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# "The Most Beautiful Mystery in the World"

... The Intriguing Case of the Mysterious Malagasy

Madagascar, the world's fourth-largest island, was created about 160 million years ago in the breakup of the great Southern Continent. One fragment of this breakup - the one destined to become the Indian subcontinent - drifted north, collided with Eurasia, and eventually formed the Himalayas. But the fragment destined to become Madagascar, born before most of today's plants and animals existed, stayed in pretty much the same spot through the eons, just off the southeast coast of Africa. Today, 20 million humans rule the place, but astonishingly, no permanent human settlements were established there until about 700AD. When the first Europeans visited the Island in the 16<sup>th</sup> century, they found a race of people not unlike those they had seen in East Africa, but – and here's the mystery – they spoke a language unlike any that had ever been heard in Africa. Popular ethnologist Jared Diamond has said:

This strikes me as the single most astonishing fact of human geography for the entire world. It's as if Columbus, on reaching Cuba, had found it occupied by blue-eyed, blond-haired Scandinavians speaking a language close to Swedish, even though the nearby North American continent was inhabited by Native Americans speaking Amerindian languages.<sup>11</sup>

Alfred Grandidier [1836 – 1921], the 19<sup>th</sup> century's greatest expert on Madagascar, called this "La plus belle énigme du monde" – the most beautiful mystery in the world.<sup>2</sup> In fact, this "mystery" has fascinated ethnologist, linguists, archaeologists and historians ever since Portuguese Jesuit Fr. Luis Mariano in 1613-14 first noticed – and published - a comparison of Malagasy speech to, of all things, the languages of Southeast Asia.<sup>3</sup> Mariano travelled up and down the coasts of Madagascar noting – significantly – that "their language…is the same throughout the island…the natives of the South and North understand each other with ease."<sup>4</sup> But how could this be? A huge island of black Africans, all conversing in the same language, one that sounded vaguely like those spoken by Asian people far across the sea?

For nearly two centuries after Mariano posed the enigma, Europeans were frustrated in their attempts to colonize – or even to explore – Madagascar. Hostile to outsiders, the coastal Malagasy either expelled or absorbed interlopers, so not much was known about the place from European explorers. English, French and American pirates and slave traders had intercourse with

<sup>&</sup>lt;sup>1</sup> Diamond, pg. 381.

<sup>&</sup>lt;sup>2</sup> Larson, pg. 37.

<sup>&</sup>lt;sup>3</sup> Adelaar 1995, pg. 325.

<sup>&</sup>lt;sup>4</sup> Larson, pg. 34.

the coastal Malagasy only. But when an English mariner named Robert Drury returned home 15 years after being marooned on Madagascar [1701 - 1716], he opened a window on this mysterious island for the English reading public.<sup>5</sup> As a slave of Malagasy chiefs, Drury had moved about southern and western Madagascar among several tribes, becoming thoroughly acculturated, speaking their language to the point where he nearly forgot how to speak English. His ghostwritten memoirs, published in 1729, told a tale of a complex land of internal tribes and kingdoms constantly at war with one another, constantly taking slave-prisoners in battle. As Drury moved from coastal tribe to coastal tribe, he spoke and was spoken to in the language of the time, many words of which he recorded in his memoir. This record, when corrected for his cockney accent, sounds remarkably like the Malagasy spoken today.<sup>6</sup>

But it wasn't until 1777, when French merchant-explorer Nicolas Mayeur ventured into the central highlands of Madagascar that the mystery started to unravel. He wrote that "…in the interior of this great island entirely surrounded by savage peoples there is more enlightenment, more industry and a more active administration than on the coasts where the inhabitants are in constant relations with foreigners." These people, unlike the coastal dwellers who grew rice with the ancient slash-and-burn technique [*tavy*], grew theirs in great irrigated fields [*padi*]. Consequently, harvests were abundant and they expanded rapidly to become strongest tribe of the island. Mayeur was the first European to "discover" the Lords of Madagascar, the *Merina*.<sup>7</sup>

### **The Indonesians**

Modern visitors to Madagascar are sometimes shocked, as was Nicolas Mayeur in 1777, to see that there are really two distinctly different types of Malagasy: the Africans and the Indonesians. Here are photos representing the contrast in appearance between 21<sup>st</sup> century members of coastal tribe [Betsimiaraka], the ruling tribe of the nation [Merina], and a tribe conquered a couple of centuries ago by the Merina [Betsileo]. Their appearances pretty much tell the story of how Madagascar's two main ethnicities both mixed and failed to mix over the last 1300 years:

#### Merina Politician



Marc Ravalomanana

#### Merina Politician



Andry Rajoelina





**Betsileo Women** 



<sup>&</sup>lt;sup>5</sup> Drury, 1729.

<sup>&</sup>lt;sup>6</sup> Richardson [in Drury], 1890, pp. 316-335.

<sup>&</sup>lt;sup>7</sup> Brown, pg. 117.

Once the Merina had been identified as clearly non-African, scholars scrambled to figure out where these people had originated. Obviously, it was they who had brought the Malagasy language with them. But where did they come from? And when? Among the first academics to weigh in on the topic was Alexander von Humboldt [1767 – 1835], one of the fathers of modern linguistics, who thought Malagasy to be directly descended from Philippine languages. As it turns out, Humboldt was wrong in detail, but he was on the right track.

# Analyzing the Ancestor Languages

It was not until 1951 that a solid hypothesis emerged of who the Merina actually were. It was based entirely on linguistic detective work, and it came from a man who had devoted most of his adult life to the Malagasy: Norwegian missionary-turned-linguist Otto Christian Dahl [1903 – 1995]. Dahl served as a missionary in Madagascar from 1929 to 1959, but during periods of home leave in the 1930s and 1940s, he turned to his real love – linguistics- publishing in 1937 *Le système phonologique du proto-malgache<sup>8</sup>*, followed by his academic thesis and most important work *Malgache a Maanjan. Une comparaison linguistique*,<sup>9</sup> in 1951. In this latter work, Dahl identified once and for all the source of the Malagasy language: Ma'anyan - an Austronesian language of the Greater Barito family, spoken in the southern Barito Valley of Kalimantan, Indonesian Borneo.



The Greater Barito Language Group [shown in Green].<sup>10</sup>

<sup>&</sup>lt;sup>8</sup> Norwegian Journal of linguistics 10:189-235.

<sup>&</sup>lt;sup>9</sup> Oslo: Egede Institute, 1951.

<sup>&</sup>lt;sup>10</sup> <u>http://www.ethnologue.com/show\_map.asp?name=MG&seq=30</u>

Ma'anyan, the language identified by Dahl, is one of fourteen or so languages spoken today in the Greater Barito group. Ma'anyan speakers dwell today on the southern border of this group, right next to the vast coastal area occupied by people who speak languages of the Malay family. Given the geographic situation, one would expect both a good deal of similarity between closeneighbor languages of the Barito group, and also that these languages would have adopted loan words from the nearby Malay languages.

Recently, a phylogeny of the entire Austronesian language family has been published by the University of New Zealand.<sup>11</sup> Although this phylogeny is not as rich in Barito languages as is the *Ethnologue*, it has the benefit of clarity and public availability of its vast language database.<sup>12</sup> Here is the part of this phylogeny dealing with the Barito languages:<sup>13</sup>



This phylogeny was computer-generated using the Phylogenetic method borrowed from evolutionary biology.<sup>14</sup> Note that Merina, the Malagasy dialect presumably closest to the Barito languages, appears next to Ma'anyan on this phylogeny. Three other languages, Ngaju Dayak, Katingan, and Tunjung appear to also be closely related to Merina Malagasy.<sup>15</sup>

Given the turbulent history of Man since 700 AD, it is highly unlikely that these languages are spoken today exactly where they were spoken at the time of the Merina exodus. And it is well-established that these languages have changed greatly over the past 1300 years. Here is where the closely-related Barito languages Ma'anyan, Ngaju Dayak, Katingan and Tinjung are spoken today:<sup>16</sup>

http://language.psy.auckland.ac.nz/publications/index.php?pub=Greenhill\_et\_al2008

<sup>16</sup> <u>http://llmap.org/languages/kxg/data\_browser.html</u> [Katingan] <u>http://llmap.org/languages/mhy/data\_browser.html</u> [Ma'anyan] <u>http://llmap.org/languages/nij/data\_browser.html</u> [Ngaju Dayak] <u>http://llmap.org/languages/tjg/data\_browser.html</u> [Tunjung]

<sup>&</sup>lt;sup>11</sup> Greenhill et al. [2008]

<sup>&</sup>lt;sup>12</sup> Austronesian Basic Vocabulary Database (ABVD).

<sup>&</sup>lt;sup>13</sup> <u>http://language.psy.auckland.ac.nz/austronesian/img/FullTreeFigure.pdf</u>

<sup>&</sup>lt;sup>14</sup> http://language.psy.auckland.ac.nz/austronesian/research.php

<sup>&</sup>lt;sup>15</sup> It should be noted that the language Katingan does not appear on the *Ethnologue* map, and the area covered by Ngaju Dayak is much greater on the *Ethnologue* map than on the LL-Map.



Malagasy's Forbears: Where Four Southern Barito Languages are Spoken Today

These are landlocked languages, spoken today by people with no knowledge of maritime skills. So although the linguistic similarity to Merina is unquestioned, this relationship begs the question: "How did these people undertake a voyage that would make them the first permanent settlers of an uninhabited island far across the Indian Ocean?"

Along with all the other languages in the Austronesian Language database, these languages have been used to reconstruct a *Proto*-Austronesian language. Expert linguistic researchers have catalogued the lexical similarity of every word in a list of 210 words from each of these Austronesian languages to the putative proto-Austronesian tongue. By counting words from these lists with the highest score for lexical similarity to proto-Austronesian [PAN], we see that about 1/3 of this proto-language has carried forward to several of the Southern Barito languages:<sup>17</sup>

•••	Cognacy with Proto-Austronesian
Katingan	39.5%
Merina	31.0%
Ma'anyan	30.5%

<sup>&</sup>lt;sup>17</sup> Greenhill et al. [2008]. Only words with the highest congnacy score assigned by these authors [1] were counted in my assessment.

So right away, we see that only 30% - 40% of words from these languages are solidly linked to their putative predecessor, PAN. But how closely are they related to one another? Using the same list of words, and this time making my own judgment as to the similarity or dissimilarity of each word between the languages, I observed the following:

	Cross -	with	AND	Apparent Correlation AND NOT Shared Cognacy
Merina-Ma'anyan	34.5%	18.1%	16.2%	18.3%
Merina-Katingan	24.5%	20.5%	12.5%	12.0%

[Note: "Shared Cognacy" refers to words that are correlated between Merina and Ma'anyan or Merina and Katingan AND are cognate with PAN].

Indeed, Ma'anyan appears more closely related to Merina Malagasy than does Katingan [34.5% - vs- 24.5%]. But only about one word in five that Merina shares with Ma'anyan or Katingan is cognate to PAN. Slicing the data another way, we see that of the words that appear to be correlated between Merina and Ma'anyan or Merina and Katingan, approximately equal numbers of words *do not* descend from PAN as *do* descend from PAN. The implication is clear: *before* the Malagasy schism, the southern Barito languages had acquired a very large fraction of loan words. In fact, the similarity of Ma'anyan to Katinagan, Ngaju Dayak and other Barito languages prompted Alfred B. Hudson, the researcher of the Maanyan (1967), along with Dahl himself (1977) to point out that Malagasy should be grouped with Greater Barito, not just Ma'anyan.<sup>18</sup>

In an effort to see if further inferences could be drawn from the publicly-available data provided by the University of New Zealand, I constructed a list of 25 "core" words that were very clearly closely related between Merina Malagasy and its three closest Barito relatives, Ma'anyan, Katingan, and Ngaju Dayak. I then compared this word list to the more-northerly Barito language, Tunjung. Overwhelmingly [21/25], these 25 core words are cognate to PAN. But of these 25 core words, only 60% [15/25] are found in the more northerly language, Tunjung.

<sup>&</sup>lt;sup>18</sup> Adelaar [1995], pg. 327. As we shall see, a detailed analysis of loan words in Merina Malagasy led Otto Dahl to infer the date of the Merina emigration, a date which would become a bone of contention between him and his rival Malagachist, Alexander Adelaar (1989) [Adelaar, A. "Malay influence on Malagasy; Historical and linguistic inferences," in *Oceanic Linguistics*, 28-1:1-46.]

English	Merina	Ma'anyan	Katingan	Ngaju	Tunjung
bone	táolana	ta?ula?	tula?	tulang	lah
liver	<mark>áty</mark>	atey	at?i	atei	limpa
hair	vólo	wulu	balau	balaw	alaw
nose	órona	uru?	uru?	urung	uru?
tongue	léla	lela?	?ela?	jela	cela?
eye	máso	mate	mat??	mate	uee
person	ólona	ulun	ulun	ulun	ulun
woman	vávy	wawey	bawi	bawi	wawe?
name	anárana	?aran	?aran	aran	nama
rope	tády 💦	tadi	tali?	tali	tali?
to die	máty	matey	mat?i	matei	mate?
bird	vórona	wuru?	buru?	burung	?mpulu?
feather	vólo	wulu	bulu?	bulu	bulu?
leaf	rávina	rawen	daw?n	dawen	roun
fruit	vóa	wua?	bua?	bua	ugan
stone	váto	watu	batu?	batu	batu?
sky	lánitra	la?it	la?it	langit	la?it
moon	vólana	wulan	bulan	bulan	
rain	orana	uran	učam	ujan	ucan
fire	áfo	ариу	apui	ариі	apuy
day	ándro	andraw	andau	andaw	naw
we	<mark>isíka</mark>	kita	ita?	itah	tay
One	<mark>ísa</mark>	isa?	ic??	ije	ca?
Two	róa	rueh	du??	due	r?ga?
Three	télo	telo	t?lu?	telu	t?lu
Four	<mark>éfatra</mark>	epat	?pat	epat	pat

Core Words Similar in Merina, Ma'anyan, Katingan, Ngaju – compared to Tunjung

# **Yellow Fill** = Cognate to PAN; Green = Tunjung Match; Red = No Tunjung Match

So it indeed does appear that the southern Barito languages of today have strong lexical similarity to Merina Malagasy, the more northerly language less so.

It should be mentioned that although Merina is close to the Barito languages in word similarity, it has an entirely different syntax. As Alexander Adelaar explains it:

...the morphosyntactic structure of Malagasy is more conservative than SE Barito languages. This type of structure is referred to as "Philippine". "In it, several parts of the sentence can become subject, such as actor, undergoer, recipient, location, or instrument, with an affix on the verb indicating which part of the sentence is the subject." "But Maanyan has evolved toward a West Indonesian (Malay-type) morphosyntactic structure. This structure basically allows only the actor and undergoer of the verb to become subject (in a way not unlike the active versus passive option in European languages)."<sup>19</sup>

In contrast, Malagasy – and presumably the older Barito languages - have a sentence structure of the form Verb - Object - Subject.<sup>20</sup>

Mamaky boky ny mpianatra (reads book the student) "The student is reading the book" Nividy ronono ho an'ny zaza ny vehivavy (bought milk for the child the woman) "The woman bought milk for the child"

But why have the modern southern Barito languages changed, while the offshoot language, Merina Malagasy, has not? Adelaar says "...the longstanding and sustained influence of Malay" is responsible.<sup>21</sup> Asya Perlestvaig has pointed out that it is not unusual for offshoot languages to more closely conserve the original language than do the *in situ* descendant languages themselves.<sup>22</sup>

### The Malagasy Dialects

In modern Madagascar, the "official" language is basically Merina. This language was not written down until the 1820s, when the London Missionary Society, working with the Merina King, encoded the language with a Roman alphabet consisting of 4 vowels and 17 consonants.<sup>23,24</sup> Considerable confusion has resulted from this orthography, which uses "o" for the "oo" sound [there being no "u" in LMS Malagasy], and which insists on writing many more letters than are actually pronounced at the end of words. Nonetheless, Madagascar does have a written language that can be read by those familiar with the Roman alphabet, with about 70% of today's Malagasy supposedly literate.<sup>25</sup>

Despite the claims of early explorers [see footnotes 3 and 4], the Malagasy language does vary significantly across the island. In fact, it must have been in a constant state of flux from the moment it was introduced to the island, given what we know from the sparse historical record. From the 18<sup>th</sup> century testimony of Nicolas Mayeur, we learn that "…I was understood everywhere. However, I recognized a difference in their way of [pronouncing] certain words from one province to another."<sup>26</sup> Although "…early settlements may have included pockets of

<sup>&</sup>lt;sup>19</sup> Adelaar [2009], pg. 150.

 <sup>&</sup>lt;sup>20</sup> Wikipedia: <u>http://en.wikipedia.org/wiki/Malagasy\_language</u> [Accessed Feb., 2010]
<sup>21</sup> Ihid

<sup>&</sup>lt;sup>22</sup> Asya Perlestvaig, private communication, 4 February, 2010.

<sup>&</sup>lt;sup>23</sup> Randrianja and Ellis, pg. 123. Earlier, Malagasy was written by the priestly class of the Antaimoro tribe in an Arabic script now called *Sorabe*. But this never came into public use.

<sup>&</sup>lt;sup>24</sup> Kessler, pg. 12.

<sup>&</sup>lt;sup>25</sup> Van Tuyl, pg. 10.

<sup>&</sup>lt;sup>26</sup> Larson, pg. 35.

Bantu speakers that disappeared over time,"<sup>27</sup> latter-day immigration from Africa brought Swahili to the west coast of Madagascar, such that by the sixteenth and seventeenth centuries, Madagascar's west coast was a "virtual linguistic checkerboard of Malagasy dialects and Bantu languages, the latter spoken principally by immigrants from Africa."<sup>28</sup> A modern field researcher probably casts the issue of mutual intelligibility into the proper perspective:

Based on my own experience of staying in a non-Merina region, I feel comfortable to claim that if two speakers from different regions distant from each other speak to each other, they typically have problems communicating if they only use their own speech varieties. However, in an actual situation, such speakers negotiate with words and expressions they know of other varieties, eventually establishing a form of communication.<sup>29</sup>

In 1969, French ethnographer Paul Vérin and his colleagues attempted a survey of Malagasy dialects spoken by the 14 officially-recognized tribes of the nation. Vérin compared Malagasy dialects with respect to their variation from Merina.<sup>30</sup> The Antankarana [Tkr] dialect spoken around Diego Suarez in the far north was 71% similar to Merina, whereas the Betsimiaraka [Bsk] dialect spoken on the east coast varies less from Merina, being 81% similar.<sup>31</sup>

I used a truncated list of "core" words derived from the previous Merina-Barito comparison [see above] to give an anecdotal illustration of how these dialects compare to one another, based on Vérin's data. [Red words in the table are probably not understood by Merina-only speakers]:

<sup>&</sup>lt;sup>27</sup> Randrianja and Ellis, pp. 50-51.

<sup>&</sup>lt;sup>28</sup> Larson, pg. 36.

<sup>&</sup>lt;sup>29</sup> Ritsuko Kikusawa, *National Museum of Ethnology, Japan*. Private communication, February, 2010.

<sup>&</sup>lt;sup>30</sup> Also called *Plateau Malagasy* [Plt], it is spoken by the Merina, Betsileo, Bezanozano, and Sihanaka.

<sup>&</sup>lt;sup>31</sup> Vérin et al. [1969], pp. 26-83.

English	Merina	Betsimisaraka	Antankarana
bone	táolana	taolana	taola?a
liver	áty	aty	ate
hair	vólo	vorondoha	fa?eva
nose	órona	orona	oro?
tongue	léla	lela	lela
eye	máso	maso	maso
person	ólona	olona	olona
woman	vávy	viavy	viavy
name	anárana	a?ara?a	a?ara?a
rope	tády		
to die	máty	maty	maty
bird	vórona	vorona	voro?a
feather	vólo	volovolony	volovolo
leaf	rávina	rávina	ravin-kazo
fruit	vóa		
stone	váto	vato	vato
sky	lánitra		
moon	vólana	volana	fanjava
rain	orana	ôra?a	male?y
fire	áfo	afo	motro
day	ándro		
we	isíka	antsika	atika
One	iray	iraika	araika
Two	róa	roay	aroy

Comparison of Merina, Betsimisaraka, and Antankarana Dialects in a limited list of words

Of the 20 words on this list, Betsimisaraka shows only one change [95% similarity], whereas Antankarana shows four [80% similarity]. Since Merina and Ma'anyan show 100% similarity for all 25 words on this list, we might infer that these changes are loan words introduced in Madagascar. In fact, the Antankarana word for "fire" is *motro*, whereas the Swahili word for "fire" is *moto*. Given the location of the Antankarana language surrounding the major northern port city of Diego Suarez, loan words from maritime traders should be expected.

Using Vérin's data quantized in deciles, color-coded, and superimposed on a schematic map of Malagasy tribes [Dahl, 1991], we see a clear pattern emerge:



Vérin data superimposed on schematic map from Dahl [1991]

Clearly, there is an east-west gradient in the "Merina-ness" of Malagasy dialects: the western and southern tribes, the ones most heavily influenced by Africa, are the least "Merina-like". The east coast, where the people are ethnically African but inhabit the region most likely settled by Indonesian immigrants, are the most "Merina-like" of the non-plateau tribes. (The Merina of course, are the most Indonesian of the Malagasy tribes). What historical events may have colored this map, and when, remain to be discovered.

So if linguistics and casual observation both show us the African/Indonesian composition of the Malagasy people, what can modern DNA analysis tell us about their origins?

#### The DNA Evidence

In 2005, DNA research was published that seems to confirm what Otto Dahl and the linguistics community had been saying for over 50 years: the Malagasy are comprised of ancestors from both Africa and Borneo.<sup>32</sup> Researchers took biological samples from people residing throughout the world of the Austronesian Languages (except for Polynesia), and conducted a sophisticated analysis of both mitochondrial DNA [female line] and Y-chromosomes [male line]. The study confirmed the Africa/Borneo origins hypothesis and at the same time illuminated the strengths and weaknesses of human genetic testing versus linguistic analysis.<sup>33</sup>

The results of the Hurles study can best be visualized in this color-coded map of Y-chromosone frequencies in sampled populations throughout Austronesia:<sup>34</sup>



The color-coded results in this map for the Malagasy population result from Y-chromosome sampling of 10 Merina men and 27 non-Merina men from plateau tribes known to have been conquered by the Merina. No samples were taken from the predominantly African coastal tribes. The African and Austronesian genetic lineages were found to be "non-overlapping" so that origins could clearly be distinguished using the markers color-coded as Yellow [East African], versus Blue and Blue-Green [Borneo]. The result agreed with common sense: of the Merina-speaking Plateau Malagasy population [Merina, Betsileo, Bezanozano, and Sihanaka], roughly one-third of the observed Y-chromosomes showed the East African [Yellow] marker and one-third showed one of the two markers for Borneo [Blue, Blue-Green]. The remaining one-third displayed other markers traceable to Africa, Austronesia, or Europe. The Malagasy population exhibited 10 different Haplogroup types, whereas the Cook Islands, for example, showed only two. The implication for the Cook Islands is clearly that a small number of settlers arrived

<sup>&</sup>lt;sup>32</sup> Hurles, M. E. et al., "The Dual Origin of the Malagasy in Island Southeast Asia and East Africa: Evidence from Maternal and Paternal Lineages," in *Am. J. Hum. Genet. 76:894-901, 2005.* 

<sup>&</sup>lt;sup>33</sup> See Appendix for a discussion of this issue.

<sup>&</sup>lt;sup>34</sup> Hurles et al., pg. 896.

relatively recently and were not subject to much intermixing with later-settling populations. Madagascar, however, either had a more diverse pioneer population, or achieved its relative diversity through multiple independent settlements, probably over a period of many years or even centuries.

As to the origin of the settling male-line population, the number of samples taken is insufficient to resolve the physical location of today's descendants of the Merina ancestors. Borneo seems the most likely, but there is insufficient resolution to distinguish *where* in Borneo the ancestors may have come from. In this regard, linguistics trumps genetics, at least for results published to date.<sup>35</sup>

### Conclusions and Speculations about the Malagasy

It seems that every historian and linguist who has studied Madagascar has eventually been driven to speculate on the timing of immigration, the nature of the immigrants, how they came [all at once, or in waves], how Africans and Indonesians mixed [in Africa or in Madagascar], and how they developed similar customs, as well as similar language. Here we review some interesting analyses and hopeless speculations. As we shall see, linguistic evidence does have its limits.

# When did the first Indonesian immigrants arrive in Madagascar? Dahl [1951] noted that

Malagasy has only a few loan words from Sanskrit. He therefore postulated that the emigration from Kalimantan took place at the beginning of Indian influence there, rather than later, when Sanskrit influence on Merina would have been greater. Some early Sanskrit inscriptions dating to 400AD turned up in eastern Kalimantan. Hence, he reasoned, the emigration must have been about that time.<sup>36</sup> In a 1989 article, Adelaar argued that loan words from Malay, Javanese, and Sulawesi were introduced into pre-emigration Merina,<sup>37</sup> and this argued for a later date, perhaps as late as the 15<sup>th</sup> century.<sup>38</sup> Dahl fired back in this game of intellectual ping-pong, saying that Adelaar was wrong, but cited an inscription in what seemed to him to be "Early Ma'anyan" on a tablet from Kota Kapur in Indonesia that had been dated to 689AD. This he asserted, argued for a date of 700AD for the emigration.<sup>39</sup> In fact, this inscribed "Early Ma'anyan" text raised a serious question: since modern Barito languages are *not* written languages, how is that an ancient form of the language *was* written?<sup>40</sup>

...there is direct evidence of the emergence of a civilisation possessing a written language of its own among the speakers of Borneo languages, i.e., the so-called 'introductory formulae' of several Old Malay inscriptions. These are written in an unknown Austronesian language and have not been (and, probably, never will be)

<sup>39</sup> Ibid.

<sup>&</sup>lt;sup>35</sup> See Appendix for discussion of Linguistics –vs- Genetics.

<sup>&</sup>lt;sup>36</sup> Dahl [1991], pg. 12.

<sup>&</sup>lt;sup>37</sup> Adelaar [2009] pg. 150. This agrees with my independently-derived conclusion [see pg. 6]

<sup>&</sup>lt;sup>38</sup> Dahl [1991], pg. 54.

<sup>&</sup>lt;sup>40</sup> Kullanda, pg. 94.

adequately translated...It appears therefore that there was a close affinity between the ... [introductory formula language] and the languages of southeastern Borneo in the Barito river area as well as the closely affiliated Malagasy language... Given the use of the [introductory formula] language... in Srivijaya – a sea power controlling trade routes – alongside Old Malay, it seems likely that in the early first millenium AD it had been, as Malay was to be, a lingua franca of seafarers and merchants of the south seas.<sup>41</sup>

What this author [Kullanda] suggests is that Merina Malagasy might *not* be descended from Southern Barito, but rather that the Barito languages and the Malagasy tongues all *descend from a common ancestor* – a *lingua franca* used by Indonesian seafarers! This is an appealing hypothesis, but – like the speculations of Dahl and others - there seems to be no way to prove or disprove it.

After further sparring, and following Dahl's death in 1995, Adelaar seems to have settled on the 700AD date. But does this cessation of the "war of words" between Dahl and Adelaar really mean we have an answer to the emigration date? I think a jury of experts could not rule definitively on this question. However, with suitable equivocation, most references seem to accept the 700AD date, bolstered by an archaeological finding in Diego Suarez at the northern tip of Madagascar, carbon-dated to ca. 700 AD.<sup>42</sup>

#### Did they come in one migration, or many? Directly, or via stopovers?

Here, the students of Madagascar have ventured into the world of speculation. Brown says: "The present-day distribution of the Indonesian/Polynesian outrigger canoe in the Indian Ocean, and notably in Ceylon, the Maldives, the East African coast and, significantly, the *west* coast of Madagascar, is strong support for the northern route." By "northern route" he means a gradual migration – perhaps generations long – from Indonesia to Madagascar.<sup>43</sup> Adelaar [2009] endorses the idea that emigration was first to East Africa (nicely explaining the presence of Africans in the settlement population).<sup>44</sup> However, Adelaar cannot refrain from citing anecdotes about a WWII survivor of a ship sinking in the Sunda Strait of Indonesia drifting safely to Madagascar.<sup>45</sup> Jounalist Peter Tyson adds fuel to the all-in-one-voyage hypothesis:

Did a single oceangoing outrigger canoe from Indonesia, perhaps trading along the Indian coast, get blown in a storm to Madagascar? We know this is possible. In 1930, a boat of fishermen from the Laccadive Islands off India's southwest coast drifted all the way to Madagascar, coming ashore safely as Cape Est, on the northeast coast south of Antalaha.<sup>46</sup>

<sup>&</sup>lt;sup>41</sup> Kullanda, pg. 94-95.

<sup>&</sup>lt;sup>42</sup> Randrianja and Ellis, pg. 20.

<sup>&</sup>lt;sup>43</sup> Brown, pg. 13.

<sup>&</sup>lt;sup>44</sup> Adelaar [2009], pg. 164.

<sup>&</sup>lt;sup>45</sup> Adelaar [2009], pg. 158.

<sup>&</sup>lt;sup>46</sup> Tyson, pg. 216.

Missing from these arguments is any hint of science, linguistic or otherwise. It seems that for the present, and perhaps forever, linguistics will not be able to solve the mystery of *how* people got from Indonesian to Madagascar.

### How did the African Malagasy come to speak dialects of Merina?

Here, the details may not be clear, but the historical record offers some clues.

[Etienne de] Flacourt wrote an acute description [Histoire de la Grand Isle Madagascar (1658)] of a distinctive form of dual authority whereby the population of the area surrounding Fort Dauphin was divided into two hierarchies, one classified a 'white' [fotsy], the other 'black' [mainty]. The king of Madécase told him, much as his father had told Father Mariano some thirty-five years earlier, that the royal family, at the top of the 'white' hierarchy, was descended from a group of immigrants known as Zafiraminina who had reached Madagascar some seventeen generations previously and migrated gradually down the east coast before arriving in the far southeast. The system of double authority refected an accommodation between the Zafiraminina immigrants and the local peoples. Immigrants and indigenes had learned to live with each other by creating parallel structures that, over time, had developed complex rights and obligations towards each other. There was no doubt that the 'whites' had the higher status of the two.<sup>47</sup>

This is not unlike the political situation in Madagascar today, where a light-skinned Merina political elite control the government [see pg. 2].

It is well documented from the memoir of Robert Drury and other sources that by the 17<sup>th</sup> and 18<sup>th</sup> century, continual warfare existed between tribes and villages, with the taking of slaves being the prerogative of the victors. This form of cross-pollination between otherwise isolated groups of people could well be the single most important reason for the spread of a "single" language at an early date in the human history of the Island. Once the Indonesia-derived language gained the upper hand, it would have been – like the language of most conquerors – hard to compete with.

# Conclusion

So... has Grandidier's "Mystery" been solved? Partially, it would seem. But even with the application of modern DNA analysis, the history of the Malagasy, a people who have left no written record of their ancient history, remains somewhat obscure. But the lion's share of credit for what we *do* know about it belongs to the work of Otto Christian Dahl and 20<sup>th</sup> Century Linguistic Detectives.

<sup>&</sup>lt;sup>47</sup> Randrianja and Ellis, pg. 77. It should be noted that 17 generations prior to the 1600s would place the immigration of the Zafiraminina *circa* 13<sup>th</sup> century AD. This is surely possible, but it conflicts with the linguistic theories of emigration timing. Could it be that *emigration* from Kalimantan was ca. 700AD and *immigration* to Madagascar ca. 1200?

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