

Retention or drift? Reassessing the Nuclear Austronesian hypothesis and its implications for Austronesian higher-order phylogeny*

This paper reappraises the principal morphosyntactic evidence for the *Nuclear Austronesian hypothesis* (Ross 2009, 2012) and argues that it does not support the proposed subgroup. The hypothesis rests on a distributional contrast involving four Philippine-type voice affixes. In Puyuma, Tsou, and Rukai, these affixes are restricted to environments traditionally associated with nominalization, whereas in most other Austronesian languages they also mark voice on indicative predicates. The Nuclear Austronesian hypothesis interprets this contrast as evidence for a shared innovation whereby three thematic nominalizers were reanalyzed as indicative voice markers. It accordingly places each of the three languages in a separate Austronesian primary branch excluded from the putative reanalysis. A broader examination of the distribution of these affixes yields two findings. First, the restricted paradigms of Puyuma, Tsou, and Rukai are independent innovations resulting from distinct processes of paradigmatic reduction and loss. Parallel developments in Philippine and Indonesian languages demonstrate that such changes are highly recurrent. Second, the proposed distinction between voice affixes and “nominalizers” lacks empirical support: the latter are ordinary voice affixes occurring in finite relative clauses, whose predicates may bear either indicative or non-indicative morphology. Because non-indicative relative clauses are rare, indicative forms predominate in these environments, creating the illusion that “nominalization” is specifically associated with indicative voice morphology. The putative Nuclear Austronesian branch consequently lacks the defining innovation required to establish it as a subgroup. This conclusion reconciles the morphosyntactic evidence with phonological and lexical evidence supporting Tsouic and removes the subgrouping-based rationale for locating the earliest reconstructable Austronesian homeland in Taiwan’s southern highlands.

Keywords: Austronesian higher-order phylogeny, Nuclear Austronesian hypothesis, nominalization-into-verb, directionality

*This research was supported by a Marsden Fund Fast-Start Grant (#VUW2012) from the Royal Society of New Zealand. I am grateful to the late Robert Blust, Shin Fukuda, Daniel Kaufman, Malcolm Ross, Hannah Woodfield, Christina Truong, Nathan Adamson, Bradley McDonnell, Ivan Bondoc, and two anonymous reviewers for *Oceanic Linguistics* for their valuable comments and suggestions. I also thank Jasmine Cheng and Chunming Wu for introducing me to members of the Kasavakan Puyuma and Kananavu communities, respectively. Special thanks go to my language consultants—Atrung Kagi, Simuy Kadangilran, Cokim Ruvulreng, Punik Ruvaniyaw, Angai Pa’tt, Apu’u Vayaeana, Seehe Palray, Dakis Pawan, Lisin Kalitang, Savaran Kaljalju, Sauljaljuy Padrar, Ljumeg Paljizaw, and Ivan Bondoc—for generously sharing their time and knowledge.

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1 Introduction

Linguistic subgrouping depends crucially on distinguishing shared innovations from inherited features. A central debate in Austronesian higher-order subgrouping illustrates the difficulty of making this distinction on the basis of morphosyntactic variation. The debate concerns a major locus of variation among higher-order Austronesian languages. In the majority of these languages, a phenomenon known as *nominalizer–voice affix homophony* is observed, whereby the affixal morphology used in indicative main clauses also appears in relative clauses (traditionally analyzed as nominalized environments) and in lexical items involving thematic nominalization. The Seediq examples below illustrate this pattern. In (1a), the morpheme *-un* appears in an indicative root clause as a Patient Voice (PV) affix; in (1b–c), it is traditionally analyzed as a patient nominalizer in the relative clause (1b) and in lexical nominalization (1c).

(1) Seediq

- a. wada puq-**un** na robo ka rodux
PRF eat-**PV** GEN Robo PIVOT chicken
'Robo already ate the chicken.' (patient voice root clause: *-un*-marked)
- b. rodux [_{RC} wada puq-**un** na robo]
chicken [_{RC} PRF eat-**PT.NMZ** GEN Robo]
'chicken that Robo already ate' (patient relative clause: *-un*-marked)
- c. puq-**un**
eat-**PT.NMZ**
'food; thing to be eaten' (patient nominalization: *-un*-marked)

While this pattern is found in the majority of Philippine-type Austronesian languages, it is absent from three Formosan languages of southern Taiwan: Rukai, Tsou, and Puyuma. In Puyuma, for example, indicative root clauses employ a set of verbal affixes distinct from those used in relative clauses and participant nominalization, as illustrated in (2). Crucially, the affix *-en* used in nominalization (2b–c) is cognate with the Seediq affix in (1), whereas the affix used in root clauses, *-aw* (2a), is not.¹

(2) Puyuma

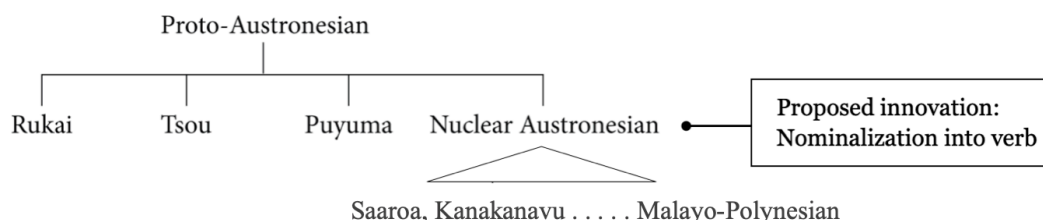
- a. ku=ekan-**aw** na bunga.
1SG.GEN=eat-**PV** PIVOT yam
'I (already) ate the yam.' (patient voice root clause: *-aw*-marked)
- b. man [_{RC} nu=a-ekan-**en**] ?
what [_{RC} 2SG.GEN=IRR-eat-**PT.NMZ**]
'What is the thing that you will eat?' (patient relative clause: *-en*-marked)
- c. a-ekan-**en**
IRR-eat-**PT.NMZ**
'food; thing to be eaten' (patient nominalization: *-en*-marked)

This morphosyntactic contrast has played a central role in an influential proposal concerning the higher-order subgrouping of the Austronesian family. Ross (2009, 2012) proposes that the homophony between thematic nominalizers and their corresponding verbal affixes, as illustrated in (1), reflects a

¹The patient nominalizer *-en* is retained only in certain Puyuma dialects, including Kasavakan, from which examples (2b–c) are drawn. See section 4.3.3 for discussion of its loss in more innovative dialects.

complex morphosyntactic innovation known as *nominalization-into-verb*, a reanalysis first proposed by Starosta, Pawley, and Reid (1981). Under this analysis, three thematic nominalizers were reanalyzed as verbal affixes marking root clause predicates following the divergence of Puyuma, Tsou, and Rukai from Proto-Austronesian. This innovation defines a fourth primary branch of Austronesian, termed *Nuclear Austronesian*, as illustrated in (3).

(3) The Nuclear Austronesian hypothesis (Ross 2009, 2012)



While the proposal offers an elegant account of this major paradigmatic distinction among higher-order Austronesian languages, recent work has pointed out that it is difficult to reconcile with independent linguistic evidence for subgrouping. In particular, it conflicts with the putative Tsouic branch, which comprises Tsou and two other Formosan languages of southern Taiwan, Saaroa and Kanakanavu (Tsuchida 1976; Ho 1998; Blust 1999). This branch is supported by both phonological innovations and exclusively shared replacements of Proto-Austronesian lexical items in basic vocabulary (Tsuchida 1976; Sagart 2014). The proposal also entails a homeland inference that is inconsistent with the current archaeological record—that the southern highlands of Taiwan constituted the earliest reconstructable center of dispersal of the Austronesian family (Ross 2012: 1320).

This paper reappraises the central proposal of the Nuclear Austronesian hypothesis—that the presence or absence of ‘nominalizer-voice affix homophony’ among higher-order Austronesian languages reflects the reanalysis of ‘nominalization-into-verb’—and argues for the opposite direction of change. Rather than treating ‘nominalizer-voice affix homophony’ as a morphosyntactic innovation, I propose instead that ‘nominalizer-voice affix homophony’ is a conservative feature retained in most Formosan languages and that Puyuma, Rukai, and Tsou independently lost this feature. Evidence for this reinterpretation comes from primary data from these three languages, alongside a re-examination of the core morphosyntax of Formosan and Malayo-Polynesian languages, which reveals parallel trajectories of change independently attested across western Austronesian.

This alternative proposal resolves the conflict between the Nuclear Austronesian hypothesis and the established phonological, lexical, and archaeological evidence, while also providing a diachronic account more consistent with the synchronic syntax of higher-order Austronesian languages.

The remainder of this paper is organized as follows. Section 2 reviews the key assumptions of the Nuclear Austronesian hypothesis. Section 3 discusses several previously understudied loci of Formosan morphosyntax that are difficult to account for under the Nuclear Austronesian hypothesis. Section 4 puts forward an alternative diachronic account, demonstrating that the absence of ‘nominalizer-voice affix homophony’ in Puyuma, Rukai, and Tsou is best analyzed as the result of independent innovations (drifts), rather than as a retentive feature. Section 5 discusses the implications of the current analysis, including those for Austronesian higher-order phylogeny and early Austronesian dispersal. Section 6 summarizes and concludes.

Except where otherwise indicated, the data presented in this paper come from primary fieldwork conducted between 2016 and 2026 on Puyuma, Tsou, Rukai, Kanakanavu, Paiwan, Amis, and Seediq.

2 Empirical basis of the Nuclear Austronesian hypothesis

I begin by revisiting the key assumptions of the Nuclear Austronesian hypothesis. As is well known, higher-order Austronesian languages of Taiwan and the Philippines exhibit a complex four-way grammatical system known as ‘Philippine-type voice’. In languages of this type, all finite verbal clauses must be marked for one of four voices: Actor Voice (AV), Patient Voice (PV), Locative Voice (LV), or Circumstantial Voice (CV). As illustrated by the Tagalog examples in (4), a change in the verbal morphology conventionally termed ‘voice’ in the Austronesian literature correlates with a change in the designation of the syntactically prominent phrase commonly referred to as the pivot, which is marked by the dedicated argument markers *ang/si*. This phrase is glossed as ‘pivot’ throughout the paper.²

(4) Tagalog

- a. B<um>ili si AJ ng polvorón mula kay Lia para kay Joy.
buy<AV> PN.PIVOT AJ INDF.ACC shortbread P₁ PN.ACC Lia P₂ PN.ACC Joy
‘AJ bought shortbread from Lia for Joy.’ (Actor Voice: <um>)
- b. Bi-bilih-in ni AJ ang polvorón mula kay Lia para kay Joy.
CONT-buy-PV PN.GEN AJ CN.PIVOT shortbread P₁ PN.ACC Lia P₂ PN.ACC Joy
‘AJ will buy the *shortbread* from Lia for Joy.’ (Patient Voice: -in)
- c. Bi-bilih-an ni AJ ng polvorón si Lia para kay Joy.
CONT-buy-LV PN.GEN AJ INDF.ACC shortbread PN.PIVOT Lia P₂ PN.ACC Joy
‘AJ will buy shortbread from *Lia* for Joy.’ (Locative Voice: -an)
- d. I-bi-bili ni AJ ng polvorón mula kay Lia si Joy.
CV-CONT-buy PN.GEN AJ INDF.ACC shortbread P₁ PN.ACC Lia PN.PIVOT Joy
‘AJ will buy shortbread from Lia for *Joy*.’ (primary data) (Circumstantial Voice: i-)

The four voice affixes used in the examples above—<um>, -en, -an, and i—are cognate among many higher-order languages and are reconstructable to Proto-Austronesian or a stage immediately after its split (Wolff 1973; Ross 2009; Blust & Chen 2017)—the precise chronology of which is one of the key questions of this paper.

(5) The four indicative voice affixes that can be traced back to early Austronesian morphology

Actor Voice	Patient Voice	Locative Voice	Circumstantial Voice
*<um>	*-en	*-an	*Si/Sa-

In the Austronesian literature, similar affixal morphology is found in three environments traditionally described as nominalization: (a) relative clauses, (b) the presupposed clause of pseudo-clefts, which is structurally a headless relative clause (Potsdam 2006; Lin 2013), and (c) lexical nominalization involving participant nominalization, which is structurally a reduced headless relative clause (Ntelitheos 2006; Chen 2017). These three environments are exemplified by the Tagalog examples in (6).

(6) Tagalog

- a. ang gabi=ng [_{RC} ka-kain-in ni Ivan]
DET taro=LK [_{RC} CONT-eat-PT.NMZ PN.GEN Ivan]
‘the taro that Ivan will eat’ (relative clause)

²Languages such as Tagalog employ different case markers for personal names (PN) and common nouns (CN). These examples use the conventional alignment-neutral case labels for Tagalog, but the choice of labels does not affect the paper’s central argument. P₁ and P₂ stand for two different prepositions.

- b. Ano ang [_{RC} ka-kain-**in** ni Ivan]?
 what PIVOT [_{RC} CONT-eat-**PT.NMZ** PN.GEN Ivan]
 ‘What is the thing that Ivan will eat?’ (pseudo-cleft)
- c. ka-kain-**in**
 CONT-eat-**PT.NMZ**
 ‘thing to be eaten; food’ (lexical nominalization)

As shown above, the patient nominalizer *-in* used in (6a–b) is homophonous with the Patient Voice affix used in verbal environments, as illustrated in (7) and earlier in (4b).

(7) Tagalog

Ka-kain-**in** ni Ivan ang polvorón.
 CONT-eat-**PV** PN.GEN Ivan CN.PIVOT shortbread
 ‘Ivan will eat the shortbread.’

This phenomenon is known as *nominalizer–voice affix homophony*, whereby the verbal affixes used in indicative root clauses are homophonous with the corresponding thematic nominalizers. This homophony underlies the well-known claim in the literature that Tagalog and many other Austronesian languages lack a noun–verb distinction (e.g. Kaufman 2009, 2017; Kaufman et al. 2026).

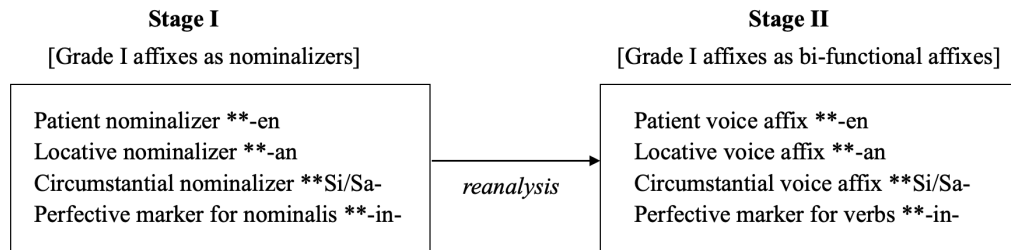
The surprising absence of this feature in three indigenous languages of Taiwan was first pointed out by Ross (2009). While most higher-order Austronesian languages employ the same set of affixes in root clauses and relative clauses (8a), as illustrated by the parts of the paradigms highlighted in gray, Rukai (8b), Puyuma (8c), and Tsou (8d) employ distinct morphology in these two environments and thus lack ‘nominalizer–voice affix homophony’, as illustrated by the parts of the paradigms highlighted in blue. See also Ross & Zeitoun (2024) for an overview of this typology.

(8) Voice and nominalization paradigms of higher-order Austronesian languages (Ross 2009: 317–321)

	Actor Voice		Patient Voice		Locative Voice		Circumstantial Voice	
	V	N	V	N	V	N	V	N
a. Majority pattern	<i>*M-</i>	<i>*M-</i>	<i>*-en</i>	<i>*-en</i>	<i>*-an</i>	<i>*-an</i>	<i>*Si/Sa-</i>	<i>*Si/Sa-</i>
b. Rukai	<i>m-</i>	<i>m-/ta-</i>	–	<i>-ane</i>	–	<i>ta-...-ane</i>	–	<i>sa- (<*Si-)</i>
c. Puyuma	<i></i>	<i></i>	<i>-aw</i>	<i>-en</i>	<i>-ay</i>	<i>-an</i>	<i>-anay</i>	<i>i- (<*Si-)</i>
d. Tsou	<i>M-</i>	<i>M-</i>	<i>-a</i>	<i>-a</i>	<i>-i</i>	<i>-i</i>	<i>-(n)eni</i>	<i>-(n)eni</i>

How did this major paradigmatic distinction come about? The Nuclear Austronesian hypothesis holds that the paradigms of Puyuma, Rukai, and Tsou represent an earlier stage, whereas the symmetrical pattern involving ‘nominalizer–voice affix homophony’ found in the majority of Austronesian languages reflects a post-Proto-Austronesian innovation that excluded the primary-level offshoots, as illustrated in (9). For simplicity, I refer to the three thematic nominalizers argued to have undergone this reanalysis as ‘Grade I affixes’ throughout this paper.

(9) The purported evolutionary pathway of ‘nominalizer-voice affix homophony’



Together with the proposed reanalysis of the three thematic nominalizers, the perfective marker *-in-/ni-* has likewise been argued to have undergone the same innovation: from marking perfective aspect in nominalizations to marking perfective aspect in verbal clauses, as illustrated above in (9). This marker commonly co-occurs with the LV and CV affixes—or forms a portmanteau affix with the patient voice (Blust & Chen 2017)—to mark perfectiveness in both verbal and nominal environments, as exemplified by the Tagalog examples in (10).

(10) Tagalog: nominalizer-voice affix homophony

- a. **ni**-luto ni Maria ang sinigang.
 PFV.PV-cook PN.GEN Maria CN.PIVOT sinigang
 ‘Maria cooked the sinigang.’ (ni- as a perfective marker used in root clauses)
- b. k<in>ain ni Ivan ang sinigang na [RC **ni**-luto ni Maria].
 eat<PFV.PV> PN.GEN Ivan CN.PIVOT sinigang LK [RC PFV.PV-cook PN.GEN Maria]
 ‘Ivan ate the sinigang that Maria cooked.’ (ni- used in relative clauses)
- c. ang **ni**-luto
 DET PFV.PV-cook
 ‘the thing that was cooked’ (ni- used in lexical nominalization)

Alongside this analysis, it is further assumed that the possessor in nominal environments was reanalyzed as a genitive-marked agent in root-clause environments, a development that resulted in *possessive-genitive homophony*. This assumption is based on the observed homophony between possessive marking and agentive marking in PV, LV, and CV constructions in many higher-order Austronesian languages, as exemplified by the Tagalog data below.

(11) Tagalog: possessive-genitive homophony

- a. sombrero **ni** Ivan
 hat PN.POSS Ivan
 ‘Ivan’s hat’ (possessive marking: ni)
- b. Bi-bilih-in **ni** Ivan ang sombrero.
 RED-buy-PV PN.GEN Ivan CN.PIVOT hat
 ‘Ivan will buy the hat.’ (genitive agent marking: ni)

On this analysis, the Tagalog-style syntax found in the majority of Philippine-type Austronesian languages, which lacks a noun–verb distinction, is the outcome of this purported morphosyntactic reanalysis outlined in (9). The Nuclear Austronesian hypothesis and/or its proposed innovation of “nominalization-into-verb” has subsequently been adopted or further developed in several morphosyntactic studies, although often within substantially revised higher-order classifications (Aldridge 2015;

Ross 2015a, b; Aldridge 2016; Zeitoun and Teng 2016; Aldridge 2020, 2021a, b; Aldridge and Yanagida 2021; Aldridge 2023; Ross and Zeitoun 2024; among others; see also Kaufman 2026 for a critical review).

3 Synchronic issues for the Nuclear Austronesian hypothesis

Having reviewed the empirical basis of the Nuclear Austronesian hypothesis, this section turns to the key focus of this paper:

- (12) Does the proposed development of ‘nominalization-into-verb’ provide a valid account of the synchronic voice systems found in higher-order Austronesian languages?

I will demonstrate that a closer examination of the synchronic syntax of Formosan languages suggests that the answer is negative.

Section 3.1 revisits the basics of the ‘nominalization-into-verb’ proposal. Section 3.2 demonstrates that this proposal fails to account for several key characteristics of the voice systems of Formosan languages. Section 3.3 re-examines the distribution of the relevant voice morphology across Formosan languages and highlights its inconsistencies with the Nuclear Austronesian hypothesis.

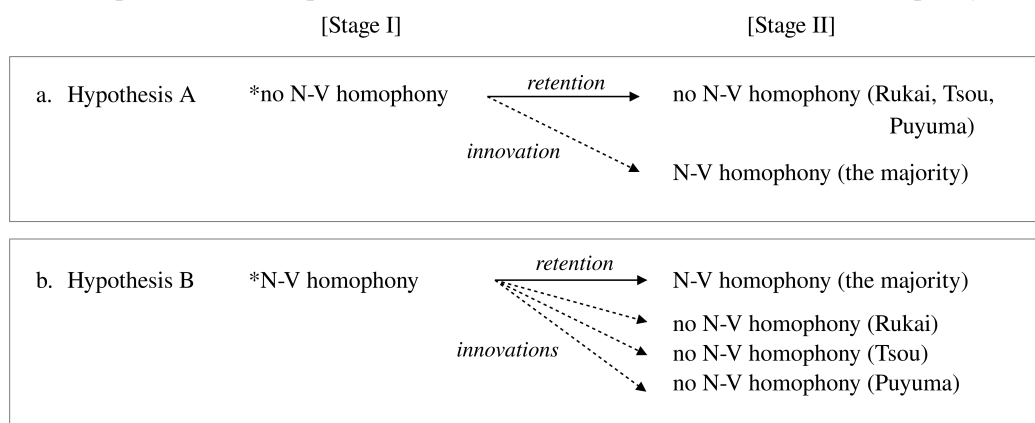
3.1 The directionality question

In theory, the synchronic variation in the presence or absence of nominalizer–voice affix homophony discussed above permits two diachronic interpretations:

- (13) a. **Hypothesis A:** the lack of ‘nominalizer-voice affix homophony’ reflects the ancestral state
b. **Hypothesis B:** the presence of the homophony reflects the prototype

Under Hypothesis A, the absence of ‘nominalizer-voice affix homophony’ in Puyuma, Tsou, and Rukai represents a *retention*, whereas its presence elsewhere reflects an *innovation*, as illustrated in (14a). Under Hypothesis B, by contrast, the homophony found in most higher-order Austronesian subgroups represents a *retention*, whereas its absence in Puyuma, Tsou, and Rukai reflects *independent innovations*, as illustrated in (14b). Both directions of change are logically possible and would yield the same synchronic distribution.

- (14) Two interpretations of the presence or absence of ‘nominalizer-voice affix homophony’



In what follows, I discuss how the ‘nominalization-into-verb’ analysis (Hypothesis A) makes inaccurate predictions about the synchronic morphosyntax of Formosan languages, suggesting that Hypothesis A may not be on the right track.

3.2 Issues with the one-to-many mapping between thematic roles and voice selection

As introduced above, the Nuclear Austronesian hypothesis holds that the modern indicative voice paradigms of the purported ‘Nuclear Austronesian languages’ arose through the reanalysis of three thematic nominalizers as voice affixes: Patient Voice, Locative Voice, and Circumstantial Voice.

(15) The purported reanalysis as a whole

a. *Patient nominalizer	————→	Patient nominalizer/voice affix
b. *Locative nominalizer	————→	Locative nominalizer/voice affix
c. *Circumstantial nominalizer	————→	Circumstantial nominalizer/voice affix
d. *perfective affix for nominals	————→	perfective marker for nominals/verbs
e. *possessor	————→	possessor/the agent in non-AV clauses
f. *possessor marker	————→	possessor marker/marker for agent in non-AV clauses

A closer examination of key properties of the voice systems of Formosan languages, however, suggests that this hypothesis rests on an inaccurate understanding of the synchronic syntax—namely, that voice selection is determined by the thematic role of the pivot. The following subsections present specific evidence against this analysis.

3.2.1 Mismatch between Patient Voice and patient/theme roles

A first issue with the hypothesis concerns its inability to account for a nontrivial constraint shared across Philippine-type languages: the undergoer of an unaccusative verb is incompatible with the so-called ‘patient nominalizer’ (i.e. PV morphology) in relative clauses and lexical nominalization. If this morphology were genuinely a patient nominalizer, the restriction would be unexpected. The undergoer of an unaccusative verb and the patient of a transitive verb bear the same thematic role and should therefore be compatible with the same nominalizer.

The English patient/undergoer-denoting suffix *-ee*, for example, exhibits this broader compatibility: it forms nouns denoting the undergoers of unaccusative verbs, as in *escapee*, *returnee*, and the less common *arrivee*, as well as the patients of transitive verbs, as in *mentee*, *employee*, and *interviewee* (Barker 1998). A similar pattern is found in Kawaiisu (Numic), where the patient nominalizer *-p* derives both *maha-p* ‘clean laundry’ from the transitive verb ‘wash’ and *piki-p* ‘pus’ from the unaccusative verb ‘rot’ (Toosarvandani 2010). These examples jointly show that the same nominalizer can target an undergoer regardless of whether it corresponds to a transitive object or an unaccusative subject—in line with the fact that a thematic nominalizer targets *thematic role* rather than grammatical function or transitivity.

The putative patient nominalizer in Austronesian, however, shows an unexpected pattern. Relativizing the patient of an unaccusative verb (e.g. ‘die’) requires the relative clause to be marked in AV rather than in PV morphology, as illustrated with the Seediq and Tagalog data below.

(16) Seediq: Incompatibility of unaccusative verbs with a patient nominalizer/PV affix

- a. ima ka [_{RC} { *huqil-**un** / ✓**mp**-huqil } kusun]?
 who PIVOT [_{RC} { *die-**PV**.NMZ / ✓**AV**.**IRR**.NMZ-die } tomorrow]
 ‘Who is the one that will die tomorrow?’ (Presupposed clause of a cleft)
- b. m<n>sepi=ku [_{RC} { *huqil-**un** / ✓**mp**-huqil }
 AV<PRF>dream=1SG.PIVOT ACC [_{RC} { *PRF-die-**PV**.NMZ / ✓**AV**.**IRR**.NMZ-die }
 kusun].
 tomorrow]
 ‘I dreamt of the one [who will die tomorrow].’ (Unaccusative RC)
- c. { *huqil-**un** / ✓**mp**-huqil } kusun ka riso nii.
 { die-**PV** / ✓**AV**.**IRR**-die } tomorrow PIVOT young.man this
 ‘This young man will die tomorrow.’ (Unaccusative root clause)

(17) Tagalog: Incompatibility of unaccusative verbs with a patient nominalizer/PV affix³

- a. sino ang [_{RC} { *pa-patay-**en** / ✓ma-ma-matay } bukas]?
 who PIVOT [_{RC} { *IRR-die-**PV**.NMZ / ✓**IRR**-**AV**.NMZ-die } tomorrow]
 ‘Who is the one that will die tomorrow?’ (Unaccusative presupposed clause of a cleft)
- b. na-panaginip-an=ko ang lalaki=ng [_{RC} { *pa-patay-**en** / ✓ma-**ma**-matay }
 PRF-dream-LV=1SG.GEN PIVOT man=LK [_{RC} { *IRR-die-**PV**.NMZ / ✓**IRR**-**AV**.NMZ-die }
 bukas].
 tomorrow]
 ‘I dreamt about the man who will die tomorrow.’ (Unaccusative RC)
- c. *pa-patay-**in**-/✓ma-**ma**-matay ang lalaki bukas.
 IRR-die-**PV**/✓**IRR**-**AV**-die PIVOT man tomorrow
 ‘The man will die tomorrow.’ (Unaccusative root clause)

In other words, although an unaccusative subject bears an undergoer/patient role, the appropriate nominalizer is the putative ‘agent nominalizer’, rather than the purported ‘patient nominalizer’ predicted by the ‘nominalization-into-verb’ hypothesis. This contradicts the prediction of the nominalization-into-verb hypothesis that patient nominalization is associated with the patient nominalizers *-un* (Seediq) and *-en* (Tagalog). Examples (16b) and (17b) further show that the same pattern occurs in ordinary relative clauses, while (16c) and (17c) demonstrate its occurrence in root clauses.⁴

This incompatibility is unexpected and difficult to explain under the ‘nominalization-into-verb’ hypothesis, especially given that the patient must instead combine with an AV affix (16)–(17). This observation suggests that the distribution of the PV affix is sensitive to the grammatical relation of an argument, rather than simply to its thematic role (e.g. Rackowski 2002; Chen 2025).⁵ This finding thus

³The Tagalog PV example is grammatical but has a distinct meaning: *papatay-in* denotes killing rather than dying. Accordingly, (17a) means ‘Who will be killed tomorrow?’

⁴Although Patient and Theme are distinguished in some approaches, other approaches use the terms interchangeably or subsume them under a single Patient/Theme role. Since the ‘nominalization-into-verb’ hypothesis proposes only a four-way thematic contrast, I assume that it does not systematically distinguish between Patient and Theme. Indeed, in many of the relevant constructions, the argument may bear either role depending on the lexical semantics of the verb. For example, the subject of an unaccusative verb may be interpreted as a Theme or a Patient, depending on whether it undergoes a change of location or state. Accordingly, Patient and Theme are treated together here except where the distinction is directly relevant.

⁵Notably, the same mapping is found in the putative non-Nuclear Austronesian languages Puyuma and Tsou. The implications of this observation will be discussed in section 4.

undermines the assumption that Philippine-type voice affixes originated as nominalizers associated with particular thematic roles.⁶

3.2.2 Thematic multifunctionality of Circumstantial Voice

A second issue for the ‘nominalization-into-verb’ hypothesis concerns the often-neglected functional diversity of Philippine-type voice affixes.

Under the hypothesis, the three non-AV indicative affixes derive from nominalizers associated with three specific thematic roles: patient, location, and instrument, respectively. However, the precise functions of these voice affixes are considerably more diverse. As shown in (18), each of these affixes can promote multiple types of phrases to pivot status across Philippine-type languages, both in root clauses and in relative clauses or pseudo-clefts.

(18) Mapping between voice type and possible pivot roles in higher-order Austronesian languages

a. Actor voice	◦ agent in unergatives or two-place clauses ◦ patient in unaccusatives ◦ causer in productive causatives ◦ experiencer in statives
b. Patient voice	◦ patient in two-place clauses ◦ causee in productive causatives ◦ recipient in ditransitives
c. Locative voice	◦ locative, source, goal, temporal phrases
d. Circumstantial voice	◦ instrument, benefactive, reason, manner, degree, stimulus, purpose ◦ patient/theme of productive causatives ◦ patient/theme of control construction ◦ theme of ditransitives

This multifunctionality is illustrated with the Paiwan examples below, with parallel patterns attested across at least 15 other Philippine-type Austronesian languages (Chen 2017, 2025). As shown, CV morphology is not associated with any particular grammatical or thematic role borne by the pivot phrase. Rather, the range of phrases that trigger CV extends from core arguments structurally lower than the direct object—such as patients/themes in double-object ditransitives, causative constructions, and control constructions—to various adjunct- or oblique-like phrases not selected by the verb, including benefactors, instruments, reasons, purposes, manners, and degrees.

(19) Paiwan

- a. 'u-s<in>i-vaik a qalɟup ta vavuy **ti** **kapi**.
 1SG.NOM-**[CV]**-PRF-go LK <AV> ACC wild.pig **PIVOT Kapi**
 ‘I went hunting wild pigs with *Kapi*.’ (CV pivot: comitative)
- b. 'u-s<in>i-patagilj=anga=**sun** a sapay ta kaitang.
 1SG.NOM-**[CV]**(PRF)begin=COS=**2SG.PIVOT** LK <AV>grow ACC field
 ‘I have started to cultivate the field for *you*.’ (CV pivot: benefactive)

⁶As will be shown in section 4, however, the pattern described above follows directly from an alternative analysis in which Patient Voice does not derive from a thematic nominalizer but instead indexes a direct object pivot phrase (e.g. Pearson 2001, 2005; Chen 2017, 2024). Because unaccusative verbs have no direct object, they are correctly predicted to be incompatible with a PV affix/patient nominalizer.

- c. Si-qihul=si' hiya' 'i' Ø-pa-patas **ku'** **ruas**.
 [CV]-force=2SG.GEN 3SG.ACC LK AV-CAUS-write **PIVOT book**
 'You forced him to read *the book*.' (CV pivot: theme)
- d. S(in)i-pa-'alup tay palang **a** **icu a vavuy**.
 1SG.GEN=[CV]⟨ PRF ⟩-CAUS-hunt ACC Palang **PIVOT this LK boar**
 'I made Palang hunt *this wild pig*.' (CV pivot: theme)

In other words, a closer examination of the four-way voice systems of these languages reveals that there is no one-to-one correspondence between a thematic role and a particular voice affix. Depending on the syntactic environment, a syntactically prominent theme argument in a so-called nominalized environment may co-occur with Actor Voice, Patient Voice, or Circumstantial Voice morphology. Consider the Tagalog examples in (20), which demonstrate the same mismatch in relative clauses.

(20) Tagalog: One-to-many mapping between voice selection and theme nominalization

- a. Ito ang pusa-ng [_{RC} ha-habul-**in** ko bukas].
 this PIVOT cat-LK [_{RC} CONT-chase-**PT.NMZ** 1SG.GEN tomorrow]
 'This is the cat that I will chase tomorrow.' (patient nominalization with PV morphology)
- b. Ito ang pusa-ng [_{RC} **na**-matay kahapon].
 this PIVOT cat-LK [_{RC} **PRF.AV**-die yesterday]
 'This is the cat that died yesterday.' (patient nominalization with AV morphology)
- c. Ito ang libro-ng [_{RC} **i-b<in>**igay ko kay Ivan kahapon].
 this PIVOT book-LK [_{RC} CV-give<PRF> 1SG.GEN PN.ACC Ivan yesterday]
 'This is the book that I gave Ivan yesterday.' (patient nominalization with CV morphology)
- d. Ito ang pusa-ng [_{RC} **i-pa-pa**-habol ko kay Ivan bukas].
 this PIVOT cat=LK [_{RC} CV-CAUS-CONT-chase 1SG.GEN PN.ACC Ivan tomorrow]
 'This is the cat that I will have Ivan chase tomorrow.' (patient nominalization with CV morphology)

Because nominalizers are typically associated crosslinguistically with particular thematic roles, deriving Philippine-type voice affixes from nominalizers leaves the synchronic functional diversity of these affixes unexplained. The empirical evidence instead indicates that they are defined syntactically rather than thematically, further suggesting that the 'nominalization-into-verb' hypothesis does not accurately account for the synchronic facts.

One might object that these mismatches do not by themselves invalidate the 'nominalization-into-verb' hypothesis, since the functions of the relevant affixes could have changed through subsequent grammaticalization. Such an account is logically possible but diachronically highly implausible, as it would require grammaticalization not merely to broaden or shift the functions of individual affixes, but to produce a systematic and substantial realignment of their semantic associations. In particular, the Theme argument of an unaccusative predicate would have to become associated with a voice category linked primarily to agent-like arguments, while the Themes of ditransitive and causative constructions—both canonical object-like participants—would have to be reassigned to Circumstantial Voice, a category otherwise associated with adjunct-like roles such as instruments and beneficiaries. Although grammaticalization may produce semantic extensions and functional change, it is difficult to motivate precisely this cross-cutting reorganization of core and peripheral thematic roles. Appealing to subsequent grammaticalization therefore does not provide a plausible explanation for the observed mismatches.

3.2.3 Interim conclusion

We may therefore conclude that the ‘nominalization-into-verb’ hypothesis rests on the inaccurate generalization that voice selection in root clauses is determined by the thematic role of the pivot. A closer examination reveals several nontrivial mismatches between thematic roles and voice selection. In particular, a theme pivot is not invariably associated with Patient Voice but may instead require Actor Voice or Circumstantial Voice, depending on the valency and lexical type of the verb.

3.3 Issues with the distribution of Grade I–III morphology

I now turn to a second set of evidence that challenges a central assumption of the Nuclear Austronesian hypothesis:

- (21) a. the unexpected occurrence of Grade II and III morphology in nominalized environments in putative Nuclear Austronesian languages; and
- b. the equally unexpected occurrence of the same set of affixes in nominalized environments in so-called ‘non-Nuclear Austronesian’ languages.

Together, these patterns undermine the claim that only a particular subset of Philippine-type voice affixes has a distinct nominal origin.

As illustrated below (22), higher-order Austronesian languages commonly possess three series of voice morphology distinguished by mood. In the majority of these languages (i.e. the so-called ‘Nuclear Austronesian languages’), Grade I morphology (reflexes of **<um>*, **-en*, **-an*, and **Si/Sa-*) occurs primarily in indicative root clauses and is proposed to have arisen through ‘nominalization-into-verb’. Grade II morphology (reflexes of **-a*, **-aw*, **-ay*, **-anay*) occurs in optative and hortative clauses, whereas Grade III morphology (reflexes of **∅*, **-u*, **-i*, **-an*) occurs in imperative and negative clauses.

- (22) Mood inflections in early Austronesian voice system (Ross 2012; Blust & Chen 2017)

	AV	PV	LV	CV	
a. Grade I	*<um>	*-en	*-an	*Si-/Sa-	indicative
b. Grade II	*-a	*-aw	*-ay	*-anay	optative, hortative
c. Grade III	*-Ø	*-u	*-i	*-an	imperative, negative

This three-grade voice alternation is illustrated by the Ataval examples below.

- (23) Atayal: Mood inflections in Patient Voice morphology

- a. na-niq-**un**=mu ku siyam.
CA.RED-eat-**PV.GRADE 1**=1 SG.GEN PIVOT pork
'I will eat the pork.'
(Grade I: indicative Patient Voice affix *-un*)
- b. niq-**aw**=mu ku siyam
eat-**PV.GRADE 2**=1 SG.GEN PIVOT pork
'If only I could eat the pork!'
(Grade II: optative Patient Voice *-aw*)
- c. niq-**i** ku sehuy!
eat-**PV.GRADE 3** PIVOT taro
'Eat the taro!'
(Grade III: imperative Patient Voice *-i*)

- d. ini=nya niq-i ku sehuy
 NEG=3.GEN eat-PV.GRADE 3 PIVOT taro
 ‘He didn’t eat the taro.’ (Huang 2001: 64) (Grade III: negative Patient Voice -i)

The ‘nominalization-into-verb’ hypothesis holds that this paradigm is the outcome of Grade I morphology being reanalyzed from three thematic nominalizers, as in (24).

- (24) Proposed reanalysis of ‘nominalization-into-verb’ (Starosta, Pawley, & Reid 1982/2009; Ross 2009)

	AV	PV	LV	CV	
	—	*-en	*-an	*Si-/Sa-	“nominalizer”
a. Grade I	*<um>	*-en	*-an	*Si-/Sa-	indicative
b. Grade II	*-a	*-aw	*-ay	*-anay	optative, hortative
c. Grade III	*-Ø	*-u	*-i	*-an	imperative, negative

← ‘Nominalization into verb’

This hypothesis thus makes a testable prediction concerning the distribution of Grade I–III morphology in higher-order Austronesian languages:

- (25) Testable prediction of the Nuclear Austronesian hypothesis

Grade II and III morphology was not reanalyzed from nominalizers but is verbal in origin (24); it should therefore never function as ‘nominalizing morphology’ in relative clauses, pseudo-clefts, or lexical nominalizations in either the putative Nuclear Austronesian or non-Nuclear Austronesian languages.

In what follows, I show that this prediction is contradicted by recent descriptions of Formosan languages.

3.3.1 Unexpected use of Grade II morphology in nominalized environments

Contrary to the prediction above, a closer examination of the Formosan literature reveals that Grade II morphology occurs not only in root clauses but also in nominalized environments. Consider the following examples from two putative Nuclear Austronesian languages, Seediq and Siraya, in which Grade II morphology occurs both in main clauses and in the presupposed clauses of pseudo-clefts.

- (26) Seediq: Grade II CV affix in verbal and nominal environments (Tsukida 2009:236, 447)

- a. keret-**ani**=su Ø sagas ka yayu
 cut-CV.GRADE 2=2SG.GEN ACC watermelon PIVOT knife
 ‘You should cut the watermelon with a knife.’ (Grade II affix in main clause)
- b. yayu niyi ka [_{RC} keret-**ani** Ø sagas]
 knife this PIVOT [_{RC} cut-CV.GRADE 2 ACC watermelon]
 ‘This knife is what one should cut the watermelon with.’ (Grade II affix in pseudo-cleft)

- (27) Siraya: Grade II PV affix in verbal and nominal environments (Adelaar 2011: 96, 91)

- a. pi-i-alak-**aw** lava tumang ta ti Jesus?
 K-LOC-offspring-PV.GRADE 2 perhaps where PIVOT PN Jesus
 ‘Where will this Jesus be born?’ (Grade II affix in main clause)

- b. mang ta [RC kan-**aw**=mian]? mang ta [RC
 what PIVOT [RC eat-**PV.GRADE 2**=1PL.EXCL.GEN] what PIVOT [RC
 it-**aw**=mian]?
 drink-**PV.GRADE 2**=1PL.EXCL.GEN]
 ‘What are we going to eat? What are we going to drink?’ (Grade II affix in pseudo-cleft)

In addition to its occurrence in relative clauses, Grade II morphology in Siraya also functions as nominalizing morphology in lexical nominalizations. Consider the examples in (28).

- (28) Siraya: Grade II affixes in lexical nominalization (Adelaar 2011: 151, 152, 156)
- a. ukukua-**aw**
 marry-**PV.GRADE 2**
 ‘someone to be married; wife-to-be’ (Grade II affix -aw as patient nominalizer)
- b. pa-i-baba’-**ey**
 SM-LOC-rest-**LV.GRADE 2**
 ‘place where one will rest’ (Grade II affix -ay as locative nominalizer)

A parallel pattern is found in Saaroa, another Formosan language placed within the putative Nuclear Austronesian branch, which likewise allows Grade II morphology in both main clauses and lexical nominalization, as in (29).

- (29) Saaroa: Grade II morphology in verbal and nominal environments
- a. vur-**ani**=cu=a=ailhaku a sulhatu uluku.
 give-**CV.GRADE 2**=COS=1SG.GEN PIVOT book Eleke
 ‘I gave the book to Eleke.’ (Grade II morphology in main clause)
- b. lhi-vur-**ani**
 PRF-give-**CV.GRADE 2**
 ‘what was given’ (Zeitoun and Teng 2016) (Grade II morphology in lexical nominalization)

Like Grade II affixes, Grade III morphology may also occur in nominalized environments. Consider the following examples from Atayal, a Nuclear Austronesian language, in which Grade III affixes occur in negative relative clauses (30b), paralleling their use in negative root clauses (30a).

- (30) Atayal: Grade III LV affixes in verbal and nominal environments
- a. ini=nya niq-**i** qu buqoh
 NEG=3SG.GEN eat-**LOC.GRADE 3** PIVOT banana
 ‘He/she didn’t eat the banana.’ (Safulao Payas p.c.) (Grade III affix in main clause)
- b. buqoh nanak qu [RC ini=nya niq-**i**]
 banana only pivot [RC NEG=3SG.GEN eat-**LOC.GRADE 3**]
 ‘Banana is the only thing that he/she didn’t eat.’ (Jiang 2016: 204) (Grade III affix in pseudo-cleft)

The availability of Grade II–III morphology in nominal environments in putative Nuclear Austronesian languages thus undermines the empirical starting point of the ‘nominalization-into-verb’ hypothesis: the claim that only Grade I affixes may occur in such environments. In the next section, I show that the same distribution is also attested in the putative “non-Nuclear Austronesian” languages, further calling the validity of this hypothesis into question.

3.3.2 ‘Nominalizer-voice affix homophony’ with Grade II–III morphology

A further challenge to the ‘nominalization-into-verb’ hypothesis comes from the often-overlooked fact that ‘nominalizer–voice affix homophony’ is also attested in the putative non-Nuclear Austronesian languages Tsou and Puyuma, where it involves Grade II and III morphology rather than Grade I morphology. The following examples illustrate this pattern.

- (31) Tsou: Grade II LV affix in verbal and nominal environments (Chang 2004: 169)
- a. i-si ait-i ta pasuya ‘o ‘avai
 NAV.LS-3SG.GEN see-**LV.GRADE 2** GEN Pasuya PIVOT Avay
 ‘Pasuya saw Avay.’ (Grade II affix in main clause)
- b. zou sia na [RC i-si ait-i ta pasuya]
 EMPH who PIVOT [RC NAV.LS-3SG.GEN see-**LV.GRADE 2** GEN Pasuya]
 ‘Who is the one that Pasuya saw?’ (Grade II affix in pseudo-cleft)
- (32) Puyuma: Grade III LV affix in verbal and nominal environments (Jiang 2016: 189)
- a. ‘azi ku=tengez-i i misak
 NEG 1SG.GEN=beat-**LV.GRADE 3** SG.PIVOT Misak.
 ‘I did not beat Misak.’ (Jiang 2016: 189, 188) (Grade III affix in main clause)
- b. maumau i misak na [RC ‘azi ku=tengez-i]
 EMPH.COP SG.PIVOT Misak PIVOT [RC NEG 1SG.GEN=beat-**LV.GRADE 3**]
 ‘Misak is the one that I didn’t beat.’ (Grade III affix in pseudo-cleft)

As shown above, in both languages, Grade II–III morphology can be used in both root clauses and relative clauses/pseudo-clefts.⁷ This observation poses a logical challenge to the Nuclear Austronesian hypothesis: under this account, Tsou and Puyuma must have also undergone the reanalysis of ‘nominalization-into-verb’ to derive the homophony between verbal and nominal morphology, with a different set of affixes from those reconstructed for Nuclear Austronesian.

The presence of ‘nominalizer–voice affix homophony’ in languages excluded from the putative ‘nominalization-into-verb’ innovation thus strongly suggests that a single reanalysis cannot adequately account for the distribution of Grade I–III morphology across higher-order Austronesian subgroups.

3.4 Issues with the AV/non-AV asymmetry in ‘nominalizer-voice affix’ homophony

Finally, as introduced in Section 3.1, the Nuclear Austronesian hypothesis posits a dichotomy between Actor Voice and the three non-Actor voices: PV, LV, and CV. Specifically, it assumes that the Grade I (indicative) AV affix was excluded from the purported reanalysis of ‘nominalization-into-verb’. In other words, synchronic AV constructions are treated as direct retentions from Proto-Austronesian, whereas PV, LV, and CV constructions are argued to have arisen through the reanalysis of nominalized constructions (Starosta, Pawley, & Reid 1982/2009; Ross 2009, 2012).

⁷The homophony has been independently confirmed through primary fieldwork on both languages, although parallel data are omitted here for reasons of space. See Section 4.3 for further discussion of the synchronic voice paradigms of Tsou and Puyuma.

(33) Derivational relation between voice and nominalization paradigms proposed in Ross (2009)

	AV	PV	LV	CV	
	—	*-en	*-an	*Si-/Sa-	“nominalizer”
a. Grade I	*<um>	*-en	*-an	*Si-/Sa-	indicative
b. Grade II	*-a	*-aw	*-ay	*-anay	optative, hortative
c. Grade III	*-Ø	*-u	*-i	*-an	imperative, negative

← ‘Nominalization into verb’

Under the logic of the nominalization-into-verb hypothesis, however, the rationale for excluding the AV affix from the purported reanalysis is unclear. Across higher-order Austronesian languages—including both purported Nuclear Austronesian languages and the proposed primary-level offshoots Puyuma, Rukai, and Tsou—Actor Voice morphology occurs in both verbal and the so-called nominal environments. Consider the following examples from Seediq (Nuclear Austronesian), Tagalog (Nuclear Austronesian), and Puyuma (non-Nuclear Austronesian).

(34) Seediq: ‘nominalizer-voice affix homophony’ in AV morphology

- a. k$\mathbf{m}$$\langle n \rangle$ee ki ka Dakis
 dance$\langle \mathbf{AV} \rangle$PRF PIVOT Dakis
 ‘Dakis danced.’ (

b. k$\mathbf{m}$$\langle n \rangle$ee ki nii
 dance-$\langle \mathbf{AV} \rangle$-PRF this
 ‘the one who danced’ (

(35) Tagalog: ‘nominalizer-voice affix homophony’ in AV morphology

- a. k$\mathbf{um}$anta si Ivan ng kanta.
 $\langle \mathbf{AV} \rangle$sing PIVOT Ivan INDF.ACC song
 ‘Ivan sang (a song).’ (

b. ang k$\mathbf{um}$anta (ng kanta).
 DET $\langle \mathbf{AV} \rangle$sing (INDF.ACC song)
 ‘the one who sang (a song)’ (

(36) Puyuma: ‘nominalizer-voice affix homophony’ in AV morphology

- a. s$\mathbf{em}$enay=ku (dra senay)
 sing$\langle \mathbf{AV} \rangle$=1SG.PIVOT (INDF.ACC song)
 ‘I sang (a/the song).’ (

b. na s$\mathbf{em}$enay (dra senay)
 DEF.PIVOT sing$\langle \mathbf{AV} \rangle$ (INDF.ACC song)
 ‘the one who sang (a song)’ (

Given this pattern, accommodating the observed ‘nominalizer–voice affix’ homophony in AV within the ‘nominalization-into-verb’ hypothesis would require one of the following three scenarios:

- (37) a. **A parallel reanalysis deriving the Actor Voice:** ‘Nominalization-into-verb’ of the agent nominalizer occurred in Proto-Austronesian, prior to the earliest splits within the family.
- b. **‘Nominalization-into-verb’ as multiple parallel drifts:** An agent nominalizer underwent ‘nominalization-into-verb’ independently in all four Austronesian primary branches, Puyuma, Tsou, Rukai, and Proto-Nuclear Austronesian, resulting in four parallel developments that eliminated the inherited Proto-Austronesian verbal paradigm.

- c. **Nominalizer–voice affix homophony in AV as chance convergence:** The homophony involving AV arose independently in Puyuma, Rukai, and Tsou through chance convergence.

While the scenarios in (37b) and (37c) are clearly disfavored, the scenario in (37a) also presents significant theoretical difficulties. It requires us to assume either (i) that Proto-Austronesian lacked verbal clauses altogether or (ii) that Proto-Austronesian nominalizers underwent a wholesale reanalysis that eliminated the entire inherited verbal paradigm. Moreover, as discussed in detail in Section 3.2.1, neither account (i)–(ii) captures an important property of Philippine-type voice systems: the synchronic function of the AV affix is not invariably associated with the agent role and may instead mark patient-oriented constructions or patient nominalization, depending on the lexical properties of the verb root (e.g. bivalent vs. unaccusative).

3.5 Interim conclusion

In sum, the ‘nominalization-into-verb’ hypothesis is incompatible with four important properties of higher-order Austronesian languages:

- (38) a. There is no one-to-one correspondence between Grade I (indicative) voice morphology and particular thematic roles (Section 3.2).
 b. Grade II–III morphology may occur in so-called nominalized environments in purported Nuclear Austronesian languages, undermining the assumption that such environments are restricted to Grade I affixes (Section 3.3.1).
 c. ‘Nominalizer–voice affix homophony’ is also attested in purported non-Nuclear Austronesian languages, calling into question the explanatory power of the Nuclear Austronesian hypothesis (Section 3.3.2).
 d. ‘Nominalizer–voice affix homophony’ involves not only PV, LV, and CV affixes but also Actor Voice morphology across all four putative primary branches of Austronesian, further calling into question the explanatory power of the Nuclear Austronesian hypothesis (Section 3.4).

4 Retention or drift? ‘Nominalizer–voice affix homophony’ as a terminological illusion

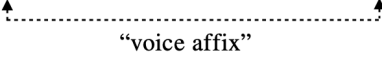
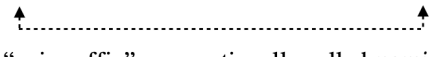
In this section, I present an alternative account of Austronesian nominalizer-voice affix homophony and demonstrate how it better captures the synchronic patterns discussed above.

4.1 Directionality revisited: ‘Nominalization-into-verb’ as a terminological illusion

I argue for Hypothesis B in (14). Specifically, I propose that the apparent homophony between nominalizers and voice affixes reflects an inherited pattern that has been retained in most Austronesian languages. I further argue that the reported absence of Grade II–III forms from nominalization contexts is an artifact of their relative infrequency in relative clauses and lexical nominalizations.

More fundamentally, the distinction between “nominalizers” and voice affixes is terminological rather than grammatical. Both labels refer to Philippine-type voice morphology in different syntactic environments. The so-called nominalizers are ordinary voice affixes on predicates in finite relative clauses modifying a nominal head, as schematized in (39a)–(39b).

(39) ‘Nominalizer-voice affix homophony’ as a terminological illusion⁸

- a. “voice affix”: $[_{CP} \text{ TopP}_{[u\delta]} \dots C [_{TP} V \dots DP_1 DP_{2[\delta]} \dots]]$

 b. “nominalizer”: $[_{DP} D [_{CP} \text{ TopP}_{[u\delta]} \dots C [_{TP} V \dots DP_1 DP_{2[\delta]} \dots]]]$


The term ‘nominalizer’ thus creates the misleading impression that these forms constitute a grammatical category distinct from voice affixes. They are instead ordinary voice affixes occurring on predicates within relative clauses.

On this analysis, structures traditionally described as “nominalized environments” involve clausal-level nominalization: a finite relative clause is embedded under an overt or null nominal head. They therefore resemble English nominals containing finite relative clauses, such as *the car_i [_{CP} that Bill would / should / could / might / will buy _____i]*. This analysis draws on the absence of evidence that relative clauses—including the presupposed clauses of pseudo-clefts—are structurally defective in Formosan or better-described Philippine-type languages such as Tagalog. These clauses permit voice and TAM marking and exhibit the same argument case-marking patterns as root clauses.⁹ Voice-marked pseudo-clefts in these languages can therefore be analyzed in parallel with English pseudo-clefts such as those in (40): in both constructions, the presupposed constituent contains a finite embedded clause with ordinary verbal morphology of the kind found in main clauses.

- (40) a. Who was [_{NP} the man_i [_{CP} that _____i kissed Mary]]? (relativization of agent)
 b. What was [_{NP} the thing_i [_{CP} that Mary gave _____i to you]]? (relativization of patient)
 c. What was [_{NP} the place_i [_{CP} that Mary brought you to _____i]]? (relativization of location)
 d. What was [_{NP} the thing_i [_{CP} that Mary cut the pork with _____i]]? (relativization of instrument)

As there is no compelling reason to posit a derivational relationship between the same grammatical form used in different syntactic environments, the ‘nominalization-into-verb’ hypothesis is unmotivated and thus cannot be regarded as a plausible diachronic account of the synchronic morphosyntax of higher-order Austronesian languages.¹⁰

⁸The precise nature and analysis of Philippine-type voice affixes are not crucial to the present argument. Although the schema below adopts an accusative analysis, nothing in the present proposal hinges on that analysis. Accusative approaches treat these affixes as markers of topic agreement within finite clauses, as schematized in (39) (Richards 2000; Pearson 2005; Chen 2017), whereas ergative approaches analyze them as transitivity and valency rearrangement morphology (Payne 1982; Mithun 1994; Aldridge 2004). Both approaches nevertheless agree that full-fledged voice alternations belong to finite verbal environments. The central claim here is simply that voice affixes are verbal morphology and that they also occur in relative clauses because relative clauses are finite clauses, despite being embedded under an overt or null nominal head.

⁹To the best of my knowledge, no Philippine-type Formosan language has been shown to have structurally defective relative clauses. Available descriptions indicate that relative clauses permit voice and TAM marking and retain the case-marking patterns found in root clauses.

¹⁰For a similar view, see Jiang (2016), who likewise reconstructs both Grade I and Grade II forms as relativization markers in Proto-Austronesian and questions whether the reanalysis of nominalizations as verbs provides reliable evidence for subgrouping.

Under this view, the ‘nominalization-into-verb’ hypothesis is a misanalysis resulting from the relatively low frequency of non-indicative morphology in relative clauses. This distribution creates the appearance of a special relationship between indicative voice affixes and the voice morphology occurring in relative clauses.

Empirical support for the current analysis comes from the availability of mood inflections within relative clauses, parallel to the English example above. This includes instances of lexical nominalization, which has been shown to be structurally reduced headless relatives (Ntelitheos 2006 et seq.). As shown earlier in Section 3, Grade II and III morphology can occur in the relative clauses of the purported Nuclear Austronesian languages, including in instances of lexical nominalizations. Consider, for example, the Siraya and Kananavu data below, which demonstrate the availability of mood inflections within so-called nominalized environments.

(41) Siraya: mood inflections in lexical nominalization (Adelaar 2011: 151, 152, 156)

- a. pa-titil-**en**
SM-quarrel-PV.GRADE 1
‘what is quarreled about; issue’ (Grade I PV affix used in lexical nominalization)
- b. ukukua-**aw**
marry-PV.GRADE 2
‘someone to be married; wife-to-be’ (Grade II PV affix used in lexical nominalization)
- c. pa-i-sasu-**an**
SM-LOC-rule-LV.GRADE 1
‘place that is ruled over; kingdom’ (Grade I LV affix used in lexical nominalization)
- d. pa-i-baba’-**ey**
SM-LOC-rest-LV.GRADE 2
‘place where one will rest’ (Grade II LV affix used in lexical nominalization)

(42) Kananavu: mood inflections in both verbal and nominal environments (primary data)

- a. Ko’o=pa=ku a-p-im-**e** Avia pa’ici.
NEG-AUX=1SG.GEN IRR-CAUS-drink-UV.GRADE 3 Avia alcohol
‘I did not have Avia drink alcohol.’ (Grade III morphology in root clause)
- b. Pa’ici isi sua [RC ko’o=pa=maku a-p-im-**e** Avia]
alcohol DET PIVOT [RC NEG-AUX=1SG.GEN IRR-CAUS-drink-UV.GRADE 3 Avia]
‘This alcohol is what I have never had Avia drink.’ (Grade III morphology in headless relative clause)

See also the parallel examples from Tausug, a Malayo-Polynesian language spoken in Sulu in the southern Philippines. As Kaufman (2026) notes, imperative Grade III morphology may occur both in independent main clauses and in the presupposed clauses of pseudoclefts.

(43) Tausug: Grade III voice morphology in relative clauses (Akamine 2003)

- a. Kaun-**a** ini!
eat-PV.GRADE 3 this.NOM
‘Eat this!’
- b. Ini in kaun-**a**!
this.PIVOT PIVOT eat-PV.GRADE 3
‘This is what you eat!’ (quoted from Kaufman (2026:562); adapted for consistency)

This parallel distribution follows straightforwardly from the present analysis, since finite subordinate clauses are expected to permit the full range of mood inflections. It is problematic, however, for the Nuclear Austronesian hypothesis, under which Grade II affixes are verbal in origin and should therefore be excluded from environments classified as nominalized, including relative clauses and lexical nominalizations.¹¹

Several observations support this analysis. First, lexical nominalizations may preserve distinctions that are characteristic of clauses rather than ordinary derived nouns. As the Siraya and Seediq examples above demonstrate, they may exhibit mood contrasts, and they may also inflect for aspect. Such inflection indicates that their apparently word-level structure contains an embedded clausal layer, even where that structure is not transparently visible on the surface. Second, these forms can be productively expanded into less reduced headless relative clauses: a genitive agent and an accusative undergoer may be freely added to the same voice-marked predicate. The resulting expression has the interpretation and argument structure of a relative clause, without any additional nominalizing morphology. Lexical nominalizations and productive headless relative clauses therefore do not instantiate two categorically different constructions, but occupy different points on a continuum of structural and semantic reduction. On this view, so-called lexical nominalization is best analyzed as clausal-level nominalization: the nominalized constituent is a headless relative clause, while the morphology borne by its predicate remains verbal voice morphology.

More importantly, the fact that the relevant affixes exhibit a three-way mood distinction within relative clauses renders the purported nominal origin of Grade I affixes unmotivated. Instead, it lends further support to the present analysis, according to which the putative “nominalizers” are essentially voice affixes employed in embedded verbal environments.

Finally, the present analysis makes a testable prediction: if “nominalizers” are simply voice affixes occurring in finite relative clauses, as currently argued, ‘nominalizer-voice affix homophony’ should involve all four Philippine-type voice affixes, rather than only the three non-AV affixes implicated in the Nuclear Austronesian hypothesis. This prediction is borne out exactly by the synchronic data. As discussed earlier in section 3.4, across both purported Nuclear Austronesian languages (Seediq, Tagalog) and languages claimed to be excluded from this branch (Puyuma), AV affixes occur in both root clauses and pseudo-clefts, just as the three non-AV affixes do.¹²

To conclude: the phenomenon conventionally described as ‘nominalizer–voice affix homophony’ is best analyzed as a core property of Philippine-type voice systems: voice morphology occurs in both root clauses and finite relative clauses.

¹¹Following Ntelitheos (2006) and subsequent work, I analyze forms conventionally described as *lexical nominalizations* as structurally reduced headless relative clauses. Although these forms may surface as single words and develop conventionalized lexical meanings, they retain a clausal structure containing a verbal predicate marked for voice. Their lexicalized interpretation therefore does not require the voice affix itself to be a nominalizer; rather, it arises through the conventionalization of the headless relative construction as a whole.

¹²A related issue for the nominalization-into-verb hypothesis lies in its assumption that the perfective marker *<in>, together with the three non-AV affixes, was used exclusively to mark nominal predicates prior to the purported reanalysis of ‘nominalization-into-verb’. This assumption permits two interpretations, both of which require a typologically highly unusual proto-system. First, Proto-Austronesian lacked a perfective marker in verbal environments prior to the reanalysis. Alternatively, Proto-Austronesian possessed separate perfective markers for nominalized and verbal environments, with the former subsequently replacing the latter through the purported reanalysis. Neither issue arises under the present account, since a perfective marker is independently expected to occur in finite relative clauses.

4.2 Where is the old morphology? Insights from Malayo-Polynesian

I have shown that the Nuclear Austronesian hypothesis is a misanalysis arising from the relatively low frequency of Grade II–III (non-indicative) morphology in relative clauses, which created an apparent special relationship between Grade I voice affixes and those found in relative clauses. An important implication follows from this analysis:

- (44) The absence of Grade I homophony in root clauses reflects an *innovation* in Rukai, Tsou, and Puyuma. In other words, the absence of ‘nominalizer-voice affix homophony’ in Grade I morphology is innovative rather than retentive.

Looking beyond Austronesian, this analysis is consistent with the crosslinguistic observation that root-clause morphology is often more innovative than subordinate-clause morphology (Matsuda 1998; Bybee & Thompson 2000; Bybee 2001). In other words, morphological innovations arising in root clauses are not necessarily replicated immediately in subordinate clauses. Such conservatism has been documented in word-order change in Old English (Hock 1986), German (Vennemann 1975; Givón 1979), and Kru (Givón 1979), as well as in grammaticalization (Klein-Andreu 1990; Bybee et al. 1994), morphological replacement (Aldai 2000), and morphophonemic change (Matsuda 1993, 1998).

This generalization is well attested among languages under the Malayo-Polynesian subgroup of the Austronesian family. In various languages, Philippine-type Grade I voice affixes have disappeared from root clauses but survive as fossilized morphology in lexical nominalization. The Oceanic language Roviana, for example, no longer exhibits Philippine-type voice morphology in root clauses but retains reflexes of these affixes in lexical nominalizations (e.g. *gani* eat’ : *g<in>ani* thing eaten, food’ (< Grade I perfective PV affix *<in>); *huhuve* bathe’ : *huhuve-ana* bathing place’ (< Grade I LV affix *-an)).

Under the present analysis, the absence of ‘nominalizer–voice affix homophony’ in Puyuma, Tsou, and Rukai represents further striking instances of the same pattern, suggesting that morphological simplification in many Austronesian languages begins in root clauses. In what follows, I draw attention to several underexplored parallels from Malayo-Polynesian languages belonging to different subgroups and spoken in widely separated regions—Yami, Tukang Besi, Chamorro, and Tawbuid—which shed further light on this recurrent evolutionary pathway.

There is little doubt that lower-level Austronesian languages have undergone extensive innovation, frequently resulting in the reduction or loss of the Philippine-type voice system. Languages in Borneo, Indonesia, and Sulawesi often preserve only a residual two-way voice distinction, while in others the earlier voice distinctions have disappeared entirely (Gil & Schapper 2020; McDonnell & Chen 2022). Even among languages that retain Philippine-type syntax, intermediate stages along the pathway toward morphological loss are clearly observable. Yami, for example, exhibits an underexplored asymmetry with certain verbs: the Grade I AV infix <om>—a regular reflex of the PAn AV affix *<um>—cannot occur in root clauses but is the only form permitted in relative clauses. By contrast, with the same verbs, the innovative AV affix *maN-* is restricted to root clauses.

- (45) Yami AV morphology in two environments
- a. Ya=**maN**-cita si Kerui so vakong.
 3SG.PIVOT=**AV**-see PIVOT PN OBL book
 ‘Greg is reading a book.’
 (AV affix in main clauses: *maN-*)

- b. M-ai=ka a [_{RC} t<om>ita jiaken an].
 AV-come=2SG.PIVOT LK [_{RC} <AV.GRADE 1>see 1SG.LOC.FR Q]
 ‘How about you come to see me?’ (Vondiziano 2025: 109) (AV affix in RCs: <om>)

Tukang Besi (Celebic) provides another example in which Grade I morphology is restricted to relative clauses (Donohue 1999). Synchronically, the inherited Grade I AV affix (<um>) is no longer productively used in root clauses, as shown in (46a). In relative clauses, however, the affix remains obligatory, as illustrated by the pseudo-cleft in (46b). This asymmetry points to an innovation in root-clause morphology, with the more conservative pattern preserved in relative clauses.

(46) Tukang Besi: Grade I morphology preserved in pseudo-clefts

- a. no-**balu** te loka na wawine.
 3.RLS-**buy** CORE banana NOM woman
 ‘The woman bought some bananas.’
 b. Te emai na [_{RC} b<um>alu te loka]?
 CORE who NOM [_{RC} <AV.GRADE 1>buy core banana]
 ‘Who bought the bananas?’ (Donohue 1999)

Similarly, Chamorro, an isolate within Malayo-Polynesian spoken in the Mariana Islands, has independently lost productive voice affixes in root clauses. Reflexes of the Grade I affixes, however, remain obligatory in relative clauses and pseudo-clefts, where they are synchronically analyzed as markers of *wh*-agreement (Chung 1994; Donohue & Maclachlan 1999). As shown below, the embedded clause in an ordinary complementation structure bears no voice affix (47a). By contrast, the infix <um> is obligatory in the presupposed clause of the pseudo-cleft in (47b), which is structurally a headless relative clause.

(47) Chamorro: Grade I morphology preserved in pseudo-clefts

- a. h<um>ällum si Maria [_{CP} na ha-**pänak** si Juan i pätgun].
 AGR.assume PN Maria [_{CP} C AGR-**spank** PN Juan the child]
 ‘Maria assumes that Juan spanked the child.’
 b. Hayi h<in>aomña si Maria [_{RC} p<um>änak __i pätgun]?
 who <PV>assume PN Maria [_{RC} <AV.GRADE 1>spank __the child]
 ‘Who does Maria assume spanked the child?’ (Chung 1994: 1, glosses mine)

The same evolutionary trajectory has recently been reported for Tawbuid, a Philippine language of Mindoro that has lost all Philippine-type voice distinctions in main clauses (Fleming 2022), including the Actor Voice morphology formerly used in active sentences. Nevertheless, a full-fledged paradigm of Grade I morphology is preserved in relative clauses and remains productively employed in several types of lexical nominalization, as illustrated by the nominalization paradigm below.

(48) Tawbuid nominalizers used in relative clauses and lexical nominalization (Fleming 2022: 73)

agent nominalization	theme nominalization	locative nominalization	instrumental nominalization	result nominalization
Ø, ta-, k-	na-, fag-...-un	fag-...-an, -an	faN-	na-...-an

Importantly, all five languages descend from Proto-Malayo-Polynesian, which unambiguously exhibited Philippine-type voice morphology in root clauses (Zobel 2002; Ross 2009). The absence of this

morphology from root clauses in these languages must therefore be attributed to secondary innovation. This pattern parallels Rukai, in which Philippine-type voice affixes are now restricted to relative clauses.

Crucially, because these languages are not closely related to one another, these parallel developments suggest that the preferential loss of Philippine-type voice morphology from root clauses represents a recurrent diachronic tendency across Western Austronesian languages. The table below summarizes further parallel cases attested in various regions of Western Austronesia. Languages listed as allowing Grade I morphology in relative clauses also permit the same morphology in lexical nominalizations.

(49) Similar trajectories of loss reported in Malayo-Polynesian languages¹³

		Subgrouping affiliation	Region	Phenomenon
1	Yami	Bashiic	Batanes	Grade I morphology only in relative clauses
2	Tawbuid	Greater Central Philippines	Mindoro	Grade I morphology only in relative clauses
3	Chamorro	Chamorro	the Marianas	Grade I morphology only in relative clauses
4	Tukang Besi	South Sulawesi	Sulawesi	Grade I morphology only in relative clauses
5	Sigulai	Sumatran	Sumatra	Grade I morphology only in relative clauses
6	Nias	Sumatran	Sumatra	Grade I morphology only in relative clauses
7	Mori Bawah	Celebic	Sulawesi	Grade I morphology only in relative clauses
8	Muna	Celebic	Sulawesi	Grade I morphology only in relative clauses
9	Busoa	Celebic	Sulawesi	Grade I morphology only in relative clauses
10	Karo Batak	Sumatran	Sumatra	Grade I morphology (except AV) only in lexical nominalizations
11	Old Enggano	Sumatran	Sumatra	Grade I morphology (except AV) only in lexical nominalizations
12	Äiwoo	Oceanic	Santa Cruz Islands	Symmetrical two-way voice alternation only in relative clauses
13	Javanese	Western Indonesian	Java	Grade I voice morphology is attested in Old Javanese but has been lost in modern Javanese except in Actor Voice
14	Tagalog	Greater Central Philippines	the Philippines	Imperative Grade III morphology lost

To conclude, Austronesian languages belonging to diverse Malayo-Polynesian subgroups and spoken in widely separated geographical regions exhibit the same evolutionary trajectory: root-clause morphology undergoes innovation and reduction, while older morphology is preserved in relative clauses and lexical nominalizations. The recurrence of this pattern across unrelated branches suggests that it represents a common diachronic drift within Austronesian.

4.3 Supporting evidence from Formosan

Let us now reconsider the absence of ‘nominalizer–voice affix homophony’ in Tsou, Puyuma, and Rukai in light of recent descriptions and primary data.

¹³Sources: Yami: Vondiziano (2025); Tawbuid: Fleming (2022); Chamorro: Chung (1994); Tukang Besi: Donohue & Maclachlan (1999); Sigulai: Akoli & Arka (2026); Nias (Brown 2001); Karo Batak: Edwards (2015: 86); Mori Bawah: Mead (2005); Muna: van den Berg (2013); Busoa: van den Berg (2020); Enggano: Hemmings & Dalrymple (2023); Zobel & Hemmings (2024); Äiwoo: Næss (2013); Javanese: Poedjosoedarmo (2002); Tagalog: Nuñez (2026). An anonymous reviewer also notes that many other Philippine languages have lost Grade I AV <um> from indicative/root clauses. Bikol, for example, uses *mag-* in indicative constructions and retains <um> only in imperatives.

4.3.1 Tsou morphology revisited

Ross (2009, 2012) reports that neither Grade I nor Grade III affixes are synchronically attested in Tsou. The voice system employs only Grade II affixes, which occur in both root clauses and relative clauses. Tsou therefore makes no distinction between indicative and non-indicative constructions in its voice morphology (see Lin 2010 and Chang & Pan 2016 for details). This absence of a morphological mood distinction parallels the situation in various Malayo-Polynesian languages that no longer preserve the three-way mood distinction in their voice morphology, as discussed above and in recent works (Blust & Chen 2017; McDonnell & Chen 2022).

(50) Tsou voice morphology (Tsuchida 1976)

	AV	PV	LV	CV	Etyma
<i>“Nominalization”</i>	<i>M-√</i>	<i>√-a</i>	<i>√-i</i>	<i>√-(n)eni</i>	Proto-Austronesian Grade II
<i>Root clause</i>	<i>M-√</i>	<i>√-a</i>	<i>√-i</i>	<i>√-(n)eni</i>	Proto-Austronesian Grade II

Despite the apparent simplification of Tsou morphology, new data reveal a previously underexplored pattern: Tsou employs multiple affixes for locative nominalization. In addition to the Grade II suffix *-i*, shown in the paradigm below, primary fieldwork data and a recently published dictionary compiled by a native speaker (Wang 2013) attest at least two further locative nominalizers, *-a* and *-ana*. Consider the following examples.

(51) Tsou locative nominalization with three distinct nominalizers (Wang 2013; primary data)¹⁴

	Locative nominalization with <i>-i</i>	Locative nominalization with <i>-a</i>	Locative nominalization with <i>-ana</i>
	Grade II morphology	Grade I morphology	Grade I morphology
1	esmomz- i ‘place where something rises/sun rises’ rise-LV.GRADE 2	yoyasv- a ‘playground’ play-LV.GRADE 1	poepe- ana ‘place of wind’ wind-LV.GRADE 1
2	teaph- i ‘container’ put.in-LV.GRADE 2	pethu- a ‘container’ hold-LV.GRADE 1	eiski- ana ‘place of eagle’ eagle-LV.GRADE 1
3	poo’usn- i ‘shed where someone was held captive’ confine-LV.GRADE 2	tvo-tposu- a ‘book room’ store-book-LV.GRADE 1	cmoi- ana ‘place of bear’ bear-LV.GRADE 1
4	otuev- i ‘place to put a pillow’ pillow-LV.GRADE 2	tvo-tupuz- a ‘woodshed’ store-firewood-LV.GRADE 1	psoseong- ana ‘place of pine trees’ pine.tree-LV.GRADE 1
5	zu’z- i ‘place where something is inserted’ insert-LV.GRADE 2	tvo-’oanu- a ‘storage room’ store-food-LV.GRADE 1	kakaap- ana ‘bamboo forest’ bamboo-LV.GRADE 1

It is highly likely that at least one of the two nominalizers, *-a* and *-ana*, is a regular reflex of the Proto-Austronesian Grade I Locative Voice affix **-an*, if not both.¹⁵ The data suggest a division of labor between the two affixes: *-a* combines with verbal roots and *-ana* with nominal roots.¹⁶ Both are likely to be variant reflexes of the Proto-Austronesian affix **-an* with innovative functional divisions. The coexistence of this form in lexical nominalizations and the corresponding affix *-i* in root clauses

¹⁴The lexical items are drawn from Wang 2013 (73, 240, 196, 175, 290, 281, 188, 270, 265, 163, 63, 192, 201, 109) and double-checked through primary fieldwork, with page numbers given in the order of appearance in the table. The exception is *otuev-i* ‘place to put a pillow’, which was obtained through primary fieldwork.

¹⁵See Ross (2012: 1309) for a similar observation concerning two variants of Proto-Austronesian **-an* in Tsou. See also Ross (2012: 1307) for a brief discussion of potential reflexes of Proto-Austronesian **-an* in Tsou’s lexical items.

¹⁶The precise function of the prefix *tvo-* requires further investigation. It occurs fairly productively in locative nominalizations denoting places for putting things (Wang 2013: 270). One possibility is that it functions as a verbalizer, with the resulting stem subsequently taking the locative nominalizer *-a*.

accords with a broader crosslinguistic tendency: root-clause morphology is more prone to innovation, whereas subordinate-clause morphology—such as that of the headless relative clauses underlying lexical nominalizations—tends to be more conservative. This pattern thus reinforces the view that Tsou is innovative—with its root-clause morphology having advanced further along this diachronic pathway and thereby diverged from the morphology retained in subordinate environments, such as lexical nominalization. Its evolutionary trajectory parallels those observed in Tawbuid, *Tukang Besi*, and Chamorro, as discussed in Section 4.2. These parallels further support the present analysis, under which ‘nominalizer–voice affix homophony’ is retentive rather than innovative (Hypothesis B).

4.3.2 Rukai morphology revisited

As noted by Ross (2009, 2012), Philippine-type voice morphology in Rukai is largely restricted to relative clauses and lexical nominalization, apart from fossilized AV morphology retained in root clauses in conservative dialects, as illustrated in (52). Rukai has therefore traditionally been regarded as lacking a Philippine-type voice system.

(52) Proto-Rukai voice morphology (Li 1977)

	AV	PV	LV	CV	Etyma
<i>“Nominalization”</i>					
... Indicative	<i>M-√</i>	<i>√-anə</i>	<i>ta-√-anə</i>	<i>sa-√</i>	Proto-Austronesian Grade I
<i>Root clause</i>					
... Indicative	<i>M-√</i>	—	—	—	
... Subjunctive	<i>M-√</i>	—	—	—	
... Imperative	<i>M-√-a</i>	—	—	—	

This paradigm exhibits a distribution similar to that observed in Tsou: Grade I morphology is restricted to so-called ‘nominalized environments’. This pattern supports the view that Rukai has undergone a parallel development whereby Grade I morphology has been lost from root clauses but preserved in subordinate environments.

Notably, dialectal variation suggests that different Rukai varieties represent different stages of this loss. While the Grade I AV prefix *m-* is retained with some verbs in Tanan and Budai Rukai, it is almost entirely unattested in Mantauran Rukai (Zeitoun 2007, 2016). The Rukai morphological paradigm therefore provides further support for the present proposal (Hypothesis B).

4.3.3 Puyuma morphology revisited

Similar to Tsou and Rukai, Puyuma exhibits a loss of Grade I morphology from root-clause environments. As shown below, Grade I affixes are restricted to relative clauses and lexical nominalization, with the exception of the AV affix. In root clauses, indicative mood is marked by Grade II affixes, which typically mark optative and hortative clauses in other languages. Consequently, Puyuma root clauses no longer morphologically distinguish the indicative from the hortative mood except in Actor Voice.

- (53) Proto-Puyuma voice morphology (Blust & Chen 2017; drawing on Teng 2008, Ross 2009, and primary fieldwork)

	AV	PV	LV	CV	Etyma
<i>“Nominalization”</i>					
... Indicative	<i>M-√</i>	<i>√-en</i>	<i>√-an</i>	<i>i-√</i>	Proto-Austronesian Grade I
<i>Root clause</i>					
... Indicative	<i>M-√</i>	<i>√-aw</i>	<i>√-ay</i>	<i>√-anay</i>	Proto-Austronesian Grade II
... Hortative	<i>M-√-a</i>	<i>√-aw</i>	<i>√-ay</i>	<i>√-anay</i>	Proto-Austronesian Grade II
... Imp./Neg.	<i>√-Ø</i>	<i>√-u</i>	<i>√-i</i>	<i>√-an</i>	Proto-Austronesian Grade III

Like the patterns observed in Tsou and Rukai, this asymmetry is consistent with the well-attested generalization that subordinate environments often preserve older morphology. It therefore supports the present proposal that the loss of Grade I morphology from main clauses represents an innovation.

Importantly, the proposed directionality of change is further supported by dialectal variation within Puyuma. Innovative dialects exhibit a more advanced stage of loss: Grade I PV morphology has disappeared even from relative clauses and lexical nominalizations and has been replaced by Grade I LV morphology. The same PV morphology remains productive in more conservative dialects. Consider the following data from primary fieldwork on two dialects. In Nanwang Puyuma, the PV suffix *-en* has been lost from lexical nominalizations and replaced by the LV suffix *-an*, thereby eliminating the morphological contrast between patient and locative nominalizations. By contrast, this distinction is still retained in the speech of older speakers of conservative dialects such as Kasavakan and Tamalakaw. Consider the data below from primary fieldwork.

- (54) Patient nominalization in two Puyuma dialects¹⁷

	Nanwang (innovative)	Kasavakan (conservative)	Gloss
a.	akan- an	akan- en	‘eat’ : ‘food, thing to eat’
b.	tra-trakaw- an	ca-cakaw- en	‘steal’ : ‘thing to steal’
c.	ka-katratr- an	ka-katrac- en	‘bite’ : ‘thing to bite’
d.	a-atelr- an	Ha-atelr- en	‘abandon’ : ‘thing to abandon’
e.	da-deru-(w) an	da-deru-(w) en	‘cook’ : ‘thing to cook’

This variation supports the view that these languages are undergoing a recurrent drift towards morphological loss, with individual languages and dialects representing different stages of this process. See Blust and Chen (2017) for relevant discussion and Ross and Zeitoun (2024) for an overview of voice-system variation across Formosan languages.¹⁸

4.3.4 Kanakanavu, Saaroa, and their implications

In principle, the loss of Grade I morphology from main clauses need not affect all four voice affixes simultaneously, but may instead proceed incrementally. This prediction is precisely borne out by Kanakanavu and Saaroa, two Formosan languages spoken in the southern highlands.

¹⁷Primary fieldwork on Tamalakaw and Rikavung Puyuma suggests that the conservative patient voice affix *-en* also occurs in lexical patient nominalizations, although the choice between *-en* and *-an* varies across speakers and lexical roots. Similar variation is observed in Kasavakan, where speakers over the age of 70 use *-en* more frequently but also accept *-an* as interchangeable, with some root-sensitive variation in affix choice.

¹⁸At the same time, to the best of my knowledge, no Malayo-Polynesian language productively employs reflexes of Grade II or III morphology as indicative root-clause morphology. In this respect, Puyuma and Tsou are exceptional.

Recent work reports that in Saaroa, the Grade I LV affix is restricted to relative clauses (Zeitoun and Teng 2016). Because this affix is unattested in root clauses, Saaroa is synchronically described as exhibiting only a three-way voice distinction. Consider the paradigm below in (55).

(55) Saaroa voice morphology (Zeitoun & Teng 2016)

	AV	PV	LV	CV	Etyma
<i>“Nominalization”</i>					
... Indicative realis	?	√-a(na)	ta-√-a(na)	si-√	Proto-Austronesian Grade I
... Indicative irrealis	?	a-√-a(na)	—	a-√-ani	Proto-Austronesian Grade II
<i>Root clause</i>					
... Indicative	M-√	√-a	—	√-ani	Proto-Austronesian Grade II
... Imperative	M-√-a	√-u	—	√-ani	Proto-Austronesian Grade III(?)
... Dependent	M-√	√-i	—	√-i	Proto-Austronesian Grade III(?)

In Kanakanavu, Grade I LV and CV affixes likewise occur exclusively in relative clauses (Zeitoun and Teng 2016). Because these affixes cannot appear in root clauses, Kanakanavu is synchronically described as exhibiting only a two-way voice distinction, as illustrated in (56).

(56) Kanakanavu voice morphology (Zeitoun & Teng 2016)

	AV	PV	LV	CV	Etyma
<i>“Nominalization”</i>					
... Indicative realis	?	√-a(na)	ta-√-a(na)	si-√	Proto-Austronesian Grade I
... Indicative irrealis	?	a-√-a(na)	—	a-√-ani	Proto-Austronesian Grade II
<i>Root clause</i>					
... Indicative	M-√	√-a	—	√-ani	Proto-Austronesian Grade II
... Imperative	M-√-a	√-u	—	√-ani	Proto-Austronesian Grade III(?)
... Dependent	M-√	√-i	—	√-i	Proto-Austronesian Grade III(?)

While this empirical picture likewise supports the view that main-clause morphology often leads the way in diachronic change, with older morphology preserved in relative clauses and other subordinate environments, the patterns observed in Saaroa and Kanakanavu further demonstrate that the loss of Grade I morphology need not affect all four voice affixes simultaneously, but may instead proceed incrementally.

We may therefore conclude that the tendency for root clauses to lead morphological change is attested across both Formosan and Malayo-Polynesian languages, and that the pattern attributed to the Nuclear Austronesian hypothesis is simply one manifestation of this broader diachronic tendency.

4.4 Support from diachronic economy

Finally, let us evaluate the two competing analyses (Hypotheses A and B) from the perspective of diachronic economy. All else being equal, an analysis that derives the synchronic patterns through fewer independent changes is preferable. As a final consideration, the present analysis requires substantially fewer innovations than the conventional account. The changes required under the present analysis and the Nuclear Austronesian hypothesis are summarized below. Changes marked with an asterisk represent particularly implausible innovations.

(57) Required innovations under the current analysis

	Required changes
Tsou	1. Loss of most Grade I morphology from root clauses
Rukai	1. Loss of voice distinction in root clauses except fossilized AV affixes in conservative dialects 2. Loss of Grade I PV affix *-en in relative clauses
Puyuma	1. Loss of Grade I affixes from root clauses (except Grade I AV)
Saaroa	1. Loss of Grade I LV affix in root clauses
Kanakanavu	1. Loss of Grade I LV and CV affixes in root clauses

(58) Required innovations under the Nuclear Austronesian hypothesis¹⁹

	Required changes
Tsou	1. Independent innovation of possessor-genitive homophony* 2. Independent innovation of the ‘pivot-only’ extraction constraint* 3. Independent innovation of N/V homophony in all Grade II affixes* 4. Loss of Grade I affixes in “nominalized” environments (except AV)
Rukai	1. Loss of all voice distinctions in root-clause morphology
Puyuma	1. Independent innovation of possessor-genitive homophony* 2. Independent innovation of the ‘pivot-only’ extraction constraint* 3. Independent innovation of N/V homophony in Grade III affixes* 4. Independent innovation of N/V homophony in Grade I AV affix* 5. Reanalysis of Grade II (hortative) affixes into indicative voice affixes
Saaroa	1. Loss of Grade I LV affix in root clauses 2. Independent innovation of a ‘pivot-only’ constraint in AV-marked main clauses*
Kanakanavu	1. Loss of Grade I LV and CV affixes in root-clause morphology 2. Independent innovation of a ‘pivot-only’ constraint in AV-marked main clauses*
Nuclear Austronesian languages	1. Innovation of ‘nominalization-into-verb’ 2. Independent innovation of ‘nominalizer-voice affix homophony’ in AV* 3. Independent innovation of a ‘pivot-only’ constraint in AV clauses*, or 3’. Loss of possessor-genitive homophony in AV clauses*

As shown above, the present analysis (Hypothesis B) requires substantially fewer innovations than the Nuclear Austronesian hypothesis (Hypothesis A), providing further support for it as the more economical account.

This comparison is not intended as a simple tally of the changes required by the two hypotheses. Rather, it aims to evaluate both hypotheses objectively by considering the number, nature, and independent plausibility of the innovations each requires. Diachronic economy is therefore treated here as one component of the broader empirical evaluation, rather than as a decisive criterion in itself.

¹⁹To keep the discussion focused, this paper does not discuss the proposed connection between the ‘pivot-only’ extraction constraint on relativization and the “nominalization-into-verb” hypothesis. Under this account, the ban on extracting non-pivot (genitive) agents derives from the proposed reanalysis: these agents originated as possessors and are therefore inherently case-licensed and unavailable for extraction. However, the ‘pivot-only’ constraint also holds in Puyuma and Tsou, both excluded from the proposed Nuclear Austronesian subgroup. It also holds in AV constructions across all higher-order Austronesian subgroups, despite the claim that these constructions did not undergo the reanalysis. The table in (58) thus highlights that the constraint extends beyond the languages and constructions purportedly affected by the reanalysis, making its distribution difficult to explain solely through the reanalysis of nominalizations as verbs.

4.5 Why not an insubordination analysis?

Finally, I consider why an insubordination analysis is inappropriate for Austronesian nominalizer–voice affix homophony. *Insubordination*, or *de-subordination*, refers to the diachronic reanalysis of formerly subordinate-clause structures as root-clause structures (e.g., Evans & Watanabe 2016; Mithun 2008; Givón 2015). Given the present proposal that the forms traditionally termed “nominalizers” are in fact voice affixes occurring in relative clauses, one might alternatively analyze Austronesian nominalizer–voice affix homophony as an instance of insubordination. Under such an account, Philippine-type voice morphology would originally have been restricted to relative clauses and subsequently extended to root clauses. Such an analysis, however, faces several serious difficulties. First, it would require the wholesale replacement of Proto-Austronesian root-clause morphology. Second, it would require Philippine-type voice morphology originally to have been restricted to relative clauses, with no corresponding use in root clauses. Because Philippine-type voice affixes encode both mood and voice (i.e., topic selection), the assumption that this elaborate system of contrasts first developed exclusively within relative clauses is difficult to maintain.

4.6 Interim conclusion

I have argued that the Nuclear Austronesian hypothesis rests on two inaccurate assumptions about the synchronic syntax of higher-order Austronesian languages, summarized in (59).

- (59)
- a. Grade II and III affixes may occur in both root clauses and nominalized environments, including relative clauses, pseudo-clefts, and lexical nominalizations, despite their relatively low frequency in the latter.
 - b. The purported ‘non-Nuclear Austronesian languages’ preserve most Grade I morphology in nominalized environments while excluding it from root clauses. In light of the crosslinguistic generalization that subordinate clauses tend to preserve older morphology, this distribution indicates that these languages have innovated in their root-clause morphology.

Notably, as demonstrated above, the absence of nominalizer–voice affix homophony is manifested differently in each of the languages examined. This variation reinforces the view that each language has independently undergone extensive morphological loss and simplification, paralleling the developments observed in the lower-level western Austronesian languages discussed in Section 4.2.

5 Implications

I have argued that Austronesian ‘nominalizer–voice affix homophony’ reflects the occurrence of Philippine-type voice affixes in both root clauses and finite relative clauses. Under this analysis, the synchronic absence of nominalizer–voice affix homophony in several higher-order Austronesian languages is the result of independent innovations.

An important implication of this conclusion is that the presence or absence of ‘nominalizer–voice affix homophony’ has no subgrouping value: its presence reflects a shared retention rather than a shared innovation, while its absence reflects independent morphological reductions. This finding sheds light on three problematic aspects of the Nuclear Austronesian hypothesis: (i) the lack of phonological innovations supporting the proposed subgroup; (ii) its long-debated incompatibility with the Tsouic subgroup; and (iii) its identification of the southern highlands of Taiwan as the earliest reconstructable homeland

of the Austronesian family. In what follows, I examine how the present analysis bears on each of these implications.

5.1 The absence of independent innovations supporting Nuclear Austronesian

As Ross (2012) acknowledges, no phonological evidence or known lexical or sociocultural innovation has yet been identified in support of the proposed Nuclear Austronesian primary branch. Although this absence does not in itself constitute evidence against the hypothesis, it requires positing a complex morphosyntactic innovation unaccompanied by any identifiable innovations in other domains. The conclusion reached here that Nuclear Austronesian does not constitute a valid subgroup therefore offers a straightforward explanation for this lack of corroborating evidence.

5.2 Implications for the Tsouic hypothesis

One point of contention surrounding the Nuclear Austronesian hypothesis concerns its incompatibility with the proposed Tsouic primary branch (Tsuchida 1976; Ho 1998; Blust 1999; Sagart 2014). Support for this branch has been drawn from several lines of linguistic evidence, as well as shared sociocultural features and oral traditions.

Tsou (ISO 639-3 *tsu*), Saaroa (ISO 639-3 *sxr*), and Kanakanavu (ISO 639-3 *xnb*) are three geographically adjacent languages spoken in the southern highlands of Taiwan. Tsuchida (1976) groups them into a Tsouic branch on the basis of four shared phonological developments: the mergers of Proto-Austronesian *g/k, *j/Ø, *S/s, and *R/r. Although these developments are either not exclusive to these languages or supported by few etymons (see Ross 2012 and Zeitoun & Teng 2016 for a detailed review), Tsouic has been retained in subsequent subgrouping proposals that draw on phonological innovations (Ho 1998; Blust 1999; Sagart 2014; Stansfield 2026; see also earlier proposals in Ferrell 1969 and Li 1972).

In addition to the phonological evidence, support for Tsouic comes from a substantial body of shared lexical innovations. Tsuchida (1976) identifies 57 lexical items found exclusively in Tsou, Saaroa, and Kanakanavu. Particularly significant are those that constitute *replacement innovations*, replacing basic vocabulary reconstructed to Proto-Austronesian (see Sagart 2014 for a detailed discussion). A selection of these proposed replacements, drawn from Sagart (2014), is presented in (60).

(60) Replacement innovations shared exclusively by Tsou, Saaroa, and Kanakanavu

Proto-Austronesian	Proto-Tsouic	gloss	language
a. *esa/isa	*cáni	‘one’	T/S/K
b. *biCuka	*Civuka	‘belly’	T/S/K
c. *benan	*walúwálu	‘white-spotted deer (<i>Cervus taiouanus</i>)’	T/S/K
d. *biRaq	*cáŋúhu	‘inedible taro (<i>Alocasia macrorrhiza</i>)’	T/S/K
e. *kaka	*kaŋálúã	‘older sibling’	T/S/K
f. *qenay	*lavúku	‘sand’	T/S/K
g. *Canem	*lɔməkə	‘to plant’	T/S/K
h. *sulaR	*vuŋáyí	‘snake’	T/S/K

Although early contact among the three languages is likely, this shared basic vocabulary is difficult to attribute entirely to borrowing: numerals (60a), body-part terms (60b), and kinship terms (60e) are crosslinguistically less susceptible to borrowing. A borrowing account is further complicated by

the Nuclear Austronesian classification, in which Saaroa and Kanakanavu constitute distinct subgroups (Zeitoun & Teng 2016). Possible scenarios include (i) two separate borrowing events for each shared item, one between Tsou and Saaroa and another between Tsou and Kanakanavu; or (ii) borrowing between Tsou and the putative Proto-Nuclear Austronesian language, followed by inheritance in Saaroa and Kanakanavu and subsequent loss elsewhere in Nuclear Austronesian. Both scenarios require additional assumptions: the first involves repeated parallel borrowing, while the second involves widespread loss of the borrowed forms in languages that retain the corresponding Proto-Austronesian vocabulary. These shared lexical replacements are therefore more straightforwardly explained by inheritance from Proto-Tsouic and provide strong support for a Tsouic branch.

Beyond the linguistic evidence, Tsou, Saaroa, and Kanakanavu have also been classified as members of the same cultural group on the basis of shared sociocultural features (Ferrell 1969). Despite extensive influence from the areally dominant Bunun language (Tsuchida 1976; Pan 2012; Wild 2018), Saaroa and Kanakanavu exhibit sociocultural features that show closer affinities with Tsou than with Bunun. These affinities are consistent with a shared origin. The relevant features are summarized in (61).

(61) Shared sociocultural features among Tsou, Saaroa, and Kanakanavu

Communities	Material culture	Religion and oral tradition
Tsou, Saaroa, Kanakanavu	• No stone-carving and decorative wood • Manufactured pottery • Leather used for clothing • bark container • Unique Tsouic-style house • Men's meeting house	• Particularized named gods and spirits (contra Atayal and Bunun cultures) • Originated in Yushan • Later split into Northern and Southern Tsou • Southern Tsou moved down along Laonung River and further split into Saaroa and Kanakanavu (Li 2001:273)

Oral traditions provide a further line of support for Tsouic. Li (2001: 272–273) reports a tradition tracing the common origin of the Tsouic peoples to the Yushan region: the ancestors of the Tsou moved westward, while those of the Kanakanavu and Saaroa migrated southward before separating into two groups. This account of descent from a shared ancestral community is echoed in my own fieldwork. The Tsou and Kanakanavu speakers with whom I work likewise regard the three peoples as descendants of a common ancestor and recount the southward migration of the Kanakanavu and Saaroa. The persistence of this tradition among Kanakanavu speakers is notable given the present-day predominance of Bunun, rather than Tsou, in their community. Although oral traditions cannot independently establish a linguistic subgroup, their convergence with the phonological and lexical evidence lends additional support to Tsouic.

Taken together, the phonological, lexical, and sociocultural evidence provides a strong cumulative case for the Tsouic subgroup, even if no single line of evidence is decisive on its own. Subgrouping proposals incompatible with Tsouic therefore warrant careful scrutiny. The Nuclear Austronesian hypothesis not only lacks support for its purported defining innovation but also yields a classification that conflicts with this convergent evidence. These findings underscore a broader methodological point: independent, well-founded lines of evidence should ideally yield compatible subgrouping inferences.

5.3 Implications for locating the earliest reconstructible Austronesian homeland

A second point of contention surrounding the Nuclear Austronesian hypothesis concerns its homeland inferences. The proposal recognizes Puyuma, Rukai, and Tsou as primary branches of Austronesian, all

located in or around the southern highlands of Taiwan. On this basis, and drawing on Linguistic Migration Theory (Sapir 1916), Ross (2009) identifies this region as the earliest reconstructable Austronesian homeland.

This inference, however, is difficult to reconcile with the archaeological record. The prevailing view in the archaeological literature is that the Austronesian settlement of Taiwan resulted from a Neolithic dispersal from southeastern mainland China around 5,500 years ago (Bellwood 2023). There is also broad agreement that the major dispersal of Proto-Austronesian-speaking populations began no later than the Dapenkeng (TPK) cultural period (e.g. Chang 1989; Hung and Carson 2014; Bellwood 2023).

Within Taiwan, the archaeological evidence does not point to an inland or highland center of TPK dispersal. Rather, Tsang's (2005: 69) synthesis of TPK sites indicates that early settlements were geographically widespread but predominantly coastal. Sites identified over the past several decades include those on the Fengshan tableland in the south (Tsang et al. 1994), on floodplains in southwestern Taiwan (Nanke Archaeological Team 2002), in the Taipei Basin (Liu et al. 1996; Liu 2002), and on numerous terraces along the northern and eastern coasts (Liu 2002). No comparable concentration of early TPK sites has been reported from the island's interior, nor is there archaeological evidence for an inland—let alone southern-highlands—core area from which settlement spread.

Although the archaeological record does not directly establish which languages were spoken by the inhabitants of TPK sites, their identification as Austronesian-speaking populations remains the most plausible interpretation. More importantly for present purposes, the predominantly coastal distribution of these settlements is consistent with broader patterns of early Austronesian settlement elsewhere in the Pacific, where initial occupation strongly favored coastal locations. For example, Lepofsky's (1988) study of the environmental settings of 28 Lapita sites found that all were situated on the coast at the time of occupation, including those now located inland as a result of subsequent geomorphological change.

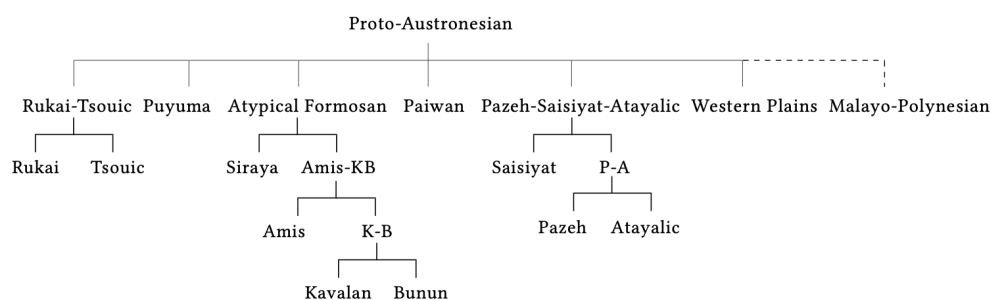
Even if the southern highlands are interpreted only as the earliest reconstructible homeland—as one anonymous reviewer suggests—rather than as the initial center of Austronesian dispersal, the proposal remains difficult to reconcile with the archaeological evidence. It still implies that the common ancestor of all extant Austronesian languages was once spoken in the southern highlands and that a subsequent dispersal proceeded from this region. Yet no known archaeological evidence supports such a highland homeland or dispersal.

The current finding that the Nuclear Austronesian hypothesis lacks adequate linguistic support therefore removes the premise underlying this apparent conflict.

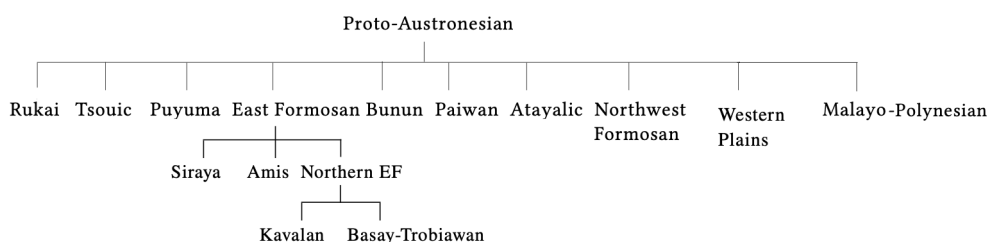
5.4 Implications for higher-order Austronesian phylogeny and early dispersal

A key implication of the current conclusion is that linguistic subgrouping based on the Comparative Method and phonological innovations drawn from regular sound changes does not conflict with the relevant morphosyntactic evidence—the apparent conflict arose only because 'nominalizer-voice affix homophony' had been incorrectly analyzed as a shared innovation. This returns us to phonologically based subgrouping proposals, according to which Proto-Austronesian split into no fewer than six primary branches. Two representative proposals, Ho (1998) and Blust (1999), are illustrated below.

(62) Ho (1998)



(63) Blust (1999)



As shown above, the two proposals are mutually compatible; the difference in the number of primary branches they posit stems from their treatment of several recurrent sound changes as either drifts or shared innovations (see Chen 2017 for a detailed comparison). Crucially, both proposals recognize the integrity of the Tsouic subgroup, comprising Tsou, Saaroa, and Kanakanavu, which is further supported by the lexical innovations discussed in Section 5.2.

As discussed earlier, the invalidity of the Nuclear Austronesian hypothesis removes the morphosyntactic basis for the southern highlands homeland hypothesis, thereby resolving its conflict with the archaeological evidence discussed in Section 5.3. This reinforces the methodological principle that different lines of evidence for subgrouping should yield compatible inferences; apparent conflicts among them warrant careful scrutiny. In this respect, the phonological evidence—which supports multiple primary branches distributed across different regions of Taiwan—points to an early settlement pattern without a clearly identifiable inland center. This pattern is consistent with the archaeological record and suggests a role for coastal mobility in early Austronesian settlement.

We may therefore conclude that subgrouping based on shared phonological innovations yields results consistent with those derived from (a) lexical innovations, (b) the archaeological record, and (c) sociocultural classifications. Moreover, the known morphosyntactic differences among higher-order Austronesian languages do not conflict with this converging body of evidence.

5.5 Implications for early Austronesian morphology and principles of morphosyntactic reconstruction

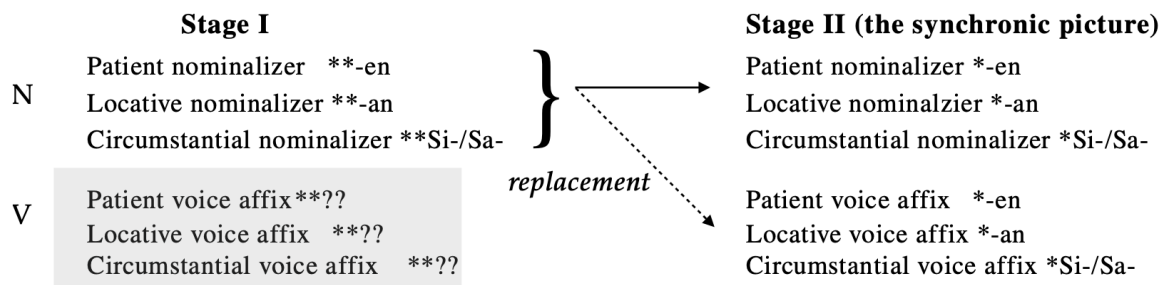
The present analysis shows that so-called ‘nominalizer–voice affix homophony’ is simply the use of the same voice morphology in root and subordinate clauses. Although most clearly reflected in the Grade I morphology of conservative Philippine-type systems, this pattern is not restricted to Grade I affixes. The reconstructed Proto-Austronesian voice paradigm under this analysis (Hypothesis B) is illustrated in (64).

(64) The Proto-Austronesian voice system under the present analysis

	AV	PV	LV	CV	(in both root clauses and relative clauses)
a. Grade I	*<um>	*-en	*-an	*Si-/Sa-	indicative
b. Grade II	*-a	*-aw	*-ay	*-anay	optative, hortative
c. Grade III	*-Ø	*-u	*-i	*-an	imperative, negative

The puzzle raised by the Nuclear Austronesian hypothesis offers a methodologically instructive case study in morphosyntactic reconstruction at the primary level of a language family. Proposed reanalyses generally involve either (i) the emergence of a new grammatical element, such as the grammaticalization of a lexical item into a functional head or bound morpheme, or (ii) the wholesale replacement of an inherited morpheme and its function. The second type is particularly problematic for primary-level subgrouping: without independent evidence, complete replacement would make the proto-pattern unrecoverable, as illustrated in (65).

(65) The vacancy issue of the Nuclear Austronesian hypothesis



The ‘nominalization-into-verb’ hypothesis illustrates this methodological problem. It derives synchronic indicative voice morphology from earlier nominalizers, yet Proto-Austronesian is unlikely to have lacked indicative clauses. The hypothesis must therefore assume that the innovative voice affixes replaced an inherited verbal paradigm. This leaves a fundamental question unanswered: what morphology marked indicative clauses before this reanalysis? The hypothesis offers no principled means of reconstructing that earlier system.

These considerations suggest four principles for morphosyntactic reconstruction:

- (66) a. **Independent evidence for directionality.** Because the direction of morphosyntactic change is often difficult to establish, a reconstruction should be supported by synchronic, comparative, or diachronic evidence favoring it over viable alternatives.
- b. **Accountability across constructions.** A reconstruction should account for the full range of relevant synchronic environments, not only well-studied patterns in simple clauses. Competing analyses should therefore be tested in constructions where they make different predictions.
- c. **Economy.** All else being equal, the reconstruction requiring fewer independent innovations should be preferred.
- d. **Caution with replacement-type reanalysis.** Replacement-type reanalyses should be invoked in primary-level reconstruction only when supported by compelling independent evidence, since the complete replacement of an inherited form and its function makes the proto-pattern difficult to recover.

6 Conclusion

This paper has reappraised the Nuclear Austronesian hypothesis (Ross 2009, 2012) through a reexamination of its central empirical motivation: the widely cited homophony between nominalizers and voice affixes in higher-order Austronesian languages. I have argued that the underlying pattern reflects retention rather than a shared innovation defining a primary-level subgroup. Philippine-type voice affixes occur in both root clauses and finite relative clauses. Analysing the latter as nominalizations assigns distinct labels to the same verbal morphology, creating the appearance of nominalizer–voice affix homophony. The purported homophony is therefore an artifact of synchronic analysis, not evidence of a historical innovation.

Under this account, the absence of such homophony in several higher-order Austronesian languages reflects independent reductions in root-clause voice morphology, with more conservative forms surviving in relative clauses and other subordinate environments. The shared morphology thus represents a retained feature of Philippine-type voice systems rather than a valid diagnostic for primary-level subgrouping. Relative clauses and other so-called nominalized environments serve as morphological time capsules, preserving forms that have been reduced or lost in root clauses.

The present analysis also offers an alternative to nominalist accounts of Philippine-type voice morphology (e.g. Kaufman 2009, 2017). On the account developed here, the relevant affixes are reconstructed as verbal rather than nominal morphology: they occur on verbal predicates and encode mood and voice distinctions. This eliminates the need to posit a ‘nominalization-into-verb’ reanalysis and provides a unified account of their synchronic distribution across clause types and their diachronic stability within Austronesian.

Finally, this reassessment illustrates how inaccurate assumptions about the synchronic syntax can lead to subgrouping inferences that conflict with other lines of evidence. It therefore underscores the importance of grounding diachronic proposals in a sound understanding of the synchronic facts.

List of abbreviations

ACC: accusative	NEG: negation
AGR: agreement	NMZ: nominalizer
AUX: auxiliary	NOM: nominative
AV: Actor Voice	OBL: oblique
CA.RED: Ca-reduplication	PT: patient
CAUS: causative	P: preposition
CN: common-noun marker	PAn: Proto-Austronesian
CONT: continuative	PFV: perfective
CORE: core case	PIVOT: pivot
COS: change of state	PL: plural
CP: complementizer phrase	PN: personal-name marker
CV: Circumstantial Voice	POSS: possessive
DEF: definite	PRF: perfect
DET: determiner	PV: Patient Voice
EMPH: emphatic	Q: question particle
EXCL: exclusive	RC: relative clause
FR: free form	RED: reduplication
GEN: genitive	RLS: realis
INDF: indefinite	SG: singular
IRR: irrealis	SM: stem marker
LK: linker	TAM: tense, aspect, and mood
LOC: locative	UV: Undergoer Voice
LV: Locative Voice	
NAV: non-Actor Voice	

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