

African Evidence for Three Proto-World Lexical Roots

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This paper shows that a refinement in the method of historical semantics, the most neglected of areas in linguistics, offers a means of extending the application of the comparative method of linguistic reconstruction to at least as far back at 14000 B.P. This may coincide with the onset of the Neolithic Revolution in agriculture which dramatically changed the distribution of peoples and languages on the planet.

Evidence is provided for three possible roots, KAM, PAK and TAK' which certainly date back to this period but which might have been present in the Proto-World of about 40000 B.P.

There is a large amount of published lexical data representative of the language families of the world. For several major language families there exist sizeable corpora of lexical reconstructions which recover thousands of lexical items in use 5000-6000 years B.P., e.g. Proto-Indo-European, Proto-Dravidian, Proto-Austronesian, etc.

The Bantu subequatorial African family of between 400-600 languages is in effect a subfamily of Niger-Congo, the major sub-Saharan language family.

From studying semantic development patterns applying in the case of TAK' it was found that the same patterns recurred with other unrelated roots such as PAK and KAM, often in the same languages.

From studying semantic development patterns present in the data, it becomes apparent that a generally predictable direction of semantic change is discernible. Diachronically, the same patterns of change recur in the same way in unrelated roots with the same or similar meanings in the same and in different languages. In other words: from available evidence, it seems as if similar semantic patterns of change have occurred in unrelated roots such as KAM, PAK and TAK'. The regularity and attestation of these semantic

patterns of change in available evidence in most of the world's languages suggests a universal tendency of semantic development.

These findings afford historical linguists a certain predictive power. Knowing that a root is found in some related languages with certain meanings, other reflexes of the same roots can be predicted within a wide semantic development area in these languages. The same semantic changes have been observed in three distinct Proto-World roots.

Some linguists because of various factors will not be able to accept the following data as sufficient evidence of genetic relationship of the languages involved. Nevertheless most social scientists will, it is hoped, agree that this is clearly a case of data in want of a conclusion and a method.

In keeping with the practice of structural-functionalist and structural-mentalistic linguistics of the twentieth century, the study of meaning change has been almost completely neglected in historical linguistics. Meaning has been used as a criterion for affirming the relatedness of words. Words could be judged to be genetically related if their meanings were identical or fell within narrow limits of variation. Semantics was used as a control on the study of sound change but did not become an object of study in its own right.

The postulation of language families such as Nostratic, Eurasiatic, Proto-World is controversial. In order to postulate these language families, the comparative method would have to be used. It is accepted by most historical linguists as being the only acceptable validation of linguistic genetic relationship.

The comparative method depends on the demonstration of regular sound correspondences between languages. It is believed by most historical linguists that the cumulative effects of sound change and lexical replacement make the method inapplicable beyond 8000 B.P.

The data presented in this paper suggests that a careful analysis of historical semantic areas will make available many more roots for the application of the comparative method.

One historical semantic area is investigated in this article as it has differentiated over ten or twenty or more thousand years in three roots TAK', KAM, PAK. The representation of these roots is not intended to constitute reconstructions. It is too early for that. All that is intended, is to demonstrate that historical reconstruction according to the comparative method will become feasible at remote time depths, i.e. earlier than 8000 B.P. The identification of more roots and the evidence of their semantic changes will add legitimacy to both the theory and the method.

If the cognates listed under each of the three roots are accepted then some interesting etymologies may be revised. E.g. the Latin, *homo* for 'man' can now be seen not to be derived directly from *humus*, 'earth', as is conventionally believed. Rather, the true etymology is with *amare* 'love' and

amicio 'wrap'. The Latin *h* and the zero reflex standard PIE **gh* as in Latin *homo* 'man', *hortus* 'garden', *anser* 'goose' with English cognates 'groom, garden, goose'. The Latin /*h*/ was a weak consonant and on its way to loss. It is not surprising to find both /*h*/ and zero reflecting **gh* (= **g* in the glottalic revision).

A recent development in Indo-European studies has been the widely accepted suggestion that glottalic conventional Proto-Indo-European **b*, **d*, **g* were in fact glottalic ejective stops **p'*, **t'*, **k'*. It is therefore interesting to note that a number of reflexes of the TAK' root from Africa and the Americas contain ejectives. This unusual phonetic feature is more likely to be a retention from ancient times than an independent innovation. As a retention it supports the glottalic theory.

The following English verbs and associated nouns illustrate the semantic area of the three roots with reflexes in languages representative of nearly all the language families of the world.

walk	> go in front, jump, hurry, stride	[leg, foot, calf, thigh, hip, buttock, back]
straddle	> stride, strut, be haughty, step, step on	[pace, step, step-ladder, rung]
go in front	> precede, do first, do before, begin	
grasp	> clutch, claw, bite, (into and hold on with teeth) hold, scoop, handle, comb, span, touch, be adjacent	[claw, tooth, talon, fang, hand, finger, toe]
bite	> chew, eat, champ, nibble, corrode, erode	
hold	> take, receive, seize, take hold of press, squeeze, milk, be tight, stiff, firm, wrap around, clothe	[tooth, jaw, cheek, chin]
take hold of	> grapple, wrestle	
span	> crack, split, fork, bifurcate, grasp	[crack, split, fork, crotch, (mountain) pass, interval, hand, five, ten]
press on	> embrace, hug, copulate, love, deflower, prick, stab, shear, grind	[ram, bull, billy-goat, penis, sting]
cover	> put roof on, build, shield, protect muzzle	[skin, muzzle, hide, roof garment, earth]
love	> want, desire, be joyful	

The list comprises the following data¹. It was the intention to provide a representative selection and not a complete listing of cognates. Gaps in the list do not necessarily mean an absence of reflexes.

KAM

KHOISAN

Nharo	/xám	urine	Barnard 1985:69
Nharo	/kám	urine	Barnard 1985:69
Ju-/hoansi	//x'ám	take a handful	Snyman 1975:136
Ju-/hoansi	//xám	cling to, carry on the back	Snyman 1975:136
Ju-/hoansi	//x'óm	hit (with fist)	Snyman 1975:136
Ju-/hoansi	//ám	stand on toes to reach	Snyman 1975:129
Ju-/hoansi	!xóm	eat	Snyman 1975:126
Ju-/hoansi	!x'ám	tighten a bowstring, wring out (a cloth)	Snyman 1975:124
Ju-/hoansi	!ám	tighten, close	Snyman 1975:113f
Ju-/hoansi	!a-mà	jump up	Snyman 1975:114
Ju-/hoansi	!a'mi	to marry	Snyman 1975:114
Ju-/hoansi	!a-m'm	penis, sting	Snyman 1975:114
Ju-/hoansi	!hám	eat (e.g. porridge)	Snyman 1975:105
Ju-/hoansi	!xám	give birth	Snyman 1975:110
Ju-/hoansi	/x'ám	pinch	Snyman 1975:100
Ju-/hoansi	tsxam	grip (between the toes)	Snyman 1975:81
Nama	gam v.	hold (liquid) in mouth	Rust 1969:68
Nama	gamanah	loins, hips	Rust 1969:69
Nama	/gam	two	Rust 1969:75
Nama	!gam	kill, murder	Rust 1969:89
Nama	!game	marry tv	Rust 1969:89
Nama	/goma	doubt	Rust 1969:115
Nama	!hama	run away	Rust 1969:167
Nama	!ham	jump over	Rust 1969:172
Nama	!ama	boast, show off	Rust 1969:33
Nama	!am	on, over	Rust 1969:33
Nama	//ama	wet, damp	Rust 1969:21
Nama	//am	clap (hands)	Rust 1969:20
Nama	/kam	to urinate	Rust 1969:216
Nama	//kam	pinch, squeeze, fasten, peg	Rust 1969:220
Nama	!kam	to struggle, fight	Rust 1969:224
Nama	!kam	have stillborn (lamb, calf)	Rust 1969:230
Nama	//kami	to grind	Rust 1969:220
Nama	khom	grind fine	Rust 1969:239

¹ Where possible, roots are supplied with their source cited. Minor transcriptional changes have been necessitated by typographical requirements.

Nama	//khom	wrap up, envelop	Rust 1969:243
Nama	//kamis	nether grinding stone	Rust 1969:220

NIGER-CONGO

Mende	ngámé	gnash (the teeth)	Innes 1969:103
Mende	háma	waist	Innes 1969:24
Mende	humé	eat the inside, pick out part and eat it	Innes 1969:31
Proto-Bantu	*-kám-	squeeze, wring, milk	Guthrie 1971:130
Proto-Bantu	*-kámát-	seize	Guthrie 1971:130
Proto-Bantu	*-kúm-	touch	Guthrie 1971:132
Proto-Bantu	*-kúmé	ten	Guthrie 1971:132
Proto-Bantu	*-kúmq	ten	Guthrie 1971:132
Proto-Bantu	*-kúmq	ten	Guthrie 1971:132
Proto-Bantu	*-kúmbat-	hold in arm, hold in hand	Guthrie 1971:132
Proto-Bantu	*-kíma	bread, mash	Guthrie 1971:131
Proto-Bantu	*-kóm-	hit with hammer	Guthrie 1971:131
Proto-Bantu	*-kúmu	thumb	Guthrie 1971:132
Mende	kóma	check	Innes 1969:47
Mwani	-koma	hit with fist	own notes
Mwani	-kama	be tight (as clothes)	own notes
Zulu	-khuma	eat dry food	Dent 1969:395
Zulu	ishumi	ten	Dent 1969:482
Zulu	umgama	interval of time or distance	Dent 1969:351
Zulu	-khama	squeeze out, strain, drain off (as whey); throttle, light rain (when it clears)	Dent 1969:368

NILO-SAHARAN

NILOTIC SUBFAMILY

Ateso	ai-kamun	catch, refer to, hold, seize	Hilders 1958:42
Turkana	kam	eat by throwing food into mouth	Barrett 1990:22
Turkana	kamun	catch, seize	Barrett 1990:23
Maasai	a-gam	grip	Tucker 1955:293

AFRASIAN

Arabic	kamma	to muzzle	Badger 1967:654
Arabic	kimaam	bridle for a camel	Badger 1967:93
Arabic	kašama	to muzzle	Badger 1967:654
Arabic	qamaša	to restrain	
Arabic	kamma	to cover, conceal, cloak, plug up, muzzle, muffle	Cowan 1976:839
Arabic	kimaam	muzzle	Cowan 1976:839
Arabic	kamata	suppress one's anger	Cowan 1976:839
Arabic	kamaša	rein in, pull up (a camel)	Cowan 1976:839
Arabic	kamaša	seize, grasp, grip	Cowan 1976:840

Arabic	kamša	a handful	Cowan 1976:840
Arabic	kamamaša	pair of pincers	Cowan 1976:840
Arabic	munkamiš	clenched, shrunk, cramped	Cowan 1976:840
Arabic	kaamaša	sleep with someone, embrace someone, have sexual intercourse with someone	Cowan 1976:840
Arabic	kamana	to hide, be hidden	Cowan 1976:840
Arabic	yamma	to cover, veil, conceal	Cowan 1976:683
Arabic	yimaama	blinkers, muzzle	Cowan 1976:683
Arabic	yamaa	to provide with a roof	Cowan 1976:685
Arabic	yamaza	press, touch, palpate	Cowan 1976:684
Arabic	yumr	armful	Cowan 1976:684
Arabic	yamma	cover, veil, conceal	Cowan 1976:683
Arabic	xamsa f.	five	Cowan 1976:262
Arabic	šamma	to comprise, include, embrace	Cowan 1976:640
Arabic	šamaa	to defend, guard, to shield,	Cowan 1976:208
Arabic	šuma	protect sting, stinger (of insects), prick, spine	Cowan 1976:208
Arabic	šimaar	donkey	Cowan 1976:205
Arabic	šamal	Aries, Ram	Cowan 1976:207
Arabic	šamala	carry, bear	Cowan 1976:206
Arabic	šaml	cargo	Cowan 1976:207
Arabic	šimaaf	sexual intercourse	Cowan 1976:136
Arabic	šamaša	to gather, unite	Cowan 1976:136
Arabic	tajammuf	meeting, coming together	Cowan 1976:136
Arabic	jumf alkaf	the fist, clenched hand	Cowan 1976:136
Hebrew	qemah	flour	Holladay 1988:319
Hebrew	qāmaš	take a handful	Holladay 1988:320
Hebrew	*qomes f	a handful	Holladay 1988:320
Hebrew	*qāmat	seize	Holladay 1988:319
Hebrew	kāmah	long for, yearn for	Holladay 1988:159
Hebrew	kāmar	be agitated; become hot, burn, shrivel up	Holladay 1988:159
Hebrew	gomed	a measure of length (of a sword); a short cubit	Holladay 1988:62
Hebrew	g-m-?	swallow up (the ground, said of a horse)	Holladay 1988:62
Hebrew	gmūl f.	what one's hands have done	Holladay 1988:62
Burji	k'āb-a n.	tongs of blacksmith	Sasse 1982:122
Afar	kamus m	buttocks, bottom	Parker 1985:144
Afar	gamad m	buttock, end, rear	Parker 1985:109
Afar	kimmūqe II	pinch a small bit of skin	Parker 1985:147
Afar	kamade II	tie tightly	Parker 1985:143
Afar	gumaadi m	fist	Parker 1985:117
Afar	kumbuquš m.	fist	Parker 1985:151
Afar	kumbuuquše	clench one's fist, variant	Parker 1985:151
Afar	kummuquše		

Afar	kùmsa m.	scooping up	Parker 1985.151
Hausa	káamaa	catch, seize, take hold of	Newman 1979.61
Hausa	káamee	become stuck, adhere	Newman 1979.62
Hausa	káamu	measure from elbow to tip of middle finger	Newman 1979.62
Hausa	káam-káam	tightly	Newman 1979.62
Hausa	gáam	firmlly	Newman 1979.41
Hausa	géermu m	beard	Newman 1979.43
Hausa	góoma f.	ten	Newman 1979.45

INDO-EUROPEAN

Proto-Indo-European	*kem- (1)	to compress, obstruct	Pokorny 1959.555
Proto-Indo-European	*kama- m	lump	Pokorny 1959.555
Proto-Indo-European	*gem-	seize with both hands	
		seize, take hold of, compress	
Proto-Indo-European	*ghāmā	gape, open mouth	Mann 1985.411
Proto-Indo-European	*gembh-	bite	Pokorny 1959.369
Proto-Indo-European	*gombho-s	spike, nail, tooth	Mann 1985.404
Proto-Indo-European	*gombhō	show the teeth, chew, bite, stab	Mann 1985.404
Tokharian A	kam	'tooth'	Pokorny 1959.369
Tokharian B	keme	'tooth'	Pokorny 1959.369
Latin	amare	to love	Lewis et al. 1989.107
Latin	amicio	to throw around, wrap about, veil	Lewis et al. 1989.104
Latin	amictus m	manner of dressing, cloak itself, other kinds of covering - air, herbage, weeds	Lewis et al. 1989.105
Latin	canus m	a muzzle for horses	Lewis et al. 1989.276
Indic	*jam-	to eat	Turner 1973.282
Indic	*jhamp-	cover	Turner 1973.294
Indic	*jabh-	bite	
Indic	*káama-	wish, love, sexual love	Turner 1973.155
Greek	gaméō	to marry, take to wife (of the man), take for a paramour (of mere sexual intercourse)	Liddel 1990.337
Greek	gómos	load	Liddel 1990.356
Greek	gomph-algia	tooth-ache	Liddel 1990.356
Greek	gómphos	bolt for shipbuilding	Liddel 1990.356
Greek	gamphai	jaws	Mann 1985.396
Greek	gamphētai	jaws	Mann 1985.396
Albanian	dhëmballe	jaws	Mann 1985.396
English	champ, comb		

ALTAIC

Turkish	gem	bit (of a horse)	Alderson 1959:111
Turkish	kemirmek	gnaw, nibble, corrode	Alderson 1959:184

URALIC

Hungarian	kimer	scoop out something from something	Magay 1990:522
Hungarian	kimarát	etch, corrode, bite	Magay 1990:521
Hungarian	hám	harness, traces	Magay 1990:377
Hungarian	hám	epidermis	Magay 1990:377
Finnish	hammas	tooth	Magay 1990:377

INDO-PACIFIC

Cheke-Holo	khamé	arm, hand	White 1988:256
Pisirami	kama	tooth	Greenberg 1973:828
Tagota	kama	tooth	Greenberg 1973:828
Lake Murray	kama	tooth	Greenberg 1973:828
Babwa	kama	tooth	Greenberg 1973:828
Tirio (Tirio)	guma	stone	Greenberg 1973:828
Konmak (Marind)	kum	stone	Greenberg 1973:828

DRAVIDIAN

Tamil	amunku	to sink, be pressed down	Burrow 1960:13
Kanada	amar	to seize firmly, embrace	Burrow 1960:13
Tamil	kampi	bit of a horse's bridle	Burrow 1960:88

AUSTRALIAN

Dyirbal	gubal	cover up	Dixon 1972:403
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AUSTRONESIAN

Proto-Austronesian	*kamkam	take hold of, seize	Benedict 1990:209
Proto-Tai	*kam-A	hold in the hand	Benedict 1990:209
Proto-Kadai	*kaam-A	hold in the mouth	Benedict 1990:209
Proto-Miao-Yao	*khamgam	jaws (holders in the mouth)	Benedict 1990:210
Proto-Kadai	*kom	press from above, oppress	Benedict 1990:210
Proto-Malayo-Polynesian	*gamgam	make a fist	Benedict 1990:210
Proto-Paiwanic	*gamgam	fist	Benedict 1990:210
Proto-Austronesian	*gama?	catch fish or shrimp with the hands	Blust 1986:40
Proto-Austronesian	*gemi/kemi	hold on by biting	Blust 1986:41
Proto-Austronesian	*kamay	hand	Blust 1983:63
Proto-Austronesian	*gem	hold in the fist	Blust 1980:72
Proto-Austronesian	*gemel/*kemel	grasp, squeeze	Blust 1980:72
Proto-Austronesian	*gemes	want, desire	Blust 1980:72
Proto-Austronesian	*gumul	wrestle, grapple with	Blust 1980:76

JAPANESE

Japanese	kami	bite, gnaw, chew	Benedict 1990:210
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Japanese	kámu	chew, masticate	Vaccari 1990 213
Japanese	tsukámu	grasp, grip with one's hand	Vance 1993:564
Japanese	-kumi	counter for sets, pairs	Vance 1993 283
Japanese	kumi	class (school), group, team, party	Vance 1993 282
Japanese	kúmu	to put together (in sense of 'fold (arms), cross (legs) etc')	Vance 1993 283

AMERIND

Uto-Aztecan	*koʔa	eat	
Uto-Aztecan	*kuwmi	nibble	Matteson 1972 55
Proto-Mayan	*q'ab	hand	Matteson 1972 62
Proto-Arawakan	*kaa-pi	hand	Matteson 1972 62
Proto-Tucanoan	*gopi	tooth	Matteson 1972 85
Tarahumara	kabi	to be wrapped	Thord-Gray 1955 202
Tarahumara	kabi-ka	to wrap around	Thord-Gray 1955 202
Tarahumara	kabo-cha-ra	the calf of the leg	Thord-Gray 1955 202
Tarahumara	kema-ka	1) cover, shelter 2) wearing apparel 3) blanket, scrape, cover	Thord-Gray 1955 211
Tarahumara	kema-ti	to cover the body with clothes or clothing	Thord-Gray 1955 211

TAK'

NIGER-CONGO

Wolof	tánk	leg	Fal 1990 218
Wolof	táunku	go on foot	Fal 1990 218
Wolof	tégal	dandle	Fal 1990 224
Wolof	tikkar g-	sacrum	Fal 1990 226
Wolof	ténk	hobble	Fal 1990 225
Wolof	teg	saddle (of horse or camel)	Fal 1990 220
Wolof	tekk	be haughty	Fal 1990 221
Wolof	tággoo b-	separation	Fal 1990 216
Wolof	tágg m-	nest	Fal 1990 216
Wolof	tággat	saddle a horse	Fal 1990 216
Wolof	taq	be adjacent	Fal 1990 214
Wolof	taggar g-	bed of slats	Fal 1990 211
Wolof	lagg	stride, hurry	Fal 1990 115
Wolof	láng	walk abreast	Fal 1990 117
Wolof	lekk	eat	Fal 1990 119
Wolof	dégg	tread on	Fal 1990 61
Wolof	deggaate	step on	Fal 1990 61
Wolof	digaloo	be separated from	Fal 1990 63
Wolof	diggante b-	distance, gap, space	Fal 1990 63
Proto-Bantu	*-táanu	five	Guthrie 1971 138
Proto-Bantu	*-táko	buttock	Guthrie 1971 137
Proto-Bantu	*-takun-	chew	Guthrie 1971 137

Proto-Bantu	*-tang-	go in front	Guthrie 1971:138
Proto-Bantu	*-tung-	sew	Guthrie 1971:140
Zulu	-hlanu	five	Dent 1969:372
Zulu	ithanga	thigh	Dent 1969:491
Zulu	-hlafunu	chew	Dent 1969:369
Swahili	-tano	five	Johnson 1939:453
Swahili	-tanga	go to and fro	Johnson 1939:452
Swahili	tako	buttock	Johnson 1939:447
Tsonga	rhaku	buttock	Cuenod 1967:172
Tsonga	-teka	to take, marry	Cuenod 1967:192
Tsonga	-nhlampfunha	chew	Cuenod 1967:130
Shona	tága (9)	arm's length (as measurement)	Hannan 1981:629
Shona	-táfuna tv. & i	eat slowly (chewing finely) K eat reluctantly	Hannan 1981:629
Shona	tagára (1a)	sp frog (cp tagarira Z)	Hannan 1981:630
Shona	tákama ideo.	of standing straight	Hannan 1981:630
Shona	-tákama iv.	be caught between teeth (esp food) cp -pakama K	Hannan 1981:630
Shona	-tákamara iv.	stand straight (prepared to fight)	Hannan 1981:630
Shona	-tákanudza tv.	cause to release hold of something, cause to disengage	Hannan 1981:630
Shona	-tákanuka tv.	disengage, come off (of something that gripped)	Hannan 1981:630
Shona	-tákanura tv	disengage, unclasp, remove what grips or burdens. KZ dis- entangle (Remove as meat caught between teeth)	Hannan 1981:630
Shona	-tákatsuka iv	to lope	Hannan 1981:630
Shona	-tánga	begin, commence, start	Hannan 1981:633
Shona	-tángidza	do first, forestall	Hannan 1981:633
Shona	-tángira tv.	forestall	Hannan 1981:633
Shona	-tángudza	do first, outstrip others	Hannan 1981:633
Shona	-tánja tv	spread legs near the fire (depriving others of warmth)	Hannan 1981:633
Shona	-tanjaira iv.	walk with legs far apart (coarse expression)	Hannan 1981:633
Shona	tánya ideo	of sitting with legs stiff and wide apart	Hannan 1981:633
Shona	tanyara ideo.	of straddling	Hannan 1981:634
Shona	-tanyaradza	spread legs (standing or sitting; M coarse expression)	Hannan 1981:634
Shona	-dágaira iv	walk with head thrown back (rather proudly)	Hannan 1981:107
Shona	dákó 5	buttock	Hannan 1981:108
Shona	dáku ideo.	progressing by jumps (as hare does) 2) emitting sparks 3) speaking quickly, but distinctly	Hannan 1981:108

Shona	-dákuka iv.	progress by jumps (as hare does)	Hannan 1981:108
Shona	dangá 5	1) cattle enclosure 2) herd, flock 3) KMZ cattle consideration paid as main part of roora	Hannan 1981:110
Shona	dángwé 5	first-born	Hannan 1981:110

NILO-SAHARAN

Turkana	ting (aló-)	adopt, take, catch, clamp etc	Austin 1981:256
Turkana	tingakin	conjoin	Austin 1981:256
Lugbara	towi	five	Barr 1965
Nubian	tanga	leg	Armbruster 1965:160

AFRASIAN

Arabic	nijl f	foot, leg	Cowan 1976:329
Arabic	rajila	go on foot, comb the hair	Cowan 1976:329
Coptic	tiw/ti(e)	five	Campbell 1991:340
Hebrew	regel	foot, leg, urine	Holladay 1988:332
Soomaali	tagoog (-ta)	forearm	Luling 1987
Soomaali	takoorin (ka)	hip-bone	Luling 1987
Soomaali	takar	gadfly, camel-fly, horsefly	Luling 1987
Soomaali	takoor	set apart, segregate	Luling 1987
Soomaali	takooray v		
Soomaali	tag tegay	to go v	Luling 1987
Soomaali	tako	span	Zaborski 1975:327
Afar	taikko	a step ahead, space	Parker 1985:197
Galla	takku	span	Zaborski 1975:327
Galla	daka	to go	Zaborski 1975:324
Burji	deeg-ée f.	tail	Sasse 1982:62
Burji	kúka f.	leg	Sasse 1982:136
Burji	lek'an-s- v	chew	Sasse 1982:134
Burji	t'ung-a	finger, fingernail, claw, toe	Sasse 1982:183
Burji	ɖakku'-u	quick, early	Sasse 1982:61
Burji	lakk-ána	twins	Sasse 1982:132
Bade	taagdú	step on	Schuh 1977:165
Ngizim	tákdú	step on	Schuh 1977:165
Duwai	dáagiyó	step on	Schuh 1977:165
Hausa	táakaa	step on	Schuh 1977:165
Hausa	tangádji m.	stagger	Newman 1990:257
Hausa	táákii m.	step (pace)	Newman 1990:260

INDO-EUROPEAN

Proto-Indo-European	*tākō	touch, hit	Mann 1985:1367
Proto-Indo-European	*tek-	run, gallop	Mann 1985:1372
Proto-Indo-European	*tenk-	press, squeeze, cram	Mann 1985:1380
Proto-Indo-European	*teuk-	thigh, haunch, buttock	Mann 1985:1390
Proto-Indo-European	*tongh-	firm, hard, confirm	Mann 1985:1412

Proto-Indo-European	*tonk-	close, tight, compact, firm	Mann 1985:1412
Proto-Indo-European	*tuk	plug, cram, force	Mann 1985:1453
Proto-Indo-European	*tuengho	press, cram, oppress	Mann 1985:1465
Proto-Indo-European	*lag-	kick	Mann 1985:659
Proto-Indo-European	*lakō	jump, dance	Mann 1985:662
Proto-Indo-European	*lag-	kick	Mann 1985:659
Proto-Indo-European	*lak-	kick	Mann 1985:660
Proto-Indo-European	*dank-	bite, grip, clamp; biting etc. (examples tongs, tang, etc.)	Mann 1985:132
Proto-Indo-European	*daknos	grip, bite, clamp, tongs	Mann 1985:131
Old English	taegl	tail	
Latin	tango	touch, grasp	
Persian	takaltu	stuffing or pad of a saddle.	Fazl-i-ali 1885:151
		Felt cloth placed under saddle	
	tagawar	a running horse	Fazl-i-ali 1885:169
Persian	tag	bottom, depth. The surface of the earth. Cries for help	Fazl-i-ali 1885:169
Persian	tazarw	a cock pheasant	Fazl-i-ali 1885:152
Persian	tagal	a patch on a garment, pad of a saddle	Fazl-i-ali 1885:169
Italian	lacca	leg, haunch	Mann 1985
Swedish	lägg	calf, thigh bone	Mann 1985
Old Icelandic	leggr m.	1) hollow bone (of arms and legs) 2) leg 3) stem of a plant 4) shank of an anchor 5) shaft of a spear.	Zoëga 1910:265
Old Icelandic	taka v	1) to take, catch, 2) seize 3) to reach, stretch forth, touch 4) to reach and take harbour 5) to take hold (of a vessel). 9) touch regard, concern 10) to start, rush.	Zoëga 1910:430
Old Icelandic	tak n.	hold, grasp	Zoëga 1910:430
Old Icelandic	tagl n.	horse's tail	Zoëga 1910:430
Old Icelandic	tangi m	1) a point projecting into the sea 2) the pointed end by which the blade is driven into the handle	Zoëga 1910:433
Old Icelandic	tá f.	toe	Zoëga 1910:433
Old Icelandic	tá n.	path, walk (poet.)	Zoëga 1910:433
Old Icelandic	tág f	stringy root, fibre	Zoëga 1910:433
Old Icelandic	tengja v.	to fasten, tie together	Zoëga 1910:435
Old Icelandic	teygja v.	1) stretch out, draw 2) to spread out dough into a flat cake 3) allure, entice	Zoëga 1910:435
Old Icelandic	tigr m.	a ten, decade	Zoëga 1910:435
Old Icelandic	tunga f.	tongue	Zoëga 1910:444
Old Icelandic	tveir	two	Zoëga 1910:444
Old Icelandic	tvæ-vefr a.	two-winters old	Zoëga 1910:444

Old Icelandic	tyggja v	to chew	Zoëga 1910:445
Old Icelandic	tygi n.	gear, harness	Zoëga 1910:445
Old Icelandic	tygill m.	strap, band	Zoëga 1910:445
Old Icelandic	tygga (að),	to harness	Zoëga 1910:445
Old Icelandic	tykta, v	to chastise	Zoëga 1910:445
Old Icelandic	tögla v	to champ, gnaw	Zoëga 1910:446
Old Icelandic	tong (pl tangir) f	smith's tongs	Zoëga 1910:446

BASQUE

Basque	taka-taka	toddling	Aulestia 1992:353
Basque	taka-taka ibili	take one's first steps (child)	Aulestia 1992:353
Basque	-takoan	after	Aulestia 1992:353
	(verbal suffix)		
Basque	takoi n.	heel	Aulestia 1992:353
Basque	takoikatu tv	stamp the feet, tap one's heels	Aulestia 1992:353
Basque	tenkatu tv	tauten, tighten	Aulestia 1992:356
Basque	tenkor aj	firm, having integrity	Aulestia 1992:356
Basque	tinkotu tv.	to secure, make firm, steady	Aulestia 1992:357

ALTAIC

Turkish	tekē	he-goat, shrimp	Kornrumpf 1989:163
Turkish	tekme	kick	Alderson 1959:329
Turkish	değmek	touch, reach	Alderson 1959:329
Turkish	etek	foot of a mountain, skirt of garment	Alderson 1959:329
Turkish	tuğ	horse-tail, plume	Kornrumpf 1989:170
Mongolian	töye	span	Poppe 1960:60
Khalkha Mong.	töö	span	Poppe 1960:60
Evenki	tegenikte	span	Poppe 1960:60
Nanay	toŋja	five	Campbell 1991:983
pre-Mongolian	*takim	below the knee	Poppe 1960:55
pre-Mongolian	*tugila	kick out with feet (horse)	Poppe 1960:61
Mongolian	tujila	kick out with feet (horse)	Poppe 1960:61
Khalkha	tul-	kick out with feet (horse)	Poppe 1960:61
Sagaic	tuyula	kick out with feet (horse)	Poppe 1960:61

URALIC

Hungarian	hátra	backwards (metath.)	Magay 1990:390
Hungarian	hátasló	saddle-horse, riding-horse	Magay 1990:389
Hungarian	hátnál	at the back, in the rear, behind	Magay 1990:391
Finnish	tahti n	pace	Berlitz 1981:280
Finnish	takaisin av	back av	Berlitz 1981:280
Finnish	takamus	bottom	Berlitz 1981:280
Finnish	takana (postp.)	behind	Berlitz 1981:280
Finnish	takaosa n	rear	Berlitz 1981:280
Finnish	takvalo	tail light, rear-light	Berlitz 1981:280
Finnish	lonkka	hip	Anttila 1973:337

INDO-PACIFIC

Timor

Oirata	tana	hand	Greenberg 1973:813
Makasai	tana	hand	Greenberg 1973:813
Bunak	don	hand	Greenberg 1973:813
Abui	tang	hand	Greenberg 1973:813

Southern New Guinea (Kiwaiic, Torres Straits, Timor)

Miriam	tanka	finger nail	Greenberg 1973:832
Bangu/Kiwaiic	tanka	finger nail	Greenberg 1973:832

Andaman Islands	tanka	arm	Greenberg 1973:859
Kede, Chariar	tong	arm	Greenberg 1973:832

Bougainville

Nasioi	tanka	hand, arm	Greenberg 1973:832
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Western New Guinea

Kapaur	taan	hand	Greenberg 1973:832
Karas	tan	hand	Greenberg 1973:832

South West New Guinea

Upper Tedi	teni	hand	Greenberg 1973:832
Unkia	teng	hand	Greenberg 1973:832

Southern New Guinea

Dibolug, Gijara, Dabu	tang	arm	Greenberg 1973:832
Mbayaka, Agob, Kibuli	tang	arm	Greenberg 1973:832
Ngamai	tan	arm	Greenberg 1973:832

Unclassified New Guinea

Goliath	tang	hand	Greenberg 1973:832
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Cheke Holo	thag'ru	1) back, backside, buttocks of person/animal 2) top of house 3) bottom of upturned canoe.	White 1988:257,266
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Cheke Holo	tag'u	crawl, e.g. babies, ants, caterpillars, vines	White 1988:182
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Cheke Holo	tako tv. & iv.	catch, grab by the hand	White 1988:183
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Cheke Holo	takuri tv.	grasp, snatch, grab hold of (eg an axe or spear tossed in the air)	White 1988:183
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Oenge/Andaman	cige	leg	Greenberg 1973:864
Biada	ca	leg	Greenberg 1973:864
Bogijab	cag	leg	Greenberg 1973:864
Juwoi	cok	leg	Greenberg 1973:864
TA Abui	tuku	leg, foot	Greenberg 1973:864
HA Pagu	tagi	to walk	Greenberg 1973:864

Modole, Galela	tagi	to walk	Greenberg 1973:864
Tabaru, Loda	tagi	to walk	Greenberg 1973:864
Temate	tagi	to walk	Greenberg 1973:864
CM Savo	tetegha	foot, lower leg	Greenberg 1973:864
TS Northeast	tage(na)	to walk	Greenberg 1973:864
North	taka(ni)	to walk	Greenberg 1973:864
NNG Arso	taka	foot	Greenberg 1973:864
Sko	tae	foot	Greenberg 1973:864
Moraori	tegu	foot	Greenberg 1973:864
Mombum	itogh	foot	Greenberg 1973:864
Bara	togoi	leg	Greenberg 1973:864
Ekari, Woiani	togo	foot	Greenberg 1973:865
Mikaru	saga	foot	Greenberg 1973:865
Matap	tag	hip	Greenberg 1973:865
ENG Mafulu	soge	foot	Greenberg 1973:865
Kambisa	suga	foot	Greenberg 1973:865
Korona	sogo	foot	Greenberg 1973:865
Kabana	suge	foot	Greenberg 1973:865
Sikube	suku	foot	Greenberg 1973:865
Hunjara	tegi	foot	Greenberg 1973:865
Jegasa Sarau	tegi	foot	Greenberg 1973:865

West New Guinea

Wambon	atigo	to bite	Greenberg 1973:826
Dumut	atingo	to bite	Greenberg 1973:826

Marind Group

Boven Mbian	tek	finger nail	Greenberg 1973:827
Digul/Ok	tuk	finger nail	Greenberg 1973:827
Ninintai/Ok	duk	finger nail	Greenberg 1973:827
Awju Sjiagha			
Awju	dogho	finger nail	Greenberg 1973:827

Marind Group

Marind	ete	jaw	Greenberg 1973:827
Aghu (Awju)	te	jaw	Greenberg 1973:827

DRAVIDIAN

Tamil	taak-	walk v	Burrow 1960:204
Kuwi(F)	taakali	walk v	Burrow 1960:204
Kuwi(F)	taikcu	to come in contact	Burrow 1960:204
Parji	taak-	to walk	Burrow 1960:204
Gondi	taakaanaa	to walk, to go	Burrow 1960:204
Tamil	taakku	to come into contact	Burrow 1960:204
Kanada	tagalu	come into contact with, touch, hit, have sexual intercourse with	Burrow 1960:204

BRAHUI

Brahui	laggog	climb	Bray 1908:166
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Brahui	tak	desire n.	Bray 1908:171
Brahui	takking	covet	Bray 1908:169

AUSTRONESIAN

Proto-Polynesian	taka	roam	Ranby 1980:223
Proto-Polynesian	taka	unmarried	Ranby 1980:223
Rennell	taka	marry	Ranby 1980:223
Samoan	taka	lover, suitor, unchaste, fornication, party to whom proposal of marriage is taken)	Ranby 1980:223
P-Nuclear-Polynesian	tago	touch, hold, grasp	Ranby 1980:225
Tongan	tago	visit woman at night for sex	Ranby 1980:225
Proto-Polynesian	tiketike	to have flexed legs	Ranby 1980:230
Tokelau	tiketike	sit on chair, ride horse	Ranby 1980:230
Proto-Austronesian	*tanjas	agile, quick	Blust 1986:93
Proto-Austronesian	*tajan	finger, toe	Blust 1986:95
Proto-Austronesian	*tegel	unyielding	Blust 1986:98
Proto-Austronesian	*ti(ŋ)kan	spread the legs	Blust 1986:102
Proto-Austronesian	*taked	heel, foot, leg	Blust 1983:130
Malay	tanga	house ladder, stairs, steps	Yusop 1975:264
Malay	tangam	rabbit	Yusop 1975:264
Malay	tanjai	stalk, stem, handle of cup, dipper	Yusop 1975:264
Malay	tanjakap	catch, arrest, grasp	Yusop 1975:264
Malay	tanjas	swift, fleet (of horses), agile	Yusop 1975:264
Malay	tanjan	hand and forearm	Yusop 1975:263

AUSTRALIAN**PAMA-NYUNGAN**

Diyari	tuku	back	Austin 1981:256
Diyari	tuka-	carry on the back	Austin 1981:256

SINO-TIBETAN

Chinese	tàng tv	iron (clothes)	Wang 1967:451
Chinese	tàng tv	straighten up	Wang 1967:461
Chinese	tàng xiōng	throw out one's chest	Wang 1967:461
Chinese	tùi	leg	Wang 1967:470
Chinese	dīngzi	nail (for fastening)	Wang 1967:111
Chinese	dòng tv	touch, handle (something)	Wang 1967:112

JAPANESE

Japanese	matāgu	to step over, straddle	Wang 1967:112
Japanese	matā	crotch, where legs join	Wang 1967:112

AUSTRIC

Nicobarese	tanai	five	Wang 1967:112
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AMERIND

Miwok	takse tv. & i.	1) to jump 2) to jump out of the way 3) to jump over something 4) to hop 5) to skip	Callaghan 1984:144
Guahibo	tákhua	foot	Matteson 1972:155
Tucanoan	dika-ku	arm	Matteson 1972:138
Bora	uségai	finger	Matteson 1972:57
Chibchan	itigina	finger	Matteson 1972:57
Washo	itʔsig	finger	Matteson 1972:57
Karok	ti:k	finger	Matteson 1972:57
Tzotzil/Mayan	tek' tv.	step on; step (Ritual speech, prayer)	Laughlin 1975:334
Tzotzil/Mayan	tek' nc.	stamp, pace	Laughlin 1975:334
Tzotzil/Mayan	tek' nc.	stamp, pace	Laughlin 1975:334
Tzotzil/Mayan	tek'anan tv.	step on (plu)	Laughlin 1975:334
Tzotzil/Mayan	tek'ek' av.	about to tread on (rooster on hen)	Laughlin 1975:334
Tzotzil/Mayan	tek'el nc.	pace, step	Laughlin 1975:334
Tzotzil/Mayan	tek'i iv.	stand firm (Ritual speech, curing prayer)	Laughlin 1975:334
Tzotzil/Mayan	tek'obal	ladder	Laughlin 1975:334
Tzotzil/Mayan	tek'ton	strut (turkey), dancing person	Laughlin 1975:334

NA-DENE

Athabaskan	t'a	tail	Greenberg 1987:324
Athabaskan	t'a-ŋ	backward	Greenberg 1987:324
Tlingit	t'a	behind	Greenberg 1987:324

PAK

NIGER-CONGO

Proto-Bantu	*-pákat-	hold especially child	Guthrie 1971:135
Proto-Bantu	*-bák-	get catch	Guthrie 1971:118
Proto-Bantu	*-pók-	take, receive	Guthrie 1971:136
Proto-Bantu	*-pókɿ	blind person	Guthrie 1971:136
Proto-Bantu	-páágú	tree-fork	Guthrie 1971:135
Proto-Bantu	-páká	wild cat, domestic cat	Guthrie 1971:135
Proto-Bantu	*-pákud-	take out food (from pot), take out (from container)	Guthrie 1971:135
Ngazija	paja 5	thigh	own notes
Swahili	kipago	rung of a ladder, step	Johnson 1939:202
Venda	-fháhula	take flour or similar substance out of mortar by hand	v Warmelo 1989:50
Venda	-fháha	scoop up or out as flour	v Warmelo 1989:50
Venda	-phaga	take greedily, help oneself liberally without consideration for others	v Warmelo 1989:302

Venda	phagú-phagú	a hurried serving and gobbling of food	v. Warmelo 1989:303
Venda	pháhá 9	wildcat	v. Warmelo 1989:303
Venda	phango 9	narrow cleft, defile, hence: narrowness of the pelvis (in child-birth)	v. Warmelo 1989:305
Venda	-phakha	distribute, serve or dish up	v. Warmelo 1989:303
Venda	phakho 9	cavity, hollow etc.	v. Warmelo 1989:303
Venda	báká 5	open space, as between the sticks of a fence or roof or between the spokes of a wheel	v. Warmelo 1989:7

NILO-SAHARAN

Turkana	pak	bifurcate, split, rive, cross, whittle, cut	Barrett 1990:65
Turkana	paka	female cat, tabby	Barrett 1990:65
Turkana	paka	cat, kitten	Barrett 1990:65
Turkana	pakak aj.	bifurcated, split	Barrett 1990:65
Turkana	pakar	separate, isolate, rebel	Barrett 1990:65
Turkana	pakat	gap, fissure, rent, crack	Barrett 1990:65
Turkana	pakunitae	selected, chosen	Barrett 1990:65

AFRASIAN

Arabic	fajja	to straddle over, to walk wide, to have the legs wide apart	Cowan 1976:697
Arabic	fajara	cleave, break up	Cowan 1976:697
Arabic	faxð f	thigh	Cowan 1976:699
Afar	faas m	axe	Parker 1985:99
Afar	faxaaqe	crack, split	Parker 1985:99
Afar	fahu	splitting	Parker 1985:99

INDO-EUROPEAN

Proto-Indo-European	pekō	strike, meet, fight	Mann 1985:913
Proto-Indo-European	paǵ-	harden, fix, fit	Mann 1985:899
Proto-Indo-European	pekō	shear, comb out, trim	Mann 1985:914
Proto-Indo-European	penque	five	Mann 1985:919
Proto-Indo-European	pug-	jab, jolt, stab	Mann 1985:1006
Proto-Indo-European	puk-	fit, enclose, hug, embrace, encircle	Mann 1985:1008
English	fang		Mann 1985:1008
English	fight		Mann 1985:1008
English	finger		Mann 1985:1008
English	fist		Mann 1985:1008
English	five		Mann 1985:1008
Old English	faec	space, interval	Mann 1985:899
Old English	fōg	join, joint	Mann 1985:901
Greek	pekhus	arm	
Sanskrit	bahus	arm	

Greek	pugnē	fist	Mann 1985:901
Greek	pugē f.	buttocks	Mann 1985:901
Greek	pent-	five	Mann 1985:901
Greek	pekos	comb	
Russian	piaste	five	Mann 1985:901
Russian	izmepyaty	five	Mann 1985:901
Czech	paž f.	arm	Mann 1985:901
O C S	poku	handful	Mann 1985:1648
Polish	pazur m	claw, talon	Stanislawski 1981:456
Latin	forpex icis f.	tongs, scissors	Mann 1985:901
Latin	pugnus	fist, punch	Mann 1985:1006
Latin	quinque	five	Mann 1985:1006
Latin	pungo	prick	Mann 1985:1009
Old Icelandic	fang	1) grasp, hold, 2) wrestling, grappling 3) the space between the arms, the breast and arms 4) catching fish, fishing 5) foetus in sheep and cows 6) pl fōng baggage, luggage 7) means, opportunity	Zoëga 1910:124
Old Icelandic	fanga v.	to capture	Zoëga 1910:124
Old Icelandic	fang-taka f.	taking a hold (in wrestling)	Zoëga 1910:125
Old Icelandic	fā (fāe, fekk, fengum, fenginn), v	1) to grasp with the hands, to get hold of 2) take, capture 3) get, gain, win 4) suffer, endure 5) to get, procure, to give, to deliver, to put into one's hands 6) with gen. to get, take, gain, win 7) to conceive (of sheep, cattle) 8) to touch, affect	Zoëga 1910:130
Old Icelandic	fé	cattle, esp. sheep 2) property, money	Zoëga 1910:132
BASQUE			
Basque	bost	five	Campbell 1990:180
ALTAIC			
Turkish	apaz	closed hand or fist, handful, the whole hand, paw, talon, strength, violence, ancient official signature of the Sultans, large stann, sole (for shoe repair)	Campbell 1990:180
Turkish	pençe atmak	to lay hands on, seize	Hony 1947:273
Turkish	pençeli	powerful, despotic, repaired, resoled (boots)	Hony 1947:273
Turkish	pençelemek	grasp, seize	Hony 1947:273
Turkish	pençeleşmek	lock fingers with one another and have a test of strength, engage in contest with another	Hony 1947:273

Turkish	piç	bastard, offshoot, sucker, cuticle of the nail	Hony 1947:274
Turkish	bacak	leg, shank	Hony 1947:274
Turkish	peş	the space behind	Komrumpf 1989:131
Turkish	pençe	paw, strength, violence	Komrumpf 1989:131
Turkish	pens(e)	pliers, tweezers	Komrumpf 1989:131
Turkish	pazu, bazu	arm, muscle, strength	Hony 1947:272
Turkish	paça	pig's/sheep's trotter	Komrumpf 1989:128

URALIC

Finnish	viisi	five	Berlitz 1981:303
Finnish	pakko	force	Anttila 1973:32
Hungarian	fog	hold, take, seize, grasp, catch	Magay 1990:317

INDO-PACIFIC

Bea	pag	claw	Greenberg 1973:858
Baale	poag	claw	Greenberg 1973:858
Sulka	paaga	finger nail	Greenberg 1973:858
Baham	pag	finger nail	Greenberg 1973:858
Teminabuan	pek	finger nail	Greenberg 1973:858
Nafri	faxa	finger nail	Greenberg 1973:858
Amara	foka	finger nail	Greenberg 1973:858
Tate	faha	claw	Greenberg 1973:858
Mawata	baga	chin	Greenberg 1973:830
Kiwai	baga	chin, jaw	Greenberg 1973:830
Miriam	bag	cheek	Greenberg 1973:830

AUSTRONESIAN

Proto-Austronesian	*pekpek	beat, hit	Blust 1986:68
Proto-Austronesian	*perja	fork of a branch	Blust 1986:68
Proto-Austronesian	*panja	forked, pronged	Blust 1983:91
Proto-Austronesian	*pe(ŋ)kan	stretch open/apart	Blust 1983:94
Proto-Austronesian	*pukag	crotch, thigh, fork	Blust 1983:98
Proto-Austronesian	*peka	separate, part tv.	Blust 1980:125
Thao/Paiwanic	paaqi	buttocks	Benedict 1990:218
Malay	paha	thigh	Yusop 1975:191

AUSTRALIAN

Pama-Nyungan			
Dhargari	paga	to copulate	Austin 1981:311
Dhargari	puka-	to scratch	Austin 1981:309

JAPANESE

Japanese	hikkaku	to scratch, to claw	Vance 1993:139
Old Japanese	fagi	shank (lower leg)	Benedict 1990:218

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