

MOTU REFLEXES OF PROTO-AUSTRONESIAN

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I. INTRODUCTION

Motu is traditionally one of the Melanesian members of the greater Austronesian family of languages. It is spoken in south-eastern Papua, in Port Moresby and the adjacent coastal areas to the east and west.

Geographically, Motu falls into the Central Area, one of four areally determined general groupings designated by Dyen. This area takes into account these Austronesian language types to be found in East New Guinea and Melanesia.¹ According to lexicostatistical comparative studies by Dyen, Motu is said to be genetically a constituent member of the Heonesian linkage (under the Malayo-Polynesian linkage), part of the comprehensive Austronesian family of languages.²

Some linguistic work has been carried out on Motu. Capell (1943) lists a number of word correspondences and has initiated application of the comparative method of regularizing historical relationships for Motu.³ In terms of descriptive efforts, Lister-Turner and Clarke (1930; 1941) have produced both a dictionary and grammatical treatments.⁴ Wurm and Harris have more recently published a grammar of Police Motu.⁵

This paper is an attempt at a second look at Motu and its historical relationship with Proto-Austronesian (henceforth PAN). In this respect, the paper will present a somewhat revised treatment of the consistent reflexes of the proto-phonology in Motu.

An attempt will be made to regularize the sound laws which characterize Motu as well as the cognate forms which exemplify these laws.

Much of this work has already been carried out by Capell in his historical treatment of a number of languages (including Motu) of south-eastern Papua.⁶ However, the sound laws which are there postulated, and the cognates which are used to support them, are not always easily and unambiguously traceable reflexes of PAN forms. To account for this, Capell suggests several intervening strata in the history of Motu, explaining certain irregularities as attributable to these historically pertinent linguistic strata.

This paper attempts to relate Motu forms to their PAN antecedents without reference to intervening strata. The result, hopefully, is perhaps a more straightforward and more easily applicable account of diachronic events in Motu.

Two types of material have been included as the basis of comparison in this study: (1) cognate forms which appear originally in Capell's monograph⁷; (2) cognate forms which have been independently culled from the several descriptive treatments of Motu mentioned above. The Motu forms suggested by Capell as correspondences are retained only in those instances where the reconstructions he presents agree with or parallel those of Dempwolff.⁸

Dempwolff's reconstructions are largely used for the Proto-Austronesian forms, except in those instances where Dyen disagrees with him. The symbols employed for the presentation of the reconstructions, however, are not those used by Dempwolff, but rather the more convenient set substituted by Dyen.⁹

The proto-phonemes and their reflexes are presented in a simulated alphabetical order based on the PAN phoneme. Proto-forms are grouped according to the initial, medial, or final position of the reconstructed phoneme in question. The manner of presentation is exemplified by the following:

<u>PAN form</u>	<u>English Gloss</u>	<u>Motu Reflex</u>	<u>English Gloss</u>
*X	'X'	X	'X'

Where the gloss is the same for the Motu as the original PAN, it is not entered and the second space for the English gloss is left empty. If a Motu form is questionable in some respect as a reflex, this fact is indicated by a parenthetically enclosed question mark after the Motu word. For example,

tage (?) 'dung'.

Pertinent morphological breaks and other potential word divisions are indicated by a hyphen. This should serve to indicate that part of the Motu form which is to be considered in the comparison. For example, l-au 'l'.

Finally, pertinent comments on the status of the forms, their relationship to the projected Austronesian reconstructions and their historical progression are appended, where necessary, to the end of each proto-phoneme section. General comments and conclusions will be presented in a short section at the end of the paper.

II. AUSTRONESIAN REFLEXES IN MOTU.

II. 1. Consonantal Reflexes.

<u>PAN</u>	<u>English</u>	<u>Motu</u>	<u>English</u>
*b			
*b-		h-	
*-b-		-h-	
*banua, *b (a e) nuwa	'village, land'	hanua ¹⁰	'village'
*banun	'to wake up'	hao-a	
*bituqen	'star'	hisiu	
*bulan	'moon'	hua	
*buaq, *buwaq	'fruit, flower'	hua, au huahua	
*buqaya(h)	'crocodile'	huala	
*buhuk	'hair'	hui	
*beli	'to buy'	hoi	
*besay	'paddle'	hode	
*buni	'to conceal'	huni	
*tebu(h)	'sugar cane'	tohu	
*Rabii(h)	'night, evening'	ado-rahi	'evening'
*qa-baRat,	'N.W. wind, monsoon'	l-ahara ¹¹	
*tubuq	'to grow'	tuha (?)	'creeper, vine'
*abuh	'ashes'	k-ahu, r-ahu r-ahu (ahu)	'lime'
*bei, *beyi, *binay	'woman, wife'	hahine (?)	'woman'

The last form, hahine, is possibly derived from *binay, plus an initial syllable reduplication; this latter form is likely formed from *bei, *beyi, plus the formative infix, -in-. Compare the steps of syllable reduplication and/or infixation in the following related forms: Motu: hahine; Tagalog: babae; Malay: bini; Javanese: bibi; and Tongan: fafine.

<u>PAN</u>	<u>English</u>	<u>Motu</u>	<u>English</u>
*d			
*d-		d-	
*-d		-∅	
*(d D)uRih	'thorn'	duri	'barb'
*diRus	'to bathe'	digu (?)	
*(t T)uhu(d j)	'knee'	tui	
*D			
*D-		r-	
*-D-		-r-	
*Dahun	'leaf'	rau	
*Depa(hO)	'fathom'	roha	
*Duwa, *Dewha	'two'	rua	
*(d D)aRaq	'blood'	rara	
*(d D)anum	'water'	ranu	
*quDip	'to live'	ma-uri	
*tuDuq	'drop, leak'	hatuturu, (ha-tu-turu)	'drop of water'
*ku(d D)en	'pot'	uro	
*quDaN	'crustacean, prawn'	ura	'prawn'
*z			
*z-		d-	
*-z-		-d-	
*zalan	'road'	dala	
*za(hO)uq	'far'	daudau	
*zari	'finger-length'	dodori, (do-dori)	'forefinger'
*gazi	'saw, sawfish'	gadigadi	'double teeth'

<u>PAN</u>	<u>English</u>	<u>Motu</u>	<u>English</u>
*g		g-	
*g-			
*gazi	'saw, sawfish'	gadigadi	'double teeth'
*guruq	'noise, confusion'	guru	'noise'
*j			
*-j-		-d-	
*-j		-∅	
*pija	'how many'	hida	
*qajaw, *qanjaw	'sun, day'	ado ado-rahi	'sun' 'evening'
*ajan	'name'	l-ada	
*ijjuN, *ujuN	'nose'	udu	
*(t T)uhu(d j)	'knee'	tui	
*qulej, *ulej	'worm, maggot'	uloulo	'maggot'
*R			
*R-		r-	
*-R-		-r-	
*-R		-∅	
*Rabii(h)	'night, evening'	ado-rahi	'evening'
*Rumaq	'house'	ruma	
*Rusuk	'rib'	rudu	
*(d D)aRaq	'blood'	rara	
*qu-baRat, baRat	'N.W. wind, monsoon'	l-ahara	
*(d D)uRih	'thorn, barb'	duri	'barb'
*tiRem	'oyster'	siro	
*-uRita	'octopus'	urita	
*diRus	'to bathe'	digu (?)	
*niuR, *niyuR	'coconut'	niu	
*liqeR	'neck'	aio	
*apuR, *kapuR	'lime'	ahu	
*timuR	'rainwind'	sisimu	'light shower'
*sinaR	'to shine'	dina	'sun'
*wa(hO)iR	'water'	vai sina-vai	'river' 'Mother of Water' (proper name)

<u>PAN</u>	<u>English</u>	<u>Motu</u>	<u>English</u>
*h			
*h-		∅-	
*-h-		-∅-	
*-h		-∅	
*hasaN	'gills'	l-ada	
*hinep	'to lie down'	eno (?)	
*buhuk	'hair'	hui	
*Dahun	'leaf'	rau	
*kahiw	'wood'	au	
*(t T)uhu(d j)	'knee'	tui	
*abuh	'ashes'	k-ahu, r-ahu r-ahu (kahu, rahurahu)	
*aku(h)	'I'	l-au	
*ia(h)	'he, she'	ia	
*tebu(h)	'sugar cane'	tohu	
*Depa(hO)	'fathom'	roha	
*q			
*q-		∅-	
*-q-		-∅-	
*-q		-∅	
*quareqep	'love, hope'	l-aroa	'hope'
*qunap	'fish-scale'	una(hi)	'to scale a fish'
*quDaN	'crustacean, prawn'	ura	'prawn'
*qctey (< *qatay)	'liver'	ase	
*quDip	'to live'	ma-uri	
*buqaya(h)	'crocodile'	huala	
*tinaqi	'bowels'	sinai	
*bituqen	'star'	hisiu	
*taqi	'excrement'	tage (?)	'dung'
*panaq	'arrow'	hani	'wing of bird'
*puluq	'ten'	a-hui	
*tumbuq	'to grow'	tubu	'to increase, grow'
*buaq, *buwaq	'fruit, flower'	hua, huahua	
*(d D)aRaq	'blood'	rara	

The Motu reflex for *taq̄i 'excrement' may have been subject to euphemistic phonetic change or possibly word play. This may account for the Motu -ḡ- instead of the expected -Ø- development. (Motu taḡe 'dung')

The Motu reflex for *qareqep 'love, hope' shows evidence of vowel dissimilation. PAN *e usually develops into Motu o; however, with the medial loss of *-q-, this would have resulted in a vowel sequence of -oo-. Instead, the second -o- is dissimilated to -a-, accounting for the -oa sequence in the Motu form, l-aroa 'hope'

<u>PAN</u>	<u>English</u>	<u>Motu</u>	<u>English</u>
y (-ay; *-uy)		-Ø-; -l- (?)	
*iya	'he, she'	ia	
*ia(h)			
*niyuR, *niUK	'coconut'	niu	
*buqaya(h)	'crocodile'	huala	

Two conclusions are possible from medial *-y-. One, medial *-y- is lost, except between identical vowels, where instead *-y- changes to Motu -l-. Or, secondly, -l- is the normal reflex of *-y- in Motu, and ia and niu are simply continuations of the original doublet without *-y-. On both counts, it is difficult to draw definitive conclusions on such scanty evidence.

*-ay			
*-ay		-e	
*matey (<*matay)	'to die'	mase	
*qatey (<*qatay)	'liver'	ase	
*besay	'paddle'	hode	
*(s)akay	'up'	dae	
*binay (*bei, *beyi)	'woman, wife'	hahine	'woman'

*-uy			
-uy		-i	
*apuy	'fire'	l-ahi	

<u>PAN</u>	<u>English</u>	<u>Motu</u>	<u>English</u>
*k		∅-	
*k-		-∅-	
*-k-		-∅	
*-k			
*kaen	'to eat'	ani aniani	'food'
*kahiw	'wood'	au	
*kiTa, *kiTa(hO)	'to see'	ita-ia	'sees'
*kinta	'we'	ita	'we, inclusive'
*ku(d D)en	'pot'	uro	
*kutu	'louse'	utu	
*kaw	'you, singular'	oi	'thou'
*kamu	'you, plural'	umui (?)	
*kami	'we, exclusive'	ai (?)	
*aku(h)	'I'	l-au	
*ikuR	'tail'	iu	
*laku	'to stroll, go, walk'	lao	'to go'
*(s)akay	'up'	dae	
*siku	'elbow'	diu	
*manuk	'bird, animal'	manu	
*tasik	'sea'	tadi	
*Rusuk	'rib'	rudu	
*buhuk	'hair'	hui	
*c			
*c-		k-	
*cirit	'urine, diarrhea'	he-ku-kuri (?) (hekukuri)	'diarrhea'

The historical development of *c in Motu is questionable, being based on a single possible reflex which exhibits an unexplained vowel change.

<u>PAN</u>	<u>English</u>	<u>Motu</u>	<u>English</u>
*l			
*l-		∅-; l- (before a)	
*-l-		-∅-; (-l-)	
*lima	'five'	ima	
*liqeR	'neck'	aio	
*la Nit	'sky'	la:i (?)	'wind'
*lawa	'web'	valavala	'cobweb'
*la Naw	'a fly'	la:o	
*laku,	'to stroll, walk, go'	lao	'to go
*lalu	'to go past'	lao	'away, adverb'
*puluq	'ten'	a-hui	
*bulan	'moon'	hua	
*beli	'to buy'	hoi	
*tali Na	'ear'	ta:ia	
*telu	'three'	toi	
*zalan	'road'	dala	
*piliq	'to choose'	hidi (?)	

The Motu reflex of *lawa 'web' shows both a metathesis of the original *l and *w and a reduplication of the entire metathesized form. C.f. valavala.

Medially, *l is lost except between identical vowels, e.g., *aCa and possibly *iCi. Thus, the proto-phoneme is retained in Motu dala 'road' (from *zalan). Between instances of i, i.e., *iCi, it may have changed to d; however, the evidence is limited to a single potential reflex, C.f. Motu hidi 'to choose' and PAN *piliq.

Motu la:i 'wind' may also be a reflex of *haNin 'wind'. The expected reflex in this case would be *a:i, with loss of the initial, medial, and final consonants; the prefix l-, which appears in other forms showing an initial a through loss of proto-consonants in initial position, would have been added at a later time.

<u>PAN</u>	<u>English</u>	<u>Motu</u>	<u>English</u>
*m			
*m-		m-	
*-m-		-m-	
*-m		-∅	
*mama	'father, uncle, old man'	mama	'father'
*manuk	'bird, animal'	manu	
*matey (<*matay)	'to die'	mase	
*mata	'eye'	mata	
*m-utaq	'to vomit'	mumuta	
*mamaq	'to chew'	mama	
*ama	'father'	ama	
*Rumaq	'house'	ruma	
*timuR	'rainwind'	sisimu	'light shower'
*lima	'five'	ima	
*~namuk	'mosquito'	namo	
*kamu	'you, plural'	umui (?)	
*kami	'we, exclusive'	ai (?)	
*inum	'to drink'	inu	
*(d D)anum	'water'	ranu	
*tiRem	'oyster'	siro	

The Motu reflexes for the reconstructed pronominal forms *kamu, 'you, plural' and *kami 'we' exhibit several unexplained changes and are included as possible cognates. The first form shows an unexplained vowel change; the second, if indeed a reflex (and the loss of *k and retention of *a and *i point in this direction), shows an unexpected loss of *m medially. C.f. Motu umui 'you, plural' and ai 'we, exclusive'.

*n			
*n-		n-	
*-n-		-n-	
*-n		-∅	
*niuR, *niyuR	'coconut'	niu	
*nupi	'dream'	nihī	
*banua	'village, land'	hanua	'village'
*ini(h)	'this'	ina	
*inum	'to drink'	inu	

<u>PAN</u>	<u>English</u>	<u>Motu</u>	<u>English</u>
*ina	'mother'	sina, sinagu (si na-gu)	'my mother'
*panaq	'arrow'	hani	'wing of bird'
*hinep	'to lie down'	eno (?)	
*qunap	'fish scale'	una(hi)	'to scale a fish'
*bituqen	'star'	hisiu	
*kaen	'to eat'	ani, an-ia ani-ore ani-bou	'to eat' 'eats' 'eatable' 'eat up'
*zalan	'road'	dala	
*baNun	'to wake up'	hao-a	
*buni	'to conceal'	huni	
*(d D)anum	'water'	ranu	
*sinaR	'to shine'	dina	'sun'
*manuk	'bird, animal'	manu	
*-na	'his, hers'	-na	
*bunuq	'to strike, kill'	a-hunu	'to extinguish the fire'
*bulan	'moon'	hua	
*Dahun	'leaf'	rau	
*ku(d D)en	'pot'	uro	
*ajan	'name'	l-ada	
*ñ			
*ñ-		n-	
*ñamuk	'mosquito'	namo	
*N (ŋ)			
*-N-		-Ø- (length)	
*-N		-Ø	
*laNaw	'a fly'	la:o	
*baNun	'to awaken'	hao-a	
*taliNa	'ear'	ta:ia	
*laNit	'sky'	la:i	'wind'

<u>PAN</u>	<u>English</u>	<u>Motu</u>	<u>English</u>
*taNiS	'to weep'	ta:i	
*quDaN	'prawn, crustacean'	ura	'prawn'
*ijuN, *ujuN	'nose'	udu	
*hasaN	'gills'	l-ada	

PAN *-N- is lost in Motu, but with compensatory lengthening (as indicated by the :), except before *-u. C.f. Motu hao-a with la:o, la:i, ta:i. The Motu form ta:ia 'ear' appears to have metathesized the length feature with the i; one would have expected *tai:a from PAN *taliNa, and this may, in fact, have represented an earlier stage in Motu.

*p			
*p-		h-	
*-p-		-h-	
*-p		-∅	
*pitu	'seven'	hitu	
*piliq	'to choose'	hidi	
*pija	'how many'	hida	
*panaq	'arrow'	hani	'wing of bird'
*puluq	'ten'	a-hui	
*put	'blow, puff'	hu	'noise made by wind'
*apuy	'fire'	ahi, l-ahi	
*epat	'four'	ha-ni (?)	
*Depa(hO)	'fathom'	roha	
*nupi	'dream'	nihi	
*qareqep	'love, hope'	l-aroa	'hope'
*quDip	'to live'	ma-uri	
*apuR, *kapuR	'lime'	ahu	
*hinep	'to lie down'	eno	
*qunap	'fish scale'	una(hi)	'to scale a fish'
*t			
*t-		s- (before i); t- elsewhere	
*-t-		-s- (before i, ey); -t- elsewhere	
*-t		-∅	

<u>PAN</u>	<u>English</u>	<u>Motu</u>	<u>English</u>
*taliNa	'ear'	ta:ia	
*t-ama	'father'	tama	
*taqi	'excrement'	taḡe (?)	'dung'
*tebu, *tebuh	'sugar cane'	tohu	
*tumbuq	'to grow'	tubu	'to increase, grow'
*tuDuq	'drop' (e.g., of water)	hatuturu, (ha-tu-turu)	
*telu	'three'	toi	
*taNis	'to weep'	ta:i	
*taNgap, (*taNkap)	'holder'	taḡa	'basket'
*tutu	'to pound, e.g., rice'	tutu-a	
*tasik	'sea'	tadi	
*timuR	'rainwind'	sisimu	'light shower'
*tinaqi	'bowels'	sinai	
*tiRem	'oyster'	siro	
*mata	'eye'	mata	
*m-utaq	'to vomit'	mumuta	
*pitu	'seven'	hitu	
*kutu	'louse'	utu	
*uRita	'octopus'	urita	
*qatey (<*qatay)	'liver'	ase	
*matey (<*matay)	'to die'	mase	
*bituqen	'star'	hisiu	
*epat	'four'	ha-ni (?)	
*cirit	'urine, diarrhea'	hekukuri	'diarrhea'
*laNit	'sky'	la:i	'wind'
*put	'blow, puff'	hu	'noise made by wind'
*baRat, *qa-baRat	'N.W. wind, monsoon'	l-ahara	

The Motu reflex for PAN *epat 'four' may have developed in the following fashion: (1) final consonant lost; (2) *p changes to Motu h; (3) initial vowel dropped; (4) addition of now empty morphological formative -ni. C.f. *epat and ha-ni.

<u>PAN</u>	<u>English</u>	<u>Motu</u>	<u>English</u>
*T		t-	
*T-		-t-	
*(t T)au	'man'	tau	
*(t T)uhu(d j)	'knee'	tui	
*kiTa, *kiTa(hO)	'to see'	ita ita-ia	'sees'
*s		d-	
*s-		-d-	
*-s-		-∅	
*-s			
*(s)akay	'up'	dae	
*siku	'elbow'	diu	
*sinaR	'to shine'	dina	'sun'
*besay	'paddle'	hode	
*-(s)awa, *asawa	'spouse'	adava	
*Rusuk	'rib'	rudu	
*tasik	'sea'	tadi	
*esah, *isah	'one'	ta (?)	
*diRus	'to bathe'	digu (?)	
*taNis	'to weep'	ta:i	

The Motu reflex of the PAN form *isah, *esah 'one' may have developed in the following fashion: (1) loss of final consonant; (2) change of PAN *s to Motu d; (3) loss of initial vowel; (4) devoicing of now initial d- to t- by conditioning of preceding voicelessness. C.f. Motu ta.

*w (ʔ-aw, *-iw)		v-	
*w-		-v-; -∅-	
*-w-			
*wa(hO)iR	'water'	vai sina-vai	'river' 'Mother of Water' (proper name)
*lawā	'web'	valavala	'cobweb'
*-(s)awa *asawa	'spouse'	adava	

<u>PAN</u>	<u>English</u>	<u>Motu</u>	<u>English</u>
*buaq, *buwaq	'fruit, flower'	hua, au huahua	
*Duwa	'two'	rua	
*tawu, *(t T)au	'man'	tau	
*banua, *b(a e) nuwa	'land, village'	hanua	

As previously indicated in the treatment of PAN *l, the Motu reflex of *lawā 'web' shows both a metathesis of the original *l and *w and a reduplication of the entire metathesized form. C.f. Motu valavala 'cobweb'.

PAN *-w- is retained between identical vowels. For example, Motu adava 'spouse' from *-(s)awa, *asawa. Either this is the case, or Motu w is the normal medially for *-w-, with the other Motu forms being reflections of PAN doublets.

*-aw		-o	
*laNaw	'a fly'	la:o	
*qajaw, *qanjaw	'sun, day'	ado	'sun'
*linaw	'to be quiet,	ado-rahi	'evening'
*kaw	' ^{peaceful} you, singular'	ma-ino	
		oi (o-i) (?)	'thou'
*-iw		-u	
*kahiw	'wood'	au	
*a			
*a		a	
*apuy	'fire'	ahi, l-ahi	
*pija	'how many'	hida	
*Depa(hO)	'fathom'	roha	
*banua, *b(a e)nuwa	'village, land'	hanua	'village'
*bulan	'moon'	hua	
*Rabii(h)	'night, evening'	ado-rahi	'evening'
*baRat, *qa-baRat	'N.W. wind, monsoon'	l-ahara	
*mata	'eye'	mata	
*matey (<*matay)	'to die'	mase	
*Rumaq	'house'	ruma	

<u>PAN</u>	<u>English</u>	<u>Motu</u>	<u>English</u>
*i		i	
*i			
*pitu	'seven'	hitu	
*pija	'how many'	hida	
*beli	'to buy'	hoi	
*taNis	'to weep'	ta:i	
*kiTa	'to see'	ita ita-ia	'sees'
*(d D)uRih	'thorn'	duri	barb
*lima	'five'	ima	
*sinaR	'to shine'	dina	'sun'
*tasik	'sea'	tadi	
*u			
*u		u; i	
*pitu	'seven'	hitu	
*kutu	'louse'	utu	
*banua, *b(a e)nuwa	'village, land'	hanua	'village'
*bulan	'moon'	hua	
*buni	'conceal'	huni	
*tumbuq	'to grow'	tubu	
*ujuN, *ijuN	'nose'	udu	
*niuR	'coconut'	niu	
*(t T)uhu(d j)	'knee'	tui	
*telu	'three'	toi	
*puluq	'ten'	a-hui	
*baNun	'to wake up'	hao-a	
*ñamuk	'mosquito'	namo	

PAN *u usually becomes u in Motu, except in those instances where loss of a medial consonant (e.g., *l and *h) would result in the vocalic sequences *uu and *ou. In such cases, the second vowel (the u) changes to i. Compare the following

*(t T)uhu(d u) > tui
 *puluq > a-hui

*telu > toi

There are also occasional forms in the data where *u changes to Motu o, possibly under the influence of a preceding bilabial or velar nasal. Compare the following:

*baNun	hao-a
* [~] namuk	namo

<u>PAN</u>	<u>English</u>	<u>Motu</u>	<u>English</u>
*e			
*e		o; a	
*Depa(hO)	'fathom'	roha	
*beli	'to buy'	hoi	
*besay	'paddle'	hode	
*tebu(h)	'sugar cane'	tohu	
*ku(d D)en	'pot'	uro	
*telu	'three'	toi	
*qulej, *ulej	'worm, maggot'	uloulo	'maggot'
*tiRem	'oyster'	siro	
*qareqep	'love, hope'	l-aroa	'hope'

PAN *e usually becomes Motu o, except in certain cases where loss of a medial consonant (e.g. *q) would result in a *ee sequence. C.f. PAN qareqep and Motu l-aroa. In such cases, the second occurrence of *e becomes Motu a.

II.3. Motu Reflexes of the PAN Nasal Grade.

Reflexes of the PAN nasal grade are limited, being confined to perhaps a half-dozen examples. The following correspondences suggest these historical changes:

- *mb > b: *tumbu 'to grow' > tubu 'to increase, grow'
- *mp > b: *ka(m)pit, *(q h)ampit 'to grasp' > abi 'to grasp'
- *Ng > g: *taNgap, *(ta)Nkap 'holder, receptacle' > taga 'basket'
- *Nk > k: *laNkaq 'to step, stride' > laka 'to go, step'
- *nt > t: *kinta 'we, inclusive' > ita 'we, inclusive'
- *ma(n)taq 'raw' > matamata 'new'

It is difficult, at best to draw valid conclusions from such minimal evidence. At the same time, however, attention should be drawn to the fact that such hypothesized

treatment of the nasal grade reconstructions does provide for the historical origins of certain Motu phonemes which would be otherwise entirely lost. For example, Motu b, k. PAN *b always becomes Motu h; PAN *k is lost.

Secondly, it also provides for the possible historical origin of Motu \bar{g} in PAN *Ng (*Nk).

Unfortunately, other nasal clusters are not so evident. The following of the nasal series show no observable reflexes in Motu: *nd, *nD, *nz, *ñj, *ñc, *nT, and *ns.

111. General Comments and Conclusions.

Finally, several closing comments summarizing the important characteristics of the historical development of Motu from PAN may be in order.

- 1.) As in other Melanesian languages, PAN consonants in final position are lost in Motu.
- 2.) In other positions, the following PAN consonants fall together as regards their reflexes in Motu: PAN > Motu; *p, *b > h; *d, *z, *j, *s > d; *D, *R, *r > r; *n, *ñ > n; *h, *q, *y (?), *k, *l (before i initially; medially), *N (with compensatory lengthening), *-w- (except between identical vowels) > \emptyset ; *t (except before i, ey), *T > t.
- 3.) The following PAN vowels and diphthongal sequences also fall together in Motu: PAN > Motu; *i, *-uy *u (after loss of *-l-, *-h-) > i; *u, *-iw > u; *e, *-aw > o;
- 4.) Finally, Motu does offer some evidence for deciding between *d and *D as possible reconstructions in certain cases. For example, consider the case of *(d D) aRaq 'blood', *(d D) anum 'water', *ku(d D) en 'pot', and *(d D) uRih 'thorn', where Motu shows rara, ranu, uro, and duri respectively.

In other cognates, *D and *d unambiguously become Motu r and d respectively. In addition, the divergence in the four reflex forms themselves would call for separate antecedent reconstructions for rara, ranu, and uro on the one hand, and for duri on the other. The PAN forms from which these latter have been derived can only have been *DaRaq, *Danum, *kuDen, and *duRih, respectively.

IV. Footnotes.

¹ The other geographical groupings designated by Dyen are the West (Indonesia, Sarawak, Southeast Asia Mainland, Madagascar,) The Northwest (Taiwan, Philippines,

North Borneo, Brunei), and the North and East (Micronesia and Polynesia). For further discussion, see Isidore Dyen, A Lexicostatistical Classification of the Austronesian Languages (Indiana University Publications in Anthropology and Linguistics, Memoir 19 of the International Journal of American Linguistics, 31, 1965), 23.

² Ibid. 37, 39.

³ Arthur Capell, The Linguistic Position of South-Eastern Papua (Sydney, 1943)

⁴ R. Lister-Turner and J.B. Clarke, Revised Motu Grammar (Port Moresby, 1930); A Dictionary of the Motu Language of Papua (Sydney, 1941); and A Grammar of the Motu Language of Papua (Sydney, 1941).

⁵ S.A. Wurm and J.B. Harris, Police Motu (Linguistic Circle of Canberra Publications Series B, Monograph No. 1; Canberra, 1963.)

⁶ Capell includes Motu, together with Ikoru, Sinaugoro, Keapara, Hura, Rubi, and Aroma (including the Keakoro dialect), among the Central Mainland Languages. See Capell, The Linguistic Position, pp, 20-31.

⁷ The historical treatment given to such cognate forms, however, may or may not be identical to that given them in Capell's discussion of Motu sound laws. C.f. Ibid., pp, 26-31.

⁸ In the introduction to his monograph, Capell points out that "as standards of Indonesian, the works of Dr. R. Brandstetter and Dr. O. Dempwolff have been taken, especially the latter's Vergleichende Lautlehre" Ibid., p.5.

He does, however, occasionally include reconstructions somewhat differing from or independent of Dempwolff's; these have been excluded from the discussion for the sake of uniformity.

⁹ The symbols initiated by Dyen as practical substitutes for Dempwolff's set match up in the following fashion: Dempwolff = Dyen; b = b; d = d; d = D; d' -, -d' - = z; g = g; -g' -, -g' - = j; ʃ = R; h -, -c -, -c = h; c -, -h -, -h = q (?); j -, -j -, -aj, -uj = y, -ay, -uy; k = k; k' -, -k' - = c; l = l; l = r; m = m; n = n; n' -, -n' - = n; ŋ = N (ŋ); p = p; t = t; t -, -t - = T; t' = s; v -, -v -, -av = w, -aw; a = a; i = i; u = u; ə = e.

¹⁰ Motu forms are presented in their traditional Latin orthographic shapes. The orthography of the works cited is unfortunately not phonemic and this fact probably obscures certain pertinent facts regarding reflexes of proto-forms.

¹¹ Motu l- is an article-like prefix which occurs with certain forms which would otherwise begin with an -a-. C.f l-ahara 'N.W. wind, monsoon'; l-ada 'name' l-au 'I'; l-aroa 'hope'; l-ahi 'fire'.

V. BIBLIOGRAPHY

- Capell, Arthur. The Linguistic Position of South-Eastern Papua. Sydney, 1943.
- _____ "Oceanic Linguistics Today". Current Anthropology 3.371-428 (1962.)
- Dempwolff, Otto. Vergleichende Lautlehre des austronesischen Wortschatzes. Berlin, 1934-38.
- Dyen, Isidore. The Proto-Malayo-Polynesian Laryngeals. Baltimore, 1953.
- _____ A Lexicostatistical Classification of the Austronesian Languages. Memoir 19. Supplement to International Journal of American Linguistics. Vol.31, No. 1 (1965).
- Lawes, William G. Grammar and Vocabulary of Language Spoken by Motu tribe (New Guinea). Sydney, 1896.
- Lister-Turner R. & Clarke J.B. Revised Motu Grammar. Port Moresby, 1930.
- _____ A Dictionary of the Motu Language of Papua. Sydney, 1941.
- _____ A Grammar of the Motu Language of Papua. Sydney, 1941.
- Thomas, Dorothy M. "Proto-Malayo-Polynesian Reflexes in Rade, Jarai, and Chru." Studies in Linguistics 17.59-75 (1963).
- Wurm S.A. & J.B. Harris. Police Motu. Linguistic Circle of Canberra Publications Series B, Monograph No. 1, Canberra, 1963.