## Notes on Uto-Aztecan Data Set Entries.

Principal source for entries is Wick Miller's Uto-Aztecan Cognate Sets, Revised and Expanded by Kenneth C. Hill, May, 2011 (ms. courtesy of Kenneth C. Hill). Entries in the Sets represent attested terms in the languages in question. Thus many glosses do not coincide exactly with Swadesh-list terms. These are indicated below under "Non-exact gloss entries," under each language in succession. Entries whose listed meaning in the Sets appears too far removed from the Swadesh-list term are not included in our database. Examples: 1): under mu-02, die, Luiseño entries glossed "to be in eclipse, of the sun or moon;" "a boil; a knot in wood;" are excluded; 2): one entry for 'swim' (Tubar) appears under "o-07, walk about"-this is included (as glossed "walk about, crawl, swim"), but all other entries under o-07 lack reference to swimming or movement through water of any kind, and are thus excluded.

Our additions to the Sets listings are shown below under "Supplemental entries with source" (for each language successively). The great majority of additional words are taken from the same sources used by the Sets. In combing these sources, the task was defined not as identification of all cognates per se, but as location and inclusion of the attested term for the Swadesh-list word. Words not yet included in Miller/Hill's Sets reflect: a) incompleteness and ongoing construction of that database (K.C. Hill personal communication), or b) their non-cognate status with those included in the Sets. In the latter case, entries may or may not point to borrowing from non-Uto-Aztecan languages (terms clearly derived from Spanish or English have not been included).

In the Sets, Hill provides an IPA version of the attested term as well as the original orthographic rendering. The IPA version is the only rendering we use. Our additions are rendered in Hill's IPA format (from comparison with his renderings from the same sources in the Sets). Entries for our three out-groups-Ipai, Tewa, and Zuni-have been conformed as far as possible to Hill's IPA format. Since we seek the most agnostic method possible, we do not include in our dataset entries proposed for proto-UtoAztecan or a narrower proto-language (e.g., proto-Tepiman).

Gloss entries from Miller/Hill's Sets non-exactly correspondent with Swadesh-list words; and Supplemental entries with sources:

Northern Paiute

Non-exact gloss entries:
bone: shinbone
claw: fingernail
cold: REFL.
dog/pet: horse
drink: drink! (IMP.)
earth (1): muddy place
earth (2) 1st entry: broad valley
feather: wing
foot: on foot
full: are you full?
give: feed
head: [from e ddsopege, my head]
heart: [from e bbewu, my heart]
horn: antler
kill: kill pl. obj
knee: knees
know: find
lie: $2^{\text {nd }}$ entry: lie pl.
neck: wear at the neck
night: at night
root: tree root
say: tell
see: DUR.
seed: seeds (type of seeds) [2nd entry from source included; 1st entry, non-cognate, not included]
sit: sit (sing. DUR.)
skin: [from e bbuho, my skin]
that: $2^{\text {nd }}$ entry: that one
tooth: [from tama-ggwaesuno, tooth-brush]
tree: firewood
walk: move about/walk/go
what: thing

## Supplemental entries, with source:

1) ash; claw ( $2^{\text {nd }}$ entry); full; head; heart; horn; louse; moon; name; sand; seed; skin; tooth;
\{Body parts are given as possessives (e ... [=/i/], my ...); the non-possessive form is inferred from body parts as listed in Snapp et al 1982 and Thornes 2003.\}

Yerington Paiute Tribe, 1987, Paiute-English, English-Paiute Dictionary. Compiled by Arie Poldevaart. Yerington Paiute Tribe.
2) all; bark; bird; blood; bone; burn; cloud; die; dry; earth (mud); eye; fat; feather; fire; flesh; fly; foot; good; hair; kill (sing./dual); knee; lie; liver; long; louse; man; many; mountain; neck; rain; root; round; see; sleep; small; star; stone; swim; that; tongue; tree; woman

Thornes, Timothy Jon. 2003. A Northern Paiute Grammar with Texts. University of Oregon dissertation.
3) claw ( $1^{\text {st }}$ entry); egg; leaf; man; this

Snapp, Allen, John Anderson and Joy Anderson. 1982. Northern Paiute. Studies in UtoAztecan Grammar, Volume 3, Uto-Aztecan Grammatical Sketches, edited by Ronald W. Langacker. Summer Institute of Linguistics Publications in Linguistics Number 57, Volume III, pp. 1-92.

Note. Although Snapp et al (1982:6) indicate second syllables are long unless they show otherwise, both K. Hill (2011) and Thornes (2003) show them as undistinguished from short forms (i.e., no macron). K. Hill renders voiceless stops, fricatives, and affricates as double consonants, where Snapp et al show them as single. Where Snapp et al use symbols ordinarily used for voiced stops, fricatives, or affricates (e.g., b, d, g, $\mathrm{z}, \mathrm{j}$ ), Hill represents these as single voiceless forms (e.g., $\mathrm{p}, \mathrm{t}, \mathrm{k}, \mathrm{s}, \mathrm{t}^{\mathrm{s}}$ ). We follow Hill's pattern in rendering words derived from Snapp et al.

## Western Mono

Non-exact gloss entries:
black: to be black
claw (gloss from Lamb n.d.)
cloud: 1st entry: fog
dry: to be dry
earth: dirt
full: get full | be full
know: $2^{\text {nd }}$ entry: to recognize
leaf: feather, leaf
long: 2nd entry: long, tall, lanky, 3rd entry: long and narrow
name: to name
new: just, early
night: night-time, at night, during the night
say: 4th entry: say something
sit: 1st entry: sit sing., 2nd entry: sit pl.
stand: 2nd entry: get up, stand up, fly
star: stars
white: to be white
yellow: to be yellow, tan, brown

## Supplemental entries, with source:

ash; bark; belly; big; bird; bite; claw (rendering from K. K. Hill 2011); cloud $3^{\text {rd }}$ entry; full; green/blue; hair; head; hear; I; kill pl.; know $1^{\text {st }}$ entry; long 1st and 3rd entries; man; many; rain; red; say $1^{\text {st }}, 2^{\text {nd }}, \& 3^{\text {rd }}$ entries; sit; small; smoke; that; tree; we; what Lamb, Sydney M. n.d. Monachi dictionary. Ms., Survey of California and Other Indian Languages. http://linguistics.berkeley.edu/~survey/languages/california-languages.php

## Tümpisa Shoshone (Panamint, Koso)

Non-exact gloss entries:
belly: 2nd entry: stomach, belly
bird: sage grouse
burn: make a fire, start a fire, set on fire, cremate
cold: be cold
dog/pet: pet, domestic animal, horse, dog (archaic)
earth: 1st entry: mud, 3rd entry: habitat, homeland, native land, stomping ground, niche
fire: make a fire
head: 2nd entry: pertaining to the head
hot: be hot
root: medicine
round: round basket with a neck
say: teach
sit: 1st entry: sit, camp, stay, be located, situated, do awhile (sing.), 2nd gloss: sit, camp, stay, be positioned, located, situated, dl.
walk: 4th entry: walk around, roam, wander, live (in a traditional lifeway)
who: $1^{\text {st }}$ entry: subj., $2^{\text {nd }}$ entry: obj.
woman: $2^{\text {nd }}$ entry: young woman
yellow: yellow paint
you (sing.): $1^{\text {st }}$ entry: subj., $2^{\text {nd }}$ entry: obj.

Supplemental entries, with source:
all; full; hair; hand; hear; I; leaf; long; neck; new; seed; swim; that; this; who; woman; you (sing.)

Dayley, Jon P. 1989. Tümpisa (Panamint) Shoshone Dictionary. University of California Publications, Linguistics 116.

## Big Smokey Valley Shoshone

Non-exact gloss entries:
bird: small bird
bite: 1st entry: bite something hard, 2nd entry: bite something flexible
burn: to burn something, make a fire
cloud 1st entry: fog, cloud, 2nd \& 3rd entries: cloud, thundercloud
cold: be cold (of a thing)
dog/pet: 1st entry: horse, dog, pet
earth (1): mud
earth (2): 1st \& 2nd entries: earth, ground, dirt, dust, sand; 3rd entry: a field, farm, ranch, place of dwelling, (home) territory, land, meadow
fire: $1^{\text {st }}$ entry: pertaining to fire, $2^{\text {nd }}$ entry: make a fire
hair: $2^{\text {nd }}$ entry: headhair
hand: $1^{\text {st }}$ entry: pertaining to the hand
head: 2nd entry: with the head
hot: hot (of a thing)
man: $1^{\text {st }}$ entry: adult man, $2^{\text {nd }}$ entry: slightly older than $1^{\text {st }}$ entry
neck: $2^{\text {nd }}$ entry: neck, larynx
say: to say something
sit: 1st entry: to sit (sg. subj.), 2nd entry: sit (dl. subj.)
stand: 2nd entry: get up, arise, fly
walk: 2nd entry to live, to wander, to travel (sg. subj.)
who: who? somebody
you: $1^{\text {st }}$ entry: subj., $2^{\text {nd }}$ entry: obj.

Supplemental entries, with source:
all; feather ( $2^{\text {nd }}$ entry); fire ( $1^{\text {st }}$ entry); flesh; hair; hand; hear; I; kill (pl.); leaf; long; man; name; neck; new; root; seed; small (1 ${ }^{\text {st }}$ entry); swim; that; this; who; woman; yellow; you

Crapo, Richley H. 1976. Big Smokey Valley Shoshoni. Reno and Las Vegas, NV: Desert Research Institute Publications in the Social Sciences No. 10.

## Western Shoshone

Non-exact gloss entries:
all: (obj.)
belly: navel
big: big one, fat one
bird: small bird
bite: bite in two , break with the teeth
burn: light a fire, make a fire
claw: fingernail
cloud: 1st entry: fog
cold: be cold
dog/pet: 1st entry: horse
earth: 1st entry: mud; 2nd \& 3rd entries: land, earth, ground, soil, dirt, 4th entry: land owned, real property
fire: make a fire
green: be green
hand: with the open hand
head: with the head
hot: be hot
root: medicine
say: 2nd entry: say, tell, mean; 3rd \& 4th entries: say, point out, tell, explain sit: 1st entry: sit (down), stay, remain (sing.), 2nd entry: sit (down), stay (pl.)
stand: 2nd entry: fly, get up
tree: aspen, tree
walk: 3rd entry: travel, wander; live
white: be white

Supplemental entries, with source:
all; hair; hand; head; hear; I; kill (pl. obj.); leaf; mountain; neck; new; seed; that; this; tree; we; what; who; woman; you

Crum, Beverly and Jon Dayley. 1993. Western Shoshoni Grammar. Boise, ID: Boise State University.

Shoshone

Non-exact gloss entries:
bird: small bird
bite: with teeth or mouth
burn: to make a fire
cold: 1st entry: cold (of a thing), 2nd entry: by means of cold
cloud: thundercloud
dog: 1st entry: horse, pet
earth: 2nd entry: home country, land, property
feather: $1^{\text {st }}$ entry: wing, $2^{\text {nd }} \& 3^{\text {rd }}$ entries: feathers
fire: $2^{\text {nd }}$ entry: make a fire
give: feed (v.t.)
hair: $1^{\text {st }}$ entry: head hair, $2^{\text {nd }}$ entry: body hair
hand: with the hand
head: 3rd entry: with the head
hot: hot (of a thing)
round: round (spherical not circular)
say: 1st entry: to say something; 2nd entry: to say, to tell; 3rd \& 4th entries: to ask, to tell on or about someone or something
sit: 1st entry: to sit (sg. subj.), 2nd entry: to sit (pl. subj.)
sleep: 1st entry: sing., 2nd entry: pl.
stand: 2nd entry: to get up, to fly
walk: 3rd entry: to move around, to roam, to wander, to survive, to make a living in the aboriginal fashion of hunting and gathering, to live (sg. subj.)
what: what?

## Supplemental entries, with source:

all; earth (1); feather; fire ( $1^{\text {st }}$ entry); hair; hear; I; leaf; long; new; root; seed; small; that; this; what; woman; you

Miller, Wick R. 1972. Newe Natekwinappeh: Shoshoni Stories and Dictionary. University of Utah Anthropological Papers, Number 94. Salt Lake City: University of Utah Press

Comanche

Non-exact gloss entries:
belly: stomach
bite: $1^{\text {st }}$ entry: bite off; $2^{\text {nd }}$ entry: chew
burn: $1^{\text {st }}$ entry: set on fire, burn; $2^{\text {nd }}$ entry: burn something up, scorch, etc.; $3^{\text {rd }}$ entry: burn, flame
cloud: 1 st $\& 2$ nd entries: fog, $3^{\text {rd }}$ entry: clouds
dog: 1st entry: horse
earth (1): mud
give: feed
head: 2nd entry: with head
kill (sing., dl.): last vowel corrected (from stress accent to unvoiced vowel)
know: 1st entry: knowledgeable, knowing
name: name someone, read (as a book)
not: no
round: $1^{\text {st }}$ entry: round (ball-like), spherical, $2^{\text {nd }}$ entry: round, spherical; $3^{\text {rd }}$ entry: ref. to ball-like
say: tell
sit: sit down, stay (pl)
stand: 1st entry: standing; 2nd entry: rise up, go up, fly up
walk: 1 st entry: able to walk, move around (as a child learning or a person who has been ill)
woman: $2^{\text {nd }}$ entry: young woman
you: to you

Supplemental entries, with source:
bark; bite; burn; come; earth (1); feather; fire; full; green; hair; hear; know $2^{\text {nd }}$ entry; leaf; long:1st entry; many; neck; nose; not; root; round; seed; small; woman

Robinson, Lila Wistrand and James Armagost. 1990. Comanche Dictionary and Grammar. Summer Institute of Linguistics and the University of Texas at Arlington Publication 92.

Kawaiisu

Non-exact gloss entries:
bite: to chew
cloud: cloud, fog
dry: to dry
earth (2): dirt, earth, world, year
full: $1^{\text {st }}$ and $2^{\text {nd }}$ entries: to be full
good: $1^{\text {st }}$ and $2^{\text {nd }}$ entries: to be good
green: 2nd \& 3rd entries: blue
head: back of head
hot: to be hot
kill pl.: kill, beat
long: to be long
path: road
red: to be red
root: $2^{\text {nd }}$ entry: root of a plant
sit: 1st entry: to sit, stay, live, be alive (sing.), 2nd entry: to live, to sit, stay (pl.)
sleep: sleep (sing.)
smoke; to smoke, be smoky
tree: tree type
white: to be white
who: $1^{\text {st }}$ and $2^{\text {nd }}$ entries: who?

## Supplemental entries, with source:

all; bark; big; bite; burn; cold; come; die; earth (1); eat; feather; fire; full; good; hair; hand; hear; hot; I; know; leaf; long; many; not; one; path; root; round; say; see; small; star; that; this; tree; walk; we; what; white; who; woman; you (sing.)

Zigmond, Maurice L., Curtis G. Booth, and Pamela Munro. Kawaiisu, A Grammar and Dictionary with Texts, edited by Pamela Munro. University of California Publications, Linguistics 119.

## Chemehuevi

Non-exact gloss entries:
belly: groin, belly
come: $1^{\text {st }}$ entry: come to (sg.), $2^{\text {nd }}$ entry: come to (pl.)
drink: a drink
earth (2): 1st entry: plain, 2nd entry: damp ground, 3rd \& 4th entries: earth, land eat: food
feather: $1^{\text {st }}$ entry: feather, $2^{\text {nd }}$ entry: feather, wing
flesh: 1st entry: mountain sheep
fly: fly off (pl.)
green: turquoise
hair: head hair
head 1st entry: back of head
hot: it's hot
kill (sg.): kill, scold
know: $1^{\text {st }}$ entry: know how to, can, $2^{\text {nd }}$ entry: know, understand, learn
many: lots of
rain: rain (noun)
red: form inferred from K. Hill 2011 entries
sand: gravel
sit: sit (sg.)
that: $1^{\text {st }}, 2^{\text {nd }}, 3^{\text {rd }}$ entries refer to visible forms; $4^{\text {th }}, 5^{\text {th }}, 6^{\text {th }}$ entries to invisible forms
walk: $1^{\text {st }}$ entry: sing, $2^{\text {nd }}$ entry: pl.
we: $1^{\text {st }}$ entry: we (excl.), $2^{\text {nd }}$ entry: we (dl. incl.), $3^{\text {rd }}$ entry: we (several, incl.)
what: $2^{\text {nd }}$ entry: what, how
who: $2^{\text {nd }}$ entry: who, what
yellow: yellow (of egg)

## Supplemental entries, with source:

all; bark; big; bite; black; burn; cold; come; die; dry; ear; feather; good; hand; hear; kill (sg.); kill (pl.); know; leaf; long; many; new; not; one; root; round; say; see; small; star; swim; that; this; walk; we; what; white; who; woman; you (sing.):

Press, Margaret L. 1979. Chemehuevi, A Grammar and Lexicon. University of California Publications, Linguistics 92.

## Southern Paiute

Non-exact gloss entries:
cloud: cloud, fog
dog: horse
drink: entry revised from "I drink" (I is same word as Southern Ute)
earth (2): 1st entry: plain, 2nd entry: desert
feather: wing
flesh: 1st entry: mountain sheep
fly: several fly off
give: gives
head: 1st \& 2nd entries: occiput, back of head, 3rd entry: head (instr. pref.)
know: to find, to discover
mountain: 2nd entry "used only in songs; apparently borrowed from Shoshone"
name: my name
sand: gravel-spring (place name)
say: to tell, to tell on
sit: 1st entry: to sit (sing.) , 2nd entry: to sit (pl.)
sleep: 1st entry: sing., 2nd entry: pl.
smoke: (it) smokes
tree: old tree

Supplemental entries, with source:
big; blood; burn; die; dog 2nd entry; feather; fire; fish; good; hair; hear; know $2^{\text {nd }}$ entry; I; lie; not; one; star; tree; woman; you

Sapir, Edward. 1931. Southern Paiute Dictionary. Proceedings of the American Academy of Arts and Sciences. Vol. 65, No. 3.

## Southern Ute

Non-exact gloss entries:
belly: intestines, innards, tripe
breast: suck at the breast
burn: $1^{\text {st }}, 2^{\text {n d }}$, and $3^{\text {rd }}$ entries: burn (v.i.), $4^{\text {th }}$ and $5^{\text {th }}$ entries: burn (v.t.) cloud: fog
come: all entries: come to
dog: horse
earth (2): $1^{\text {st }}$ entry: plains, open country, wild country, ground, floor, flat-lands, country, 2nd entry: earth, world, soil, dirt, ground, country, land
flesh: 1st entry: big-horn sheep
full: $2^{\text {nd }}$ and $3^{\text {rd }}$ entries: full of
give: feed
hair: $1^{\text {st }}$ entry: head-hair, $2^{\text {nd }}$ entry: human hair
hot: $1^{\text {st }}$ and $2^{\text {nd }}$ entries: be hot (weather, place), $3^{\text {rd }}$ entry: $\mid$ be hot, be feverish kill: kill en masse. kill, butcher
say: point at, tell (to) about
sit: sit, be sitting sleep: $1^{\text {st }}$ entry: sing., $2^{\text {nd }}$ entry: pl.
smoke: be smoky, be getting smoky, become smoky
that: $1^{\text {st }}$ and $2^{\text {nd }}$ entries: that (dem.), $3^{\text {rd }}$ and $4^{\text {th }}$ entries: that (pro.)
this: 1 st entry: this (dem.), $2^{\text {nd }}$ entry: this (pro.)

Supplemental entries, with source:
all; bark; big; bite; burn; come; die; dry; earth (1); feather; full; good; hair; hand; head; hear; hot; I; know; leaf; long; man; new; not; root; round; see; small; star; swim; this; walk; woman; white; you (sg.)

Southern Ute Tribe. 1979. Ute Dictionary. Núu-?apáĝą-pi Pọ?ọ́-qwa-tị. Preliminary edition. Ignacio, CO: Ute Press.

## Orayvi Hopi:

Whiteley's knowledge of Hopi (as a field ethnographer since 1980) informs selection of entries. Non-possessive forms have been substituted for Hill's possessive entries for body parts (e.g., eye, hand, knee).

Non-exact gloss entries:
all: 1 st entry: (inanimate), $2^{\text {nd }}$ entry (animate)
black: 1st entry: blackish pigment
burn: 1st \& 2nd entries: burn (v.t.), 3rd entry: burn (v.i.)
cloud: 1st entry: mist, fog, $3^{\text {rd }}$ entry, low-lying nimbus
cold: be cold
come: $1^{\text {st }}$ entry: start, begin, $2^{\text {nd }}$ entry: arrive (sing.), $3^{\text {rd }}$ entry: arrive (pl.)
earth (1): mud
earth (2): $1^{\text {st }}$ entry: sand/soil, 2nd entry: earth, land
full: get full
good: 1st entry: it is for the good that, thankfully, that's good
head: 2nd entry: top of head
hot: $1^{\text {st }}$ entry: hot, warm (weather), 2nd \& 3rd entries use 'warm' (muki) with an intensifier (male-speaker: a?ni; female-speaker: hinur) for hot (of weather, objects)
kill sing.: $2^{\text {nd }}$ entry: shoot
know: 1st entry: come to a sudden realization that, 2nd entry: be acquainted with, know how to do, 3rd entry: be aware of, have information about; 4th entry: be able to recognize or comprehend; 5th entry: to make known
lie: $2^{\text {nd }}$ entry: lie flat, $3^{\text {rd }}$ and $4^{\text {th }}$ entries: become recumbent, $5^{\text {th }}$ entry: lie down with legs tucked under
night: last night
neck: 2nd entry: nape of neck
red 1st entry: red ochre
root: 2nd entry: medicine
round: 1st entry: circular, 2nd entry: spherical
say: 1st entry: tell, inform, relate, announce, $2^{\text {nd }}$ entry: say (quotative)
sand: 1st entry: fine sand, 2nd coarse sand
sit: 1st entry: sit, stay, reside (sg.), 2nd entry: sit (pl.)
sleep: sleep (sg.)
tail: 2nd entry: penis
tree: changed to just $t^{5}$ oki, per PW field interview, 7-30-2011
walk: (circumgressive suffix)
what: $1^{\text {st }}$ entry: subj., 2nd entry: obj.
woman: $1^{\text {st }}$ entry: sing.; $2^{\text {nd }}$ entry: pl .

## Supplemental entries, with source:

all; bark; big 1st entry; bird; breast; burn 1st \& 2nd entries; claw; cloud 2nd \& 3rd entries; come $2^{\text {nd }}$ and $3^{\text {rd }}$ entries; dog; dry; earth (1) and (2); eat; eye; feather; find; fire; fly; good 2nd \& 3rd entries; green 2nd entry; hair; hand; hear; heart; hot; kill sing. $1^{\text {st }}$ entry; knee; know; leaf; lie $1^{\text {st }}, 2^{\text {nd }}$, and $3^{\text {rd }}$ entries; long; many; mountain; mouth; neck 1 st entry; nose; person; red $2^{\text {nd }}$ entry; round; sand; say 3rd entry; skin; sleep (sing.); small; stone; stone; sun; tail 1st entry; tooth; tree; what; white; woman; yellow

Hopi Dictionary. 1998. Hopìikwa Lavàytutuveni: a Hopi-English dictionary of the Third Mesa dialect. Compilers. Bureau of Applied Research in Anthropology, University of Arizona. Tucson: University of Arizona Press.

## Pahkannil (Tübatulabal)

Non-exact gloss entries:
black: it is dark
blood: her blood
cold: is cold
come: am coming
drink: is drinking
dry: it is dry
ear: (sing. or pl. per Voegelin 1958)
earth (2): the valley
flesh: his meat
full: to be full
give: to give it
hair: headhair
hot: it (fire, water, weather) is hot
know: he knows it
name: its name
neck: his neck
say: 1st entry: tell
sand: the sand
see: find
sit: 1st entry: he is sitting, 2nd entry: sits down
stand: he is standing
star: the stars
tail: his tail
we: $1^{\text {st }}$ entry: (dl. incl.), $2^{\text {nd }}$ entry: (dl. excl.), $3^{\text {rd }}$ entry: (pl. incl.)
woman: the woman

Supplemental entries, with source:

1) all; big; burn; earth (1); feather; fire; foot; fly; good; leaf; lie; louse; mountain; rain; round; skin; sleep; small; smoke; swim; that; walk; what

Voegelin, C.F. 1958. Working dictionary of Tübatulabal. International Journal of American Linguistics 24.221-228.
2) green; red; we; white; who; you

Voegelin, C.F. 1935. Tübatulabal grammar. (i-vii, 55-189) University of California Publications in American Archaeology and Ethnology 34.2.
3) one
http://www.native-languages.org/famuto_words.htm

Kitanemuk
Non-exact gloss entries:
burn: $1^{\text {st }}$ entry: VT, $2^{\text {nd }}$ entry VI (of big fire)
claw: fingernail
cloud: 1st entry: fog, 2nd entry: thunder, thunderhead cloud
dry: be dry
ear: ear, leaf
earth (1): clay, mud
fly: float
full: get full
hair: $1^{\text {st }}$ entry: head hair, $2^{\text {nd }}$ entry: body hair
head: top of head
know: 1st entry: know, know how to, understand (words), $2^{\text {nd }}$ entry: hear (also know?)
leaf : ear, leaf
man: person, Indian
name: name someone
neck: $1^{\text {st }}$ entry: nape of neck, $2^{\text {nd }}$ entry: neck, throat
night: at night, last night
red: (note inserted in K. Hill 2011: for all Takic examples [Kitanemuk, Serrano, Tongva, Luiseño, Acjachemen, Cupeño, Cahuilla], "Jane Hill says this is a borrowed Yuman word")
round: spherical
say: advise
sit: be, live, face
seed: its seed
small: baby, small, little finger
stand: stand up
that: $1^{\text {st }}$ entry: proximal, $2^{\text {nd }}$ entry: distal
who: who?
Supplemental entries, with source:
all; big; burn; claw; cold; die; drink; feather; fire; flesh; foot; good; green; hair; long;
mouth; neck; new; round; see; skin; swim; that; this; tree; white; who; woman

Anderton, Alice Jeanne. 1988. The Language of the Kitanemuks of California. Ph.D. dissertation, University of California, Los Angeles.

## Serrano

Non-exact gloss entries:
cloud: $1^{\text {st }}$ entry: fog, $2^{\text {nd }}$ entry: thunder, thunder cloud
dry: dry (v.i.)
earth (1): 1st \& 2nd entries: mud
earth (2): $2^{\text {nd }}$ entry: earth, ground, land, world
full: become full
head: top, up, above it
hot: hot (as of weather)
know: 1st entry: know, recognize, learn, 2nd entry: hear, listen to leaf: ear, leaf
lie: 3rd entry: lie down (flat, as on one's stomach)
man: 2nd entry: person, Indian
nose: my nose
red: be red
say: $1^{\text {st }}$ entry: to tell a true story, $3^{\text {rd }}$ entry: tell
see: find
sit: sit, stay, reside, live
stand: $1^{\text {st }}$ entry: get up, 2nd entry: stand (pl.)
tail: its tail
woman: man's daughter

Supplemental entries, with source:
No supplemental entries (no sources available)

Tongva (Gabrielino)
Non-exact gloss entries:
The following are given in $3^{\text {rd }}$ person singular possessive form: bark; belly; blood; bone; breast; egg; eye; feather; flesh; foot; hair; hand; head; horn; knee; leaf; liver; mouth; name; neck; nose; tail; tongue; tooth
breast: breasts
burn: burned
die: dying
earth (1): mud
eat: he is eating
give: give it to me
hot: hot (e.g. said when the sun is making things hot)
kill (sing.): is going to kill
lie: lie down! (imp.)
man: 2nd entry: person
name: $3^{\text {rd }}$ person form inferred (Hill entry is $1^{\text {st }}$ person possessive)
neck: nape of neck
say: $1^{\text {st }}$ entry: speak! (imp.)
sit: be [in a location] (future)
stand: I am standing up
tooth: $3^{\text {rd }}$ person form inferred (Hill entry is $1^{\text {st }}$ person possessive)
walk: will walk

## Supplemental entries, with source:

all; belly; big; bird; blood; breast; burn; cloud; die; drink; dry; fat; feather; fire; fly; foot; give; good; green; hair; hand; head; I; knee; leaf; liver; long; many; mountain; mouth; neck; new; night; nose; one; rain; round; see; seed; skin; sleep; small; smoke; stand; star; tail; that; this; tongue; tree; what; white; woman; yellow

McCawley, William. 1996. The First Angelinos: The Gabrielino Indians of Los Angeles. Morongo Indian Reservation, Banning CA: Malki Museum Press \& Novato, CA: Ballena Press.

## Luiseño

Non-exact gloss entries:
bird: $2^{\text {nd }}$ entry: a bird, the white brant
black: to become black
burn: $1^{\text {st }}$ entry: to scorch, singe, burn brush, 2nd entry: to set fire to something, 3rd entry: to light a fire, burn (something), $4^{\text {th }}$ entry: to burn (v.i.)
cloud: to become cloudy
earth (1): clay
full: to be full (through eating)
give: to give to several people, distribute
good: $2^{\text {nd }}$ entry: to be good
green: to be green/blue
hot: to be hot
know: $2^{\text {nd }}$ entry: to know, recognize, be acquainted with
lie: $1^{\text {st }}$ entry: to lie on the ground
many: $1^{\text {st }}$ and $2^{\text {nd }}$ entries: big, large
round: to be lumpy, to be round
sit: $1^{\text {st }}$ entry: to live, be (especially on top of something), to mount a horse, $2^{\text {nd }}$ entry: to sit down
small: 2nd entry: small, child
what: $1^{\text {st }}$ entry: (subj.), 2nd entry (obj.)
white: to be white

## Supplemental entries, with source:

1) ash; bark; bird (1 ${ }^{\text {st }}$ entry); cloud; cold; come; die; drink; earth (1); earth (2); fire; fly; head; hear; hot; knee; leaf; long; night; rain; skin; stone; tongue; white; yellow

Bright, William. 1968. A Luiseño Dictionary. University of California Publications, Linguistics 51.
2) all; big (2nd entry); burn (2nd, 3rd, and 4th entries); dry; eat (2 ${ }^{\text {nd }}$ entry); feather; fly; good; green; hair; hot; know (1st entry); lie; man (1st entry); many (2nd entry); new; round; sand; sit (2 ${ }^{\text {nd }}$ entry); swim; this; that; walk (3rd entry)

Preliminary Juaneño vocabulary. Based on data of J. P. Harrington, collected around 1933, mostly from Anastasia de Majel. Adapted by W. Bright, 1994.
http://www.juaneno.com/default.tpl?PageID $=166$

## Acjachemen (Juaneño)

Entries from the Revised Sets:
dog; who; this ( $1^{\text {st }}$ entry); we ( $1^{\text {st }}$ entry); big ( $1^{\text {st }}$ entry); hair ( $2^{\text {nd }}$ and $3^{\text {rd }}$ entries); earth (2); mouth; tooth, stone

All other entries are from:
Preliminary Juaneño vocabulary. Based on data of J. P. Harrington, collected around 1933, mostly from Anastasia de Majel. Adapted by W. Bright, 1994.
http://www.juaneno.com/default.tpl?PageID = 166

Non-exact gloss entries:
breast, dog, fire, hand, path, are extracted from phrases in the Preliminary Juaneño vocabulary entries
burn: 1st entry: burn (v.t.), 2nd entry: to light a fire, burn (something), 3rd entry to burn (v.i.)
cold: 1st entry: to be cold, 2nd entry: (of a person) to be cold
ear: inferred from Luiseño (close cognate "hear" is identical in Juañeno and Luiseño) earth (2): earth, dirt, land
fat: inferred from Luiseño comparison of fat (adj.)
fly: to flutter in the breeze, fly (a kite)
good: 2nd entry: to be good
hair: $2^{\text {nd }}$ and $3^{\text {rd }}$ entries: head, hair
hot: to be hot
leaf: sprout (cf .Luiseno gloss)
lie: 1st entry: to lie on the ground, 2nd entry: to lie down, to go to sleep
long: to be long, tall
many: 1st entry: big, 2nd entry: big, large
round: to be lumpy, to be round
sit: to place (a person)
smoke: to be smoky

## Cupeño

(Where entries in the Revised Sets are less definite than in J. Hill 2005, the latter source has been used instead)

Non-exact gloss entries:
bark: [shell] money
bird: Mud Hen
burn: 1st entry: burn (obj.), 2nd entry: burn, be burned cloud: fog die: 1st entry: (sing.), 2nd entry: (pl.), $3^{\text {rd }}$ entry: be sore, suffer earth (2): 1st entry: valley
eye: eye,face
flesh: $2^{\text {nd }}$ entry: skin
fly: young bird
full: to dine, eat
hot: 1st entry: to be hot, of people, weather, etc.
kill: bewitch, kill
lie: 1st entry: lie down, 2nd entry: lie at an angle, lie on side, 3rd entry: lie on back neck: nape of neck
night: to pass the night;
say: 1st entry: to relate history
sit: 1 st entry: be there
tail: 2nd entry: its tail
tree : firewood
walk: 2nd entry: walk around
woman: 2nd entry: man's daughter

Supplemental entries, with source:
all; ashes; belly; big; black; burn (all entries); cold; come; die; drink; dry; earth (2) (2 ${ }^{\text {nd }}$ entry); egg; flesh (1 ${ }^{\text {st }}$ entry); foot; good; green; head; hear; hot (2nd entry); kill (pl.); know; leaf; lie (all entries); long; many; mountain; mouth; new; seed; sit (2nd entry); small; stone; swim; tail (2nd entry); that; tree; walk; white; woman ( $1^{\text {st }}$ entry); yellow Hill, Jane H. 2005. A Grammar of Cupeño. University of California Publications, Linguistics 136.

## Cahuilla

Non-exact gloss entries:
big: big one
cloud: fog
dry: to become dry
full: to become full with food
hot: to become hot
know: to know, recognize, to learn, to find out
long: $2^{\text {nd }}$ entry: to be long
round: to be round
stand: 1st entry: to get up, lift oneself up from lying position, 2nd entry: stand up, stand still, stop walking, stop working
say: 1st entry: to tell a true story
sit: to be (of objects), to be lying down (of animate beings - refers to the mere existence of an animate being) (sg. subj.)
small: 1st entry: child
walk: to walk around
woman: $2^{\text {nd }}$ entry: man's daughter

Supplemental entries, with source:

1) all; bark; big; burn; cold; come; drink; dry; earth (1); earth (2); fire; good; green; head; hear; hot; long; man; person; round; sand; skin; stone; white; woman (1 ${ }^{\text {st }}$ entry); yellow

Seiler, Hansjakob and Kojiro Hioki. 1979. Cahuilla Dictionary. Banning, CA: Malki Museum Press.
2) kill (pl.)
http://wals.info/example/all/wals_code_cah, citing: Seiler, Hansjakob. 1977. Cahuilla Grammar. Banning, CA: Malki Museum Press.

## Tohono O'odham

Non-exact gloss entries:
bark: nest
burn: 1st entry: to burn in a single fire, 2nd entry: it is burning
claw: nail of a person
cloud: sky, cloud
cold: to be cold (as of weather)
come: $1^{\text {st }}$ entry: to arrive somewhere on foot or on horseback at a walking pace, $2^{\text {nd }}$ entry: to get, arrive somewhere at a walk
drink: to drink (obj.)
earth (1): clay, mud, plaster
feather: feathers, wing
foot: 2nd entry: track, footprint
full: to become full
green: to be blue/green
hand: palm of the hand
hot: heat, hot, to be hot
kill (sing.): $3^{\text {rd }}$ entry: he killed
know: 1st entry: to learn something, to find out about somebody, 2nd entry: to teach [i.e., make known]
leaf: to have leaves, be leafy
lie: 1 st entry: to be somewhere in a lying or spreading position (inanimate), 2nd entry: to lie down, to go to bed
many: 1st entry: much, many, a lot of
neck: 2nd entry: nape of the neck
night: at night, last night, tonight
one: $2^{\text {nd }}$ entry: only in counting
rain: (noun)
root: roots (of a specified plant)
red: to become red
sand: 1 st entry: fine sand (as on beach), $2^{\text {nd }}$ entry: gravel, coarse sand
say: 1st entry: say something, tell a story, 2nd entry: to make a certain sound, say
something, speak in a certain way, 3rd entry: to talk, to speak
see $2^{\text {nd }}$ entry: find, notice, discover
seed: its seeds
sit: 1 st entry: to be dwelling, living (sg.), 2nd and 3rd entries: to be seated sleep: (sing.)
small: 1st entry: child (little one)
stand: 2nd entry: stand up, stop
walk: 2nd entry: to walk around
white: to be white
woman: 2nd entry: old woman, wife

Supplemental entries, with source:

1) cloud; feather; kill (sing.) $3^{\text {rd }}$ entry; water $2^{\text {nd }}$ entry

Bascom, Burton William. 1965. Proto-Tepiman. Ph.D. dissertation, University of Washington.
2) mountain

Hill, Jane H. and Ofelia Zepeda. 1998. Tohono O'odham (Papago) Plurals.
Anthropological Linguistics 40:1:1-42
3) hair; not; skin; what; who; swim

Saxton, Dean, Lucille Saxton and Susie Enos. 1983. Dictionary: Papago/Pima—English (O'othham—Mil-gahn), English—Papago/Pima (Mil-gahn—O'othham). Second edition revised and expanded. Edited by R.L. Cherry. Tucson: University of Arizona Press.

## Pima Bajo

Non-exact gloss entries:
burn: it is burning
claw: fingernails
cloud: sky, cloud
cold: it is cold
earth (1): $1^{\text {st }}$ and $2^{\text {nd }}$ entries: clay
feather: feathers, wing
fire: firelight
foot: 2nd entry: track, footprint
hair: head, hair
hand: palm of the hand
leaf: to have leaves, be leafy
many: 1st entry: many, much
night: at night, last night, tonight
rain: (noun)
root: its roots
say: 5th entry: to talk, 6th entry: to say to
see: $2^{\text {nd }}$ entry: find, see
sit: to be seated
small: 1st entry: child (little one)
stand: 3rd entry: to be standing, 4th entry: stand up
walk: 1st entry: to go, 2nd entry: walk around

Supplemental entries, with source:

1) cloud; feather; kill (sing.); hair; water

Bascom, Burton William. 1965. Proto-Tepiman. Ph.D. dissertation, University of Washington.
2) egg; flesh; full; lie; name; not; skin; star; swim; what; who; yellow

Escalante H., Roberto and Zarina Estrada Fernández. 1993. Textos y gramática del pima bajo. Hermosillo: Universidad de Sonora.

Northern Tepehuan
Non-exact gloss entries:
bite: he bit
burn: it is burning
cloud: sky, cloud
cold: it is cold
come: he comes
earth (1): 1st entry: clay
feather: feathers, wing
foot: 2nd entry: track, footprint
full: to fill
horn: its horn
many: 1st entry: many, much
root: 2 nd entry: its roots
say: 1st entry: tell, 3rd entry: to tell, 4th entry: to say to
see: $2^{\text {nd }}$ entry: find, see
sit: to be seated
sleep: he sleeps
small: little one
stand: 1st entry: to be standing, 2nd entry: to stand up
walk: 1st entry: to go, 2nd entry: walk around

Supplemental entries, with source:
cloud; feather; kill (sing.); small; water $2^{\text {nd }}$ entry
Bascom, Burton William. 1965. Proto-Tepiman. Ph.D. dissertation, University of Washington.

Southern Tepehuan
Non-exact gloss entries:
bite: he bit
burn: it is burning
cloud: sky, cloud
cold: it is cold
come: he is going to come
earth (1): clay
feather: feathers, wing
full: to fill
kill (sing.): he killed
many: 1st entry: many, much
root: 2nd entry: its roots
round: around
see: $2^{\text {nd }}$ entry: find, see
round: around
say: 1st entry: tell, 3rd entry: to tell, 4th entry: to say to
sit: to be seated
small: little one
stand: 1st entry: to be standing, 2nd entry: to stand up
walk: 1st entry: to go, 2nd entry: walk around

Supplemental entries, with source:
cloud; feather; hear; kill (sing.); sleep; water $2^{\text {nd }} \& 3^{\text {rd }}$ entries
Bascom, Burton William. 1965. Proto-Tepiman. Ph.D. dissertation, University of Washington.

## Guarijío

Non-exact gloss entries:
bark: shrimp, crawfish
dog: $1^{\text {st }}$ entry: puppy, $2^{\text {nd }}$ entry: possessed animal, cattle, cow, bull
dry: to be dry
earth (2): land
foot: 1st entry: sole of the foot
full: be full
green: blue
hand: palm of the hand
hot: to boil, be boiling
know: 1st entry: to know, know a place, have knowledge, 2nd gloss: to know how to do something
lie: to be lying down (sg. subj.)
many: 1st \& 2nd entries: everything, 3rd entry: to be, become many
neck: throat, neck of the violin
one: $1^{\text {st }}$ entry: at this one time, single time
red: to be red
sand: $1^{\text {st }}$ entry: pile of rocks, bare rocky place where eroded into rock on the trail
say: 1st entry: advice
see: $2^{\text {nd }}$ entry: find, see
sit: 1st entry: to be seated, sitting (sg. subj.), 2nd entry: to sit down (sg. subj.), 3rd entry: to be seated, sitting (sg. subj.), 4th entry: to be seated (pl. subj.)
small: short
smoke: to make smoke
stand: $1^{\text {st }}$ entry: be standing (pl. subj.)
walk: $1^{\text {st }}$ entry: to go, travel (sg. subj.)
white: to be white
woman: wife
yellow: to be yellow
you: (sing. or pl.)

Supplemental entries, with source:
cold; fish; green; heart (2 $2^{\text {nd }}$ entry); one ( $2^{\text {nd }}$ entry); sand ( $2^{\text {nd }}$ entry); stand ( $2^{\text {nd }}$ entry); sun

Shaul, David L. 1983. The position of Opata and Eudeve. Studies in Native American Languages II. Kansas Working Papers in Linguistics 8(2): 95-122.

## Rarámuri

Non-exact gloss entries:
breast: chest, breast
earth (1): mud
earth (2): land, earth, clay
dog: 2nd entry derived from listed bukura, possessor (of an animal)
full: $1^{\text {st }}$ entry: get full
give: give as a gift
hand: $1^{\text {st }}$ entry: palm of hand
kill (pl.): kill (animals)
neck: neck, throat
see: $2^{\text {nd }}$ entry: find, see
sit:1st entry: to be, 2nd entry: be seated, 3rd entry: to sit (pl.)
smoke: be smoky, make smoke

## Supplemental entries, with source:

1) all; bark; black; blood; cold; come; earth (1); egg; feather; flesh; good; green; hand ( $2^{\text {nd }}$ entry; hear; I; kill (sing.); lie; long; man; many; new; one; person; round; say; seed ( $1^{\text {st }}$ entry); small; stand ( $2^{\text {nd }}$ and $3^{\text {rd }}$ entries); sun; swim; that; this; tongue; tree; we; what; who; woman; yellow

Lionnet, Andrés. 1972. Los elementos de la lengua tarahumara. Mexico City:
Universidad Nacional Autónoma de México, Instituto de Investigaciones Históricas.
2) dry; hot

Hilton, K. Simón. 1959. Vocabulario tarahumara. Serie de vocabularios indígenas Mariano Silva y Aceves núm. 1: tarahumara y español. Mexico City: Instituto Lingüístico de Verano.
$3)$ hand ( $1^{\text {st }}$ entry); seed ( $2^{\text {nd }}$ entry)
Shaul, David L. 1983. The position of Opata and Eudeve. Studies in Native American Languages II. Kansas Working Papers in Linguistics 8(2): 95-122.

## Eudeve

Non-exact gloss entries:
belly: stomach, intestines
claw: nail
cold: get cold
fire: firelight
hot: 1st entry: be hot, 2nd entry: have heat, boil
know: to teach [i.e., make known]
many: 1st entry: much, 2nd entry: big
rain: (noun)
say: 2nd entry: talk, 3rd entry: advise
see: $2^{\text {nd }}$ entry: find
sit: 1 st entry: seated, 2nd entry: sit down
stand: stand up
woman: 2nd entry: girl

Supplemental entries, with source:
black; flesh; feather; green; seed (2 ${ }^{\text {nd }}$ entry); eat (2 ${ }^{\text {nd }}$ entry); star

Shaul, David L. 1983. The position of Opata and Eudeve. Studies in Native American Languages II. Kansas Working Papers in Linguistics 8(2): 95-122.

Ópata
Non-exact gloss entries:
claw: nail
cold: get cold
fire: firelight
many: 1st, 2nd, and 3rd entries: big
say: $1^{\text {st }}$ entry: speak
sit: sit (sg. subj.)
woman: 3rd entry: wife

Supplemental entries, with source:
bite; black; cloud; eat; egg; eye; feather; flesh; green; heart; lie; long; mountain; say (2 ${ }^{\text {nd }}$ entry); seed; stand; star

Shaul, David L. 1983. The position of Opata and Eudeve. Studies in Native American Languages II. Kansas Working Papers in Linguistics 8(2): 95-122.

Arizona Yoeme (Yaqui)
Non-exact gloss entries:
all: all, each, every, everyone, even, even though
come: $1^{\text {st }}$ entry: arrive (pl.)
earth (2): earth, land, soil, area, region, country
eat: have something to eat
feather: ( $2^{\text {nd }}$ entry): wing
fly: be flying
foot: feet, legs
hair: headhair
head: 2nd entry: head hair
hot: (2nd entry): warm
know: to teach [i.e., make known]
many: 1st entry: much, plenty, abundance
neck: 1st entry: neck, throat, $2^{\text {nd }}$ entry: nape of neck
round: around
see: $2^{\text {nd }}$ entry: find
sit: 1st entry: be sitting, be situated, 2nd entry: sit down, 3rd entry: sit down (imp. sing. only)
sleep: asleep, sleeping
stand: 1st entry: stand up (sg.), 2nd entry: standing up (pl.)
walk: go
know: ( $1^{\text {st }}$ entry): know well
woman: (2 ${ }^{\text {nd }}$ entry): wife

Supplemental entries, with source:
black; blood; claw; cloud; fat; feather; flesh; good; hot (1 ${ }^{\text {st }}$ entry); I; know (3 entries); person; sand; say; small (2 ${ }^{\text {nd }}$ entry); stand (for meaning); star; swim; that; what; who; woman ( $1^{\text {st }}$ entry)

Molina, Felipe S., Herminia Valenzuela and David Leedom Shaul. 1999. Hippocrene Standard Dictionary: Yoeme-English, English-Yoeme. New York: Hipprocrene Books.

Mayo

Non-exact gloss entries:
all: each
burn: [he] is burning it
claw: finger
come: $1^{\text {st }}$ entry: arrive, pl., $2^{\text {nd }}$ entry: came, arrived
drink: [he] is drinking
earth (2): land, floor
eat: is eating
eye: eyes
fat: fatty, greasy
foot: feet
fly: flies, is flying
full: [he] is full
hair: headhair
hand: hand, hands
head: 2nd entry: hair of the head
hot: [it] is hot
know: to teach [i.e., make known]
lie: [he] is lying down (sg. subj.)
many: 1st entry: much
neck: 1st entry: neck, throat, $2^{\text {nd }}$ entry: nape of neck
rain: is raining
round: around
sit: 1st entry: is seated, 2nd entry: sit (pl. subj.), 3rd entry: (imp. sing.)
small: few, a little bit
stand: 1st entry: stood up, 2nd entry: standing (pl.)
swim: swims, is swimming
walk: goes
what: what?
who: who?
woman: wife

Supplemental entries, with source:

1) black; blood; cloud; fat; flesh; good; I; sand; say; stand; star; swim; that; what; who

Collard, Howard and Elisabeth Scott Collard. 1962. Serie de vocabularios indígenas Mariano Silva y Aceves núm. 6: castellano-mayo, mayo-castellano. Mexico City: Instituto Lingüístico de Verano.
2) feather

Shaul, David L. 1983. The position of Opata and Eudeve. Studies in Native American Languages II. Kansas Working Papers in Linguistics 8(2): 95-122.

Tubar
Non-exact gloss entries:
bark: shrimp
belly: stomach
big: tall, long
dog: domestic animal
hot: be hot
many: 2nd entry: tall, long
say: 2nd entry: talk
see: 3rd and 4th entries: see, find
sit: 1st entry: be, be seated, live, be in
stand: stand up
swim: walk, crawl, swim
that: (this) other
walk: 1st entry: go
what: what?

Supplemental entries, with source:
ash; belly; bird; breast; claw; come; die; dry; egg; eye; fire; flesh; fly; green; hair; heart; I; kill (sg.); kill (pl.); liver; man; new; night; nose; red; smoke; that; this; what; woman; yellow; you (sg.)

Lionnet, Andrés. 1978. El idioma tubar y los tubares; según documentos inéditos de C.S. Lumholtz y C.V. Hartman. Mexico City: Universidad Iberoamericana.

Cora

Non-exact gloss entries:
all: more, very
bird: woodpecker
bite: bites it
breast: chest, breast
burn: burning
claw: nail
cold: 1st entry: cold, ice, snow, 2nd entry: it is cold
come: comes
drink: I drink
earth (2): filth, dirt, earth
eat: eats it
egg: lays an egg
fat: $1^{\text {st }}$ entry: fatty thing, $2^{\text {nd }}$ entry: fatty food
flesh: prickly pear cactus
fly: flies
foot: my foot
full: got full
hear: hears him/her
hot: it is hot
kill (sing.): (he) kills it (for eating)
know: [he] remembers, knows it
lie: is lying down
many: 1st entry: it is much, a lot, 2nd entry: big
name: inferred from 'have as a name'
neck: neck, throat
rain: it rains
sand: sandy ground
say: 1st entry: language, word, 2nd entry: [he] says
see: [he] finds it
sit: 1st entry: [he] is seated, 2nd entry: [he] sits
sleep: is asleep
stand: stands up
swim: is swimming
walk: I walk
what: what?
woman: women

Supplemental entries, with source:
black; blood; cloud; come; fat (both entries); fish; fly; good; green (all entries); hear; heart; lie; man; mountain; nose; red; root; skin; small; stand; swim; that; walk; what; white; yellow (both entries); you (sing.)

McMahon, Ambrosio and María Aitón de McMahon. 1959. Cora y español. Serie de vocabularios indígenas Mariano Silva y Aceves núm. 2. Mexico City: Instituto Lingüístico de Verano.

## Wixarika (Huichol)

Non-exact gloss entries:
In entries for breast, rain, person, one, bird, black, long, K. Hill 2011's IPA transcription /w/ has been corrected to $/ \beta /$ per Grimes et al rule: /v/ $=/ \mathrm{w} /$ before $/ \mathrm{a} /$ and $/ \ddot{\mathrm{u}} /$, and $=/ \beta /$ before $/ \mathrm{e} /$ and $/ \mathrm{i} /$ (Grimes et al 1981)
all: 3rd entry: (animate subject)
belly: 1st entry: abdomen, rectal muscle, 2nd entry from Grimes et al huu.ríeca, Diguet rhoca
breast: chest, breast
claw: nail
die: dead
drink: drink water
earth (2): dirt, ground, land
give: sustain, feed
hot: hot, excited, full of desire
leaf: have leaves
name: have as a name
neck: neck, throat
rain: drizzle
red: rendering via comparison with K. Hill 2011 "red (multiple)"
say: 1st entry: talk, 3rd entry: to say, to talk, 4th entry: to say something to someone sit 1st gloss: be sitting, live, 2nd entry: begin to be seated [pl.]
woman: 2nd entry: unmarried young woman

Supplemental entries, with source:

1) all; belly ( $2^{\text {nd }}$ entry); blood; cloud; egg; flesh; good; hear; heart; long; mouth; nose; red; say ( $3^{\text {rd }}$ and $4^{\text {th }}$ entries); skin; small; smoke; stand (pararse); swim; that; two; what; who; woman

Grimes, José with Pedro de la Cruz Ávila, José Carrillo Vicente, Filiberto Díaz, Román Díaz, Antonio de la Rosa and Toribio Rentería. 1981. El huichol: apuntes sobre el léxico. Ithaca, NY: Department of Modern Languages and Linguistics, Cornell University.
2) belly (2 ${ }^{\text {nd }}$ entry); come; die; green; mountain; star; yellow; you

Diguet Léon. 1911. Idiome-Huichol. Contribution à l'étude des langues mexicaines. In: Journal de la Société des Américanistes. Tome 8, pp. 23-54. (IPA transcriptions inferred from K. Hill 2011 conventions)

## Classical Nahuatl

Only Karttunen 1983 entries used from K. Hill 2011 (not Molina 1571 entries).
Non-exact gloss entries:
bark: skin, hide, husk, rind
bird: $2^{\text {nd }}$ entry: hummingbird
black: something black
burn: 1st entry: to burn, to burn someone, something
claw: fingernail, toenail
cold: 1st entry: something cold, 2 nd, $3^{\text {rd }}$, and 4th entries: get cold, 5 th entry: to be cold
drink: to drink something
earth (2): earth, land, property
eat: to eat something
good: something good
green: something blue/green
hot: to be warm, for the sun to shine
kill: to commit suicide, to mistreat oneself, to kill or injure someone
know: 2nd entry: to be known, be apparent, 3rd entry: to learn, to study, to teach someone
lie: to stretch oneself out, to lie down, to settle, to stretch something out, to spread something on a flat surface
man: 2nd entry: man, male, husband
mouth: 3rd entry: lip, mouth, edge
neck: neck, throat
say: to take council with oneself, to make a complaint, to say something to someone, to reveal something to someone
seed: 2nd entry: pit
sit: 1st entry: to be, 2nd entry: to sit down, to settle, to seat someone, to put something down, to set down statutes and ordinances, to set things in order
small: small one
stand: stand up, get up, get someone up
walk: to go along, to walk, to wander
white: something white
you: your

Supplemental entries, with source:
all; breast; egg; fat; full; good; horn; liver; long; mountain; new; rain; red; round; small; smoke; stand; sun; swim; tail; this; that; white; yellow; you

Karttunen, Frances. 1983. An Analytical Dictionary of Nahuatl. Austin: University of Texas Press.

## Tetelcingo Mexicano

Non-exact gloss entries:
belly: his belly
bird: $2^{\text {nd }}$ entry: hummingbird
bite: he bites it
breast: $1^{\text {st }}$ entry: his breast; $2^{\text {nd }}$ entry: her breast
burn: [he] burns it
claw: his nail
cold: 2nd entry: it gets cold, 3rd entry: it's cold
come: I come
drink: [he] drinks it
ear: his ear
eat: eats it
earth (2): ground, earth, land
eye: his eye
fly: flies
foot: his foot
give: [he] gives [it] to him
hand: his hand
head: his skull
heart: (IPA form corrected)
hot: it is hot
kill (sing.): kills him (all entries)
knee: his knee
know: $1^{\text {st }}$ entry: [he] knows it, tries it (food), 2nd entry; [he] teaches him, advises him, educates him, trains him
leaf: 1st entry: its leaf
lie: lies
mouth: his mouth
name: his name
neck: his neck
nose: his nose
person: man, male person
rain: rains
say: [he] says to him
see: [he] sees it
sit: 1st \& 2nd entries: I am, 3rd entry: [he] puts it, places it, seats it
sleep: [he] sleeps
stand: stands
swim: swims
tail: his/her/its tail
tongue: his tongue
walk: [he] walks

Supplemental entries, with source:
all; breast; egg; feather; full; good; kill (sing.); lie; long; many; new; rain; red; round; small; smoke; stand; swim; tail; that; this; yellow; you

Brewer, Forrest and Jean G. Brewer. 1962. Vocabulario mexicano de Tetelcingo, Morelos. Serie de Vocabularios Indígenas Mariano Silva y Aceves Núm. 8. Mexico City: Instituto Lingüístico de Verano.

## Pochutla Mexicano

Non-exact gloss entries:
black: soot
cloud: [Boas indicates uncertainty about the term]
many: $2^{\text {nd }}$ entry: enough
person: man

## Supplemental entries, with source:

all; bird; breast; burn; claw; cloud; cold; drink; dry; eat; egg; eye; fly; foot; good; hand; head; heart; hot; kill (sg.); know; many; name; not; rain; say; see; seed; sit; sleep; small; smoke; stand; that; this; tongue; walk; we; woman; you (sg.)

Boas, Franz. 1917. El dialecto mexicano de Pochutla, Oaxaca. International Journal of American Linguistics 1(1): 9-44.

Pipil
Non-exact gloss entries:
know: $2^{\text {nd }}$ entry: to teach, to learn
mouth: 2nd entry: cheek
person: man
skin: $1^{\text {st }}$ entry: leather

Supplemental entries, with source:
all; bird; bite; black; breast; dry; ear; egg; feather; foot; full; good; head; heart; hot; kill (sg.); knee; lie; liver; long; many; new; not; rain; red; round; seed; sit; small; smoke; stand; tail; that; this; who; yellow; you

Campbell, Lyle. 1985. The Pipil Language of El Salvador. Berlin: Mouton.

Ipai
Ipai words are taken from Wikipedia's representation of Swadesh lists for Hokan Languages
(http://en.wiktionary.org/wiki/Appendix:Swadesh_lists_for_Hokan_languages). Ipai entries derive from: Couro 1973, Couro and Langdon 1975, Hinton 1994, and Langdon 1970. Our rendering of Ipai words into Hill's version of IPA is based on the description of Ipai phonology in Couro and Langdon 1975, and in part on the comparative discussion of Yuman phonology by Winter (1957).

Couro, Ted. 1973. Dictionary of Mesa Grande Diegueño; 'Iipay Aa-English/English'Iipay Aa, Malki Museum Press, California.

Couro, Ted and Langdon, Margaret. 1975. Let's talk 'Iipay Aa: An Introduction to the Mesa Grande Diegueño language, Malki Museum Press, California.

Hinton, Leanne. 1994. Flutes of Fire: Essays on California Indian Languages. Heyday Books, Berkeley, California.

Langdon, Margaret. 1970. A Grammar of Diegueño: The Mesa Grande Dialect. University of California Press, Berkeley, California.

Winter, Werner, 1957, Yuman Languages I: First Impressions. International Journal of American Linguistics 23:1:15-23.

## Tewa

To render Tewa words as closely as possible to the IPA format followed by Hill, we rely on the phonemic system described by Hoijer and Dozier (1949), also represented by Dozier (1953), and with some minor variations by Hale (1967). From Harrington's evolving system for writing Tewa (e.g., Harrington 1909, 1916, Henderson and Harrington 1916, Robbins, Harrington, and Freire-Marreco 1916), phonemic forms have been correlated with and rendered after Hoijer and Dozier's system (as have the more general orthographic renderings of Curtis [1926]), and thence conformed to Hill's IPA format. In Tewa /a/ is a low open front vowel, contrasting with /a/ in UtoAztecan. Technical difficulty of rendering Tewa alveolar and post-alveolar affricates ( $\mathrm{t}^{\mathrm{s}}$ and $t^{5}$ ) in glottalized form leads us to show glottalization over the first symbol of the digraph only (as $\mathfrak{t}^{s}$ and $t^{j}$ ).

Non-exact gloss entries:
Several verbs are taken from Dozier (1953) whose glosses are "he drank, "he heard," etc. Verb stems are inferred from these entries by comparison with verb forms in other sources (Hale 1967, Hoijer and Dozier 1947, Harrington 1909):
bite: [he] took a bite
drink: [he] drank
eat: [he] ate [it]
give: [he] gives
hear: [he] heard
sit: [he] sat down
swim: [he] went swimming
burn: to be burnt
claw: fingernails
dry: to be dry
fat: fatty meat, lard
flesh: $1^{\text {st }}$ entry: flesh of, e.g., a seed, $2^{\text {nd }}$ entry: meat
hot: warm
lie: $1^{\text {st }}$ entry: (sing.), $2^{\text {nd }}$ entry: (pl.), $3^{\text {rd }}$ entry: (pl.)
that: $1^{\text {st }}$ entry: less remote (from speaker), 2nd entry: more remote (from speaker)

## Entries, with source:

1) bark; bird; blood; bone; claw; cold; come; dog; ear; earth (2); eat; feather; fire; good; hot; I; kill (sing.); many; mouth; night; one; person; red; see; sit; sleep; that (1st and $2^{\text {nd }}$ entries); this; two; we; who; yellow; you

Harrington, John Peabody, 1909. Notes on the Piro Language. American Anthropologist 11:4:563-594.
2) all; black; egg; eye; fat; fire; fish; flesh ( $2^{\text {nd }}$ entry); foot; hair; hand; head; heart; man; moon; mountain; neck; nose; path; rain; skin; small; star; stone; sun; tail; tooth; water; white; woman

Hoijer, Harry and Edward Dozier, 1949, The Phonemes of Tewa, Santa Clara Dialect. International Journal of American Linguistics 15:3:139-144.
3) breast; cold (2 ${ }^{\text {nd }}$ entry); drink; flesh (1 ${ }^{\text {st }}$ entry); lie ( $3^{\text {rd }}$ entry); mouth; name; say; stand; two; walk

Hale, Kenneth L., 1967, Toward a Reconstruction of Kiowa-Tanoan Phonology. International Journal of American Linguistics 33:2:112-120.
4) ash; burn; dry; fly; leaf; lie (1st and $2^{\text {nd }}$ entries); long; root; round; seed; tree

Robbins, Wilfrid William, John Peabody Harrington, and Barbara Freire-Marreco, 1916, Ethnobotany of the Tewa Indians. Bulletin of the Bureau of American Ethnology 55.
5) bite; drink; eat; give; hear; sit; swim

Dozier, Edward, 1953, Tewa II: Verb Structure. International Journal of American Linguistics 19:2:118-127.
6) belly; earth (1); horn; new; sand

Harrington, John Peabody, 1916, The Ethnogeography of the Tewa Indians. Annual Report of the Bureau of American Ethnology 29: 31-636.
7) big; bird; green; louse; yellow

Henderson, Junius and John Peabody Harrington, 1914, Ethnozoology of the Tewa Indians. Bulletin of the Bureau of American Ethnology 56.
8) cloud; flesh (1st entry); knee; tongue; yellow (word morphology only)

Curtis, Edward S. 1926. The Tewa: the Zuni. The North American Indian, vol 17. Norwood, MA: Plimpton Press.

## Zuni

All entries are derived from Newman (1958). For rendering Newman's orthography into Hill's IPA format, we follow Newman's description (1954). Verb entries just represent the stem form without hyphens (as shown by Newman 1958).
/a/ is described by Newman (1954:164) as a low central vowel. We render it here as /a/, in correspondence to Hill's usage for Uto-Aztecan. All Zuni words beginning with a vowel are preceded by a glottal stop. Initial glottal stops are excluded here, however, in adherence to Hill's treatment of the same pattern in Uto-Aztecan of word-initial glottal stops as non-phonemic. As regards glottalized consonants, at first, Newman (1954:163, n.1) excluded these from his phonemic inventory, treating "all such phenomena as combinations" of consonant plus glottal stop. By 1958 (p 167), his analysis appears to have changed. Shaul (1982) also treats these Zuni sounds as glottalized consonants. Shaul's work is relied on for several groups of Uto-Aztecan cognates in the Revised Sets, as well as in our additions (including for Opata, Eudeve, Guarijío, Rarámuri, and Arizona Yoeme). We have chosen to treat these Zuni phonemes as glottalized consonants. As with Tewa, for alveolar and post-alveolar affricates ( $t^{s}$ and $\left.t^{f}\right)$ glottalization is shown over the first symbol of the digraph only (as $\hat{t}^{s}$ and $\hat{t}^{f}$ ).

Non-exact gloss entries:
all: $1^{\text {st }}$ entry: all (human), $2^{\text {nd }}$ entry: all (nonhuman)
big: be big
black: be or become black
breast: $1^{\text {st }}$ entry: woman's breast, $2^{\text {nd }}$ entry: chest, breast, $3^{\text {rd }}$ entry: woman's breast cloud: $1^{\text {st }}$ and $2^{\text {nd }}$ entries: be cloudy
cold: be or become cold
earth (2): $1^{\text {st }}$ entry: the earth, $2^{\text {nd }}$ entry: soil
egg: chicken egg
full: be full
good: be good
hair: hair (pl.)
hot: become hot
lie: $1^{\text {st }}$ entry: lie (sing.); $2^{\text {nd }}$ entry: in a lying position (pl.)
long: become long
moon: crescent moon
new: that which is new
night: become night
person: Zuni person
red: be red
round: be round
seed: $1^{\text {st }}$ entry: small seed, $2^{\text {nd }}$ entry: seeds ( pl.$)$
sit: $1^{\text {st }}$ entry: be in a sitting position, $2^{\text {nd }}$ entry: sit down
sleep: $1^{\text {st }}$ entry: (sing.), $2^{\text {nd }}$ entry: (pl.)
stand: $1^{\text {st }}$ entry: stand (from lying position), $2^{\text {nd }}$ entry: stand (from sitting position)
walk: walk back and forth
what: $3^{\text {rd }}$ entry: what?
white: be or become white
who: $1^{\text {st }}$ entry: someone, $2^{\text {nd }}$ entry: who?
yellow: be or become yellow
Sources:

Newman, Stanley, 1954, A Practical Zuni Orthography. Appendix, in Zuni Law: a Field of Values, by Watson Smith and John M. Roberts, pp 163-170. Papers of the Peabody Museum of American Archaeology and Ethnology 43:1.

Newman, Stanley, 1958, Zuni Dictionary. International Journal of American Linguistics 24:1:part 2.

Shaul, David L., 1982, Glottalized Consonants in Zuni. International Journal of American Linguistics 48:1:83-85.

