BRIDGING ARCHAEOGENETICS, LINGUISTICS,

AND FOLKLORE: NEW PERSPECTIVES ON

AUSTRONESIAN MIGRATION IN NIAS



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1 INTRODUCTION

Nias Island, off the west coast of Sumatra, is a pivotal location for understanding the complex migration history of Island Southeast Asia (Bellwood 2000). Archaeogenetic research reveals unusually low Y chromosome and mitochondrial DNA diversity in Nias, indicating a significant population bottleneck and probable replacement events (Oven et al. 2010). Archaeological studies and oral traditions support evidence of early Hoabinhian/Australomelanesoid settlement, later followed by Austronesian-speaking groups with advanced megalithic cultures (Wiradnyana 2007, 2010, 2015). This study adopts an interdisciplinary approach, combining archaeogenetics, archaeology, linguistics, and folklore—including dialect surveys and traditional "hoho" narratives (Zigoto 2018)—to reconstruct the patterns of migration and cultural change in Nias

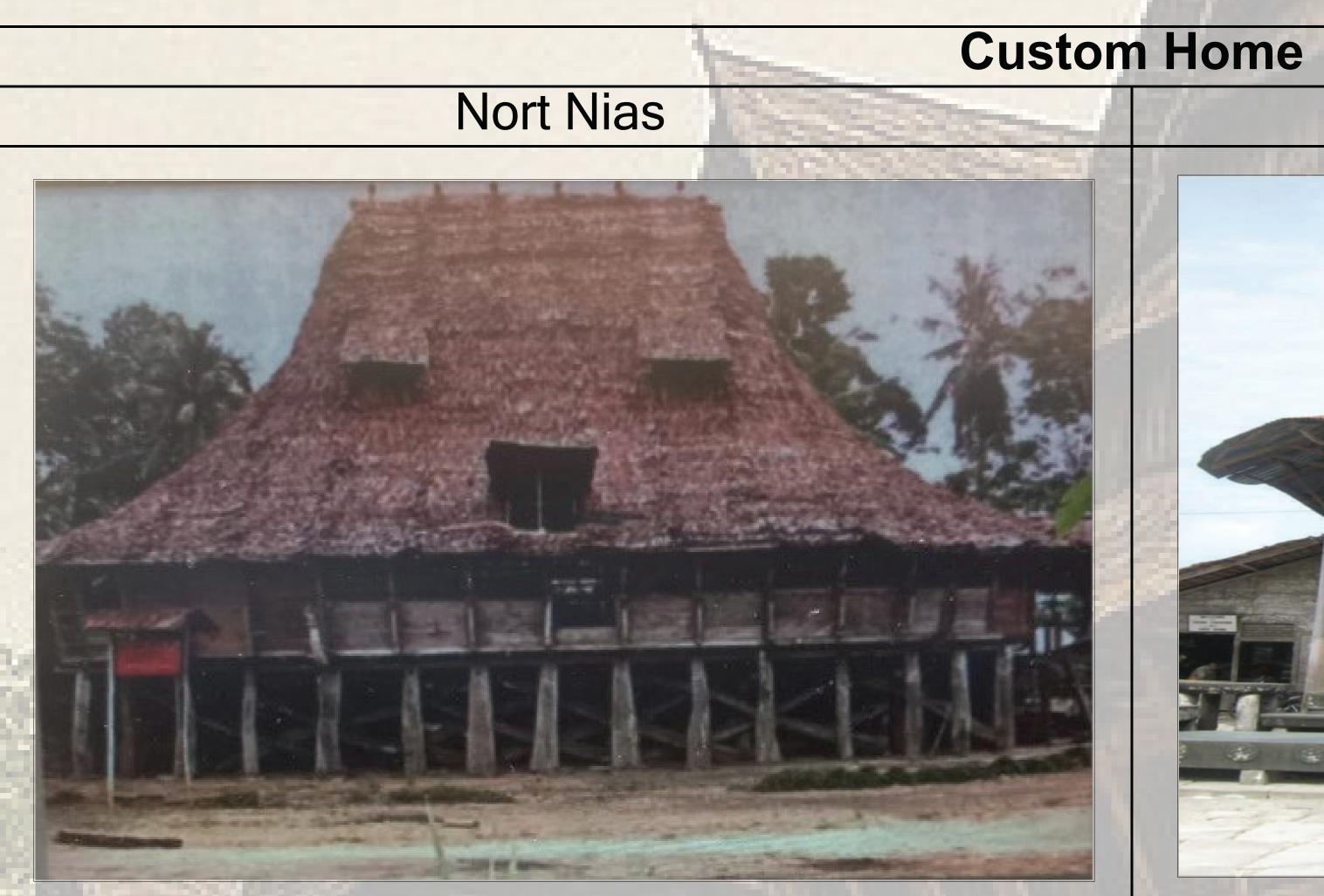
(3) ANALYSIS & RESULTS

Archaeology & Genetics: Archaeological evidence indicates early settlement by Hoabinhian/Australomelanesoid groups in northern Nias, followed by Austronesian-speaking, megalithic builders arriving first in the south. Radiocarbon dating and genetic studies reveal low Y chromosome and mtDNA diversity, consistent with major population replacement and south-to-north migration (Oven et al. 2010; Wiradnyana 2007, 2010, 2015).

Linguistics: Dialect surveys show southern and central Nias dialects retain older Austronesian features—lexicon and morphology—supporting a south-to-north spread of Austronesian speakers. Dialect patterns closely align with migration and settlement evidence (Zigoto 2018).

Folklore: Traditional hoho narratives recount ancestral arrivals in the south and expansion northward, mirroring archaeological and linguistic findings. Folklore also highlights the persistence of elite lineages, reflecting the role of social hierarchy in Nias's history.

Hoho Example





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Ba mböröta so niha soroi ba danö
Asia ya'ia inada sakao dödö
ya'ia inada si numana
töinia moroi khö
namania Sibowo Döfi
Madala
ma ifofanö ia amania
ifatörö'ö asi ba nata
owo Samösa löna

awönia niha Tosake ia

ba danö niha

Hämmerle, 2022

Once Upon a Time
There was a woman who came from the land of Asia
She was a mother whose heart was
forlorn
A mother, poor and sorrowful
The name given to her by her father
was Sibowo Döfi Madala
She was banished by her father.
She crossed the sea upon a boat
Without a single companion to accompany her
She was stranded on an island

Dialect Variation: North Nias, South-Central & South Nias				
Linguistic Variable	North Nias	South-Central Nias	South Nias	*PAN//*PWMP
burn	tunu (1-12)	cunu (13-15)	Xoji (16-20)	PWMP *tutuD
stone	kara (1-12)	kara (13-15)	Batu (16-20)	PAN *batux
3SG	Yaia (1-12)	Yaia (13-15)	=e (16-20)	PAN *ia
neck	Bagi (1-12)	Bagi (13-15)	ogu (16-20)	PWMP *bugar
pig	Mbawi (1-12)	Bawi (13-15)	Bawi (16-20)	PAN *babi
In-laws	matua (1-12)	macua (13-15)	Matua (16-20)	PAN *kurung
lice	Kutu (1-12	Ucu (13-15)	Kutu (16-20)	PAN *kutu
drink	Badu (1-12)	Baju (13-15)	Inu (15-20)	PAN *inum
(adat)head	Salawahada (1- 15)	sacuaБanua	si?ulu (15-20)	PAN *ulu
torchlight	Solo (1-14)	Colo (6-18)	Sulu (15, 19-20.)	PAN *suluh
turtle	gaera] (1-2),	[gotu] (3, 9, 11)	fənu (4-8, 10, 12-20)	PAN *penyu
silver	firə (1-12)	fir (3-15)	Ria (16-20)	PAN *pelak
stand (up)	mu-zizio (1-2,5-6, 8-10,12)	mo-zido (4,7,11,13)	s <um>ido (14-20)</um>	PAN *diRi PAN * <um></um>
Realis/Irrealis	The state of the s		Distinguished by pronominal prefix on verb	

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2 METHODOLOGY

This study integrates data from archaeogenetics, archaeology, linguistics, and folklore to reconstruct migration and cultural change in Nias. Archaeological excavations and radiocarbon dating were used to establish settlement timelines (Wiradnyana 2007, 2010, 2015), while genetic analysis focused on patterns of Y chromosome and mtDNA diversity (Oven et al. 2010). Linguistic research involved dialect surveys and analysis of key lexical and morphological features (Zigoto 2018). Folkloric evidence was drawn from the documentation and interpretation of traditional "hoho" narratives. By combining these approaches, we offer a comprehensive view of the demographic and cultural history of Nias



Sites				
Boronadu	Tundrumbaho	Hiligowe (260 ± 120 BP)		
(576 ± 30 BP)	(340 ± 120 BP)	(260 ± 120 BP)		

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4) CONCLUDING REMARKS

This study shows that the regions of southern-central Nias were the earliest centers of Austronesian settlement, with later expansions to the north and nearby islands. Hierarchical social structures, especially the preservation of elite patrilineal lineages, significantly shaped genetic patterns, leading to pronounced genetic bottlenecks. These results highlight that internal factors such as social stratification and local power were as important as external migration in shaping Nias's demographic and linguistic landscape.

Integrating archaeogenetic, linguistic, and folkloric data, our interdisciplinary approach provides deeper insights into Austronesian migration in Nias. The findings underscore the southern region's key role as the starting point for cultural and population dispersal, and show how social and cultural dynamics have influenced the genetic and linguistic diversity seen today. Beyond enriching local Nias history, this study also advances understanding of human migration across Southeast Asia.

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