This paper proposes a reconstruction of subject marking in Proto-Austronesian (PAn). I depart from previous approaches in not reconstructing nominative case, per se. Rather, I propose that subjects in PAn surfaced as bare DPs, and the case markers that are reflected in present day Formosan and Philippine languages resulted from later innovations. The marking with initial /k-/ that appears widely on subjects projected from common nominals originated as a topic marker *

\*k- in PAn. In contrast to this, case-marking on personal nominals like names and pronouns derives from the PAn locative preposition *

\*i. The preposition was used in differential object marking of personal nominal absolutes in the newly innovated ergative clause type in a daughter of PAn, Proto-Ergative Austronesian. The preposition further grammaticalized into a determiner and subsequently into the marker of [PERSON] in PEAn’s daughter Proto-Nuclear Austronesian. The person marker i- is ubiquitously reflected in case markers in Nuclear Austronesian languages. This analysis additionally accounts for the fact that nominative marking with a reflex of *

\*i is not found in Rukai dialects. Proto-Rukai retained the accusative alignment of PAn and consequently did not have ergative clauses with nominative objects. Rukai dialects do have strategies for differential object marking, but this is found only with non-nominative objects.

1. Introduction

This paper proposes a reconstruction of nominative case marking in Proto-Austronesian (PAn) and its development in first-order subgroups. One key fact which I attempt to account for is the asymmetry between marking of common noun subjects and those consisting of personal names or pronouns. As shown in (1) for Puyuma, case markers on personal nominals (1a) and common nouns have completely distinct forms. Also of note is the fact that personal case markers in Formosan and Philippine languages nearly always contain the vowel /i/, as can be seen in (1a).

(1) a. \texttt{tr}<em>akaw Da paisu i isaw  
\texttt{<INTR>steal OBL money SG.NOM.PN Isaw\textsuperscript{2}}

\textquoteleft Isaw stole money.'
However, previous reconstructions typically posit a greater degree of uniformity. Both Ross (2006) and Blust (2015) assume that all PAn case markers consist of a consonant followed by a vowel, the consonant expressing the case, and the vowel marking certain features of the argument. I first consider Blust (2015), who proposes that nominative case in PAn was *s- and accusative/oblique was *k-. The vowel differentiates personal from common nouns and also expresses number for personal nouns. Note that the singular personal markers contain the vowel /i/.

The main evidence for this reconstruction comes from a full s- nominative paradigm in the Philippine languages Old Bikol and Subanen. In addition, a reflex of *ki is found marking accusative/oblique personal names in Rukai, Mayrinax Atayal, Saisiyat, as well as a number of Malayo-Polynesian languages.

However, this reconstruction also incurs problems, even on Blust’s own (1999) subgrouping hypothesis. Most importantly, there is a dearth of evidence for s- marking common noun subjects, and no such evidence can be found outside the Malayo-Polynesian subgroup. Though si can easily be found marking personal subjects in many of the subgroups shown in (3), it is conspicuously lacking in Rukai, Tsou(ic), and Puyuma, which means that reflexes of personal nominative *s- can only be found in Nuclear Austronesian (NucAn) languages on the subgrouping proposed by Ross (2009), which I discuss below. Finally, I am aware of no convincing evidence for k- marking non-nominative common DPs in any Philippine or Formosan language.

Turning to Ross (2006), he proposes that nominative case was marked by *k-. Similar to Blust (2015), the consonantal case markers are followed by a vowel marking whether the argument is personal or common. He attributes no distinction to *a and *u but (correctly, in my view) argues against Blust’s (2005, 2015) position that *a marked plural personal DPs in PAn. Ross points out, first, the overwhelming evidence for common nominal marking with -a across Formosan languages and additionally suggests quite plausibly that the few instances of plural marking by -a derive diachronically from the combination of *-i and *-a, as in Paiwan nia [GEN.PN.PL].

3 The only exceptions to this are languages in which personal and common DP case marking have merged. An example of this is the Atayalic language Seediq, in which ka marks nominative case on all DPs.
Primary evidence for this reconstruction comes from the uniform nominative-marking by *k- found in Rukai. Common DP nominative marking by k- is also widely reflected in Formosan languages. As shown in (5), ku is used in the Tanan dialect to mark personal subjects, while ka marks common noun subjects.

(5) a. luða ay-kila ku tina=li
tomorrow FUT-come NOM.PN mother=1SG.GEN
‘My mom will come tomorrow.’
b. kaDu a ka anea
not.exist NOM.CN who
‘Noone is there.’

(Tanan Rukai⁵)

However, nominative *ki is nearly non-existent in Formosan or Philippine languages.⁶ The reconstruction shown in (4) is also problematic even for Ross’ (2009) subgrouping hypothesis. Ross (2009) modifies Blust (1999) by arguing for only four first-order subgroups, all but Rukai, Tsou, and Puyuma belonging to the NucAn subgroup, whose defining innovation is the reanalysis of embedded nominalizations as finite root clauses, a change first proposed by Starosta et al. (1982) but not attributed to a particular subgroup. As a consequence, reflexes of *C- accusative/oblique marking are found only in the NucAn subgroup (e.g. Amis [OBL.CN] tu). The same is also true of Blust’s (2015) proposed *si nominative marking, as pointed out above.

I also adopt the NucAn hypothesis in this paper. The fact that personal nominative marking with *si and *C- object marking are found only in this subgroup suggests the existence of additional innovations defining the NucAn subgroup, but unfortunately, space does not permit me to explore these possibilities in this paper. I additionally adopt my (2015, 2016, to appear) refinement to Ross’ (2009) family tree in which Tsou, Puyuma, and NucAn are contained within a subgroup called

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⁴ Ross (1992) reconstructs *C as a dental affricate.
⁵ Unless otherwise indicated, examples are taken from my fieldnotes.
⁶ In Pazeh, ki marks all nominative DPs (Li & Tsuchida 2002: 4). But since Pazeh is a NucAn language, it does not offer convincing evidence for the reconstruction of PAn. A plausible origin for nominative ki in this language is the combination of nominative k- for common DPs with the personal marker –i. Tona and Maga Rukai have also extended ki from marking embedded genitive subjects to marking nominative personal subjects in finite clauses.
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Ergative Austronesian (EAn). The innovation defining this subgroup is the development of the type of ergative alignment commonly referred to as the Austronesian “voice” system. I introduce my subgrouping hypothesis and show how it relates to the development of the case system in section 3.2.

To summarize the preceding discussion, there is some evidence for reconstructing *ki marking accusative personal nouns and nominative *k- for common nouns to PAn. Thus, it might be possible to maintain the following partial reconstruction combining these aspects of Blust (2015) and Ross (2006).

(7) PAn NOM ACC/OBL
    Personal ? *ki
    Common *k- ?

When it comes to personal nominative marking and common accusative marking, evidence for these can be found in NucAn languages. *si is widely reflected as nominative case marking personal DPs among Formosan and Philippine languages in the NucAn subgroup, while a reflex of *C- is also commonly used to mark common DP objects in Formosan NucAn languages. Though this strongly suggests additional evidence for positing the NucAn subgroup, these morphemes cannot be reconstructed to PAn. In short, both Blust (2015) and Ross (2006) face serious challenges in reconstructing PAn case marking, and neither of them individually presents a clear picture of PNucAn.

(8) PNucAn NOM ACC
    Personal *si *ki
    Common *k- *C-

In this paper, I choose an approach that differs from both Ross (2006) and Blust (2015) in some crucial respects. Focusing on subject marking, I propose in particular that PAn lacked a specific nominative case marker. Rather, subjects surfaced as bare DPs selected by a determiner. I follow Ross (2006) in positing vowels, specifically *u and *a, as determiners in PAn and additionally propose a distinction between the common noun determiners based on specificity and offer some evidence for the distinction in the following section. I further propose that there was no personal determiner in PAn. Rather, personal subjects surfaced as bare nominals without a determiner.

(9) PAn DET NOM TOP
    [+SPEC] *u *u *k-
    [-SPEC] *a *a

Another distinguishing characteristic of my approach is that it can provide explanations for the creation of new forms through natural syntactic processes in plausible structural environments. For the common DP nominative marker, I propose that the k- which is reflected as nominative case in Rukai and NucAn languages derives from a topic marker *k- in PAn. Regarding the person distinction, I propose that this was also a post-PAn development and was the consequence of differential object marking (DOM). Specifically, I propose that the origin of the person marker -i is the locative preposition *i in PAn. This preposition developed into a determiner when it was used to differentially mark an internal argument personal DP in VP which valued nominative case. This
innovation took place in Proto-Ergative Austronesian (PEAn), because it was in this daughter of PAn that ergative alignment and the possibility of nominative objects first emerged in the Austronesian language family. After being reanalyzed as a determiner in this environment, *i was extended to mark other nominative personal DPs, as in modern Puyuma, which is exemplified in (1a). In Proto-NucAn, *i further grammaticalized into a marker of the feature [PERSON], thus losing its ability to mark case. I assume that this in turn necessitated the innovation of a new nominative case marker *s- for personal DPs, but limitations of space prevent me from exploring this hypothesis in the current paper.

2. Development of nominative case from topic marking

This section explores the development of nominative case markers from PAn topic marking with *k-. This is seen most clearly in Rukai and also on common nominals in NucAn languages. In Rukai, all nominatives are marked with a reflex of *k-, as discussed in the previous section. The vowel following this consonant serves to distinguish personal DPs like names and pronouns from common DPs. This is part of the evidence for reconstructing a specificity distinction between these two vowels, since personal nominals have more specific reference than common nominals. Additional evidence comes from the retention of *a in Puyuma as the nominative case marker for nonspecific common DPs.

(10) Personal Common

<table>
<thead>
<tr>
<th>Tanan</th>
<th>Rukai</th>
</tr>
</thead>
<tbody>
<tr>
<td>ku</td>
<td>ka</td>
</tr>
</tbody>
</table>

As proposed in the preceding section, I reconstruct *k- as a topic marker in PAn. Evidence for *k-topic marking can also be found in Rukai. Pronouns in Rukai dialects appear with a reflex of *k-only when topicalized.

(11) Tanan TOP NOM ACC GEN

<table>
<thead>
<tr>
<th>1SG</th>
<th>ku-n-aku</th>
<th>=a)ku</th>
<th>n-aku-a</th>
<th>=li</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>=naku</td>
<td></td>
<td>=li</td>
</tr>
<tr>
<td></td>
<td></td>
<td>=naw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2SG</td>
<td>ku-su</td>
<td>=su</td>
<td>musu-a</td>
<td>=su</td>
</tr>
<tr>
<td>1PL</td>
<td>ku-ta</td>
<td>=ta</td>
<td>mita-a</td>
<td>=ta</td>
</tr>
<tr>
<td>EXCL</td>
<td>ku-nai</td>
<td>=nai</td>
<td>nai-a</td>
<td>=nai</td>
</tr>
<tr>
<td></td>
<td>ku-numi</td>
<td>=numi</td>
<td>numi-a</td>
<td>=numi</td>
</tr>
</tbody>
</table>

Topicalized pronouns must also be resumed by clitics, which I view as an example of clitic left dislocation. This clearly indicates that the ku-marked pronouns do not appear in argument position in the clause, since the nominative subject is expressed by the clitic. Note further that fronted topics are also followed by the topic marker ka, which clearly also has an initial /k/.

(12) a. ku-su ka tina=li i-wa=su luwig 1<uw>angay?
    NOM-2SG TOP mother=1SG.GEN FUT-go=2SG when <NONFIN>buy
    ‘You, my mother, when are you going shopping?’

b. ku-naku ka aw-ci-il=aku musu-a
    NOM-1SG TOP PST-see=1SG 2SG-ACC
    ‘As for me, I saw you.’

(Tanan Rukai)
Non-subject arguments can also be topicalized with *ku, suggesting further that the function of this morpheme is not merely to mark nominative case. Note that in-situ objects in the clause are marked accusatively. (13a) shows a full DP object with accusative marking. (13b) shows a topicalized object. Note that topic marking appears on both the modifier and head nominal.

(13)  
a. aw-ciil-aku iDa-a tau’ung  
PST-see-1SG.NOM DEM.INVIS-ACC dog  
‘I saw the dog.’

b. [ku-ani dara’u-li ku-ani avava]  
NOM-DEM.VIS make-1SG.GEN NOM-DEM.VIS toy
ay-bað-aku ini-a Lulay  
FUT-give-1SG.NOM DEM.VIS-ACC child
‘This toy I made, I will give to that child.’ (Tanan Rukai)

I analyze the PAn topic marker *k as shown in (14). This morpheme selects the constituent to be topicalized. The entire topic phrase then occupies clause-initial position.

(14)  
*TopP (=DP) (PAn)

Top  
*  
k  
DP

Although non-subjects can be fronted in Rukai, this is rather exceptional, and the overwhelming number of topics are subject arguments. Given this, I propose that the topic marker *k- was reanalyzed as a nominative case marker, and is reflected as such in Rukai and NucAn languages. The plausibility of this reanalysis is further suggested by the fact that *k- would have been syllabified together with the following vowel, facilitating the formation of a single word.

(15)  
KP

K  
*

DP

In NucAn languages like Amis, k- marks nominative case on common DPs, while personal subjects are marked with a reflex of *s. Blust (2015) reconstructs this as the nominative case marker in PAn, but it is reflected only in NucAn languages, so I assume it to be an innovation unique to this subgroup. I discuss the -i person marker in the following section and argue that it is a reflex of the PAn preposition *i. This preposition first grammaticalized into a determiner and subsequently into a lower functional head on the DP spine housing a [PERSON] feature.
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(16) Personal.SG  Personal.PL  Common
    Amis  ci  ca  ku  (Wu 2000: 64)

The dichotomy between personal marking with a reflex of *si and common noun marking with a reflex of *k- can be seen in the following examples.

    AV-beatNOM.PN  Sawmah  PN  Mayaw-ACC
    ‘Sawmah is going to beat Mayaw.’
    ‘Sawmah is beating Mayaw.’ (Amis; Wu 2006: 166)

b. R<um>akat ku mitiliday.
    <NEUT>walk  NOM.CN  student
    ‘The student is walking.’ (Amis; Wu 2006: 81)

In the following section, I propose that the marking of personal subjects with -i is the result of the reanalysis of the locative preposition *i when it was used as a differential case marker on personal DPs in their base positions inside VP.

It bears pointing out that a reflex of *k- is also found on nominative pronominal forms in several NucAn languages, e.g. Kanakanavu (Sung 2018), Amis (Wu 2018), Bunun (Huang & Shih 2018). This may seem surprising, since personal pronouns also have a [PERSON] feature. However, the stems to which the case prefix attaches reflect free form pronouns as reconstructed by Ross (2015). As free forms, these pronouns would not have occupied their clause-internal subject position as clitics on the verb but rather would have been the forms used when these pronouns were topicalized. This is precisely what my reconstruction of *k- as a topic marker predicts.

(18) Amis  NOM
    1.SG  k-ako
    2.SG  k-iso
    1.PL.INCL  k-ita
    1.PL.EXCL  k-ami
    2.PL  k-amo  (Wu 2018)

3. Grammaticalization of the PAn preposition *i

In this section, I discuss a second origin of nominative marking in Austronesian languages. This innovation also crucially results in the development of the personal determiner i which is found ubiquitously in NucAn case markers for personal DPs. In this section, I propose that the determiner developed from the PAn locative preposition *i. Unsurprisingly, *i is reflected only in non-nominative case markers in Rukai, marking genitive pronouns and object personal DPs, as I show in section 3.1. The latter development was a strategy for differential object marking (DOM) of personal DPs in the VP. A reflex of *i is also found as a topic marker in some Rukai dialects but this is a later development, and this i never specifically marks nominative case.

In section 3.2, I propose that *i was reanalyzed as a determiner on nominative personal DPs in the ergative language Proto-Ergative Austronesian (PEAn), which is sister to Proto-Rukai in the Austronesian language family. The preposition *i was also employed as in DOM in PEAn, but it specifically marked objects with nominative (absolutive) case. The preposition was later
reanalyzed as a determiner on analogy with the determiners *u and *a marking other nominative DPs and then extended to marking all nominative personal DPs. The determiner *i is reflected in this function in Puyuma.

3.1. Development of *i in Rukai

This subsection discusses the development of the preposition *i as a nominal marker in Rukai. I first point out that I am not alone in reconstructing a locative preposition *i in PAn, as Starosta et al. (1982), Blust (2003), Ross (2006), and others have also done so. This preposition is directly reflected in multiple high-order subgroups of the Austronesian family, shown below for Puyuma in (19a) and Paiwan (NucAn) in (19b).

(19) a. pilang-u i temuu
    take-TR.IMP SG.NOM.PN your.grandmother
    muka i Dena-Denan
    ‘Take your grandmother to the mountains.’ (Puyuma; Teng 2008: 216)

b. na-t<em>alem azua tsaoitsao tua velevel i gadu
    PPFV-<INTR>plant NOM.DEM person OBL banana LOC mountain
    ‘That person plants bananas in the mountains.’ (Northern Paiwan)

I propose in this subsection that *i grammaticalized into a non-nominative person marker from the preposition as a result of its use as a genitive marker on pronouns. As can be seen from the following Maga Rukai paradigm, most first and second person possessors employ the same clitic form which marks nominative subjects, with the exception of first person singular, which is a Proto-Rukai innovation of unknown origin. Most of the nominative clitic forms are in turn inherited from PAn, though they come from a mixture of the clitic and free paradigms, according to Ross’ (2015) reconstructions. The third person genitive forms are clearly innovations because PAn did not have third person clitic pronouns, and this is reflected in Rukai as well, where no Rukai dialect employs a third person subject clitic. Third person pronouns in Rukai grammaticalized from demonstratives (Li 1973, 1996; Zeitoun 1997).

(20) Maga TOPIC NOMINATIVE ACC GEN
    1SG i-kiki kiki ku= ŋku-a =li
    1PL INC l-miti miti ta= miti-a =ta
    1PL EXCL i-knami knami nami= nma-a =nami
    2SG i-musu musu su= su-a =su
    2PL i-mumu mumu mu= mu-a =mu
    3[+VIS] i-kini kini ni-a =ini
    3[-VIS] i-kidji kidji dji-a =dja (Zeitoun 1997: 316)

However, the third person visible possessor in Maga has an initial i-. Third person possessors in Tanan and Budai are likewise prefixed with i-. The fact that i- is a separate morpheme and not originally part of the pronoun itself is shown by the fact that the accusative forms do not have the initial i-. It is true that the Maga invisible third person pronoun lacks this reflex, but it is found on the invisible third person pronoun =idā in the Tanan dialect. It is also relevant to note that only the
third person forms in these dialects carry this prefix. This clearly suggests that genitive marking with *i- is an innovation, given that the grammaticalization of third person clitic pronouns from demonstratives is itself a post-PAn development.

Note in addition that object pronouns are instead marked with -*a- or -*ani-, which are reflexes of the PAn nominalizer *-an. As I discuss below, this suffix functions as a differential object marker on personal DPs in Rukai and some NucAn languages. Because of this wide distribution, I attribute this marking to PAn. For present purposes, the relevant point is that object pronominals in (20) are marked only by the nominalizer; *i- does not appear.

I propose that the third person genitive marker *i- is a reflex of the PAn preposition *i. This is supported independently by the existence of *i- prefixed existential verbs in several Formosan languages. Zeitoun (2019) reconstructs the Proto-Rukai existential verb as *i-a-kai, composed of the locative preposition *i, a realis verbal marker *a-, and a demonstrative *kai. Blust (2003) reconstructs a bound locative prefix *i- to PAn, which is clearly related to the preposition *i. I assume that the bound form of the preposition was inherited by Proto-Rukai and propose that it marked pronominal possessors in this language, with the resulting form expressing the location of the possessum in the sense of Freeze (1992).

From the paradigm in (20), it can also be seen that *i- has been extended to marking the topic pronominal forms in Maga. Mantauran Rukai also has topic pronouns marked with *i-. What is important to note is that topic formation with *i- post-dates the development of genitive marking with *i-. Several of the free form nominative pronouns show reflexes of the topic marker *k-, indicated in the italicized forms in (20). The innovated topic marker *i- attaches outside of the reflex of *k-, clearly showing that topic marking with *k- is more conservative.

Positing the prepositional source for *i-marking in Rukai also accounts for the gap in Ross’ (2006) nominative paradigm, namely the lack of a reflex of nominative *ki. Where it exists in Formosan languages, *ki nearly always marks non-nominative personal DPs, as in the following Tanan Rukai example.

(21) *aw-ciil=aku    *ki    tama=li
    PST-see=1SG.NOM    DAT.PN    father=1SG.GEN
    ‘I saw my father.’                  (Tanan Rukai)

This can be accounted for on my analysis if the existential/possessive *i- is reconstructed as a bound form. The topic marker *k- was added in order to provide a host for *i-. As a topic marker, *k- had no inherent category of its own but rather inherited the category of its complement. Attaching to a DP, it projected a topic DP, as proposed in section 2. But if it attached to a PP, then the resulting category was also a PP.7

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7 Given that a personal object marker *ki is found in some other Formosan, as well as a number of Malayo-Polynesian, languages, it is possible that it had already been formed in PAn. Attributing *ki to PAn or to Proto-Rukai does not significantly affect my proposal since both languages had accusative alignment. Hence, *ki would only have marked personal objects with non-nominative case.
One final word is in order here regarding why reflexes of *ki are found marking only personal DPs. I propose that this is due to differential object marking. Rukai dialects make a clear distinction between marking of personal and common DPs in object position. In the Maga pronominal paradigm in (20), all of the object pronouns are affixed with the suffix -a, which is diachronically related to the PAn nominalizer *-an. This is true of all object pronominal forms in all Rukai dialects I am familiar with. A reflex of this marker can still be found on personal DPs in Maga and Tona, though in Tanan and Budai, it has been replaced by ki for marking of phrasal personal objects.

Returning to DOM with a reflex of *-an, a nominalizing suffix is widely found (though mostly in frozen pronominal forms) on non-subject pronouns in NucAn languages. A reflex of *-an also continues to be used productively to mark object personal DPs and pronouns in Amis. Consequently, I propose that PAn also employed the nominalizer *-an as a personal object marker, in addition to its basic function as a nominalizer. As to why a nominalizer is employed in DOM, I suggest that this is because the nominalizer derives a predicate from the specific DP so that it can combine syntactically and semantically with the verb. But the question of whether converting a semantic entity into a category that can more easily participate in complex predicate formation is the fundamental purpose of DOM is a topic which must be left to future research.

To summarize the discussion in this subsection, I have argued that PAn clearly had a mechanism of DOM for pronouns and personal DPs. I reconstruct this as the nominalizer and also suggest that the prepositional form employing *ki replaced this in some languages for marking full DP objects. This personal marker clearly retains the prepositional character of PAn *i, since reflexes of *i never serve unambiguously as markers of subjects in Rukai dialects. The next subsection proposes a diachronic pathway for grammaticalization of the preposition of *i as a determiner marking nominative personal DPs.

3.2. P *i > determiner in Ergative Austronesian languages

The focus of this section is the development of the personal nominative marker i, which I propose grammaticalized from the PAn preposition *i. As can be seen in the case marking paradigm below, Puyuma also retains the indefinite determiner *a from PAn as the nonspecific nominative marker on common DPs.

(23) Puyuma
    PN.SG    PN.PL    CN.SPEC    CN.NSPEC
    i        na⁸      na        a

(2008: 50)

The origin of this case marker is unclear (Stacy Fang-ching Teng, p.c.), but I assume that its use with personal DPs represents an extension of specific common DP marking, and it is not originally a personal case marker.
Examples of these case markers can be seen below. Another relevant point to note is the alignment in Puyuma, which is the type of (split-)ergative alignment commonly referred to as the Austronesian “voice system”. The subject has nominative case in intransitive clauses and in transitive clauses with indefinite direct objects like (24a, b). In fully transitive clauses like (24b, c), nominative case appears on an internal argument. Another point which is relevant to the following discussion concerns word order, which is relatively free in Puyuma. In particular, there is no fixed position for nominative DPs.

(24) a. tr<em>akaw dra paisu i isaw</em>  
    <INTR>steal INDEF.OBL money SG.NOM Isaw  
    ‘Isaw stole money.’

b. Dua me-nau-a a mia-Dua a Tau i, …  
    come INTR-see-PURP NOM.NSPEC PRS-two NOM.NSPEC person TOP  
    ‘Two people came to see ….’

c. tu=trakaw-aw na paisu kan isaw  
    3GEN=steal-TR DEF.NOM money SG.OBL Isaw  
    ‘Isaw stole the money.’

d. tu=trakaw-anay i tinataw dra paisu  
    3GEN=steal-APPL 3SG.NOM his.mother INDEF.OBL money  
    ‘He stole money for his mother.’ (Nanwang Puyuma; Teng 2008: 147)

Returning to the discussion of case marking, as was clear in the previous subsection, *i is not reflected as a subject marker in Rukai. It is also not reflected as a person marker in Tsou. Given that a reflex of *i on nominative case markers is found only in Puyuma and NucAn languages, this suggests very strongly that Ross’ (2009) subgrouping hypothesis requires some modification. In Aldridge (2015, 2016, to appear), I propose a revision of Ross (2009) by introducing a new subgroup called “Ergative Austronesian” (EAn). In contrast to previous reconstructions of PAn alignment and verbal morphology by Wolff (1977), Starosta et al. (1982), Blust (1999, 2009/2013), and Ross (2009), I propose that PAn was a language with accusative alignment, which is retained in Rukai. I also propose a diachronic origin for the non-accusative alignment found in the EAn languages, as well as an analysis for how this alignment developed syntactically from biclausal (restructuring) constructions with nominative objects.

(25) Austronesian (ACC)  
    \[ Rukai \ (ACC) \quad \text{Ergative An (ACC > ERG; P} *i > D *i) \]  
    Tsou \ (ERG) \quad \text{Puyuma \ (ERG) \quad \text{Nuclear An \ (ERG)}} \]

In this paper, I propose an additional innovation which took place in PEAn, i.e. the grammaticalization of the PAn preposition *i into a determiner. This determiner is reflected as the

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9 Teng (2008) glosses this morpheme as a type of transitivity marker. I mark it as an applicative in order to more directly reflect its function as promoting a pseudo-argument to direct object status.

10 Previous reconstructions assume PAn to have had the same type of split-ergative alignment which is shown in (24) for Puyuma.
Puyuma personal nominative case marker *i. Reanalysis of the preposition as a determiner was the result of DOM when an object DP was structurally licensed with nominative case. PEAn is thus similar to Hindi, which is also a split-ergative language. Hindi imperfective clauses are accusatively aligned with nominative subjects, while perfective clauses have ergative subjects and nominative objects, as shown below.

(26) a. raam roTii khaataa thaa.
   Ram(NOM) bread(F) eat(IPFV.M) was.M ‘Ram (habitually) ate bread.’
   b. raam-ne roTii khaayii thii.
   Ram(ERG) bread(F).NOM eat(IPFV.F) was.F ‘Ram ate bread.’           (Hindi; Mahajan 1990: 72-3)

What is interesting is that Hindi shows DOM in both ergative and accusative clause types. Names and pronouns are obligatorily differentially marked by a dative suffix in object position, and other specific objects often are as well.

(27) a. Miiraa-ne larkii-ko kal dekh-aa thaa
   Meera-ERG(F) girl(F)-DOM yesterday see(PFV.M) be(PST.M) ‘Meera had seen the girl yesterday.’
   b. mē larkii-ko har roz bulaa-taa hū
   I(M) girl(F)-DOM every day call(IPFV.M.SG be(PRES.IPFV.SG) ‘Meera had seen the girl yesterday.’      (Hindi; Mahajan 2017: 92-3)

I propose that the same process of DOM occurred in PEAn ergative clauses. The locative preposition was attached to a personal DP with structural (nominative) case in order to allow it to combine with the verb and form a VP.

(28)  *PP
     /    \
    P     DP
       /     \   
  i      D     NP
       |      [PERSON]

The preposition was later reanalyzed as the personal determiner. The reanalysis was facilitated by the fact that personal DPs were not marked by the definite and indefinite determiners *u and *a in PAn, so *i came to occupy the null D position. This reanalysis can also be viewed as an analogical extension of the existing process of marking subjects with a determiner. This in turn placed functional pressure on *i to serve as a nominative case marker and led to the extension of *i from marking only internal argument nominative personal DPs to marking all personal nominatives. This is how the determiner *i is reflected in Puyuma.
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(29)  

\[
\begin{array}{c}
\text{DP} \\
\text{D} \\
i \\
\text{[PERSON]}
\end{array}
\]

The determiner \( *i \) is also reflected—albeit primarily on pronouns—in NucAn languages. These pronouns serve as nominative forms in Kanakanavu (Sung 2018), Kavalan (Hsieh 2018), and some Atayalic languages like Truku (Lee & Hsu 2018).

A word is in order here about Tsou. The reanalysis of the preposition \( *i \) as a determiner, which is reflected in Puyuma and NucAn languages, is not found in Tsou. Tsou case markers encode deictic information and do not show any distinction for person (Zeitoun 1992, Chang & Pan 2016). Given the complete lack of a person distinction, it is highly unlikely that the determiner \( *i \) has simply been lost in this language. I propose instead that the lack of DOM with the preposition was the consequence of the structural position of nominative DPs in the language. Recall from (24) that there is no fixed position for nominative DPs in Puyuma. If we assume that internal arguments are free to remain in their base positions in VP and value case under c-command, then the need for DOM on personal DPs is clear, as suggested particularly by (24d), where the personal DP marked with \( i \) surfaces immediately following the verb.

In contrast to this, Tsou has VOS basic word order, nominative DPs surfacing consistently in clause-final position. Given that nominative DPs must move out of VP for case licensing, there is no need for differential marking, since nominative objects do not need to combine directly with the verb to create a VP.

(30)  

\[
\begin{align*}
a. & \quad \text{mi-ta m-ongsi 'e pasuya} \\
& \quad \text{INTR-3SG INTR-cry NOM PN} \\
& \quad \text{‘Pasuya is crying.’} \\
& \quad \text{(Tsou; Chang 2011: 281)} \\
b. & \quad \text{mo mo-si ta pangka to emi ‘o amo} \\
& \quad \text{INTR.3SG INTR-put OBL table OBL wine NOM father} \\
& \quad \text{‘Father put wine on the table.’} \\
& \quad \text{(Tsou; Chang 2011: 285)} \\
c. & \quad \text{i-ta teaph-a to kexpx ta pasuya e cxyx} \\
& \quad \text{TR-3SG put.into-TR OBL backpack OBL PN NOM lunch.box} \\
& \quad \text{‘Pasuya put the lunch box into his backpack.’} \\
& \quad \text{(Tsou; Chang 2011: 282)} \\
d. & \quad \text{i-si si-i ta amo ta emi ‘e pangka} \\
& \quad \text{TR-3SG put-APPL OBL father OBL wine NOM table} \\
& \quad \text{‘Father put wine on the table.’} \\
& \quad \text{(Tsou; Chang 2011: 285)}
\end{align*}
\]

This subsection proposed a grammaticalization pathway for the preposition \( *i \) to become a determiner. In NucAn languages, this determiner undergoes further reanalysis as a marker of the feature person and no longer can serve by itself as a marker of case.

4. Conclusion

In this paper, I reconstructed the following marking for subjects in Proto-Austronesian (PAn). Specifically, there was no nominative case marker; common DPs surfaced with a determiner, while personal DPs were unmarked.
I additionally proposed origins for overt nominative case-marking in high-order subgroups of the Austronesian family. Marking on common DPs with *k- derives from topic marking with *k- in PAn. The determiner/person marker *i traces its origin to the PAn preposition *i. The preposition was reanalyzed as a determiner when it was used to differentially mark nominative objects in the ergative daughter of PAn, Proto-Ergative Austronesian (PEAn). This determiner further grammaticalized into a marker of the feature [PERSON] in a daughter of PEAn, Proto-Nuclear Austronesian, and is now widely reflected in Formosan and Philippine languages in personal case markers.

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