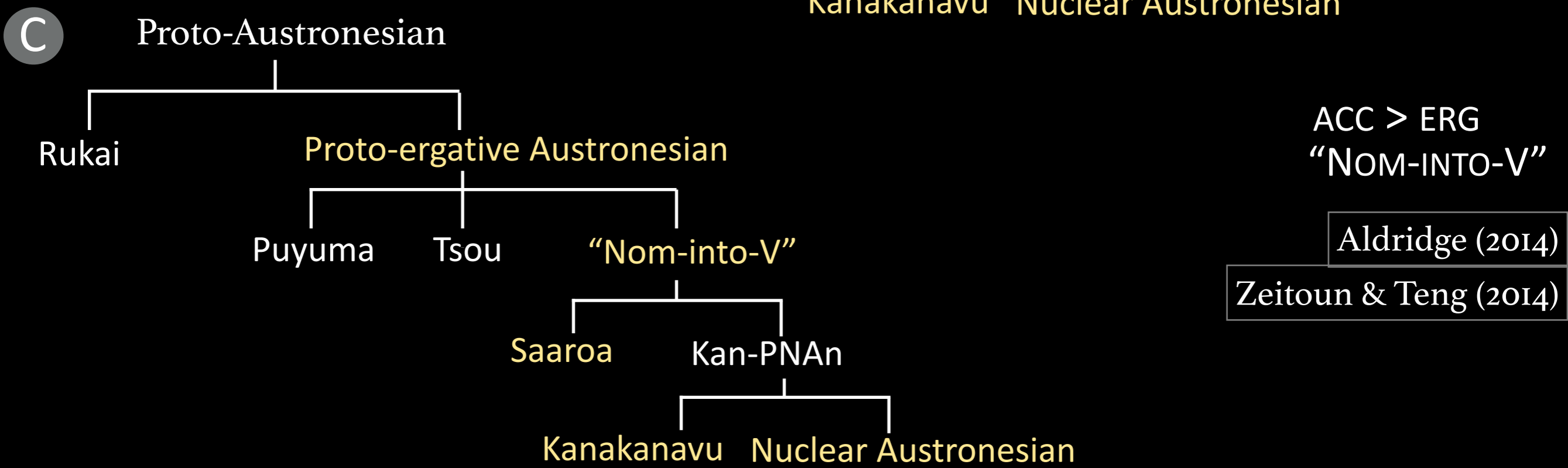
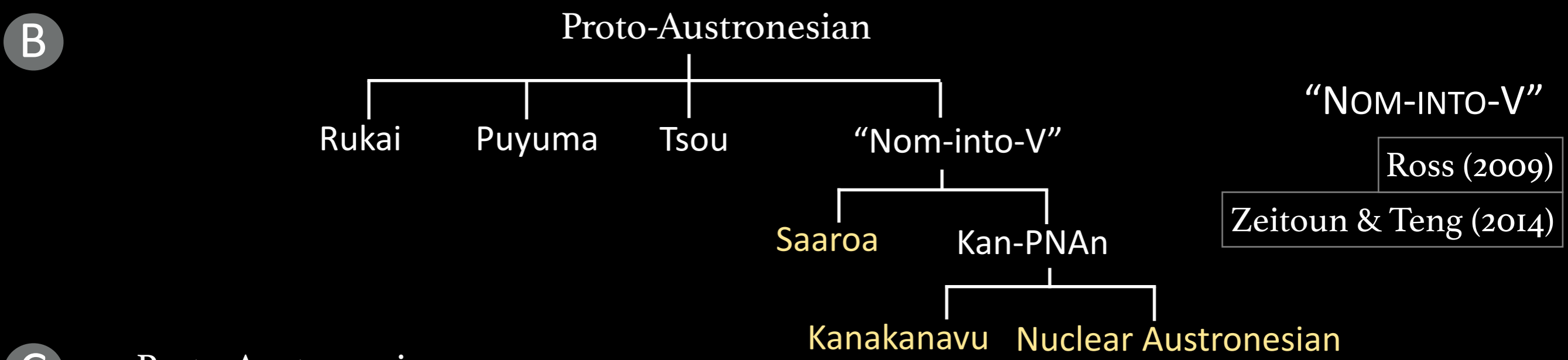
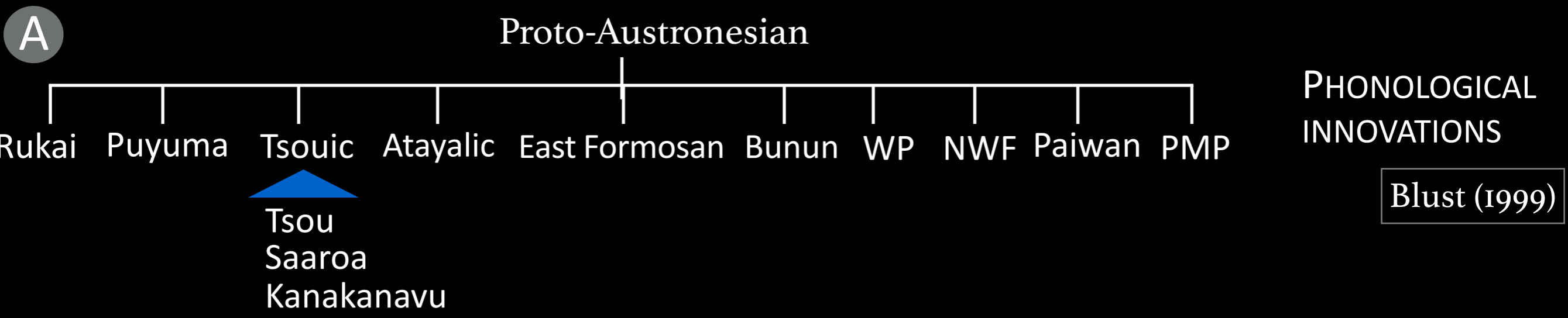


A reexamination of recent Austronesian higher-level subgroupings
and the Nominalization-into-Verb hypothesis

Victoria Chen

University of Hawai'i / Academia Sinica



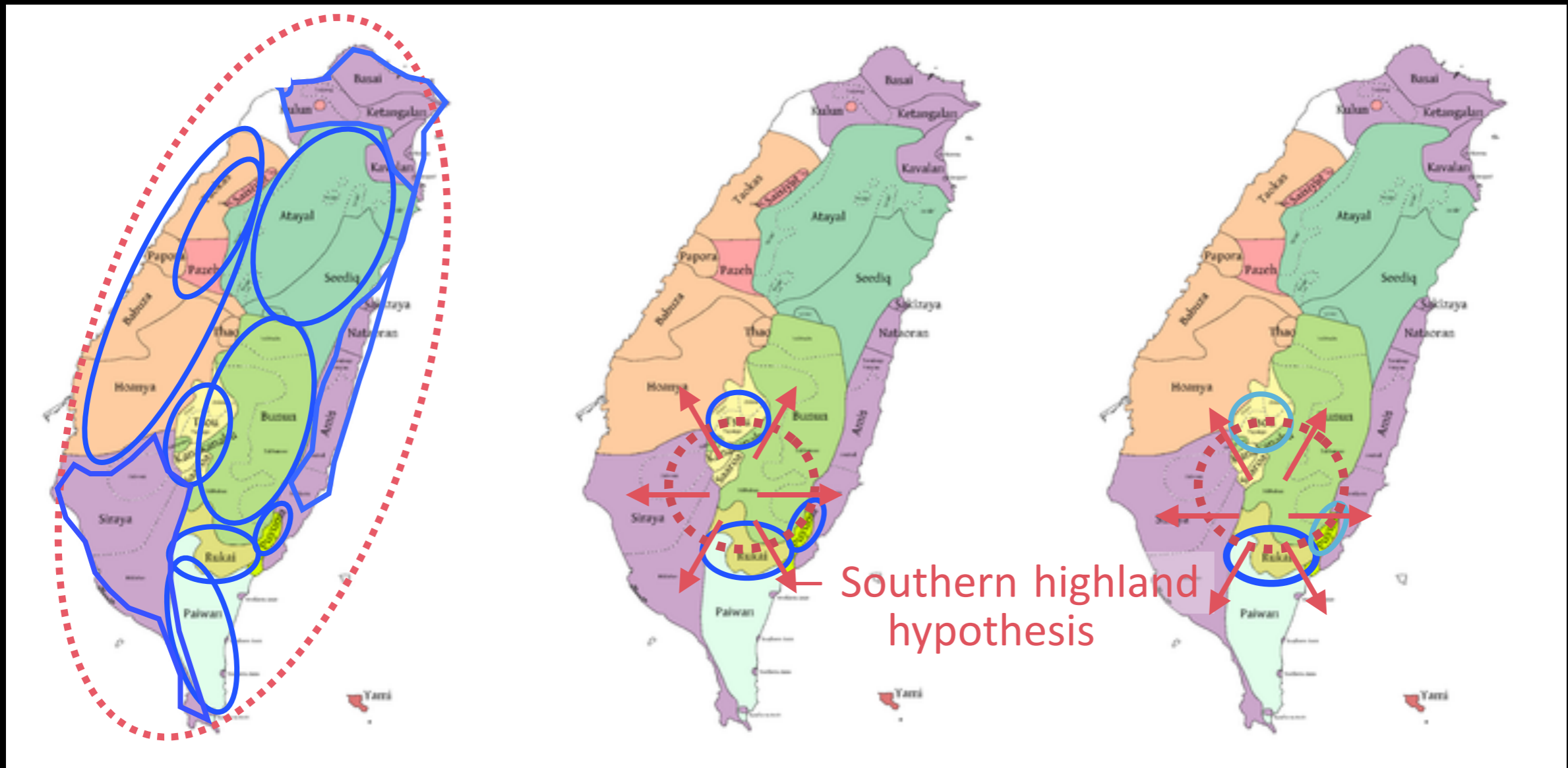
THE ISSUES

- 1 Tsouic ↔ “Nom-into-V”
- 2 ? ≡ “Nom-into-V”
- 3 The status of Rukai
- 4 Homeland inference

A Phonology-based

B “Nom-into-V”

C Alignment change



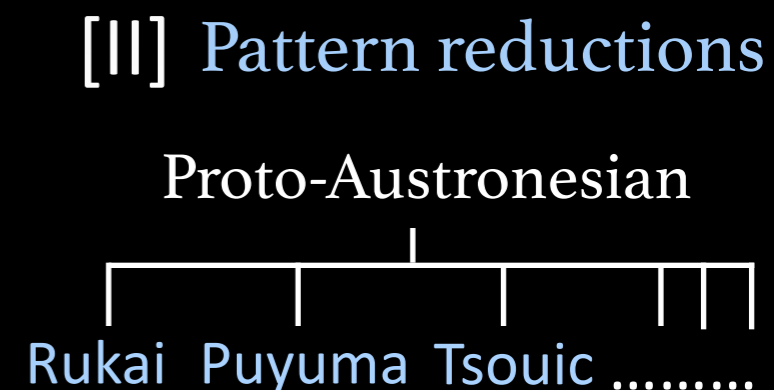
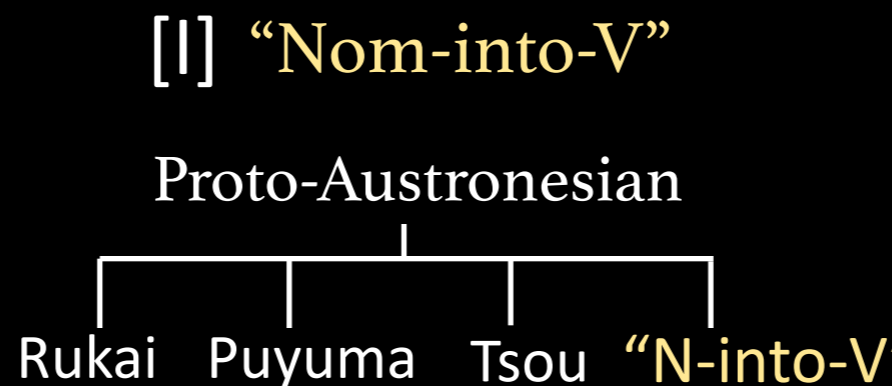
Blust (1999)

Ross (2009, 12)

Aldridge (2014)

MAIN PROPOSALS

- 1 The Tsouic subgroup is supported by solid lexical evidence
 → a subgrouping scenario compatible with Tsouic
- 2 Two scenarios to account for the empirical observation



Compatibility with Tsouic

X

P-NIV’s lack of phonological innovation

?

The issues of Saaroa, Kanakanavu & Rukai

?

Shared Ergative/Poss case homophony

X

Homeland inferences

X

✓

✓

✓

✓

✓

- 4 The phonological subgrouping plus a **pattern reduction** hypothesis can account for the empirical observations summarized above

The competing hypotheses

- evidence for Tsouic
- evidence for “Nom-into-V”
- evidence for Rukai (Acc, no voices) being conservative

Evidence for Tsouic

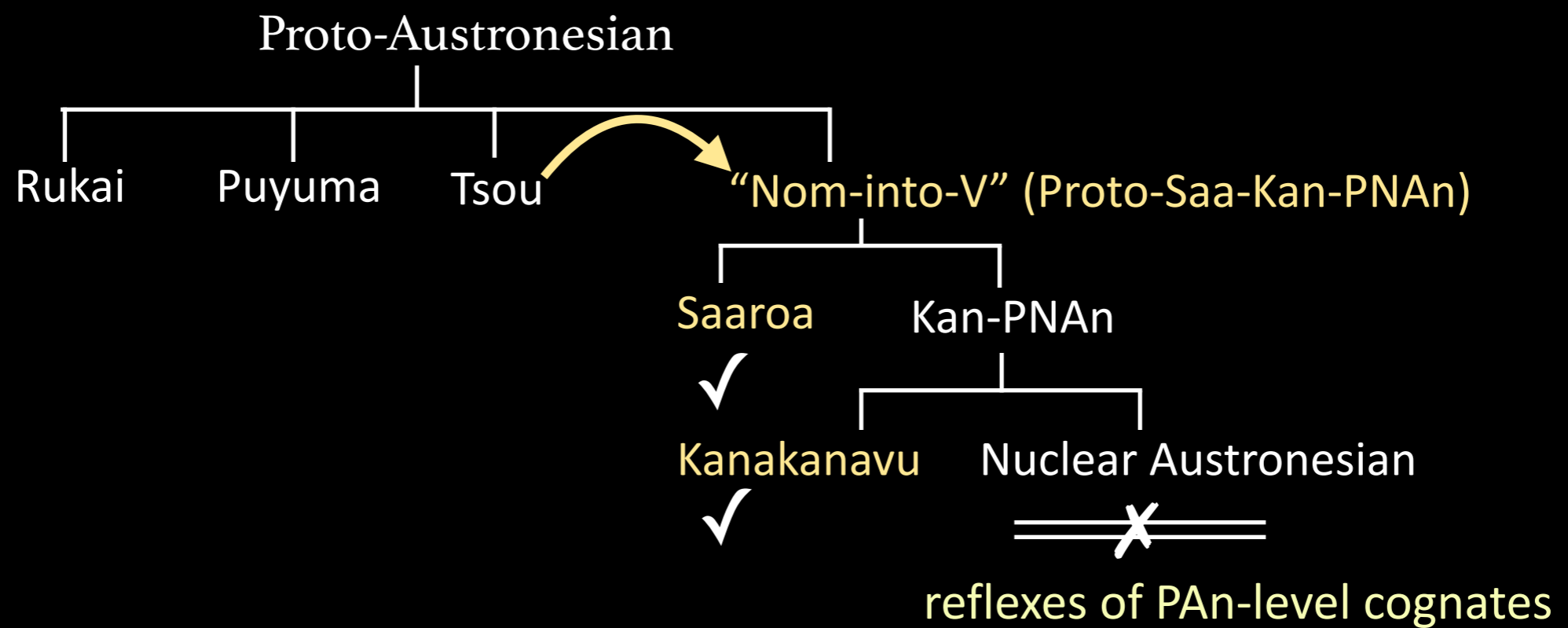
✓ Cognates → Tsouic

✓ phonological ✓ lexical

? Borrowing

- 1. Basic vocabulary, including '1'
- 2. Complex scenario required
 - two independent borrowings ? (~ 50 items)
 - borrowing into P-Saa-Kan-PNAn; lost in PNAn ✗
- 3. Bunun as the areal dominant

B



Evidence for “Nom-into-V”

B

Proto-Austronesian



“Nominalization-into-V”

(e.g. SPR 1981, Ross 2009, 12, Aldridge 2014)

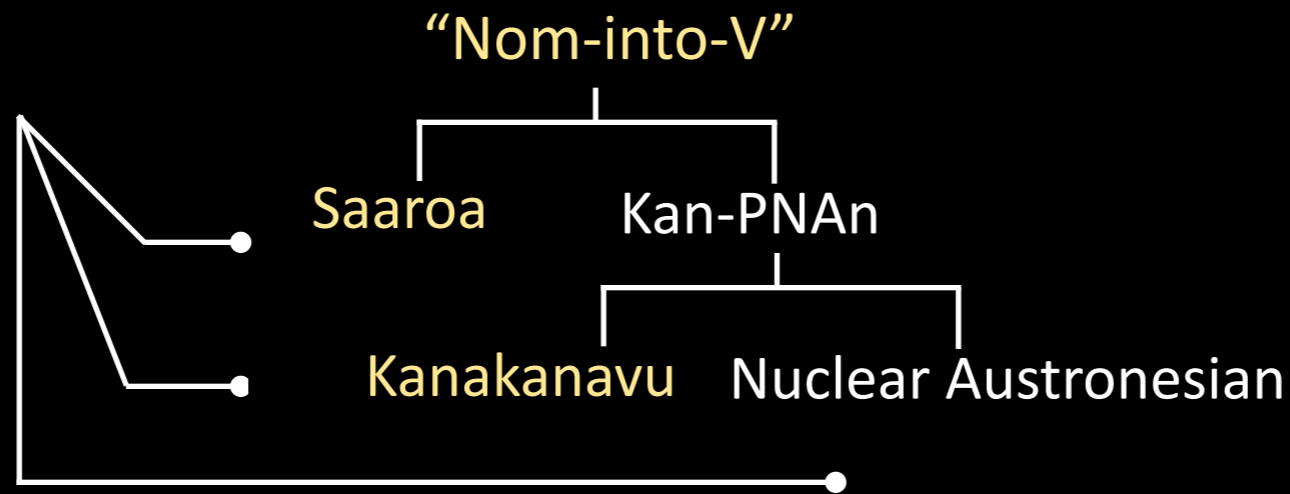
		AV	UVP	UVL	UVC
Nominalization	Realis (N)	M-	-en	-an	Sa-/Si-
	Pealis perfective (N)	M-<in>	<in>	<in>-an	<in>Si-
	Irrealis (N)	Ca-	Ca- -en	Ca- -an	Sa-/Si-Ca-
Verbal (Type I)	Realis	M-	-en	-an	Sa-/Si-
	Realis imperfective	M-Ca	Ca- -en	Ca- -an	Sa-/Si-Ca-
	Optative/hortative	M- -a	-aw	-ay	-anay
	Imperative	∅	-u	-i	-an-i
	Dependent	∅	-a		
	Irrealis	Ca-	Ca- -en	Ca- -an	Ca-

Innovation

- Shared traits {
- 1. Nominalizer/voice affix homophony
 - 2. Possessor/ergative case homophony

(SPR 1981 et seq.)

- Shared innovation?



	AV	UVP	UVL	UVC	
Saaroa	✓				(reflex of *-in- reanalyzed as verbal)
Kanakanavu	✓	✓			(reflex of *-en reanalyzed as verbal)
PNAn	✓	✓	✓	✓	(all reanalyzed as verbal)

- Issue — the status of Saaroa & Kanakanavu

SCENARIO I : “N-into-V” is still ongoing in modern Saaroa and Kanakanavu.

SCENARIO II: “N-into-V” had been completed in P-NIV. Saaroa and Kanakanavu split from P-NIV (P-Saa-Kan-PNAn) at different stages during this development.

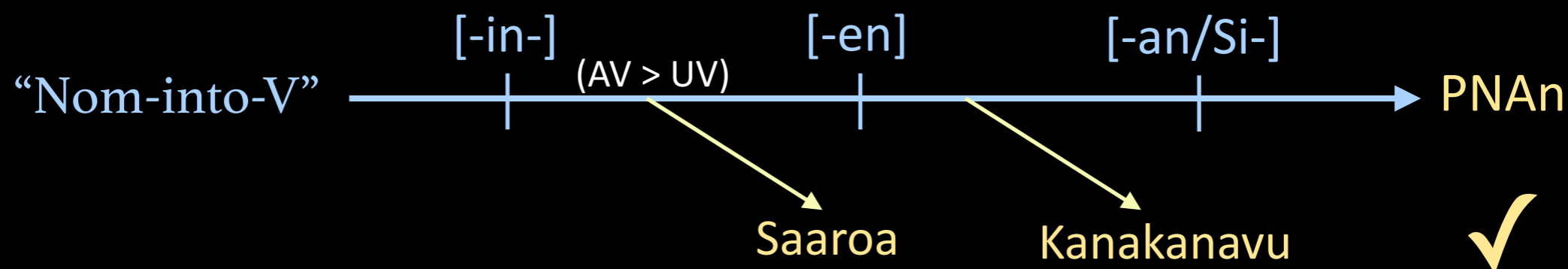
SCENARIO III : The “incomplete reanalysis” reflected above is a result of pattern reduction.

- Issue — the status of Saaroa & Kanakanavu

SCENARIO I : “Nom-into-V” is still ongoing in modern Saaroa and Kanakanavu.

SCENARIO II: “Nom-into-V” had been completed in P-NIV. Saaroa and Kanakanavu split from P-NIV at different stages during this development.

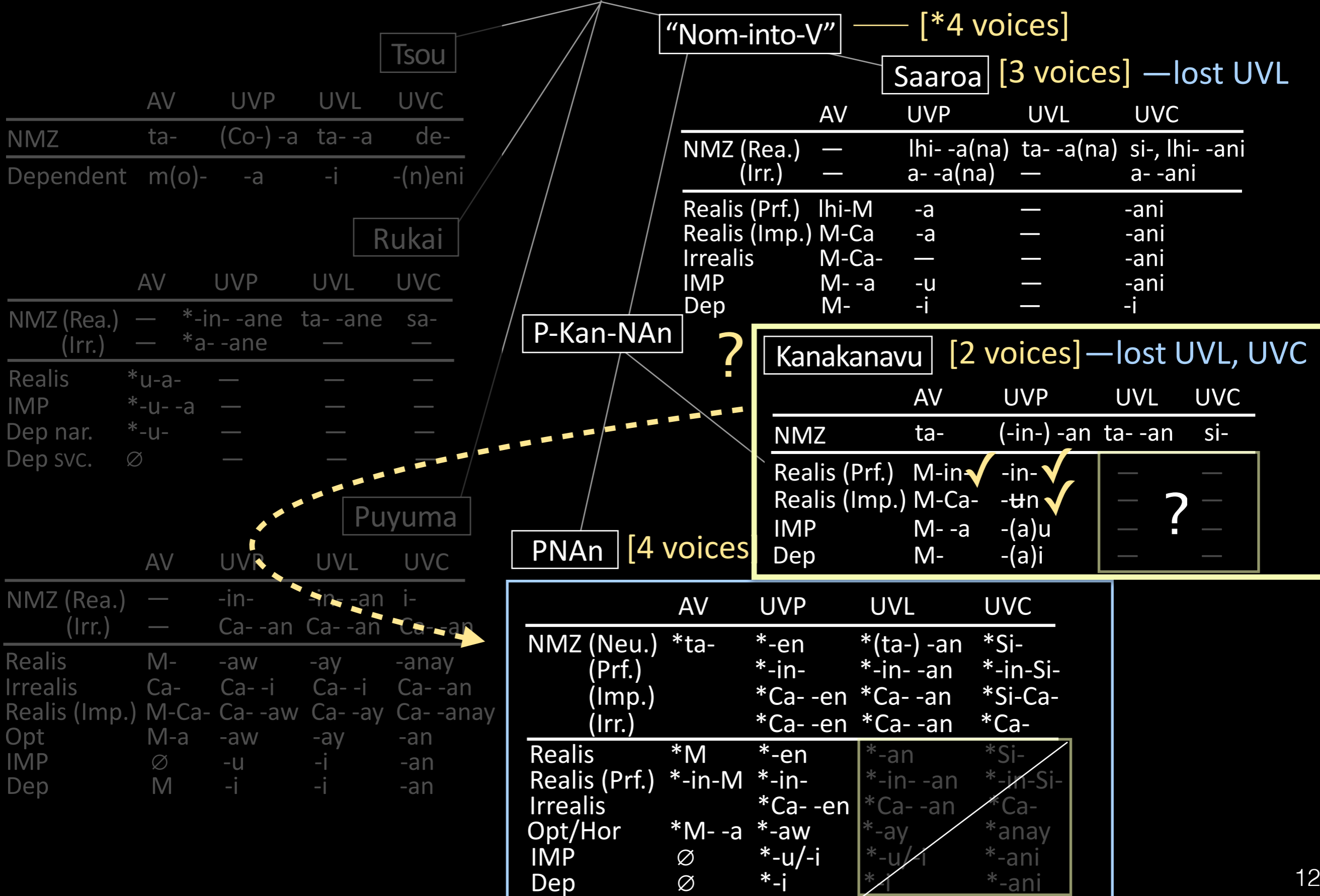
?



SCENARIO III : The “incomplete reanalysis” in the two languages is a result of pattern reduction.

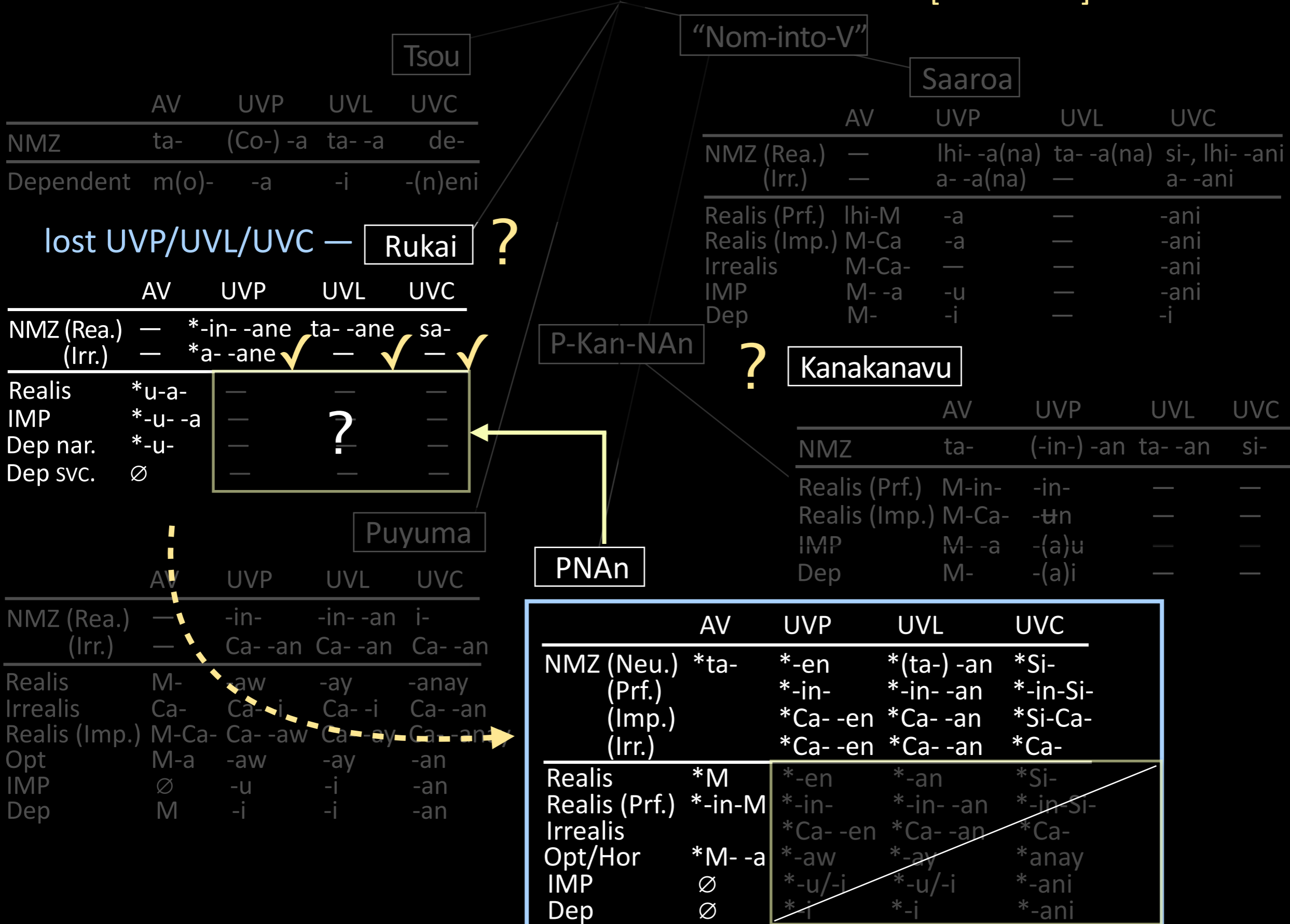
THE ISSUE OF SAAROA & KANAKANAVU

Proto-Austronesian



THE STATUS OF RUKAI

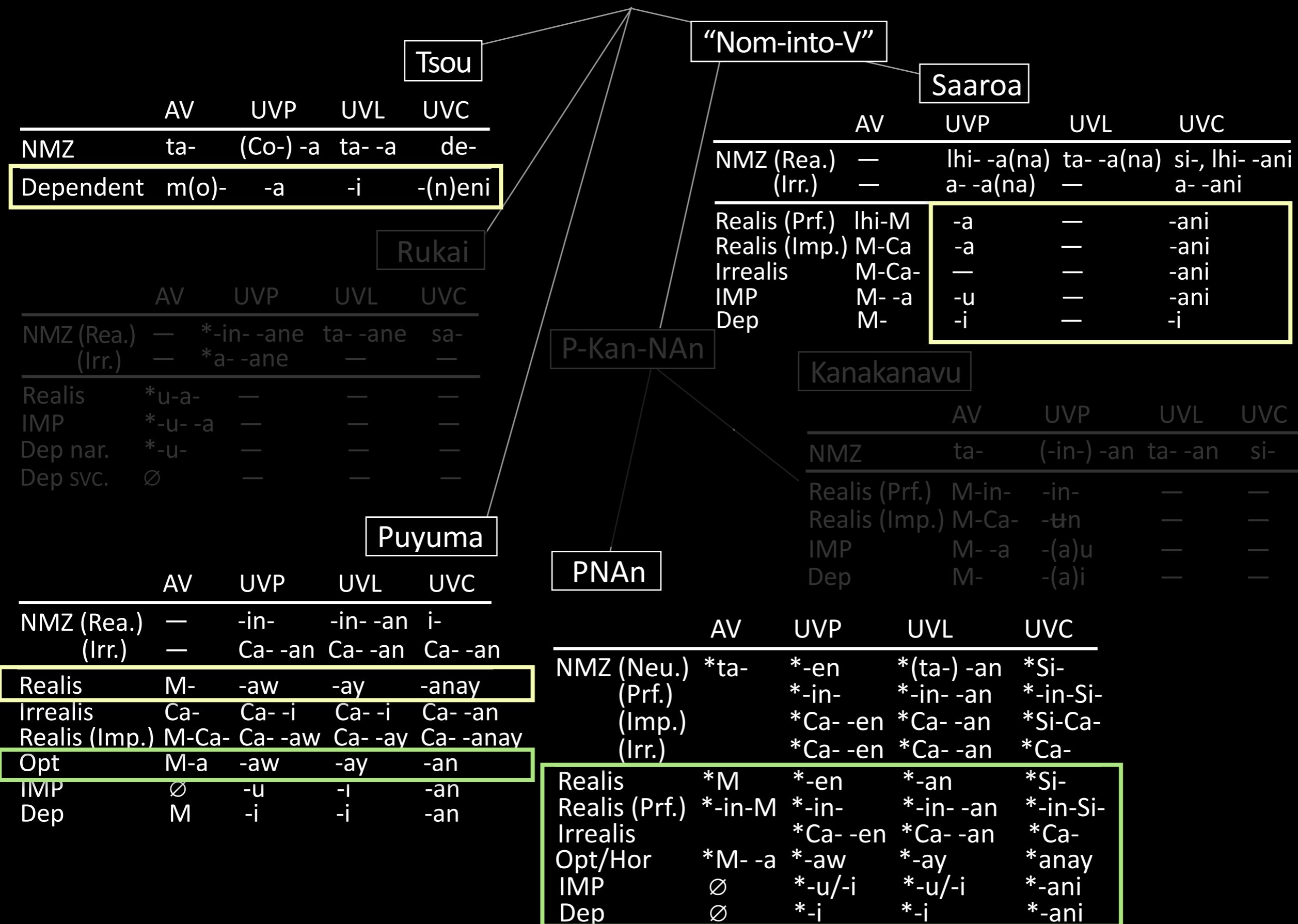
Proto-Austronesian ———— [*4 voices]



- Voice can be lost
- Pattern can be simplified

THE “LOSS” HYPOTHESIS — Pattern reductions

Proto-Austronesian



Did Tsou and Puyuma never undergo “Nom-into-V”?

“Nom-into-V” (SPR 1981, Johns 1990, Bittner & Hale 1996, Alexiadou 2001, Ross 2009)

- 1. Nominalizer/voice affix homophony ✓
 - 2. Possessor/ergative case homophony ✓
- e.g. NAn, Mayan, Inuit

		Ergative					Possessor		
Amis (NAn)	a.	ma-palu	ni Lisin	∅	ci	Sawmah.	b.	ku wawa	ni Lisin
		UVP-beat	ERG L.	ABS	PN	S.		ABS child	SG.POSS L.
		‘Lisin beat Saumah.’						‘Lisin’s child’	

- Puyuma and Tsou both exhibit Possessor/ergative case homophony

			Ergative				Possessor	
Puyuma	a.	tu=pukpuk-aw=ku	kan rusaw.		b.	tu=paysu	kan rusaw	
		3.ERG=beat-UVP=1SG.ABS	SG.ERG teacher			3.POSS=money	SG.POSS teacher	
		‘The teacher beat me.’					‘teacher’s money’	
			Ergative				Possessor	
Tsou	a.	i-ta	eobaka to ino	‘o	oko.	b.	o’ mcoo	to ino
		UV.RLS-3S.ERG	UVP.beat	OBL	mother	ABS	child	ABS eye
		‘Mother has beaten the child.’					‘mother’s eye’	

(Zeitoun 2005:270,273,275)

Possessor/ergative case homophony in Puyuma & Tsou

Puyuma

	Personal								Common							
	Singular				Plural				Definite			Indefinite				
	NOM	PSR	GEN	OBL	NOM	PSR	GEN	OBL	NOM	PSR	GEN	OBL	NOM	PSR	GEN	OBL
NANWANG	i	kan	kan	kan	na	kana	kana	kana	na	kana	kana	kana	a	dra	dra	dra
KATRIPUL	i	ni	ni	kani	na	—	—	kana	na	(ni)na	(ni)na	kana	a	za	za	za
ULIVELIVEK	i	ni	ni	kani	na	—	—	kana	na	(ni)na	nina/ kana	kana	a	za	za	za

(PAN SG. GEN *ni)

(PAN PPN. GEN *na)

(Teng 2009: 827)

(Blust to appear, Ross 2006)

— Poss/Erg homophony in Puyuma shares the same origin with ‘NAn’ languages

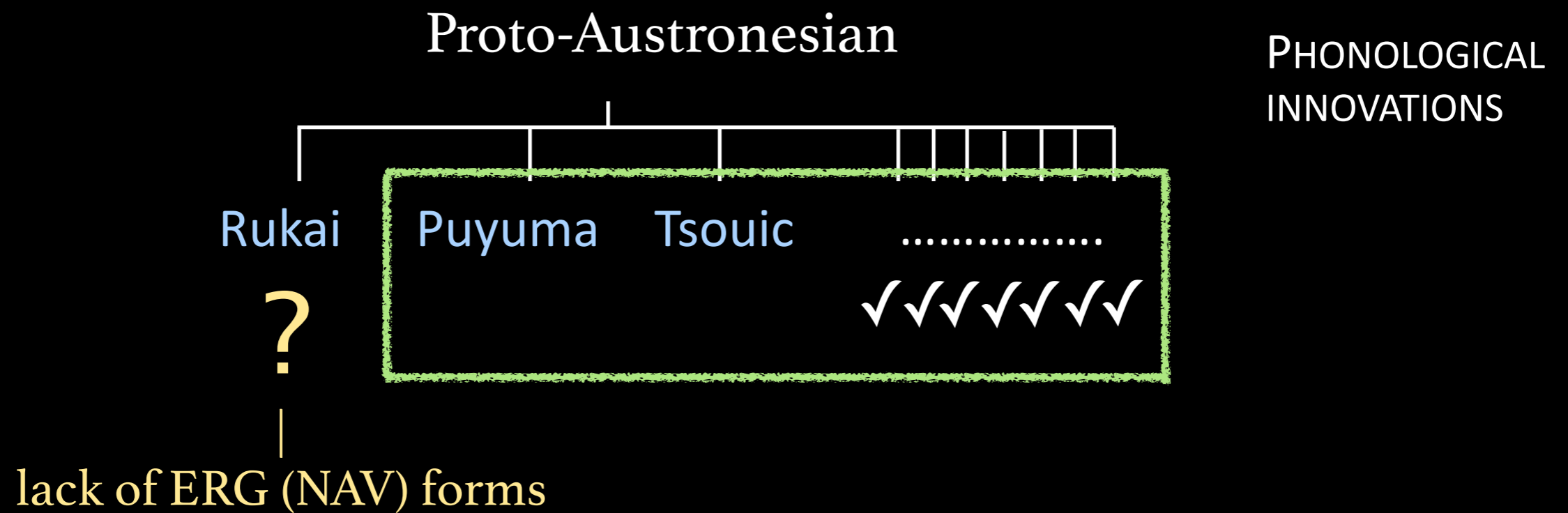
Tsou

	+ identifiable, -referential			+/- identifiable, + referential		-identifiable, -referential	
	VIS, PROX	VIS, MEDIAL	VIS, DISTAL	-VIS, HIGH CERTAINTY		-VIS, LOW CERTAINTY	
Nominative	‘e	si	ta	‘o		na	
Oblique	ta	ta	ta	to		no, ne	

— GEN/OBL syncretism

(Lin 2010: 99, Zeitoun 2005:274)

[II] Pattern reductions



Lack of phonological evidence defining P-NOM-INTO-V (P-Saa-Kan-PNAn)

PAn'	*p	*t	*C	*k	*q	*b	*d	*z	*j	*g	*m	*n	*N	*ñ	*ŋ	*s	*S	*l	*r	*R	*h
P-Sar-Kan-PNAn	*p	*t	*C	*k	*q	*b	*d	*z	*j	*g	*m	*n	*N	*ñ	*ŋ	*s	*S	*l	*r	*R	*h
(P-NAn	*p	*t	*C	*k	*q	*b	*d	*z	*j	*g	*m	*n	*N	*ñ	*ŋ	*s	*S	*l	*r	*R	*h)
Tsou	p	t	c	ʔ,k	∅	f	c	c	∅	k	m	n	n	h,k	ŋ	s	s	l	r	r	∅
P-Rukai	p	t	c	k	∅	b	dr	d	g,∅	g	m	n	—	l	ŋ	s	s	lr	lr	—	∅
P-Puyuma	p	t	tr	k	ʔ	b	d,dr	d	d	h	m	n	l	l	ŋ	s	s	∅	lr	r	ʔ

THE “LOSS” HYPOTHESIS

—— If there is a process of “Nom-into-V”, it might at least precede the split of all ergative-aligned AN languages (cf. SPR 1981)

—— The lack of nominalizer/voice affix homophony in Puyuma, Tsou (& Rukai) is a product of **pattern reductions**

- ✓ ERG/POSS case homophony in Puyuma & Tsou
- ✓ Compatibility with Tsouic
- ✓ The positions of Saaroa/Kanakanavu/Rukai being less ambiguous
- ✓ The lack of phonological evidence defining “Nom-into-V”
- ✓ Less mechanism required:

—— ✗ Separate sources of ergativity in Puyuma/Tsou and “NAn” languages (Aldridge 2014)

✗ Possessor/ergative homophony in Tsou & Puyuma as two independent coincidences with NAn

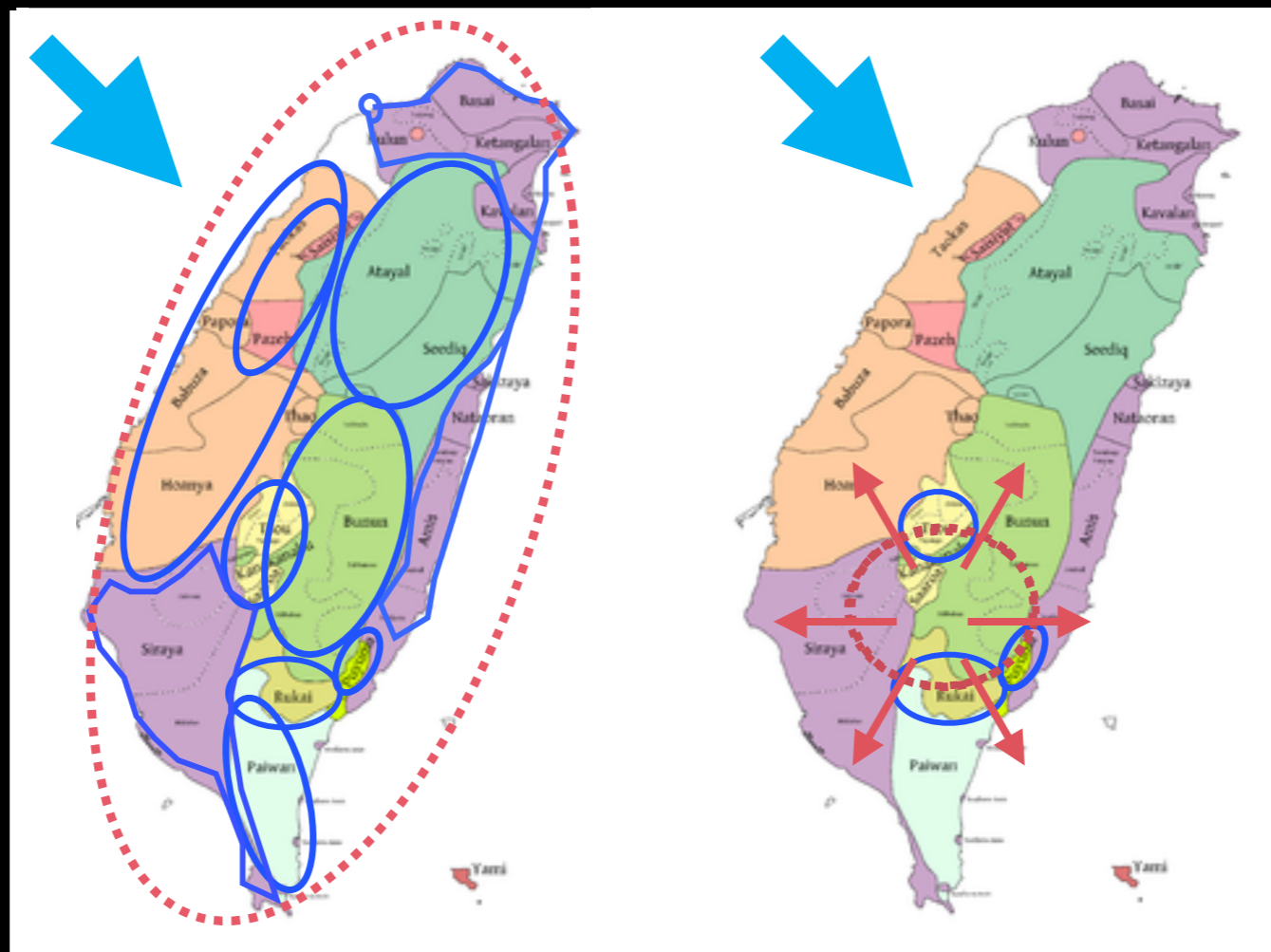
Homeland inference

ARCHEOLOGICAL EVIDENCE VS. HOMELAND INFERENCES

- The Austronesian settlement of Taiwan was a Neolithic dispersal from mainland southeast China around 5,000 years ago (e.g. Chang & Goodenough 1976, Tsang et al. 2006, Rolett et al. 2011)
- The distributions of the mid-Neolithic sites in Taiwan show a **tendency of moving toward the inland regions along the rivers.** (e.g. Kuo 2014:141-142)

A Phonology-based

B “Nom-into-V”



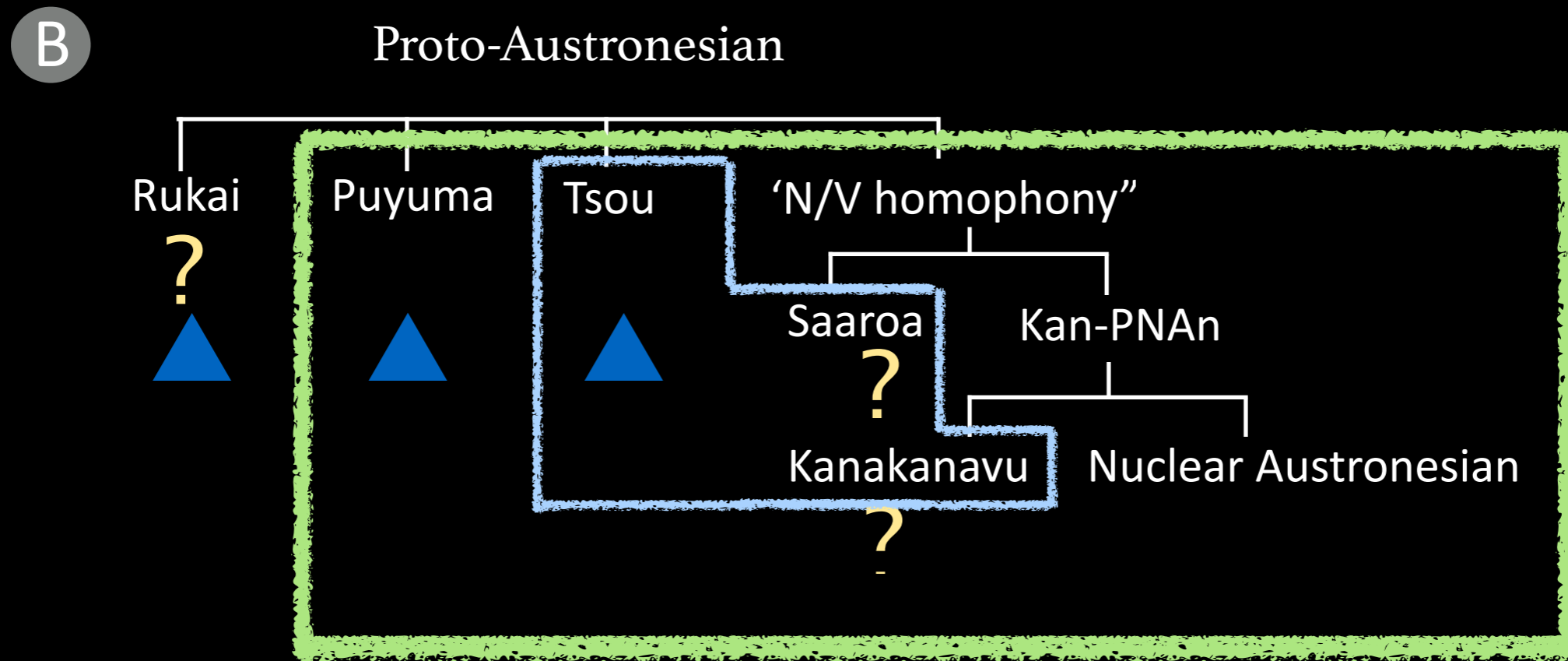
REF

Conclusion & Implication

“Nom-into-V” { 1. Nominalizer/voice affix homophony
2. Possessor/ergative homophony

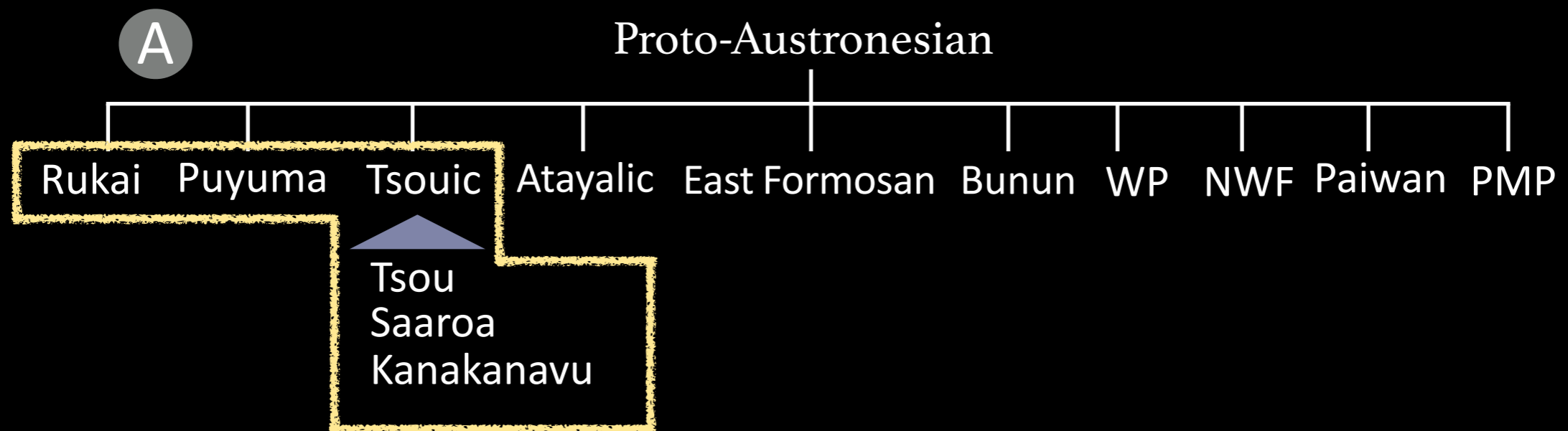
Tsouic: Tsou, Saaroa & Kanakanavu

Homeland inference ▲



“Nom-into-V” (cf. SPR 1981)

PROPOSAL



Pattern reductions

- Compatibility with Tsouic
- “Nom-into-V” without phonological innovation
- The positions of Saaroa, Kanakanavu & Rukai
- Shared Ergative/Poss case homophony
- Homeland inference

Selected References

- ALDRIDGE, EDITH. 2004. Ergativity and Word Order in Austronesian Languages. Ph.D. dissertation: Cornell University.
- ALDRIDGE, EDITH. 2011. Antipassive in Austronesian Alignment Change. In Dianne Jonas, John Whitman, and Andrew Garrett (eds.), *Grammatical Change: Origins, Nature, Outcomes*:332-346. Oxford University Press.
- ALDRIDGE, EDITH. 2012. Tagalog nominalization and ergativity. Paper presented at the 19th meeting of the Austronesian Formal Linguistics Association (AFLA19). Academia Sinica, Taiwan.
- ALDRIDGE, EDITH. 2014. Ergativity from subjunctive in Austronesian languages. Paper presented at the 14th International Symposium on Chinese Languages and Linguistics (ISCLL 14th), Academia Sinica, Taipei, 4-6 June 2014.
- ALEXIADOU, ARTEMIS. 2001. *Functional Structure in Nominals*. Amsterdam: John Benjamins.
- AUSTRONESIAN COMPARATIVE DICTIONARY. Blust & Trussel (ongoing). <http://www.trussel2.com/ACD/>
- BITTNER, MARIA. 1995. Quantification in Eskimo: A Challenge for Compositional Semantics. In E. Bach, E. Jelinek, A. Kratzer, & B. Partee (eds.), *Quantification in Natural Languages*:59-80. Dordrecht: Kluwer Academic Publishers.
- BITTNER, MARIA & KENNETH HALE. 1996. Ergativity: Toward a Theory of a Heterogeneous Class. *Linguistic Inquiry* 27:531-604.
- BLAKE, BARRY. 2001. *Case*. Cambridge: Cambridge University Press.
- BLUST, ROBERT. 1984. The Austronesian Homeland: a linguistic perspective. *Asian Perspectives* 26:45-67.
- BLUST, ROBERT. 1996a. Beyond the Austronesian homeland: The Austric hypothesis and its implications for archaeology. In Ward H. Goodenough (eds.), *Prehistoric Settlement of the Pacific*:117-137. *Transactions of the American Philosophical Society* 86.5. Philadelphia: American Philosophical Society.
- BLUST, ROBERT. 1996b. Some remarks on the linguistic position of Thao. *Oceanic Linguistics* 35.2:272-294.
- BLUST, ROBERT. 1999. Subgrouping, circularity and extinction: some issues in Austronesian comparative linguistics. In Elizabeth Zeitoun & Paul Jen-kuei Li (eds.), *Selected Papers from the Eighth International Conference on Austronesian Linguistics*:31-94. Taipei: Institute of Linguistics, Academia Sinica.
- BLUST, ROBERT. 2002. Notes on the history of 'focus' in Austronesian languages. In F. Wouk & M. Ross (eds.), *The history and typology of western Austronesian voice systems*:63-78. Canberra: Pacific Linguistics.
- BLUST, ROBERT. 2003. Three notes on early Austronesian morphology. *Oceanic Linguistics* 42.2: 438-478.
- BLUST, ROBERT. 2005. A Note on the History of Genitive Marking in Austronesian Languages. *Oceanic Linguistics* 44.1:215-222.
- BLUST, ROBERT. 2013[2009]. *The Austronesian languages* (2nd edition). Canberra: Pacific Linguistics.
- BLUST, ROBERT. 2014. The Higher Phylogeny of Austronesian and the Position of Tai-Kadai: another look. Paper presented at the 14th International Symposium on Chinese Languages and Linguistics (ISCLL 14th), Academia Sinica, Taipei, 4-6 June 2014.
- BOK-BENNEMA, REINEKE. 1991. *Case and agreement in Inuit*. Dordrecht: Foris.
- BOK-BENNEMA, REINEKE & A. GROOS. 1984. Ergativiteit. In *GLOT* 7:1-49.
- BRICKER, VICTORIA. 1981. The source of the ergative split in Yucatec Maya. *Journal of Mayan Linguistics* 2.2:83-127.
- BYBEE, JOAN. 2001. Main clauses are innovative, subordinate clauses are conservative. In Joan Bybee & Michael Noonan (eds.), *Complex sentences in grammar and discourse: Essays in honor of Sandra A. Thompson*:1-17. Amsterdam: John Benjamins.
- CHANG, HENRY YONG-LI. 2006. Rethinking the Tsouic subgroup hypothesis: A morphosyntactic perspective. In H. Chang, L. Huang and D. Ho (eds.), *Streams Converging into an Ocean: Festschrift in Honor of Professor Paul Jen-kuei Li on his 70th Birthday*:565-83. Taipei: Institute of Linguistics, Academia Sinica.
- Kaufman, Daniel. 2009. Austronesian nominalism and its consequences: A Tagalog case study. *Theoretical Linguistics* 35.1:1-49.
- Kikusawa, Ritsuko. 2012. On the development of applicative constructions in Austronesian languages. *Osaka: Bulletin of the National Museum of Ethnology* 36:413-455.
- Li, Paul Jen-kuei. 2001a. The dispersal of the Formosan aborigines in Taiwan. *Language and Linguistics* 2.1:271-278.
- REID, LAWRENCE. 1994. MORPHOLOGICAL EVIDENCE FOR AUSTRIC. *OCEANIC LINGUISTICS* 33.2:323-344.
- REID, LAWRENCE. 2002. DETERMINERS, NOUNS, OR WHAT? PROBLEMS IN THE ANALYSIS OF SOME COMMONLY OCCURRING FORMS IN PHILIPPINE LANGUAGES. *OCEANIC LINGUISTICS* 41:295-309.
- ROSS, MALCOLM. 2002A. RESEARCH THEMES IN THE HISTORY AND TYPOLOGY OF WESTERN AUSTRONESIAN LANGUAGES. IN FAY WOUK AND MALCOLM ROSS (EDS.), *THE HISTORY AND TYPOLOGY AND WESTERN AUSTRONESIAN VOICE SYSTEMS*:17-62. CANBERRA: PACIFIC LINGUISTICS.
- ROSS, MALCOLM. 2002B. THE HISTORY AND TRANSITIVITY OF WESTERN AUSTRONESIAN VOICE AND VOICE-MARKING. IN FAY WOUK AND MALCOLM ROSS (EDS.), *THE HISTORY AND TYPOLOGY AND WESTERN AUSTRONESIAN VOICE SYSTEMS*:17-62. CANBERRA: PACIFIC LINGUISTICS.
- ROSS, MALCOLM. 2009. PROTO AUSTRONESIAN VERBAL MORPHOLOGY: A REAPPRAISAL. IN K. ALEXANDER ADELAAR & ANDREW PAWLEY (EDS.), *AUSTRONESIAN HISTORICAL LINGUISTICS AND CULTURE HISTORY: A Festschrift for R. Blust*: 295-326. CANBERRA: PACIFIC LINGUISTICS.
- ROSS, MALCOLM. 2012. IN DEFENSE OF NUCLEAR AUSTRONESIAN (AND AGAINST TSOUC). *LANGUAGE AND LINGUISTICS* 13.6:1253-1330.
- ROSS, MALCOLM. 2014. MAJOR MORPHOSYNTACTIC CHANGES IN EARLY AUSTRONESIAN. *LECTURES IN WORKSHOP ON ADVANCED LINGUISTICS: LANGUAGE CHANGE, ACADEMIA SINICA*. JULY 14-24, 2014.
- ROUVERET, ALAIN & JEAN-ROGER VERGNAUD. 1980. SPECIFYING REFERENCE TO THE SUBJECT: FRENCH CAUSATIVES AND CONDITIONS ON REPRESENTATIONS. *LINGUISTIC INQUIRY* 11:97-202.
- RUBINO, CARL. 2000. ILOCANO DICTIONARY AND GRAMMAR: ILOCONO-ENGLISH, ENGLISH-ILOCANO. *PALI LANGUAGE TEXTS, DEPARTMENT OF LINGUISTICS, UNIVERSITY OF HAWAII*. HONOLULU: UNIVERSITY OF HAWAII PRESS.
- SAGART, LAURENT. 2004. THE HIGHER PHYLOGENY OF AUSTRONESIAN AND THE POSITION OF TAI-KADAI. *OCEANIC LINGUISTICS* 43.2:411-444.
- SAGART, LAURENT. 2008. THE EXPANSION OF SETARIA FARMERS IN EAST ASIA: A LINGUISTIC AND ARCHAEOLOGICAL MODEL. IN ALICIA SANCHEZ-MAZAS, ROGER BLENCH, MALCOLM ROSS, ILIA PEIROS AND MARIE LIN (EDS.), *PAST HUMAN MIGRATIONS IN EAST ASIA: MATCHING ARCHAEOLOGY, LINGUISTICS AND GENETICS*:133-157. LONDON: ROUTLEDGE.
- SAGART, LAURENT. 2010. IS PUYUMA A PRIMARY BRANCH OF AUSTRONESIAN? *OCEANIC LINGUISTICS* 49.1:194-204.
- SAGART, LAURENT. 2013. IS PUYUMA A PRIMARY BRANCH OF AUSTRONESIAN?: A REJOINDER. *OCEANIC LINGUISTICS* 52.2:481-492.
- SAGART, LAURENT. 2014. IN DEFENSE OF THE NUMERAL-BASED MODEL OF AUSTRONESIAN PHYLOGENY, AND OF TSOUC. *LANGUAGE AND LINGUISTICS* 15.6:859-882.
- SHIH, CHAO-KAI & ATUL MANQOQO. 2013. ON TAKIBAKHA MULTIPLE APPLICATIVE CONSTRUCTIONS. PAPER PRESENTED AT 20TH ANNUAL MEETING OF THE AUSTRONESIAN FORMAL LINGUISTICS ASSOCIATION (AFLA20). ARLINGTON, 2013.
- SPRENG, BETTINA. 2001. LITTLE V IN INUKTITUT: ANTIPASSIVE REVISITED. *LINGUISTICA ATLANTICA* 23:155-190
- STAROSTA, STANLEY. 1985. VERBAL INFLECTION VERSUS DEVERBAL NOMINALIZATION IN PAN: THE EVIDENCE FROM TSOU. IN ANDREW PAWLEY & LOIS CARRINGTON (EDS.), *AUSTRONESIAN LINGUISTICS AT THE 15TH PACIFIC SCIENCE CONGRESS*: 281-312. PACIFIC LINGUISTICS C-88. CANBERRA: THE AUSTRALIAN NATIONAL UNIVERSITY.
- STAROSTA, STANLEY. 1995. A GRAMMATICAL SUBGROUPING OF FORMOSAN LANGUAGES. IN PAUL JEN-KUEI LI ET AL (EDS.), *AUSTRONESIAN STUDIES RELATING TO TAIWAN*:683-726. TAIPEI: INSTITUTE OF HISTORY AND PHILOLOGY, ACADEMIA SINICA.
- STAROSTA, STANLEY, ANDREW PAWLEY & LAWRENCE A. REID. 1981. THE EVOLUTION OF FOCUS IN AUSTRONESIAN. PAPER PRESENTED AT THE THIRD INTERNATIONAL CONFERENCE ON AUSTRONESIAN LINGUISTICS, BALI. REPRINTED IN E. ZEITOUN (EDS.) 2009, *FORMOSAN LINGUISTICS: STANLEY STAROSTA'S CONTRIBUTIONS*:329-480.
- STAROSTA, STANLEY, ANDREW PAWLEY & LAWRENCE A. REID. 1982. THE EVOLUTION OF FOCUS IN AUSTRONESIAN. IN A. HALIM, L. CARRINGTON & S. WURM (EDS.), *PAPERS FROM THE THIRD INTERNATIONAL CONFERENCE ON AUSTRONESIAN LINGUISTICS, VOL. 2*:145-170. CANBERRA: PACIFIC LINGUISTICS. REPRINTED IN E. ZEITOUN (EDS.) 2009, *FORMOSAN LINGUISTICS: STANLEY STAROSTA'S CONTRIBUTIONS*:297-328.
- ZEITOUN, ELIZABETH & STACY FANG-CHING TENG. 2014. THE POSITION OF KANAKANAVU AND SAAROA WITHIN THE FORMOSAN LANGUAGES REVISITED. PAPER PRESENTED AT THE 14TH INTERNATIONAL SYMPOSIUM ON CHINESE LANGUAGES AND LINGUISTICS (ISCLL 14TH), ACADEMIA SINICA, TAIPEI, 4-6 JUNE 2014.

Evidence for modern Rukai (ACC) being innovative

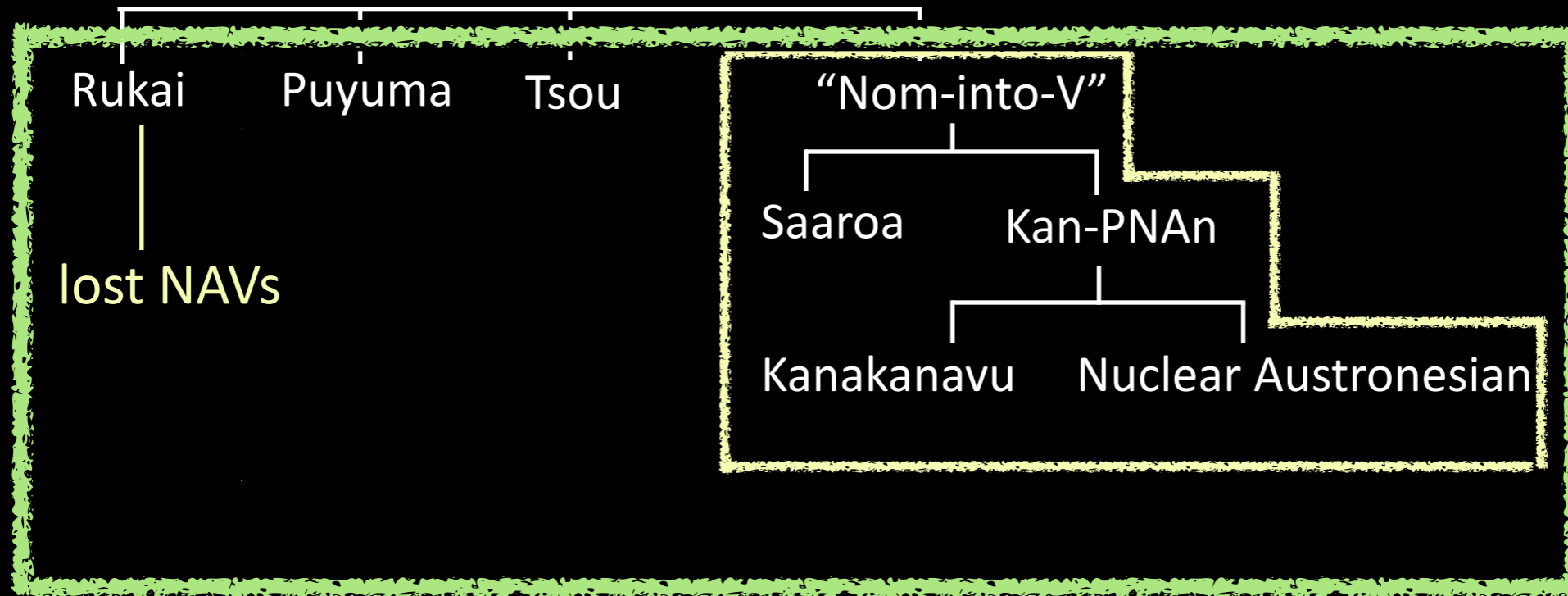
	1Sg	2Sg	1P (incl.)	1P (excl.)	2P
PAn neutral	*aku	*(i)Su	*(i)ta	*ami	*[a]mu
PAn GEN	*naku	*miSu	*mita	*nami	*namu
P-Rukai OBL	*naku-an	*miSu-an	*mita-an	*nami-an	*mu-an

— OBL = GEN + -an

(Ross 2014)

B

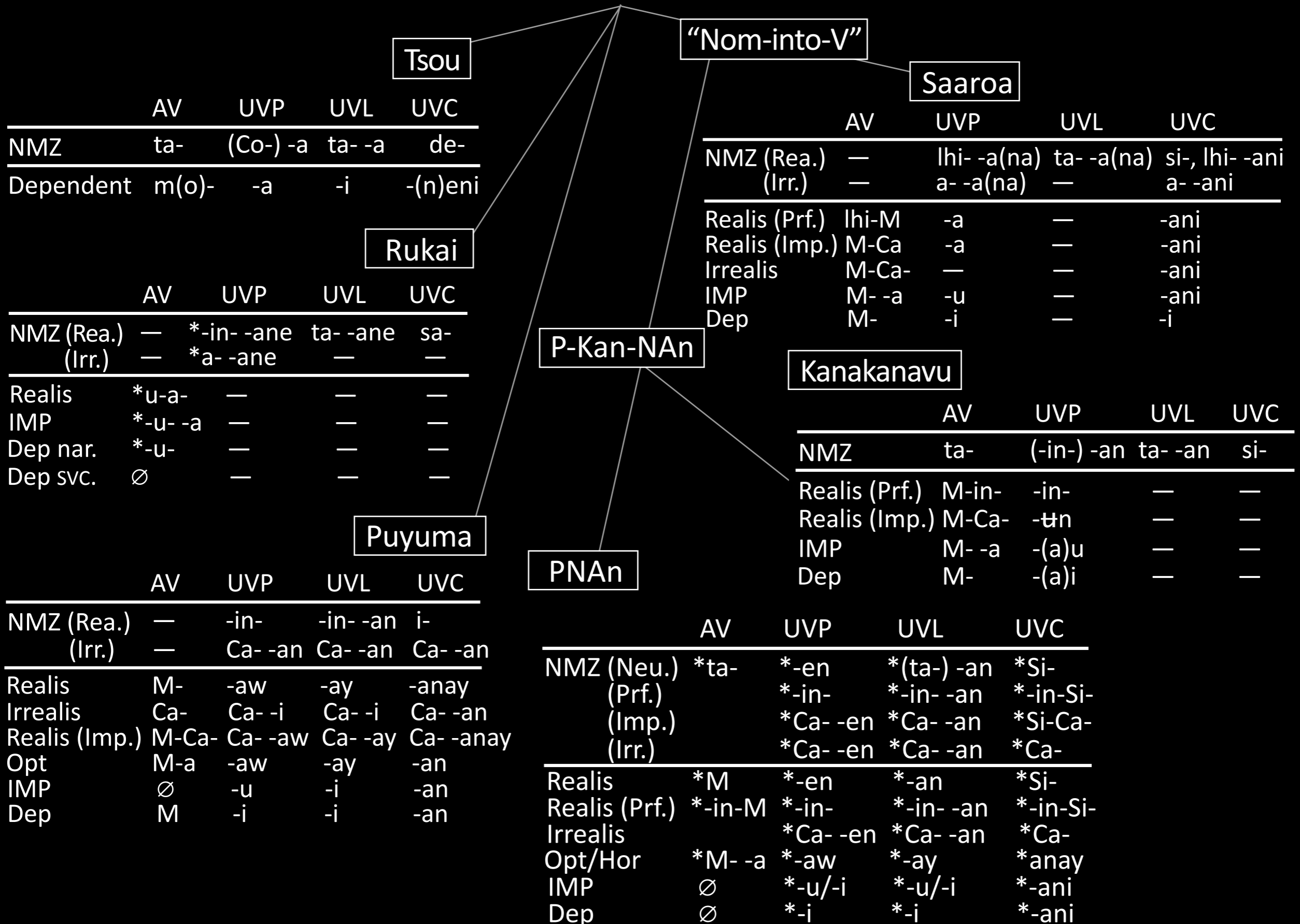
Proto-Austronesian



“Nom-into-V” (cf. SPR 1981)

THE ISSUE OF SAAROA & KANAKANAVU

Proto-Austronesian



PATTERN REDUCTION VS. “NOM-INTO-V”

The “Pattern reduction” scenario does not require more assumptions than the “Nom-into-V” hypothesis

The “loss” scenario vs. “Nom-into-V”

[I]

PAn under “Nom-into-V”

	AV	UVP	UVL	UVC
NMZ (Neu.)	*ta-	*-en	*(ta-) -an	*Si-
(Prf.)		*-in-	*-in- -an	—
(Imp.)		*Ca- -an	*Ca- -an	—
(Irr.)		*Ca- -an	*Ca- -an	*Ca-
Realis	*M-Ca-	—	—	—
Irrealis	Ca-	—	—	—
Opt/Hor	*M- -a	*-aw	*-ay	*-anay
Dep	*M-	*-a	—	—
Imp	∅	*-u/-i	*-u/-i	*-ani

(PAn, Ross 2012, 14)

[II]

PAn under “Pattern reduction”

	AV	UVP	UVL	UVC
NMZ (Neu.)	*ta-	*-en	*(ta-) -an	*Si-
(Prf.)		*-in-	*-in- -an	*-in-Si-
(Imp.)		*Ca- -en	*Ca- -an	*Si-Ca-
(Irr.)		*Ca- -en	*Ca- -an	*Ca-
Realis	*M	*-en	*-an	*Si-
Realis (Prf.)	*-in-M	*-in-	*-in- -an	*-in-Si-
Irrealis		*Ca- -en	*Ca- -an	*Ca-
Opt/Hor	*M- -a	*-aw	*-ay	*anay
IMP	∅	*-u/-i	*-u/-i	*-ani
Dep	∅	*-i	*-i	*-ani

(PNAn, Ross 2012, 14)

FROM PAN TO RUKAI

PAn under “Nom-into-V”

	AV	UVP	UVL	UVC
NMZ (Neu.)	*ta-	*-en	*(ta-) -an	*Si-
(Prf.)		*-in-	*-in- -an	—
(Imp.)		*Ca- -an	*Ca- -an	—
(Irr.)		*Ca- -an	*Ca- -an	*Ca-
Realis	*M-Ca-	—	—	—
Irrealis	Ca-	—	—	—
Opt/Hor	*M- -a	*-aw	*-ay	*-anay
Dep	*M-	*-a	—	—
Imp	∅	*-u/-i	*-u/-i	*-ani

PAn under “Pattern reduction”

	AV	UVP	UVL	UVC
NMZ (Neu.)	*ta-	*-en	*(ta-) -an	*Si-
(Prf.)		*-in-	*-in- -an	*-in-Si-
(Imp.)		*Ca- -en	*Ca- -an	*Si-Ca-
(Irr.)		*Ca- -en	*Ca- -an	*Ca-
Realis	*M	*-en	*-an	*Si-
Realis (Prf.)	*-in-M	*-in-	*-in- -an	*-in-Si-
Irrealis		*Ca- -en	*Ca- -an	*Ca-
Opt/Hor	*M- -a	*-aw	*-ay	*anay
IMP	∅	*-u/-i	*-u/-i	*-ani
Dep	∅	*-i	*-i	*-ani

Rukai

	AV	UVP	UVL	UVC
NMZ (Rea.)	—	*-in- -ane	ta- -ane	sa-
(Irr.)	—	*a- -ane	—	—
Realis	*u-a-	—	—	—
IMP	*-u- -a	—	—	—
Dep nar.	*-u-	—	—	—
Dep svc.	∅	—	—	—

- lost UVP/UVL/UVC

- lost UVP/UVL/UVC

FROM PAN TO PUYUMA

PAn under “Nom-into-V”

	AV	UVP	UVL	UVC
NMZ (Neu.)	*ta-	*-en	*(ta-) -an	*Si-
(Prf.)		*-in-	*-in- -an	—
(Imp.)		*Ca- -an	*Ca- -an	—
(Irr.)		*Ca- -an	*Ca- -an	*Ca-
Realis	*M-Ca-	—	—	—
Irrealis	Ca-	—	—	—
Opt/Hor	*M- -a	*-aw	*-ay	*-anay
Dep	*M-	*-a	—	—
Imp	∅	*-u/-i	*-u/-i	*-ani

PAn under “Pattern reduction”

	AV	UVP	UVL	UVC
NMZ (Neu.)	*ta-	*-en	*(ta-) -an	*Si-
(Prf.)		*-in-	*-in- -an	*-in-Si-
(Imp.)		*Ca- -en	*Ca- -an	*Si-Ca-
(Irr.)		*Ca- -en	*Ca- -an	*Ca-
Realis	*M	*-en	*-an	*Si-
Realis (Prf.)	*-in-M	*-in-	*-in- -an	*-in-Si-
Irrealis		*Ca- -en	*Ca- -an	*Ca-
Opt/Hor	*M- -a	*-aw	*-ay	*anay
IMP	∅	*-u/-i	*-u/-i	*-ani
Dep	∅	*-i	*-i	*-ani

Puyuma

	AV	UVP	UVL	UVC
NMZ (Rea.)	—	-in-	-in- -an	i-
(Irr.)	—	Ca- -an	Ca- -an	Ca- -an
Realis	M-	-aw	-ay	-anay
Irrealis	Ca-	Ca- -i	Ca- -i	Ca- -an
Realis (Imp.)	M-Ca-	Ca- -aw	Ca- -ay	Ca- -anay
Opt	M-a	-aw	-ay	-an
IMP	∅	-u	-i	-an
Dep	M	-i	-i	-an

- generalized Opt/Hor into Realis

- lost the distinction between Realis & Opt/Hor

FROM PAN TO TSOU

PAn under “Nom-into-V”

	AV	UVP	UVL	UVC
NMZ (Neu.)	*ta-	*-en	*(ta-) -an	*Si-
(Prf.)		*-in-	*-in- -an	—
(Imp.)		*Ca- -an	*Ca- -an	—
(Irr.)		*Ca- -an	*Ca- -an	*Ca-
Realis	*M-Ca-	—	—	—
Irrealis	Ca-	—	—	—
Opt/Hor	*M- -a	*-aw	*-ay	*-anay
Dep	*M-	*-a	—	—
Imp	∅	*-u/-i	*-u/-i	*-ani

PAn under “Pattern reduction”

	AV	UVP	UVL	UVC
NMZ (Neu.)	*ta-	*-en	*(ta-) -an	*Si-
(Prf.)		*-in-	*-in- -an	*-in-Si-
(Imp.)		*Ca- -en	*Ca- -an	*Si-Ca-
(Irr.)		*Ca- -en	*Ca- -an	*Ca-
Realis	*M	*-en	*-an	*Si-
Realis (Prf.)	*-in-M	*-in-	*-in- -an	*-in-Si-
Irrealis		*Ca- -en	*Ca- -an	*Ca-
Opt/Hor	*M- -a	*-aw	*-ay	*anay
IMP	∅	*-u/-i	*-u/-i	*-ani
Dep	∅	*-i	*-i	*-ani

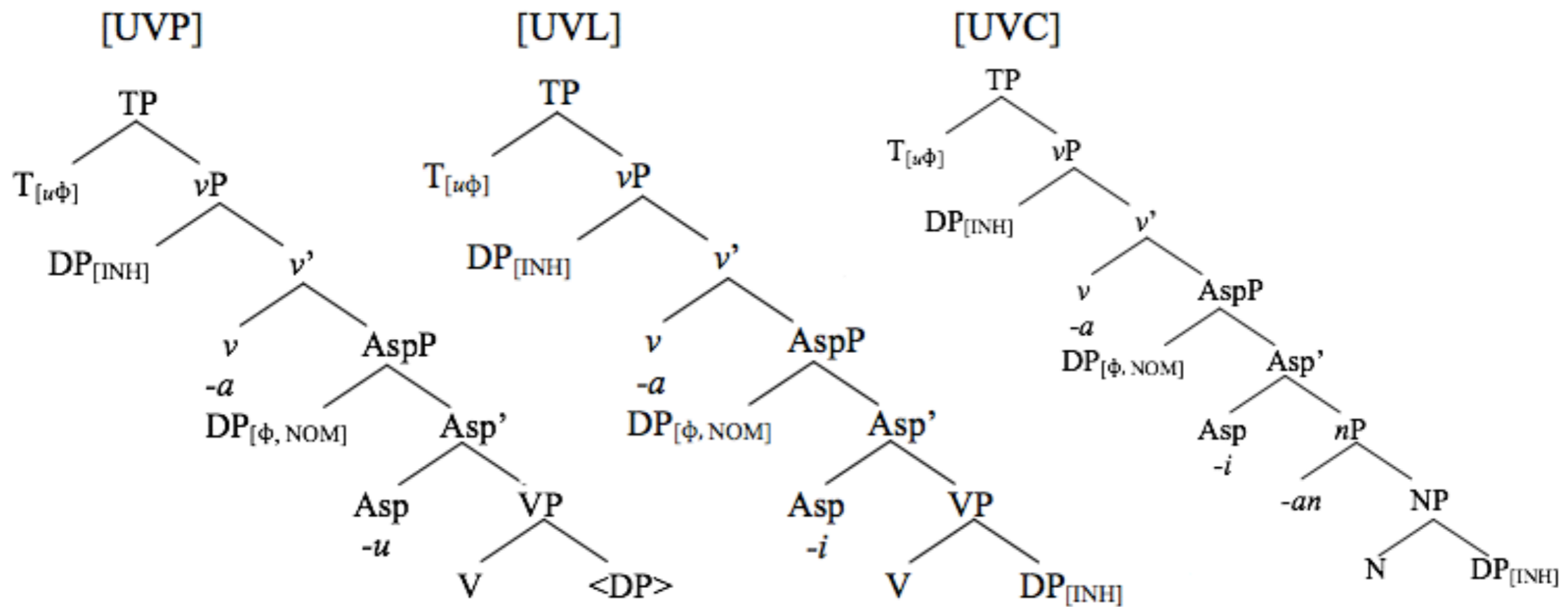
Tsou

	AV	UVP	UVL	UVC
NMZ	ta-	(Co-) -a	ta- -a	de-
Dependent	m(o)-	-a	-i	-(n)eni

- lost Realis/Irrealis/
Opt/Hor/Imp

- lost Realis/Irrealis/
Opt/Hor/Imp

FIGURE 9: THE PROPOSED UVP, UVL, AND UVC STRUCTURES IN ALDRIDGE (2014)



Partial realization of “Nom-into-V” in NAn languages

		[*-in-]		[*-en]		[*-an]		[*Si-/Sa-]	
		NMZ	Verbal	NMZ	Verbal	NMZ	Verbal	NMZ	Verbal
(NAn)	Paiwan	✓	✓	✓	✓	✓	✓	✓	✓
(NAn)	Amis	*	✗	*	✓	✓	✓	✓	✓
(NAn)	Kavalan	*	✓	✗	—	✓	✓	✓	✓