9 Acts of impact, force and change of state

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1 Introduction

The theme of this volume is material culture, and it is perhaps inevitable that a majority of the reconstructions in the preceding chapters are of nouns denoting objects—mostly utensils and some manufactured objects, especially buildings and seagoing vessels. A number of reconstructions are of verbs denoting actions performed with these utensils or on the materials of which objects are made. In many cases, however, the relevant verbs have meanings which transcend the subthemes of individual chapters, and so we have decided to bring them together here and to consider them in relation to each other in order to gain a better understanding of their meanings. This leads to a certain amount of repetition, but we have thought it more convenient for the reader to have much of the data assembled here than to have to pursue cross-references to earlier chapters. In the interests of space, however, we have generally not repeated here those verbs whose meanings fit neatly enough under the subtheme of another chapter, and we have sometimes reduced the cognate sets given as supporting evidence.

Some system of classification was necessary to give coherence to our work, and we started with a classification based on what we thought were sensible but somewhat *ad hoc* semantic classes. Interestingly, as work progressed and the glosses of cognate set members gave us pointers to the meanings of our reconstructions, so the meanings of the reconstructions themselves led us to reshape our classification and to recognise semantic divisions which were not part of our original classification. In this way, we believe we have gained some insight into the semantic classification of acts of impact, force and change of state used by POc speakers.

The final classification of reconstructions, with section numbers, is as follows:

¹ Ross Clark did the initial collation and classification of data, Meredith Osmond wrote the first draft, also collating reconstructions drawn from other chapters, and Malcolm Ross refined and added reconstructions, partially reorganised the chapter and rewrote much of it.

Malcolm Ross, Andrew Pawley and Meredith Osmond, eds The lexicon of Proto Oceanic, vol. 1: material culture, 233-295. Pacific Linguistics, C-152, 1998.

C Malcolm Ross, Ross Clark and Meredith Osmond

Ross, M., Clark, R. and Oansond, M. "Acts of Impact, Force and Change of State". In Ross, M., Pauley, A. and Oansond, M. éditors, *The Lexicon of Proto Oceanic: The Culture and onvironment of ancestral Oceanic society 1: Material Culture.* C152235-396. Pacific Linguistics, The Astardian National University, 1998. DOI:10.1154/ePLC702.233

- 2 Abrasion and friction
 - 2.1 File, rasp, sharpen, grind
 - 2.2 Scratch, scrape, grate
 - 2.3 Rub
 - 2.4 Brush, sweep
- 3 Cutting, peeling, separating, splitting and tearing
 - 3.1 Cut off, sever
 - 3.2 Cut into two or more pieces
 - 3.3 Shape by cutting
 - 3.4 Incise the skin, circumcise
 - 3.5 Other cutting verbs
 - 3.6 Sharpen, pare, shave
 - 3.7 Separate flesh from shell, skin from fruit, bark from tree, leaves from branch or midrib
 - 3.8 Split into two or more sections
 - 3.9 Tear
- 4 Penetration with a pointed object
 - 4.1 Pierce
 - 4.2 Drill, bore
- 5 Forceful impact
 - 5.1 Hit, beat, strike
 - 5.2 Break, smash, shatter
- 6 Removal of object from source by hand
 - 6.1 Pluck, pick
 - 6.2 Break off, snap off
 - 6.3 Pinch, nip
 - 6.4 Unhook, hook
- 7 Wringing and squeezing
- 8 Twisting, plaiting, braiding
- 9 Bending and folding
- 10 Fastening and lashing together
- 11 Applying heat and burning

Possibly the most interesting categories that emerged were 'separate flesh from shell, skin from fruit, bark from tree, leaves from branch or midrib' and 'split into two or more sections'. Perhaps the first of these could be more quintessentially expressed as something like 'separate one naturally occurring layer of an object from the rest'. In each case the conceptual focus seems to be on the separation itself, not the manner in which it is done. Because of this focus, we found ourselves impelled to combine different manners of separation—cutting, peeling, separating, splitting and tearing—into a single higher-order grouping, as they seem not to have been as important for classifiying actions in POc as they are in European languages.

The formal categories of POc verbs are particularly salient in this chapter. They are explained in greater detail in Chapter 2, §3.1.1. Many verbs can be reconstructed with both an intransitive and a transitive alternant. Two patterns commonly occur. They are illustrated

by the first two reconstructions in §2.1. In the first pattern, the intransitive has two syllables and ends in a consonant (shown in brackets if it is not reflected in the supporting data), and the transitive alternant has an added *-*i*-. e.g. POc *asa(q), *asaq-*i*- 'grate, sharpen by grating or rubbing'. The hyphen on the transitive means that it was usually followed by an enclitic object pronoun. In the second pattern, represented by POc *kiri[-] 'file, rasp, saw', there is no final consonant, and the intransitive and transitive are identical, with two syllables. The hyphen in square brackets indicates that nothing follows the intransitive alternant, but that an enclitic object pronoun follows the transitive.

With verbs of the first pattern, we sometimes present the intransitive and transitive alternants separately with their supporting data if these form long lists, and sometimes together.

There is a third pattern represented in the reconstructions in this chapter. Here, the intransitive consists of a single-syllable 'root' with a reduplication of the initial consonant-vowel sequence, as in POc *toto(k) 'cut, chop' (§3.2), where the root is *tok. The transitive consists of the root with added *-i- as in POc *toki.

Sometimes, as explained in Chapter 2, §3.1.1, we are unable to determine from the cognate set what verb class a given intransitive verb belonged to. This means that the glosses of intransitive verb reconstructions are sometimes vague, because we do not know whether the actor or the undergoer was the subject.

Another alternation that occurs, but has nothing to do with transitivity, is between a reconstruction with an oral-grade initial consonant, like POc *kiri[-] 'file, rasp, saw', and one with a nasal-grade initial consonant, like POc *giri[-] 'file, rasp'. Where such an alternation is reconstructed, the alternant reconstructions are labelled (1) and (2). The possible origins of this alternation are discussed in Chapter 2, §3.1.3.

A practical problem in the analysis for this chapter was that it is often necessary to reconstruct two or more formally similar verbs. There are some quite principled reasons for this, and some which are more *ad hoc*. The more principled explanations are that (i) a verb may have intransitive and transitive alternants, as noted above; (ii) verbs with similar meanings often contain the same PAn monosyllabic root, as described in Chapter 2, §3.1.3; (iii) as mentioned in the previous paragraph, verbs with corresponding oral-grade and nasal-grade consonants must sometimes be reconstructed. Once verbs with similar forms and meanings exist alongside each other, the conflation of two forms to make a new one is quite possible or phonaesthetic motives may lead to the creation of new but similar forms. In §2.2, appeal is made to a sporadic sound change which occurs in Oceanic languages in order to explain some of the similarities among verbs of scratching and scraping. It is probable, though, that phonaesthetic motives have also operated here as they appear to in English *scratch, scrap, scrape, scrawl, scribble, scrimp*.

2 Abrasion and friction

The verbs in this section refer to continuously repeated contact between an implement and an object to affect the surface of that object in some way, either by removing some of the substance of the object itself (file, rasp, sharpen, grind, scratch, scrape, grate) or by removing another substance from its surface (rub, brush, sweep).

2.1 File, rasp, sharpen, grind

The generic term for any kind of wearing down by friction was POc *asa(q) *asaq-i- (Ch. 4, §4.1.5). While it is possible to reconstruct several terms that refer just or primarily to the grating of foodstuffs, it has proven more difficult to reconstruct a term referring specifically to the sharpening of cutting edges. POc *kiri/*giri is our most likely contender.

PAn *Sasaq 'whet, sharpen' (ACD)

POc **asa(q)*, **asaq-i-* 'grate, sharpen by grating or rubbing' POc **i-asa(q)* 'grater; anything used to grate, grind' (Lichtenberk 1994)

Adm:	Loniu	yasa(y)	'sharpen a cutting edge'
NNG:	Manam	ara	'grate, sharpen, rub'
NNG:	Kairiru	yas	'sharpen s.t.'
MM:	Теор	aha	'grate (tapioca +); scrub (floor +)'
	and the second second	(i)aha	'grater (for tapiok)' (i- < POc *i- INS)
MM:	Maringe	jaha or zaha	'sharpen (knife, axe +); grate (tapioca, sweet potato)'
MM:	Roviana	asa-i-	'grind (very blunt axe +); grate (sweet potato, taro +)'
SES:	Bugotu	(a)aha	'grate, rub down (taro +) on a stone, sharpen by rubbing'
SES:	Arosi	ata	'scrape, rub, sharpen with rubbing'
NCV:	Mota	asa	'rub, wash with rubbing'
NCV:	Raga	raha	'grate, grind, sharpen'
SV:	Kwamera	(ə)rəsi	'grate, as coconut meat; scrape, as ash from a
			tuber; sand smooth, as wood of axe handle'
Mic:	Carolinian	(m)asa	'(knife, axe +) blade'
Mic:	Ponapean	ete	'sharpen, put an edge on s.t.'
Fij:	Bauan	yaða-	'grate, of taro, tapioca +; grind, of blade on
			stone'
		(i)yaða	'grater, grindstone' (i- < POc *i- INS)
Pn:	Maori	aha-aha	'saw-like instrument of shark teeth set in a wooden mount'

PMP *kirkir (V) 'file, rasp' (Blust 1977) (1) POc *kiri[-] 'file, rasp, saw'

NNG:	Roinji	kiri-	'bore (hole)'
NNG:	Manam	kuiri-	'bore (hole)'
PT:	Iduna	kili-li	'pumice stone'
PT:	Motu	iri	(N) 'saw'
		iri-ri	'file'
Pn:	Tongan	kili	'saw, file'
Pn:	Tokelauan	kili	(V) 'file, rasp'

(2) POc *giri[-] 'file, rasp'

NNG: Mangseng

kir kir(oŋa) 'rub, file'
(N) 'file' (-oŋa NOM)

SES: SES:	Gela Lau	gi-giri giri-giri	(N) 'rasp; a saw' 'roughen, as a stick with notches or in making a file'
cf. also	D :		
NNG:	Takia	riri	'grate, pulverise by rubbing against s.t. rough; rasp'
PT:	Motu	riri	'grate (yams +)'

2.2 Scratch, scrape, grate

Various activities are subsumed under this heading. They include the separation of coconut meat from the shell, the grating of foodstuffs (coconut meat, cassava etc.), the scraping of tubers to remove dirt and ash, and the scratching of a (non-food) surface, sometimes with the intention of leaving a mark. Distinguishing reflexes of some of our reconstructions has proved difficult because some are formally quite similar. Distinguishing which term was used for which activity is also problematic, since it would appear that often communities see these activities as essentially describable by the same term, in that they are using the same action of moving an implement, typically a cockle shell or similar bivalve, to and fro to affect the surface of an object. Sometimes the name of the shell suffices to describe the activity.

POc *karu(t), *karut-i- seems to have referred to scratching with fingernails or claws, and thus not to have been used of food preparation:

PAn *karut 'scrape, rasp' (ACD)

POc *karu(t), *karut-i- 'scratch with fingernails or claws', PWOc *karo

		•	
NNG:	Kove	kaho	'scratch oneself'
PT:	Lala	(vi?a)?alo	'scratch oneself'
PT:	Motu	ya-yaro	'scratch'
MM:	Bali	yaro	'scratch oneself'
SES:	Tolo	karu-karu(ha)	'thorny'
SES:	Sa'a	karu	'scratch with the fingernails; to clutch; to hollow out a log'
SES:	Lau	ka-karu	'scratch on the wall from outside to frighten'
NCV:	Mota	kar, karu	'scratch'
NCV:	Nguna	karuti	(VT) 'scratch'
Mic:	Marshallese	kar	'scratch, scrape'
Fij:	Bauan	kadru	'scratch'
Pn:	Tongan	(v)aku	'scratch, scrape, dig up'
Pn:	Rarotongan	raku	'scratch with fingernails or claws'
Pn:	Tahitian	ra?u-ra?u	'scratch'

Lichtenberk (1994) rightly comments on the formal similarity of terms used for scraping (data below) and on its phonaesthetic basis:

1)	POc	*kara(s), *karas-i-	'peel or scrape (skin off tubers)'
	POc	*ko[r,R]a(s), *ko[r,R]as-i-	'scrape out (coconut meat +); dregs of strained
			coconut scrapings'

2) POc *kari(s), * PEOc *kori(s), *		(tubers, coconuts)' (esp. coconuts), grate (esp. coconuts)'
3) PEOc *kaRi POc *koRi[-]		; bivalve sp., used as a scraper' ; bivalve sp., used as a scraper; scrape with
4) POc *kasi[-]	'k.o. mu off'	ssel, used as food scraper; scrape out or
POc *kosi[-]	'scrape,	scratch (to mark s.t.)'

However, it is notable that the reconstructions above form pairs which can be accounted for by a sporadic sound change whereby |a| becomes |o| after |k| in many Oceanic languages, perhaps especially in frequently used words. This change occurs independently in different places, presumably through velarisation of the vowel. Thus in Chapter 6, §3.7, we find POc *kapu(t) and POc *kopu, both reflecting PMP *kaput and referring to wrapping food for cooking, and in Chapter 6, §2.7, POc *kapit 'tongs' with Tongan and W. Futunan reflexes where the root is kofi rather than kafi. In certain Papuan Tip languages the POc pronoun *kamiu 'you (PL)' is reflected with |o| for *a (Iduna omi, Dobu ?omi, Duau, Suau komi, Misima komiu). This implies that each pair may represent only one POc form, as shown below. We incorporate Lichtenberk's (1994:280–281) insight that these verbs differ according to whether the object is stuff scraped off (e.g. coconut meat) or the object of scraping (e.g. coconut shell):

1) POc *karas, *karas-i-	'peel or scrape off (stuff scraped off); itch'
2) POc *kari(s), *karis-i-	'scrape (object of scraping)'
3) PEOc *kaRi[-]	'scraper; bivalve sp., used as a scraper; scrape with a shell'
4) POc *kasi[-]	'k.o. mussel, used as food scraper; scrape out or off (stuff scraped out or off); scratch'

We retain the pairs of forms below, because this interpretation is not conclusive: POc *kosi may reflect PAn *keskes.

PAn root *-ras 'grate, scrape, scar'2

(1) POc *kora(s), *koras-i- 'scrape out (coconut meat +); dregs of strained coconut scrapings' (Lichtenberk 1994)

SES:	Arosi	?ora	'scrape with a shell'
		?orasi	'dregs of strained coconut scrapings'
NCV:	Mota	goras	'scrape out, grate, the hard meat of coconut with cockle shell (<i>vin-gar</i>)'
Mic:	Carolinian	xiri	'scrape or grate'
Fij:	Bauan	kora	'refuse of scraped coconut'

To our knowledge this PAn root has not been reconstructed elsewhere, but is supported by this POc reconstruction, by POc *rasi 'grate, scrape (tubers, coconuts); scratch' (in this section), reflecting putative PMP *rasras, and by PMP *biras and *kiras, both 'scar', and by PWMP *parces 'shaved off, made smooth' (all ACD).

(2) POc *gora(s), *goras-i- 'scrape out (coconut meat +); dregs of strained coconut scrapings'

MM:	Maringe	garosi	'scrape, claw or scratch with one swipe' (metathesis)
SES:	Gela	gola, golahi	'scrape, plane' (<i>l</i> for expected <i>r</i>)
SES:	Sa'a	korasi-	'(rat +) scratch about'

POc *kara(s), *karas-i- 'peel or scrape skin off tubers'

Adm:	Mussau	kalasi	
MM:	Kara (West)	kaias	
MM:	Tiang	kes	
MM:	Maringe	ka-krasi	'scrape off potato or taro skin, using a shell'
SES:	Arosi	karasi	'scrape, bruise, take off skin'
SES:	Kwaio	galā galasi-	
SES:	To'aba'ita	garasi	'scrape (taro, sweet potato + to remove dirt after pulling it out of ground)'
SES:	Sa'a	kara, karasi	'scrape, grate'
		kara uhi	'grate yams with a cockle shell' (uhi 'yam')
cf.also):		
PT:	Dobu	kwakwara	'scratch, scrape (as cleaning inside of cooking pot, removing old paint)'
MM:	Maringe	k ^h araji	'scrape, damaging the skin or surface'

PMP *karis 'scratch mark' (ACD)

POc *kari(s), *karis-i- 'scrape (tubers, coconuts)' (Lichtenberk 1994); 'scratch a mark on s.t.'

3.1.			
NNG:	Kove	karisi	'scrape (one's skin)'
NNG:	Akolet	karis	'scratch (one's skin)'
NNG:	Mindiri	kar-kari	'scratch (one's skin)'
PT:	Motu	ari-	(V) 'mark, indent (as bottom of canoe with stones)'
MM:	Bulu	kari	'scratch (one's skin)'
MM:	Maringe	kai-kari	(VT) 'scrape off (e.g. mud from one's feet),
			remove with scraping action, usually with
			implement like a piece of bamboo'
SES:	Gela	kari	'scrape off (dirt from a cut +); scrape out (white of coconut)'
		karisi-	'peel off (skin of stem of plant or stick); circumcise'
SES:	Tolo	karisi-	'peel (with knife, shell +)'
SES:	Arosi	kari-kari	'scrape off small roots with waro shell'
Mic:	Carolinian	xeri	'scratch s.t., grate it'
Mic:	Marshallese	kar	'scratch, scrape'
Mic:	Ponapean	rakih	'scratch with the fingernails, to claw'
Fij:	Wayan	(i)kari	'grater' (i - < POc * i - INS)

Fij:	Bauan	kari-	'scrape (coconut +)'
SV:	Anejom	(a) $\gamma re\theta$	'scrape'

PEOc *kori(s), *koris-i 'scrape (esp. coconuts), grate (esp. coconuts)'

SES:	Gela	gori	'shave the head'
SES:	Tolo	kori-	'scrape or grate coconut'
SES:	To'aba'ita	kori	'scrape (coconuts +)'
SES:	Lau	gori	'scrape with shell, scrape off and out, shave'
SES:	Arosi	?oris-i	'scrape'
NCV:	Lewo	koli	'scrape (e.g. coconut)'

Note that *kori(s) may have occurred in POc, but its WOc reflexes would be indistinguishable from those of *koRi below unless the final *-s were reflected. The only WOc reflex which may fulfil this criterion is Tangga (MM) kois 'grater made from a hemisphere of coconut shell'.

PEOc*kaRi 'scraper; bivalve sp., used as a scraper' (Geraghty 1990)

SES:	Gela	gali	'species mollusc, pelecypod, Asaphis deflorata, eaten'
NCV:	Mota	gar	'cockle'
		(vin)gar	'cockle shell, used to cut yam vines and to scrape out meat from coconut' (vin from viniu
Fij:	Bauan	kai	'skin, bark, husk, partic. of coconut') 'generic name of bivalve shellfish, Lamellibranchiata'

POc*koRi[-] 'scraper; bivalve sp., used as a scraper; scrape with a shell'

NNG:	Manam	?ori(ŋ)	'scrape coconuts'
		[?] ori- [?] ori	'pearlshell, traditionally used to scrape coconuts; coconut grater, scraper'
NNG:	Kove	ko-koli	'scrape the exterior off food (trepang, taro)'
PT:	Dobu	koli	'scrape, as coconut, wood'
PT:	Motu	ori	'grate coconut, chew pandanus fruit'
MM:	Vitu	kori	'scratch (one's skin)'
MM:	Tabar	kori-kori	'scrape (coconut)'
SES:	Gela	goli	'scrape coconut with a tue (fresh water shell)'
NCV:	Nguna	koi	'grate (coconut)'
Fij:	Rotuman	?oi	'scrape, grate'
Fij:	Bauan	koi	'scrape (breadfruit)'
		(i)koi	'shellfish' ($i - \langle POc *i - INS \rangle$)
MM: MM: SES: NCV: Fij:	Vitu Tabar Gela Nguna Rotuman	kori kori-kori goli koi ?oi koi	'scratch (one's skin)' 'scrape (coconut)' 'scrape coconut with a <i>tue</i> (fresh water shell)' 'grate (coconut)' 'scrape, grate' 'scrape (breadfruit)'

PMP *gasgas 'scratch' (ACD)

POc *kasi[-] 'k.o. mussel, used as food scraper; scratch, scrape out or off' (Lichtenberk 1994)

Adm:	Loniu	asi	'scratch'
PT:	Tawala	kahi	'pearlshell'
PT:	Muyuw	kas	'scratch'

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MM:	Nakanai	kasi	'scratch'
		(la)kasi	'broken coconut shell; mussel or clam; mussel shell used as knife'
MM:	Tolai	ka	'scrape, grate or scratch, scrape out, as the flesh of a coconut'
MM:	Simbo	kasi-kasi	'scratch the soil as a bush turkey'
SES:	Lau	kasi	'adze, chop; knock a nut with a stone on another stone'
		ka-kasi	'split open'
Fij:	Rotuman	?asi	'cockle; shell much used for scraping'
Pn:	Samoan	?asi	'edible mollusc (Arca sp.); coconut scraper cockle (Vasticardium sp.)'
Pn:	Tikopia	kasi	'bivalve mollusc (<i>Asaphis violascens</i> Forskal), possibly other related bivalves also; shell traditionally used as cutting or scraping
			implement, as food scraper for coconut, breadfruit'
cf. als	0:		
PT:	Motu	ka-kasi	'scratch, scrape'
MM:	Maringe	ke-kesi	(VT) 'scrape roasted potato, taro or yam skins'
SES:	Lau	kesi	'scrape off burnt outside after roasting taro; strike a match'

PAn *keskes 'scratch, scrape' (ACD) POc *kosi[-] 'scrape, scratch (to mark s.t.)'

SES:	Gela	kohi	'scrape'
Pn:	Tongan	kohi	'scratch with a sharp point'
Pn:	Samoan	?osi	'scratch'
Pn:	E. Uvean	kohi	'cut lightly, scratch'

There are three other reconstructions which overlap semantically with those above. They are:

POc *rasi[-]	'grate, scrape (tubers, coconuts); scratch'
PEOc *saqalo	'scrape, clean by scraping; rub smooth'
PEOc*paro(s), *paros-i-	'chafe, of skin; scrape'

POc *rasi[-] 'grate, scrape (tubers, coconuts); scratch'

NNG:	Manam	rasi(?)	'grate (cassava +)'
NNG:	Takia	rasi	'scrape (coconut)'
MM:	Banoni	resi	'scrape (coconut), coconut scraper'
MM:	Kia	rahi	'grate, scratch (coconut, cassava)'
MM:	Maringe	(g)rahi	'grate or scrape off (coconut or bark for making medicine +)'
NCV:	Mota	ras, rasa	'scrape, scratch, rub, with straight motions backwards and forwards; so, sharpen by rubbing backwards and forwards on a stone'

NCV:	Raga	raha	'grate, grind, sharpen'
NCV:	Lonwolwol	rehe	'rub, scrape, grate, grind'

Lichtenberk (Ch. 6, §5.2) reconstructs this verb as (r,R)asik, but if the Raga and Lonwolwol items are indeed cognate, then the initial consonant is diambiguated and the verb was rasi.

The two PEOc items below straddle the semantic divide between this section and the one below, in that they refer to actions in which rubbing is sufficient to remove substance from the surface of the object.

PEOc *saqalo 'scrape, clean by scraping; rub smooth'

SES:	Arosi	taro(hi)	(VT) 'brush off dirt, clean yam tubers; rub, massage'
Fij:	Bauan	(i)sakaro	'a shell, used for scraping coconuts' (r for exp. l) (i- < POc *i- INS)
Pn:	Tongan	ha?alo	'make clean and smooth by scraping'
Pn:	Samoan	sālo	'rub smooth with scraper'
Pn:	Tikopia	sāro	'scrape, grate up, scratch, sweep'
Pn:	Emae	sāro	'scrape pandanus leaves for making mats'
Pn:	Maori	hāro	'remove outer skin of flax leaves by scraping with a shell, to scutch'
Pn:	Hawaiian	halo	'rub, polish'

PEOc *paro(s), *paros-i- 'chafe (skin); scrape'

MM:	Maringe	poroji	'chafe away the skin, e.g. tightly bound pig's feet'
SES:	Lau	faro	'scraper for grating yams'
NCV:	Nguna	vāro	'chafing of inner thighs'
		varosi	'grind (e.g. meat)'
Fij:	Wayan	varoki	(VT) 'cut s.t. with a saw'
Fij:	Bauan	varo	(V) 'file, saw, or rasp'
Pn:	Maori	faro, fa-faro	'scrape'
		faro-faro	'scrape'

2.3 Rub

Rubbing in Oceanic languages is roughly divisible into two semantic categories: rubbing in which abrasion is to the fore, as for example in making a fire, and rubbing for the purpose of making smooth. The generic term for abrasive rubbing was apparently POc *usuq, whilst *suka referred to friction to make a fire. The POc term for 'rub smooth' was *quju(r), *qujur-i-. Although it is sometimes difficult to distinguish the reflexes of *usuq and *quju(r), they were clearly separate verbs in POc. POc *pulu evidently referred to rubbing in association with washing.

PMP **usuq* 'rub, wipe' (ACD) POc **usu(q,p)*, **usu(p)-i-* 'rub abrasively'

PT:	Motu	udu-	'rub a stick to make fire'
MM:	Nakanai	huru	'remove outside of shell by rubbing'

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MM:	Tolai	ū	(VT, VI) 'wipe'
SES:	Gela	uhu	'rub, rub fire, scrape off skin by rubbing, cut
			design on forehead'
SES:	Sa'a	usu	'rub, scrape, grate' (usu ?ei 'a firestick')
SES:	Lau	usu, usuf i-	'rub, wipe, rub off'
Mic:	Mokilese	it	'start a fire using sticks'

POc *suka, *suka-i- 'make fire with fire-plough'

Adm:	Lou	sok	'rub a friction stick against wood to make fire'
MM:	Nakanai	suka	'the making of fire with the fire-plough; a
			fire-plough'
MM:	Tolai	uk	'bore through, bore into'
SES:	Lau	su-sukai	'bore'
		su-suka	'a gimlet'
Fij:	Rotuman	si?a	'make fire by friction'
Pn:	Rennellese	sika	'make fire by the fire-plough'
Pn:	Samoan	si?a	'light a fire by friction; apparatus (fire-plough)
			as a whole; base wood of fire-plough'
Pn:	Tikopia	sika	'rub in groove, frictionate'

Note the unexplained fronting of the vowel in Central Pacific languages. For a similar example, see **supi* 'sharpen, shave, pare' (§3.6).

POc *quju(r), *qujur-i- 'rub, make smooth by rubbing'

Adm:	Titan	ucu(e)	'rub, scrape, smooth'
NNG:	Lukep	wuru	'rub smooth (leaves when making mat)'
SES:	Gela	yuduri-	
SES:	Lengo	yuji	
SES:	Longgu	?usuri-	'rub, wipe (e.g. with a towel)'

PMP *bulu 'wash' (Dempwolff 1938) POc *pulu[-] 'rub to make clean, wash'

SES:	Lau	fulu, fulu-	'clean, wipe, rub off dirt, wash away earth (of rain'
SES:	Tolo	vuli(a)	'wash (hands, clothes +)'
Fij:	Bauan	vulu-vulu	'wash the hands'
Pn:	Tongan	fu-fulu	'wash'
Pn:	Rennellese	hugu	'anoint or rub, as with perfume or tumeric'
Pn:	Tikopia	furu	'cleanse, as by rubbing'

2.4 Brush, sweep

Of the verbs reconstructed below, POc *salap refers to the action performed with a broom, in Melanesia often made by tying together a bunch of palm-leaf midribs; POc *sapu(r), *sapur-i- refers to brushing or wiping dirt or dust from something; and POc *tapi meant something similar to *sapu(r), but perhaps with focus on the movement involved. We do not have enough information about POc *saRo to pin down its meaning.

Yabem	salep	'broom, originally the fruit stem of the nipa palm'
Gedaged	salai	'inflorescence of coconut'
Misima	hala	'sweep'
Lau	ta-tala	'broom made from midribs of sago palm'
	talafi	'sweep (s.t.)'
'Are'are	tā-tara	'sweep the house'
Sa'a	tala	'sweep the house with a bunch of leaves or
Arosi	tara ta-tarahi	grasses' 'rake, sweep, gather; a broom' 'sweep (s.t.)'
	Misima Lau 'Are'are Sa'a	Gedaged salai Misima hala Lau ta-tala tala fi 'Are'are tā-tara Sa'a tala Arosi tara

POc *salap, *salap-i- 'sweep, broom'

POc *sapu(r), *sapur-i- 'brush (dirt +) off (s.t.)' (where 's.t.' is the object)

Adm:	Titan	sap ^w i	'wipe, wipe off'
NNG:	Mapos Buang	rvu	'wipe, dry, clean'
PT:	Muyuw	(katu)sap	'brush dirt off'
PT:	Misima	hapul	'brush down (e.g. with coconut husk); brush; brush off'
PT:	Motu	dahu	'rub, wipe'
MM:	Bulu	ravu	'wipe'
MM:	Nakanai	savul(a-taro-a)	'brush away'
MM:	Patpatar	sah	'sweep'
MM:	Tolai	avu(lar)	(VT) 'brush or wipe off, as dust with the hand'
SES:	Talise	savu(lano)	'rub'
SES:	Lau	tafu	'brush off, brush against'
SES:	Longgu	tavuri-	'flick or brush something off'
Pn:	Samoan	safu	'broom'

POc *tapi[-] 'dust off, brush lightly'

PT:	Motu	tahi-	'dig out; (fowls +) scratch'
PT:	Minaveha	tapi-	'dust off (ashes from food +)'
MM:	Sursurunga	tahi	'sweep out, clean out'
MM:	Tolai	tavi(e)	'broom'
Fij:	Wayan	tavi	'be brushed lightly, swept'
Fij:	Bauan	tavi	'slap, pat, push with the hand'
Pn:	Tongan	tafi	'sweep'
Pn:	Samoan	tafi	'clear away, remove, brush off, rub off'
Pn:	Tikopia	tafi	'brush lightly, stroke, smear'
Pn:	Maori	tahi	'sweep'

POc *saRo[-] 'wipe, sweep'

PT:	Motu	daro
PT:	Lala	dalo
MM:	Nakanai	salo
SES:	Tolo	salo

'sweep; adze a plank''sweep''rub or wipe (excrement only)''broom, brush' (*salo-a* 'sweep')

3 Cutting, peeling, separating, splitting and tearing

Prior to the introduction of steel blades, cutting of timber would have been achieved by stone axe or adze (replaced with *Tridacna* shell blade when suitable stone was unobtainable), and of softer materials by sharpened shell or piece of bamboo, or a piece of obsidian or flint. In some languages, terms for the implement serve as a base for various cutting activities. For instance, Iduna, a Papuan Tip language, has dozens of cutting terms which are compounds with *-tala-* 'chop, cut (of tree, boat), shave (of beard), peck (with beak)', a reflex of POc *taRa(q) 'adze'. They include:

-tala-kehi-	'cut small (of wood, with a knife)'
-tala-kelikeli-	'cut long grooves or scratches (with knife)'
-tala-kowa-	'take a cutting'
-tala-k ^w aili-	'take leaf out (of coconut frond)'
-tala-k ^w ane-k ^w ane-	'cut one after another, chip at holding adze vertically'
-tala-lukuwe-	'cut into'
-tala-muhu-muhu-	'cut into tiny pieces (of wood)'
-tala-bwa?e-bwa?e-	'chip round marks with sharp edge of knife'
-tala-dobo-	'break with knife (of food, wood)'
-tala-done-	'cut into'
-tala-golohi-	'cut off, chop off (branches), (cause to) tear by cutting'

The evidence suggests that taRa(q) 'adze' already had a corresponding verb taRaq-i-, in POc.

PMP *(*t*,*T*)*a*Raq 'hew, plane' (Blust 1972b) POc **ta*Ra(q) (N, V) 'adze'; **ta*Raq-*i*- 'chop with adze'

NNG:	Takia	tare	(VT) 'cut, hew, as with an axe'
NNG:	Manam	tara	'cut down (branches)'
PT:	Motu	tarai-	(V) 'adze, chop, cut wood'
PT:	Iduna	tala-	'chop, cut (of tree, boat), shave (of beard), peck (with beak)'
PT:	Dobu	tala	(VT) 'fell a tree, cut out a canoe; lance flesh'
PT:	Gapapaiwa	tara	'cut, chop' (used in many compounds to describe specific manner of cutting)
MM:	Tabar	tara	'chop'
MM:	Minigir	(ta)tara	'adze'
SES:	Lau	ala	'split across'
SES:	Arosi	arai-	'chop, cut, cut down a tree'
NCV:	Mota	tara	'hew, chop, cut'
NCV:	Paamese	tāta	'adze'
SV:	Lenakel	(a)rai	'cut'
SV:	Anejom	(a)tai	'slice, cut without raising knife'
Mic:	Kiribatese	ta-tā	(V) 'adze'
Mic:	Carolinian	sār	'knife'
Fij:	Bauan	tā	'chop with knife or axe'
Pn:	Tongan	tā	'hit, strike, beat'
		tā?i	'chop, cut or carve (canoe +)'

Pn:	Niuean	tā	'strike, kill, adze'
Pn:	Hawaiian	kā	'hit, strike, hack, thrust'

The POc term for an obsidian blade was apparently *koto (Ch. 4, §4.1.3) and this is used as a verb in some languages. It is possible that the verb *koti (§3.1) is derived from this, but we cannot be sure.

POc *koto[-] 'obsidian head of spear, obsidian knife or blade; cut (across)'

NNG:	Dami	oto	'spear'
NNG:	Lukep	koto	'cut across grain'
NNG:	Wab	kot	'cut'
NNG:	Sissano	?ot	'chop'
PT:	Motu	oto	'a slice or strip'
MM:	Tigak	koto	'cut off'
MM:	Ramoaaina	koto	'obsidian; used to make scars or to shave'
MM:	Tolai	koto	'piece of stone (obsidian) or shell used as a
			lance'
MM:	Roviana	koto(a)	'cut or trim hair, shrubs +'
SES:	Kwaio	Poto	'hit and perforate'
SES:	Arosi	koto	(V) 'spear'
		oto	'arrow without barbs'
NCV:	Mota	koto	ʻnip, snap'
NCV:	Nguna	koto(vi)	'break, cut (a long thing); separate, away'
NCV:	Lonwolwol	kote, gote	'across, through'

There are a large number of reconstructable POc terms for 'cut' (and many more in various smaller Oceanic groups). Some of these can be given a reasonably precise gloss, whilst others we gloss simply as 'cut' as their more exact use is lost to us.

3.1 Cut off, sever

A number of verbs referring to cutting something off or severing it can be reconstructed. In some cases it is reasonably clear that they were distinguished by the kinds of object which were cut. In other cases it is difficult to reconstruct semantic distinctions. Reconstructable verbs are:

POc	*utu(s), *utus-i-	'sever, separate'
POc	*kutu[-]	'cut'
POc	*ma-utus, *motus	'become, be broken off, severed'
POc	*muju	'be clipped off'
	*mujuki-	'clip off (protruding growth close to the surface)'
POc	*koti[-]	'cut off (hair, taro tops +)'
POc	*paRi[-]	'cut or lop off branches'
POc	*p ^w uti[-]	'cut off'
POc	*siba	'cut, slice'
PEOc	*polos, *polos-i	'cut across, sever'

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POc *utu(s), *utus-*i*- appears to have been a generic verb of severing or separating. POc *ma-utus/*motus does not strictly belong here, as it is an inceptive or stative verb, not a verb of action. It is included because of its formal relationship with *utus and because there are certain formal problems associated with POc *utu(s), *kutu, *ma-utus and *muju. The first of these is that some of the reflexes attributed to *utu(s) may in fact reflect *kutu (this is true, e.g., of Mangseng and Gumawana utu).

PMP **utus* 'break under tension, as a rope' (ACD) POc **utu(s)*, **utus-i-* 'sever, separate'

Adm:	Loniu	utu	'split open, as coconut'
NNG:	Kilenge	utu	'cut (sticks)'
NNG:	Mangseng	ut	'cut leaves; cut to relieve pain'
PT:	Gumawana	utu	'cut off branches'
PT:	Motu	utu	'cut off, sever'
PT:	Lala	uku	'cut off, rub'
MM:	Nakanai	utu	'cut, as with a knife, cut off'
SES:	Gela	utu-utu, utuhi	'break, be severed, of a rope'
SES:	Bugotu	utu-utu	'clip, crop, cut short'
	Sector and the	utuhi	(VT) 'sever, cut off, cut in two'
NCV:	Mota	ut	'cut or break across'
Fij:	Rotuman	ufu	'pull apart, pull in two, sever (lit. and fig.), esp. to break (string, rope, net +) or to divorce'

POc *kutu[-] 'cut'

NNG:	Singorakai	kuta	
NNG:	Kis	(a)kuto	'cut (meat +)'
MM:	Vitu	yutu(valayi)	'split (wood)'
MM:	Sursurunga	kut(i)	'cut, slice'
MM:	Ramoaaina	kutu	'cut, separate; cut off the retreat of a party in war'
SES:	W. Guad.	kuti	'cut (string)'
cf. also)		
MM: Fij:	Maringe Bauan	kusu gutu, gutuv(a)	'sever, cut off, break (rope-like object)' 'cut off, sever'

In the following set, the occurrence of stative perfective glosses like 'torn', together with the Nakanai form *ma-utu, points to a reconstruction derived by prefixing *ma- to *utus above: the function of *ma- was to derive neutral (inceptive and stative) intransitive verbs (Ch. 2, §3.1.2). The hypothesis that the form *ma-utus occurred is supported by the derived transitive Longgu, Sa'a mousi below, but the widespread presence of reflexes of *motus suggest that it occurred as an alternant in POc:

POc *ma-utus, *motus 'become, be broken off, severed'

Adm:	Loniu	mot	(VI) 'be broken, break'
PT:	Motu	motu	'break, as a string' (not applicable to e.g.
			pottery, a spear)
MM:	Nakanai	ma-utu	'torn'

MM:	Tolai	mutu	(VT) 'cut out, as a canoe etc.; to cut up as timber; to cut down'
SES:	Bugotu	(ka)moto	(ADJ) 'cut off, broken off short'
SES:	Lau	mū	(VI) 'cease, be discontinued; separated, severed'
		moi	'broken'
SES:	Sa'a	тои	(VI) 'be broken off'
NCV:	Mota	mut	'maimed in foot or hand'
		mwot	'cut, break, stop'
NCV:	Raga	mosi	'broken'
NCV:	Lewo	musu	'broken, cut off'
Pn:	Tongan	motu	'break, become separated'
Pn:	Samoan	motu	'severed'
Pn:	Mangareva	motu	'be severed'
Pn:	Tahitian	motu	'be cut, severed'
Pn:	Hawaiian	moku	'sever, cut'

Note that the Malaita-Makira languages of SES have formed a new transitive verb *motus-i-'break off' from the intransitive *ma-utus:

SES:	Longgu	mousi-	'cut, break, pull in two; cut clean away, cut right off'
SES: SES:	Sa'a Arosi	mousi mosi	(VT) 'break off' 'break'
SES:	Lau	mūsi	(VT) 'tear, tear off, separate, sever, cut or break off'

Although the forms attributed to POc *muju 'be terminated' look remarkably similar to those attributed to *ma-utus, the differences in form and meaning are consistent enough to require a separate reconstruction:

POc *muju 'be clipped off', *mujuki- 'clip off (protruding growth close to the surface)'

Adm:	Lou	mut	'cut'
SES:	Lau	mu-mudu	'a fragment, portion, crumb, scrap, chip'
SES:	Arosi	modu	'cut off the end'
Fij:	Wayan	musuki-	'cut s.t. short; cut or break s.t. off in the middle, curtail, interrupt' (OBJ what is cut off)
Fij:	Bauan	musu	'be broken crosswise, be cut crosswise'
1000		musuk(a)	'break crosswise, cut crosswise'
Pn:	Tongan	mutu	'cut off'
Pn:	Samoan	mutu	'cut off'
Pn:	Mangareva	mutu	'cut off, interrupted, be silent'
Pn:	Tahitian	mutu	'cut off, ended'
Pn:	Hawaiian	muku	'cut off, ended'
cf. als	0		
Fij:	Wayan	mudu muduki-	'be cut off, amputated, severed, cut short' (VT) 'cut s.t. off, amputate; bring s.t. to an end' (also <i>muduvi</i> , but in less common use)
Fij:	Bauan	mudu muduk(a)	'be cut off, ceased, ended, amputated' (VT) 'cut off, cause to cease'

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NNG:	Manam	?oti(ŋ)	'cut off taro tops for planting'
MM:	Nakanai	koti	'cut or shave off hair (with obsidian)'
MM:	Siar	kot	'cut'
MM:	Nehan	kot	'cut'
SES:	Gela	goti	'cut off, as taro head in planting'
SES:	Bugotu	yotihi	'break s.t. off'
SES:	Arosi	?oi	'cut off taro tops for planting; to scrape off or peel with a shell; break, as the point of a spear'
SES:	Lau	?oi	'break off'
SES:	Kwaio	?oi	'break'
SES:	Sa'a	o?i	'break' (mao?i 'broken in two')
NCV:	Kiai	koti(a)	'cut'
SV:	Lenakel	(a)kəs	'cut (hair)'
Mic:	Woleaian	xos	'cut a tuber top'
Fij:	Wayan	koti(vi)	'clip, shear, cut s.t. short (hair, cloth +)'
Fij:	Bauan	koti	'clip, shear, cut off small things (esp. with a shell or sliver of bamboo)'
Pn:	Niuean	koti	'pinch, snip'
Pn:	Hawaiian	?oki	'cut, clip'

POc *koti[-] 'cut off (hair, taro tops +)'

POc *paRi[-] 'cut or lop off branches' (ACD)

NNG:	Mangseng	var	'cut, clip'
MM:	Nakanai	vali	'cut, as wood or a leaf from a tree; remove all
			the limbs from a tree'
SES:	'Are'are	hari	'lop off branches, cut off a bunch of bananas,
			betelnuts'
SES:	Sa'a	hali	'lop off branches'
SES:	Arosi	hari	'tear, tear off, pull off a cluster of fruit'
Fij:	Rotuman	fai	'cut or chop down (tree or branch)'

POc *p^wuti[-] 'cut off'

NNG:	Malai	(i)but	'cut (meat +)'
NNG:	Megiar	(i)f uti	'chop'
MM:	Madak	pit	'cut (meat +)'
MM:	Halia (Haku)	putu	'chop'
MM:	Babatana	puti	'cut (string)'
SES:	Gela	pusi	(VT) 'cut off'
SES:	W. Guad.	vusi	'cut (string)'
SES:	Longgu	pusi-pusi	'cut (hair with scissors)'

PEOc *polos, polos-i 'cut across, sever' (ACD)

SES:	Lau	folo	'across; cross over; cut across, sever'
SES:	Kwaio	folosi(a)	'cut crosswise, across'
SES:	Sa'a	holo, holosi	'cross, divide; cut a piece off, sever a pig's head'
SES:	'Are'are	horosi(a)	'cross'
SES:	Arosi	horo, horosi	'divide, sever, cut off'
NCV:	Mota	wolos	'cut across, cut, chop in lengths'

POc *siba 'cut, slice'

MM:	Nakanai	sipa	'cut, of hair; shred leaves for greens'
NCV	: Mota	sipa	'slice, pare (e.g. pumpkin, breadfruit)'
NCV	: Raga	hiba	'peel with knife'
Mic:	Woleaian	tef a(li)	'cut it, slice it'
Mic:	Carolinian	tīp	'piece, slice, chunk'
Mic:	Ponapean	dipe	'slice, as breadfruit or taro'
cf. al	so		
Fij:	Wayan	ðebe(ti)	'cut s.t. open (esp. soft or flexible things), cut s.t. off or up, slice s.t., dissect'
Fij:	Bauan	ðebe(ta)	'cut in thin slices (bread, cake); cut in two (cloth, rope, stem of bunch of bananas); circumcise, superincise (polite term)'

3.2 Cut into two or more pieces

The reconstructions below are separated from those of splitting in §3.8 largely because their meaning entailed cutting rather than other modes of separation.

PAn **tektek* 'hack off' (Blust 1977) POc **toto*(*k*) 'cut, chop'

NNG:	Lukep	tota	'cut'
NNG:	Takia	tut-	'pound, knock to bits, cut bush, cut off'
NNG:	Poeng	toto	'cut (meat)'
NNG:	Bam	tuot	'cut (meat +)'
PT:	Iduna	toto(na)	'cut (hair, grass skirt, string, pandanus +)'
MM:	Nakanai	toto	'cut across'

POc *toki 'cut, chop'

NNG:	Tuam	to-togi	'cut (meat +)'
NNG:	Manam	to-toki	'cut down, cut off'
MM:	Tolai	tok	'cut a chip'
NCV:	Nguna	tooki	'axe'
Fij:	Wayan	toki	'cut small pieces out of s.t. with a hoeing or pecking movement (OBJ: what is cut)'
Pn:	Tongan	toki	'adze, axe'
Pn:	Samoan	to?i	'adze, axe'
Pn:	Maori	toki	'adze, axe'

POc *p(")asi[-] 'cut up, cut off, cut lengthwise'

Adm:	Mussau	pasi	'cut (meat +), split (wood)'
NNG:	Takia	pasi	'cut away tree branches'
MM:	Torau	pa-pasi	'chop'
SES:	Bugotu	pahe	'cut, cut off'
Fij:	Wayan	vasi	(VT) 'cut s.t. to a point; cut off the bark'
Fij:	Bauan	vasi	'split firewood'
-			

Pn:	Rennellese	hasi	'pearlshell used as spoon; to cut with such'
Pn:	Takuu	vasi	'split, cut lengthwise'
Pn:	Nukuria	hasi	'cut off taro corm from stalk'
cf. als	so:		
PT:	Motu	vasiga	'flint used as a knife'

PMP *peka 'separate, disconnect' (ACD)

POc *poka 'divide, separate, cut up'; PMM 'cut up (pig +)'

•		•	
Adm:	Drehet	p ^w ok	'(glass, wood +) crack open, split open'
MM:	Bulu	poka	'cut (meat +)'
MM:	Tolai	poka, poko	'cut, cut up (pig +)'
MM:	Sursurunga	pok(oi)	'cut up (pig +)'
MM:	Tangga	pok	'cut' (e.g. pok suaak 'cut down bamboo'; pok-pa
			'cut off'; <i>pok-pukti</i> 'cut in half'; <i>pok kalut</i> 'cut wood')
MM:	Nehan	pok	'cut (meat +)'
SES:	Gela	voka	'divide, separate, divorce'
SES:	Tolo	poha	(VT) 'hammer, smash (with a stone)'
cf. also):		
Fij:	Wayan	boka(ti-)	'split or cut s.t. in half with a blow; cut s.t. up in
			this way (e.g. coconut, breadfruit, wood)'
Mic:	Carolinian	pax	(VI) 'be cut, split'

The two items below, POc *taba(s), *taba(s)-i- 'cut' and POc *tapa(s), *tapas-i- 'cut into, incise', both appear to reflect PMP *tabas 'chop down, cut away'. Although both are formally good reflexes of PMP *tabas (Ch. 2, §2.4), it is very rare to find two POc reflexes of a PMP item which differ from each other in the voicing of their medial consonant, and we are unable to explain this.

PMP *tabas 'chop down, cut away'³ POc *taba(s), *taba(s)-i- 'cut'

NNG:	Adzera	rab-	'chop, hew, cut down'
PT:	Dobu	daba	
MM:	Tolai	taba	'cut out of wood, carve as an image'
Mic:	Kiribatese	tapa	'cut, split'
Mic:	Ponapean	sap	'cut into pieces'
Mic:	Woleaian	tapa	'cut (usually leaves)'
Pn:	Rennellese	tapasi(a)	'be cut, have a cut (as feet on coral)'
Pn:	Rarotongan	tapa?i	'split, cleave lengthwise'
Pn:	Tuamotuan	tapahi	'cleave apart, sunder, cut'
Pn:	Maori	tapahi	'cut, chop'

³ Blust (ACD) reconstructs PWMP **tabas* 'cut away underbrush'. The reconstruction of PMP **tabas* is supported both by the Oceanic reflexes listed here and by Buru (CMP) *taha* 'fell s.t., cut down s.t. that is standing vertically'.

NNG:	Bing	taf a(hat)	'break in the middle'
PT:	Muyuw	tav	'cut down the middle'
MM:	Patpatar	tahe	'split open (nuts with stone, knife +)'
MM:	Teop	tava-tava	'scar from decorative cuts, tattoo'
SES:	Gela	tavahi	'castrate'
SES:	Lau	afa	'cut, incise, mark, notch'
SES:	Arosi	aha	'cut, sever, score, notch'
NCV:	Mota	tov	'begin cutting a canoe into shape'
NCV:	Raga	tava	'cut'
Mic:	Woleaian	tefa	(VT) 'cut, slice'
Mic:	Trukese	safeti	'peel or take the skin from a roasted breadfruit'
Fij:	Bauan	tavā	(of flesh of living or dead body) make a long
			but superficial cut' (Milner); (VT) 'cut with a
			knife, as meat from a carcass' (Capell)
Pn:	Tongan	tafa	'cut open, incise (boil, abscess)'
Pn:	Samoan	tafa	'lance, cut open (a boil); cut into portions, carve'

POc *tapa(s), *tapas-i- 'cut into, incise'

3.3 Shape by cutting

The two verbs below refer to cutting wood or shell to shape it or carve it in the production of artefacts such as canoes or shell inlays in carvings.

The reconstruction of POc $*sap^{w}i$, as distinct from *sapi (§3.7), is justified by the semantic contrast between the two sets, and by unambiguous reflexes of POc $*-p^{w}-$ (Tawala, Dobu, Tolai, Bauro -p-, Port Sandwich $-v^{w}$ -).

POc *sap^wi[-] 'carve into shape, trim (with axe or adze), whittle'

Adm:	Loniu	sah	(VT) 'chop, carve, sharpen, whittle'
		sehi	(VT) 'chip, carve, sharpen, whittle'
		sehi-sah	(VI) 'carve, whittle'
NNG:	Mangap	sap	'chop, hew'
NNG:	Adzera	saf-	'cut'
NNG:	Mapos Buang	sap	'cut, slice, slash; to cut across the grain at an angle with an adze or knife'
PT:	Tawala	hapi	'chop, hew'
PT:	Dobu	sapi	'make rough cuts on log before shaping it for canoe planks'
PT:	Muyuw	sav	'cut bushes with a bush knife'
MM:	Tolai	api	(VT) 'dress wood by chipping it; to level'
SES:	Bauro	tapi-	'cut (wood)'
NCV:	Port Sandwich	sav ^w i	'carve, cut flat with axe, trim, sharpen'
NCV:	Paamese	(mu)sahi	'carve, cut into shape'
NCal:	Nemi	t ^h avi	'chop, hew'

POc *kala(s), *kalas-i- 'shape s.t. by cutting, cut s.t. out'

MM:	Tolai	kala	(VT) 'cut out as a canoe'
SES:	Tolo	kala	'cut, as with a knife, chop'

SES:	Longgu	kalasi-	'whittle, cut off little bits of wood with a knife'
SES:	Sa'a	kala	'cut shell (for inlay, fish hook +)'
SES:	Arosi	kara	'cut, as pieces of nautilus shell for inlay'

3.4 Incise the skin, circumcise

The two verbs below referred to cutting into parts of the human body. The PEOc term **tepe* almost certainly referred to circumcision. If Motu *se-sehai* is cognate, then the term is of POc antiquity, but both its form and meaning become less clear.

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POCT	1 ten	1-1-	Slice	(flesh),	CIRCUM	1CISE'
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PT:	Motu	se-sehai	'bore or pierce under the surface'
SES:	Gela	teve	'cut out a piece of flesh, flay'
NCV:	Mota	teve	'cut with a drawing motion'
NCV:	Raga	teve(na)	'penis'
NCV:	Paamese	tehe	'cut, slice; circumcise'
SV:	Anejom	(a)thi(i)	'cut s.t. off s.t. else'
Fij:	Bauan	teve, tevek(a)	'circumcise'
Pn:	Tongan	tefe	'circumcise'
Pn:	Samoan	tef e	'circumcise'
Pn:	Tahitian	tehe	'superincise, circumcise'

PEOc *soni, *sonit-i- 'incise, cut into'

Arosi	toŋi	'prick a boil'
Wayan	soni(ti)	'cut s.t. open, make a small cut in (body part)'
Bauan	soni(ta)	'make a small incision, as for piercing a boil'
Tongan	soni	'make a small incision, lance'
Samoan	soni	'chop, cut up'
Tahitian	ho-honi	'nibble, bite'
Tuamotuan	honi	'nibble, bite, scrape out with teeth'
	Wayan Bauan Tongan Samoan Tahitian	Wayan soni(ti) Bauan soni(ta) Tongan soni Samoan soni Tahitian ho-honi

3.5 Other cutting verbs

The two verbs reconstructed below referred to cutting, but the glosses of their reflexes do not allow us to reach clear conclusions about the kinds of cutting they were used for.

PMP *qiris 'cut, slice' (ACD) POc *qiri(s) 'cut'

PT:	Misima	il	'strip (bark from wood, leaves from frond)'
MM:	Vitu	yiri	'cut (string +)'
		yiri(via)	'cut (string +)'
MM:	Nakanai	hili(li)	'strip off (leaves)'
SES:	Gela	yiri	'cut with sawing motion'
SES:	Lau	?iri	'chop, cut'
SES:	Arosi	kiri	'slice, cut open'

PMP *keleŋ (dbl. *geleŋ) 'cut into pieces' (Blust 1989) POc *kolo(η) 'cut'

MM: SES:	Nakanai Longgu	olo, ololo olo(?ia)	<pre>'cut, scarify' (common tattoo word) 'cut (string)'</pre>
SES:	Lau	?olo(fita)	'cut up (fruit +)' (<i>fita</i> 'split, divide')
SES:	'Are'are	oro(ia)	'cut the head off'
SES:	Sa'a	olo	(VT) 'cut the ends off' (olo pwau 'cut hair')
SES:	Arosi	?oro	'cut up, as for planting'
cf. als	50		
PT:	Motu	koro	'break off twigs or blaze trees to mark the road; to notch, carve'

3.6 Sharpen, pare, shave

POc *supi[-] 'pare, shave, sharpen'

Adm:	Mussau	supi	'sharpen the point (of a stick +)'
NNG:	Kove	supi-	'sharpen (stick)'
NNG:	Takia	sup	'peeler, made by grinding a hole in a shell until the edge of the hole is razor sharp'
		suwi-	'chop, or chip away; pare, as in paring a piece of fruit with a knife'
NNG:	Mapos Buang	ruv	'sharpen, whittle, peel with knife'
PT:	Motu	duhi	'pare; prepare yams + for cooking'
PT:	Dobu	sui	'shave head, face'
MM:	Nakanai	suvi	'peel (taro)'
MM:	Tabar	cip	'peel'
MM:	Tolai	ip	'peel, as taro'
MM:	Nehan	hui	'peel'
SES:	Lau	sufi	'shave with a razor, cut hair'
SES:	Kwaio	sufi	'shave, cut hair'
SES:	'Are'are	suhi-	'shave the head, beard; scrape'
SES:	Sa'a	suhi	'shave'
NCV:	Fortsenal	zivi	'knife'
Fij:	Wayan	suvi(ti)	'cut s.t. into pieces, esp. food'
Fij:	Bauan	suvi	'cut in pieces, chiefly of yams and breadfruit, generally lengthwise, but also of other food'
		sivi	'cut out with an adze'
		ðivi	'cut or pare off, sharpen a stick or pencil'
Pn:	Niuean	hifi	'shave off hair, clip (s.t.)'
Pn:	Tongan	hifi	'cut up, carve, slice, pare, trim edges of wood'
Pn:	Tikopia	sifi	'make shavings, whittle'

For similar unexplained fronting of the vowel in Central Pacific languages see also POc *suka 'make fire with fire-plough (§2.3).

PAn ?*tazim 'sharpen'

Adm:`	Nauna	tic	'sharpen'
NNG:	Malalamai	taziŋ	'sharpen (stick)'
NNG:	Wogeo	taji	'sharpen (stick)'
NNG:	Kairiru	(ma)taj	'sharp'
SV:	Anejom	(a)tes	'chip'
Mic:	Woleaian	taim(i)	'sharpen'
Mic:	Marshallese	jem-jem	'sharpen'
Mic:	Carolinian	seimi	'sharpen a blade or other object'
Fij:	Bauan	tasi	'scrape, shave, peel food (chiefly tapioca),
			before cooking'
Pn:	Tikopia	tasi	'cut, shave'
Pn:	Tuamotuan	tāhi	'scrape'
Pn:	Maori	tahi	'trim wood'

POc *tajim, *tajim-i- 'sharpen to a point, trim (wood)'

3.7 Separate flesh from shell, skin from fruit, bark from tree, leaves from branch or midrib

This set of meanings is dealt with together because we often find Oceanic verbs with two or more meanings from this list. That is, POc seems to have verbs whose meaning was essentially 'separate one layer or part of an object from another', where the object was usually a plant, fruit or vegetable.

Not surprisingly, there is an overlap between these meanings and some of those of verbs in other sections of this chapter. For example, POc *kara(s), *karas-i- 'peel or scrape skin off tubers' (§2.2) and POc *supi 'pare, shave, sharpen' (§3.6) also refer to peeling.

We may divide the verbs in this subsection into three groups:

- POc *kulit, *kulit-i- 'skin', derived from the noun *kulit in a way analogous to the English verb to skin;
- 2) the three formally similar verbs *isi, *sisi and *Risi(q);
- 3) verbs with meanings related to those in (2), namely:

POc	*sali	'strip leaves from branch, frond'
PEOc	*sapi	'strip (leaves); pluck (fruit, nuts)'
POc	*papak	'peel bark'
POc	*kati	'husk with the teeth'; PEOc *keti
POc	*p(^w)ili	'peel by hand (fruit, cooked food)'.

POc *tosi 'score, split, pull apart lengthwise' is included here because it denotes an act preparatory to the splitting of, e.g., pandanus leaves, an action denoted by reflexes of some of the verbs listed above.

PAn *kulit (N) 'skin'; (V) 'peel, remove skin of s.t.' POc *kulit, *kulit-i- (N) 'skin'; (V) 'peel, remove skin of s.t., bark (a tree)'

NNG:	Sengseng	kul	'remove a bandage or shoes; come undone, of
			s.t. wrapped'
NNG:	Manam	kuli	'peel'

PT:	Dobu	kuli-kuli	'rash on skin'
MM:	Tolai	kulit	(V) 'peel off, remove bark, remove skin'
MM:	Simbo	guli, guli-	(V) 'skin, pare skin off'
SES:	Gela	guli, guliti-	(V) 'skin, bark (shin or a tree +); take the scab
			off a sore'
SES	Arosi	?uri	(V) 'peel'
Fij:	Bauan	kuli	(N) 'skin, bark, peel'
		kulit-	'peel cooked taro or food cooked in water; strip
			off the skin or bark of a tree'

The three items below have obvious formal and semantic similarities. The reconstructed forms and meanings are:

POc *isi[-]	'scoop out (flesh from coconut +); peel off (skin, bark +)'
POc *sisi[-]	'scoop out (flesh from coconut +); peel off (skin, bark +)'
POc $*Risi(q)$	'remove by tearing, tear or peel off (bark +) in long narrow strips'

Blust (ACD) notes CMP cognates of POc **isi* (Roti *isi* 'peel onion +, scale fish', Kei *isi(n)* (VT) 'skin, peel off'), supporting the gloss 'peel off (skin, bark +)'. PAn had a noun **isi*? whose meanings included 'flesh (of humans, animals, fruits, tubers); contents; blade of a knife; inhabitants'. It is possible that POc **isi*, at least in its meaning 'scoop out (flesh from coconut +)', was derived from this noun. Thus **isi* is fairly well supported by external evidence, as well as the Oceanic reflexes listed below. Since coconut flesh is grated straight out of the shell, the Molima and Nakanai reflexes are easily derived semantically from 'scoop out (flesh from coconut +)'.

POc *Risi(q) is also supported by external (Philippine) cognates with meanings associated with tearing. POc *sisi and *isi are supported by CMP cognates. Since POc *isi and *sisiappear to be reconstructable with the same meaning, we suspect that the latter is simply derived from the former by reduplication. However, several of their reflexes have glosses associated with stripping bark from a tree, and we wonder whether there has been some conflation with reflexes of *Risi(q), which clearly meant 'remove by tearing, tear or peel off (bark +) in long narrow strips' (in SES languages, reflexes of *Risi(q) have undergone a meaning shift to 'cut a piece off s.t.').

Of the Polynesian reflexes, we have, on grounds of meaning, attributed Rennellese *isi* 'scoop, scrape (coconut meat from shell)' to POc **isi* but Samoan *isi* etc to POc **Risi(q)*.

PCEMP **isi* 'peel, strip off; scrape (coconut)' (ACD) POc **isi[-]* 'scoop out (flesh from coconut +); peel off (skin, bark +)'

NNG:	Poeng	isi	'strip bark from tree or vine'
PT:	Molima	isi, isi-	'grate (on a grater), rub (s.t.)'
PT:	Motu	idi	'prise meat from coconut, press or squeeze with
MM: Pn:	Nakanai Rennellese	isi isi	an implement' 'scrape, grate (coconut); scrape wood smooth' 'scoop, scrape (coconut meat from shell)'

PCEMP *sisi 'peel off (skin, bark +)'4

POc *sisi[-] 'scoop out (flesh from coconut +); peel off (skin, bark +)'

NNG:	Gedaged	sisi	'pull up (off), peel off, husk, take off (one's clothes)'
NNG:	Kove	sisi	peel off bark or skin, strip leaves from frond, remove the midrib of a leaf'
NNG:	Manam	sisi(?)	(V) 'peel, pare (sweet potatoes, bananas +), bark (tree)'
NNG:	Numbami	sisi	'peel with teeth'
PT:	Dobu	sisi	'scrape baked food'
MM:	Maringe	hihi	'pry apart, separate by prying (e.g. copra, tin can)'
SES	Gela	hihi	(VT) 'scoop out the white flesh of a coconut; push out, prise out; open (tin +)'
NCV:	Mota	sis	'rub or knock off skin or bark, flay'
Fij:	Rotuman	sisi	'peel or strip off'
Fij:	Bauan	ðiði	'separate pulp from coconut'
Pn:	Tongan	hihi	'scoop out, gouge out (clams)'

PMP **Risi*[q] 'tear, split, cut' (Blust 1983–84a, ACD)

POc *Risi(q) 'remove by tearing, tear or peel off (bark +) in long narrow strips'

rips), esp.
eaf +); cut rk fibre); hands
f a tree'
, remove'
1

POc *tosi was evidently used of the action of scoring something with a pointed instrument, e.g. as a preliminary to splitting (i.e. *Risi(q) above) pandanus leaves.

Evidence for reconstructing a PCEMP etymon in addition to POc is Buru (CMP) *sisi-k* 'cut, peel bark off for further use'.

PAn *testes 'tear, tear up' (Blust 1977) POc *tosi[-] 'score, split, pull apart lengthwise'

SES:	Arosi	osi	'cut, score'
SES:	Lau	osi	'pull to pieces, as a house'
Fij:	Wayan	toði-	'cut (e.g. pandanus leaves) into fine strips, trim, cut thorns off'
Fij:	Bauan	toði(a)	'remove thorns of <i>voivoi</i> pandanus leaves with a shell; split <i>voivoi</i> leaves in long narrow strips with a shell; plane board or plank away from oneself with a sharp blade or edge used endwise'
Pn:	Emae	tosi(a)	'split pandanus leaves for weaving'
Pn:	Tongan	tohi	'make mark or design on'
Pn:	Samoan	tosi	'score, scratch, mark; tear in strips without quite separating'
Pn:	Tahitian	tohi	'score, chisel'
cf. als	0		
MM:	Maringe	tohi	'peel off skin with a knife, as in peeling potato; cut back and forth with a knife, as in cutting bread'

POc *sali[-] 'strip leaves from branch, frond'

NNG: SES:	Lukep Gela	sali sali	'strip leaves from a branch or palm frond' 'tear downwards'
SES:	Arosi	tari	'strip off'
SES:	Sa'a	tari (sao)	'split the sides of sago palm leaves (<i>sao</i>), leaving the rib for use as a bird arrow'
NCV:	Paamese	salī	'trim leaves from cane'

The contrast between PEOc *sapi and POc *sap^wi 'carve into shape, trim (with axe or adze), whittle', is referred to in §3.3. Note, however, that Gela sapi formally reflects *sap^wi rather than *sapi, and is included below on semantic grounds:

PEOc *sapi[-] 'strip (leaves); pluck (fruit, nuts)'

SES:	Gela	sapi	'pluck fruit from a bunch; strip off leaves'
SES:	Lau	tāfi	'lop off; take off midrib of sago palm leaf'
SES:	'Are'are	tahi	'strip off leaves; cut into slices'
SES:	Sa'a	tahi	'pluck hanging vines'
SES:	Arosi	tahi	'cut, cut off; strip off'
NCV:	Mota	sav	'pluck (hair, feathers)'
Fij:	Wayan	savi	'remove s.t. by a blow'

PMP *bakbak 'peel off, of skin; remove bark of tree' POc *papak 'peel bark'

MM: Tolai	papak	'peel off bark, skin (also applied to peeling off
		lime, paint +)'
SES: Gela	papa	'chip, chips'

PMP *gatgat 'chew up' (Blust 1977) POc *kati[-] 'husk with the teeth'

Adm:	Titan	at	'chew, bite'
NNG:	Kaiwa	ati	'bite'
MM:	Tolai	kat	'gnaw, pull the husk of a coconut or betelnut with the teeth'
SES:	Tolo	yeti(a)	'bite off the husk of betelnut'
Mic:	Woleaian	gei-gei	'bite with teeth, husk coconut husks into smaller layers'
Fij:	Boumaa	?ati[-]	'bite'
Pn:	Niuean	eti	'bite off, as rind of sugarcane +'
Pn:	Rennellese	?eti	'husk a coconut'
Pn:	Mangareva	eti	'tear with teeth'

The item above shows a sporadic change from POc *a to PEOc *e. This resembles the change found in some reflexes of POc *kali, *keli 'dig' (Ch. 5, §5.4), but in the latter case forms with both vowels must be reconstructed for POc.

POc *p(")ilit 'peel by hand (fruit, cooked food)'

NNG:	Mangap	pīli	(V) 'husk (corn, pitpit +)'
NNG:	Kairiru	pil	'peel skin off (cooked vegetable) by hand' (PL
			OBJ)
		pli	'peel skin off (cooked vegetable) by hand' (SG
			OBJ)
MM:	Notsi	pili	'peel (sweet potato +)'
NCV:	Mota	wil	'peel, turning the fruit over in peeling'
SV:	Anejom	hujis	'peel, skin'
SV:	Sye	(a)vli	'peel'
SV:	Ura	(ala)vli	'peel'
SV:	Kwamera	(a)veri	'peel'

3.8 Split into two or more sections

There are a number of verbs of splitting, apparently distinguished by the exact nature of the action, which in turn is often dependent on the texture of the object being split. POc $*p(^w)olaq/*p^walaq$ seems to have been the generic term for splitting or sometimes tearing something into two. It was evidently the verb used of splitting a log for firewood. POc *potak, *potak-i- was the verb used of splitting something, e.g. a coconut, open. POc *kakas, *[ka]kas-i- and $*p(^w)asi$ were perhaps more generic terms for 'split', but it is difficult to be sure of this from the available reflexes. Its Longgu and Bauan reflexes suggest that POc *pisak may have referred to splitting wood finely. POc *wakaq has few reflexes, but they refer to splitting or cutting up items less hard than wood. Reflexes of POc *Risi(q) (§3.7) sometimes also mean 'split', but this was not its primary meaning.

PMP *belaq 'split (s.t.); part of something split' (ACD) POc * $p(^{w})olaq$, * $p(^{w})ola(q)$ -*i*- 'split (wood +)'

MM:Nakanai (sul)pola(sul)pola (split (wood)MM:Nakanai (sul)pole'split (wood)'MM:Meramera (val)pole'split (wood)'MM:Nehan polaka'split, break in two, tear in two'SES:Lau folafola'split, break in two, tear in two'SES:Lau folahoro'divide, sever, cut off'Fij:Bauan kola, kola(a)'split wood with wedges, break open a seed pod'cf. also:-'split wood with wedges, break open a seed pod'Fij:Bauan bola'be cut open, split down the middle (e.g. melon, shellfish); have a long incision made (in surgery)'Fij:Bauan bola(a)'cleave with an axe'POc*p*alaq 'split (wood +)''NNG:Kove (i)pala (i)pala ('split (wood +)'NNG:Gitua pala ('split' (NB -rau-pala, -sis-pala, -tara-pala: different manners of splitting)NNG:Lukep pala ('split, cleave, chop open, divide'NNG:Gedaged fale (VT) 'split into strips'PT:Misma marak ('split (wood)'MM:Vitu (yutu)valay(i) 'split (wood)'MM:Pola pala ('split, cleave, chop open, divide'MM:Vitu (yutu)valay(i) 'split (wood)'MM:Pola pala ('split, cleave, choo open, divide'MM:Vitu (yutu)valay(i) 'split (wood)'MM:Bola pala ('cut (cond, cut straight across' pala-pala(i) 'straight line of cloth which has been cut'SES:Sa'a p''a 'ta 'tra	PT:	Motu	pola(i)	(VT) 'split a log into two or four pieces'
MM:Meramera polaka(val)pole polakasplit (wood)' split,'MM:Nehan polaka'split,'SES:Lau fola'split, break in two, tear in two'SES:Arosi horo'divide, sever, cut off'Fij:Bauan kola, kola(a)'split wood with wedges, break open a seed pod' cf. also:Fij:Wayanbola'be cut open, split down the middle (e.g. melon, shellfish); have a long incision made (in surgery)'Fij:Bauanbola'be cut open, split down the middle (e.g. melon, shellfish); have a long incision made (in surgery)'Fij:Bauanbola(a)'cleave with an axe'POc*p*alaq 'split (wood +)''split (wood +)'NNG:Kove(i)pala'split (wood +)'NNG:Gitua palapala'chop'NNG:Mangap paalapala'split' (NB -rau-pala, -sis-pala, -tara-pala: different manners of splitting)NNG:Gedaged falefale'split, cleave, chop open, divide'NNG:Poeng pale(VT) 'split into strips'PT:Misima map"al'strip (sago or coconut leaves from main leaf stem)'MM:Vitu (yutu)valay(i)'split (wood)'MM:Bola pala- pala-pala'cut (meat +)'MM:Bola pala- pala-pala(i)'straight line of cloth which has been cut'SES:Longu pala- pala-pala(i)'straight line of cloth which has been cut'SES:Sa'a p"a tut cut cody, cut wood or other relatively large objec			• • •	
MM:Nehanpolaka'split'SES:Laufola'split, break in two, tear in two'SES:Arosihoro'divide, sever, cut off'Fij:Bauankola, kola(a)'split wood with wedges, break open a seed pod'cf. also:				
SES:Laufola'split, break in two, tear in two'SES:Arosihoro'divide, sever, cut off'Fij:Bauankola, kola(a)'split wood with wedges, break open a seed pod'cf. also:Fij:Wayanbola'be cut open, split down the middle (e.g. melon, shellfish); have a long incision made (in surgery)'Fij:Bauanbola(a)'cleave with an axe'POc $*p^walaq$ 'split (wood +)'NNG:KoveNNG:Gituapala'chop'NNG:Gituapala'chop'NNG:Lukeppala'split, cleave, cut, split into two'NNG:Gedagedfale'split, cleave, chop open, divide'NNG:Poengpale(VT) 'break, cut, split into strips'PT:Misima p^wal 'strip (sago or coconut leaves from main leaf stem)'MM:Vitu(yutu)valay(i)'split (wood)'MM:Bilurpala'cut grass'SES:Longupala'cut cloth; cut straight across'mala-pala(i)'straight line of cloth which has been cut'SES:Sa'a $p^w\bar{a}$ Wic:CarolinianfelaWic:Carolinianfela(VT) 'cuto, psplit, cut wood or other relatively large objects with machete, axe or hand'				•
SES:Arosihoro'divide, sever, cut off'Fij:Bauankola, kola(a)'split wood with wedges, break open a seed pod'cf. also:Fij:Wayanbola'be cut open, split down the middle (e.g. melon, shellfish); have a long incision made (in surgery)'Fij:Bauanbola(a)'cleave with an axe'POc *p ^w alaq 'split (wood +)'NNG:Kove(i)palaNNG:Gituapala'chop'NNG:Margappaala(VT) 'break, cut, split into two'NNG:Margappaala(VT) 'break, cut, split into two'NNG:Gedagedfale'split, cleave, chop open, divide'NNG:Gedagedfale'split, cleave, chop open, divide'NNG:Poengpale(VT) 'split into strips'PT:Misima p^wal 'split (wood)'MM:Bilurparak'split (wood)'MM:Bolapala'cut (meat +)'MM:Patpatarpaa-pal'cut grass'SES:Longupala-'cut cloth; cut straight across'pala-pala(i)'straight line of cloth which has been cut'SES:Sa'a p^wa 'straight line of cloth which has axe'Mic:Carolinianfela(VT) 'cut, hew with an axe'Mic:Carolinianfela(VT) 'cut, hew with an axe'				•
Fij:Bauankola, kola(a)'split wood with wedges, break open a seed pod'cf. also:Fij:Wayanbola'be cut open, split down the middle (e.g. melon, shellfish); have a long incision made (in surgery)'Fij:Bauanbola(a)'cleave with an axe'POc *p ^w alaq 'split (wood +)'NNG: Kove(i)pala'split (wood +)'NNG:Gituapala'chop'NNG:Mangappaala(VT) 'break, cut, split into two'NNG:Gedagedfale'split (NB -rau-pala, -sis-pala, -tara-pala: different manners of splitting)NNG:Gedagedfale'split (vood)'NMG:Poengpale(VT) 'split into strips'PT:Misimap ^w al'srlit (wood)'MM:Vitu(yutu)valay(i)'split (wood)'MM:Bilurparak'split (wood)'MM:Patpatarpaa-pal'cut grass'SES:Longupala-'cut cloth; cut straight across' pala-pala(i)SES:Sa'ap ^w ā'straight line of cloth which has been cut'SES:Sa'ap ^w ā'break, crack; hatch'MicWoleaianfela(VT) 'cut, hew with an axe'Mic:Carolinianfela(VT) 'chop, split, cut wood or other relatively large objects with machete, axe or hand'				-
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large objects with machete, axe or hand'			•	
	Mic:	Carolinian	fala	
fal (VI) 'carve, do adze work'			- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
			fal	(VI) 'carve, do adze work'

The forms above suggest the following history. The POc form was (on MP evidence) *polaq. Initial *po- first became *p^wo- through spread of lip-rounding from vowel to consonant, then *p^wo- dissimilated to *p^wa-. Either each of these forms occurred in the speech of the POc community, or (less plausibly) independent parallel changes occurred in various daughter languages. Bauan *bola* also points to a POc doublet **bolaq* (Ch. 2, §3.1.3).

PMP *beTak 'split, cleave' (Dempwolff 1938)

(1) POc *potak, *potak-i- 'crack open, split open (nuts, coconuts +), make incision'

Adm:	Loniu	pot	(VI) 'be broken, be chopped down'
Adm:	Titan	pot	(VI) '(wooden objects) be broken'

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NNG:	Malasanga	pota	'split (wood)'
NNG:	Manam	ota?	'crack s.t. open (coconuts, canarium nuts +)'
MM:	Notsi	pət	'chop'
MM:	Теор	potā	'cut open (pig belly); split (open)'
MM:	Varisi	pota	'cut (string)'
SES:	Bugotu	fota	'break, smash up, be broken'
SES:	Tolo	vota	'separate (e.g. strings of rattan)'
SES:	Sa'a	hoa	(VI) 'make an incision in; remove and separate'
		hoai	(VT)
SES:	Arosi	hoa	(VI) 'divide, cleave asunder, separate'
		hoai, hoari	(VT)
NCV:	Mota	wota	'knock, break by knocking'
SV:	Anejom	(a)htak(wai)	'split'

(2) POc *botak, *botak-i- 'crack open, split open (nuts, coconuts +), make incision'

PT:	Motu	bota(i)	'beat, thrash'
Fij:	Wayan	bote(ki)	'split or crack s.t. open'
cf. also	o:		
SES:	Gela	voti	'break open (coconut +), split, split up'
Fij:	Bauan	bete	'break brittle things'

POc *kakas, *[ka]kas-i- 'split'

NNG:	Malalamai	(i)kasa	'split (wood)'
MM:	Ramoaaina	kai	'scrape; point; scratch; chop up small (taro, coconut)'
SES:	Lau	kasi	'adze, chop'
		kakasi	'split open'
SES:	'Are'are	kakā	'tear, split wood'
SES:	Sa'a	kaka	'be torn, to be split'
		kakasi	(VT) 'tear, split'
SES:	Arosi	kaka, kakasi	'split'
cf. also	D:		
SES:	Lau	kakari	'split, chip'
Mic:	Marshallese	kek	'cracked, split'

PMP *biseqak 'split' (ACD) POc *pisa(k), *pisak-i- 'split'

PT:	Dobu	pisa(ri)	'smash'
SES:	Longgu	vita?(ai)	'split (firewood, kindling)'
SES:	Lau	fita	'split, divide'
SES:	'Are'are	hita	'split, hit, struck'
SES	Sa'a	hite	(VI) 'split; to hit, strike, arrive at'
SES:	Arosi	hita	'lightning; thunder; to split; to hit, strike'
			(ma-hita 'split, broken')
Fij:	Bauan	vida(a), vidak(a)	'split, divide by hand' (of thin compact objects)

For other possible reflexes of POc *pisa(k), *pisak-i- 'split', see §7 below.

PMP *wakaq 'split' (ACD)

POc *waka(q) 'cut, split into sections, as yams for planting'

PT:	Iduna	wa?a(na)	'peel off completely (bark, skin)'
SES:	'Are'are	wa?a	'split, cut in sections; yam section'
SES:	Sa'a	wa?a	'be split, cut into sections; to split, divide fish;
			shred, cut up yams for planting' (N 'yam sets')
SES:	Arosi	wa?a	'split' (waka 'sliced portion of yam for
			planting')

3.9 Tear

Verbs of tearing refer basically to forcible separation.

POc *saRe(k) 'become, be torn up, uprooted', *saRek-i- (VT) 'tear off, uproot' (French-Wright 1983: *saRe 'tear')

NNG:	Manam	sare	'tear'
		sereki	(VT) 'tear, cut up'
PT:	Motu	dare	'tear'
MM:	Tolai	are, re	'clear away, as a house or fence'
NCV:	Mota	sare	'tear'
Mic:	Kiribatese	tae	'stripped, extracted, drawn out, defeated, cracked'
		taek(a)	'detach by pulling, uproot'
Mic:	Marshallese	car	'torn off'
Mic:	Ponapean	san-sara-	'uprooted'
		sarek	'uproot, peel, pry'
Mic:	Woleaian	tāri(ŋa)	(VT) 'rip, tear'
Fij:	Rotuman	sae	'open out, separate'
Fij:	Wayan	sei, seiti-	'break (cut, tear) s.t. into two portions'
Fij:	Bauan	se	'rend, tear in two; split, cut or saw lengthwise'
Pn:	Tongan	hae	'tear'
Pn:	Rennellese	sae	'tear, strip, as bark'
Pn:	Maori	hae	'slit'
Pn:	Hawaiian	hae	'tear'

POc *sir(i,e) 'tear in two, tear into strips'

Adm:	Lou	sir	'tear'
NNG:	Takia	sila-sile	'tear in two'
PT:	Misima	hil	'cut into strips; tear into strips'
MM:	Nakanai	sile	'strip off bark; shred leaves; tear; cut (hair); pull down'
MM:	Tolai	ir	'split, of small things'
MM:	Teop	siri	'tear, rend'
MM:	Tinputz	sī	'tear clothes, leaves'
SES:	Lau	siri	'peel, as a sweet potato'
NCV:	Mota	sur	'shave, cut close'
NCV:	Paamese	sili	'shave'

POc *sika 'split, tear (in strips)'

PT:	Dobu	si?a	'split, tear into strips'
MM:	Patpatar	sik	'strip (bark, skin)'
MM:	Tangga	sia(n)	'split down'
SES:	Lau	seka	'tear, rend'
cf. also:			
SES:	Arosi	sigo	'tear, strip off'

4 Penetration with a pointed object

4.1 Pierce

The terms listed below entail formal and semantic overlaps to a seemingly embarassing degree. However, there is evidence that all these terms occurred in POc: *(su)suRi and *s(u,i)ri, for example, are supported by the existence of contrasting reflexes in Mussau, *sui* and *suli*. Reflexes of the first three are used to refer to sewing, but the POc verb which specifically referred to that activity was none of these, but *saqit (Ch.4, §3.2.1). POc *(su)suRi and POc *sua referred respectively to a bone needle (Ch.4, §3.2.1) and a spear (Ch. 8, §9), but are included here because of their verbal uses and their potential for confusion with the other terms.

*(su)su(k)	'anything used to pierce, prick; (V) pierce, prick, sew'; *suki-
	'pierce, prick, sew (mats)'
*tuRi[-]	'sew, thread, string together'
*(su)suRi[-]	'bone (needle); sew'
*s(u,i)ri[-]	'pierce, poke' (Blust 1998)
*soka, soka-i-	(V) 'pierce; stab, poke hole in (s.t.)'
*sua	(N, V) 'spear (weapon retained in the hand)'
	*tuRi[-] *(su)suRi[-] *s(u,i)ri[-] *soka, soka-i-

PMP *cukcuk, suksuk 'skewer' (ACD)

POc *(su)su(k) 'anything used to pierce, prick'; (V) 'pierce, prick, sew'

NNG: PT:	Gitua Motu	zuzu dudu	'sharpened stick used like cooking fork' 'prod with a stick'
MM:	Nakanai	susu(tola)	'pierce the footprint (kind of sorcery)'
SES:	Gela	susu(ihu)	'hole in septum in nose; nose stick; strengthening sticks through thatch of house ridge' (<i>ihu</i> 'nose')
SES:	Lau	susu	(V) 'point, prick, impale, pierce, poke out with a stick, sting, darn'
NCV:	Mota	sus	'pierce, run through'
Fij:	Rotuman	susu	'sew, prick'

POc *suki[-] 'pierce, prick, sew (mats)'

Adm:	Titan	sus, su-suwi	'sew up, stitch, plait'
Adm:	Mussau	sui	'sew'
NNG:	Bing	suk	'throw (a spear)'
MM:	Siar	suk	'sew'

MM:	Tolai	uk	'thread (beads, tabu +)'
MM:	Maringe	su-suki	'sew with needle and thread'
SES:	Bugotu	suki	'pierce, impale, prick'
	12.00	su-suki	'sew, thread (fish teeth, money beads +)'
SES:	Longgu	suki(boro)	'sew (hem)'
SES:	Lau	sugi, sugi-	'pierce'
SES:	Arosi	su-su?i	'prick, pierce, sew'
NCV:	Nguna	suki	'pierce'
Fij:	Bauan	ðuki(ta)	'loosen ground with a stick'
Pn:	Tongan	hū-hūki(a)	'pricked in many places, having many small
			holes as if pricked'
		hūki(a)	'pricked'
Pn:	Samoan	su?i	'pierce, sew'
Pn:	Tahitian	hu?i	'pierce'

PAn **CuSuR* 'string together (beads +)' (ACD) POc **tuRi[-]* 'sew, thread, string together'

PT:	Motu	turi	'plait an armlet, sew, string fish together'
PT:	Magori	turi	(V) 'thread, sew'
PT:	Lala	kuli(kuli)	'sew (with thread)'
MM:	Vitu	turi	'sew'
MM:	Tolai	tur, turu	'pierce, as spear or arrow'
NCV:	Uripiv	(o)turi	'sew'
SV:	Lenakel	til	'sew, string, put on a string'
SV:	Kwamera	(a)tiri	'sew, weave, string beads, shuffle'
Fij:	Bauan	tui	'lift up with a string'
,		tui-tui-(vaka)	'string together'
Pn:	Tongan	tui	'put in, insert (hand into pocket +); thread
	C C		(needle, beads +)'
Pn:	Tahitian	tui	'thread, string (pierced objects)'
Pn:	Hawaiian	kui	'string (pierced objects, as flowers in a lei, or
			fish): thread (beads)'

POc *(su)suRi[-] 'bone (needle); sew'

Adm:	Mussau	sui	'sew (mats), thatch'
MM:	Roviana	susuri(na)	'bone'
SES:	Sa'a	suli(teru)	'bone needle' (<i>suli</i> 'bone')
SES:	Arosi	suri(ao)	'needle for sewing thatch' (suri-suri 'bone', ao
			'sago palm')
NCV:	Mota	su-sur	'sew, prick'

POc *s(u,i)ri[-] 'pierce, poke' (Blust 1998)

Adm:	Mussau	suli	'sew (mats), thatch'
Adm:	Lou	sur	'pierce'
NNG:	Mangseng	sir	'poke, puncture, drill'
PT:	Misima	huli	'point; poke (e.g. with spear) sand'
Mic:	Trukese	tir	'be inserted, put in between'
Mic:	Woleaian	tiri(-fegirī)	'pierce with it'

PCEMP *seka 'pierce, stab'⁵

POc *soka, soka-i- (VT) 'pierce; stab, poke hole in (s.t.)'

Adm:	Lou	sok(mat)	'shoot'
		sok(tep)	'throw spear, sticks into ground'
NNG:	Kove	soka-soka	'sharpened stake set where a pig jumps'
NNG:	Sio	soe	
NNG:	Takia	sue	
NNG:	Kairiru	uq	
SJ:	Tarpia	sok	
PT:	Misima	howa	'spear, pierce'
MM:	Notsi	coka	
MM:	Tabar	co-coka	'shoot (fish)'
MM:	Sursurunga	so(i)	(VT) 'poke hole in (s.t.): spear, strike, hit; sow, plant, break ground'
MM:	Tangga	sok	'spear s.o.'
SV:	Lenakel	suk	'spear (generic: for war, fishing, hunting)'
Mic:	Woleaian	toga-tog	'stick s.t. into (a young coconut), pierce, stab'
Fij:	Bauan	ðoka	'pierce, usually with a spear; husk coconut'
Pn:	Niuean	hoka	'pierce, poke'
Pn:	Samoan	so?a	'spike, transfix'
Pn:	Rennellese	soka	'pierce'
Pn:	Maori	hoka	'pierce'

POc *sua (N, V) 'spear (weapon retained in the hand)'

NNG:	Manam	sua(pu)	'fish spear; (V) spear'
NNG:	Poeng	sue	'bone, needle'
SES:	Gela	sua	'spear without barbs'
SES:	Longgu	sua	(N) 'spear'
		sua-	(VT) 'pull out (spear, stick +)'
SES:	Lau	sua	'spear'
SES:	Kwaio	sua	'spear'
Fij:	Bauan	sua(k)	'stab; pierce with a spear (retaining hold of the weapon); husk a coconut'
Pn:	Samoan	sua	'thrust'

4.2 Drill, bore

Drilling or boring was performed by rotating a harder implement, e.g. one with a shark's tooth head, on softer material. Reflexes of drilling terms are occasionally used of igniting a fire by rotating one object against another. Five verbs of drilling and boring have been reconstructed:

POc	*puru(k), *puruk-i-	'pierce, bore (hole)'
POc	*buru[-]	'pierce, bore (hole), drill'

⁵ Buru seka 'stab, instrument not leaving hand' is an external cognate, supporting reconstruction of PCEMP *seka.

PWOc $*b^{w}aR(i,e)[-]$	'pierce, bore (hole)'
POc (?) *paRo[-]	'drill through, pierce, perforate'
POc *wiri(t)	'twist, turn, revolve' (see §8 for supporting evidence)

None of the first three reconstructions is particularly well supported by the evidence, and their formal similarity leaves us questioning whether there is a derivational relationship between them. However, the evidence does not at this stage allow us to combine them. They all refer to actions which entail turning an instrument in order to make a hole.

(1) POc *puru(k), *puruk-i- 'pierce, bore (hole), drill'

PT:	Motu	(a)uru	(ADV) 'clean through' (as compound in verbs) (zero for expected h as reflex of POc *p)
MM:	Tolai	vuru(e)	(VT) 'turn, bore'
		vur	(VT) 'tattoo by boring pits in the skin, into which the sap of young coconuts or lime is injected; to bore pits into anything, esp. into taro as a private mark'
SES:	Tolo	vuru-, vuruki-	'pierce, make holes in'
(2)POc *	<i>buru[-]</i> 'pierce	, bore (hole), drill'	
NNG:	Dami	borū	'stab'
NNG:	Poeng	bulo	'pierce'
MM:	Tangga	bur-bur	'pump drill, using a shark's tooth as the drill head; used for drilling turtle shell, dog's teeth, thin shell breast ornaments +'
MM:	Maringe	bi-biru	'drill or dig out a small hole, such as preparing a coconut for drinking'
Mic:	Carolinian	b ^w ura b ^w uru-b ^w ur	'bore holes in wood (esp. of insects)' 'make a fire by generating friction with a traditional drill'
cf. also):		
PT:	Tawala	buhu	'bore' (< PPT *busu)
PT:	Motu	budu-	'make a hole through the eye of a coconut; to bore a hole' (< PPT *busu)
		(i)budu	'brace (instrument for boring a hole)'
PWOc *b	<i>waR(i,e)[-]</i> 'pie	erce, bore (hole)'	
NNG:	Bing	buod	'drill a hole, gouge out a hole' (- <i>d</i> for expected - <i>r</i>)
NNG:	Patep	b ^y ey	'throw, thrust (spear +), pierce, shoot'
PT:	Duau	b ^w are	and the providence of the Color
MM:	Lihir	bual	
MM:	Tolai	bari	(VT) 'bore'
MM:	Ramoaaina	bari	'bore (with gimlet +)'

The following item may be reconstructable only for PEOc. The two WOc items have phonological difficulties: Poeng *paro* has r for expected l, Simbo vala-vala final -a for -o.

Simbo	paro- vala-vala	<i>paro-pisi</i> 'shoot through', <i>paro-pite</i> 'pierce', <i>paro-punu</i> 'stab', <i>paro-tote</i> 'break by stabbing at' 'drill a hole; the bow by which the drill is
	vala-vala	
Lou		rotated'
Lau	fala	'pierce lobe of ear'
Gela	valo	'pierce a hole in a porpoise tooth, so as to string it'
Kwaio	falo- falo-falo	'drill a hole' (N) 'drill'
'Are'are	haro-	'pierce, bore, drill'
Arosi	haro haro (mao)	'bore into (s.t.), twist a stick in making a hole' 'flint point of a drill' (<i>mao</i> 'turn round')
Nukuoro	hao hao(ŋ-)	'drill through, burrow' 'bore hole in s.t.'
Maori	fao	'perforate, chisel out'
, , ,	Are'are Arosi Nukuoro	f alo-f alo Are'are haro- Arosi haro haro (mao) Nukuoro hao hao(ŋ-)

POc (?) *paRo[-] 'drill through, pierce, perforate' (ACD)

5 Forceful impact

5.1 Hit, beat, strike

A number of terms for hitting are reconstructable, with meanings which vary particularly according to the manner of hitting, like English *clout, slap, punch, pound, knock* and so on:

POc	*punu(q), *punuq-i-	'hit, strike, fight, kill'
POc	*qubu, *qub ^w i-	'hit with fist or with a weapon'
POc	*rapu(t), *raput-i-	'hit with hand or stick, slash'
POc	*tutuk, *tuki[-]	'pound, mash by pounding, hammer, crack by
		hammering'
POc	*putu(k) and	and the second
	*butu(k), *butuk-i-	'repeatedly knock, pound, beat'
POc	*qatu(ŋ), *qatuŋ-i-	'strike from above, pound'
POc	*babak, *baki[-]	'strike one against another, knock'
POc	*tupu, *tupu-i-	'knock against, knock over, stub (toe), stumble against'
POc	$*p^{w}asa(r,R), *p^{w}asa(r,R)-i-$	'slap, hit'
PWO	c*sapu[-]	'hit'
PCP	*sau, *sauti-	'strike, beat, chop'
PCP	*(v,b)asu	'a drum'; (V) 'drum, thump'

The most general term for 'hit' in POc was *punuq, *punuq-i-, often used for striking another person, sometimes with the extended meaning of fighting and/or killing them. Reflexes of *qubu, *qubu-i- and POc *Ra(p,b)u(s), *Ra(p,b)us-i- appear in very similar contexts to those of *punuq, *punuq-i-, but there is some evidence that *qubu, *qubu-i- may have referred to striking with the fist or a weapon and better evidence that *Ra(p,b)u(s), *Ra(p,b)us-ireferred to striking hard with the hand or with a stick.

PAn *buNuq 'throw at, hit with a projectile' (ACD) PMP *bunuq 'throw at, hit, strike with a sharp object; kill; extinguish (a fire)' (ACD) POc *punu(q), *punuq-i- 'hit, strike, fight, kill'

Adm:	Titan	(pa)un	'fight, make war'
NNG:	Mangseng	pun	'shoot, spear, bite, fight, hit'
	a distance of the	pun(pel)	'fight each other'
NNG:	Poeng	pune	'kill by sorcery'
NNG:	Mangap	pun	'hit'
NNG:	Takia	fini	'hit her/him'
NNG:	Manam	uŋ	'fight'
		uni	(VT) 'hit'
SJ:	Sobei	fun	'kill'
MM:	Tigak	punuk	'kill'
SES:	Longgu	- puni	'beat, best (s.o.)'
SES:	Kwaio	funu	'fight (each other)'
NCV:	Mota	pun	'dash out by hand or foot, rub out, as fire or anything written on a slate'
NCV:	Paamese	vinu	'die (in large numbers)'
		vini(i)	'kill'
NCV:	Nguna	punu(e)	'kill, extinguish, turn off [in compounds]'

POc *qubu, *qub^wi- 'hit with fist or with a weapon'

Adm:	Nyindrou	ub ^w iy	'hit, beat'
Adm:	Titan	up ^w i	'hit, strike, spank, punch'
Adm:	Drehet	$^{9}up^{w}i(p)$	'hit'
Adm:	Mussau	ubi	'kill; fight'
PT:	Iduna	?ubu(na)	'punch, hit with clenched fist'
MM:	Vitu	yubi	'kill'
		(vari)yubi	'fight'
MM:	Bola	ubi	'hit; kill'
		(va)ubi	'fight'
MM:	Nakanai	ubi	'strike, beat, spear (fish), pierce, catch with
			claws'
		ub-ubi	'shoot'
		(va)ubi	'fight (each other) with spears; war'
MM:	Sursurunga	ubi	'hit; kill'
MM:	Patpatar	ubu	'hit; fight'
MM:	Minigir	ubu	'fight'
MM:	Ramoaaina	um	'fight'
MM:	Halia (Selau)	ib	'chop'
MM:	Hahon	ibi	'hit'
MM:	Tinputz	ip	'kill'

The morphological relationship between intransitive *qubu and transitive $*qub^{w_i}$ - does not conform to any of the patterns described in Chapter 2, §3.1.2. Transitive $*qub^{w_i}$ - appears to be derived from intransitive *qubu plus transitive suffix *-i-, but intransitive roots ending in a vowel other than *-a- did not take the transitive suffix, so the history of this pair remains unclear.

1			
NNG:	Bariai	rau	'kill'
NNG:	Tuam	ravu	'hit'
NNG:	Lukep	rau	'hit'
NNG:	Mangap	(-po)rou	'fight, struggle'
NNG:	Kilenge	lau(e)	'hit'
NNG:	Numbami	lapa	'hit'
PT:	Gumawana	lau(i)	'hit; strum a guitar'
PT:	Iduna	lau(na)	'hit, beat (with stick)'
		lau(tafi)	'cut grass using grass knife' (PL SUBJ)
PT:	Ubir	rabi-	'hit'
PT:	Tawala	lau(ni)	'hit, shoot'
MM:	Lavongai	$rau(\eta)$	'kill'
MM:	Sursurunga	raps(i)	'hit, spank, beat'
MM:	Ramoaaina	rapu	'hit (with a stick +)'
MM:	Теор	ravu-ravu	'pound, mash'
MM:	Mono-Alu	lapu	'kill'
MM:	Теор	rapisi	'knife; hit, beat, scourge'
MM:	Tinputz	rapis	'bush knife'
SES:	Gela	labu(a)	'hit; kill'
SES:	Bugotu	ðabu	'hit; kill'
		ðabusi	'hit; kill'
SES:	Talise	labu	'hit'
		labusi-	'kill'
SES:	Longgu	rabusi-	'hit hard with hand or stick'
SES:	'Are'are	rapu	'strike, hit'
		rapusi-	'hit'
SES:	Arosi	rabu	'strike, knock, hit; knock in a nail'
		rabusi-	'hit'
NCV:	Uripiv	revci	'hit'
Fij:	Nadroga	ravusi-	'hit, beat'
Fij:	Wayan	ravu	'be hit, beaten, struck with a blow from hand on
			instrument; be killed; hit, strike'
		ravuti-	'hit, beat s.t.'
Pn:	Tahitian	rapu	'kneaded, mixed to a pulp; earth, dirt'
Pn:	Maori	rapu	'squeeze (in working food to a pulp)'

PMP *ra(m)buk 'knock, pound, beat' POc *rapu(t), *raput-i- 'hit with hand or stick, slash'

The mismatch in root-final consonants between PMP *ra(m)buk and POc *rapu(t) above suggests that their resemblance may be due to chance. The SES items reflect medial *-bwhere reflexes in other language groups agree on *-p-, whilst the Guadalcanal-Gelic subgroup of SES reflects a form *(l,R)abu, *(l,R)abut-i-.

The items below, POc *tutuk, *tuki- and *putu(k)/*butu(k), *butuk-i- are onomatopoeic, with a basic reference to hammering, and are derivationally related.

PAn *tuqtuq (V) 'hammer, pound, crush' (ACD)

POc *tutuk 'pound, mash by pounding, hammer, crack by hammering'

Adm:	Titan	tut	'(rain) beat down'
		tutu(wi)	'beat, strike, hit'
NNG:	Gitua	tutu	'pound, beat, knock'
NNG:	Mangap	tut	'pound, hit'
NNG:	Manam	tutu?	'mash, crush'
NNG:	Sengseng	tut	'strike; beat out barkcloth'
NNG:	Kove	tutu	'beat, as a drum; pat a baby's bottom (a device to make it stop crying)'
PT:	Molima	tutu	(V) 'tap, break open a nut, pound, strike'
PT:	Muyuw	tut	'crush betelnut'
PT:	Minaveha	tutu	'pound to crack, used of mapa nuts'
MM:	Nakanai	tutu	'tap, as a tattooing needle; strike, as with knuckles; to bump heads; produce a loud noise by hitting a buttress root'
MM:	Tolai	tut tu-tutuk	(V) 'hammer, strike with a stone, pound up'(N) 'hammer'
MM:	Roviana	tutu	'large stick (used for mixing native puddings); small pestle (used for mixing betel nut + in a mortar)'
MM:	Maringe	tutu	'hit, pound (nuts +), hammer'
SES:	Tolo	tutuku	'pound with a stick-like object to soften, mash or crush (food, nuts, lime)'
SES:	Gela	tutu	'pound, crush (yams +)'
NCV:	Mota	tut	'beat with fist, thump; break off with blows of the fist'
NCV:	Raga	tutui	'hit'
Fij:	Wayan	tatuki	'make a sharp knocking sound; tap, bang, knock'

POc *tuki- (V) 'pound'

	• • •		
Adm:	Loniu	tuku(wEy)	'break open (coconut +)'
Adm:	Lou	tuk	'beat'
NNG:	Sengseng	tuk	'beat taro against a tree in order to soften it'
MM:	Vitu	tuyi	'hit'
MM:	Babatana	tuki	'crack nuts with a stone and remove shells; kick, punch'
MM:	Maringe	tuge	(V) 'hammer, pound, esp. food in a bowl with a mallet'
		t ^h uge	'lump of mashed food made by pounding ingredients in a bowl'
NCV:	Kiai	tui	'hit (with thrown stone)'
NCV:	Nguna	tuki-	(V) 'hammer, pound, hit with stone'
Mic:	Marshallese	cuk-cuk	'pound breadfruit or taro'
Mic:	Mokilese	cuk	(V) 'pound'

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Fij:	Bauan	tuki- tuki(vatu)	'strike at, knock at, hammer, pinch' 'variety of pudding or roasted breadfruit beaten quickly under water with a stone' (<i>vatu</i> 'stone, rock')
Pn:	Tongan	tuki	'knock, hit, pound, hammer, punch'
Pn:	Tuvalu	tuki	'heavy wooden mallet, used for pounding both taro corms and pandanus leaves'

POc *putu(k) and *butu(k), morphological variants of the same verb (Ch. 2, §3.1.3), referred to the sound of repeated knocking, rather than the action of hammering.

PMP *buTuk 'knock, pound, beat' (ACD) (1) POc *putu(k) 'repeatedly knock, pound, beat'

MM:	Tinputz	vut-vuit	'heartbeat'
SES:	Arosi	(u)hu?i	'crush'
Fij:	Bauan	vutu	'pound with pestle and mortar'
		(i)vutu	'pestle for pounding'
Mic:	Marshallese	lwūc	'mallet, hammer'
		(pen)-lwūc	'pound with mallet' (penpen (V) 'tap')

(2) POc *butu(k), *butuk-i- 'repeatedly knock, pound, beat'

PT:	Iduna	(-lu)butu-butu	'knock (at door)'
PT:	Dobu	(sa)butu	'smash sago pith prior to extracting the sago
			from it'
MM:	Nakanai	butu, butu-butu	(V) 'sound a slitgong, especially to beat it loudly
			and call out at the same time'
SES:	Longgu	butu-butu	'(heart) beat; do things to show that you are
			looking for a fight (e.g. stamping feet, to
			prepare to punch someone)'
Fij:	Wayan	butu	'be assaulted and knocked about by a number
			of people, be beaten up by a group'
		butuki-	'stamp or tread on s.t., trample s.t.'

The verbs reconstructed below denote a variety of kinds of hitting:

POc *qatu(ŋ), qatuŋ-i- 'strike from above, pound' (ACD: *qatu)

NNG:	Kove	watu	'break a nut by hitting it with a stone' (watu ηani patu)
NNG:	Malalamai	atu	'hit'
PT:	Tawala	yatu	'sago chopper, adze for chopping sago'
PT:	Kilivila	katu-	'strike (from above)'
PT:	Motu	atu	'press pottery into shape (using wooden beater on stone); to tattoo'
		(he)atu	'fight (each other)'
MM:	Nehan	tuŋ	'fight'
		(weli)atuŋ	'fight (one another)'
MM:	Halia (Haku)	yatuŋ	'kill'
		(he)atuŋ	'fight (each other)'
MM:	Banoni	cum	'hit'

MM:	Maringe	aknu	'hit, beat'
SES:	Lau	sau(kata)	'pound in a mortar'
SES:	Baegu	sauni-	'kill'
SES:	'Are'are	rauni-	'kill'
SES:	Sa'a	sau	'kill, pound (taro), ram, (wind) blow strong; pound (taro and canarium nuts at a feast)'
SES:	Arosi	sau	'strike down; crush food in a bowl with a pole or coconut frond'
NCV:	Mota	atu	'give single strokes in drumming while the other performer is using both drum sticks'
NCV:	Nguna	atuni	'hit with stick or club; kill'
SV:	Lenakel	əru	'hit, strike'
Mic:	Woleaian	siu-siu	'pound (breadfruit +)'
Mic:	Mokilese	wossou	'pound soaking breadfruit in preparation for making <i>mar</i> '

PMP *pakpak 'clap, slap, beat the wings' POc *baba(k) 'strike one against another, knock'

PT:	Motu	рара	'burst, of blossom; hatch, of eggs'
SES:	Arosi	bā	'strike one upon another, as firewood in
			breaking it'
SES:	Arosi	bwabwa	'knock off e.g. bark of tree, shell of nut'
Pn:	Tongan	pā	'touch, hit, knock against; collide with; slap
			(esp. on the head); burst, explode'
Pn:	Niuean	pā	'slap, strike, touch; clap'
Pn:	Tahitian	pā	'hit, of wind'
Pn:	Hawaiian	pā	'touch'

POc *baki- (VT) 'strike one against another, knock, clap'

Mic:	Ponapean	pak	'be smashed, as of fallen ripe fruit'
Mic:	Carolinian	рахи	(VT) 'cut s.t., sever, prune, amputate, split in
			half'
Pn:	Pukapukan	paki	'clap hands, strike'
Pn:	Tahitian	pa?i	'slap, pat, touch'
Pn:	Hawaiian	pa?i	'slap'

PMP *tu(m)buk 'pound'6

POc *tupu(k), tupu(k)-i- 'knock against, knock over, stub (toe), stumble against'

1
e stone on

⁶ Murut manumbuk, Minagkabau tumbu?, Sikka tubi, all 'pound with fist'.

NCV:	Nguna	tip ^w a(e)	'hit with fist, fight, be against'	
		tim ^w a-tim ^w a	'knock'	
SV:	Kwamera	(i)rup ^w i	'clap, applaud, pat'	

A number of Eastern Oceanic items reflect a PEOc form $*tip^wa$, and it is just possible that this is descended from a separate POc etymon.

POc $*p^{w}asa(r,R)$, $*p^{w}asa(r,R)-i$ - 'slap, hit'

Adm:	Mussau	posala	'hit'
MM:	Sursurunga	posar, posri	'slap, clap, hit with the open palm'
MM:	Patpatar	pasar	'slap; beat drum'
MM:	Minigir	pasari	'hit'
MM:	Nehan	posar	'hit lightly'
MM:	Solos	pasan	'hit'
NCV:	Mota	wosa	'slap, smack, clap'
NCV:	Tamambo	voja(i)	'strike, slap'
NCV:	Port Sandwich	voč(i)	'strike with the hand, slap'
NCV:	Nguna	wosa(e)-	'clap (hands or flat objects)'
Fij:	Wayan	voða	'slap s.t. with the open hand or hands together'

PMP *sa(m)puk 'collide, bump into' (ACD: PWMP) POc *sapu(k), *sapu(k)-i- 'hit'

PT:	Gumawana	sap(i)	'slap'	
MM:	Kara (West)	saup	'fight'	
MM:	Nalik	sop	'kill'	
MM:	Notsi	cap	'kill; fight'	
MM:	Tabar	copu(i)	'dehusk (coconut)'	

PCP *sau, *sauti- 'strike, beat, chop'

Fij:	Rotuman	jau	'beat, strike' (see Geraghty 1986)
Fij:	Wayan	sauti-	'crack or break s.t. open; cut off or trim vegetation'
Fij:	Bauan	sau	'cut reeds, bamboo and some other things;
			break, as a coconut for drinking'
Pn:	Tongan	hau	'strike, beat, chop'
Pn:	Rennellese	sau	'strike, beat, slash, as weeds with a stick'
Pn:	Tongareva	sau	'cut with knife, slice, carve meat'
Pn:	Hawaiian	hau	'strike, beat, chop'

The final item is reconstructable only for PCP and appears to be derived from a noun:

PCP *(v,b)asu 'a drum'; (V) 'drum, thump'

Fij:	Bauan	vaðu	'punch with the fist'
Pn:	Niuean	pahu	'drum'
Pn:	Tongan	pahu	'thump'
Pn:	Rarotongan	pa?u	'drum formed from a hollowed block and covered with sharkskin'
Pn:	Tahitian	pahu	'drum; thumping blow'

Pn:	Hawaiian	раћи	'drum'
Pn:	Maori	pahu(u)	'wooden gong'

5.2 Break, smash, shatter

The first two reconstructions below, POc $*p^wosa(k)$, $*p^wosak-i$ - and POc $*p^wara(s)$, $*p^waras-i$ -, refer to the breaking of brittle objects, among them the shell of an egg when a chick hatches. It is possible that these were intransitive verbs in POc and that their subject was the breaking object, e.g., the egg. POc $*p(^w)oga(q)$ (VI) 'burst open, split open' and POc *momo(k) 'break into small pieces' similarly seem to have been intransitive, and the latter may also have been used to refer to potsherds, crumbs, and so on.

The remaining verbs in this subsection all appear to have been used transitively, with an agent subject and a patient object. It is possible that the forms without final *-i- were used intransitively with the patient (rather than the agent) as their subject. That is, they meant 'break spontaneously' or 'be broken', belonging to the neutral verb class (Ch. 2, §3.1.1).

POc	*pita(k), *pitak-i-	'break, split'
POc	*piti(k), *pitik-i-	'(crack)'
POc	*pu(q)a(R), *pu(q)aR-i-	'break (s.t. hard), smash'
PEOc	*pora(k), *porak-i-	'break, damage'
POc	*rabo(k)	'break, smash'

PMP *pesak 'break into several large pieces; hatch' (Blust 1986)

POc *p^wosa(k) (VI) 'break, shatter, crack open; (egg) hatch', *p^wosak-i- (VT) 'break, shatter, crack open'

MM:	Теор	(va)bō-bōha	'hatch (egg)'
MM:	Mono-Alu	posai	
		1	'break (egg +)'
MM:	Maringe	boha	'crack (spherical or bulbous object such as ground round sweet potato mounds)'
SES:	Gela	boha	(VT) 'burst; break, smash s.t. brittle, as a shell or china'
		ta-boha	(PASS) 'broken, smashed, burst'
SES:	Bugotu	poha	'burst, of boil; to crack, be cracked; to break, of day or surf'
SES:	Longgu	(ma)bota	'be smashed (usually of something that is hollow)'
SES:	Lau	(a)bota	'break, as an egg when chicken hatches out; broken'
		bo-bota	'break one thing on another'
SES:	Sa'a	pota, pota-pota	'break by knocking one thing against another'
SES:	Arosi	bota	'break by knocking on s.t. else'
NCV:	Mota	(ta)wosa	'coming open, apart (e.g. hatching egg)'
NCV:	Raga	voha	'break or crack canarium nut with stone'
NCV:	Port Sandwich	рос	'explode'
SV:	Lenakel	ho	'hit, strike'
SV:	Anejom	(a)wod	'hit, strike'

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PT:	Sudest	v ^w ara	'hatch, break (egg, coconut)'
MM	Nakanai	(tutu)pola	'(egg) hatch, be broken'
		(vali)pola	'hatch out (chick)'
MM	Sursurunga	puras	'hatch'
SES:	Arosi	(ha?a)horas(i)	'distend'

POc *p^wara(s), *p^waras-i- '(egg) hatch; hatch out (chick), break (coconut +)'

POc *p(")oga(q) (VI) 'burst open, split open'

Adm:	Drehet	p ^w ok	'crack, split open (s.t. hard)'
NNG:	Mangap	pok	'burst forth into the open, appear, come into view, break'
NNG:	Takia	puk	'erupt, break through, break with noise, burst open, crack'
MM:	Sursurunga	pu-puk	'break open a mumu'
		puki	'broken through, as when shoots have appeared in the garden'
MM:	Patpatar	puk	'break off stem end from a leaf'
MM:	Ramoaaina	puek	'burst'
SES:	Gela	poga	'burst, as a boil; rend, split, as a sail; split, of large seeds; grow'
		voga	'be split, rent, as a sail by the wind; to split, crack, rend, as glass or wood or cloth; to be cracked, of glass'
		vaga	'split, from the heat of the sun'
SES:	Longgu	poga	'burst, explode, erupt'
SES:	Lau	foga	'split, rend, burst; to be split, rent, burst'
SES:	Kwaio	foga	'cracked, split'
SES:	Arosi	hoga	'come apart'
SES:	Sa'a	hoka	'burst open, come apart'
		hokai, hokasi	(VT) 'burst, split open'

PMP *mekmek 'broken to bits' (ACD) POc *momo(k) 'break into small pieces'

NNG:	Mangap	тити
PT:	Motu	тото
SES:	Sa'a	тото
SES:	Arosi	momo
Fij:	Bauan	тото
Pn:	Tongan	тото
Pn:	Samoan	тото

PMP *bitak 'break, split' POc *pita(k), *pitak-i- 'break, split'

NNG:	Lukep	pit
NNG:	Mangap	pit(ŋana)
NNG:	Mangseng	(mo)pit
NNG:	Poeng	pite

'break into small pieces, crumble' 'rubbish; the placenta' 'sweepings, rubbish' 'a bit of food fallen' 'break into small pieces' 'a little bit, crumb, fragment' 'broken remnants'

'break' 'knock, tap, snap off, break off' 'chipped, broken' 'squeeze, press (s.t. to break it)'

PMP *benkaq 'split in two' (Dempwolff 1938)

NNG:	Takia	fite (gi)fte	(VT) 'break up, break open, split' 'split, as result of sharp blow'
MM:	Patpatar	pit	'break away a part; slice open belly of pig to remove bowels'
SES:	Longgu	vita?(ai)	'split firewood, kindling'
POc *piti	(k), *pitik-i- 'cr	ack'	
PT:	Gumawana	visi	'break, crack (pots +)'
PT:	Misima	vihi	'be cracked'
Fij:	Wayan	viti	'(rigid object) be broken off, snapped'

POc *pu(q)a(R), *pu(q)aR-i- 'break (s.t. hard), smash'

vitiki-

PT:	Iduna	fua	'crush'
PT:	Motu	huari	'smash, as pottery'
MM:	Tolai	puar	'break (cup, glass +)'
Fij:	Bauan	(ma)voa	'be injured, wounded, hurt, damaged, ruined, smashed'
Pn:	Tongan	foa	'break stone, cup, coconut; be knocked on head'
Pn:	Samoan	foa	'break rock or shell'
Pn:	Rennellese	hoa	'crack, split, smash; break (as egg, nut)'
Pn:	Tikopia	foa	'thump, strike heavily, break open by striking'
Pn:	Hawaiian	hoa	'strike with stick or club'

PEOc *pora(k), *porak-i- 'break, damage'

MM:	Simbo	poraki	(VT,VI) 'break; breaking'
SES:	Tolo	vora(na)	'cut, scratch, sore, wound'
SES:	Lau	fora	'split'
NCV:	Mota	wora	'divide, cleave asunder, split'
NCV:	Raga	bora	'divide, split'
Fij:	Wayan	voro	(VI) 'break, crack, fracture, be broken'
		voroki	(VT) 'break or crack s.t. brittle'
Fij:	Bauan	vorok(a)	'break, smash (brittle things, e.g. glass, stone,
			bone)'
cf. also	o:		

MM: Tolai

(VT) 'break, of brittle things'

'break s.t. off (OBJ: what is broken off)'

PMP *ra(m)bek 'strike, break' (ACD) (cf. *rabuk 'knock, pound') POc *rabo(k) 'break, smash'

(vata)bora

SES:	Gela	rabo	'break, smash'
SES: A	Arosi	rabo(asi)	(VT) 'explode'
		rabo(a)	'(china +) broken'

6 Removal of object from source by hand

6.1 Pluck, pick

The verbs reconstructed in this subsection fall into two formal and semantic sets, according to the PAn roots they reflect. Thus the first set reflects the PAn root *-buC 'weed, pull, pluck out' (Ch. 2, §3.1.3):

POc	*pupu(t), *puti	'pick (fruit +), pluck (feathers +)'
POc	*sapu(t), *saput-i-	'pull out, pull up, pluck (fruit, nuts)'
POc	*tapu(t), *taput-i	'strip (crops), pull off'

PPn *lohu 'fruit-plucking pole, hook something with a pole' (Biggs 1993), probably also reflects PAn *-buC via an otherwise unattested POc **loput.

The second set also seems to reflect a single PAn root, namely *-pak 'break, crack, split', although their POc meanings both refer to plucking leaves off a branch by hand. POc *paki has only Fijian and Polynesian reflexes, but is reconstructed for POc on the basis of the reconstructable PAn root:

POc	*sapaki	'pluck off, break off (leaves) with the hand'
POc	*paki	'pluck, break off (leaves) with the hand'

PAn *buCbuC 'pull up (weeds +), pluck (feathers +)' (ACD) POc *pupu(t) 'pick (fruit +), pluck (feathers +)'

PT:	Motu	huhu-	'break off bananas singly'
PT:	Dobu	(lo)pupu	'pluck feathers from a bird'
PT:	Gapapaiwa	pu(i)	'pluck feathers from a bird'
PT:	Tubetube	рири	'pull off (leaves from tree +)'
PT:	Sudest	vu	'pick; harvest a fruit'
SES:	Lau	fufu	'pick fruit'
SES:	Arosi	huhu	'pluck fruit'
SES:	Sa'a	huhu	'pluck, pick off'
Fij:	Bauan	vuvu	'root up entirely'
Pn:	Niuean	fufu	'strip off (leaves, bark +)'

POc *puti- 'pick, pluck (feathers), pull out (weeds +)'

NNG:	Numbami	uti	'pluck, pull out, dig out'
NNG:	Sengseng	put	'pluck'
PT:	Gapapaiwa	pu(i)	'pluck (chicken +)'
PT:	Lala	buku	'pluck' (b for expected p)
MM:	Patpatar	hut	'pluck (feathers)'
MM:	Tolai	vut	'weed, pluck as feathers of a fowl'
MM:	Ramoaaina	ut	'clean away the fibre from coconut; pluck
			(chicken feathers)'
SES:	Bugotu	vuti	'pluck out by roots'
SES:	Lau	fusi	'pluck leaves, flowers, fruit; twitch off fruit
			with a pole'
		fu-fusi	'pluck'
SES:	Sa'a	hu-husi	'pluck, pick off'

NCV:	Mota	vut	'dig, heaving up the soil as with digging stick'
NCV:	Port Sandwich	püči	'pluck'
NCV:	Paamese	huti	'peel fruit; shell egg; pluck feathers from chicken or bird'
Mic:	Marshallese	wic	'pull out of ground, uproot'
Mic:	Ponapean	us	'pull out, pluck'
Fij:	Wayan	vuti	(VI) 'be plucked, picked' (VT) 'pick or pluck
			things, do the picking or plucking'
Fij:	Bauan	vuti-	'pluck hair or feathers, pull up weeds'
Pn:	Tongan	fusi	'pull or tug; pull or haul in; pull up or hoist (a
			flag); pull up or weigh (an anchor); pluck'
		fu-fusi	'pull roughly or forcibly or too hard or without
			due care; overstretch'
Pn:	Samoan	futi	'pull off (weeds, hair +); pluck (hen +)'
		fu-futi	'play a fish (in reeling it in)'

POc *puti- above bears a close formal resemblance to POc * $p^wuti[-]$ 'cut off' (§3.1), but we reconstruct them separately on the basis of (i) the difference in initial correspondence sets (cf. Ch. 2, §2.1) and (ii) the consistently different sets of meanings.

PAn root *-*buC* 'weed, pull, pluck out' (Blust 1988:86–87) POc **sapu(t)*, **saput-i*- 'pull out, pull up, pluck (fruit, nuts)'

PT:	Molima	sabu	'pull up taro or grass'
SES:	Arosi	tahu	'take by force'
NCV:	Raga	havusi	'pluck, as a fowl'
NCV:	Tamambo	sabuti	'pluck, pull out (plant, tooth +)'
Fij:	Wayan	ðavu	'(tooth, root +) be pulled out, extracted,
			removed from a fixed position'
		ðavuti-	'pull s.t. out, remove s.t.'
Fij:	Bauan	ðavu	'pullup, eradicate'
		ðavut(a)	(VT) 'pull up, eradicate'
Pn:	Tongan	hafu(le)	'strip the dry leaves from sugarcane, pandanus,
			banana and plantain plants'
cf. also	0		
MM:	Roviana	zapu	'pull coconuts from a tree'
MM:	Roviana	zapu	'pull coconuts from a tree'

PAn root *-buC 'weed, pull, pluck out' (Blust 1988:86–87) POc *tapu(t), *taput-i 'strip (crops), pull off' (French-Wright 1983: *tapu)

NNG:	Lukep	tau(rai)	<pre>'pick' (-rai < POc *-(r,R)aki) 'harvest bananas' 'pull strongly, with jerk of a string, and possibly break it'</pre>
PT:	Bwaidoga	tavu(na)	
PT:	Motu	tapusi	
MM:	Nakanai	tavu	'grasp, capture'
MM:	Simbo	tapu	'pull off, as husk off canarium nut'
SES:	Arosi	ahu	(coconut +) fall; strip completely (garden of
Fij:	Bauan	tavu	food); gather fruit' 'knock down and beat'

PEOc *tau(s,t), *tau(s,t)-i- below appears to represent an irregular development of the etymon above, with loss of medial *-p-.

PEOc *tau(s,t), *tau(s,t)-i- 'pluck (fruit, leaves)' (French-Wright 1983)

SES:	Gela	tou	'knock off fruit with a stick'
Fij:	Bauan	tau	'be plucked (fruit, leaves)'
		tauc(a)	'pluck some fruits, esp. papaya and mango'

PAn root *-pak 'break, crack, split' (Blust 1988:135-136)

POc *sapaki 'pluck off, break off (leaves) with the hand' (French-Wright 1983)

NNG:	Manam	sapa?	'pluck off'
MM:	Kara (East)	səpak	'cut, gather; sago leaves for roofing'
MM:	Patpatar	sapak	'cut meat of animal into edible portions; break'
MM:	Sursurunga	sapki	'pull apart; pick (leaves, not fruit)'
MM:	Tolai	apak	'break off leaves from a tree, as for cooking or ornament'
Mic:	Woleaian	tepagi	'cut (leaves)'
cf. also		icpugi	
Mic:	Ponapean	sapak	'harvest (bananas)'

PAn root *-*pak* 'break, crack, split' (Blust 1988:135–136) POc **paki* 'pluck, break off (leaves) with the hand'

	-		
Fij:	Rotuman	ha?i	'pluck (feathers), pull out'
Pn:	Tongan	faki	'pick, pluck, esp. banana, coconut'
Pn:	Samoan	fa?i	'break off, snap off, pick'
Pn:	Tikopia	faki	'gather (breadfruit +)'
cf. also	o:		
NNG:	Sengseng	pak	'collect bedpoles by breaking of f long straight branches or trunks'
PT:	Motu	baki	'break, of bread, sago +'
Pn:	Tongan	paki	'break or break off, esp. with the hand; pick or pluck'

6.2 Break off, snap off

POc *pati[-] 'break, snap s.t. off'

Adm:	Loniu	hat	'break up (firewood), pick or break off (corn, but not fruit)'
SES:	Arosi	hai(maromoromo	b) 'broken to bits' (<i>maromoromo</i> 'broken into small fragments')
Pn:	Niuean	fati	'break off, snap'
Pn:	Samoan	fati	'break'
Pn:	Tokelauanan	fati	'break, snap off'
Pn:	Tahitian	fati	'(to be) broken off'
Pn:	Hawaiian	haki	'broken'

PMP **lepak* 'break, crack off' (Blust 1989) POc **lopa(k)* 'break'

MM:	Maringe	lopa	'break off, cut piece of reed or sugarcane'
SES:	Arosi	roha	'break s.t. brittle'

6.3 Pinch, nip

PMP *kinit 'pinch, nip, pluck' (ACD)

(1) POc *kinit, *kinit-i- 'pinch off with fingers, nip with fingernails'

Adm:	Mussau	kiniti	'pinch'
NNG:	Poeng	kini-	'pluck, pull up, fold'
NNG:	Lukep	kin	'pick by pinching (greens, betel pepper)'
NNG:	Mangap	kin	'pluck off'
NNG:	Takia	kitini	'pinch' (metathesis)
PT:	Motu	kini	'nip with fingernails'
MM:	Sursurunga	kinit, kinti	'pinch'
MM:	Simbo	kiniti	(VT) 'pinch'
SES:	Gela	yini	'pinch'
SES:	Longgu	ini-	'pull off, pick the betel nut leaf'
SES:	Lau	?ini	'pinch'
		?ini(fi)	(VT) 'pinch, pick or pluck, e.g. betel leaf'
SES:	Arosi	?ini	(VT) 'pinch, nip, hold with fingers'
NCV:	Mota	ginit	'pinch, nip off'
NCV:	Paamese	initi	'pinch, pluck guitar strings; pick bush
			vegetables'
NCV:	Tamambo	hiniti	'pinch, nip'
Mic:	Ponapean	kinih	'pinch'
Mic:	Marshallese	kinjiy	'pinch with fingernails'
Mic:	Ulithian	xilisi-	'pluck it, pick it'
Fij:	Wayan	kini	'(leaves) be pinched off with the fingers'
		kiniti-	'pinch s.t., pick leaves off by pinching them'
Fij:	Bauan	kini	'pinch with the nails'
Pn:	Samoan	?ini	'pinch with nails, nip'
Pn:	Maori	kini	'nip, pinch'

(2) POc *ginit, *ginit-i- 'pinch off with fingers, nip with fingernails'

PT:	Gumawana	ginisi	'pinch s.o.'
SES:	Lau	gini-gini	'pinch off with the nails'

6.4 Unhook, hook

PEOc *suqi[-] 'take s.t. down (from a hook or branch)'

SES:	Gela	hui	'take down from or off, as off a peg on the wall; to unclothe'
SES:	Bugotu	hui	'take down, let down; cease'

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Fij:	Rotuman	sui	'unloose, undo, untie, unbind; disentangle; take off clothes'
Pn:	Tongan	hu?i	'detach, take off, slip off; pick by the bunch'
Pn:	Samoan	ui	'take down, take off (s.t. hanging); free from restriction or taboo'
Pn:	Anutan	ūi	'gather pandanus fruit or betel nut'
Pn:	Nukuoro	ui	'pick pandanus'

The verb below appears to be derived from a noun PMP/POc *kawit 'hook'. This noun bears a remarkable resemblance to PMP/POc *kawil 'hook, fish hook' (Ch. 8, §4), and we take it that the latter may well represent an irregular offshoot of the former at some time in the distant past.

PMP *kawit 'hook' (Dempwolff 1938)

(1) POc *kawit, *kawit-i- 'hook, to catch hold of; fruit crook' (from French-Wright 1983)

NNG:	Manam	?aut	'pluck fruit with a fruit crook'
MM:	Tolai	kait	'catch, as clothes on thorns'
SES:	Gela	kauti	'drag off fruit with a hook'
SES:	Sa'a	i-kau	'hooked stick for fruit-picking'
SES:	Arosi	kau	'catch and hold, as a shirt in a nail; a crook for pulling down fruit'
		?awi	'hook'
NCV:	Mota	kaut	'catch hold and pluck, twitch'
		i-kau	'the cleft bamboo used to twitch off almonds, breadfruit +'
Mic:	Kosraean	kai	'catch with a hook'
Fij:	Wayan	kau	'fishhook (generic term)'
		kauti-	'hook s.t., catch s.t. on a hook'

(2) POc *gawit, *gawit-i- 'hook, to catch hold of; fruit crook'

NNG:	Lukep	gaot	'pick (breadfruit)'
PT:	Dobu	geuta	'hook fruit, fruit hook'
SES:	Lau	gau	'pluck fruit with a bamboo or crook'

7 Wringing and squeezing

POc evidently had a substantial number of verbs used of squeezing or wringing something to extract liquid. The substance to which this probably applied with the greatest frequency was grated coconut which had been soaked in water, from which coconut 'cream' is extracted by squeezing. The last two items listed here referred to squeezing something by holding it tight. There are several formal overlaps among the items in this section, and these are discussed below.

POc	*p(")ip(")i(t), *p(")iti-	'press, wring, squeeze s.t. (e.g. in order to extract liquid)'
POc	*popo(s), *pos-i-	'squeeze, press out'
PNNC	\$ *p(")isa(k), *p(")isak-i-	'squeeze (grated coconut +)'
POc	*poRo(s), *poRos-i	'squeeze out, wring out (liquid)'
POc	*momo(s)	'squeeze'

POc	*losi(t)	'squeeze, wring'
PEOc	*gugu(m), *gumi-	'grasp in fist, clench fist'
POc	*gumu(t), *gumut-i-	'hold tight'

PMP *pitpit 'clamp, jam, pinch' (Dempwolff 1938)

POc $p(^{w})ip(^{w})i(t)$ 'press, wring, squeeze s.t. (e.g. in order to extract liquid)'

]	NNG:	Kove	vivi	'squeeze (grated coconut +)'
J	NNG:	Poeng	viv(pele-)	'squeeze (grated coconut +)'
		1.13	(kam)vivi-	'squeeze (out liquid, i.e. coconut), squeeze (in the hand)'
]	NNG:	Numbami	pipi-	'squeeze (grated coconut +)'
]	NNG:	Gedaged	pipi	'squeeze (out), express, crush, pinch, strangle, compress'
I	NNG:	Manam	pipi	'squeeze in order to extract the contents, wring out'
]	PT:	Minaveha	pi pi	'squeeze s.t.'
]	PT:	Misima	pi	'squeeze; wring out (clothes)'
]	MM:	Ramoaaina	wi-wi(ŋ)	'squeeze, wring clothes; strain juice through cloth'
	SV:	Lenakel	(a)vət	'squeeze'
,	cf. also):		
	PT:	Gumawana	bibi	'squeeze (boil +)'
			(vata)bibi	'squeeze up against something'
1	SES:	Arosi	bibi	'crush, squeeze, crowd'
20	c *p(^w)	iti- 'press, wri	ng, squeeze s.t. (e.s	g. in order to extract liquid)'
	Adm:		pit	'squeeze juice out'
	Adm:	Drehet	peh	'squeeze'
	NNG:	Kis	pti-ti	'squeeze (grated coconut +)'
	NNG:	Ali	wic	'squeeze (grated coconut +)'
	NNG:	Poeng	pite	'press, exert pressure, squeeze, press (s.t. to break it)'
	MM:	Tolai	pi-pit(e)	'wring the milk out of grated coconuts through a fibre, squeeze, wring clothes (- <i>e</i> < POc *- <i>aki</i>)'
	Mic:	Woleaian	fiy(ā)	'squeeze'

		5 5 ()	
SV:	Sye	(a)vsi	'squeeze (liquid from)'
SV:	Anejom	(i)vidi(ñ)	'squeeze (liquid from)'

PMP *pespes 'squeeze, press out' (ACD: PWMP)

Ρ

POc *popo(s) 'squeeze, wring (coconuts to extract cream +)'

Adm:	Mussau	poso-, poposo	'squeeze (grated coconut +)'
MM:	Patpatar	pupus(ane)	'squeeze with wringing motion; squeeze with
			hands, as of fruit'
MM:	Siar	pupus	'squeeze grease from coconut'

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PT:	Kilivila	poli	'squeeze, wring'
MM:	Kara (East)	pas	'squeeze (grated coconut +) '
MM:	Kandas	pus	'squeeze (grated coconut +)'
MM:	Nehan	pos	'squeeze (grated coconut +)'
MM:	Теор	posi	'wring, squeeze'
		(i)posi	'coconut strainer' (<i>i</i> - < POc * <i>i</i> - INS)
MM:	Maringe	po ji	'squeeze, wring liquid, as in making coconut
			milk or medicine'
SES:	Bugotu	po ji	'wring, squeeze, twist'
SES:	Gela	poi-posi	'squeeze and wring out coconut shavings'
		podi	'squeeze, as in shaking hands'
		poi-podi	'sieve or strainer of coconut fibre'
Pn:	Tongan	fohi	'remove skin, rind; peel'
Pn:	W. Futunan	foi-	'peel or skin (s.t.); peel where the skin is ready to come off (not e.g. taro)'

POc *posi-'squeeze, wring (coconuts to extract cream +)'

Blust (ACD) has also reconstructed PMP *pe(R)cit and *becit, both 'squeeze, squirt out', from which the items attributed to *pos-i- could, on the face of it, alternatively be derived. However, if PMP *pe(R)cit or *becit were the source of the Oceanic forms, we would expect the POc pair **posi(t), **posit-i-, and the latter is reflected nowhere. Instead, we can reconstruct the pair *popo(s) and *posi-, and it is accordingly more likely that the set above is derived from the latter.

Also reconstructable is PNNG *p(")isa(k), *p(")isak-i- 'squeeze (grated coconut +)'. It seems probable that this is a reflex of POc *pisa(k), *pisak-i- 'split' (§3.8) which has undergone a change in meaning (essentially from 'split a coconut to obtain its flesh' to 'squeeze the coconut flesh to obtain its sap'). The partial formal similarity of this item to those above may have abetted this shift.

PNNG *p(")isa(k), *p(")isak-i- 'squeeze (grated coconut +)'

NNG: Gitu	a pisa	'squeeze'
NNG: Kile	nge pise	'squeeze (grated coconut +)'
NNG: Atui	i <i>pis</i>	'squeeze (grated coconut +)'
NNG: Mar	ngap <i>pīzi</i>	'wring, squeeze'
NNG: Luk	ep pisi	'squeeze with hands'
NNG: Bing	g pis-is	'squeeze (grated coconut +)'
NNG: Mar	nam pisa	'squeeze,wring'
	pisaki	'squeeze (grated coconut +)'
NNG: Kair	riru <i>fis</i>	'squeeze (grated coconut +)'
cf. also		
NNG: Man	ngap bi-bīzi (-par)bi-bīzi	'squeeze, be tight, tighten' 'squeeze oneself into, crowd together into

PAn *peRes 'squeeze out' (Blust 1972b)

POc *poRo(s) 'squeeze out, wring out (liquid)'

NNG: Gitua	poro	'wring'
NNG: Kove	poho	'squeeze, wring out; add coconut cream to food;
		make sago'

	Kairiru Nakanai	fuor volo	'squeeze (grated coconut +)' 'work sago flour, squeeze the water out'
	Ramoaaina	pur	'squeeze coconut milk onto food'
MM:	Maringe	foro	'squeeze (grated coconut +)'
NCV:	Mota	woro	'squeeze, wring out juice of herbs, liquor of fruits, over food and things prepared for charms; add coconut sauce to <i>loko</i> (pudding of grated yam)'

POc *poRos-i- 'squeeze out, wring out (liquid)'

NNG:	Kairiru	furasi	wring, squeeze (e.g. in the preparation of
			coconut cream)'
MM:	Tigak	pagosi	'squeeze (grated coconut +)'
MM:	Tabar	poroc(an)	'squeeze (grated coconut +)'
MM:	Siar	poros	'squeeze (grated coconut +)'

It seems likely that in some languages reflexes of POc *poRo(s) 'squeeze out, wring out (liquid)' and POc *piro[-] 'twist together' or PEOc *pilo(s), *pilos-i- 'make a cord by twisting fibres on the thigh' have been conflated. Thus the items below have meanings usually associated with reflexes of *poRo(s) but their forms reflect *piro or *pilo(s), *pilos-i-:

PT:	Iduna	vilo-	'twist, wring (of clothes)'
SES:	Kwaio	filo, filo-	'squeeze, wring'
SES:	'Are'are	hirosi	'wring, twist, roll'
Fij:	Wayan	vilo	'be squeezed and strained through a cloth, as in
			preparing kava or coconut cream; be wrung out,
			dried by wringing with the hands'
		viloði-	'squeeze and strain s.t.; wring out wet clothes'

Note that the reflexes of *poRos-i- above are all WOc, whilst those of *pilos-i- are EOc. This distribution suggests that conflation occurred in PEOc, with reflexes of POc *piro[-] 'twist together' and POc *poRo(s) 'squeeze out, wring out (liquid)' becoming conflated both formally and semantically, giving rise to *pilos-i*- in place of *poRos-i-.

PMP *mesmes 'squeeze' (Blust 1983–84a) POc *momo(s) 'squeeze'

SES:	Sa'a	тото	'squeeze, press on each side'
SES:	Arosi	тото	'clasp in hand and squeeze'

PMP **le(c,s)it* 'squeeze out, squirt out' (ACD) POc **losi(t)* 'squeeze, wring'

	Roviana	(li)lohi-	'wring out (wet garment +)'
SES:	Gela	luhi-	'squeeze'
OFO	T.1.	(loi)losi	'sponge'
SES:	Talise	losi-	'squeeze'
SES:	Longgu	losi-	'squeeze s.t., wring s.t. out; squeeze milk out of scraped coconut meat immersed in water'
SES:	To'aba'ita	losi	'wring (clothes, grated coconut +) to extract
			liquid'

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SES:	Lau	losi	'wring, squeeze'
SES:	Sa'a	(loi)lōsi	'squeeze, strain out coconut cream from hero (scraped coconut) with <i>unu</i> (fibrous spathe of a coconut frond)'
SES:	Arosi	rosi	'wring, twist, squeeze (coconut fibre in straining coconut scrapings +)'
Fij:	Bauan	lose	'squeeze, wring (chiefly of kava)'

The derivational relationship between the pair of verbs below, PEOc *gugu(m), *gum-i-'grasp in fist, clench fist', evidently still subsists in some Pn languages. Although PEOc *gugu(m) is to our knowledge only reflected in Pn languages, this relationship persists and must go back to PEOc and probably to POc. There is an obvious historical relationship between this pair and Dempwolff's reconstruction of PMP *gemgem 'make a fist', but the reconstructable POc/PEOc vowel is 'wrong': *u for expected *o.

PMP *gemgem 'make a fist' (Dempwolff 1938) PEOc *gugu(m) 'grasp in fist, clench fist'

Pn:	Tongan	kuku	'grasp, grip, clutch, hold on to; embrace, cuddle'
Pn:	Samoan	?u?u	'take hold of, grasp'

PEOc *gumi- 'grasp in fist, clench fist'

Fij:	Wayan	gumi-	'grasp s.t. in the hand or claw, hold s.t. tightly in the hand'
Fij:	Bauan	gumi-	'clench the fist'
NCV:	Raga	⁹ gu- ⁹ gum	'clench fist'
NCV:	Tangoa	ku-kumi	'take in the hand'
NCV:	Lonwolwol	gum	'hold by a grip around'
NCV:	Paamese	kumi	'squeeze, wrestle'
NCal:	Nemi	kom ^w i	'knead'
Pn:	Tongan	kuumi(a)	'clench, grasp in fist' (durational of kuku)
Pn:	Samoan	?u-umi(a)	passive of [?] u [?] u 'hold, grip, clutch'
Pn:	Tahitian	?u-?umi	'squeeze, wring'

The vowel is also 'wrong' (except perhaps in the Arosi reflex) in the pair below, which, despite its formal and semantic similarity to the pair above, seems to have a different PMP origin. Similarity has apparently ensured that no language reflects both forms of each pair. Indeed, I suspect that some forms above are historical conflations of reflexes of PEOc *gumi- and *gumu (from POc *gumu(t)).

PMP *kemes 'take in the hand, clasp, grasp' (ACD) POc *gumu(t), *gumut-i- 'hold tight'

NNG:	Yabem	gamu?	'knead'
SES:	Arosi	gomo	'squeeze, hold tight, clutch'
Pn:	Tahitian	?umu	'express, wring out'
Pn:	Maori	kumu-, kumuti-	'clench, close (as hand), carry in the hand; hold
			breath'

8 Twisting, plaiting, braiding

The verbs in this section have to do with twisting, plaiting and braiding in general, and more specifically with twisting or rolling fibres to make various kinds of string or cord. The reflexes of some of these verbs overlap in their semantics with those in §7. Other verbs are used of plaiting and weaving to make artefacts such as mats and baskets. They are the following, presented in Chapter 4, §3.2:

POc	*patu(R), *patuR-i-	'tie, plait, weave (mats, baskets +)'
POc	*aña	'woven, braided'
POc	*paus, *paus-i-	'weave, plait'
POc	*tiki[-] (V)	'plait (mat +)' (ACD)
POc	*pai	'weave'

PMP *piri(c,t) 'twist, plait' (Blust 1970) POc *piri[-] 'plait a cord, twist, wrap around'⁷

Adm:	Mussau	iri	'tie, bind by wrapping around'
NNG:	Gedaged	pili	'weave (mats, sails +), (V) braid, knot (the strands of grass skirts)'
PT:	Kilivila	vili	'turn; make grass skirts; be twisted'
PT:	Molima	vili	'make a skirt, roll a cigarette, put a headdress round the head'
PT:	Motu	hiri	'fasten by twisting round and round; tie up (a parcel, bundle), twisting string all round it; kill (pig) for visitors'
MM:	Tolai	pir	'plait (basket, mat +)'
MM:	Nakanai	viri	'twist, wind up, wind around'
MM:	Simbo	viri	'plait, make a basket'
SES:	Sa'a	hiri	(V) 'lap with string, bind spears or arrows'
SES:	Arosi	hiri	'twist, twine round, (snake) coil, wind (a line) round'
NCV:	Mota	vir	'twist, wring, squeeze with a twist, plait'
NCV:	Tamambo	viri	'twist, plait, braid; coconut milk'
SV:	Sye	(e)vi	'weave (basket)'
NCal:	Nemi	fili	'braid'
Mic:	Ponapean	pir	'turn, spin, twist'
Mic:	Kosraean	pir(aki)	(V) 'braid, plait'
Fij:	Rotuman	hiri	'plait three strands of sennit, hair +, and the 'tail' of a basket or floor-mat made of coconut- leaf, this tail itself being called a <i>hiri</i> '
Fij:	Bauan	viri	'lash (fence, raft +)'
Pn:	Samoan	fili	'plait, braid (sennit, hair +)'

Oceanic reflexes of *wiri(t) 'rotate, drill, bore' are not to be confused with phonetically and semantically similar forms reflecting POc *piri 'twist'.

cf. also:

PT:	Gumawana	(ki)pili	'twist s.t., unscrew a lid'
MM:	Tolai	pir	'plait (basket, mat +)'

PEOc *piri-piri 'twine round and round; thing made by braiding*

SES:	Sa'a	hiri-hiri	'plaited spear'
SES:	Arosi	hiri-hiri	'twist, twine round, (snake) coil, wind a line round; a thread for tying a hook to a line'
Pn:	Samoan	fili-fili	'chain'
Pn:	Hawaiian	hili-hili	(V) 'braid, plait, string'
cf. als	o:		
Mic:	Woleaian	piri-pir	'tie, twist, fold, lash (as in twisting ropes)'

Reduplication was regularly used to form intransitive verbs from verbs which were implicitly transitive (Ch 2, §3.1.2).

The two terms below have undoubtedly been conflated in some languages, but the data justify separate reconstructions. With regard to the origin of PEOc *pilo(s), *pilos-i, see the discussion associated with POc *poRo(s), *poRos-i- above (§7).

POc *piro[-] 'twist together	(Bethwyn Evans pers.comm.)
------------------------------	----------------------------

PT:	Gapapaiwa	(tura)viro(a)	'twist'
PT:	Molima	vilo-	'twist'
PT:	Iduna	vilo-	'twist, wring (of clothes)'
SES:	Lau	firo, firo-	
SES:	Kwaio	filo, filo-	'squeeze, wring'
SES:	Arosi	hiro	'revolve, spin'
NCV:	Mota	viro	'turn, go round, change, turn out of the way'
Fij:	Bauan	viro-viro-	'(timber) cross-grained'
Pn:	Tongan	fio	(VI) 'mix, mingle'
Pn:	Nukuoro	hilo-	'mix, braid strands of sennit'
Pn:	Rarotongan	iro-	'mix together, mix up, blend'
cf. also)		
PT:	Gapapaiwa	piro	'tangle; braid'
SES:	Arosi	piro	'plait the edge of a bag'
Mic:	Marshallese	piro	'twins; double; grown together; joined; two pandanus keys joined together'

PEOc *pilo(s), *pilos-i 'make a cord by rolling fibres on the thigh' (Bethwyn Evans pers.comm.)

filosi-'twist round'SES:Kwaiofilosi'twist, wring'	SES:	Lau	filo	'twist together (strands)'
SES: Kwaio filosi 'twist, wring'			filosi-	'twist round'
	SES:	Kwaio	filosi	'twist, wring'
SES: 'Are'are hirosi 'wring, twist, roll'	SES:	'Are'are	hirosi	'wring, twist, roll'
SES: Arosi hirosi 'revolve, spin'	SES:	Arosi	hirosi	'revolve, spin'

⁸ Oliver (1974:139) describes cord making from "the flax-like *piripiri* (*Cenchrus echinatus*)" in Tahiti, quoting from Hendy (1927).

NCV: NCV: Fij:	Port Sandwich Paamese Wayan	vlösi vilesi vilo viloði-	 'roll on one's thigh' (VT) 'turn around, turn over' 'be squeezed and strained through a cloth, as in preparing kava or coconut cream; be wrung out, dried by wringing with the hands' 'squeeze and strain s.t.; wring out wet clothes'
Fij:	Bauan	vulo	'twist a thread on the knee'
Pn:	Tongan	filo, filohi	'thread; spin, make thread, string, rope'
Pn:	Niuean	filo	'twist (as a rope); string, thread, reel of cotton'
Pn:	Takuu	filo	'roll rope on thigh'
Pn:	Mangareva	hiro	'make threads by rolling filaments on the thigh'
Pn:	Hawaiian	hilo	'twist, braid, spin; twisted, braided'
cf. also)		
NNG:	Poeng	bulosi	'bore'
MM:	Nakanai	pulo	'squeeze (grated coconut +)'
MM:	Meramera	pule	'squeeze (grated coconut +)'
SES:	Sa'a	pulo	'turn over, twist'
SES:	Lau	bulo-bulo	'twist'
Pn:	Ifira-Mele	polōsi(a)	'twist'

An unrelated PPn term has been reconstructed for the same process, **amo* 'prepare fibres for string-making (by rubbing between hands or on thigh); prepared fibre' (Biggs 1993)

POc *loqi 'make thread by rolling fibres on the thigh' (Chowning 1991: *loi 'thread made ...')

MM:	Nakanai	loi	'rub between the hands'
MM:	Tolai	loe	(V) 'twist, coil'
		lo-loi	(V) 'roll or coil (strips of shell money)'
SES:	Kwaio	loi	'weave a net, knit'
NCV:	Nguna	lo-lo	'thread'
Pn:	Maori	roi(roki)	'secured, tied up; knot, bind'

PWOc **m*^wali[-] 'braid large ropes (for use with canoes +)' (Chowning 1991)

NNG:	Lukep	mol-	'twist into a loop'	
NNG:	Manam	moli	'plait'	
PT:	Sudest	m ^w ana(basi)	'twist (s.t.)'	
MM:	Nakanai	mali	'plait (mat)'	

POc *piji(r), *pijir-i- 'braid, twist together'

NNG:	Takia	pide	'braid'
NNG:	Mangseng	pit	'twist off, pick off'
NNG:	Mapos Buang	bij	'squeeze'
MM:	Patpatar	hidi	'plait'
MM:	Nduke	piduri-	'squeeze'
SES:	Bugotu	pijiri	'plait with three or four strands'
SES:	Gela	pidiri	'intertwine the strands of a rope; a fishing line'
Mic:	Kiribatese	bira	'braid'
Mic:	Marshallese	pit ^w	'twist sennit'

Mic:	Mokilese	pit	(VT) 'wind (rope)'
Mic:	Woleaian	fitī	'tie, bind, tangle, spiral, wrap'

POc *bo(q)u(k), *bo(q)uk-i- 'feel with fingers, lay hand on, squeeze'

MM:	Nduke	bou(a)	'squeeze'
Fij:	Wayan	bō, bōki-	'feel or squeeze with the fingers, lay hold firmly on s.t.'
Fij:	Bauan	bō, bōk(a) bōbōk(a)	'seize, squeeze, lay hands firmly on' 'seize or squeeze (s.t.)'
Fij:	Rotuman	hō	'squeeze, wring'
Pn:	Tongan	pōpō	'wipe after urinating (women)'
Pn:	Samoan	pōpō	'pat'
Pn:	Maori	pōpō	'pat with hand, soothe'

PWOc *b(u,o)go 'twist, wring'

NNG:	Mangap	bōgo (sua)	'twist talk, accuse falsely, give false testimony'
NNG:	Poeng	bugo	'twisted up (e.g. rope)'
MM:	Ririo	pugo	'squeeze'
MM:	Babatana	pugo	'squeeze'
MM:	Sisiqa	pogo	'squeeze'
cf. also)		
MM:	Nakanai	vugo	'(hair) snarled or tangled; tie (a knot)'

The two terms below, POc *kili(s), *kilis-i- 'twist, bore, rotate' and POc *wiri(t) 'twist, turn, revolve', are verbs of rotating, whose reflexes vary among twisting, drilling and braiding.

POc *kili(s), *kilis-i- 'twist, bore, rotate'

NINIC.	Manage	1	g
	Mangap	kir	'bore, drill a hole into something hard'
NNG:	Roinji	kiri-	'bore (hole)'
NNG:	Manam	kuiri	'bore (hole)'
NNG:	Mapos Buang	kiri(n)	'turn, bore, rotate, open (a tap +)'
MM:	Ramoaaina	kili	'twist up the strands of a string; spin, as a top or
			a cord; go around'; in compound verbs 'around'
NCV:	Lonwolwol	kilh(e)	'turn, turn around'
		kilih	'be twisted, turned, sprained'
cf. also			
Fij:	Nadroga	gili-	'braid'
Fij:	Bauan	gili	'twist or rub in the hands'

The term below bears a formal and semantic resemblance to POc *piri 'twist' (§8) but is distinct from it:

PMP *wirit 'twist' (ACD) POc *wiri(t) 'twist, turn, revolve'

Fij:	Bauan	wiri	'turn, revolve'
Pn:	Tongan	vili	'drill, bore'

Pn:	Samoan	vili	'(of thread, top, coin +) spin; drill; revolve, rotate'
Pn:	Maori	wiri	'bore, twist; gimlet, auger'

9 Bending and folding

POc *loku(t), *lokut-i- 'bend, fold'

Adm:	Lou	liət	'bend, joint'
PT:	Motu	loku	'double up, fold, roll up'
MM:	Sursurunga	lukus, luksi	'bend (a limb or finger)'
SES:	Gela	logu	'bend, fold double, as bamboo tongs'
SES:	Longgu	lo?u-	(VT) 'bend'
		lo?u-lo?u	(VI) 'bend back and forth'
SES:	Arosi	ro?u(ni)	'bend, fold; curl up legs'
SES:	Sa'a	loku	'bend, be doubled back, to curl'
Fij:	Rotuman	lo?u	'bend at an angle, fold, crease'
Fij:	Wayan	lokuði-	'bent; twist, fold s.t.'
Fij:	Bauan	loku	'bent, folded'
Pn:	Niuean	lo-loku	'bend'
Pn:	Samoan	lo?u	'be bent, curved'
Pn:	Maori	roku	'bend; to be weighed down'

The seeming PMP ancestor of this form is PMP $*leku^2$ 'bend, fold, folding part of the body' (ACD), but this source is called into question by the root-final POc *-t reflected in the Lou, Sursurunga and Wayan items above.

10 Fastening and lashing together

Terms for materials used for cordage or string are reconstructed in Chapter 4, §3.2. As well as the verbs listed below, reflexes of POc *patu(R), *patuR-*i*- 'tie, plait, weave (mats, baskets +)' (Ch. 4, §3.1.1) and POc verb *saqi(t) 'sew' (Ch. 4, §3.2.1) are also used for tying. This was evidently one of the POc meanings of the former, but probably not of the latter. Other verbs for various kinds of tying are listed below. POc *buku 'tie (a knot); fasten' was probably a generic term for tying, whilst POc * p^wita 'tie by encircling', POc *paqu(s), *paqus-*i*-'bind, lash; construct (canoe +) by tying together', and POc *pisi 'bind up, tie up, wind round, wrap' had more specialised meanings. There is insufficient information about POc *kiti 'tie, bind' to attribute a more specific meaning to it.

The first POc verb reconstructed below is identical to POc *buku 'node ...' (Ch. 4, §3.2), a noun which referred among other things to knots. It is possible that the verbs listed below under *buku are independent developments from the POc noun. However, since many POc roots seem to have functioned as both noun and verb, we reconstruct the verb here.

The second verb, *bukuti, is odd, in that it implies a PMP root **bukut, but the reconstructable PMP form is *buku (Ch. 4, $\S3.2$) without final *-t. We assume that *-t- was inserted by analogy with other transitive verbs.

NNG:	Lukep	buk	'tie (a knot)'
NNG:	Mangap	mbuk	'tie (a knot)'
NNG:	Roinji	buyu	'tie'
NNG:	Hote	puk	'fasten; dress'
MM:	Roviana	рики	(V) 'tie or knot'
Mic:	Woleaian	фиgo-фиgo	(V) 'knot, tie'
Fij:	Bauan	buku	'tie a knot, fasten two things together'

POc *buku 'tie (a knot); fasten'

POc *bukuti (VT) 'tie (a knot); fasten'

MM:	Ririo	pukici	'tie'
MM:	Babatana	pukiti	'tie'
Mic:	Marshallese	p ^w iwciy	(VT) 'knot'
Mic:	Woleaian	<i>фugosii</i>	(VT) 'knot'
Mic:	Trukese	p ^w ukeey	(VT) 'knot'
Fij:	Bauan	bukuti	(VT) 'knot'

The verb POc $*p^{wita}$ 'tie by encircling' was evidently used of tying a cord around, e.g., a limb (see also Ch. 8, §13):

POc *p^wita, *p^wita-i- 'tie by encircling, ensnare'

NNG:	Lukep	wit	'tie by encircling'
		wit(kala)	'tie together'
		pit	'snare, trap; to trap'
NNG:	Mangap	mbit	'tie up with rope, fasten'
	0.	(na)pit-pit	'snare, trap for rats, pigs, bandicoot' (na-
			indicates a borrowing from Kilenge)
NNG:	Poeng	(sam)pite	'tie securely, tighten'
		(bago)pita	'fasten (to help it to float)'
NNG:	Takia	pite(lak)	'tie on (as grass skirt)'
MM:	Sursurunga	puti	'tie together'
MM:	Ramoaaina	pita	'hang up in the house; tie to the end of anything'
		pit	'tie'
		pit-pit	'line, snare'
		piti	(V) 'snare'
SES:	Gela	piti-	'tie'
SES:	W. Guad.	piti	'tie'
SES:	Longgu	piti-	'trap an animal's leg; tie s.t. around ankle or
			wrist'
Pn:	Tokelauan	fi-fita	'(garments) be too tight'
Pn:	Maori	<i>фita</i>	'firm, secure, fast'

POc *paqu(s), *paqus-i- was apparently used of tying together larger objects, like the parts of a canoe.

PCEMP *paqu(s) 'tie, bind"

POc *paqu(s), *paqus-i- 'bind, lash; construct (canoe +) by tying together'

	1 1 1		
Adm:	Loniu	husi	'tie, fasten'
Adm:	Lou	ро	'tie with a rope'
NNG:	Manam	wauri	'tie'
NNG:	Lukep	раи	'tie'
NNG:	Takia	fou	'tie, bind; construct (a canoe)'
NNG:	Poeng	pau(e)	'fasten'
NNG:	Hote	vak	'hold, bind, fasten, give'
NNG:	Mapos Buang	vaķu	'tie, fasten; carry; on a pole between two people'
SJ:	Sobei	fau	'tie'
MM:	Roviana	pusi	'bind' (also the name of a vine used for this
			purpose)
SES:	Lau	foo	'bind'
SES:	Arosi	ho?osi	(VT) 'bind, fasten, tie'
SES:	Sa'a	ho?osi	(VT) 'bind'
NCV:	Raga	vauhi-	'bind, tie'
Mic:	Kiribatese	bou	'construct (canoe, house)'
Mic:	Marshallese	уашуәш	(VI) 'bind with sennit; lash'
		yawit ^w	(VT) 'bind with sennit; lash'
Mic:	Woleaian	føfø	(VI) 'tie, bind'
		føt(agīy)	(VT) 'anchor, tie'
Fij:	Bauan	vauð(a)	'tie'
Pn:	Samoan	fau	'make, construct (wooden objects, canoes +)'
Pn:	Tongan	fa?u	'tie'
Pn:	Rennellese	ha?u	'tie, lash'

It is just possible that the item above is in fact identical to POc *paus, *paus-i- 'weave, plait' (Ch. 4, §3.1.1). Unfortunately, we have found no language in which reflexes of the two items are in contrast. On the other hand, we find widely scattered reflexes with two separate sets of glosses, 'weave, plait' and 'bind, lash, fasten', and it seems judicious to keep them apart.

POc *pisi[-] 'bind up, tie up, wind round, wrap'

MM:	Bali	vizi	'tie'
MM:	Minigir	visi	'tie'
MM:	Mono-Alu	pi-pisi	'tie (parcel +)'
NCV:	Mota	viv	'bind round'
		vi-vis	'wind round, bind; to tie'
NCV:	Port Sandwich	n <i>pisi</i>	'bind up leg, to tie up, around'
NCV:	Nguna	vi-visi(ki)	'wrap around; wrap (cut finger +) with (cloth +)'
Mic:	Mortlockese	fiti	'wrap'
Mic:	Satawalese	fiti	'tie (lei +)'
Fij:	Bauan	viði	'bind, coil, roll up'

⁹ This reconstruction is supported by Ngada *pa²u* 'tie, bind' and the Oceanic reflexes listed here.

Pn:	Tongan	fihi	'tangled, intricate, complicated, problematical'
		fi-fihi	'badly tangled'
Pn:	Samoan	fisi	'entwine'

The item below, POc *kiti 'tie, bind', is reconstructed at POc level because it is fairly clear that there was a PAn root *-kit. This, according to the theory of PAn monosyllabic roots outlined in Ch. 2, §3.1.3, would have resulted in a PMP **kit-kit 'tie, fasten' (as yet not directly attested), and this in its turn would have given rise to POc **kiki(t) and *kit-i-, of which only the latter is attested:

PAn root *-*kit* 'join along the length' (Blust 1988:111–112) POc **kiti[-]* 'tie, bind'

NNG:	Yabem	ki?	'tie'
MM:	Nakanai	kisi	'fasten; tie, tie up'
		kisi	'tie'
MM:	Solos	kit	'tie'
MM:	Teop	kisi	'fasten, tie, bundle'
MM:	Taiof	kic-kic	'tie'

11 Applying heat and burning

POc had a number of verbs expressing the various ways in which heat can be applied. The reflexes of some of these, like POc $*m^w aRi$ 'roast, burn' (Ch. 6, §3.2), are used almost exclusively in the context of cooking, and are therefore presented in Chapter 6. The reflexes of others, like POc *tunu 'roast, burn' (Ch. 6, §3.2), POc *raran, *raran-i- 'warm s.t./s.o.' (Ch. 4, §3.1.1), and POc *sunu 'singe' (Ch. 6, §3.6), are used both for cooking and for other kinds of heat application, and so are given here with reduced cognate sets. Two further terms, POc *soko(t), *sokot-i- 'burn (grass +)' and POc *tunu(n), *tuni 'light, set fire to', were used for burning but apparently did not apply to cookery.

PAn *CuNuh 'roast food over a fire' (ACD)

POc *tunu 'roast on embers or in fire; burn (s.t.); make decorative cicatrices by burning the skin'

Adm:	Wuvulu	unu	'cook, roast'
NNG:	Gedaged	tun(i)	'cause to burn, light (a fire so it burns well), set fire'
NNG:	Sengseng	tun	'burn; burn shells or limestone to make lime; burn cicatrices; set fire to'
PT:	Motu	tunu-	'bake pottery'
MM:	Tolai	tun	'burn, cook, roast, broil'
MM:	Roviana	tunu	'burn scars on the arm (as is often done by young boys)'
SES:	Bugotu	tunu	'a mark, blot, cicatrice caused by burning'
SES:	Sa'a	นิทน-นทน	'burn in the fire, roast flesh on the embers; raise cicatrices on the body by burning'
NCV:	Mota	tun	'roast on or over embers'
NCal:	Nemi	cini	'burn, grill in fire'

Mic:	Kiribatese	tin-tin	'grill or roast on open fire'
Fij:	Bauan	tunu	'warm food up again'
Pn:	Tongan	tunu	'cook on open fire'

PAn *da(n)day 'heat s.t. or warm oneself by fire' (Dempwolff 1938)¹⁰ POc *raray, *ray-i- 'heat s.t. or warm oneself by fire' (see Ch.4, §3.1.1)

	NNG:	Manam	raraŋ	'warm up (food that has become cold), warm up again'
	PT:	Molima	lala	'wilt pandanus leaves over a fire in order to soften them for mat-making'
	MM:	Nakanai	lala	'wilt pandanus leaves over a fire in order to soften them for mat-making'
	SES:	Sa'a	ra-rani	'warm oneself at the fire'
	NCV:	Raga	ra-rani	'roast on embers'
	SV:	Kwamera	(a)rəŋi	'singe, burn (hair off pig), warm, dry by fire'
	Mic:	Mokilese	ron-ron	'warm oneself'
	Mic:	Marshallese	ran-ran	'warm oneself by the fire'
	Fij:	Bauan	ra-raŋ-	'warm oneself at a fire; of pain, smart slightly'
	Pn:	Pukapukan	lala	'bleach pandanus leaves by passing them over a fire'
	Pn:	Hawaiian	lala	'warm up, cook over fire; warm oneself by a fire'
2	Oc *sun	u 'singe'		
	Adm:	Loniu	sun	
	Adm:	Nyindrou	sun	'burn or cook (over fire); roast'
	PT:	Kilivila	sulu-sulu	'cook'
	MM:	Nakanai	sulu-lu	
	Mic:	Marshallese	t ^w ini-y	
	Fij:	Rotuman	su-sunu	'burn, scorch'
	Fij:	Wayan	cunu	'be burnt or branded by a smouldering stick or firebrand'
	Pn:	Tongan	hunu	

PMP *zeket 'burn (fields +)' (ACD) POc *soko(t), *sokot-i- 'burn (grass, rubbish +)'

Ρ

Adm:	Lou	sakot	'burn on'
MM:	Bulu	royo	'(fire) burn'
MM:	Lihir	so	'(fire) burn'
		sakt	'burn (grass)'
MM:	Barok	soŋot	'burn (grass); bake (on fire)'
MM:	Tangga	sok	'(fire) burn'
MM:	Nehan	suk	(ADJ) 'burnt'; (V) 'singe'

¹⁰ Given the two reconstructable POc forms, this appears to be a case of Blust's (1977) paradigm (Ch. 2, §3.1.2), suggesting that the PMP form was *dayday.

cf. also:

SES:

Pn:

Pn:

SES:

SES:

Samoan

Maori

Kwaio

Arosi

Arosi togo

'make up a fire, set more wood on'

PMP *tutuŋ 'set on fire, burn' (Dempwolff 1938)¹¹ POc *tutu(η) 'light, set fire to' (Blust 1972b)

tuŋi(a)

tuŋi

sūŋi-

suŋi-

NNG:	Poeng	to	(VI) 'burn'
Fij:	Wayan	tutu	'be alight, lit, started, going'
Fij:	Bauan	tutu	'light a lamp, set fire to a thing'
Pn:	Tongan	tutu	'set on fire or burn up'
Pn:	Samoan	tutu	'light (lamp, fire +)'
POc *tuŋi	i 'light, set fi	ire to'	
Adm:	Drehet	suŋ	'burn'
NNG:	Bing	tuŋ	'burn'
NNG:	Poeng	toŋe	(VT) 'burn'
Fij:	Wayan	tuni	'light (fire, lamp +)'
Pn:	Tongan	tuŋi(a)	'set fire to'

'be set alight' 'set light to'

'burn (s.t.)'

'burn (s.t.)'

¹¹ If the Oceanic forms are an example of the usual canon, we would expect PMP *tuŋtuŋ.

