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PAPAGO VERB STEMS

BY

JUAN DOLORES

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EXPLANATORY NOTE

The list of Papago verbs constituting this essay was compiled by Mr. Dolores to facilitate the analysis of a number of texts recorded by him, and to serve as a basis for future grammatical study. As the Papago and Pima languages are practically identical, the list may also be of value in the further elucidation of the Pima texts published by the late Dr. Frank Russell,¹ as well as in comparative studies in the Uto-Aztekan group of languages.

The system of orthography was worked out by the undersigned after phonetic investigation of the language. For the spellings used in each word, Mr. Dolores is however responsible. The following notes may make the orthography sufficiently clear for grammatical purposes.

¹ Ann. Rep. Bur. Am. Ethn., xxvi, 3-389, 1908.

The vowels are a, i, o, u, and ü, the latter the back-tongue, non-rounded vowel found in many Shoshonean languages. C is similar to English sh, tc to ch. V is bilabial. Ṭ is a more alveolar or palatal sound than t, which is distinctly dental. N before i and ü is a different sound from n before a, o, u, being nearly equivalent to ny, that is, palatalized. This difference is invariable when the sound is initial. It did not seem necessary, therefore, to employ distinct symbols. Subsequently a number of instances of medial unpalatalized n before ü were found. In these words n has therefore been indicated by italic *n*. Several instances of palatal n before a, o, u have been written ny.

Several consonants seem to depend on the adjacent vowels. Thus, at least initially, s occurs only before i and ü, c only before a, o, u; t before a and o, tc before i, ü, u. V and w are hard to distinguish. Mr. Dolores has written v before a and i, w before o, u, ü, which seems correct to the writer. The spelling wua might, however, be regarded as representing wa with heavily labialized w. Ṭ has been found, initially, only before a and u.

All Papago sounds, vowels and consonants alike, have two pronunciations; one sonant and with weak breath, the other surd² and strongly aspirated. The former has been indicated by ordinary small roman letters, the latter, for convenience in typewriting, by small capitals. The rules governing when the same sound is respectively sonant or surd cannot be examined here; the main determining factor, however, is position in the word, surd aspirated sounds being normally found at the end of words. S and c alone seem to be invariably surd: they have therefore been represented throughout by small capital letters.³ Mr. Dolores also writes l as always surd, even when intervocalic. This may be because of a normally stronger breath pressure than in English; the sound is certainly sonant for at least the greater part of its duration in some positions.

² Vowels here designated as surd may in reality be whispered. At any rate they show no trace of laryngeal vibrations in ordinary mechanically made tracings.

³ Consistency would have required capital H instead of small h; but this has not been done. Surd v of course is bilabial f; and w is much like English wh. Stops and the affricative tc are sonant only during the explosion when initial, entirely surd when final or followed by surd vowels.

In the vowels there is a third class of sounds: sonant and aspirated, represented by following *h*. It is thus necessary to distinguish between sonant unaspirated *a*, sonant aspirated *ah*, and surd aspirated *ʌ*.

It seems likely that something similar may apply also to consonants. In *kah*, to look for, and *kah*, to hear, there is undoubtedly a difference in the initial sounds. Both are sonant during the explosion, but the second contains a stronger breath. Compare similarly *kih*, to become fat, and *kih*, house; *tcīyah*, to arrive, and *tcīyah*, to settle down; *teuh*, to do or to rain, *teuh*, to stop burning. In each case the initial consonant of the second word is more strongly aspirated, though the difference is not indicated in the orthography used. A similar aspiration probably explains the spelling *kahvai* (with surd *v* and sonant *a*), where *kahvai* (the whole last syllable sonant) or *kahvai* (the last syllable entirely surd) might be expected, and Mr. Dolores' *ūLUKI*, *ūLIHNI*, *OLIHC*, where *L* perhaps stands for *lh* related to *l* and *L* as *ah* is to *a* and *ʌ*.

Accent is very weak in Papago, and apparently of no grammatical significance; it has therefore not been written.

A. L. KROEBER.

I. SIMPLE VERB STEMS⁴

A thorough distinction is made in the Papago verb between completed and continued action, or as it might be called, accomplishment and progression. The obvious translations in English are by the infinitive and present participle respectively. Most verb stems, as here given in their shortest form, denote completed action, and their "participle," or form signifying continuing action, is made by the addition of one of a number of suffixes. Other verbs add no such suffix: in them, incomplete action can be expressed only by using the form denoting repeated action, namely, the reduplicated stem. These two classes have not been separated or distinguished in the list.

⁴ The alphabetic order is the same as in English. *T* and *tc* follow *t*, *ü* follows *u*. No distinction of order is made between small and capital letters, nor between aspirated and unaspirated vowels: *a* and *ah* come in the same place and *am* precedes *ahp*. The glottal stop is also not taken account of in alphabetizing.

A third class of verbs denotes only incomplete or continued action. These stems cannot express completion or accomplishment. Consequently their translation by the English infinitive would be misleading, and they have all been rendered by the present participle. They have been further distinguished by an asterisk. Thus sa'ahsim, to laugh at, but *ahc, laughing at, or to be in a condition of laughing at. In the same way there is an absolute difference in meaning between huh, to eat, and *ko'ah, eating, or to be eating. *cavant is "looking for horses"; the idea being that when one goes to look for the horses he is continually looking until he finds them. *cahw is "rattling the gourd" in accompaniment of a certain class of songs. When a song is commenced, there being only one verse, the song with the same words is repeated many times over. The rattle starts with the song and never stops until an entirely new song is to be introduced. The gourd continues to rattle even while the singers pause to catch their breath preparatory to singing the song over again. The rattling keeps the same time, and makes the connection from one repetition to the next. It is clear as soon as the full meaning of this word is understood that the idea of continuation is implied; and the same idea prevails in all the verbs of this class.

*hapahtkū and *nahpaktū have been included in this "participial" class because being from adjectives they have no complete action or "infinitive" form. *kūhc, *nawo't, *skū'ir have also been starred and translated as participles because, while they possess forms denoting completed action, these are longer than the "participial" forms given.

ah	point, tell
*ahc	laughing at
ai	reach, overtake, pass
ammoh	talk loud
ammihTCU	know, guess right
a'pūTCU	accuse
cāca'KI	mix
*cācahNI	groaning
cai	drive (cattle, horses, etc.)
*ca'ī	hanging (like clothes on line, on brush)
cāhku	hold in the palm

CAM	make a rustling and scratching noise
ca'pü	splash
*cavANT	looking for (usually horses)
ca'vai	buy
*cahwü	rattling the gourd
coh	sew
cohcah	cry
cohNI	hit with the hand
CONYTCI	cut by striking
CÖPI	stop
hah	roast grain in the basket
hah	melt, thaw
ha'ahsah	stop, quit
hai	crack, destroy
*hapahTKÜ	lying flat (hapaḥ, flat)
hāPI	copulate in ano
hasuhteu'ih	blunder
ha'ts	sprinkle
haḥT'c	paste, stick on
haḥüwuah	belch
hih	cut hair, cut grass, etc.
hih	go, walk, move
hiahc	bury
hihhiN	yell, bark
hihKÜ	turn from flower into fruit (cactus fruit)
hiovihtCI	soak by burying
hihPÜcuh	sprinkle with the mouth
hiḥoh	cook by boiling
hiḥpah	braid
*hi'vi'kü	depending on
*hihwü	rubbing
hoah	look for by stirring
hohhah	load in a carrying basket
ho'pinnoh	wrap
hötümmuh	hurry some one
huh	eat
huh	be gone (liquid)
huh	grease
hūkah	become warm
hūLihka't	show evidence of bearing mesquite-beans
hūPÜ	pull out
huḥT	go down
hu'ui	chase
hüh	laugh
hūhLI	hang clothes for drying, to dry fruit
hūmahpai	pile, assemble, gather
hūoh	bloom
hūhpih	become cold, cool (no more pain)
hūum	be cold

hüva'kɪ	smell
hüva'tɕɪ	become cool
ih	drink
ih	call a person's attention by naming his relationship to oneself
iahpu't	catch flour as it falls off the grindstone
iah'to'kɪ	tell a lie
iawuah	spill
ihhammuh	delay, disturb
ihu	gather cactus fruit
i'ihhoh	cough
ikɪ	shake a plant to make the fruit fall off
innam	hunger for meat
iohɪ	fry
i'ovih	become sweet
ihpɪ	retract the foreskin
*ipüh	breathing
ihɪ	put grain, or anything composed of many separate bodies, into a plate or basket
ihvɪ	make fire with a drill
kah	look for
kah	hear
kar	cook meat on coals
kaihc	catch and hold between the legs
*kaiɕɪ	saying
*kakütah	selling, wanting to sell
kam	put in the mouth
kantahtɕ	scatter
kahpü	pop
kahvɪ	quarrel
kawulihkai	separate, change
kahyo'pɪ	cross
kih	get fat, gain flesh
kiah	couple
ki'ihc	bite and hold with the teeth
kikihwü	tremble
kikhku'tɕɪ	whistle, whistling
koh	hug, hold against the breast
*ko'a	eating
kohcohɕkü	be loose
*köhhim	limping
koi	sleep (sing.), die (pl.)
koi	bleed
kohkoh	sick (pl.)
köhkü	dig; sleep (pl.)
kohpo'tkü	be heaped, raised
kohpü	explode
ko'to'kɪ	yell in victory
kohwü	rattle like tin cans

kuh	close, shut
*kuh	singing (a bird), neighing (a horse)
ku'A	get wood
kühc	burn and stick to the cooking vessel
kūca't	chase game for killing
kuhca'tkū	be dry and stiff
kuhcuhli	make jelly or jam
kuhha'ki	cook meat on the end of a stick
ku'ihno'ki	annex
kuhkūtpah	heat the body for curing rheumatism
kūr	put wood in the fire, for carrying the fire away
kuṭuh	bother, disturb
kuyihcaṭ	whine
kuyiNT	count (Spanish)
kuyihTCI	call an animal or a bird by imitating its voice
küh	stand (man, animals)
*kühc	scratching the body
kūr	bite, sting
kūr	fall
kūkuhs	feed
kūkū	whip, earn, win
kū'kūTCI	beautify, make good
kühli	shell corn, pick berries
kū'ū'tah	reach full growth
kühvai	cool and form a scum, like greasy food
kūvihc	lay against, lay on top
kūyihc	step on
mah	give
mah	cook yucca in the ground
maɪ	learn, know
ma'ihc	cover
ma'ihhih	hit by throwing
maim	get sick by eating too much fat meat
ma'kaht	break through
*makühwū	swinging the arm
mammūṭoh	experience the act of giving birth to a child
mānnihkoh	be stiff jointed
māhsih	become light
mahtoh	untangle
moh	gather seeds
mōr	load on the head (mo'o, head)
muh	shoot (with bow and arrow)
muh	die
muhli	break by bending
mu'uhkar	sharpen
müh	run (sing.)
mūah	kill
mūr	burn something, blaze

mūkoh	be gone far (distance or time) (mūkü, far)
nāhc	fold
naI	make fire
nahkoh	endure, raise
naM	meet
*nannawühkü	sparkling
naNūhkihtci	tease a hungry person with food
*nahpahꞑkü	lying or sitting in a dead-like position
nāhtoh	make, finish
navai	make wine
*nawo't	make a friend, making a friend
noh	bend
nūah	beg
nūi	see
nūi	sing
nūhni	fly up, fly away (pl.)
nūoh	speak, talk
*nyūku't	keeping, taking care of
oh	gather cactus fruit, harvest corn
oA	erase
ohckoh	skin a sore place
oi	follow
ōlahT	coil, shorten, take up
oLiHC	hook
ōhmI	break (pl.)
o'oh	drop (liquid)
o'ohhah	write, paint
ōtcū'ühwü	find the thing lost
pah	swallow
pa'ihhah	inclose (pl. obj.)
pa'ivihTci	get ahead
pakaht	get mad, get angry
pāmmu't	ask for help
pānnim	creep, crawl
pih	give cooked food
piah	take cooked food off the fire
pihhah	wind
pihhiNoh	put things in the skirt or apron
pīPI	defecate
pihstci	sneeze
pūr	take (sing. obj.)
pūpū't	make a pattering noise
sih	suck
siHC	pin, touch with the end
siPü	drizzle, to drop in drops
sihpü	break open of itself (a sore)
sihsxi	sift
si'tci	rattle (rattlesnake or bell)

skihhu ⁵	fear
skuyihTCI ⁵	yell in defiance of the opponent
*skü'IT ⁵	scolding, being angry at
sōhhoi	love, like, agree
so'i'kü'ühLI	pity
stahmo ⁵	abhor, dislike
sūvahhu	sweat (Spanish)
*tah	sitting
tah	fly, jump (sing)
tah	wrestle
tai	borrow, ask for
tahmai	have a toothache from eating sour fruit
tamūhtcuah	cause to pain again
tāpiuh	smoothe
tāhpū	split
tāt	touch, feel
tātah	arrive (pl.)
tahtahNI	thunder nearby
taht	spread
*tahtcuah	wanting, needing, desiring
toa	be alive, be well, get well
toahhiih	thunder far away
toha	put away, put down (pl.), pour water
to'ɪ	bet (pl. obj.)
to'ipiah	rescue, save
tohkah	play the woman's ball game
tōmmi'r	bear fruit out of the regular season
ton	shine
toNnom	be thirsty
tō'pū	twist
tohskoh	swell
tōt	cohabit
to'ts	excite, frighten
toht	groan, snore
teihkūpū	work
teihpcuh	lick, using the fingers
teihpiah	move the whole family
*teihteivih	playing
teiyah	arrive (sing.)
teiyah	make a home, to settle down
teuh	stop burning of itself
teuh	put the baby on the back
teuh	do, make, prepare
teuh	rain
teuammah	cook by burying in the ground

⁵ Stems do not begin with two consonants. s- commences many adjectives. These four verbs all denote states of mind. They are therefore evidently adjectives.

teu'ammuh	punch with a stick or with the fingers
teur	grind
teur	put out the fire
teu'ihTCI	ask a question
teum	try
teühPI	sink
*teühTCI	standing (pl., inanimate objects)
teuyihc	make a lunch
teuyihc	catch and drag under
teuyihc	wink
teüh	see, find
teüh	put away
teüh	taste
teühc	go up, climb, ride
teüi	say
teühkah	put on the shoes
teühkah	be there (at a certain time, in a certain place)
teü'kiah	fight
teü'KIToh	think, remember
teühkōpih	undermine
teühKÜcaht	mark, make a line
teümmar	make bread, tortilla
teümmoh	stop by obstruction, go all over
teümmu't	make a fire to heat cooking rocks
teü'TCI	smoke tobacco
teühTCI	name, call
teüvaim	drag
uhhu'KI	notch the end of an arrow
ur	take (pl. obj.)
ukITCI	shake
ulihNI	hold out something for somebody
ūlu'KI	throw the baby up and down
ür	plant
*ūpi't	being afraid, fearing
ū'pū	stop crying
ūhs	steal
ūta'KI	find
*ūtü'ki't	having, owning
vah	go in
vah	make tough, irrigate
vai	call
vahMI	rise from lying
va'Nnyoh	pull
vahPCCu't	get blisters, become blistered
vih	stay, be left
viah	leave something purposely
vinnyuh	lick with the tongue
vi'TCI	twist, make a hair rope
wohI	burn the hair

wor	lay, put down
wōh'poi	take away from by force
wōhpü	run (pl.)
wōhpü	pull out the hair
wohsuh	brush, sweep
wuh	tie
wühc	come out, rise from sitting
wuhha	awaken
wuhsoh	blow with the mouth
wuyihtci	race a long distance using a wooden ball
wühhotci	certify, to make true
wünnat	put with

II. VERBS DERIVED FROM NOUNS

A. WITHOUT CHANGE

Many nouns are also used as verbs, the idea of "have" being then understood. Thus, ha'ah, a jar, or, to have a jar. Such verbs are here given.

Other nouns which will be listed separately later, are made into verbs, with the meaning "to have," by the addition of the suffix -'kah. But the nouns in the following list cannot add the suffix -'kah; and those which are given as adding the suffix -'kah, cannot be used as verbs without it.

Coyi'kah and ünni'kah contain this suffix, but being themselves nouns, their verbal forms are here included.

<i>Noun or Verb</i>	<i>Meaning as Verb</i>
a'ahn	to have feathers
alita'kü	to have a child (a man)
āmmoh	to have some one to work for
aht	to have an anus or bottom
ahtohli	to make atole, to have atole (Spanish)
cālihvi	to have trousers
cavihkuht	to have a rattle
con	to have a starting point or trunk
connikiwuhli	to have a wooden ball
co'piaht	to have a doll
coyi'kah	to have a pet
ha'ah	to have a jar
hahcū'tah	to have a woven basket
ha'koh	to have a cushion for the head
hahpohr	to have an arrow
hi'i	to have urine
hiwo'kü	to have a sore (the skin broken open)

<i>Noun or Verb</i>	<i>Meaning as Verb</i>
hiwühcan	to have a groin (a woman)
hiwühteuh	to have a groin (a man)
hoah	to have a sewed basket
hoahsa'ah	to have a plate
honnikü	to have a wife
huhhulikah	to have menses
hūTCI	to have toe or finger nails
hükü	to have a co-wife (a woman)
ivi'tahkuḥṭ	to have a fire drill
kaitckah	to have seeds for planting
kalicahni	to have trousers (Spanish)
kaḥṭ	to have a bow
kih	to have a home or a house
kohc	to have a nest
kohtohni	to have a shirt (Spanish)
kukü	to have an end
kun	to have a husband
kuhsüwoh	to have a neck
kütcah	to have semen
liaht	to have a raw-hide rope (Spanish)
mahkoṭakü	to have something with which to couple
mannata'kü	to have something to hobble with
maḥṭ	to have a child (a woman)
mah'tcuḥṭ	to have a grinding stone
mayin	to have a mat
mo'oh	to have a head
nahkü	to have an ear
nonnah	to have eggs
ovih	to have an opponent
ovi'TCI	to have an awl
oyit	to have a farm
pohcohli	to have pohcohli (corn and beans cooked together)
sihpuḥṭ	to have a sitting part
sihsüvata'kü	to have spit
sihtohli	to have syrup
tahtkü	to have root or roots
tahṭ	to have a foot
tohnü	to have a knee
teihni	to have a mouth
teüohkuḥṭ	to have a cane
teühpah	to have a mortar
teüpitükuḥṭ	to have a pestle
teü'rocki	to have a dream
uhc	to have a flint arrow point
ur	to have wind on the bowels
u'umhata'kü	to be feathered (speaking of the arrows)
uhsakah	to have the stick with which girls play the double ball.

<i>Noun or Verb</i>	<i>Meaning as Verb</i>
u'uh	to have war arrows
üLita'kü	to have bark or skin
ünni'kah	to own or to have (ünni'kah = property)
vahcah	to have a woven trinket basket
vahCOMI	to have a sewed storage basket
vähKUS	to have a mat or anything used as a mat
vä'oh	to have a pair of wooden tongs for gathering cactus fruit
vipü'toh	to have testicles
vitü'kuht	to have a pestle for grinding
wöhkü	to have a stomach
wo'kücah	to have a quiver
wonnahMI	to have a hat
wöht	to have the foreshaft of an arrow
wuakah	to have a wuakah song

B. BY SUFFIX -'kah, TO HAVE OR CLAIM

<i>Nouns</i>	<i>Verbs</i>
a'ahn, feathers	a'annü'kah, to have feathers
ah'ki, river-bed (without water)	ah'ki'kah, to claim a river-bed
alih, baby	ali'kah, to have a child
ähNÜ, desert-willow	annü'kah, to claim the desert-willow
ca'r, brush	ca'i'hak, to claim brush
cäht, wild potatoes	cäfü'kah, to have wild potatoes
cü'kü, mocking-bird	cü'kah, to have a pet mocking-bird
cüta'ki, water	cüta'kah, to have water
hähcahNI, giant cactus	hahcanni'kah, to claim giant cactus
haivahNI, cows	haivanni'kah, to have cows
hähLI, squash, pumpkin	hähli'kah, to have squash, pumpkin
ha'r, a kind of plant used as food	ha'tü'kah, to have ha'r
ho'ki, deer skin stripped from the body	ho'kah, to have deer skin (buck-skin)
ho'tai, stone	ho'tai'kah, to have a charm stone (medicine man)
hovi'toi, Spanish bayonet	hovi'tei'kah, to have the fruit of Spanish bayonet
hüahvi, deer	hüavi'kah, to claim deer
huni, corn	hunni'kah, to have corn
hümma'rckam, people	hümma'rckammü'kah, to claim people as one's own
hüht, red face paint	hühtü'kah, to have red paint for the face
ihhu'kü, devil's claw (<i>Martyria</i>)	ihhu'kah, to have devil's claw
ihkohvi, a plant used as food	ihkovi'kah, to have ihkohvi
ihkuhLI, a plant used as medicine	ihkuli'kah, to have ihkuhLI
ipahi, leaf-cactus	ipai'kah, to have the fruit of ipahi

ihsüvi'KI, a kind of cactus	ihsüvi'kah, to claim ihsüvi'KI
iva'KI, greens or weeds	iva'kah, to have greens
kaitCI, seeds	kaitCI'kah, to have planting seeds
	kaitci'kah, to have cactus seeds
kaLivaHC, a kind of peas	kaLivaHCü'kah, to have kaLivaHC
(Spanish)	
kaviyuh, horse (Spanish)	kaviyu'kah, to have a horse
ki'KI, tallow	kī'kah, to have tallow
kihsOH'KI, a kind of cactus	kihsOH'ki'kah, to have the fruit of kihsOH'KI
	kohLai'kah, to have a corral
kohLai, corral (Spanish)	kuyi'kah, to claim mesquite-trees
kuHI, mesquite-tree	küli'kah, to have an old man (a woman speaking of her husband)
küLih, old man	küpi'kah, to have watermelons
	LANteüh'ki'kah, to have lentils
küHPi, watermelon	LIaLi'kah, to have money
LANteüh'KI, lentil (Spanish)	mahca'tü'kah, to have a moon (a woman speaking of her sickness)
LIaLI, money (Spanish)	mākai'kah, to have a doctor
mahca'r, moon, month	
māhkaI, one who cures sickness without medicine	manteüh'ki'kah, to have lard
manteüh'KI, lard (Spanish)	mUNni'kah, to have beans
müHNi, beans	nāhka'KÜ, to have the fruit of nāhka'KÜ
nāhka'KÜ, a kind of cactus	nawü'kah, to claim the nahwü
nahwü, any kind of leaf-cactus	ohkohkoi'kah, to have a pet wild-pigeon
ohkohkoi, wild pigeon	ohKSü'kah, to have an old woman (a man speaking of his wife)
ohKS, old woman	ōLakah, to have gold
	ONnü'kah, to have salt
ōLah, gold (Spanish)	o'o'tammü'kah, to claim people
ON, salt	o'o'tü'kah, to have sand (a woman speak- ing of sand used in making pottery)
o'o'tAM, a person	ohponnü'kah, to have greens
o'ohT, sand	
ohpohNÜ, a kind of weed used as food	ō'pü'kah, to have enemies
ō'PÜ, cruel and warlike people	pannü'kah, to claim coyote
paN, coyote	pavi'kah, to have pahvi
pahvi, a kind of bean	pilihkanni'kah, to have wheat
pilihkani, wheat	pitü'kah, to have clay for pottery
pit, mud, clay for pottery	SULitei'kah, to have a baby boy
SULitCI, a baby boy	tahcü'kah, to have a date
tahC, sun, day, time	tai'kah, to have fire (matches)
tai, fire	tahküwuyi'kah, to claim tree yucca
tahküwur, tree yucca	tahtai'kah, to have sinew
tahtai, sinew	tāṭayi'kah, to claim the road-runner
tāṭai, road-runner	to'a'kah, to claim a mountain
to'a'KÜ, mountain	tohhawühsü'kah, to have chewing gum made from the pitch of tohhawühs
tohhawühs, a kind of brush	toLo'kah, to have a bull
tōLoH, bull (Spanish)	

tōnmüh'kü, hill	tōnmüh'kü'kah, to claim a hill
teühhu'kü, meat	teühhu'kah, to have meat
teuhNI, dried cactus fruit	teunnikah, to have dried cactus fruit
teūta'KI, burning coals, charcoal	teuṭa'kah, to have coals
teühwü, jackrabbit	teüwü'kah, to have jack-rabbits (killed)
teühho, a cave	teühho'kah, to have a cave
teü'kü, mesquite-bean flour	teü'kah, to have mesquite-bean flour
teüMI, a kind of cactus	teümmi'kah, to claim teühMI
teüoihMÜ, a kind of cactus	teüoihMü'kah, to have the fruit of teüoihMÜ
teüotCI, man, male	teüotci'kah, to have a man
teüva'KI, clouds	teüva'kah, to have clouds (imitations of clouds)
teüwüṭ, dirt, earth, world	teüwü'ṭü'kah, to claim some place as one's own
teühyah, girl	teühya'kah, to have a girl (a young woman)
uhca'PI, pitch	uhca'pi'kah, to have pitch
uhhimmahLI, a kind of bug, one of four Papago totems	uhhimmahli'kah, to claim uhhimmahLI clanship
ümmu'kü, a kind of yucca	ümmu'kah, to have the leaves of ümmu'kü
uhsākah, the chief's stick, also a crooked stick used by girls in playing the double ball game (uhs, tree in general)	uhsākah, to have an uhsākah
uhtkoh, stalk of the soap-weed	uhtko'kah, to have uhtkoh for making arrows
uhtkoteütCI, soap-weed	uhtkoteütci'kah, to have soap-weed
u'tühva'kü, tule	u'tühva'kah, to have tule used in making baskets
u'uhhi'kü, birds	u'uhhi'kah, to have a bird or birds
uhVI, woman	uvi'kah, to have a sister who has passed the age of girlhood and is known as uhVI and not teühyah
ülita'kü, skin	ülita'kah, to have skin of some animal
ünni'kah, property	ünni'kah, to have
vahcai, grass, hay	vahcai'kah, to have grass or hay
va'kü, hole	va'kah, to have a hole (animals)
vähpü'kü, cane, or ribs of cactus	vähpü'kü'kah, to have cane or ribs of cactus
vahyah, well	vahya'kah, to have a well
viahpo'o'kü'ühLI, a young man	viahpo'o'kü'üli'kah, to have a young man
vihho'kü, mesquite beans	vihho'kah, to have mesquite beans
vipahMÜ, milk-weed (chewing gum)	vipammü'kah, to have chewing gum
vihwü, tobacco	viwü'kah, to have tobacco
wō'kü, road, trail	wō'kah, to have a road or trail
wo'o, pond	wo'o'kah, to have a pond
wülü, burro (Spanish)	wülü'kah, to have a donkey
wü'KI, red paint used on pottery	wü'kah, to have red paint

The changes made in the noun stem by the addition of this suffix -'kah are regular. As sonancy predominates in the beginning of words, and surdness at the end, ō'PÜ naturally becomes ō'pü'kah. Aspiration is related to surdness. Therefore tōloh makes tōlo'kah, and pahvi pavi'kah. Nouns ending in t, ʈ, n, m, s, or c, add ü before -kah. No exception to any of these rules are to be found.

Most of the nouns ending in 'ki or 'kü lose this ending before -'kah: cūta'ki'kah becomes cūta'kah. But there are a few nouns ending in the same syllable, which retain it before 'kah. These are ah'ki, kihsoh'ki, lan̄teüh'ki, mantcüh'ki, tōn̄nüh'kü, and vāhpü'kü.

C. BY SUFFIX -T, TO MAKE

It will be seen from this list that -T can be suffixed to all names of things that are made. But when a noun is changed to a verb with the suffix -T, it is not understood whether work has been done, is being done, or will be done, so that all nouns changed to verbs with this suffix mean either make, making, or made, and can be fully understood only when used in a sentence. Thus:

N	toh	hūmmah	kīht
I	will	a	house-make
	hūmma'	ANT	kīht
	a	I-have	house-made
	a'ninih	kīht	
	I-am	house-making	

When -T becomes the ending of words having the suffix -TCU, -T always changes these words to a "participle" expressing continued action.

<i>Nouns</i>	<i>Verbs</i>
ālih, baby	āli't, to become a father
āmmoh, the boss, master	āmmoht, to find some one to work for
aht, the beginning of a basket or a jar	ah't, to make the beginning of a basket or jar
ahtohcah, the skin or cloth that is worn by men around the waist	ahtohcaht, to make the ahtohcah
ahtohli, atole (Spanish)	ahtohliht, making atole

Nouns

ca'ali'kih, a forked stick used to brace the carrying basket and make it stand
 cāhkihMÜ, a rope or a strap that goes around the nose of a horse
 cālihi, trousers
 con, the starting point, trunk
 connikiwuLLI, a wooden ball
 co'piaHT, doll
 coyikah, pet
 cūLInnah, a stick straightened to be made into an arrow
 ha'ah, an olla
 hahcūtah, woven basket
 ha'koh, a cushion for the head
 hahpohT, arrow
 ha'uh, gourd drinking cup
 hiNnūvahLI, a mat not woven nor sewed, made of grass
 hoah, sewed basket
 hoahsa'ah, plate
 ho'ki, the skin, after it is taken off an animal (buck skin)
 ho'ommah, the best shooting arrow; a horse most used
 hon, body
 hōnni'kü, wife
 huhhulikah, sickness of a woman
 hū'kü, relationship of two women who are married to one man
 inna'ki, ancient skirt
 ihpuHT, over-skirt (modern)
 kaikiah, sandal string
 kaiHTcakah, seeds for planting
 kalihcahNI, drawers (Spanish)
 kāHT, bow
 kih, house
 ki'āta'kū, handle
 kihcoh, cheese (Spanish)
 kihhoh, carrying basket
 kihhüh, brother-in-law, sister-in-law
 kihki, plow, or a sharp stick to dig with
 kiteü'kū, door ("house-opening")
 kiwuhT, belt
 kohc, nest

Verbs

ca'ali'kiHT, to make a ca'ali'kih
 cāhkimmüHT, to make a cāhkihMÜ
 caLiviHT, to make trousers
 conT, started or commenced
 connikiwuLiHT, to make a wooden ball
 co'piaHTT, to make a doll
 coyikaHT, to make a pet
 cūLInnaHT, to make a cūLInnah
 ha'aHT, to make an olla
 hahcūtaHT, to make a basket
 ha'koHT, to make a cushion
 hahpoh'T, to make an arrow
 ha'uHT, to make a gourd drinking cup
 hiNnūvaliHT, to make a grass mat
 hoahT, to make a basket
 hoahsa'aHT, to make a plate
 ho'kiT, to make buck skin
 ho'ommaHT, to make a good arrow; a good gentle work horse
 honT, to make the body
 hōnT, to marry (a man)
 huhhulikaHT, to get the huhhulikah
 hū'kūT, to get a hū'kü
 innaKIT, to make an ancient skirt
 ihpuHTT, to make an over-skirt
 kaikiaHT, to make a sandal string
 kaiHTckaHT, to prepare seeds for planting
 kalihcaNniHT, to make drawers
 kāh'T, to make a bow
 kiHT, to make a house
 ki'āta'kūT, to make a handle
 kihcohT, to make cheese
 kihhoHT, to make a kihhoh
 kihhüHT, to get a kihhüh
 kihkiT, to make a plow or a digging stick
 kiteü'kūT, to make a door
 kiwuhHT, to make a belt
 kohcT, to make a nest

Nouns

kohtohNI, shirt
 ku'kiaht, corn with the husks pulled up and hung up for planting seeds; erectio penis
 kūkūtah, a hanging shelf made of sticks tied together
 kulahNI, medicine (Spanish)
 kūrs, smoke or dust
 LOMmiata'KŪ, a saddle made of two bundles of grass tied together (Spanish)
 māhkai, one who cures without medicine
 mahkoṭa'KŪ, a rope or a strap to tie two things together
 mannaṭa'KŪ, a rope or a strap used to hobble a horse
 maht, child of a woman
 mahteuht, a grinding stone
 mayIN, a woven mat
 miht'piaht, a cinch used as a stirrup
 mo'o, head
 nawo'tCI, friend
 nonhah, egg
 oLah, women's double ball
 ōvih, opponent
 ovi'tCI, awl
 ōyit, farm, garden
 pahcoh, breast
 pahhi, tail
 pit, mud, clay for pottery
 sihtohLI, syrup
 siwo'tah, tassel of down feathers tied on the head
 talivihNŪ, twister for making rope
 tahtKŪ, root
 teuakiah, a net for carrying things on a horse
 teūṭa'KI, burning coals or charcoal
 teūhho, a cave
 teū'KŪ, mesquite-bean flour
 teū'kūṭah, race track
 teūotCI, a man, male
 teūhpah, a mortar

Verbs

kohtonniht, to make a shirt
 ku'kiaht, to make ku'kiaht
 kūkūtaht, to make a kūkūtah
 kulanniht, to make medicine
 kūpst, to make smoke or dust
 LOMmiata'KŪT, to make a grass saddle
 māhkaiht, to teach one the secrets of curing without medicine
 mahkoṭaKŪT, to make a mahkoṭaKŪ
 mannaṭa'KŪT, to make a mannaṭa'KŪ
 mahtT, to give birth to a child
 mahteuhtT, to make a mahteuht
 mayINT, to make a mat
 miht'piaht, to make a miht'piaht
 mo'oht, to make the head
 nawo't, to make a friend
 nonhaht, to lay an egg (also applied to human beings)
 olaht, to make the olah
 ōviht, to make an opponent
 ovi't, to make an awl
 oyi't, to make a farm or garden
 pahcoht, to make the breast
 pahhiT, to make the tail
 pi't, to get clay in condition for pottery making
 sihtoliht, making syrup
 siwo'taht, to make a feather tassel
 talivint, to make a talivihNŪ
 tahtKŪT, to become rooted
 teuakiaht, to make a teuakiah
 teūṭa'KIT, to make burning coals or charcoal
 teūhhot, to make a cave
 teū'KŪT, to make mesquite-bean flour
 teū'kūṭaht, to make a race track
 teūotCIT, to make a man; to castrate a horse
 teūpaht, to make a mortar

<i>Nouns</i>	<i>Verbs</i>
teüh'toh, a rock to hold the cooking jar above the fire	teüh'toht, to make a teüh'toh
teühtonñütakü, the center pole of a house	teühtonñütaküt, to make a center pole
teüva'ki, clouds	teüva'kit, to make clouds (imitations of clouds)
u'kücah, a wall put up for a wind-break	u'kücaht, to make a wind-break
u'uh, a war arrow	u'uhT, to make a war arrow
u'umhaṭa'kü, the feathers on an arrow	u'umhaṭa'küt, to make u'umhaṭa'kü
ünnikah, property	ünnikaht, to use as one's own, to wear
üht'pah, a mat of grass used as a door for the house	üht'paht, to make an üht'pah
vähkus, whatever is used to sit or lie on (skin, blanket)	vähkust, to make a vähkus
vä'oh, wooden tongs for gathering cactus fruit	vä'oht, to make tongs
vahteihhoh, a big wooden dish (Spanish)	vahteihhoht, to make a vahteihhoh
vawünnata'kü, a pole which holds up the roof	vawünnata'küt, to make a vawünnata'kü
vahyah, a well	vahyaht, to make a well
vitü'kuhṭ, a pestle for grinding	vitü'kuhṭT, to make a pestle
wöhca'kü, pocket (Spanish)	wöhca'küt, to make a pocket
wō'kü, a road	wō'küt, to make a road
wo'kücah, a quiver	wo'kücaht, to make a quiver
wonnaḥmi, a hat	wonnaḥmiht, to make a hat
wo'o, a pond	wo'oht, to make a pond
wōht, foreshaft of an arrow	wōht', to make a foreshaft
wuliwü'kah, a target (a little bundle called a bird or rabbit made of grass, tied with bark)	wuliwü'kaht, to make a target

D. BY SUFFIX -TCU, TO MAKE FOR

ali, a baby	alITCU, to act like a child, to make a child
aht, the beginning of a basket	ahtCU, to make the beginning of a basket; to make an anus
ahtoḥli, atole (Spanish)	ahtolITCU, to make atole for some one
calihvi, a pair of trousers	calivihTCU, to make a pair of trousers for somebody
cavikuhṭ, a rattle	cavikuhṭTCU, to make a rattle for somebody
con, trunk; the starting point	conTCU, to begin
connikiwuhli, a wooden ball used in long distance race	connikiwuhliTCU, to make a wooden ball for somebody
co'piaṭ, a doll	co'piaṭTCU, to make a doll for somebody
ha'ah, an olla	ha'ahtCU, to make an olla for some one

<i>Nouns</i>	<i>Verbs</i>
hahcūṭah, a woven basket	hahcūṭahTCU, to make a woven basket for some one
hahkimaḥṭ, niece, nephew	hahkimaḥṭTCU, to make a niece or nephew for some one
ha'koh, a cushion for the head on which to carry baskets or jars	ha'koḥTCU, to make a cushion for some one
hahpoḥṭ, arrow	hahpoḥṭTCU, to make an arrow for some one
hoah, a sewed basket	hoahTCU, to make a sewed basket for some one
hoahsa'ah, a plate	hoahsa'ahTCU, to make a plate for some one
hon, body	hōnTCU, to make a marriage for some one (a man)
hū'kü, relation between two women who are married to the same man	hūkūTCU, to make a hū'kü for some one
ivitahkuḥṭ, fire drill	ivitahkuḥṭTCU, to make a fire drill for some one
ka'ammaḥṭ, grandchild of a woman	ka'ammaḥṭTCU, to make a grandchild for some one
kaitckah, seeds for planting	kaitckahTCU, to make planting seeds for some one
kaliḥcani, a pair of drawers	kaliḥcanTCU, to make drawers for some one
kāḥṭ, bow	kāḥṭTCU, to make a bow for some one
kih, house	kiḥTCU, to make a house for some one
kihüh, brother-in-law, sister-in-law	kihühTCU, to make a brother-in-law or sister-in-law for some one
kohc, nest	kohcTCU, to make a nest for some one
koḥtoḥni, shirt	koḥtoḥniTCU, to make a shirt for some one
ku'kiaḥ, an ear of corn, with the husks pulled up and left on the cob, and hung up to be used only for planting seeds	ku'kiaḥTCU, to make ku'kiaḥ for some one
kuḥvü, husband	kunTCU, to make a marriage for some one (woman)
kups, smoke	kupstcu, to make smoke, to turn into smoke
liāḥṭ, a rawhide rope (Spanish)	liāḥṭTCU, to make a rawhide rope for some one
māḥkai, one who cures without medicine	māḥkaiḥTCU, to make a medicine man of somebody
mahkoṭa'kü, a rope or strap used to tie things together	mahkoṭa'küTCU, to make a coupler for some one
mannāṭa'kü, a rope or strap used to hobble a horse	mannāṭa'küTCU, to make a hobble for some one
maḥṭ, child of a woman	maḥṭTCU, to help as a midwife
maḥteuḥṭ, a grinding stone	maḥteuḥṭTCU, to make a grinding stone for somebody
mayin, a woven mat	mayinTCU, to make a mat for some one

<i>Nouns</i>	<i>Verbs</i>
mo'o, head	mo'ohtCU, to make a head for something
nonnah, egg	nonnahTCU, to impregnate
ōvih, an opponent	ōvihTCU, to make an opponent for somebody
pohcoHLI, hominy	pohcoLIhtCU, to cook hominy for somebody
sihtohLI, syrup	sihtohLIhtCU, to make syrup for somebody
teuṭa'KI, burning coals, or charcoal	teuṭa'KITCU, to make coals or charcoal of something
teü'kü, mesquite-bean flour	teü'küTCU, to make mesquite-bean flour for somebody
teü'küṭah, a race track	teü'küṭahTCU, to make a race track for somebody
teühpah, a mortar	teühpahTCU, to make a mortar for somebody
ūhc, flint arrow-point; the stinger of insects	ūhTCU, to make a flint arrow-point for some one
uhsākah, a stick used by women in their game of the double ball	uhsākahTCU, to make an uhsākah for some one
u'uh, war arrow	u'uhtCU, to make war arrows for some one
ünnikah, property	ünnikahtCU, to make something the property of some one
vahcah, a woven trinket basket with a cover	vahcahtCU, to make a trinket basket for some one
vahcoHMI, a sewed storage basket	vahcoMMihtCU, to make a storage basket for some one
vahkoh, a small olla, a gourd used to carry water in, a canteen.	vahkohtCU, to make a small olla for some one
vāhkUS, a mat, skin, blanket, or anything that spreads, used to sit or to lie on	vāhkUSTCU, to make a mat for some one
va'oh, a pair of wooden tongs	va'ohtCU, to make a pair of tongs for some one
vitü'kuṭ, a pestle for grinding	vitü'kuṭTCU, to make a grinding pestle for some one
wohca'kü, a pocket (Spanish)	wohca'küTCU, to make a pocket for something
wo'kücah, a quiver	wo'kücahtCU, to make a quiver for something
wonnaHMI, a hat	wonnaMMihtCU, to make a hat for somebody
wohsümmaṭ, grandchild of a man	wohsümmaṭTCU, to make a grandchild for somebody (a man)
woḥt, the foreshaft of an arrow	woḥTCU, to make the foreshaft of an arrow

E. BY SUFFIX -wuah, TO LET FALL

<i>Nouns</i>	<i>Verbs</i>
aḥt, anus	aḥtūwuah, to hit with the buttocks
hūTCI, finger-nails, toe-nails	hūtcīwuah, to hit with the toe, to stumble

Nouns

kām, cheek
 koA, forehead
 kūtcah, semen
 mo'o, head
 mühs, vagina
 nahkü, ear
 oh, back
 sihC, elbow
 sihsüvatakü, saliva
 tähkü, nose
 taht, foot
 teihni, mouth
 um, thigh
 vihha, penis
 wöhkü, stomach
 wui, eye

Verbs

kammüwuah, to hit with the cheek
 koawuah, to hit with the forehead
 kütcüwuah, to emit seed
 mo'owuah, to hit with the head
 mühsüwuah, to hit with the mühs
 nahküwuah, to hit with the ear
 öwuah, to hit with the back
 sihcüwuah, to hit with the elbow
 sihsüwuah, to spit
 tahküwuah, to hit with the nose
 ta'tüwuah, to put the foot in something
 teinüwuah, to hit with the mouth
 ummüwuah, to hit with the thigh
 vihhawuah, to hit with the vihha
 wohküwuah, to hit with the stomach
 wuhhiwuah, to hit with the eye

F. BY SUFFIX -KI, TO SHAKE

Nouns

a'an, wings
 aht, anus
 hon, body
 mo'o, head, hair
 pahhi, tail
 taht, foot

Verbs

annü'ki, to flap the wings
 ahta'ki, to shake the buttocks
 honnü'ki, to shake the body
 mo'o'ki, to shake the head
 pahhi'ki, to switch the tail
 tahta'ki, to shake the foot

G. BY SUFFIX -AM, -IM, TO GO TO GET

Nouns

hi'i, urine
 hōnni'kü, wife
 hūni, corn
 ihhu'kü, devil's claw (*Martyria*)
 ihu, cactus fruit after it is gathered in the basket
 ku'a'ki, wood
 nü'i, song
 on, salt
 piht, manure
 pi't, mud
 tayih'kah, the sprouts of the vähs plant used in making baskets after being heated (tai, fire)
 va'i'ki, water after it is put in the jar
 wuakah, girls' adolescence ceremony

Verbs

hi'am, to go to urinate
 hōnnim, to go to get married (a man)
 hūnnyam, to go after corn
 ihhu'kam, to go after the ihhu'kü
 iyam, to go after cactus fruit
 ku'a'kam, to go after wood
 nü'im, to go to sing
 onnam, to go after salt
 pihtam, to go to defecate
 pi'tam, to go after pottery clay
 tayih'kam, to go after the vähs
 va'ikam, to go after water
 wuakam, to go to the singing and dancing

H. BY SUFFIX *-PI*, TO TAKE OFF

The following words are in common use; but, figuratively speaking, *-PI* can be suffixed to all nouns: that is, to the names of those things which are firmly attached to something else. The name of the thing taken off, with the suffix *-PI*, indicates that that which was taken off, did not come off willingly, nor easily, but was taken off by force. For example: *honnihPI*, (his) wife taken away. The girl who loves her husband will not willingly leave him, but sometimes the girl is taken away from her husband by her parents. Hence the expression, *honnihPI. mülihPI*, took off the running powers of a man, or of a horse; exhausted, made tired, so that the animal, or man, cannot run any more.

<i>Nouns</i>	<i>Verbs</i>
ho'i, thorn	ho'ihPI, to take off thorns (gathering cactus fruit)
kaitCI, seeds	kaihPI, to take off seeds
kī'KI, tallow	ki'ihPI, to take off tallow
kohMI, back, shell, outside bone	komPI, to take off the back or the shell of insects
mo'ohtKÜ, the scalp	mo'ohtPI, to scalp
nāhkÜ, ear	nāhkÜPI, to take off a part of the ear (ear marks on cattle)
oN, salt	onnüPI, to take off salt
o'ohT, sand	o'ohTPI, to take off sand (cleaning seeds)
teu'i, flour	teu'ihPI, to take off flour that is stuck to clothes, etc.
teüwühT, dirt, earth, world	teüwühTPI, to take off dirt (cleaning clothes)
üLita'kü, skin, bark	üLihPI, to take off the bark
üṭah, the inside part of fruit	üṭahPI, to take off the inside part of the fruit
vihho'kü, mesquite-beans	vihho'küPI, to take off mesquite-beans from the tree
vihpü'toh, the testicles	vihpü'tohPI, to castrate
wohpoh, the hair on the skin	wohpohPI, to take off the wohpoh

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