

DR. R. DAVID ZORC (Senior Linguist, Language Research Center, McNeil Technologies)
***The Spread of Austronesian Languages from South China and Formosa—
 Westward to Indonesia and Eastward to Oceania***

Our knowledge of prehistory comes slowly and painstakingly. A picture of prehistory can be drawn with the collective efforts of archeologists, anthropologists, and historical linguists. What can we know about Austronesian migrations from linguistic evidence alone? Two areas will be treated in this paper: SUBGROUPING (whereby we achieve an understanding of what languages belong together and how they are related to each other) and the application of the WÖRTE UND SACHEN (Words and Things) technique.

1. SUBGROUPING

According to Blust (1995), this is the basic family tree of the Austronesian family of languages. Note that "Malayo-Polynesian" is a separate branch of the family, referring to the collection of all extra-Formosan languages of southeast Asia and the Pacific.

PROTO-AUSTRONESIAN

Formosan (six primary branches)	Malayo-Polynesian	
	Western	Central-Eastern
	Philippine lgs. western Indonesian lgs.	Oceanic eastern Indonesian lgs

Bellwood (1985:224) proposes that population expansion from Formosa into the northern Philippines started by 5,500 B.P. Blust (1995:458) then suggests the following migrations took place. From the southern Philippines and Celebes there were two movements: westward into Indonesia and eastward. This latter eastward journey also had two spits: along the north coast of New Guinea splitting into South-Halmahera-West New Guinea and Oceanic, and central Malayo-Polynesian, moving southward into the central Moluccas and then westward through the Lesser Sunda Islands. He does not suggest a date for these, but cites archeological evidence about Lapita culture in the Bismarck Archipelago by at least 3,600 B.P. He also proposes that the date for Proto Oceanic was 4000 B.P. It would then seem reasonable that migrations to and settlements within the Philippines took over one millenium.

A subgroup is established on the basis of "innovations" or shared differences from all other languages. For example, the form ***damgu** 'dream' is limited to the Bisayan subgroup of central Philippine languages. This word replaces long-standing etymologies PAN ***Sepi**, PMP ***hepi**, ***hipi**, PPH ***taR-qinep** 'dream.' The following are some common words likely to show that a language is within the Austronesian family (i.e., cognates are common within the family and are not found outside the family):

PAN ***maCa**, PMP **matá** 'eye'

PAN ***qaCey**, PMP ***qatáy** 'liver'

PAN ***duSa**, PMP ***duhá** 'two'

PAN, PMP ***telú** 'three'

PAN ***Sepát**, PMP ***epát** 'four'

PAN, PMP ***limá** 'five'

PAN, PMP ***kamí** 'we (exclusive)'

PAN, PMP ***kitá** 'we (inclusive)'

PAN ***iCú**, PMP ***itú** 'that' (Note: PAN, PMP ***iní** 'this' is found in Thai and may be pre-PAN)

PAN ***maCéy**, PMP ***matáy** 'die, be dead'

2. "Words and Things" (*Wörter und Sache*) technique

In this method, thoughtful and careful comparison is made of words with similar forms and meanings. If and when any element is found to differ, such a difference must be explained, such as the operation of

natural sound change. If we take Tagalog **bigás** 'husked rice' and compare it with Cebuano and Hiligaynon **bugás**, Pangasinan **belás**, Kapampangan **abyás**, and Malay **beras**, we can conclude that they descend from a single etymon, reconstructed as ***beRás**. The ***b**, ***a**, and ***s** are shared in common; the penult vowel is ***e** (schwa) retained in Pangasinan and Malay, but which undergoes regular changes in Tagalog [i], Bisayan [u], and Kapampangan [a]. The continuant nature of Malay [r], Pangasinan [l], and Kapampangan [y] and the velar stop found in Tagalog and Bisayan suggest a velar fricative sound (symbolized as cap **R** by Dyen for typographic ease, but written as Greek gamma [ɣ] by Dempwolff).

Numerous forays into this field within Austronesian have been made by: Dyen (1976), McFarland & Tsuchida (1976 - translation of Kern), Blust (1976, 1980, 1982, 1987), Zorc (1994). I will primarily be citing etyma from Blust (1995), with some updates that come from my own research. Supporting evidence can be found in Blust (1995) and by any Filipino reader (no matter what his or her language background, many forms will come to mind that "fit" these etymologies). Only the two highest levels, Proto-Austronesian (PAN) and Proto-Malayo-Polynesian (PMP) will be represented. Forms thus far not found with supporting evidence from Formosan languages are here assumed to support subsequent contacts as the first migrants moved southward into tropical and warmer domains. Thus, for example, ***niuR** 'coconut' is a post-Austronesian (extra-Formosan) item.

2.1. The Physical Environment

PAN ***baRiuS**, PMP ***baRiuh** 'typhoon'
 PAN/PFM ***SuReNa** 'snow, ice, frost' (lost outside of Formosa)
 PAN ***i+luR** 'central or deepest channel of a river (in which water continues to flow even during the dry season)' [Alt: ***sa+luR**, ***a+luR**]
 PAN ***Nabek** 'breakers, surf'
 PAN ***búkij** 'mountain, forested inland mountain areas'
 PAN ***dánaw** 'lake, pond'
 PAN ***danúm** 'fresh water' [cf: PAN ***inum** 'drink']
 PAN ***Sa-báRat** 'monsoon wind (south or west)'

PMP ***banua** 'human ecosystem' (see Blust 1987 for superb deductive reasoning)
 PMP ***dáRat** 'littoral sea'
 PMP ***wahiR** 'flowing water'
 PMP ***tasik** 'sea, saltwater'
 PMP ***tímuR** 'east monsoon'
 PMP ***qilih** 'mountain range' [different from PPH ***hili** 'village, town']

2.2. The Boat

PAN ***qabang** 'dugout canoe'
 PAN ***IaHúd** 'seawards'
 PAN ***CaliS**, PMP ***talíh** 'rope, line'
 PAN ***aliq** 'veer, change course'
 PAN ***liu** 'turn, veer to the side'
 PAN ***sengseng** 'stopper; plug (for a leak)'
 PMP ***bangka7** 'canoe'
 PMP ***aluja** 'paddle'
 PMP ***beRsay** 'oar'
 PMP ***kátíR** 'outrigger'
 PMP ***saRman** 'outrigger'
 PMP ***láyaR** 'sail'
 PMP ***biling** 'turn, veer to the side'
 PMP ***biluk** 'tack, sail in an oblique direction to the wind'
 PMP ***depáh** 'to fathom'
 PMP ***dungdung** 'sheltered (as from wind)'
 PMP ***langen** 'rollers for beaching a canoe'

PMP ***limás** 'bail out water'
PMP ***pa-lahúd** 'go to sea'
PMP ***sengkar** 'cross-seat in a boat'
PMP ***tekén** 'punt, boat pole'
PMP ***tiqang** 'mast'

Loanwords in this arena show awareness of other culture's boat types and perhaps cooperative endeavors in boat-building, such as the spread of various technologies, whether by emulation and imitation or by cohabitation.

Tamil **padaw**

Chinese **sampan**

2.3. The Human Community

PAN ***Rumaq** 'house'
PAN ***tukád** 'runged ladder'
PAN ***lepáw** 'village granary'
PAN ***tuqtuq** 'pound, hammer'
PAN ***taRáq** 'hew, plane with adze'
PAN ***zekét** 'adhere to, stick [v]; glue [n]'

PMP ***baláy** 'structure, public building'
PMP ***tezek** 'erect, put upright'
PMP ***qatép** 'thatch roof'
PMP ***bubúng** 'ridge of roof'
PMP ***dapúR** 'hearth'
PMP ***dingding** 'wall'
PMP ***kásaw** 'rafter'
PMP ***pa(n)pan** 'board, plank'
PMP ***dúyan** 'hammock'
PMP ***qalun-an** 'wooden headrest or pillow'
PMP ***hadíRi** 'pillar, housepost'
PMP ***haRedán** 'ladder, staircase'
PMP ***kamáliR** 'bachelors' quarters'
PMP ***kiRam** 'axe (from shell or stone)'

2.4. Early Fauna

PAN ***IuCung**, PMP ***Iutung** 'monkey'
PAN ***buhet** 'squirrel'
PAN ***qaRem** 'pangolin, scaly anteater' (currently found only in Formosa and Borneo)
PAN ***qiSu**, PMP ***qihu** 'shark'
PAN ***buqáya** 'crocodile'

2.5. Agriculture

PAN ***pájay** 'rice plant'
PAN ***beRás** 'husked rice'
PAN ***Semáy** 'cooked rice'
PAN ***bineSiq**, PMP ***binhiq** 'seed rice'
PAN ***búRaw**, ***búRew** 'chase away (e.g., birds or animals from a field)'
PAN ***eRík**, ***iRík** 'thresh grains by trampling'
PAN ***lepáw** 'granary'
PAN ***Lesúng** 'mortar'
PAN ***qaSelu**, PMP ***qah(e)lu** 'pestle'
PAN ***qánih** 'to harvest'
PAN ***tapeS**, PMP **tahép** 'winnow'
PAN ***zaRámi** 'rice straw'
PAN ***qeCa**, PMP ***qetá** 'rice husk'

PAN ***CebuS**, PMP ***tebúh** 'sugarcane'
PAN ***biRaq** 'wild taro'

PMP ***laquya**, ***laqia** 'ginger'
PMP ***qúbi** 'yam'
PMP ***tales** 'taro'
PMP ***niúR** 'coconut'
PMP ***kuluR** 'breadfruit'
PMP ***punti** 'banana'
PMP ***Rambia** 'sago'

2.6. Domesticated Animals

PAN ***ásu**, ***u-asu** 'dog' (the latter with a frozen case-marking particle)
PAN ***bábuy** 'wild pig'
PAN ***beRÉk** 'domesticated pig'
PAN ***Libu**, PMP ***nibu** 'lair, den'
PAN ***qaNuáng** 'carabao' (Malay **kerbau**, Tag **kalabáw** ultimately from Mon-Khmer languages)

PMP ***manúk** 'chicken'
PMP ***lálung** 'cock, rooster'

2.7. Hunting and Fishing

PAN ***qaNúp** 'hunt'
PAN ***bekás** 'spring a trap'
PAN ***qaCeb**, PMP ***qateb** 'deadfall trap'
PAN ***taqén** 'set a trap'
PAN ***túbaH** 'derris root fish poison'
PAN ***SapeN**, PMP ***hapén** 'fishing line'

The inferences we can draw from these fields show how the Austronesian peoples developed and their expertise grew as they spread. Whether the migration was from Formosa through the Philippines (the Bellwood hypothesis) or at least two separate migrations from mainland Asia directly to the Philippines (the Solheim hypothesis), the Philippines was clearly a staging area for all subsequent Malayo-Polynesian movements, eastward to Oceania and westward to Indonesia. There is clearly a rift between northern and southern Philippine languages:

(1) the retention of PAN ***j** vs. its merger with ***d** (PAN ***ngájan** 'name' > PNP ***ngágan** vs. PSP ***ngádan**)

(2) **CVC-** vs. **CV-** reduplication to show progressive or ongoing action (PNP ***CVC-** vs. PSP ***CV-**)

(3) The degree to which nasal clusters (***NC**) appear in well-established etyma (see Reid 1982, nil in NPh, some in SPh).

While most Philippine scholars have assumed that this rift developed *in situ*, it could support separate migrations into the Philippines from Asia, if this proves to be in conjunction with archeological evidence (as Solheim proposed in his comments to this paper).

It is sad that, with little available in truly pre-historical documentation, the fabrications of a chemist have held sway in the teaching of Philippine prehistory, setting up details about migrations from Borneo as the progenitors of numerous Philippine groups (see Scott 1968 for a critique of these materials). In truth, the people of Borneo and of the numerous Indonesian islands can trace their origins to the Philippines, and at a much greater time depth than a few hundred years!

Filipinos have much to be proud of since they remain part of a major staging area for what had been the largest and most expansive language family on Earth (prior to European expansion and the spread of English). The extent of the Austronesian realm is from Formosa in the north to New Zealand in the south, from Madagascar off of Africa in the west to Easter Island off of South America in the east.

The role of the Philippines as a staging area is not without its problems. Linguistic homelands are required to have a high order of language diversity. Such is the case for Formosa (even with several languages now extinct) and so too is Celebes. The fact that the Philippines has such a relatively low order of diversity among its languages points to a major extinction (see Blust i.p.). This may be due to a natural catastrophe such as Mount Pinatubo or migration pressures where groups doubled back to central Luzon, eradicating or absorbing a multiplicity of early Austronesian languages.

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