felaʻu oe le pusi*
PERF eat 2SG SPEC cat PERF scratch 2SG SPEC cat
‘The cat has bitten you? The cat has scratched you?’ (Ochs 1982;(9))

Ochs claims that dropping ergative case is associated with familiar, intimate registers of Samoan speech. How should this stylistic variable be encoded into the present case assignment system? I suggest that Samoan grammar provides two means of licensing the A argument. T may assign abstract Case to the A argument, in which case A inherits the feature [T] which maps to absolutive case. Alternatively, the A argument may appear with ergative Case by virtue of appearing in the specifier of agentive *v* which has assigned abstract Case to P. The derivation of a transitive clause may proceed via either route, and concomitantly the choice is associated with a register distinction.

The option of A being licensed by the tense marking auxiliary and receiving the morphologically null case is associated with a more casual register. Other feature of Samoan grammar serve to signal casual register. Notably, Samoan speakers neutralise the alveolar-velar distinction in casual registers of speech. In formal registers, alveolar and velar stops are phonemically distinct, velar stops only appearing in loan words. In casual registers, non-labial stops are all pronounced as velar, regardless of whether they appear in a loan word or not. In registers of speech where velar stops occur in native Samoan words, the ergative case rarely occurs. This is expected if ergative case is a signal of a more formal, written register, and thus clashes somewhat with the presence of velar stops which signals a more casual, oral register.

The analysis proposed here suggests the “dropping" of ergative case is a bona fide case alternation, where an ergative-absolutive case frame alternates with an absolutive-absolutive frame. Case frames of the latter variety have been referred to as ‘bi-absolutive’ (Forker 2012, a.o.). I take so-called bi-absolutive clauses as evidence for the theory of ergativity proposed by Legate 2008. In a transitive clause, two case licensing heads are operative: T which may licensing the A argument, and *v* which may license the P argument. It is therefore expected that we find clauses where each case licensing head simultaneously licenses an argument. I suggest these bi-absolutive clauses are examples of this phenomenon.

A question arises as to whether so-called ergative drop is simply a process of phonological reduction, whereby the ergative case marker is simply deleted at a phonological level of representation. The syntactic and phonological accounts make clear predictions. Under the syntactic account, the dropping of ergative case is simply a question of alternate licensing operations, either the ergative Case feature licensed by selection or the Case feature assigned by agreement with T. Therefore, dropping ergative case should be impossible in syntactic environments where T is absent. Under the phonological view of

ergative drop, the process should be insensitive as to whether the clause is finite or not, so long is the local phonological environment of the A argument is the same.

As in the previous section, a comparison of case marking possibilities in finite and non-finite clauses provide a productive probe into these questions. In (49), a finite clause with the tense marker *sā*, ergative drop is possible (even is more formal registers with an alveolar-velar distinction). Under an account where the morphologically-null form of the DP is actually licensed by T, this is expected.

(49) *sā* *vali* *(e)* *loʻu* *tinā* *le* *fale*
PAST paint ERG my mother SPEC house
'My mother was painting the house.'

In (50a), the verb and its arguments from the finite clause in (49) are embedded within a nominalized clause. As a result, ergative drop is no longer possible. The ergative case marker may be replaced with an alienable genitive marker *a*, but it may not be simply deleted, leaving the A argument bare. These results are entirely expected if the null form of A is licensed by T. As nominalized clauses exclude T, the null form of A is not licensed, and A must be expressed with ergative or genitive case. A comparison of (50a) and (49) is evidence against a phonological account. Here the local phonological environment of the A argument is the same, yet the dropping of ergative case seems licensed by a syntactic factor, namely, the finiteness of the clause.

(50b) shows that the obligatoriness of a marked case on A persists even where the alveolar-velar stop distinction is neutralised, indicative of casual speech. The stylistic variant where A is expressed without an overt case marker is unavailable in a nominalized clause.

(50) a. *sā* *vave* *[le* *vali* **(e/a)* *loʻu* *tinā* *o* *le* *fale]*
PAST quick SPEC paint ERG/GENII my mother GENI SPEC house
'My mother paints the house quickly.' (lit. 'The painting of the house by my mother is quick.')

b. *sā* *vave* *[le* *vali* **(e/a)* *loʻu* *kigā* *o* *le* *fale]*
PAST quick SPEC paint ERG/GENII my mother GENI SPEC house
'My mother paints the house quickly.'

nominalized clauses are again useful in teasing apart the empirical predictions of various theories of ergativity. The absence of ergative drop in nominalized clauses falls out naturally from a theory where absolutive case on A is licensed by finite T.

3.2 Ergative in nominalizations

Several accounts of ergativity claim that ergative is licensed by T (Bok-Bennema 1991, Otsuka 2005, Bobaljik and Branigan 2006). I claim that the presence of ergative case within nominalized clauses argues against these theories. Deal's (2010) analysis of ergativity in Nez Perce is an example of one such theory. Under her theory, entering an Agree relation with T is a necessary condition for the licensing of ergative on the A argument (alongside occupying Spec,*v*P, as discussed in the previous section).

This hypothesis that ergative case is licensed by T finds counterevidence in Samoan nominalized clauses. A arguments within nominalized clauses often take ergative case, depsite the absence of T. For example, (51) repeats an earlier example.

(51) *e* *matamata* *le* *tamaitiiti* *[ʻi* *le* *siʻi* *ane* ***e*** ***lona*** ***tama***
PRES watch SPEC child DAT SPEC lift up ERG his father
le *matatao]*
SPEC spear
'The child watches his father lifting up the spear.'
(Mosel and Hovdhaugen 1992:546)

These data suggest that T is not a necessary condition for ergative case, and is consistent with the distribution of ergative case and T being independent, as is assumed by the account pursued in this paper.

If finite tense is not a necessary condition for ergative, what about absolutive case marking on P? Under Legate's account, both ergative on A and absolutive on P are licensed by transitive *v*. Under Deal's account ergative on A depends on the assignment of structural Case to P by *v*. Thus, under both accounts, it is predicted that ergative on A and absolutive on P co-occur in the same syntactic environments.[14]

So far this generalization holds in the two kinds of clauses examined so far: finite verbal clauses, and bare nominalized clauses. However, the generalization breaks down when we move to looking at *-ga* nominalizations. That is, nominalizations where the nominalized predicate bears the suffix *-ga* (or less commonly *-Caga*, where *C* is a lexically specified thematic consonant). In these kinds of nominalizations, ergative case marking is possible, but not absolutive case marking (on either P or S).

(52) a. *le* *fe-togi-ga* *[*(o)* *mea]$_P$* *[e* *Tapale]$_A$*
SPEC PL-throw-GA GENI thing ERG Tapale
'The throwing of things by Tapele.' 13.260

b. *le* *suʻe-ga* *[e* *le* *ulugāliʻi]$_A$* *[*(o)* *le lā* *tama]$_P$*
SPEC search-GA ERG SPEC couple GENI SPEC.3DUAL boy
'The searching by the couple for their son.' 13.251

c. *ni* *pese-ga* *malie* *[*(a)* *manu* *o* *le* *taeao]$_S$*
some sing-GA pleasant GENII bird GENI SPEC morning
'some nice singing of the morning birds.' 13.264

Under Legate's account, this is unexpected. As ergative Case is licensed by transitive *v*, transitive *v* should be available in these kinds of nominalizations, and should be able to licensed absolutive morphological case on P, contrary to fact. We therefore must conclude that Legate's account of ergative, and the account of ergative sketched in this section so far, overgenerates.

We find several pieces of evidence that roots which are nominalized with the suffix *-ga* retain many of the syntactic properties of predicates in verbal clauses and nominalized

[14]There is a terminological worry here, both Legate and Deal label the relevant case marking on P as accusative. In Nez Perce, the case marking on P is not adequately described as absolutive, as it is morphologically distinct from the case on intransitive sole arguments. In this paper, I refer to the case marking which derives from structural Case assigned by *v* to P as absolutive.

clauses. For example, they are still able to select for complements, and are still able to be take the same kinds of modifiers as in verbal clauses and nominalized clauses. In (53a-b) they retain the ability to pseudo incorporate their object.

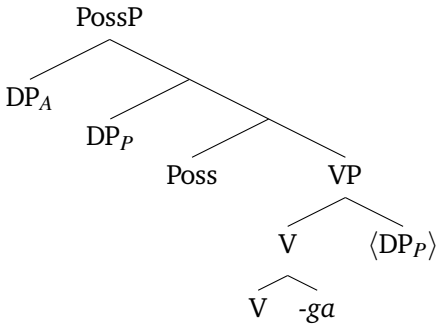
(53) a. *le* *tapē-gā* *pua'a* *a* *le* *tama*
SPEC kill-GA pig GENII SPEC boy
'The killing of pigs by the boy.'

b. *le* *fa'atau-gā* *niu* *a* *le* *tama*
SPEC kill-GA pig GENII SPEC boy
'The selling of coconuts by the boy.'

I assume that the *-ga* nominalization includes a V constituent.

I propose that *-ga* nominalizations do not include a *v*P constituent. Instead, I claim that they include a different argument structural head which serves to introduce the arguments associated with nominal constituents, labelled PossP (see Szabolcsi 1994, Toosarvandani 2015, etc for extensive discussions of the Poss head).

(54)



Now the task is to characterize the syntactic properties of Poss. In several ways, Poss is the nominal counterpart of *v*. It determines the argument structural properties of the nominal. Furthermore, there is evidence that Poss assigns Case. Recall that in a bare nominalization, only one genitive case marker is allowed on the post-predicate arguments. The proposal in this paper is that D assigns an abstract Case feature [D] to *one* post-predicate argument. However, in *-ga* nominalizations, *both* A and P are able to take genitive case, unlike in bare nominalizations.

(55) *le* *faitau-ga* *a* *Patele* *o* *le* *tusi* *paia*
SPEC read-GA GENII Patele GENI SPEC book holy
'The reading of the bible by Patele.' 13.267

I account for this fact by proposing that Poss is also able to assign an abstract Case feature. The abstract Case feature assigned by Poss (notated as [Poss]) is realized as the genitive marker in the morphological component of the grammar. Thus, the grammar of Samoan provides that two abstract Case features are able to be realized as the genitive case marker, accounting for the appearance of two genitive case marked DPs in (55).

(56)

Case licensor	morphological case
T *v*	absolutive (^{H})
D	genitive (*o*/*a*)
Poss	genitive (*o*/*a*)

There is therefore a striking parallelism between TPs and DPs. In TPs, two functional heads (T and *v*) assign abstract Case features which are realized as the same morphological case: absolutive. In DPs, a similar property holds. Two functional heads (D and Poss) assign abstract Case features which are realized as the genitive morphological case marker. In both verbal clauses and *-ga* nominalizations, these syncretic cases may co-occur, accounting for bi-absolutive finite clauses, and *-ga* nominalizations with genitive case marking on both A and P.

I return now to the question of ergative case marking in *-ga* nominalizations. Earlier, I proposed that ergative abstract Case was inherent Case marking, licensed on the DP which occupies the specifier of agentive *v*, so long as agentive *v* has assigned an abstract Case feature, via the following principle. Recall that only agentive *v* may project a specifier and assign abstract Case features.

(57) [ERG] is licensed on a DP iff:

- The DP is in the specifier projected by *v*.
- *v* has assigned an abstract Case feature.

This principle doesn't account for the occurrence of ergative case in *-ga* nominalizations. I therefore propose to weaken the rule. I do this by defining a category of heads based on the TP/DP parallelism. As Poss is the nominal analogy of *v*, I define a category of heads which I refer to as *argument structural* heads, which includes both *v* and Poss. I redefine the above rule governing inherent ergative Case by referencing the broader category of argument structural heads, rather than simply *v*.

(58) [ERG] is licensed on a DP iff:

- The DP is in the specifier projected by an argument structural head.
- The head has assigned an abstract Case feature.

Now the distribution of ergative in both verbal clauses and *-ga* nominalizations has a straightforward explanation. In verbal clauses, ergative is licensed on a DP if the DP occupies Spec,*v*P, and *v* has assigned an abstract Case feature. This entails that ergative case is *not* licensed on agentive arguments in clauses which do not have an absolutive case marked P argument. Likewise, in a *-ga* nominalization, ergative is licensed on a DP if the DP occupies Spec,PossP, and Poss has assigned an abstract Case feature. Thus, ergative is not licensed on agents of intransitive predicates or pseudo incorporating predicates.

As is the case with verbal clauses, the A argument may optionally be realized as a DP with an unspecified K head. This means that the A argument does not enter the derivation with the inherent ergative Case feature. Instead, the A argument must be licensed by a higher head. In verbal clauses, it is able to be licensed by T, whereby it will be morphologically realized with absolutive case. In nominalizations (bare or with *-ga*), it will be licensed by D, and therefore will be morphologically realized with genitive case.

4 Conclusion

In this paper, I cite data from Samoan nominalizations which bears on theories of the morphosyntax of ergativity. Crucially, several previous theories of ergativity propose that absolutive morphological case is assigned to P and S via the same mechanism. Under the assumption that S and P recieve absolutive case via a unified mechanism, we expect that S and P should be permitted and not permitted in the same morphosyntactic contexts.

Like Legate 2008, I use data from non-finite clauses to investigate the empirical predictions of this claim. I showed that Samoan nominalized clauses may contain P arguments (less-agentive arguments of transitive predicates) marked with absolutive morphological case. However, they cannot contain S arguments (sole arguments of intransitive predicates) marked with absolutive. I propose an account of the assignment of absolutive case in Samoan which captures this generalization.

Following Legate 2008, I take morphological case to be derived via a mapping from abstract syntactic features to morphophonological content. S and P receive different abstract Case features in the syntax. S receives an abstract Case feature from the functional head T, and P receives its abstract Case feature from *v*. Both of these abstract Case features are mapped to absolutive morphological case. As T is not available in a nominalized clause, S can not receive an abstract Case feature from T and therefore cannot be marked with absolutive morphological case. Instead, in a nominalized clause, the functional head D assigns to S an abstract Case feature. This feature maps to genitive morphological case. I similarly showed how this way of conceptualizing absolutive morphological case helps us make sense of Samoan clauses in casual spoken registers in which both S and P take absolutive morphological case.

Previous theories of ergative case have claimed ergative is licensed by T. I showed data from Samoan nominalizations in which ergative case is licensed. As nominalizations are non-finite, these data are problematic for this account. I also discussed the generalization that ergative case on A and absolutive case on P necessarily co-occur, predicted by accounts which claim that ergative and absolutive on P are both licensed by *v* or *v* (as per Legate 2008, Deal 2010 etc.) I show Samoan nominalizations which allow ergative on A, but ban absolutive on P. I argue that there are two conditions on licensing ergative on A. First, A must be in an agentive, causer, or initiator thematic role, assigned by the functional heads Poss or *v*. Second, the functional head assigning the thematic role must license structural Case on P, regardless of whether the Case will eventually map to absolutive (in a finite clause) or genitive (in a nominalized clause). I show how this account derives the observed case marking facts across a range of clause types.