

are petrified suffixes can be found when comparing the Asmat languages with other members of the family, especially Iria-Asienara (cf. chapter 8, nos. 11,20,25,34,39,56,79,109,122,128,217,221,243,252, 323,337,340,344,359,395). The investigation of this possibility however falls outside the scope of the present paper.

CC has further retained several lexical items which have been lost and replaced by new forms in CA and CI but which have been preserved in at least one of the other languages of the family:

*afraid* CC son, sen, sone; SE honae; KA tono  
*bamboo* CC isim, yisim; SE ihimi  
*banana* CC tayi, tai, teyi; KA kau (?)  
*cockatoo* CC tur, turu; SE tiiro; IR ature  
*tail* CC mepe; NA mep, mepe; SE mepe, KA mipi  
*hungry* CC yor; the only possible cognate of  
 this word is found in Mombum (MO): or

Fuller data can be found in the list of reconstructions, chapter 8, nos. 3, 27, 29, 77, 192, 364.

Lexically therefore CI has a distinctly 'archaic' character which may be a sign that the Casuarina Coast Asmat have lived in relative isolation from their Asmat neighbours for a long time. This agrees with the fact that they have developed (or preserved) a number of striking cultural peculiarities, such as the custom of keeping the skulls of deceased relatives, the carving of large crocodile-like figures used during initiation ceremonies, and the general absence of permanent ceremonial houses. Cultural influence of CA is only noticeable in the three northern villages of Otenep, Masim, and Muepis (Trenkensschuh 1970, Van Kessel 1961).

## 7. PROTO-ASMAT PHONOLOGY

By comparing the phonological data in CA, NA, CI, and CC it is possible to reconstruct with some confidence the main features of the phonology of their ancestor language, Proto-Asmat (\*PA). These features and the changes that took place in them during the development of the daughter languages form the subject matter of this chapter. Word structure, stress and tone, and segmental phonemes will be dealt with in this order.

### 7.1. Word Structure

Proto-Asmat appears to have had a simple word structure. At least in monomorphemic words it lacked consonant clusters. If such clusters

occurred at all they must have consisted of a morpheme-final consonant followed by a morpheme-initial consonant. Geminate consonant clusters certainly did not occur. The only consonants allowed in word-final position were /y/ and /w/. In monomorphemic words sequences of no more than two vowels could occur. In other words, \*PA was in its word structure very similar to the present-day Sempan and Kamoro languages<sup>41</sup>.

It is possible that in \*PA the requirement of a vocalic or semi-vocalic word-end was already weakened. I found about 70 cases out of 350 in which the data do not allow the reconstruction of a word-final vowel, but this number may be reduced when more data come to hand. It is certain that in the daughter languages this rule no longer applies and that often word-final vowels have been dropped. The tendency to lose final vowels has been stronger in CA than in the other Asmat languages, and within CA it has been strongest in the KW dialect which has lost the final vowel in many originally polysyllabic words. The loss of final vowels is amply illustrated by the examples given in section 7.4 and by the data in 8.3.

## 7.2. Stress and Tone

Pitch phenomena and stress have only been studied to some extent in the KW dialect of CA and in CI, and there is therefore only a narrow factual basis for conclusions regarding these phenomena in \*PA. Given the similarities between CI and KW in these respects (cf. 3.1.2.3, chapter 5, p. 34) it seems possible that a system like that of CI was operative in \*PA. That is, phonemic stress in polysyllabic words and a tonal system restricted to monosyllabic words.

## 7.3. Consonants and Vowels

\*PA probably had eleven consonant phonemes and five vowel phonemes:

p	t	k	i	u
m	n		e	o
f	s		a	
w	y			
	r			

<sup>41</sup>In Sempan and Kamoro, consonant clusters occur only word-medially and always across an actual or old morpheme boundary. In Sempan all words end in a vowel, /y/ or /w/; in Kamoro this is also the case except it seems in a few verb forms ending in /m/ (see Drabbe 1953:21-23).

Their phonetic values must have been similar to those of the corresponding CA phonemes (cf. 3.1.2.1). \*t probably had a palatalised allophone when adjacent to \*i; \*i and \*e had rounded allophones when preceding \*w; \*u and \*o had fronted allophones when preceded and followed by non-nasal alveolar consonants; \*p and \*m may have had labialised allophones ([p<sup>w</sup>, m<sup>w</sup>]) when followed by a front vowel. All consonants were allowed in word-medial position and all but \*r in word-initial position. Word-finally probably no other consonants than \*y and \*w could occur (cf. 7.1).

#### 7.4. Consonant changes

##### 7.4.1. \*p, \*k

The only \*PA consonants that did not change in any respect during the development of the four Asmat languages - except perhaps for minor shifts in allophonic realisation - were \*p and \*k, as illustrated below<sup>42</sup>:

\*p

	<u>CA</u>	<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>	
KW	picin					
KP	pitin					
KN	pitni	pitn	pitin	pitin	*piTi <sup>43</sup>	skin
SO	pirin					
KW	yipic	ipir	ipit	ipit	*yipiTi	man
KP	yipit					
KN,SO	yipir					
KW	yimsip	yisipene	imisep	yimsepin	*yimasapi(ne)	doorway
KP	yimasap					
KN	yumsep					
KN	yinsup					

<sup>42</sup>Unless stated otherwise the samples have been taken from the following lists: CA: Suru (for KW), Namen (for KP), Sawa-Erma (for KN or KN<sub>1</sub>), Manep (for KN<sub>2</sub>), Sokoni (for SO); NA: Momogo; CI: Senggo; CC: Pirimapun. Bracketed forms are non-cognates; a dash indicates absence of the corresponding form in the data. When all CA dialects have the same form it is listed only once and not preceded by dialect identification (see 7.4.2 wasen).

<sup>43</sup>For the full evidence on which the reconstructions are based see 8.3.

k\*

	<u>CA</u>	<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>	
KW, KP, SO KN	komen komne	(emene)	koman	koman	*komane	<i>tongue</i>
KW, SO KP, KN	okon okone	wakane	okon	(topane)	*wokone	<i>jaw</i>
KW, KP KN, SO	manmak mammak	manak	manak	manak	*mana-maka	<i>eye</i>

## 7.4.2. \*s

\*s did not change except in the SO dialect of CA where part of its allophonic content seems to have merged with a newly developed phoneme /h/ (cf. 3.1.2.2.). Thus when \*s was preceded and followed by \*a it developed in SO an allophone [h] which emerged with a [h] of different origin (see 7.4.3).

	<u>CA</u>	<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>	
KW, KN, SO KP	sis sisi	sise	sisi	sis	*sisi	<i>tooth</i>
	wasen	-	-	wasene	*wasane	<i>forest</i>

But: SO naham, KW nasam *to eat up*

SO komaham, KW komasam *to break off*

## 7.4.3 \*f

\*f was generally preserved unchanged in all daughter languages but there is evidence that it was dropped in CA, CI, and CC when it occurred between like vowels. In the SO dialect of CA however \*f was weakened to [h] when the two vowels were \*a. The result could have been that the opposition between /s/ and /h/ was neutralised in this particular environment, but there are a few instances of intervocalic [h] in the SO data which cannot be traced back to an earlier \*s and \*f and for that reason I have provisionally set up /h/ to account for all instances of [h].

In NA, for reasons which are still obscure, \*f between like vowels was preserved in some words and dropped in others.

	<u>CA</u>	<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>	
KW,SO KP KN	fin fina fini	ifine <sup>44</sup>	fini	fini	*fina	hair
KW KP KN SO	yufu yife yufok yifo	yufur	zufu	yufut	*yufo- <sup>45</sup>	cold
KW KP,KN SO	yen yane yahan	yane	zan	yane	*yafane	ear
KW,KP,KN SO	man mahan	mafane <sup>46</sup>	ban	mane	*mafane	hand
KW KP,KN SO	o wo oo	ofu	uu	wo	*ofu	pig
KW,KN KP	yo yu	yufu	-	yoa	*yofo	goura- pigeon

Further evidence for intervocalic \*f in *hand*, *ear*, *goura pigeon* and *pig* can be found in the other languages of the family, cf. section 8.2 nos. 11, 115, 173, 280.

#### 7.4.4. \*r

\*r was preserved in all Asmat languages except in the SO dialect, in KN<sub>2</sub>, and in at least two NA villages, Pupis and Momogo: in all of these \*r was lost. The loss of \*r must have preceded the change of \*t to /r/, see 7.4.5 below.

It is likely that the loss of \*r spread from one centre over part of the NA and KN areas, and the fact that \*r was lost in SO as well is one of the arguments in favour of a common local origin of the SO and KN<sub>2</sub> dialects of CA, cf. 3.3.4.

<sup>44</sup> ifine means *hair of head* and is an old compound i-fine, see section 8.2, no. 178.

<sup>45</sup> The final consonant in the NA and CC forms possibly is a remnant of an old suffix, cf. chapter 6, page 2. The final k in KN probably is a remnant of the particle ko, cf. footnote 40.

<sup>46</sup> mafane occurs in the Irogo list; Momogo has mane.

	<u>CA</u>	<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>	
KW KP,KN <sub>1</sub> KN <sub>2</sub> SO	erem yiram yiam yam		(zütam) <sup>47</sup>	yirima	*yirama	night
KW KP,KN <sub>1</sub> KN <sub>2</sub> SO	yuwur yuri yuu yo	yuuro <sup>48</sup> yui	zuur	yuuri	*yuwuri	dog
KW,KP KN <sub>1</sub> KN <sub>2</sub> SO	famor famer fame -	femore <sup>48</sup> fama	-	femoro	*fae-more	buttocks

## 7.4.5. \*t

The hypothesis put forward here is that \*t was preserved in CI, CC, and in the KP dialect of CA, but split into two phonemes /t/ and /c/ in KW, and into /t/ and /r/ in KN, SO and perhaps also in NA.

\*t→t,c: Proto-Asmat \*t probably had a palatalised allophone when preceding a high front vowel - as CA /t/ still has in the KN dialect - and non-palatalised allophones in all other environments. I assume that the originally complementary distribution became obscured without the palatalised allophone losing its palatalisation by such factors as morphophonemic change, analogic change and a tendency towards vowel harmony. As yet it is impossible to establish in any particular case how the change from \*t to /c/ came about. The hypothesis rests upon the fact that KW /c/ is found next to /i/ much more frequently than /t/<sup>49</sup>. In a number of cases such an environment, although absent in KW, can be reconstructed for \*PA. On the other hand there is a considerable number of words in KW in which /c/ appears in a non-high front vowel environment and where comparison with other dialects or

<sup>47</sup> zütam is an old compound. The first constituent, züt corresponds to KW yiwic *dark*; the second constituent, tam or am, I have not been able to identify. For a guess as to its etymology see 8.2, no. 97.

<sup>48</sup> The first form is from the Irogo list, the second from the Momogo list.

<sup>49</sup> A Suru list of 158 items all containing /c/ counted 59 words in which /c/ is next to /i/; a list of 135 items containing /t/ counted only 26 cases of /t/ next to /i/. Out of 60 sets of correspondences involving KW /c/, 31 have /c/ next to /i/ either in the KW words or in the reconstructable \*PA words, but only 11 out of 50 sets of correspondences involving KW /t/ have /t/ next to /i/ and only in one case it seems that an adjacent \*i can be reconstructed for the \*PA form.

languages does not point to the loss or change of an earlier adjacent \*i. Mechanically reconstructing an \*i in those cases creates the problem how to account for the fact that \*i was lost everywhere without leaving a trace except in KW. I have therefore written \*T in the reconstructions wherever KW has /c/ in recognition of the fact that while probably /c/ developed from \*t, the conditions under which this development took place are largely unknown<sup>50</sup>.

	<u>CA</u>	<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>	
KW	cem	teme	tame	tam	*Tame	<i>house</i>
KP	tame					
KN,SO	teme					
KW,KP,KN	te	-	te	tee	*te(e)	<i>rain</i>
KW	picin	pitn	pitin	pitin	*piTini	<i>skin</i>
KP	pitin					
KN	pitni					
SO	pirin					
KW	atakam	-	atakom	(atam)	*atakom	<i>language</i>
KP	atokom					
KN,SO	arakam					
KW	yipic	ipir	ipit	ipit	*yipiTi	<i>man</i>
KP	yipit					
KN,SO	yipir					

\*t→t,r: The conditions governing the split of \*t into /t/ and /r/ are interesting because of their implications for the theory of the development of the polymorphemic verb stems in the Asmat languages. In KN, SO, and NA \*t changed to r except in the following cases:

- a) In word-initial position, as already illustrated by the first example above.
- b) When immediately followed by another consonant. Thus in the third example above \*t did not become r in KN and NA because it had become part of a consonant cluster through the loss of the following vowel (cf. 3.3.3).

<sup>50</sup> The presence in CC of a form *fiki* corresponding to KW *fic* *finger nail* raises the question whether perhaps \*PA \*k also had a palatalised allophone which then merged with the palatalised \*t to form /c/ in KW. This would account for the fact that in KW /k/ is seldom found next to a high front vowel. The answer cannot be found without drawing the Sempan, Kamoro, and Iria languages into the comparison, since both Proto-Asmat \*t and \*k seem to have developed from an earlier \*\*k. Such an enterprise falls outside the scope of this paper.

## 7.4.6. \*m

\*m was generally preserved except in CI where it seems to have split into /m/ and /b/ in word-initial position (cf. chapter 5.2, p. 34). Bromley gives only one example of initial /m/ (*eye*, see 7.4.1) and it corresponds to /m/ in the other Asmat languages. Also CI /b/ corresponds to /m/ in the other Asmat languages, see *hand*, 7.4.3, and *tongue* 7.4.1. Other examples are:

	<u>CA</u>	<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>	
KW	mu	mi	bii	mii	*muí	<i>water</i>
KP	mui					
KN,SO	mi					
	emak	emake	emak	emak	*emake	<i>bone</i>

There are a few exceptions. Two of them, \*m > Ø, and \*m > n, can be found in *doorway*, 7.4.1.

## 7.4.7. \*n

\*n was generally preserved except in CI where it seems to have split into /n/ and /d/ in word-initial position (cf. chapter 5, p. 34). However, the only word with initial /n/ given by Bromley is a tree name and no equivalents have been elicited in the other Asmat languages. CI /d/ regularly corresponds to /n/ in CA, CC and NA.

	<u>CA</u>	<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>	
KW,SO	nes	nese	dasa	nasa	*nasa	<i>meat</i>
KP	nasa					
KN	nese					

See also *hair*, 7.4.3.

## 7.4.8. \*y

\*y is reconstructable in initial, medial, and final position but is well attested only in word-initial position. This phoneme was often lost in the daughter languages.

Loss of initial \*y seems to have been a tendency rather than the rule and in almost all cases noted has occurred when the following vowel was /i/. Thus some KW lists have *yisin coconut* and others have *isin*; KW has *yir white cockatoo* but KN has *iir*; KW has *yis* and *is firewood*, CC *yisa* and *isa*, CI *isa*. See also the following items in 8.3: *doorway* (109), *fire* (135), *knee* (208), *long* (226), *man* (232), *two* (393).

Bromley (1973) writes /z/ for the reflex of initial \*y in CI and posits contrast with /y/. CI /y/ however is found only rarely in

this position and Bromley's only example, *yapi wood species* he later analysed as *iapi*. Since my data do not contain cognates of *iapi* in the other Asmat languages it is unknown which phoneme in these languages would correspond to CI initial /y/.

Non-initial \*y was generally lost in the Kainak subdialect of KW, in KN, SO, and perhaps also in NA. It was generally preserved in the remainder of CA and, so it seems, also in CI and CC. The data contain only very few cases of medial or final /y/ and the picture is far from clear. CI reflexes of non-initial \*y are written /y/ by Bromley.

Reflexes of initial \*y have been illustrated by *man*, *doorway* (7.4.1), *cold*, *ear*, *goura pigeon* (7.4.3), *dog* (7.4.4), and *man* (7.4.5). Examples of non-initial /y/ are:

	<u>CA</u>	<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>	
	ay	ayas <sup>52</sup>	ai	ayi	*ayi	<i>new</i>
KW	may	mayi	may	mayi	*mayi	<i>foot</i>
KP	nayi					
KN	mii					
SO	mai					

#### 7.4.9. \*w

The evidence for reconstructing \*w comes mainly from KW which has preserved this phoneme in all positions. In medial and final position \*w was generally lost in the Kainak subdialect of KW, in KN, KP, and SO, and also in CC and NA.

The CI reflexes of \*w are /w/, /v/, and /ü/. /v/ is found only word-initially. Bromley gives only a few examples of initial /w/ and for only one of them I found cognates in the other Asmat languages (*crocodile*, see below). In this case the initial /w/ in CI originally was preceded by a vowel; it is possible that in CI \*w developed into a labiodental fricative in initial position which at first was in complementary distribution with [w] in non-initial position but later started to contrast with [w] when medial [w] became initial, as in *crocodile*. CI /ü/ developed from an earlier sequence /iw/, see *ripe*, *flower*, *dried* below.

<sup>52</sup>Probably ay-as *something new*.

	<u>CA</u>	<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>	
KW, KP KN	wow woo	wo	-	waw	*waw(o)	wood carving
KW KP KN	wow wao wo	-	vawa	wo	*wawa	now, today
KW, SO KN	wase wasa	was <sup>53</sup>	-	wase	*wase	red earth
KW	wowuc	-	vawta	-	*wawoTa	middle, centre
KW	piwi pii (Ka)	-	püü	pi	*piwi	ripe
KP, KN SO	pii pü					
KW KP KN SO	ew öö ee ö	-	wö, öö	ee	*ewe	crocodile
KW KW	iwin, iwiwin ciwew	- -	üin täüa	- -	*i(wi)win *Taiwaw	pig fly flower
and perhaps also:						
KW	sew	-	saüa	-	*saiwa (?)	dried (of meat)

The loss of non-initial \*w seems to be relevant to the development of phonemic rounded front vowels, see 7.5.1, 7.5.3.

Although KW generally preserved \*w there seems to be one environment in which \*w was lost in this dialect: when word-initial \*w was followed by \*o:

	<u>CA</u>	<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>	
KW KP KN SO	uc oc- wuti wot- wiri wir- wir wir-	-	ütü ütü-	ut ot-	*wuTi woTi- <sup>54</sup>	to laugh
KW KP KN SO	onam wonamo wonomo wanam	wonom <sup>55</sup>	-	onom	*wonamo	sky, clouds
KW KP KN <sub>1</sub> SO	or wor wer wo	we	wor	oro	*woro	you (sg)

See also 8.2, *goanna* (171), *spear* (350), *steal* (357), *thatch* (368), *tree* (387).

<sup>53</sup>Pupis list.

<sup>54</sup>Cognates in Sempan and Kamoro confirm the presence of \*o in this word:  
SE ote oto-, KA oko ko-.

<sup>55</sup>Irogo list.

#### 7.4.10. Summary

Chart IX summarises the consonant changes discussed above. The historically diagnostic isoglosses representing those changes are shown on Map V.

Chart IX: Reflexes of \*PA Consonants

..... <u>CA</u> .....				<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>
KW	KP	KN	SO				
p	p	p	p	p	p	p	*p
t,c	t	t,r	t,r	t,r	t	t	*t
k	k	k	k	k	k	k	*k
m	m	m	m	m	b,m	m	*m
n	n	n	n	n	d,n?	n	*n
f,Ø <sup>a)</sup>	f,Ø	f,Ø	f,h	f,Ø	f,Ø	f,Ø	*f
s	s	s	s,h	s	s	s	*s
r	r	r/Ø <sup>b)</sup>	Ø	r/Ø	r	r	*r
w,Ø	w,Ø	w,Ø	w,Ø	w,Ø	w,v ü,Ø	w,Ø	*w
y,Ø	y,Ø	y,Ø	y,Ø	y,Ø	z,y?	y,Ø	*y

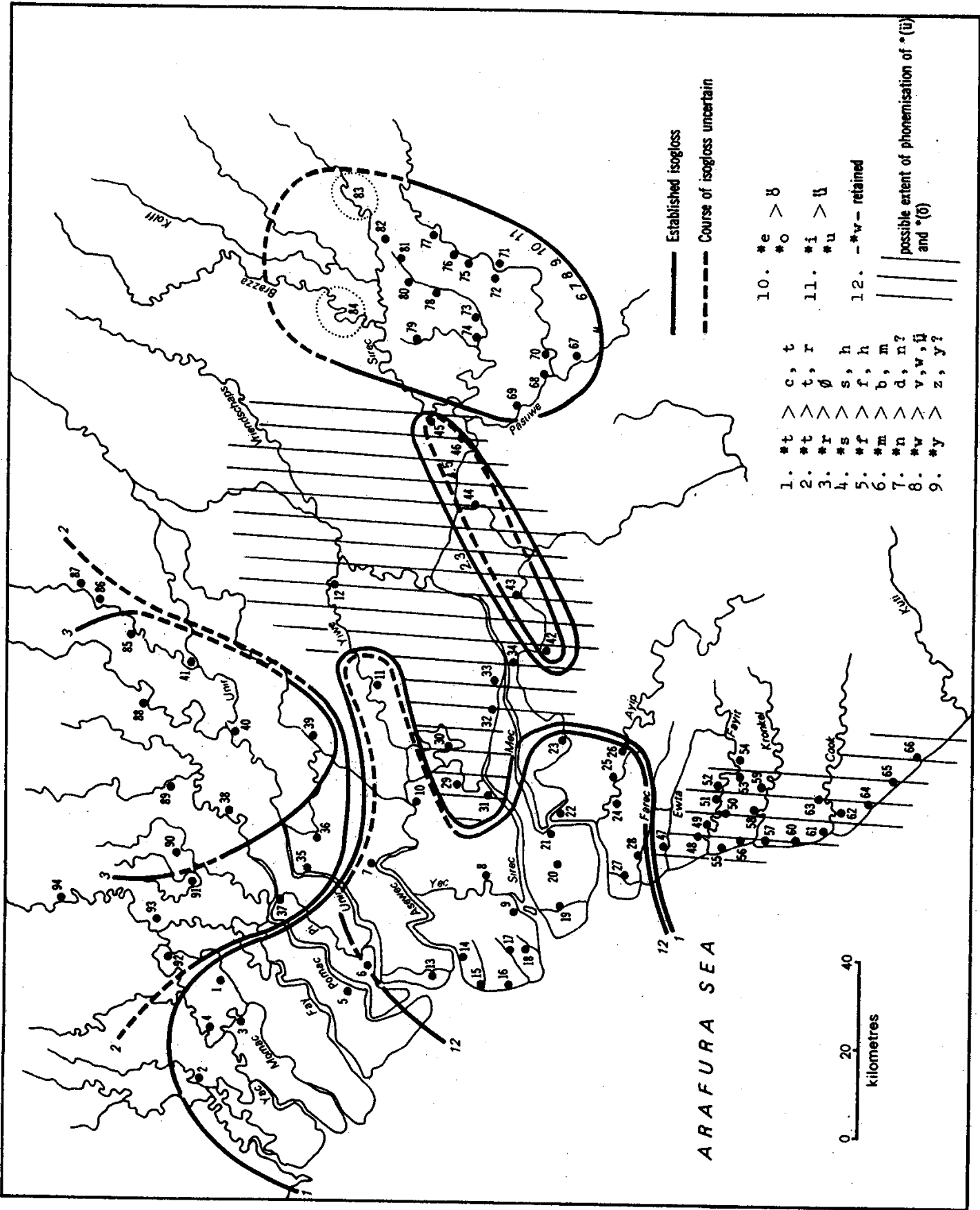
a) f,Ø = f, or loss of \*f

b) r/Ø = r in one subdialect, loss of \*r in the other

#### 7.5. Vowel Changes

The Proto-Asmat vowels have changed to a considerable extent under the influence of their environment. Alveolar consonants appear to have had a fronting and/or raising influence on neighbouring vowels; bilabial consonants exerted a backing or backing and raising influence. Often vowels have assimilated partially or totally to a preceding or following vowel; vowel sequences contracted, sometimes resulting in a vowel different from those in the original sequence. Finally, the loss of medial \*w caused the phonemisation of [ü] and [ö] in at least one of the daughter languages, CI. Vowel changes have occurred over and over again in the history of the Asmat languages and as a result vowel differences are found even between speech communities within the same (sub)dialect area. The search for regularities in this wealth of changes can only be undertaken on the basis of the fullest possible data and therefore fall outside the

MAP V SOME HISTORICALLY DIAGNOSTIC ISOGLSSES IN THE ASMAT AREA



scope of this paper. I shall therefore discuss the vowel changes only in general terms and shall point out no more than the most striking regularities<sup>56</sup>.

#### 7.5.1. \*i

\*i has been the most stable of all \*PA vowels. In word-initial position \*i has not changed at all and in the other positions it changed only in relatively few cases. As reflexes of \*i we find /i/, /ü/, /u/, and perhaps /e/.

	<u>CA</u>	<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>	
KW,SO	i	-	ii	i	*yi	<i>urine</i>
KP,KN	ii					
	pi	pi	pi	(piru)	*pi	<i>cassowary</i>

See also 7.4.1 *skin, man*; 7.4.3 *hair*.

The loss of non-initial \*w seems to have created conditions under which contrast between the [ü] and [i] allophones of /i/ could develop (cf. 7.3, 7.4.9). This has happened in CI and possibly also in CC and in the KP and SO dialects of CA:

	<u>CA</u>	<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>	
KW	siwin	siine	süin	(yisim)	*siwine	<i>bamboo</i>
KP	süünü					
KN	sini					
SO	süün					
KW	miniw	-	binu	münü	*miniw	<i>python</i>
KN	mini					
KW	tiw	-	tüü	tü	*tiwi	<i>son</i>
KP	tüü					
KN	tii					
SO	tü					

See also *ripe* 7.4.9, *dark* 8.3 (97), *ghost* 8.3 (162).

Following a bilabial consonant we find sometimes /u/ as the reflex of \*i, and there are a few cases in which /e/ seems to be the reflex. For \*i > /u/, see section 8.3, nos. 81,157,273,324,343,350,377; for \*i > /e/ see nos. 59,221,326.

<sup>56</sup>I have left out any reference to the mid-central vowel /ə/ in CA, since more study is needed to clarify its phonological status. In many cases it seems to be a pretonic allophone of any of the other vowels.

## 7.5.2. \*u

\*u is not well attested in the data on hand. In most cases /u/ in the daughter languages seems to have developed from \*i, \*o, or \*a. /u/ as a reflex of \*u seems to be present in the following sets of cognates:

	<u>CA</u>	<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>	
KW, KP KN, SO	kus kuus	-	küis	kuisi	*kuisi	<i>head</i>
KW KP KN SO	yuwur yuuri yuri yu	yui	yuur	yuuri	*yuwuri	<i>dog</i>
KW KP	yitur wuturu	-	yuturu	yutur	*yituru	<i>heavy</i>

In CI, /ü/ is not only a reflex of \*i but also of \*u:

	<u>CA</u>	<u>CI</u>	<u>*PA</u>	
KW KN	usi isi	üsi, üsü	usi	<i>camp</i>
KW	yum	züm	yum	<i>bird species</i>

Other possible reflexes of \*u are /o/ (8.3, nos. 35, 69, 249, 347) and /i/ (8.3, nos. 6, 62, 79, 226).

## 7.5.3. \*e

In word-initial position \*e remained unchanged except when it was followed by \*w, see below. Word-final \*e generally remained unchanged but there are a few cases in which \*e > a (8.3., nos. 237, 272). Also medially \*e mostly remained unchanged, but in this position we find a wide variety of possible reflexes: /a/ (8.3, no. 312), /i/ (8.3, nos. 59, 326); /o/ (8.3, no. 368); /ü/ (id.), and ö (see below).

As with \*i, the loss of non-initial \*w created potential contrast between the rounded and unrounded allophones of \*e. The development of a phonemic rounded mid-front vowel is probable for CC and the KP and SO dialects of CA; for CI, the existence of /ö/ from \*e has been established. In most cases however, CI /ö/ developed from \*o (see 7.5.4).

	<u>CA</u>	<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>	
KW,SO KN,KP	es ese	-	ese	es	*ese	<i>blood</i>
KW KP,KN	ef efe	-	efe	ef	*efe	<i>finger</i>
	se	se	se	se	*se	<i>mud</i>
KW KN <sub>1</sub> KN <sub>2</sub>	fer fere fee	fer <sup>57</sup> fee	-	fera	*fera	<i>fish weir</i>
KW KN SO	pew pea pö	-	-	-		<i>back of head</i>

See also *crocodile*, 7.4.9.

#### 7.5.4. \*o

In most cases and in all positions, \*o remained unchanged. In CI the fronted allophone of \*o found between non-nasal alveolar consonants (cf. 7.3) appears to have attained phonemic status and merged with the rounded allophone of \*e.

	<u>CA</u>	<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>	
KW KP	ok oka	-	oka	oka	*oka	<i>egg</i>
KW,KP,KN	so	-	so	so	*so	<i>singing</i>
KW,KP,SO KN	por- per-	-	por-	por-	*por-	<i>to see</i>
KW KP,KN SO	nor ner ne	ne	dör	ner	*nor	<i>I</i>
KW,KP,SO	sesak	sesak	söska	sosok	*sosaka	<i>black</i>

Quite often \*o has changed into /u/ especially in the Mismam subdialect of KW:

KW	cowuc	toor	taot	towot	*TawoT	<i>woman</i>
KP	toot					
KN	toor					
SO	taot					

See also 7.4.9 *laugh*; and 8.3, nos. 53,98,187,270,300,416. Especially in the KN dialect of CA \*o often became /e/ (*to see* and *I* above); it seems that the fronted allophone of \*o often became /e/, as in *black* above.

<sup>57</sup>Irogo list.

Less frequent are cases of \*o → /i/ (*laugh*, 7.4.9) and \*o → a (8.3, nos. 98,122).

#### 7.5.5. \*a

In word-initial position \*a remained unchanged in all daughter languages. In the other positions we find beside /a/ also /e/, /o/, /i/ and /u/ as its reflexes.

	<u>CA</u>	<u>NA</u>	<u>CI</u>	<u>CC</u>	<u>*PA</u>	
KW KP,SO KN	amas amos ames	amos	amos	amos	*amosa	<i>sago</i>
KW,KP,KN SO	emak emake	emake	emak	emak	*emake	<i>bone</i>
KW,KN	ya	ya	-	ya	*ya	<i>movement, current</i>

See also *eye* 7.4.1, *hand* 7.4.3, *new* 7.4.8, *red earth* 7.4.9.

Especially in the Mismam subdialect of KW and in KN, \*a often became /e/ after an alveolar consonant (see 8.3, nos. 3,15,24,115, 191,208,256,397) or in the neighbourhood of /i/. Presence of /i/ in the environment sometimes caused \*a > /i/, especially in KN (see 8.3, nos. 92,110,208,295,393,397). Cases of \*a → /o/ are illustrated by 8.3, nos. 39,50,69,139,264,381,393; cases of \*a → /u/ by nos. 69, 266,302.

## 8. PROTO-ASMAT VOCABULARY

### 8.1. Introductory Remarks

This chapter contains a list of 418 reconstructed items of Proto-Asmat vocabulary. Almost all of these bear a preliminary character. First of all as we have seen, the regularities in the changes that occurred in the \*PA vowels are still largely unknown and reconstructing a proto-vowel often is a matter of choosing between what seem to be two or more equally plausible possibilities. Secondly, gaps in the data often detract from the reliability of the reconstructed form.

With respect to the reconstructability of \*PA forms I have followed two rules:

First, if cognate forms are found in at least two of the four Asmat languages, a \*PA form can be reconstructed. Since all Asmat languages seem to be equally closely related to each other this is a valid assumption.