example, ARM2 for MAC gives a form from a closely related language to justify that this form probably did have the entire CVCV correspondence in Proto-Campa. In ARMADILLO2 for AMU, a comment is added to indicate some doubt about the inclusion of this item. In ARROW for LOK a derivationally related form is included to justify grouping words with these two meanings into the same cognate sets.

There is a large degree of semantic equivalence among the cognates in most cases. In the cognate sets, the first gloss is relevant to all the daughter forms unless otherwise specified in the comments below. Glosses following in parentheses are closely related semantically as either alternate glosses or additional glosses from several different daughter languages.

5.2 Cognate Sets

ACHI	ACHIOTE										
	*a	b	i	n	k	i	th	i			
PAR	a	h	í		t			е			
PIR h	а	p	i		ç		r	i			
APU	a	p	ĩ		k	i	r	i			
GAR		*þ	í		S	е	t				
RES		pa	i			i	g	í			
CUR		p	i				ž	i [mapa]			
YUC		p	í				r	í			
PIR h APU GAR RES CUR	а	p p *b p	i i i i i			-	r t	i i			

GAR form is DIC (Dominican Island Carib) from Taylor 1961b:272.

```
AGOUTI
         k i
AMU
      0
              r
WAU
    р
      i
         k
               š
PIR
PAL
       u k
            u tr u
       í k
GAR
            u
              1
LOK
         k
            i 1
                  é
            i? ∉
RES
PIA
              s î
               či
TAR
   *pí
               č
YUC
```

Synchronic form in AMU is $ro^{\gamma}k^{y}ep^{y}$. GAR, LOK and TAR forms are from Taylor 1961d. GAR form is DIC. Taylor 1961d gives GAR as pikuli, and LOK as pikiléri, while de Goeje 1928:258 gives LOK as fukuléru.

```
ANIMAL, (DOMESTICATE)
    *p i r a
TER
    р
       ê y o
BAU
    -pér
IGN
APU
ASH
     рi
PAL
RES
     р
       ii d u
YUC
```

pir a-

P-M /*r/ could be /*th/. Gloss for IGN is 'riding animal', and for APU is 'possession'.

```
AMU *k a
BAU
                       [ru]
PIR
APU
                      [ti]
MAC
       k a
              t
                       [tori]
ASH
          a
                       (tori)
                      [r]
PAL
      *k a
GAR
      *k<sup>h</sup> a
LOK
             S
GUA
       h e
                      [u]
ACH
     k é
                  е
                      [ši]
```

Synchronic form in AMU is ča?k. De Goeje 1928:228 gives WAP form as kačur and LOK as kasisi. WAP, PAL and LOK forms are from de Goeje 1928:228. GAR is from Matteson 1972:172.

```
ANT2, (ISULA)
MAC
ASH
GAR
     *m a
LOK
TAR
     *m a
YUC
     *m a
YAV
```

GAR form is from Noble 1965:73. De Goeje 1928:227 gives LOK form as muniru. TAR and YUC forms are from de Goeje 1928:228.

```
ANT3
   *k u
        d į
CHA
   kot
             [na]
PAR k o t
   katī
```

P-M /*k/ could be /*kh/, and /*u/ could be /*o/.

ARM						
	*d	a	n	a	[p ^t	a] a)
CHA	t	i	n	á	(w	a)
BAU	-ŧ	0	n		`	,
WAP		а	n	u	[b'	l
PAL	-w	a	n		•	•
GAR	-r	i	n	a		
LOK	ď	į	n	a-		
GUA	-t	į	n	а		
RES		-a?	n	áa	(p	[i])
ACH			-n	á	-	,
CUR			-n	a	[p	al
PLA		á	n	а		-
TAR			-n	a	[p	a]
YUC		-a ⁹ a	n	a		•
YAV	t	а	n	а	(p	a[si])
						,

P-M /*ph/ could be /*b/. Gloss for TAR form is 'shoulder', and for YAV is 'wing, armpit'.

ARM	2, (HA	ND, S	OHO	ЛD	ER)		
		*w	a	h	k	u	
CHA	_	W	a	h	k	0	
PAR	[it ^y o]		a		k	О	
WAU		W	í	ši	k	u	
TER		*w	0		?	u	
BAU		-w	ó		h	i	(s)
IGN		-b	a		?	u	` '
APU		-W	a		k	0	
MAC			a		k	0-	
ASH			а		k	0-	
PAL		-w	á		k	u	
RES		-v	aa		k	ó	
PLA		-w	aa		k	u	(te)
YUC		-w	a		k	u	(la ⁹ apa)

Gloss for CHA form is 'shoulder'. TER form is from Matteson 1972:190. For MAC form, compare Nomatsiguenga -bwako from Matteson 1972:213 as evidence that forms in this subgroup did have an initial labial glide at an earlier stage.

```
ARMADILLO
       *y e
           é
             t
       y
WAU i
       v
             h
TER
             hy
APU
         šoa
MAC
             t
                i
ASH
                i
                    (ni)
             t
GAR
           а
             S
                í
                    [gamu]
LOK
          e
             S
                i
RES
             ?
          a
ACH
          е
PLA
          è
TAR
          é
       у
YUC
          e?é
       у
ARMADILLO2
     *kaš
CHA k a
```

š

š

BAU k a

P-M /*k/ could be /*kh/. For AMU, primary sources note a similar form in Panoan languages as an indication that this may be a loan.

palo

ARRIVE

PAR ASH WAP TAR	-u	*k k k k ^h k	au áo o au- á-	[r]	a] (aki-)		
P-M	/* k	/ co	uld	be	/*k ^h /.		
ARRO		(BC	W)				
	*š	u	m	e	¢	a	
PAR	t	0	m	é	Ø	е	
TER	š	u	m	е			
WAP	S	u	m	а	d	а	
PAL		i	m	é	dr-		
GAR	g	i	m	a	r	a	
LOK	S	i	m	a	ŗ	a	
GUA		i	m	á	ŗ	a	[a]
PIA	d	e	m			á	[pu]

Gloss for WAP and PIA forms is 'bow'.

GUA also has a form simarabo which means 'bow'.

```
ARROW2, (SPEAR)
        *y
            0
               k
                   0
                     r
CHA
      a š
                   0
                     1
                         0
                             (li)
PAR
                   ó
                k
                      r
                         e
WAU
BAU
                   0
                      r
IGN
                  i
                      Ţ
                         i
                             [ki]
PIR
        č
           0
               k
                  0
                     r
MAC
        č
           0
               k
                  0
PAL
     y a
               k
                  0-
PIA
               k
                  ù
```

P-M /*k/ could be /*kh/. Gloss for PIR and MAC forms is 'spear'.

```
ASH

*p a l i š i

WAP *ph a r i t i

GAR b a l i g i

LOK b a l i s i

GUA p a l i ? i

ACH b áa l i

PIA b àa l i

TAR p áa l i

YUC *p a²a l i

YAV h a l i g i
```

```
BACK, (SHOULDER)
                    р
                       i
PAR
                        é
                    h
                            [ne]
TER
                    p
                        u
                            [nu-]
BAU
        -č
                        i
                    р
IGN
        -č
                    p
                        a
ASH
       -sy
             е
                N
                    p
                        а
LOK
        h
                       i
                    b
                            (nro)
GUA
     -(a)s
                       i
                    р
```

P-M /*p/ could be /*b/. Gloss for ASH form is 'shoulder'. Primary sources for LOK give abi as an alternate form.

```
BAD, (WITCH)
        *m a
                h
                    č
                       i
  AMU am a
                h
                    S
                        e?
                             (n<sup>y</sup>ehč<sup>y</sup>)
  CHA
         m a
                    č
                        е
                             (wa)
  MAC
         m a
                    e
  ASH
         m a
                    ¢
         m a
                    £
                             (káagígí)
 ACH
         m áa
                    š
                        i-
  CUR
         m aa
                    č i-
· TAR
         m aá
                        i
                             (ma)
```

Gloss for AMU and ASH forms is 'witch', for MAC is 'bewitch', and for RES is 'bad person'.

```
BAT
AMU
         *р
            0
               h
                  S
TER
         w i
BAU
         b
IGN
         Ьi
     (šio) p i
APU
MAC
         p
ASH
         р
GAR
         b
           ú
LOK
         *b
GUA
         рį
                         č
RES
         рi
                      íi
                         g
ACH
         h í
                         ži
CUR
         рi
                         ž
TAR
         рií
                            i
                         r
YUC
         рi
```

P-M /*p/ could be /*b/. Synchronic form in AMU is pohsoš. LOK form is from Taylor 1969:279.

Synchronic form in YUC is pa²ila. De Goeje 1928.223 gives WAP form as parite.

```
BATHE
                                            BIRD
              *k a
                                                  *k u
                                                         đ
WAU
              k
                 a
                      (kapa)
                                            AMU
                                                         ŧ
                                                     O!
TER
              h<sup>y</sup> i
                      (ko)
                                           PAR
                                                  k o
                                                         t
                                                             é
IGN
              -k a-
                                            WAU
                                                     u
                                                             u
PIR
              k
                 a-
                                            WAP
MAC
              -k
                 а
                      [a-]
                                           PAL
                                                  k
                                                     u
                                                         h
ASH
                 a
                      [a-]
                                           GAR
                                                     Ц
                                                         ľ
                                                             í
WAP
                 a
                     [u](kup<sup>n</sup>an)
                                           LOK
                                                  k o
                                                         d
PAL
          aw k e
                     (pye)
                                           RES
                                                  k o?
GAR
              *k i
                      din
                                           CAB
                                                  7
LOK
     (i)
              k a-
                                                  k u
                                           PIA
GUA
              ?
      О
                 ó
                     [hi]
                                           TAR
                                                  k
                                                             é
YAV
              k a
                     [wa]
                                           YUC
                                                  k u
```

GAR form is DIC from Taylor 1978:122.

```
BEE, (HONEY)
         *m a
                b
PAR
          m á
                h
TER
          m ó
BAU
     [yo]
         m oé
                P
IGN
          m a
APU
          m a
WAP
          m a
GAR
          m á
                ъ
LOK
         *m á
GUA
RES
         m aá
ACH
         m áa
               b
CUR
         m aa
PIA
         m áa
TAR
         m áa
YUC
         *m a
                   а
YAV
         m á
               h
```

Gloss for the PAR form is 'honey'. The LOK form is from Taylor 1969:277. The YUC form is from de Goeje 1928:228.

```
BIG
                   [th
           t
                а
                       i]
AMU
                a:
                   [š]
MAC
     а
           t
               â
                      i)
                   (r
ASH
     a N
           t
               а
                   (T
                      i)
WAP
            ď
               a
                   [d +]
```

```
[p i r a]
   а
[p
   i
      š
          a]
   i
       ž]
[p
          a]
       F
Ъ
      u
   i
          a]
ĺЪ
       0]
[p
   íi
      d
[p
   i
      Г
          a]
[p
   ì
      r
          a]
[p
   i
      r
          a]
[p
   i
      Г
          a?a][phá]
```

The last two syllables of the proto-form are probably from ANIMAL.

Dem							
BITT	ER						
	*k	е	p^{h}	i	d	i	
AMU			р	e:	š		(-eš)
PAR	t	i	ĥ	é			٠.,
PIR			p		S		[a-]
MAC	k ^y	е	p	i	š	ii	(ri)
ASH	k	е	_	i	sy	i-	()
GAR	g	i	P f	e	•		
LOK	S	i	₽	e			(n)
RES		e	p	ii	$e^{\mathbf{h}}$	ii	` /
PLA		í	p	i	S	í	(-iri)
YUC		*i	p	i	s	i-	()
YAV	k	е	•		ł	i-	

Taylor 1978:123 gives the DIC form for this as sip^he . The YUC form is from Matteson 1972:173.

```
BLACK
             ue
                 r
                    e
AMU
             e
                        (we)
CHA
             0
                 s é
                        (wa)
PAR
                у
                    а
TER
GAR
LOK
             a
                 r
                        [men]
                    е
CAB
      k
            ewe r
                   е
                       (ka)
PIA
      k
                1 í-
             úu
YUC
     k
            a
                       [méni]
```

BLOO	D								
		*[m	i	t ^h -š l	а	h	n	a]	
AMU			•	-š	a	h	-	-	(s)
CHA			i:		a				
PAR		[-ím	a	1	á				(ti)
TER			í	t	i				
BAU			í	t	i				
IGN			i	t	i				
PIR	h			r	a -				
APU			е	r	ē				[ka]
MAC			i	r	aa-				
ASH			i	r	aa-				
WAP			i	ž	a				[i-]
PAL		[m]	i	r	á-				
GAR			í	t,	a-				
LOK			i	th	<u>i</u>				
GUA			i	š	á				
RES			-ií	đ	ú				
ACH			í	ž	а		(naa	a)	
CAB	?		ii	r	a		-		
CUR			-i	ž	а		[n	a]	
PIA			-í	r	a		[n	a]	
TAR			-í	r	е				
YUC			-í	I	a				
YAV		[m]	í	y	a		(n	i)	
				-			-	-	

Primary sources give šais as an alternate form for AMU, -(a)šá as an alternate form for GUA, tiža- as an alternate form for ACH, and -tri as an alternate form for TAR. The gloss for WAP is 'bleed'. Taylor, Noble and other Arawakan comparativists have noted the similarity of BLOOD to DRINK. It is likely that the similarity is due to a classifier meaning 'liquid' which gained lexical status as a noun and verb in most Maipuran languages. In some languages it is necessary to posit that it entered into combination with other classifiers or lexical roots.

	BONI	Ξ			
			* [n] a	P	i
3)	AMU		*-[n] a	p	0
	CHA	[k]	áh	p	u
i)	PAR		* [n] a	h	e-
-	WAU	[ãhãpi]	[ñ] a	P	i
	TER		ô	p	e-
	BAU		[n] o	p	i-
	IGN		-a	p	e-
ca]-	PIR		-a	p	i
	APU		a	p	i
	PAL		а	p	í-
-]	GAR		-á i	b	u
	GUA	(hí)	i	P	i
	RES		-aá	p	í
	ACH	(iy)	á	h	i i i i
	CAB	(?i)	а	p	i
	CUR	•	-a	Р	i
	PIA		-á	p	i
	TAR	(y)	áa	p ph	
	YUC	•	-i		í [na]
	YAV		(n) i	h	i (u)

P-M /*p/ could be /*b/. Synchronic form in AMU is -nop and in PAR is ahi. Pre-PAR form is attested in Taylor 1961e:365. Primary sources give nope as an alternate form for BAU, (é)ipi as an alternate form for GUA, (-y)áahi as an alternate form for ACH, and (n)uhi(u) as an alternate form for YAV. The gloss for YAV is 'my bone'. Primary sources list the WAU form as a classifier meaning 'bone-like'.

BOW

		*[t	a]	P	O	
WAU	[1 1 1	[t	a]	p	i	
BAU	[*-i]	[t	i]	р	0-	
IGN	[i]	[¢	ij	p	a	[raku]
PIR		Ţt	j	w		[a]
APU		Īt	a]	Р	0	_
MAC		_		P	ia	(me)
ASH				р	yaa-	- ` `
GAR				-b	i	
CUR	(yawi)	ſt	ia	р	0	(ti)
TAR	(yawi)	Ĩt	ia]	p	u	- 1

P-M /*p/ could be /*b/. Synchronic form in BAU is -tipo. The BAU form assumes *i in Pre-BAU to relate to IGN and predicts /*a/ > /i/ in this environment.

```
BREAST, (MILK)
                  е
                     п
CHA
                  é
                     n
PAR
      [etó]
                  0
                     n
WAU
                      ñ
TER
BAU
              -š
IGN
              -č
                     \mathbf{n}
PIR
                      п
APU
ASH
WAP
               -ď
                      n
                  -i?
RES
                      n í (mu)
                  -îï
                      n
                         i
ACH
CUR
                  -î
                      n
                         i (a)
PIA
                      n
                          i-
YAV
               g í
                     n
                         î
```

Primary sources for RES also give the form $i^2ni(?aani)$ meaning 'milk'.

BRING

```
m a
CHA
                     -m ս<sup>շ</sup>
                              [me](kne)
TER
       (ny)
                     m a
                              ne
BAU
                     \mathbf{m}
                         0
                              (n-)
IGN
                     \mathbf{m}
                         а
                              (poka)
PIR
                      m a
APU
                              [na]
                     -m
                         i
MAC
                -a
                     m-
ASH
                -a
                     m-
```

BROTHER

```
*per
                  i
                       [pe]
IGN
          а
             ľ
                   а
       -p
PIR
       -р <u>і</u>
              r
                  i
APU
       -р <u>і</u>
WAP
              ž
      *-b
          i
              r
GAR
PLA
       -b èe r
TAR
       -ре г
       h a <del>l</del>
                       [he](mi)
```

P-M /*p/ of suffix could have been either /*b/ or /*ph/. Matteson 1972:174 gives the gloss in GAR as 'younger brother'. Primary sources also give the glosses of PIR and APU as 'younger brother', of WAP as 'brother of female' and of PIA as 'older brother'.

```
BROTHER-IN-LAW (OF MALE)
              *ani
WAU [pih]
                      е
                  n
BAU
               -a
                  n
                     i
                          (\mathbf{r} + \mathbf{i})
PIR
               a n
MAC
                  n
ASH
                          (r i)
                      i
                  п
PAL
                  n
                      i
                          [rhu-]
YAV
                          1
```

P-M /*1/ could be /*t^h/. The assumed pref in WAU may be either second person of from BROTHER

BUZZARD

```
*č e m u

AMU g e m o (ye)

CHA g e m o (ye)

GUA s a m u [t]
```

CASSAVA, MANIOC

```
*ka
            n
CHA
      k i
                     [1 i]
PAR
                     [t e]
      -k €
WAU
                     (t i)
PIR
                     (r i)
ASH
                     (r i)
WAP
                е
PAL
             n
GAR
GUA
RES
CUR
      k ái
PIA
      k áin i
TAR
```

Synchronic form in PAL is kini(ki). The WAU form is a possessed form. The Pre-PA form is from de Goeje 1928:230. The [in GAR is probably hiatus.

CAYMAN

```
CHA
                    0
PIR
                iy
APU
LOK
                              š
GUA
         a
CAB
      k a:
                              ž
      k a
CUR
                           í
                              ľ
      k a
PLA
                    u
      k á
TAR
YUC
     *k a
                    ú
```

The BAU form is from de Goeje 1928:227. The YUC form is from Matteson 1972:231.

CHARCOAL									
		*m	e	n		$\mathbf{k}^{\mathbf{h}}$	i		
AMU	$(k^y el^y)$	$\mathbf{m}^{\mathbf{y}}$	e			š			
CHA	(kahšo)	m	е			k	i		
TER		ш	0	ny	í	k	e		
BAŲ	e	m	0	n	e	S			
IGN	e	m	a	n	i	k	i		
PIR	[ksamo]	m	е						
MAC	(øi)	\mathbf{m}	е	n		gy k	i	(to)	
ASH	(¢i)	\mathbf{m}	e	N			i	(to)	
GUA	(ši)	m	e			č			
CUR	(tiyee)	m	е						

In some languages the gloss is literally 'fire-charcoal' with the prefixed material in parentheses meaning 'fire'.

CHEST,	(ABD	OMI	EN)		
	*t	i	k	u	
AMU	-aht ^y				
CHA	t	ú	?	u	[lu]
PAR	t	i	k	0	(la-)
WAU	-¢	i	č	u	
TER	y x x y	â	?	a	(-ku-)
BAU	č	a	k	0	(-ki)
PIR	-č		k		[ete]
APŲ	-t	i	k		[ako]
ASH	*t	i	k		(aro-)
WAP	ď	u	k k ^h	u	[di?]
PAL	-d	ú	k	u	
RES		67	k	ó	[táapígú]
ACH			-k k ^h	ú	[ta]
CAB		u	k ⁿ	u	
CUR			-k	0	[da]
PLA		ù	k	u	[ta]
TAR			-k	u	[da]
YUC		-i?i	k	ú	
YAV	t			u	(gi)

P-M /*k/ could be /*kh/. The gloss for CUR PIR and APU is 'abdomen'. The ASH form YAV is from the Asháninca dialect, Kindberg 1980:49. Primary sources give -duka- as an alternate form for PAL.

CHIC	OE FLE	EΑ				
	*i	d	i	t	u	
CHA		-s	u	č	i	
BAU		t	i	ŧ		
IGN		S,	i	t	ц	[re]
RES	i	e^{h}	íi	t	ó	
AÇH	*i	š	i	t	u	
CUR	ii	t	i	t	0	
PIA	i	S	í	d	u	
TAR	i	S	i	t	ú	
YUC	i	h	i	ŧ	ú	
YAV	[ké]			g	u	[1 i]

Taylor 1961b:271 gives the ACH form as isitu. The YAV prefix may be from ka-'ATTRIBUTIVE'.

```
CHOP, CUT
                 [k a]
          *t u
CHA
                         [s-]
             0
PAR
                 k a
             0
WAU
                 k-
             u
                [?
             ú
          š
                     0]
                         (ko)
TER
IGN
     -é
          č
             u
                         (ka)
MAC
          -t o-
ASH
             0-
                 [k<sup>h</sup>-
WAP
          ď u
RES
          t u
                            u-]
TAR
          t u
                         [tú]
YAV
          g iu
                 [k
                    a]
```

P-M /*k/ could be /*kh/.

```
CLAW, (FINGERNAIL)

*s eu t a

AMU -š e: č (ehp)

CHA s t o

PIR s ewa t a

APU -s oo t a

MAC š a t a-

ASH sy e t a-

RES -h i? t á [vî]

CUR -¢ o t a

YAV ¢ ú l a [wi]
```

```
P-M /*k/ could be /*k^h/.
CLAW2, (FINGERNAIL)
          *h u
                  ъа
             î
TER
                  p
                                         COME
BAU
          -t í
                  p
                                                          [k a]
IGN
          -h i
                     а
                                          AMU ah
                                                    р
WAP
                 *b'
                         [re]
                    a
                                                    -p u
                                         TER
                                                                   [hi-]
              ú
GAR
                         [ra]
                                          BAU
                                                    -pi
                                                               0]
                         [da]-
LOK
                                          PIR
                                                       0
                                                           ľk
                                                               a
GUA
                         [to?u]
                                          APU
                                                           [k a]
                                                      0
          -yú
ACH
                  b a
                                                           [k-
                                          MAC
                                                    -p o
CAB
                  p a
                                          ASH
                                                    ро
                                                           [k-
             -ù
PLA
                  bа
                                                    bи
                                          GAR
TAR
                  p a
                         [da]
YUC
          -h u<sup>9</sup>u p a
                                           P-M /*p/ could be /*b/.
  De Goeje 1928:229 gives WAP form as
                                          CORN, MAIZE
bare. Primary sources give hupá as an al-
                                                    *ma
ternate form for YUC.
                                          WAU
                                                    m a
                                          IGN a
                                                    m a
COATI, COATIMUNDI
                                          WAP
                                                    m a
                                          PAL
             h
                 р
                                          GAR
                                                    *m á
                                          LOK
                                                    m a
WAU
                                          GUA
                                                    m á
                                                                  kk i
                        h i
                                           The GAR form is DIC from Taylor 196
MAC
                                          CRY
ASH
LOK
                                                                  [w-]
                                          AMU
                                                               aı
RES
                                          PAR
                                                           У
      k a
                                          TER
TAR
      k a
                                          IGN
                                                                   [ha]
                                                               a
                                          PIR
                                                              a
                                                                   [ha-]
 P-M /*p/ could be /*b/.
                                          APU
                                                                   [pa]-
COLD
                                         MAÇ
                                                    -[ira]
                                                           g-
                                          ASH
                                                    [ira]
                                                           g-
                                          WAP
                                                                  [a-]
PAR
                                          PAL
     (k) i
PAL
                                          GAR
                                                                   [hua]
                        íí۷
RES
                                               (<del>i</del>)
                                          LOK
                                                               а-
CUR
                                          GUA
                                                                   [láhaa]
TAR
                         é-
                     p
```

PIA

TAR

YUC

YAV

e²e (ní)

(ri)

p

h á

k a

P-M /*p/ could be /*b/.

ka ¢ i

YUC

YAV

COLD2

WAU

ASH

The prefix *ir*- and related forms may the derived from a derivational morpheme meaning 'liquid' as in BLOOD and DRINK, Mattess 1972:175 gives the YUC form as *ia /y/* this environment does not appear to contral with its absence.

-i č

[ha]

CURE	, RE	MEI	ΣY,	(MI	EDIC	INAL	GRASS
		*p	i	n	i		
PIR		P	i	n	i-		
APU		P	i	n	i		
ASH		P.	i	n	i-		
WAP		$_{\mathbf{p}^{\mathbf{h}}}^{\mathbf{p}}$	i	n	i	[ď]	
PAL	i	p	е		y	(ti)	
GAR	i	b	i		е		
LOK	*i	b	i			(hi)	
GUA	*e	p	i				
YAV		h	i	п	a	[ha] (i	li)

The LOK and GUA forms are from Taylor 1978:59. Fanshawe 1949:60 gives the LOK form as bina. The gloss for WAP is 'grass'.

DIE,	(SIC	K)					
		*k	a	m	a		
AMU	[š]		o:	m-			
PAR		k	a	m	á	(ti)	
WAU	а	k	а	m	а		
MAC		-k	а	m-			
ASH		k	а	т)-			
TAR		-k	а	m	i	(á-)	

The gloss for the PAR form is 'dead', for WAU and ASH is 'die, sick' and for TAR is 'sick'. The TAR form meaning 'dead' is yami(ni).

```
DIG
         *k
             i
                    a]
          -k
                         (t)-
              i?
CHA
PAR
          ¢
              é
                 k
                     a]
             i
WAU a
          ŧ
                 [k]
                     a
          k
                 ſh
                         (k o)
TER
              е
                     0
BAU
          -s
              á
                    0
                         (kia-)
IGN
                         (ka)
PIR
              i
                         [tota]
MAC
             i
                 [g-
ASH
             i
                 Ĭy-
                 [č
WAP
             i
                     al
                         [ď]-
             í
PAL
         t
                 ſk
     (a-) č
             i
GAR
                 [g
                    a]
CUR
             -е
                 ſk
                    a-]
             -í
PIA
                 ľk
                     a-]
YUC
              i
                         (káhe)
```

Primary sources give sereka as an alternate form for IGN.

```
DREAM
                      [n i]
               р
           а
AMU
               р
                  0-
           í
               h
PAR i
         č
                  i
                      ſπ
                             (-ako)
WAU
         s ẽ
              p
```

```
TER
                      ú
                                  (šo)
APU
                      0
                          [n
                                  [awa]
GAR
                              i]
LOK
                                  (toa-)
                  ъ
                      0
                          ſπ
GUA
RES
                      ó
                          [n
                          Ī
TAR
                             i-
          t a
                      u
                             i-
YAV
          t a
                 h
                      u
                          ſn
```

P-M /*p/ could be /*b/. Synchronic form in AMU is *čotp-*. De Goeje 1928:233 gives the APU form as *tapunawa*. The GAR form is DIC from de Goeje 1928:233, who transcribed it as *toboüi*.

```
DRINK
           *i
                  а
                              makuna IDE
               *š
AMU
                  0
CHA
               -Ì
                       [p-]
                  а
PAR
               r
BAU
IGN
PIR
      h
APU
ASH
               ž
WAP
      (h)
PAL
               r
                  е
               t
t
GAR
      (á)
                  а
LOK
      (<del>i</del>)
GUA
               S
                  á-
RES
               đ
                  ú
               ž
ACH
                  а
CAB
                  a
CUR
      (pa) i
               ž
                  a
                       (ka)
PIA
TAR
           i<sup>9</sup>i r a
YUC
                       (káhe)
YAV [t] i
               y a
```

Synchronic form in AMU is $o\S$ -. Primary sources give it^ha - as an alternate form for LOK.

```
DRY
             h
                    0
AMU
     *р о
             h
                     0
                        (ša)
                     é
                        (wa)
CHA
      р
PIR
                r
                    i-
      -P
MAC
      -р i
                ľ
                    i
                        [a-]
      рi
ASH
                ľ
                    y
                        aa-
GUA
      h o
                 S
                     ÓΟ
                    ú
                        (pe)
      -р u
```

Synchronic form in AMU is pohša:(§).

```
DUNG, (EXCREMENT)
     *i t
                     [a]/[i]
                 k
CHA
                         i
                 k
                         í
PAR
                            (ti)
TER
         S
                 k
BAU
        t
                 S
IGN
PIR
                 k
MAC
                 g
             i
ASH
WAP
                 k
PAL
             i
                 k
GAR
LOK
                 k
RES
                š
ACH
             -í
                 у
                             (kuaa)
CUR
                 -š
                             (pi)
PLA
             í
                 y
                     a-
TAR
             i
                 у
YAV
         -¢
             i
                yá
```

The final vowel of P-M varies morphophonemically between /a/ and /i/. Primary sources give -tk(wa) as an alternate form for CHA. The PAL, GAR and LOK forms are from de Goeje 1928:216. He transcribed the GAR form as itica. The RES form ii'ssá(ko) means 'tripe'. The ACH and CUR forms are glossed 'intestines'. The PIA form meaning 'intestines' is -ya[pi][kúa] and the YAV form is ¢ia(hi).

```
DUST, (ASH)
                          е
                              [n e]
                              [ny
AMU
     (gah)
                          е
              р
      (kahčih-)
CHA
              р
                          е
PAR
          е
              h e
WAU
          -e
                                  [he]
                 ô
TER
                                  u
              р
BAU
              ро
                                  [i](p)
IGN
      (gima)
              р
                 а
PIR
              р
                 а
                              [h
                                 í]
APU
                              [n \quad i]
              -ра
                              [n e]
MAC
              -р а
ASH
              -ра
                              [n e-]
PAL
      (tabúd)
              bц
                              п
                                 e]
      (t-)[i]
GAR
                          е
YUC
     [mu?u]
                          é
```

The first vowel of P-M varies between /*a/ and /*e/. The gloss for the AMU and CHA forms is 'ash' (literally: 'fire-dust'), for WAU is 'burn for ash', and for IGN is 'ash'. The YUC form may literally mean 'ground-

dust'. Primary sources give $ipu^{\gamma}i$ as an alternate form for TER, and $(ko)p\acute{o}e(r)$ as an alternate for for BAU.

```
EAR
                 k
                       е
                         n
                            i
                                   [aku]
AMU
                       e
PAR
     [i]
                   t
                      i
                          n
TER
                          n
                              у
                                   [0- ]
BAU
                                   [0 k i]
                       е
                          n
IGN
                   -k
                      i
                          ñ
PIR
                          n
                                   [a ko]
APU
                      е
                          n
                                   [a (ko)]
          [-th a]
WAP
                       i
          -[ar i]
GAR
                       \mathbf{a}
LOK
          *[d
             i
                   k
                          n
                       а
      (-a) [č
GUA
              е
                       е
RES
                   -h
                                   [á k ó]
                      е
                          n
CUR
                       -e
                          n
                              i
TAR
                              i
                   -h
                       е
                          п
YAV
          [t
              a]
                  S
                      i
                          n
                                   [e
```

Synchronic form in LOK is [di]ke-. Primary sources give etaná- as an alternate for PAR. The P-M noun classifier may be 'container' as in (33).

```
EAR2
                  ph
                           d
              n
PIR
                   р
APU
          ĩ
                      i
                           [t
                               a]
                   p
MAC
          е
                      î
                           Γt
              \mathbf{m}
                  р
              N
ASH
                      i
                           ſt
       k
          е
                  Þ
PAL
      -t ay
                   b
                   h
YAV
                      е
                           ſŧ
```

The gloss for the YAV form is 'hear'.

EART	ПΗ						
	*k	i	P	а	č	i	
AMU			р	a:	e		
APU	k	÷	р	a	č	i	(pe)
MAC	$\mathbf{k}^{\mathbf{y}}$	i	p	a	¢	î	
ASH	k	i	P	a	Ø	i	
RES	h	í	p	0	h	í	
CUR	h	ii	p	a		i	
TAR	h	í	p	а		i	
YAV	k	a	ĥ	á	g	i	

The gloss for the APU form is 'dirty'.

EAT						
		*n	i	k	a	
CHA		n	u	k		(ne)
PAR		*n	i	g Č	е	
WAU	ã		i	č	a	
TER		п	î	k	o	
BAU		-n	i	k		
IGN		-n	i	k	а	
PIR		n	i	k	a	
APU		-n	i	k k ^h	а	
WAP		n	i	k ⁿ	-	
GAR	á		i	g	a	
GUA			е	k	aá	
ACH			-í	y	a	
CUR	-i	n		ħ	a-	
PIA				-у	áa-	
TAR		-h	i		a-	
YUC	ah	ñ			á-	
YAV	е	ñ			a	

Synchronic form in PAR is niga.

EYE							
	*[1]	п	k	i/	е		
AMU	*[1]	0	k		е		
CHA		o h	k	i			
PAR	*[d]	0	e		e-		
WAU	*[uš]	u	ŧ		e-		
TER		û	k	e-			
BAU			-k	i		[s]	
IGN		-u	k	i		[ha]	
APU		0	k	i			
MAC		0	к ^у	i			
ASH		0	k	i-			
PAL		-w	t	У		[ak]	
GAR		á	g	u			
LOK			k	0		[si-]	
GUA		0	7	u			
ACH	[-t] [t ^h]	u	í				
CAB	[t ⁿ]	u					
CUR	[-t]		i				
PIA	[-t]	u	í i				
TAR	[-t]		i			[da]	
YUC	[-ihl]	u					

Final vowel in P-M varies morphophonemically between /*i/ and /*e/. Synchronic form in AMU is -kl^ye? or kol^yo?-, in PAR is dogiand in WAU is ušutai.

FAN	(n.)				
	*h	е	\mathbf{w}	i	
TER	k	e	w	i	(ti)
MAC	h	e	ъ	а	(ro-)
ASH	h	e	w	a	(ro-)
RES	h	e	V	07-	
YAV	h	u	\mathbf{w}	i	(ta)

The TER form is from Matteson 1972:190. The gloss for the YAV form is 'to fan'.

FAT	(n.),	GRI	EAS	possible boll. to	_		
		*k	i	d	е	Tul	-
IGN	(t)		iu	h	е		
GAR	(a)	g	i	1	е	[i]	
LOK		*k	ź	h	i		
GUA	(a)		i	Ş	į		
YUC				h	i	[lá] (h i)	

Synchronic form in LOK is $k^{h}i(hi)$.

The APU form is from Matteson 1972:204.

```
FATHER
        *[h a n]
            (e n) e
PAR
WAU
                      -š ÷
TER
IGN
                      У
                             [a]
PIR
APU
                      r i
                   -i
                     гi
ASH
PAL
LOK
GUA
RES
               n] í
        [-h a
CUR
               -n]
            -á
PIA
               n] i
                      r i
FEAR, (RESPECT)
```

*p i n k a TER p î k o BAU - p î k o IGN - p i k a PIR p i k a APU p ī k a MAC p i n g a ASH p i n k a (¢a) PAL a p î s e LOK b o k a-

P-M /*p/ could be /*b/. The gloss for the IGN form is 'fear, respect', for MAC and ASH is 'respect' and for LOK is 'scare, startle'.

FEAR2 *m i d a AMU my e č CHA [-ṣa] m uu t (i) WAU m i š a GUA m o t

```
FEATHER, FUR

*p i d i

AMU p e ?-

CHA p i š (le)

PIR p i tç i

APU -p i t i

MAC b i t i-

ASU v i t i
```

P-M /*p/ could be either /*ph/ or /*b/. The gloss for the CHA form is 'wing'.

FIRE,	(FI	REW	7 0 0	DD)				
		*d	i	k	а	h	[e	i]
AMU		¢			(a á	h	(¢ č)	
CHA				k	á	h	[č	i]
PAR	i	r	i	k	á		[t	i]
WAU			i	$\overset{\not e}{\mathbf{k^h}}$	е		[i]
WAP		th			a		įž]
PAL		t	i	k	é		(t	i) i] 1]
LOK		*h	i	k			[i]
GUA		S	i	k			Ĺ	ĵ
RES	i	¢	i				[¢	ó]
ACH		-š	í	у	a			
CUR		t	ii	У	е			
PIA				*k	a		[č	i]
TAR		Ø	i		é		[e]
YUC		\$	ii	у	a			
YAV			· 27.	k	а		(1	i)

Synchronic form in LOK is $ik^h i$, and in PIA is $ki\check{c}\check{a}i$. The gloss for the AMU, TAR. and YUC forms is 'firewood'.

FIREWOOD m AMU *(neh) O. m (ini) PAR m IGN m (pa) PIR m APU m i (na) ASH m a -t i PAL m

This is a suppletive possessed form in most daughter languages. The AMU form is from Fast 1953:193 and means 'my fire'. The gloss for the IGN form is 'ash' (literally: 'firewood-dust').

FISH							
	*k	0	р	а	k	i	
PAR	k	0	h	á	¢	e	
WAU	k	u	P	a	t	i	
TER	hy	ô		е			
BAU	k	0	Ð	е	S		
PIR	${f k}^{f h}$	0	$\mathbf{p_h}$	а	ç	i	
WAP	k ⁿ	u	pn	а		i	
ACH	k-	u	b	á		i	
CUR	k	u	p	е			
PIA	k	u	b	á		i	
TAR	k	ú	р	е			
YAV	k	u	h	á	S	i	

/*k^h/.

FISH2 m a CHA [ku] m BAU m IGN m PIR m APU m MAC m ASH m PAL m LOK m **GUA** m YAV ł i m

The gloss for the CHA form is 'catfish species'. Primary sources give syimaki as an alternate form for ASH, and himé as an alternate form for GUA.

FLEA						
	$*k^h$	a	у	a	p	a
BAU [totí]	k	0			P	
IGN *[stu]	k	a	у	а		
PIR	k	0	č	0	P	a
GAR	h	а	i	á	b	a
LOK	k ^h	a	у	a	b	a
GUA	h	a	у	á	p	a
RES	k	a?			V	á (¢i)
CUR	k	а			W	a (nežo)
TAR	k	a			W	a (nére)
YUC	k	а			w	a?a (hné)
YAV	k	n	¢	i	h	a

P-M /*p/ could be /*b/. The IGN form is from the Trinitario dialect from Gill (undated:26).

FLES	H, (1	MEA	T)			<u> </u>
		*e	k	i		
AMU			-č	е	[e]	possible boll.
PAR		*e	t	i	(ti)	
TER		i	у	é	[u]	
PAL		(ih) t	i		
GAR		-e	g	i	[r igi]	
LOK			S	í	[roko]	
GUA		-е		i	[ruku]	
RES	(g)	í7		í		
CAB	?	i		i		
YUC				i³i	(hi)	

Synchronic form in PAR is ete(ti). Taylor In P-M either instance of /*k/ could be and Rouse 1955:110 give the GAR form as igirigi. Taylor 1954 gives the DIC form as ekirik.

```
FLOWER
                 w i
          *d e
AMU
             o:
CHA
             е
                         [péka]
PAR
                 y
                        (ti)
TER
PIR
     h
                 w
             ĩĩ
APU
                 w
MAC
             е
ASH
                        [a]
WAP
     [su] s
PAL
GAR
LOK
GUA
     -(a) s
RES
             ii
ACH
                 w
                         (naši)
CAB
                 w
                        (pe)
PIA
                 w
                   i-
TAR
         *t i
                 w
                   i
YUC
                 w
```

The AMU form may be borrowed from Spanish flor. De Goeje 1928:559 gives the PAR form as iwi-ti. Taylor 1969:281 gives the PAL form as -riwi. Primary source gives TAR form as [me]tiwa(pe), de Goeje 1928:230 gives it as iui. The gloss for the LOK form is 'fruit'.

```
FLY (v.)
                       [n a]
                   а
 AMU
            ah
                       (n
                               (o:ma)
 CHA
           -a s
                               (ísk-)
 PAR
           á i
                       ſn
                          a
                              (koa)
 WAU
            a l
 TER
           ô
 BAU
           -a r-
 IGN
           -a r
                  a
 PIR
           -a l
                       [n a]
 APU
           a r
                  ã
 MAC
           -a
              r-
 ASH
 WAP
 GAR
 GUA
           á
              t
RES
              đ
           -a
ACH
           aa ž-
CUR
           -a ž-
PIA
           -á Í
YUC
           a h
FOOT
             h
                          [b a]
AMU
CHA
PAR
WAU
                      а
                          [p
PIR
                  tç
APU
MAC
ASH
                  t
                     ì-
WAP
      -k<sup>h</sup>
                  ď
                          [b']
PAL
       -k
                                  [ku]
GAR
      -g
                  d
LOK
      *-k
           0
GUA
      *_?
RES
      -h
                      i?
                          [p
                             u)
ACH
                         ĺρ
                            a
CAB
       h
          i
                     ì
                         [p a]
CUR
                     i
                         ſp
                             a]
PLA
                     -à
                         ľb
                             à]
TAR
      -h
                     é
                             a]
                                 (ma)
YUC
          -i?i
                                  (má)
YAV
      k
          ú
```

P-M /*b/ could be /*ph/. Synchronic form in AMU is -tak, and may be a Panoan loan. Synchronic form in LOK is -kothi and in GUA is -?ui. The Pre-LOK and Pre-GUA forms are from Taylor 1978:122. Primary sources cite LOK -kothi and GUA -2ui. The aspiration in LOK and the loss of /l/ in GUA I take to be recent idiosyncratic developments,

```
FOREHEAD
         *d
             u
AMU
             0?
                         [m]
CHA
             0
                 []
                     0]
          ty
                 ĵ1
PAR
                     i]
             áw
                         (koa)
TER
             û
                 (t
                     i-)
IGN
          č
             u
                 (t
                     i)
APU
MAC
         -t
             0
ASH
         -t
             ٥
YAV
             а
                 [s
                     i] [si]
```

The MAC and ASH forms are classifiers meaning 'head-shaped, round'.

```
GIVE
          *p o
AMU ah
          р
WAU
          рu
                 [ta]
TER
                 [re-]
          р
             0
BAU
             0
                 [e-]
          -p
MAC
          -p-
ASH
          p-
GUA
     (áa) p ∔
     -[ni] p
TAR
                 [ia] (wa-)
```

P-M /*p/ could be /*b/.

```
GIVE2
WAU
APU
PAL
                k-
GAR
          č
                    a
LOK
                    [i-]
```

Primary sources give čeke as an alternate form for WAU.

```
GIVE3
            *d
CHA
       -07
             t-
PAR
             _{t^{h}}^{g}
                 á
WAP
                 a-
                 -aa? [ní]
ACH
                áa
CUR
                -a
                     (kada)
                -à-
                -a-
YUC
                 a?a-
            t
                 а
```

*k ^h ei m e MAC k a m e (tiri)		າ ເ				
MAC k a m e (tiri)		*k ⁿ	ei	m	е	
Mare a u m c (un)	MAC	k	a	m	е	(tiri)
ASH k a m ee (¢a) WAP k ^h ai m a (n)	ASH	k.	a	m	ee	(¢a)
WAP k ⁿ ai m a (n)	WAP	kn	ai	m	a	(n)
GAR h e m e-	GAR	'n	e	m	e-	
LOK s e m e-	LOK	S	e	m	e-	
GUA h e m e-	GUA	h	е	m	e-	
RES h a m ee (?ná?oo)	RES	h	a	m	ee	(²ជូá²∞)
CUR m a [čia-]	CUR			m	a	[čia-]
TAR m a [¢ a-]	TAR			m	a	[¢ a-]

The gloss for LOK and GUA is 'good tasting', and for RES is 'correct'.

```
GRASS
      *k a
             č
                 au
     k o
                 0-
CHA
APU
      k a
             Ø
                 0-
      k<sup>h</sup> a
WAP
             ž
                 а
                     [mka-]
     *k a
GAR
                 au
            ľ
    k a
```

The gloss for WAP is 'weed'. The GAR form is DIC from Taylor 1952. Taylor and Rouse 1955:107 give kalau as an alternate form GAR. Primary sources give karo as an alternate form for LOK.

```
GREEN, BLUE, (UNRIPE)
         *š į
               р
                   u
                          е
CHA
        s u?
PAR
               h
                   ó
                      т
                          е
                              (re)
WAU
               p
                   u
                          a
PIR
LOK
         s o
                b
                   0
                          е
                              (n)
RES
                          17
               р
                       g
                   0
CAB
               p
                   и
                      Г
                          ee
CUR
         h ii
PLA
TAR
            i
                      1
               р
                   0
                          é-
YUC
            i
                      r
                          e-
YAV
               h
                   ú
                      t
                             [mi]
```

P-M /*p/ could be /*b/. The gloss for WAU is 'unripe'.

```
HAIR, (FUR)
        t i
PAL
         -s
            е
                 [pnu]
GAR
         d
LOK
     *i t
      o l
RES
         ¢
            íi
                 (nú)
         č
ACH
     -i
            u
                 [na]
CAB
         č
            u
                 [na]
         -č
PIA
            ù
                 [na]
         č
YUC
           i
                [hna]
YAV
     í
         Ø
```

The LOK form is from Taylor 1978:124, and means 'fur'.

```
HAIR2, (FUR)
              *s
              *č
AMU
                  е
CHA
               š
                  е
                       [nu]
PAR
                       [ká-]
                  е
TER
              š
                       [20]
BAU
                       [a]
IGN
               h i
                       [ya]
PIR
                 i
                       [wu](-¢a)
      (g^{y}i)
               š i-
MAC
               sy i-
ASH
      (ki)
      (-híve?) j i
YUC
               h i
                      (-či)
```

Synchronic form in AMU is -ehč. This cognate set undoubtedly has some derivational relationship with HAIR above, but, except for a few forms, (PAR, TER, and BAU) the correspondences between the two sets are not regular. For HAIR an initial vowel is the norm, for HAIR2 it is not. The gloss for TER, BAU and IGN is 'fur'. The syllables in MAC and ASH which are the reflexes of *si are classifiers.

```
HAND
                                            HEAR
                                                          e m a
 PAR
                                            AMU
                                                          e?
                                                             m
 WAU
                                            CHA
                                                          e?
                                                             m-
 WAP
       -kh
           а
                                           PAR
                                                          é
                                                             m a
 GAR
           a
                                            WAU e
                                                             m
 LOK
           а
                                           TER
                                                             m
 GUA
       -h
           а
              P_{h}
                                           BAU
                                                             m-
 RES
       -k
          a
                      [idó]
                                           IGN
                                                          а
                                                             m
 ACH
      -k
          áa
                                           PIR
                                                          е
                                                             m
 CAB
      -k
          aa
                                           APU
                                                          е
                                                             m
      -k
          a
                                           MAC
                                                      -k<sup>y</sup>
                                                          е
                                                             m-
 PLA
      -k
          áa
                                           ASH
                                                          e m-
      -k
 TAR
          a
                 í
              р
                                           PAL
                                                         i
                                                            m á
                                                                        [p]
                  а
                      (hi)
                                           RES
                                                         é?
                                                     -h
                                                            m ú
                                           ACH
                                                         -ée m
  The RES form is probably from Proto-
                                           CUR
                                                         -ée m
                                                                         [i-]
North-Amazon Maipuran *kapi[kido].
                                           PLA
                                                         -é
                                                            m
                                                                         [ía-]
                                           TAR
                                                         е
                                                     -h
                                                            m á-
                                           YUC
                                                      h
                                                         е
                                                            m a<sup>7</sup>a
HEAD
                                                                         (kahe)
           *k i
                   w į
                                             P-M /*k/ could be /*k^h/.
PAR i
           e
             é
                          (ri)
WAU
             į
           t
                  w
PIR
           çi
                                           HEART
                  w
                     u
APU
         *-k
             i
                  w i
                                                    *[n i]
                                                             a
                                                                h
                                                                   k
MAC
             i
                          (to-)
                                           CHA
                                                             -á
                                                                h
                                                                    k
                                                                       е
ASH
          k
             i
                          (to-)
                                           PIR
WAP
          -ž
             ua
                                           APU
                                                             ã
                                                                                [pa]
PAL
          -t e
                                                                    k^y
k^h
                                           MAC
                                                     n
                                                        ig]
                                                            a
                                                                        i-
GAR
           či
                                           WAP
                          [gi]
                                                     [-n
                                                            ÷
                                                                            [n ii]
LOK
     (i)
          s i-
                                           PAL
                                                            á
                                                     [-у
                                                                    k
                                                                            [n
                                                                               i]
          k i
GUA
                                           GAR
                                                (-a) [n
                                                        í
                                                                    g
?
RES
          -h i
                  v e
                                           GUA
                                                                            [n]
ACH
                  -w
                         [ta]
CAB
           h i
                  w
                         [ta]
                                           HEAVY
CUR
                  -w
                         [da]
                                                        *[m]
                                                                    n
PIA
             -í
                  w
                         [ta]
                                           AMU
                                                                    ny
                                                                        е
TAR
                         [da]
                  -w
                                           PAR (ti)
                                                         [m]
                                                                    n
YUC
                         [la](?aru)
                  -w
                                          TER
                                                                    n
                                                                        а
YAV
           s í
                 h u
                                           BAU
                                                (ko) [h]
                                          PIR
  De Goeje 1928:217 gives the form seviri
                                          APU
                                                         [m]
for PAR, which shows that the /vi/ syllable
                                          MAC
                                                                    n
was there at an earlier stage of the language.
                                          ASH
                                                                   n
                                                                       a-
Primary sources give -tiwi as an alternate
                                          PAL
                                                 [aw]
                                                                   n
                                                                       i
                                          RES
                                                [hiža]
form for WAU, and čigi as an alternate
                                                                           [i?]
                                          CUR
                                                [ha]
                                                         [m]
form for GAR. The MAC and ASH forms
                                          PIA
                                                         [m]
                                                               i
```

YUC

YAV

(ka)[č]

[s]

n

í n

for HEAD also appear as the first syllables

in HAIR.

P-M sequence *ina* was probably a classifying suffix which adjoined to distinct stems in different daughter languages. The RES -i? is probably a classifier from *-ki. The loss of P-kk/ in RES has aspirating effects and here has caused the devoicing of the nasal.

HORN, (THORN) *¢ i w i čе CHA BAU е h IGN -h i PIR w [a] MAC i ∉ e ASH gy e PAL -t ú i w RES -ii ٧ CUR [a] TAR -¢a w i?i YUC w [áwi-] YAV [yu] ł a w i

The gloss for the YAV form is 'horn'. The related YAV form for 'thorn' is yulewi.

```
HOUSE
         *p a
                n a
PAR
          h
             a
                 n
                    á
WAU
            ã
          -p
TER
          p
            ê
                 n o
BAU
          рá
                                (n)
IGN
          -р e
                n a
                                (či)
PIR
            a
APU
          w i
PAL
          p a
                    у
                                [t-]
GAR
          b ã
LOK
          b a-
GUA
            á
                            ií-
RES
          p a
CUR
          p a
TAR
          p a
YUC
            a
                           i-
                               (<del>1</del>i)
```

P-M /*p/ could be /*b/. Justification for the alternation in P-M comes from YAV, where the possessed form hâna (which takes pronominal prefixes indicating possession) ends in /a/, and the stem of the unpossessed "absolute" form hani(-ii) ends in /i/.

```
*ре
      рį
             (na)
      рé
             (ti)
        é
             (r)
     -W
      ре
             (ti)
PAL
      -p i-
      p íi-
GUA
CAB
      p ee-
     -pì
PIA
      h u
YAV
            [wi]
```

P-M /*p/ could be /*b/.

```
HOUSE3, (DWELL)
         *p o
                   k
                      u
                          [[]
AMU
          ро
                   k
                      0!
CHA
                   k
                       0-
TER
                       u
            0
IGN
PIR
                   k-
APU
MAC
                   g
                       0-
           а
               n
ASH
               N
                   k
            a
                       0-
          рó
                       ó
                          (noomú)
```

The IGN form is from the Trinitario dialect from Gill (undated:22), and is glossed 'to dwell (with)'. The gloss for the PIR form is 'settlement, house'. The RES form means 'door' or literally 'house-mouth'.

HUMMINGBIRD

```
*p i
             m
      h
                é
PAR
        i
             m
WAP
             m
LOK
             m
                    t i
RES
      p 17
             m
CUR
             m
      p í?i
TAR
            m
      p i<sup>7</sup>i m í
```

The WAP and LOK forms are from de Goeje 1928:226. He transcribed the WAP form as pimud.

```
(SPOUSE, WITH)
       *i m a
WAU
          m
             e
                [ši]
TER
          m
BAU
          m
          m
MAC
    [-h] i
          m
             е
ASH
          m
             е
GAR
          m
LOK
          m
```

The gloss of the GAR form is both 'husband' and 'wife', from Taylor 1961a:78. The gloss of the LOK form, also from the same source, is 'with'. Semantic extension of terms for 'spouse' and 'with' are not uncommon in Maipuran languages. In some dialects of ASH, one word (not cognate with this set) means 'spouse', 'accompany' and 'with'.

```
JAGUAR, (DOG)
         *¢ i
               п
PAR
         č
               n í
IGN
               n
                  i
RES
            íi
               n
CUR
           i
               n
                  [0]
TAR
         s ii
               п
                  [u]
JAGUAR2
     *m a
           n
AMU *m a?
           п
               a
PIR
MAC
     m a
           n
```

Synchronic form in AMU is ma?yaš.

o: [m^y]

```
KNEE

*k i r

AMU *ky e ly

PAR e k aw l
```

```
MAC
                  e r
                          е
                              (to-)
ASH
                 e r
                          е
                              (to)
GAR
                 i
                      r
                          i
                              [gi]
LOK
               k
                  0
                      I
                              [abasi-]
RES
                  o? d
                          ó
               -h
                              Inaúl
ACH
               -y ú ž
                          u
                              [i]
CAB
                  -u t<sup>y</sup>
                          u
                              [na]
PLA
                  -u l
                          uì
TAR
                  -ú
                     ¢
                         iu
YUC
                  -<u>ií</u>
                         ú
                     r
                              [pači]
YAV
                 í t
                         u
```

Synchronic form in AMU is $-l^y o_i k^y em^y$. The gloss of the LOK form is 'to kneel'.

```
KNOW
            d
AMU
                а
                    (7m)
CHA (-?)
             t a
                    (te)
WAU
             t a
TER
         é
             š
               0-
BAU
             -t i
                   (ri)
IGN
         -е
             č
                а
         ai
             h i
                   [yák]
GUA
             t i
                    [hi-]
             -y áa
```

YAV

PIA

TAR

YUC

[w] i

The AMU form is from Taylor 1954 and means 'Who knows?'.

t a

```
LAKE, (SWAMP)
        *s a
              n
                  р
                     u [w a]
AMU
         s a
                  p
CHA
               7
         s á
                  р
                     u
PIR
                     0
                         [wha]
APU
                  p
                     О
MAC 0
        š a
              m
                 р
                     О
                                [naal
ASH
        s a
              N
                 р
                     0
                               (ga)
```

P-M /*p/ could be either /*ph/ or /*b/. The gloss for MAC is 'swamp', and for ASH is 'mud'.

```
LAKE2
             *ka∔ l
                      е
                          [s a]
PAR
          [ha]k ái r
TER
     (étar)[u] k u
IGN
          [ka] k iu r
MAC
          [in] g aa r
ASH
          [iN] k aa r
                      е
WAP
                          [ž
LOK
                          s
ACH
                          [s
CAB
                          [t
CUR
             k a
                          ſŧ
```

k a

*k a

*k a

P-M /*k/ could be /*kh/. The WAP and LOK forms are from de Goeje 1928:224, and were transcribed as follows: WAP: kerice, LOK: kulisa. The YUC form is also from de Goeje 1928:224. Primary sources give that form as kaésa.

s

a] (nei)

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LEAF, (PLANT (v.), FIELD)									
		*p	а	n	a				
AMU	(ahs)	p	a:	n					
CHA	(čih)	p	á	n	a				
PAR		-h	а	n	a				
WAU	(ata)	p	a	n	a				
BAU		-p	0	n	0				
IGN		-p *-p	a	n	а				
PIR	(sa)	р		n	а				
MAC		-p	a	n	а				
ASH	(øi)	p_	а	n	а				
WAP		$_{\mathrm{p}^{\mathrm{h}}}^{\mathrm{p}}$	au	n	а				
PAL	a	p	á	n	i				
GAR	-u	ь	á	n	а				
LOK		b	а	n	а				
GUA	-(a) p	á	n	а				
RES	a	p	á	n	ú				
ACH		b	á	n	а	(bai)			
CAB	? a	p	a	n	a				
CUR		p	а	n	a	(pe)			
PLA		Ъ	à	n	a				
TAR		p	a	n	á	(pe)			
YUC		-p	a	n	á				
YAV		h	a	n	а				

The gloss of the PAR, WAU and TAR forms is 'leaf, to plant', and of the BAU, WAP and PIA forms is 'to plant, field'. BAU has a form epone meaning 'leaf'. ASH has forms pana-, which means 'to plant', and -wane, which means 'field'. PIA has the form -báiná, which means 'leaf'. The gloss of the YAV form is 'to plant'. The IGN form is from de Goeje 1928:550, and was transcribed -pahna.

LEG, (SHIN) [edoto] PAR (ne) WAU TER 0 RES [1] ACH CAB CUR -k w a PIA -k à w TAR -k á w a YAV k á w

The gloss of the RES and YAV forms is 'shin'.

LIP								
		*č	į	r	а			
CHA		*č č.č	i	1	a			
IGN		-č	е	y	2			
MAC		¢	е	r	a-			
ASH		¢у	е	r	a-			
LOK			е	r	0	[ko]	-	
PIA		-d ŗ	ú	1 .	e			
TAR	i	t	í	r	í	[kur	ıa]	
YUC		-ŧ	u	r	e			
YAV		t	ú	1	е	(hi)		
LIVE	R							
		*u	h	b	а	n	а	
AMU		-0	h	p	a:	n		
CHA		-0	h	p	а	n	а	
IGN		-ú		p	а	n	a-	
PIR	h	0		p		n	a	
APU				-p	а	n	а	
MAC				-p	а	n	a-	
ASH				-p	a	n	a	
WAP	*k	u		b	a			
PAL				-*p	á	n	i	
GAR		u		b	á	n	a	
LOK				b	а	n	a	
GUA	(si-)	а		р	a	n	a	
RES		-0		p	áa	n	ú	
CAB	[?i]	u		p	a	n	a	
CUR	[-t]	0		p	a	n	а	
PIA		-u		b	a	n	a	
YUC				p	a	n	á	[-hi]
YAV				h	á	n	е	

Primary sources give -bani as the WAP form. In a number of languages LIVER is said to be derivationally related to LEAF. For example, in some languages (e.g., ASH) the form for LIVER can be said to be a compound BLOOD-LEAF. The fact that WAP and PAL attest bilabial consonants in this word different from those in LEAF, make it appear that in P-M the two forms may have been distinct, but perhaps on the way toward merging semantically. When most Maipuran languages lost the voicing and aspiration contrast among bilabial stops, the semantic merger would have then been complete.

```
*! u p u
PAR e ó h o
LOK *! o b o
PIA t ú p u
TAR d u p u
YUC *! u p u
```

P-M /*p/ could be /*b/. The LOK and YUC forms are from de Goeje 1928:227, where he transcribed the LOK form as lobu.

Synchronic form in AMU is all po: (čahp).

LOUSE

*n i h CHA n í h [pa] PAR n i [rigati] WAU -п ее [ge] TER n y [â] (ti) BAU n ó IGN ñе APU n i [pa-] MAC n e-ASH n e-PAL e (-ti) GAR e RES n e [teghí?ó] CAB n ii YUC í n e (hi)

MAN,	(PE	RSC	(NC				
	*a	h	š	e	n	i	
AMU	*a	h	š	e:	n^y	e	(šo)
PAR				é	n		[a]
WAU				e	n	į	[ša]
TER			š	a	n	e	. ,
BAU			č	0	n	oe-	
IGN	a		č	a	n	е	
PIR			y š	i	n	e	
ASH	а		š	e	n	í	(nka)
YAV				e	n	a	(mi)

Synchronic form in AMU is ahše:n^yo:(5) and means 'male'. De Goeje 1928:219 gives forms from the Saraveca dialect of PAR, ačeena, and the Yaulapiti dialect of WAU, erina, which show that the Pre-PAR and Pre-WAU forms must have had a VCVCV shape. The gloss for the TER, IGN and PIR forms is 'person', and for the BAU and ASH forms is 'fellow countryman'.

MAN	2, (PERS	SON)				
	*a	ď	ia	[]	i]	
BAU		h	i	ĺr	ĺ	
IGN	a	h	ai	Ìr	i	[a]
ASH	a	t	i	Ţr	i]	
PAL		h	iyé	Ìτ	ĺ	
LOK	[w] a	d	i	ij	i]	
RES	a	¢	á	Ìg	ή	(ne)
ACH	[w] a	š	i aá	ĩ	ίĴ	[kuéži]
CAB		*t	iya	-	•	[re]
CUR	aa	č	i a			. ,
PIA	a	S	ìia	(1	i)	
TAR	a	¢	i a	à	i)	
YUC	a	č	iñá	`		

The gloss for the PAL form is given as 'person'. In RES an alternate form -áaøigi appears as a suffix in BAD, meaning 'bad person'. The CAB form is from Matteson 1972:233.

This form may be derivationally related to EAT.

MON	KEY						
		p^h	u	d	a	t	е
AMU		*p	0	t	a	t	е
PAR		h	oá	t			е
WAU		p	a	h			i
IGN		*p	u	t	а	r	е
WAP	[so]	b'	į			ď	i
LOK		P	0	d			i
GUA		h	u	č			í
CUR		p	u	w			ē
PIA		p	ù	w	à		i
TAR		p	ú	w			е
YAV		h	u		а	¢	ĩ

Synchronic form in AMU is potyet and in IGN is pature. The IGN form reversed the vowels in coming from the Pre-IGN form.

MONKEY2

	*k	u	h	ď	1	
CHA	k	a	h	č	e	[tálo]
WAU	k	u		¢	i	
TER	k	ú		t	е	[šu]
MAC	k	0		š	i	(ri)
ASH	k	0		syi		(ri)
RES	k	0		¢	i	
PIA	k	ບໍ່ນ		č	í	

P-M /*k/ could be /*kh/.

MOON					h	
,	*k	a	h	i	th	i
AMU		ah	š	0	š	
WAU	k	e			š	i
TER	k	0	hy	ê		е
BAU	k	i	h	é	r	
IGN	k	a	h	е		
PIR	k		S	÷	ľ	i
APU	k	a	S	į	r	i
MAC	k	a	š	i	r	i
ASH	k.	a	sy	i	r	i
WAP	$_{k^{h}}^{k} \\$	a	-	i	ž	
PAL	k	á		у	r	i
GAR	h	á		•	t.	i
LOK	k	a			th	i
GUA	k	a			š	i
RES	k	e		é	g	i
ACH	$_{k}^{k}$	é		e	g Ž	i
CAB	k ^h	e		e	r	i
CUR	k	e			r ž	i
PLA	k	é		e	r	i i i i i i i i i
TAR	k	é			r	i
YUC	k	e		е	r	i

YAV

k e

1 i

MOSQUITO										
	_	*h	ai	n	i	у	u			
AMU		š	а	n		•		[k]		
CHA			áy	n			0			
PAR			ì	n			ó	[te]		
WAU			e	у			u			
TER				n	î		u	[m]		
BAU				n	i					
IGN			а	n	i	?	u			
PIR		h	a	h		у	0			
APU			a	n	i		0			
MAC	[m]		a	ñ			0			
ASH	[m]		а	n		у	0			
PAL			*a	n	i	У	u			
LOK		*h	a	n	i	у	0			
RES		h	а	n	îi	¢ č	0			
ACH			áa	n			u			
CUR			ai	n	i	y č	0			
PIA			a	n	ì	č	u			
TAR			aí	n	u	у	u			
YUC			а	n	i	у	ú			

The PAL and LOK forms are from de Goeje 1928:228, where he transcribed the LOK form as haniyu. The gloss for PAR is given as 'gnat', and for WAU as 'anopheles'.

a n i

MOTHER

YAV

YAV

		*÷	n	u	[t ^h	u]
PAR		į	n	í	[t ^y	0]
WAU		-i	n	u		
IGN		-е	n	a		
PIR	h	i	n		(r	0)
APU		i	n	i	(r	0)
ASH			-n	i	(r	0)
PAL			-n	a	[r	u]
LOK		0	у	0		
GUA		-е	у	u		

MOTHER-IN-LAW, AUNT $[t^h \\ [t^y$ *i ma k *(in) i m a ľk e] PAR WAU m a [t [š -m o [s] BAU IGN m a [s e] [ç, [kh m a i] u] **(**r PIR 0) (ž [r (t^h (š m i u) WAP [t u] u] (-hu) PAL *m a [k i] i) m i LOK GUA m e ſs

m a

Synchronic form in PAR is (in)imatyo(koe). Synchronic form in WAP is *imižukhur from de Goeje 1928:220 where he transcribed it imirdukur. See Taylor 1961a:77-78 for a justification of the morphemic status of these proposed suffixes. The PAL form is also from de Goeje 1928:220.

MOTHER-IN-LAW2, AUNT *a h k u [r o] -a h k a CHA (en) é PAR k 0 (ke) BAU k i GAR (r i) i LOK į (r i) 7 į **GUA** (l #) RES š ée (d ó) ée (r u) PLA у TAR -h i (r u) MOUTH AMU WAU PIR APU GAR LOK GUA (ali-) m (pó²kó) RES n oo ACH -n ú CAB CUR PIA

Synchronic form in AMU is -na:m and in GAR is iúma. The gloss for the WAU and LOK forms is given as 'mouth of river', for GUA 'beard', literally: 'hair-mouth', and for RES 'door', literally: 'house-mouth'.

m

m a

m

(náhi)

TAR

YUC

YAV

MOU	TH2	:							
		*w	a	у	a	[n	a]		
CHA	а	w	á	-		n	a		
MAC		b	a	g	a	n		[t	e-
ASH		Р	a		a	N		[t	e-
PAL		b	i	у	a-				
MOU	ТН3								
		*kh	a	n	a	k	i		
PAR	е	k	a	n	á	¢	е		
WAU		-k	a	n	a	t	i		
GUA	-a		а	n	ì	k	i		

Primary sources give kanati as an unpossessed form for WAU.

P-M /*k/ could be /kh/. I asume the alternation between /*k/ and /*č/ to be idiosyncratic. I consider the /h/ in CAB to be epenthetic at the morpheme boundary. It is the only instance observed in the data.

NECI	NECK2, THROAT									
		*k e	n u							
AMU			n ^y	(aap ^y)						
PAR	[ihi]		n o							
IGN	[-pi]	k e	n u							
PTR	[pa]	ç k ^y e	n o	(hi)						
MAC		k ^y e	n	[čai]						
ASH		k e	N	[¢i-]						
GAR	-i	gí	n	[a]						
LOK			*n o	[ro]						
GUA	(a)		n u	[lu(pa?a)]						
RES		-i	ñо	[čʰi]						
CUR			n o	[ri(api)]						
YUC			n u	[ru ⁷ u(pi)]						
YAV		i	n u	- 4.7						

The MAC form is glossed as 'to have a small neck'. Related to the GAR form, Taylor 1978:126 gives the DIC form isiuna. The LOK form is from Taylor 1969:278.

NECI	NECK3, THROAT									
		*ph	i							
AMU	(-n ^y -)	aapy								
CHA	[-čo?]	p	i							
PAR		h	i	[no]						
BAU		-p	í							
IGN		-p	i	[kenu]						
PIR		p		[la]						
APU	[-no] [-k ^h ani]	р	i							
WAP	[-k ⁿ ani]		į							
PAL		-b	í	[ta]						
GUA	(-anulu-)	p		[a ⁹ a]						
CAB	(kanha)	p	i							
CUR	(-noria)	p	i							
PIA	(-kaná)	p	í							
TAR	(ká)	p		[a-]						
YUC	(-núru?u)	p	i							

This *phi may be the same classifier as in SNAKE.

NEW								
		*w	a	d	a	1	i	
CHA	[pes]	w	a	t	á	1	0	
PAR		w	áy	t	а	r	е	
ACH		W	á		a	I	ii	
CAB		w	a			1	i-	
CUR		w	a			1	i-	
PIA		w	á			1	i	[sà-]
TAR		w	a			1	i	[ki-]
YUC		w	á			h	e	

```
NIGHT
          *č
AMU
             a:
                 р
CHA
          č
                     0-
PAL
     [m]
          t i
                         [ka]
GUA
     (á)
                         [a?a]
                 P.
                 p^{h}
RES
                     ó?
          g a
YAV
          у
             a
                         [łi]
```

NOSE

P-M /*č/ could be /*g/, /*p/ could be /*b/, and /*u/ could be /*o/. The RES form is probably from a Pre-RES form *qapo[ki].

```
r i
CHA
              kú
PAR
WAU
TER
BAU
     [-pa]
IGN
PIR
                    r
APU
                       i
                    Г
                            (-ta)
MAC
                            (-maši-)
ASH
PAL
             -k í
GAR
LOK
GUA
                    č
YAV
```

Taylor 1978:123 gives isíri- as an alternate form for LOK.

```
ONE
           *b a
AMU
                         (t<sup>y</sup>eš)
            p a
                    h
CHA
            p a
                         (láka)
PAR
            h á
                         (hareta)
WAU
            рã
                         (wã)
TER
            рó
                         (h<sup>y</sup>a)
BAU
            p o
                         (nóš)
PIR
            p a
MAC
            р
                         (ni)(ro)
               a
ASH
      a
               a
                         (ro)(ni)
WAP
            b'a
                        (id'a<sup>2</sup>ap<sup>n</sup>)
PAL
                        (aha-)
GAR
      á
            b ã
LOK
           b a
RES
                        [tophe]
            p a
ACH
            b a-
CUR
            p a
                        (da)
PIA
      a
           b
                        [i-]
TAR
           p aa
                        (máya)
YUC
           р а
                        (hluwáha)
YAV
           h a
                        (sia)(na)
```

The gloss for the RES form is 'first'. An PAIN, HURT alternate form for GAR is ábana.

OTHER, (ALL)									
		*b	а	у	i	n	а		
AMU	[po?]	p	0			ny			
CHA		p	á	h		n	а		
PAR		h	á	y ?			a		
TER		P	ô	7	i	n		[u]	
BAU		p	0			n			
IGN	а	p	а			n	a		
PIR		р	е	ç		n		[i](ri)	
APU		p	а	k	i	n		[i] ` ´	
MAC		p	a	š	i	n		ίί	
ASH		p	a	sy	i	n		[e]	
CUR		p	a	ď	e	n	a	[ka]	
YAV		ħ	а	¢	i	n	a	(wa)	

P-M /*b/ could be /*ph/. P-M is probably derived from ONE. The gloss for the PIR and APU forms is given as 'all'.

```
OWL
     *pu
              р
                 u l i
WAU
       uu
              p
ASH
     ро
          N
              р
                 00
                    r i
RES
CUR
     р
              р
                 u
                    l i
TAR
     p
       uu
              р
                 u
YUC
     р
              р
                 ú
```

The WAU and YUC forms might have been considered as merely onomatapoetic, except that loss of /*1/ seems to be justified in these languages.

```
PACA
        a
           p
        ah
PAR
        á
WAU
        aá
CUR
     d
        aa
PLA
        á
           b
TAR
     d
        a
    У
       a
           h
```

P-M /*p/ could be /*b/. The gloss for LOK is given as 'capybara'.

```
*kač
AMI
            £
               е
PAR
      k
                   [w í-]
WAU
      k a
                   [u ]
BAU
      -k o
            t
               i-
IGN
      -k a
PIR
            č
                          (no)
APU
                   [o i]
MAC
        a
            g
ASH
        a
            £
               i-
WAP
               i
                   [w-]
GAR
LOK
      k a
            r
               i-
PLA
      k á
                   [w i-]
TAR
      k á
YAV k á
                   [w i]
```

The gloss for the PIR form is given as 'painful'. The GAR form is DIC from de Goeje 1928:232, where he transcribed it as cari.

```
PATH, ROAD, TRAIL
         *a h t
                      n i
                ty
AMU
                  o:
                      ny
CHA
         a h
                  í
                      n i
WAU
         a h
                      n
                              [apu]
TER
                   êе
                      п
BAU
                      n
                         ó
                             [ki]
IGN
                      n
                         е
PIR
                      n
                         į
                              [aphu]
WAP
                ď
                  i
                      n
PAL
                      n
                              [a]
ACH
                   i
                      n
                              [hb][aa]
CUR
                      n
                         i
                              [po]
TAR
                   i
                      n
                         í
                             [pu]
YUC
                      n
                         í
                             [pu]
YAV
                  а
                      n
                         é
                             [hu]
```

PATH2, ROAD, TRAIL									
		*a	p	u					
PAR	(n)	á	h	0	(ti)				
WAU	[-n]	a	р	u	` '				
PIR	h	a	p	0					
APU	(kim)	a	p	0	(ri)				
MAC		a	b	0	(gi)				
ASH		a	w	0	(¢i)				
GAR	*[n]	a	b	u	` '				
LOK	[w]	a	b	0	(roko)				
GUA	[w]	0	p	ú	`` /				
RES	[aj]	á	p		[u]				
ACH	*[y]	á	b		[aa]				
CAB	[?aay]	a	p	u	• 1				
PIA	[ày]	a	p	u					
YAV	[tane]		ĥ	u					

DECCADA

(-¢a)

P-M /*p/ could be /*b/. The gloss for the

PAR and CUR forms is 'tree-root' with the

part in parentheses meaning 'tree'.

Synchronic form in GAR is mabu, and in ACH is [y]ahb[aa]. Taylor 1961e:366 gives justification for positing the Pre-GAR form, as well as for the two distinct cognate sets for PATH.

PECC	CAR	Y						
		*a	h	b	į	у	a	
AMU		a	h	py	a			
WAU		а		p	i	у	a	
PIR			h		i	y čh	a	[li]
WAP				b'	í	č ⁿ	a	
LOK		a		Ъ	0	у	a	
GUA				p	i i	tč	i	
RES	h	a		p	íi	¢	u	
ACH		á		h	i	č	a	
CUR		*aa		p	i	y č	а	
PLA		a		p	ì	č	a	
TAR		an	1	p	i		á	
YUC		a		p	i	У	é	
YAV		a		h	i	y	a	

Synchronic form in ACH is ahča. The gloss for the TAR form is given as 'pig'.

PEPPER, CAPSICUM, CAYENNE PEPPER *a č i d i AMU o:¢ CHA č TER ê t BAU IGN i č е t MAC ŧ (kana) ASH i r (-kanaa) PAL *a t GAR a LOK a [h] GUA aš. RES aa gⁿ [u] CUR a t PIA àa s TAR aa s YUC a?ah YAV a ¢ g i

The PAL form is from Taylor 1969:281.

PERS	ON						
	*k	a	k	i	n	[t ^h	į]
PIR	k	a	ç	i		(t	i)
APU	k	ã	k	i		(t	i)
MAC	*k	a	k	i	N	[t	e]
LOK	k	a	k	i		(th	i)

The gloss for PIR is given as 'non-indian'. The form associated with MAC is from the name of a neighboring Campa group, the Caquinte, and consequently does not undergo the MAC sound change $/*k/ > /k^y/$.

PIRANHA *u m a WAU [yal] u m a BAU [r] i \mathbf{m} IGN [ur] u m PIR m APU m a 0 (-ke) PAL [yan] m a LOK m CUR m а PIA u m á [i] TAR u⁹um á [i]

YUC

YAV

POT,	(CE	RAM	IIC	COC	OKĮN	G POT)
		U	Ρ	i	[th	il
BAU	k	ehe	b	i	•	-
APU	k	0	р	i	[t	i]
MAC	k	0	b	i	ĺt	i]
ASH	k.	0	w	î	[t	iÌ
WAP	-k ⁿ	a	?	i	[ž]

P-M /*k/ could be /*kh/. The possessed forms in MAC and ASH are respectively -kobite and -yowite.

m á

u m a

[i]

```
POT2, (CERAMIC COOKING POT)
            l a m a
AMU [ko]
            y
h<sup>y</sup>
                   my
                e
TER
                a
                   m a
IGN
                    m a
                           [te](hisi)
PIR
            h
                   m
                      а
PIA
           1
                а
                    m
                       àa
```

The prefix assumed for AMU may be a shortened lexical form from POT above.

```
RAT, MOUSE
                                     ROOT
               h
                  i 1 i
                                                 *pale
                  07
               č
AMU
                      S
                                     AMU
                                                  p e: r (e: č)
CHA
         k i
               hs
                  i
                     1 i
                                     CHA
                                                 -p a? 1
TER
               hy
            ô
                  0
                                          (it<sup>y</sup>á)
                                     PAR
                                                  ha r
                                                           е
APU
         k ĩ
                      r
                                     TER
                                                    óe h<sup>y</sup>
                                                          е
     [on] k i
ASH
                      r
                         [0]
                                     IGN
                                                    a
                                                       r e
WAP
                                     MAC
                                                 -ра
                                                       r
        *k u
GAR
                      1
                         i
                                     ASH
                                                  p a
                                                      r
LOK
         k o
                                     PAL
                                                       1
RES
         h i
                                     CAB
                                          [2a]
                                                       1
                                                  p a
ACH
                      ž
                                     CUR
                                          (haiko)
                                                 ра
                                                       1
CUR
                        i
                                     TAR
PIA
                                     YUC
                                          (?a)
                                                  рáге
TAR
         h í
                      r i
                                     YAV
                                          (ta)
                                                       1
                                                  h a
YUC
         h i
                      r
```

The WAP form is from de Goeje 1928:225 and was transcribed as kori. The GAR form is DIC from Taylor 1961d.

RED

WAU

TER BAU

MAC

ASH

WAP

LOK

RES

ACH

CAB

CUR

PIA

TAR

YUC

YAV

[moro]

(ke)

[k]

[ke]

, .												
					SALT							
							*i	d	į	w	į	
*k	i	r	a		WAU		į	h	i	w	i	
k	i	š	a	(ga)	BAU			č	ó	b	i	
h	a	r	а	[ra-]	IGN		i	č	e	b	е	
S	é	r	0-		PIR			t	į	w	i	
k ^y	i	r	aa-		MAC			t	i	b	ì	
k	i			[tyo](Nkari)	ASH			t.	i	w	í	
w	į	ž	a-		WAP			th	÷	w	i	
k	0	ŗ	e-		GUA		i	¢	í		i	
1		đ	á	[víí?]	RES		i		í	v	í	
	íi	ž	a	[i]	ACH				i	w	í	[duma
	ii	r	a	[ka]	CAB	?	i		i	w	i	
	ii	ž	a	[i-]	PIA				ì	w	i	[dùma
	ii	r	a-									

The ke-/k- prefix in RES, ACH, CAB, PIA and YUC is probably from ka- 'ATTRIBUTIVE'.

t

á

borrowings in Kubeo: as in kɨra hɨme "verde escuro?"

SEEI), (F	RU *a)
СНА	(ih)	_	k	i i	
PAR	()	е	e	ė	
WAU			-t	i	
TER		á	k	е	
BAU		е	S	ó	(ki)
IGN	(t-)	a	k	i	` '
PIR			ç	i	
APU			-k	i	
MAC			-k ^y	i	(gok ^y i)
ASH			-k	i	` ,
WAP		-a	$\mathbf{k}^{\mathbf{h}}$		
PAL	[ay]	á	k		[u]
GAR		į	g	i	
LOK			-S	i	
GUA		a	?	i	
RES			-h	í	[miú]
ACH				-íi	[mi]
CUR				ii	[ši]
PIA				-í	[mi]
YUC				i	(hí)
YAV		i	S	i	(naha)

AMU -my 'CLASS:seed' may be cognate to CLASS in RES, ACH and PIA. The gloss for the WAP form is given as 'fruit'. In LOK the form also means 'tip, head'. For GAR, Taylor 1978:122 gives the DIC form as iki-.

SISTER-IN-LAW, COUSIN

SKIN

đ m AMU -š 0 m CHA á m BAU 0 m RES é -е m ú CAB а m PIA -í m a (mi) YÚC -í m a YAV m a

а

[ka]

SKIN2

```
*ma
WAU
         m a
TER
PIR
APU
         m a
WAP
         -m a
PAL
        -m á
              g i
```

The two syllables of P-M may be two classifiers that have reversed from SKIN, above. The WAU form is from Noble 1965:29, and was transcribed umari.

SLEEP

```
*i m a
 AMU
             -m
 CHA
             -m a
 PAR
      [né]
             m a
                    k
 WAU
      [h] i
             m
 TER
             m
                ó
 BAU
 IGN
 PIR
MAC
             -m
ASH
PAL
             m
GAR
      [arú]
             m
                и
LOK
     [do]
             n
                    k
                       a-
GUA
     [atú]
             п
                   k
RES
             m
               ú
ACH
             -m
                       а
CUR
             m
                       а
PIA
            m
               á
                   (k
                      a)
TAR
            -m a
                   (k
                      á-)
YAV
    [g] í
            m a
```

SMELL

CIVIL							
		*a	m	i	[s	a]	
AMU			m	0	İsy	'n	[e?]
CHA		-a?	m	u-		•	r- 1
TER		0	m	é	[h ^y	0]	
PIR	h	а	m		Ϊı	ַ <u>'</u>	[ita]
PAL		i	m	í	Ĵh	e]	[]
GAR	[ir]	í	m	i	[č	al	
LOK	[d]	i	m	i	ſs	i-]	
ACH			-m	i	ř	é]	[déda]
CUR		-е	m	i	Ì	a-]	[doda]
PIA			-m	ì	Ì	a-i	
TAR		-е	m	i	Ī	á-i	
YUC		а	m		Ì	a-1	
YAV	(1 i)		m	е	(t	a)	
	٠,			_	χ.	۳)	

The YAV form meaning 'smelly' is amu.

```
SMOKE
                          []
IGN
                         (r
                             e)
ASH
                 ¢у
                     aa
                         (r
                             i)
LOK
              0
                      е
                          (1
                             i)
RES
              ií
                      ú
ACH
              íi
                 S
CAB
                     a
                          (1
                             i)
CUR
                      a
                          (ka)
PIA
TAR
YUC
YAV
         ŧ
                         (l i)
                      a
```

SNAKE				
	*a	ph -py	i	
AMU		-p ^y		
CHA		-p	ì	
WAU		-p	i	
PIR		p	i	
APU		p	i	
ACH	áa		i	
CAB ?	а	p	i	
CUR	aa	p	İ	
PIA	àa	p	i	
TAR	а	p	i	

Based on these data, P-M /*p/ could be either /*p/, /*ph/ or /*b/. I consider it to be /*ph/ due to its probable derivational relationship with NECK3, which has the crucial data from WAP, PAL and GUA showing which bilabial stop is involved.

SNAKE2

	*0	w	i
PAR	ó	w	i
WAU	u	w	i
GAR	*i	u	i
GUA	*;	w	í

Synchronic form in GAR is héue, and in GUA is wii.

```
SON
     *d u
           m
    *-t o
           m
             е
     ď
PAR
       οí
           m e
WAU
    -t
       ã
    -t o
MAC
          m
ASH
    -t o
          m
       u
          m
                 (nadi)
```

P-M /*u/ could be /*o/. Synchronic form in AMU is čeim. The gloss for the WAP form is given as 'boy'.

SOUR

```
*k a
                0
AMU
             *č
                0
                    []y
                        e]
PAR
                á
                    (1
IGN
PIR
                0
                    (r
                        i)
      k a
            gy
                0
                    (r
```

P-M /*k/ could be /*kh/, and the /*o/ could be /*u/. Synchronic form in AMU is čely.

STAND

```
WAU
APU
                                [00]
MAC
          k a
                 t
ASH
          k a
                    i
                t
                        у-
          k<sup>h</sup> a
WAP
                 ď i
                                [i-]
YAV
          k a
                 ¢ i
```

P-M /*k/ could be /*kh/.

STAND2

```
i m a
AMU
            o: m
CHA
    [-aš] t
            i
               m-
BAU
            О
               m
APU
               m a
LOK
              m a
            ĭ
                     (ni-)
CUR
            -ee m a-
```

STONE

	*k	i	b	a	
	£	e	h	а	[li]
	t,	i	р	a	
	kn	i	b'		
	ŧ	í	Р	а	
	S	í	b	а	
	*h	í	p	á	
		îi	b	a	
7		i	p	a	
	h	ii		a	(da)
		í	b	a	` ′
	h	i	p	á	(da)
	h	íi		а	` ′
	S	i	h	a	
	7	2 t kh t s *h ? h h	e e t i i kh i i i h ii h ii	g e h t i p k i b' t i p s i b *h i p n i p h ii p h i p h ii p	g e h a t i p a kh i p a s i b a a h ii p a h ii p a h ii p a h ii p a h ii p a h ii p a

Synchronic form in GUA is *ipa*, according to primary sources. The Pre-GUA form is from Taylor 1978:123.

STON	IE2				
	*m	a	h	P	i
AMU	m	a	h	p	e?
TER	m	0		p	ôi
MAC	m	a		P	i
ASH	m	a		D	i

P-M /*p/ could be /*b/.

SUN,				727	
	*k	a	m	ui	
PAR	k	a	m	á ^y	
WAU	k	a	m	÷	
APU	k,	a	m	õĩ	
WAP	k^h	a	m	uu	
PAL	k	a	m	úwi	
RES	k	á	m	í	
CUR	k	a	m	oi	
PIA	k	a	m	uí	
TAR	k	a	m	uy	(api)
YUC	k	aa	m	ú	
YAV	k	a	m	u	[1 i]

The gloss for APU is given as 'summer' and for RES as 'year'.

```
SUN2, (DAY)
                  č
               e
AMU
                  e
                          [ne?]
TER
                  š
BAU
IGN
                   č
PIR
            k
               a
                   č
APU
     [ato]
            k
               a
                   č
GUA
               a
RES
               á
ACH
               ée
CAB
               e
CUR
               e
PIA
               ée r
                     i
    [ke]
TAR
               é
YUC
               e r e [či]
```

The gloss for the ACH form is given as 'day', and for the YUC form as 'year'.

SWE	EP					
		*p	i	[d	a]	
CHA	[kah]	P	i	_		[hkaseli](či)
PAR		h	í	[e	a]	
BAU	[he]	b	i	100		[r]
IGN		-p	i	[h	i]	[ka]
ASH		Ph	i	10.00	1.5	[syi-]
WAP		ph	a	[d	a]	[+]
GAR		ab	uí	[d	a]	[ha]
LOK	[Siri]	b	i	[d	i]	• •
GUA		ep	i	[t	a]	(haa)
PIA		-p	i	ĹУ	1	[uniná-]
YAV	(ka)	h		10.000	•	(a)

The gloss for the BAU form is given as 'broom'.

SWEI	ΞT							
	*b	u	e	i	[w	al		
AMU	*p	0	e	e				
PIR	p	0	č		[w	al		
APU	p	a	č		0]	aj	(ro)	
MAC	p	0	č		Ì	a-]		
ASH	p	0	gy		Ĩ	a-1		
WAP	b'	i	gy š		[u-]	•		
RES	p	0	Ø	i			[¢u?]	
PIA	Р	ù	č	i			[čé](-ka)	(6)
YAV	h	u	e	i	ſw	al	(mi)	

P-M /*b/ could be /*ph/. Synchronic form in AMU is $peq(a:\S)$.

```
SWEET POTATO
     *khalii
     k é
CHA
                      i]
PAR
     k
        á
               e
TER
     k
        0
               ê
BAU
     s e
                   r
IGN
     k a
     k o
                   (t
ASH
     k o
                   (t
WAP
                   [ž
PAL
     k a
LOK
     h a
                   [š
RES
     k a
               ií
           n
                   [d
                      e]
                         [ú]
                   [ž
     k a
                      i]
     *k a
               í
                  [r i]
TAR
     k a
                  r
                     i]
                      u]
```

The possessed forms in MAC and ASH are -korite and -yorite. The WAP form is from de Goeje 1928:231 and was transcribed as kari. The PIA form is from Shafer 1959:560 and was transcribed as kalidi. Matteson 1972:183 gives it as kalili.

```
TAIL
                      [phi]
           *i d i
AMU
                               [m<sup>y</sup>el<sup>y</sup>]
              -S
CHA
           -i š
PAR
                  í
                      [h ]
                               [0-]
TER
           *i
              h
                 i
BAU
           i
              h
                  ó
IGN
           -i
             h
                               (ki)
PIR
              -š
APU
                      [p i]
MAC
           -i š i
          *i
ASH
              sy i
PAL
              -g
                 í
                      [b ]
                               [a]
GAR
LOK
                               [toko-]
GUA -(a)
                  îi
RES
                      [p i]
ACH
              š
                          i]
CUR
              -t i
                      [p
PIA
              -s í
                      [p
TAR
              -s i
                      [p
YUC
              h
                      [p
                          í]
                               (hi)
YAV
                      [h
                              (ti)
                          i]
```

The suffix *-phi is probably the same classifier as in SNAKE. Matteson 1972:191 cites the TER form as ihi, but the vowel must be /i/ since TER has no /i/.

** k e m a WAU t e m e TER k á m o BAU s o m IGN s a m a PIR ç e m a APU k e m a MAC k e m a (ri) ASH k e m a (ri) LOK k a m a GUA **? a m á CAB ? ee m a CUR h ee m a TAR h é m a YUC h é m a YAV k é m a	TAPIR	, F				
TER		*k	e	m	a	
BAU S O M IGN S A M A APU K E M A (ri) ASH K E M A (ri) ASH K E M A (ri) ASH K E M A (ri) LOK K A M A A (ri) CAB 7 EE M A CAB 7 EE M A CUR h EE M A TAR h É M A YUC h É M A	WAU	t	e	m	e	
IGN	TER	k	á	m	0	
PIR	BAU	S	0	m		
APU	IGN	s	a	m	a	
APU	PIR	ç	e	m	a	
ASH	APU	k	e	m	a	
ASH	MAC	ky	e	m	a	(ri)
GUA *? a m á CAB ? ee m a CUR h ee m a PIA é m a TAR h é m a YUC h é m a	ASH			m	a	(ri)
CAB ? ee m a CUR h ee m a PIA é m a TAR h é m a YUC h é m a	LOK		a	m	a	
CUR h ee m a PIA é m a TAR h é m a YUC h é m a	GUA	*7	a	m	á	
PIA É M a TAR h É M a YUC h É M a	CAB 7	•	ee	m	a	
TAR h é m a YUC h é m a	CUR	h	ee	m	a	
YUC h é m a	PIA		é	m	a	
	TAR	h		m	a	
YAV kéma	YUC	h	é	m	a	
	YAV	k	é	m	a	

Synchronic form in GUA is ama. The Pre-GUA form is from Taylor 1978:122, and is glossed as 'horse'. The TER form is glossed as 'horse, tapir', and the the TAR form as 'cow, tapir'.

TERM	MITE	3					
	*kh	a	m	a	th	a	
PIR	k	a	m		1	a	
APU	k	a	m	a	r	a	
GAR	h,	a	m	ú	t.		[iri]
LOK	*kh	0	m	0	th		[iri]
GUA			m	i	š		[iči]
RES	k	a	m	aá	d	ú	
ACH	k	a	m	a	ž	a	
CUR	k	a	m	a	ž ž l	a	
PIA	k	à	m	a	i	a	
TAR	k	a	m	a	r	a	[dá]
YUC	k	a	m	á	r	a	
YAV	k	a	m	á	t	a	

The APU form is from Matteson 1972:206. The LOK form is from Taylor 1969:279.

```
THIGH
                    *boki
PAR
                    h ó
                           g e
WAU
BAU
                       e
                    -p
IGN
APU
                      i
                           k
                    p
                    b'a
WAP
                           2
                    \stackrel{p_h}{p^h} \stackrel{i}{=}
GUA
                           2
        -(a)
RES
ACH
                    -h
```

The gloss for the BAU and APU forms is 'shin'.

[na]

-p

```
THIGH2
AMU
           č
              e
CHA
       ee
          y
APU
     -p o
                 [ke]
MAC
     b o
          r
             i-
ASH
     p o r
PAL
    -bár
                 [wan]
```

TAR

Synchronic form in AMU is -če:p.

```
THREE
     *m a
            p
AMU
     m a?
            p
               a
CHA
     m a
               0
                   [hta]
TER
      m o
            p
               ó-
BAU
      m
               0
                      (n)
IGN
      m a
            p
               a-
PIR
      m a
            p
               a
MAC
     m a
            b
               a
                   (ni)
ASH
     m a
            w
               a
PAL
     m
            p
```

alternate form for GAR, and bianman, biaman

as alternate forms for LOK.

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P-M /*p/ could be /*b/. PAL has a form TONGUE -map- which means 'third'.

TOAD *k i h h [a?to] CHA BAU PAL LOK **GUA** ACH a ž u TAR h í

P-M /*p/ could be /*b/.

		*у	÷	m	a	[d	e]	
AMU		У	0	m	a:	[¢]	
PAR		č	i	m	é	(r	e)	
PIR		h	i	m	0		•	[li](ta)
WAP		*s	u	m	a			
GAR		*g	u	m	u	[1	a]	(li)
GUA	-(a)			m	i	[s	a]	(in)
ACH		č	ée	m	a			
CUR		i	e	m	a			
PIA		č	é	m	a			
TAR		У	eé	m	a			
YUC		*y	a	m	á			
YAV		у	e	m	a			

The GAR form is from Taylor 1952. The -enená as an alternate form for TAR. YUC form is from Shafer 1959:553 and was TOOTH transcribed as hiamá.

TOBACCO2

		*у	ue	r	÷
PAR	a	d	í	y	е
TER		š	a	7	i
IGN		S	aba	r	e
PIR		у	i	r	i
APU		81	awi	r	i
MAC		S	e	r	i
ASH		sy	e	Г	i
PAL	á	у		r	i
GAR		i	ú	r	i
LOK		у	0	r	i
GUA		у	÷	200	i

desano and tanimuka borrowing

	_			17501	***		
AMU			-ny	e:	ny		
PAR		i	n	í	n	i	(ge)
WAU			*n	ẽ		ĩ	
TER			n	ê	n	e-	
BAU	*[epe]		n	e	n	e	
IGN			-n	e	n	e	
PIR			n		n	÷	
APU			-n	i	n	i	
MAC			n	é	n	e-	
ASH			n	e	n	e-	
WAP		*i	n	i	n	u	[k]
PAL			-n	é	n	i	
GAR			ĩ	e	ĩ	e	
LOK	(i)		y	e			$(-h_{i})$
GUA	(-a)		y	e		e	
RES		-0	n	é	n	é	
ACH		-íi	n	a	n	ee	
CAB			-n	e	n	e	
CUR		-е	n	e	n	e	
PIA			-n	è	n	e	
TAR	(we)(ni)		n	e	n	e	(n)
YUC	100 m 10 m 500 ft 10 m 500		-1	e	n		[á]

Synchronic form in BAU is -pen. The WAU form is from de Goeje 1928:217 and was transcribed as nei. The Pre-BAU form is also from de Goeje 1928:217. The WAP form is from Shafer 1959:551. The gloss for The WAP form is from de Goeje 1928:231. the RES form is 'teeth'. Primary sources give

		*a	h	¢	e	
AMU		-a	h	s		
CHA		á	h	s	i	
PAR		-a		¢	e	
WAU				-g	e	[we]
TER		ô			e-	
BAU				-S	e	(r)
IGN		-a		h	e	
PIR		у		h	i	
APU		1.77		-g	÷	(rī)
MAC		ai		e	i-	
ASH		a			i	(ki-)
PAL		-á			y i	(bu)
GAR		á		r		
LOK		a		r	i-	
GUA		-a			i	
ACH		-é			e	
CAB	7				i	[a]
CUR	[-0]	e				[ga]
PIA				У	e	[i]
TAR		-é				
YUC		-a			í	[n]
YAV		é				(4i)

TORT	OIS	E								TUR	KFY	GI	TAN	r		
	*s	i	n	n	u			[1	÷]	. 0.10					.1	2
AMU	š	e	m	p p	0					SEZATE	*m		r	a	d	i
BAU	S	0	111		í			[r [r	e]	WAU	m	a	1	a	h	i
IGN	S	i		p				f _T	J	LOK		a	î	0	d	i
APU	S	ĩ		P	u			r.	23	ACH	m	a	ž	á		i
			N	P	i i			[r	i]	CUR		a	ž	e		92
ASH	sy	e	14	p	1		1	(r	i)	PLA	m	a	1	à		i
ACH	š	i		p		[án		[1	i]	TAR		aá	r	e		
PIA	C	i		P	,	[àn	ı]	[1	u]	YUC	m	a?a		é		
YUC		1		P	ú					YAV	m	á	e	i		
YAV	S	1		h	ú			[1	i]							
	7	100	6	03						TURE		2, G	UA	N	23	
Syn	chro	nic	form	in	AMI	J is	šer	np ^y e:	r.		*k	a	n	a	th	i
			tun	וטע	TOW	шу	Ш			AMU		a	n	a:	š	
TORT	OIS	E2			ام میں	_				PIR	k	a	n	a	1	i
	*h	i	k	u	1	i				MAC	k	a	n	a	r	i
AMU	*x	e	k	0	r	e?				ASH	k	a	n	a	r	i
PAR		i	k	0	r	é										
WAU		i	č	u						P-M	/*k/	co	uld	be	/*k ^h /.	
LOK	h	i	k	0	r	i									8 8230460	
ACH		íi	k	u	ŗ	i				TWO						
CUR		i	k	0	1	i						*a	p	i		
PIA		i	k	ù	1	i				AMU		*a	p	e		
TAR		í	k	u	1	i				PAR			h	í	(nar	ma)
										WAU	[me]	ľ	p	ĩ	(ñav	
Syno	hro	nic	form	in	AMI	I is	rax	ore?		TER	line			í-	(max	v a)
										BAU	[m]	a	P P	í	(n)	
TREE										IGN	[m]	a		i-	(11)	
IKEE		*-	-		-	r	-27	r	-1	PIR	h	e	P	i		
AMU		*a	n	d	a	[m	±J	[n		APU	11	i	p	i		
				£	a			1	(hč)	MAC		1	P	i	(tan	: `
CHA		á		č t ^y	e			(n	á[?to])	ASH			p		(ten	1)
PAR					a					WAP	[ďi]	a	P	i i	(te)	1
WAU	L	a		t	a	,		1.000		PAL	[u i]	a		i-	[t ⁿ ar	nj
PIR	h	a		h	120		÷	n	a)	GAR			p b	í	(0)	
APU		a		92	a	(m	÷,	n	a)						(a)	
MAC		a	n	t	a	[m				LOK			b	i	(an)	
ASH		a	N	t .h	a	[m	i]			GUA			p	i	(áma	a)
WAP		a		th	a	(m	+	n)				2	0.20		
PAL		á		h	a											J is ehpa. This
LOK		a		d	a											related to pe-
CAB	?	a		h	aa				1922	'second	ď. P	rim	ary	sour	ces c	ite <i>bíama</i> as an
YUC		a?	'a			[w	2	n	ál	-14-						

The gloss for MAC is given as 'to be high vegetation', and for ASH as 'forest, jungle'.

YAV

TWO	2					
		*у	а	m	а	
PAR	(hí)	n	a	m	a	
WAU	([me]pī)	ñ t ^h	а	w	ã	
WAP	[d'ia]['i]	tn	a	m		
GAR	(bi)		a	\mathbf{m}	a	
LOK	(bi)		a	m	a	(n)
GUA	(pi)		á	m	а	
ACH		č	á	m	a-	
CAB		č	u	m	aa-	
CUR		у	а	m	а	(da)
TAR		i	a	m	é	(pa)
YUC	i	у	a	m	á	'

The form *yama was probably a classifier with broad semantic coverage in Proto-Maipuran which became lexicalized as 'two' in many of the daughter languages.

UNCLE, FATHER-IN-LAW *k u h -k CHA 0 k a PAR k TER BAU IGN k a PIR 0 ASH k k *k PAL k u CAB *aa k u PIA -k u [i](ri) TAR *k i (ri) YUC *o k u YAV k u

P-M /*k/ could be /*kh/. Principle sources cite ekáse- as an alternate for TER. The PAL form is from Shafer 1959:546, the CAB and YUC forms from Matteson 1972:234, and the TAR form from de Goeje 1928:219.

UP, AB	UP, ABOVE, (SKY)										
	*у	e	n	u	h	[k	<u>i</u>]				
AMU		e	n	0			(neht ^y)				
CHA		0	n	ó	h	[k	0]				
PAR		é	n	0		[k	o][a]				
WAU		е	n	u-							
TER [v	/]	а	n	ú		[k	e]				
BAU		а	n	í		ĺ	e]				
IGN		а	п	u		[k	e][?e]				
PIR [t]		e	n	0							
APU [it]	a	n	0			(ti-ši)				
MAC [h]	е	n	0		[k	i]				
ASH [h]	е	n	0		(k	i)				
PAL		i	n	u-		•					
GAR		ĩ		u							
LOK (a) у			0			(mɨn)				
GUA		í		i			(-pɨnaa)				
RES	ø	e	n			[i]				
CUR	y č	e	n	0		•	(n)				
PIA	č	è	n	u			(ní-)				
YUC	у	е	n	ú			. ,				
YAV		é	n	u							

P-M /*k/ could be /*kh/. The ASH [h-] may be derived from a demonstrative stem ha-, while -ki is a common locative suffix. The GAR source cites $i\tilde{u}$.

```
URINE
             i n i
PAR
     [do]
TER
                п
PIR
                        (ha)
APU
                π
                    a
                        (-ka)
MAC
             i
                    i-
                n
          -¢
            i n
             -a? n
                        (oógí)
```

The gloss for the APU form is given as 'urinate'.

```
VINE, ROPE
                     p^{\mathbf{h}}
                 h
                                  [č
                              h
AMU
              а
                 h
                     р
                          (e:
CHA
                          (i
                                  č
      [mes]
                                      a)
                      р
PIR
                 ha
              a
                                  (¢
                                      a)
                      p
APU
              aa
                      p
                                  (¢
                                      a)
MAC
              а
                                  (¢
                                      a)
                      p
                         е
ASH
      [t]
              а
                          е
                                  (g
                                      a)
GAR
                                     a)(ru)
```

```
WALK
                                      WASP
               n
                                                  n
               n
                                      CHA
            ó
                                      PAR
WAU e
                                      TER
                                      BAU
    (a)
                                      PIR
                                      APU
                                      ASH
                                                  п
WALK2
                                      LOK
                                               а
                                                  n
     *у
        a
            n i
                                      PIA
                                                ái n
     у
        ô
            n
                   [0]
                                      TAR
                                                ái n
     -у
        0
                                      YAV
                                               án i
        а
            n
                  [i-]
            n
            n i
                  [i-]
        -a
           n
           -n i-
```

WASH PAR TER BAU IGN APU MAC k^y ASH k GAR b RES PIA TAR YUC p YAV h h

The gloss for the APU form is given as 'bathe'. The DIC form is siba.

```
WASH2
      *š
          u
             k
                 ш
CHA
                 0
                     [k-]
WAU
          u
             k.
                 u-
WAP
          i
                     [a-]
PAL
      S
                 u
                     [h]
LOK
      S
         0
             k
                 0
                     [so-]
CUR
                 0
                     [eo-]
```

CHA

PAR

LOK

GUA

ACH

TER

BAU

PIR

MAC

ASH

CUR

TAR

Primary sources cite sukoh as an alternate form for PAL.

The PAR form is from Shafer 1959:562 and was transcribed as ani. The BAU and LOK forms are from de Goeje 1928:228, where he transcribed the LOK form as hanuba.

```
WATER
         u
            n i
AMU
         0
            ny
CHA
         u
               í
            n
                   [hsa]
PAR
               e
WAU
TER
BAU
IGN
PIR
        0
MAC
ASH
                   (haa)
            n
WAP
         wi
           n
PAL
           п
              i
LOK
         0
           n
                   [abo]
GUA
         wii
RES
        00 n
CAB
        uu n
CUR
        00
           n
PIA
        ú n
TAR
        uú n
YUC [h]
        úu n
YAV
        wé n
```

WET CHA (wa) WAP [b' PAL a ſb á] ACH S a ľb a] [ii] S à [b e-] (iri) YUC i s

Synchronic form in ACH is isabii.

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14.				
iviaipui aii	(Alla	waka	Π)	421

WET	2					
		* p	0	đ	а	
AMU		p	o:	r		[wa]
PAR		h	0	Γ	é	(ra)
BAU		p	0	t	ó	[to-]
IGN		-p	а	t	a	
APU	[kãã]	p	i	r	i	
PAL	[sabá]	р	í	t	е	•
RES		p	a			[ghá] (nu?)
CUR		p	u			[šia] (ka)
		_				

P-M /*p/ could be /*b/.

WHIT	E *k	а	th	а	
TER	hy	0	-	_	[pu ⁹ i]
PIR	k		1	a	(ta)
MAC	k	÷	t	a-	` '
ASH	k	i	t	a	(maaro-)
GUA	k	a	S		[úu-]
CAB	k	a	t	aa	(lik ⁿ e)

WHITE2										
	*k	a	č	0	р	a	[1	ai]		
APU	k	а	¢	0	p	i	(r	÷)		
ACH	k	a			b	á	(1	ai)		
PLA	k	a			b	a	(1	èe-)		
YAV	k	a			h	a	Į1	i-]		

P-M /*k/ could be /* k^h / and the /*p/ could be either /* p^h / or /*b/.

WIFE	,					
			*i	n	0	
PAR	[ed]		á	n	i	(t ^y o)
WAU				-n	u	
TER	[y]		ê	n	0	
BAU	[-ey]		ó	n		
IGN	[-y]		e	n	a	
PIR		h	a	n	i	(nro)
MAC	[-h]		i	n	a	
ASH			-i	n	a	
GAR			*-i		á	(ni) (r i-)
GUA			-é		e	(r i -)
RES			-í	n	í	
ACH			-í	n	uu	
CUR			-i	п	0	
PLA			-í	n	u	

The GAR form is DIC.

WOM	IAN							
		*č	i	n	a	[r	u]	
WAU		t	į	n	e	[š	u]	
BAU	e	t	ó	n				
IGN	e	S	е	n	a			
MAC		g	i	п	a			[ne]
ASH		e	i	n	а			[ne]
WAP		ž	i	n				
PAL		t	í	п		[0]	
GAR		h	ĩ		á	[r	u]	
LOK		h	i		a	[r	0]	
GUA		h	i		é	[r	÷]	
RES			i	n	áa	[d	ó]	
ACH			íi	n	a			
CUR			i	n	a	[ž	0]	
PIA			i	n	а			[naí]
TAR		7	í	n	а			
YUC			i	n	а			[náru]
YAV	[lal]		i	n	e			(mi)

May be derivationally related to WIFE.

W	ORM					
		*k	е	n	i	
CH	A	k	é	n	i	
WA	U	-t	ē		i	
TE	R.	k	â	n	е	
PIR		ç	e	n	i	
AP	U	k			ĩ	(či)
MA	C	k ^y	е	n	j-	• •
ASI	H	k	e	n	i-	
GA	R (í) g	е		i	
LO			e		i	
GU	A (6	2) ?	é			
RE	S		e	n	í	(øi)
AC	Н		ée	n	i	(ši)
YA	V	k	é	n	i	. ,

Taylor and Rouse 1955:110 and de Goeje 1928:215 transcribe the LOK form as isehi; however, it is likely that the [h] is hiatus. The gloss for the WAU form is given as 'insect larvae', for the GUA form as 'parasite', and for the RES form 'to get worms'.

6 Reconstructed phonemes and reflexes

In this section I present and discuss the reconstructed phonemes and reflexes evidenced in the preceding cognate sets.

6.1 Introductory Remarks. The reflexes are listed in such a way as to make explicit the degree of confidence that should be inferred for any particular detail. For reflexes which have numerous examples, I have listed ten or more examples and then: "etc.". If there is no "etc.", it may be inferred that the examples are exhaustive for that change. Where there are only one or two examples of a given reflex, the reader may infer a relatively low degree of confidence that the reflex or environment will ultimately be shown to endure the test of further investigation.

With this amount of data (203 sets) it is not difficult to recognize the more important correspondences. They are the ones attested by a relatively large number of cognates. For most minor reflexes posited on the basis of only one or two examples, I have attempted to assure that the implied sound changes have some phonetic plausibility. For example, the rule posited whereby /*e/ became /u/ before /w/ in YAV, only has two words attesting it (FAN and HOUSE2). However, the assimilation of the vowel to the semivowel is exactly what might be expected in this environment, and the other segments in both words enter into regular correspondences. In some cases there are reflexes posited which do not conform to any obvious phonetically plausible rule and only have one or two examples. The weight of the other correspondences in the cognate set are the only justification for the putative rules in such cases. When there are only one or two examples it is, of course, impossible to say precisely what the conditioning factors are, or even whether the reflex is a real one or not. In such cases I have merely given an environment which distinguishes the examples from all other forms.

Environments for the sound changes posited are predominately phonological, and are expressed either in terms of a reconstructed environment or a synchronic environment. In cases where the environment is a reconstructed one, as for example, in (39):

(39)
$$*t > d/_*u,*a$$

in PIA, there will be an asterisk in the environment. This implies a relatively early change, at least earlier than some other sound change in PIA which must have affected /*u/ and /*a/. Confirmation that this was a relatively early change comes from the fact that other closely related languages (RES, ACH, CUR and TAR) need rules with similar environments, as in (40):

$$(40)$$
 *t>t/___*u,*a

Phonological environments for most of the reflexes are expressed in terms of synchronic phonological segments. The implication with these is that the