

[Text version of database, created 22/12/2018].

## **Annotated Swadesh wordlists for the Maxakalí group (Macro-Jê family).**

Languages included: Maxakalí [max-mxk]; Pataxó Hãhãhãe [max-hhh].

### **DATA SOURCES**

#### **I. Maxakalí**

Antunes 1999 = Antunes, Marisa Aparecida Domingos. *Pequeno dicionário indígena Maxakali-Português/Português-Maxakali*. Juiz de Fora, MG: s.ed. // *A vocabulary of Maxakalí. The entries are not accompanied with any examples of usage.*

Araújo 2000 = Araújo, Gabriel Antunes. *Fonologia e Morfologia da Língua Maxakali*. (MA thesis.) Campinas, SP: Universidade Estadual de Campinas. // *A description of Maxakalí phonology and morphology.*

Campos 2009 = Campos, Carlo Sandro de Oliveira. *Morfofonêmica e morfossintaxe do Maxakalí*. (PhD thesis.) Belo Horizonte, MG: Universidade Federal de Minas Gerais. // *A description of Maxakalí alternations and morphosyntax.*

Gudschinsky, Popovich & Popovich 1970 = Gudschinsky, Sarah C.; Harold Popovich; Frances Popovich. Native Reaction and Phonetic Similarity in Maxakali Phonology. *Language* 46(1): 77–88. // *A pioneer work describing some peculiarities of Maxakalí phonology. All the lexical material is cited without any contexts, with a simple gloss.*

Popovich & Popovich 2005 = Popovich, A. Harold; Frances B. Popovich. *Maxakalí-English Dictionary. English-Maxakalí Glossary*. Cuiabá, MT: Sociedade Internacional de Lingüística. // *A dictionary of Maxakalí with a grammar sketch. The entries are accompanied with examples of usage.*

Silva 2014 = Silva, Mário André Coelho da. *A coda consonantal em Maxakalí*. (MA thesis.) Campinas: Universidade Estadual de Campinas. // *A work dedicated to the phonetic*

*realization of Maxakalí syllable-final consonants. A small wordlist used in elicitation sessions is attached.*

Silva f.n. = Comments based on Mário André Coelho da Silva's field materials, kindly provided to the compiler by the author.

## **II. Pataxó Hãhãhãe**

Pickering 1961 = Wordlist collected by Wilbur Pickering in 1961 and published in: Meader, Robert E. 1976. *Índios do Nordeste: Levantamento sobre os remanescentes tribais do Nordeste Brasileiro*. Cuiabá, MT: Sociedade Internacional de Lingüística.

Bahetá 1982 = Wordlist recorded by Maria Aracy de Padua Lopes da Silva and Greg Urban in 1982 and published in: *Lições de Bahetá sobre a língua Pataxó Hãhãhãe*. Comissão Pró-Índio de São Paulo.

Scheibe 1957 = Wordlist collected by Paulo Scheibe in 1957 and published in: Loukotka, Čestmír. 1963. *Documents et vocabulaires inédits de langues et de dialectes sud-américains*. Journal de la Société des Americanistes 52: 7–60.

Azevedo 1936 = Unpublished wordlist collected by Colonel Antônio Medeiros de Azevedo, a few words of which are quoted in: Urban, Greg. 1985. *On Pataxó and Hãhãhãe*. International Journal of American Linguistics 51(4): 605–608.

## **NOTES**

### **I. Maxakalí.**

Maxakalí is spoken by approximately 2,000 people in four villages in northwestern Minas Gerais, Brazil. Data from consulted sources are generally in mutual agreement. In cases of conflicting data, [Silva f.n.] was given priority.

Correspondences between the orthographic representation and UTS for the consonants are as follows:

Orthography	UTS (onset)	UTS (coda)
p	p	p
t	t	0
x	ɸ	0
k	k	k
m	m, b	m, b
n	n, d	0
y	ɲ, ʒ	0
g	g	ŋ, g
h	h	-
ʔ, 0	ʔ	ʔ, 0

If the underlying coda is homorganic with the following consonant, it is deleted, leaving compensatory lengthening on the previous vowel. After oral syllables {m}, {n} and {y} in nasal syllables surface as [hm], [hn], [hɲ] (e.g. *petehnãĩŋ* {petenãg}). Word-final open syllables are followed with an automatic ʔ (e.g. *pataʔ* {pata}).

Correspondences between orthographic representation and UTS for vowels are as follows:

Orthography	UTS	UTS (before /-p/) <sup>1</sup>	UTS (before /-t/)	UTS (before /-c/)	UTS (before /-k/)
a	a <sup>2</sup>	aɣ̣	aɔ̣	aᵀ	aᵀ
ã	ã	ãɣ̣	ãɔ̣	ãᵀ	ãᵀ
e	ɛ	ɛɣ̣	ɛɔ̣	ɛᵀ	ɛᵀ
ẽ	ẽ	ẽɣ̣	ẽɔ̣	ẽᵀ	ẽᵀ
i	i	iɣ̣	iɔ̣	iᵀ	iᵀ
ĩ	ĩ	ĩɣ̣	ĩɔ̣	ĩᵀ	ĩᵀ
o	u	uɣ̣	uɔ̣	uᵀ	oᵀ
õ	ũ	ũɣ̣	ũɔ̣	ũᵀ	õᵀ
u	i	iɣ̣	iɔ̣	iᵀ	ɐᵀ
ũ	ĩ	ĩɣ̣	ĩɔ̣	ĩᵀ	ẽᵀ

<sup>1</sup> The actual pronunciation of  $\gamma$  is closer to  $[\beta\cdot]$ .

<sup>2</sup> {a} is realized as  $v$  in the syllable  $pv?$  {pa}.

Additionally,  $\tilde{\sigma}$  is found in the word  $n\tilde{\sigma}h\tilde{\sigma}$  {nũhũ}.

In long noun forms containing VhVC or V?VC sequences both vowels are targeted by the lowering/backing caused by the coda. This makes vowel allophony marginally contrastive, cf.  $[ka?aj]$  'end' and  $[p\dot{i}ta\dot{h}a\dot{x}]$  'road'.

## II. Pataxó Hãhãhãe

Available data on Pataxó Hãhãhãe are very scarce. Our main sources are [Pickering 1961] and [Bahetá 1982].

Wilbur Pickering [1961] was able to elicit some isolated words from Txitxi'a, a resident of the Caramuru outpost (3 km from Itaju do Colônia, Bahia state) aged around 45. Pickering provides a wordlist in narrow phonetic transcription with no attempt at a phonological analysis. In UTS, his transcription is rendered with minimal changes, such as Pickering  $t\check{s}$  = UTS  $\check{c}$ , Pickering  $t\dot{s}$  = UTS  $\dot{c}$ , Pickering  $N$  = UTS  $\eta$ , Pickering  $M$  = UTS  $\eta$ . Nasality is indicated with a tilde (instead of ogonek), and superscript vowels in Pickering's transcription are substituted with asyllabic vowels ( $V$ ) after vowels or with ultrashort vowels ( $\check{V}$ ) after consonants.

Bahetá was the last speaker of Pataxó Hãhãhãe resident in the Paraguaçu outpost (Itaju do Colônia, Bahia state), aged over 80 at the time of fieldwork carried out by Maria Aracy de Padua Lopes da Silva and Greg Urban in 1982. The transcription of the data provided by her was designed by Eni P. Orlandi and requires the following substitutions for the UTS:

Bahetá	UTS
ê	e
e	ɛ
ô	o
o	ɔ

Bahetá	UTS
â	ə
à	ʌ
tx	č
ng	ŋ
g(u)	g
x	š
j	ž

While no consistent phonological analysis is possible due to the fragmentary data of the available data, it is still possible to reconcile the transcriptions used by different authors. The following comments are necessary:

(1) Tones, stress, aspiration and ejective articulation in Pickering's transcription are probably non-distinctive, except in the reflexes of Proto-Maxakalí \*Ck-like consonant clusters that are expected to yield Cʔ-like clusters in Pataxó Hāhāhāe, sometimes transcribed as ejective stops by Pickering, cf. *ɛmp-ʔi* 'ear' < Proto-Maxakalí \*yĩp-kuc.

(2) *č<sup>h</sup>, č', č, ç, t<sup>h</sup>, t* sometimes oscillate in Pickering's data. These allophones correspond to Maxakalí *ç* morpheme-initially (word-medially in the word for 'heart', which probably contained a rare phoneme or consonant cluster in Proto-Maxakalí). In [Bahetá 1982], *t* and *č* are attested. I assume they represent one and the same phoneme, which I transcribe as *ç* (except before *i*, where our sources consistently point to *č*).

(3) Obligatorily possessed nouns are usually attested with a 3SG prefix (*ĩ=* in Pickering's data, *ã= ~ a=* in [Bahetá 1982]). I omit this prefix from the citation in the main field.

(4) The counterpart of Maxakalí *n* and *ɲ* is transcribed as *ŋg* by Pickering, *ŋ* {ng} in [Bahetá 1982] and {ɲ} by Scheibe. I transcribe *ŋ*.

(5) In a handful of words (e.g. 'fire', 'hand'), Pickering transcribes an ultra-short vowel after a final *-b*, not attested in [Bahetá 1982], whereas Scheibe transcribes {-bm} with

postnasalization. I simplify this to *-b*.

(6) Pickering sometimes attests *b* where other sources transcribe *w ~ v ~ gw* ('dog', 'eye'). *w* will be preferred in the GLD.

(7) Pickering sometimes transcribes *ɣ, ɱ, ɲ, ɳ* (depending on the environment) where other authors transcribe *h*. *h* will be preferred in the GLD.

(8) The vowel that breaks Proto-Maxakalí \**Ct*-like clusters is usually transcribed as *ɪ* by Pickering; other authors have less uniform transcriptions. *ɪ* will be preferred in the GLD.

(9) Following Pickering, I will use *ĩ* rather than *ã*.

(10) Whenever the sources disagree on vowel nasality, external data will be used to choose the form to be cited.

Database compiled and annotated by: André Nikulin (June 2017, updated December 2017).

## 1. ALL

Maxakali *pi:ba?* {*pipma*} (-1).

### References and notes:

**Maxakali:** Silva f.n. Glossed as 'every'. Attested, for example, in *kukä; pi:ba? çuñã? tihî?* {kokex pipma xoyã tihî} 'every dog has an owner'; note that the verb *tihî?* {tihî} is inherently plural. Apparently this is the closest Maxakalí equivalent to the Swadesh meaning in question. Distinct from the completive marker =*nãx̃m* {=nãm} [Campos 2009: 221; Silva f.n.]. According to Campos, =*nãx̃m* {=nãm} has the internal argument of the verb as its scope, but Silva [f.n.] provides a number of examples that render Campos's analysis unsatisfactory: *?p̃ piçã? ?p̃gã?nãx̃m* {ûn puxet ûgãy nãm} 'one woman is completely furious'; *?p̃ ?p̃gã?nãx̃m* {ûn puxet ûgãy nãm} 'the woman is completely furious'; *kaçãk ?ã=ta?nãx̃m* {kayak ãta nãm} 'the shirt is completely red'. Analyzed as an intensifier in [Popovich & Popovich 2005: 30]; possibly an aspectual feature is at play. Popovich & Popovich [2005: 48] and Antunes [1999: 37] attest *çuh ñ* {xohix} in this meaning ('all' / 'ten' / 'many'), but this word is attested as *çuhi?* {xohi} and analyzed as 'many / to abound / to be numerous / PL' elsewhere [Campos 2009: 75; Silva f.n.]. Treated as a borrowing because of the segment *b*. Phonology: /pipma/.

**Pataxo Hahahae:** Not attested.

## 2. ASHES

Maxakali *pitohok* / *pitok* {*putohok* / *putok*} (1), Pataxo Hahahae *bukhv* ~ *pukui* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 38. Phonology: /ptuk/.

**Pataxo Hahahae:** Pickering 1961 (*b'ukhv*); Bahetá 1982 (*e-puk'ui*).

## 3. BARK

Maxakali *çai* ~ *mĩx̃p=çai* {*xax* ~ *mĩmxax*} (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 47 (*çai* {*xax*}); Campos 2009: 267 (*mĩx̃m=çai* {*mĩmxax*}). Polysemy: 'cover / skin / bark / shell' (only *çai* {*xax*}). Phonology: /cac ~ mĩp=cac/.

**Pataxo Hahahae:** Not attested.

## 4. BELLY

Maxakali *tãj* {*tex*} (1), Pataxo Hahahae =*bu* (2) / =*kehε* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 42. Polysemy: 'belly / stomach'. Cf. *kutã* {*kotex*} 'fish's belly' [Popovich & Popovich 2005: 18], *tãj-tuxp* {*textop*} 'fat belly' [Popovich & Popovich 2005: 42]. Phonology: /tec/.

**Pataxo Hahahae:** Pickering 1961 (*ĩm=bu*). Bahetá 1982 (*a=kehε*).

## 5. BIG

Maxakali *çäïka?* ~ *çä:ka?* {*xexka*} (1), Pataxo Hahahae *kehã-çia* (2).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 47; Campos 2009: 83, 93 (*çäïka?* ~ *çeka?* {*xexka* ~ *xeka*}); Antunes 1999: 27, 36, 37; Araújo 2000: 19; Gudschinsky, Popovich & Popovich 1970: 84. Can be used in a classifier-like manner ([Araújo 2000: 108]). Phonology: /cekka/.

**Pataxo Hahahae:** Scheibe 1957 ({*kehãtiá*}).

## 6. BIRD

Maxakali *pitiï-nãïη* {*putuxnãg*} (1), Pataxo Hahahae *plkəï* ~ *blkəï* ~ *plkəï-nãï* ~ *blkəï-nãï* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 39; Campos 2009: 183; Gudschinsky, Popovich & Popovich 1970: 84. The words *mĩñũmĩ* {*mĩyõyõy*}, *tãñãï* {*tẽytẽy*} 'southern screamer', *taçã?* {*taxa*}, translated as 'bird' or 'small bird' in [Antunes 1999: 28, 33], refer to bird species. Phonology: /ptic-nãk/.

**Pataxo Hahahae:** Bahetá 1982 (*plkəï*); Scheibe 1957 ({*pekáynão*}). The same word as *blkãï* 'feather', quoted in [Pickering 1961]. Polysemy: 'bird / feather'.

## 7. BITE

Maxakali *pituçp* {*putop*} (1) / *çaha?* {*xaha*} (2).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 38; Campos 2009: 25; Antunes 1999: 31, 33; Gudschinsky, Popovich & Popovich 1970: 79; Silva f.n. Transitive. No semantic or number differences are reported for the verbs *pituçp* {*putop*}, *çaha?* {*xaha*}, *kadεçp* {*kanep*}; Silva [f.n.] attests *kukãïte?* *kaiççuçp* *pituçp* {*kokex te kakçop putop*}, *kukãïte?* *kaiççuçp* *çaha?* {*kokex te kakçop xaha*}, *kukãïte?* *kaiççuçp* *hã?* *kadεçp* {*kokex te kakçop hã kanep*}, all meaning 'the dog bit the child'. The three are thus listed as synonyms. Distinct from *koçç ij* {*kotxix*} (non-finite *koççï?* {*kotxi*}) 'to chew' [Silva f.n.]. Phonology: /ptup/. Campos 2009: 158; Silva f.n. Non-finite: *çã?* {*xa*}. Transitive. Phonology: /ca/.

**Pataxo Hahahae:** Not attested.

## 7. BITE

Maxakali *kadεçp* {*kanep*} (-1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 14; Silva f.n. Intransitive. Requires an argument expressed with an adpositional phrase with an instrumental postposition *hã?* {*hã*} (e.g. *kukãïte?* *kaiççuçp* *hã?* *kadεçp* {*kokex te kakçop hã kanep*} 'the dog bit the child') or the morpheme *nũ?* {*nõ*} (*kukãïte?* *nũ?* *kadεçp* {*kokex te nõ kanep*} 'the dog bit (someone)'). Treated as a non-native item because of the



segment *d*; according to a speaker, this verb is onomatopoeic and refers to the sound of dog's biting. Phonology: /kadep/.

## 8. BLACK

Maxakali *mĩnĩĩ* {*mũnĩy*} (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 29; Campos 2009: 83; Gudschinsky, Popovich & Popovich 1970: 85 (*mĩnĩĩ* {*mũnĩy*}). Phonology: /pnĩc/ or /pnĩk/.

**Pataxo Hahahae:** Not attested.

## 9. BLOOD

Maxakali *hεχp* {*hep*} (1), Pataxo Hahahae =*heb* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 10; Campos 2009: 137, 273. Polysemy: 'blood / sap / liquid'. Can be used in a classifier-like manner for liquids. Phonology: /hep/.

**Pataxo Hahahae:** Pickering 1961 (*ĩ=heb*). In [Bahetá 1982], a different root without a transparent etymology is cited: *a=v'εη*.

## 10. BONE

Maxakali *kĩχp* {*kup*} (1), Pataxo Hahahae =*ĩp-çui* ~ =*up-çui* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 20. Polysemy: 'bone / stick / tree / stalk'. Quoted by Antunes in compounds: *kĩχp-çoi* {*kup xox*} 'bone / portal / tree / long object / thigh' [Antunes 1999: 26], *çu=kĩχp* {*xokup*} [Antunes 1999: 37]. Can be used in a classifier-like manner for tree-like or bone-like objects (cf. [Campos 2009: 119, 163]). Phonology: /kip/.

**Pataxo Hahahae:** Pickering 1961 (*ĩ=ĩp-çui*); Bahetá 1982 (*a=up=ç'ui*).

## 11. BREAST

Maxakali *kεχp* {*kep*} (1), Pataxo Hahahae *çohob* (2).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 15; Antunes 1999: 24. Distinct from *ĩõĩktaç* {*yõktat*} 'female breast' [Popovich & Popovich 2005: 29; Antunes 1999: 39; Gudschinsky, Popovich & Popovich 1970: 86], *paç* {*pat*} 'backbone' [Popovich & Popovich 2005: 34], glossed as 'breast' in [Campos 2009: 272]. Phonology: /kep/.

**Pataxo Hahahae:** Pickering 1961. In [Bahetá 1982], another root is cited: *a=ĩjok'a*. However, the latter possibly refers to female breast, as suggested by the illustration in the source as well as by its Maxakali cognate *ĩõĩktaç* {*yõktat*} 'female breast'.

## 12. BURN

Maxakali *mũ=haɣp* {*mõhap*} (1).

### References and notes:

**Maxakali:** Campos 2009: 233; Silva f.n. Transitive. Plural: *píg-āhā?* {*pugāhā*} (non-finite: *píg-ā?* {*pugā*}). Polysemy: 'to burn / to roast'. Intransitive: *psík* {*puk*} 'to burn (intransitive) / to be boiled / to be roasted' [Campos 2009: 111; Antunes 1999: 31; Silva f.n.]; also attested as transitive [Popovich & Popovich 2005: 37, 46, 55], especially when the object is a body part. Distinct from *mũ?=çíç* {*mõ xut*} 'to consume / to burn up' [Popovich & Popovich 2005: 28] or 'to set fire' [Silva f.n.], *ñũkõĩ* {*yõkõy*} 'to burn (of food)' [Silva f.n.]. Phonology: /mũ=hap/.

**Pataxo Hahahae:** Not attested. Cf. *euhm-ā* 'to set on fire' [Pickering 1961 (*eu ñm ā*)].

## 13. NAIL

Maxakali *ñĩ=mã=çai* {*yĩmmãxax*} (1), Pataxo Hahahae =*pahab=taĩñ* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 55 (*ñĩ=mã=çai* {*yĩmmãxax*}); Campos 2009: 93 (*ñĩx̃p=çai* {*yĩmxax*}). Cf. [Araújo 2000: 113], where the meanings 'fingernail' and 'toenail' are said to be rendered as *çai* {*xax*} 'skin' and *pata=çai* {*pataxax*} respectively. Phonology: /ñĩp=mã=cac ~ ñĩp=cac/.

**Pataxo Hahahae:** Bahetá 1982 (*a=pahab=t'a ñ*).

## 14. CLOUD

Maxakali *gõĩ* {*gõy*} (-1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 4, 5; Araújo 2000: 119; Gudschinsky, Popovich & Popovich 1970: 84. Polysemy: 'smoke / cloud / fog / to smoke'. Treated as a borrowing because of the segment *g*. Phonology: /gũc/.

**Pataxo Hahahae:** Not attested.

## 15. COLD

Maxakali *çí=çí?* / =*ã=çí?* {*xuxi* / =*ãxi*} (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 3, 8, 52 (appears as {*xuxix* / *ãxi* ~ *ãxix*}); Campos 2009: 224; Silva f.n. Polysemy: 'cold / to cool off / to cease / to ease up'. Another root, *çaxp-* {*xap-*} 'cold sensation', is found in words like *çaxp-çĩ* {*xapxũy*} 'to feel cold' [Popovich & Popovich 2005: 46; Antunes 1999: 36; Silva f.n.], *çaxp-te-xptãĩ* {*xapte p-tex*} 'cold weather / to feel cold' [Popovich & Popovich 2005: 46; Campos 2009: 27] (literally 'cold-ERG kill.SG'). Phonology: /ci=ci/ // =A=ci/.

**Pataxo Hahahae:** Not attested.

## 16. COME

Maxakali *nĩ-ḡ* {*nĩn*} (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 32; Campos 2009: 79; Antunes 1999: 29. Subjunctive: *nĩ* {*nĩ*}, imperative: *mãḡ* {*mã*}. Distinct from *ḡi=peḡḡp* / *=ḡã=peḡḡp* {*xupep* / *=ãpep*} 'to arrive / to leave', pl. *mũ=ḡahaḡ* {*mõxaha*} (non-finite *mũ=ḡãḡ* {*mõxã*}) [Popovich & Popovich 2005: 2, 35, 51; Campos 2009: 78, 183; Antunes 1999: 38]. Phonology: /*nĩ-t*/.

**Pataxo Hahahae:** Not attested.

## 17. DIE

Maxakali *ḡoḡk* {*xok*} (1), Pataxo Hahahae =*ḡuku* (1) / =*mḡhḡḡ* (2).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 48; Campos 2009: 102. Polysemy: 'to die'. Plural: *ḡak ḡ* {*xakix*} [Popovich & Popovich 2005: 45; Campos 2009: 120]. Homonymous with *ḡo-ḡk* {*xok*} 'to plant / to sow / to store inside' [Campos 2009: 97], whose non-finite form is *ḡuḡ* {*xo*}. Phonology: /*cuk*/.

**Pataxo Hahahae:** Pickering 1961 (*a=ḡu'k'ú*). Bahetá 1982 (*a=mḡh'ḡḡ*). Cf. *mḡh'ḡ* 'dead'.

## 18. DOG

Maxakali *kukäi* {*kokex*} (1), Pataxo Hahahae *wuε* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 16; Campos 2009: 147; Antunes 1999: 25; Araújo 2000: 81; Silva 2014: 111; Gudschinsky, Popovich & Popovich 1970: 86. Phonology: /*kukec*/ or /*kukek*/.

**Pataxo Hahahae:** Pickering 1961 (*b'uε*); Scheibe 1957 (*twoé*).

## 19. DRINK

Maxakali *ḡuḡuḡḡp* {*xo'op*} (1), Pataxo Hahahae *ḡohob* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 50; Campos 2009: 94; Antunes 1999: 37; Araújo 2000: 118 (attested as *ḡuhuḡḡp* {*xohop*}, non-finite *ḡuḡḡp* {*xop*}); Silva 2014: 115. Phonology: /*cuup*/.

**Pataxo Hahahae:** Pickering 1961 (*ḡ<sup>h</sup>ohob*); Bahetá 1982 (*ḡoh'ob*).

## 20. DRY

Maxakali *daḡk* {*nak*} (-1), Pataxo Hahahae *ḡε* (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 30; Campos 2009: 146, 287; Araújo 2000: 90; Gudschinsky, Popovich & Popovich 1970: 79. Treated as a borrowing because of the segment *d*. Phonology: /dak/.

**Pataxo Hahahae:** Pickering 1961. Attested in the phrase *ham o çé?* 'the earth is dry'.

### 21. EAR

Maxakali *nĩṣp-kvĩ* {*yĩpkox*} (1), Pataxo Hahahae *ẽmp-?oi* (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 55; Silva 2014: 109; Antunes 1999: 39. Phonology: /nĩp-kuc/.

**Pataxo Hahahae:** Pickering 1961 (*ẽmp-?oi*); Bahetá 1982 (*ẽ-?oi*). Scheibe [1957] lists a completely different root: {e-mohábm} (cf. *mohab* 'meat' [Pickering 1961]).

### 22. EARTH

Maxakali *hãhãṣm / hãṣm* {*hãhãm / hãm*} (1), Pataxo Hahahae *hãhãm / hãm* (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 5; Campos 2009: 264; Antunes 1999: 22; Araújo 2000: 89; Silva 2014: 116. Phonology: /hãp/.

**Pataxo Hahahae:** Pickering 1961 (*hãhãm / ham*); Scheibe 1957 ({*hahám*}); Azevedo 1936 (*ham'iko*). Attested in the phrase *ham o çé?* 'the earth is dry' [Pickering 1961]. Cf. *mĩ=ka-hab* 'ground / seed' [Pickering 1961 (*m'i=ka-hab* 'ground', *mĩ=ka-h'áb* 'seed'); Bahetá 1982 (*mi=ka-h'áb*)].

### 23. EAT

Maxakali *mãhã?* {*mãhã*} (1) / *çĩ?* {*xit*} (2).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 22; Campos 2009: 268; Antunes 1999: 26. Transitive. Non-finite: *mã?* {*mã*}. Phonology: /mã/. Popovich & Popovich 2005: 48; Campos 2009: 289. Intransitive. Phonology: /çit/.

**Pataxo Hahahae:** Not attested. Scheibe [1957] glosses {*ko-má*} as 'to eat', but this is likely a mistranslation of *kum-ĩ* 'to swallow' [Pickering 1961], a cognate of Maxakali *tum-ãhã?* / *tum-ã?* {*tomãhã / tomã*} 'to swallow'.

### 24. EGG

Maxakali *ç9?9ĩk / ç9ĩk ~ ç0ĩk=ç9ĩk* {*xu'uk / xuk ~ xokxuk*} (1), Pataxo Hahahae =*ĩçĩ* (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 28, 50, 52; Campos 2009: 73, 75; Antunes 1999: 37. Phonology: /çĩk/.

**Pataxo Hahahae:** Pickering 1961 (*ĩ=ĩçĩ*).

## 25. EYE

Maxakali *pv?* {*pa*} (1), Pataxo Hahahae =*wa* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 33; Campos 2009: 92; Antunes 1999: 30, 35; Araújo 2000: 81. Polysemy: 'eye / face'. Phonology: /pa/.

**Pataxo Hahahae:** Pickering 1961 (*ñ=buñ*); Bahetá 1982 (*a=v'a*); Scheibe 1957 ((ã-guá)); Azevedo 1936 (*a=w'a*).

## 26. FAT

Maxakali *tuɣp* {*top*} (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 42; Campos 2009: 202. Apparently can be an adjective or a noun, cf. *çoi̯k=tuɣp* {xoktop} 'animal fat / lard / suet' [Popovich & Popovich 2005: 49]. Phonology: /tup/.

**Pataxo Hahahae:** Not attested.

## 27. FEATHER

Maxakali *ñi=mãĩk=çaxp* {*yĩmãg xap*} (1), Pataxo Hahahae *bakəi* ~ *pakəi* (2) / =çɛ (3).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 55. More specifically, large wing feathers. Cf. *ñi=mãĩñ* {*yĩmãg*} 'wing'. Phonology: /ñi=mãk=cap/.

**Pataxo Hahahae:** Pickering 1961 (*b'akəi*). The same word as *pakəi* 'bird', quoted in [Bahetá 1982]. Polysemy: 'bird / feather'. Bahetá 1982 (*a=ç'ɛ*). Polysemy: 'feather / hair'.

## 28. FIRE

Maxakali *kiçaxp* {*kuxap*} (1), Pataxo Hahahae *çahab* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 22; Campos 2009: 138; Antunes 1999: 26; Araújo 2000: 114; Silva 2014: 115. Cf. *kəhəik* ~ *kəhi?* / *kəjik* ~ *kəi?* {*kuhuk* ~ *kuhu* / *kuk* ~ *ku*} 'firewood' [Popovich & Popovich 2005: 19; Campos 2009: 264; Antunes 1999: 25]. Phonology: /kicap/.

**Pataxo Hahahae:** Pickering 1961 (*çahab*); Bahetá 1982 (*tah'ab*); Scheibe 1957 (*litahábm*).

## 29. FISH

Maxakali *mãhãĩm* / *mãĩm* {*mãhãm* / *mãm*} (1), Pataxo Hahahae *mĩhĩm* (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 22, 23; Campos 2009: 264; Antunes 1999: 27; Araújo 2000: 76; Silva 2014: 114; Gudschinsky, Popovich & Popovich 1970: 82. Phonology: /mãp/.

**Pataxo Hahahae:** Bahetá 1982 (*māh'ām*); Scheibe 1957 (*{mahám}*); Azevedo 1936 (*mah'āmi*). Pickering [1961] quotes a completely different word: *çã?ku'ẽ ĩ*

### 30. FLY

Maxakali *tup-aha?* / *tup-a?* {*topaha* / *topa*} (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 42; Campos 2009: 49; Antunes 1999: 33; Araújo 2000: 119. Non-finite: *tuhuxp* {*tohop*}. Polysemy: 'to float / to soar / to fly'. Plural: *kupə-ik* {*kopuk*} (non-finite *kupĩ-ĩ* {*kopux*}) 'to float / to soar / to fly / to swallow' [Popovich & Popovich 2005: 17; Campos 2009: 111]. Phonology: /tup-a/.

**Pataxo Hahahae:** Not attested.

### 31. FOOT

Maxakali *pata?* {*pata*} (1), Pataxo Hahahae =*paka* (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 34; Campos 2009: 83; Antunes 1999: 21, 30, 35; Araújo 2000: 70. Phonology: /pata/.

**Pataxo Hahahae:** Pickering 1961 (*ĩm=p'aka*); Bahetá 1982 (*a=pak'a*); Scheibe 1957 (*{am-paká}*).

### 32. FULL

Maxakali *nĩ?=çĩxp* {*nũ xip*} (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 32; Araújo 2000: 90; Gudschinsky, Popovich & Popovich 1970: 80. Non-finite: *nĩ?=çĩxp* {*nũ xip*}. Plural: *nĩ?tihi?* {*nũtihi*} (non-finite *nĩ?ti?* {*nũti*}) [Silva f.n.]. Literally 'CTFG=be'. Phonology: /nĩ=çip/.

**Pataxo Hahahae:** Not attested.

### 33. GIVE

Maxakali *hũx̃m* {*hõm*} (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 11; Campos 2009: 86; Antunes 1999: 23; Gudschinsky, Popovich & Popovich 1970: 80. Polysemy: 'to give / to pay'. Plural: *pu:-māhã?* ~ *pũ:-māhã?* {*popmāhã* ~ *põpmāhã*} (non-finite *pu:-mã?* ~ *pũ:-mã?* {*popmã* ~ *põpmã*})

[Popovich & Popovich 2005: 18, 39; Campos 2009: 86, 87]. Phonology: /hũp/.

**Pataxo Hahahae:** Not attested.

### 34. GOOD

Maxakali *baḷ ~ bai? ~ baʔi?* {*max ~ mai*} (-1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 22, 23; Campos 2009: 19; Antunes 1999: 26, 35; Araújo 2000: 47; Silva 2014: 116; Gudschinsky, Popovich & Popovich 1970: 78, 86. Polysemy: 'good / beautiful / attractive / generous'. Distinct from *baḷ* {max} 'false' [Silva f.n.]. Distinct from *ɕe?e?* {xee} 'right / true' [Popovich & Popovich 2005: 48; Antunes 1999: 37; Araújo 2000: 109]. Treated as a borrowing because of the segment *b*. Phonology: /mai/.

**Pataxo Hahahae:** Not attested.

### 35. GREEN

Maxakali *ɲĩ=ɕiḷ* {*yĩxux*} (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 56; Antunes 1999: 36, 39 (including the diminutive *ɲĩ=ɕi ḷnãḷḷ* {*yĩxunãg*}); Gudschinsky, Popovich & Popovich 1970: 78. Ranges from blue through green to yellow (according to Silva [f.n.], it denotes any color that is not black, white or red). Phonology: /ɲĩ=cic/.

**Pataxo Hahahae:** Not attested.

### 36. HAIR

Maxakali *ɕe?* {*xe*} (1), Pataxo Hahahae =*ɕe* (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 47; Campos 2009: 83; Antunes 1999: 37; Araújo 2000: 100; Gudschinsky, Popovich & Popovich 1970: 81. Phonology: /ce/.

**Pataxo Hahahae:** Pickering 1961 (*ĩn=ç'è*); Bahetá 1982 (*a=ç'è*). Polysemy: 'feather / hair'.

### 37. HAND

Maxakali *ɲĩx̣m* {*yĩm*} (1), Pataxo Hahahae =*pah'ab* (2).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 54; Campos 2009: 83; Antunes 1999: 36. Translated as 'arm' in [Silva 2014: 110]. Phonology: /ɲĩp/.

**Pataxo Hahahae:** Pickering 1961 (*ĩm=pah'abũ ~ am=pah'ab*); Bahetá 1982 (*ɕ=pah'ab* 'finger', *pah'ab* 'hand'); Scheibe 1957 (*{am-pahábm}* 'hand'). Polysemy: 'hand / finger'.

### 38. HEAD

Maxakali *pitvĩ* {*putox*} (1), Pataxo Hahahae =*baɬkɔhaji* ~ =*baɬkoĩ* (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 38; Campos 2009: 83; Antunes 1999: 31. Phonology: /ptuc/.

**Pataxo Hahahae:** Pickering 1961 (*am=baɬk'o*); Bahetá 1982 (*am=baɬkɔh'a*); Scheibe 1957 (*am=akohá*); Azevedo 1936 (*am=akoh'a*).

### 39. HEAR

Maxakali *çĩ=pa-ik* / =*ã=pa-ik* {*xupak* / =*ãpak*} (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 2, 51; Campos 2009: 78. Non-finite: *çĩ=pa-i* / =*ã=pa-i* {*xupax* / =*ãpax*}. Phonology: /ci=pa-k/ / /=A=pa-k/.

**Pataxo Hahahae:** Not attested.

### 40. HEART

Maxakali *kiçã?* {*kuxa*} (1), Pataxo Hahahae =*ãçɔ* ~ =*ãçã* (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 21; Campos 2009: 271. Can be used figuratively. Phonology: /kica/.

**Pataxo Hahahae:** Pickering 1961 (*ã=ãçɔ*); Bahetá 1982 (*ã=at'a*).

### 41. HORN

Maxakali *pitvĩ=kiçp* {*putoxkup*} (1), Pataxo Hahahae *ẽmp=ub* (1).

#### References and notes:

**Maxakali:** Silva f.n. Phonology: /ptuc=kip/.

**Pataxo Hahahae:** Pickering 1961 (*ẽmp=ub*).

### 42. I

Maxakali *ãĩŋ-* {*ũg-*} (1) / *ãĩ?* {*ã*} (2).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: v; Campos 2009: 78. Direct. Can resyllabify following the ergative marker *te?* {te}, yielding



*tä*=*f* {tex}. Phonology: /-k/. Popovich & Popovich 2005: v; Campos 2009: 78, 86; Antunes 1999: 21. Oblique. Phonology: /A/.  
**Pataxo Hahahae:** Not attested.

#### 43. KILL

Maxakali *pitäi* {putex} (1).

##### References and notes:

**Maxakali:** Popovich & Popovich 2005: 37; Campos 2009: 122; Antunes 1999: 31, 35. Erroneously quoted as {putax} in [Antunes 1999: 24]. Plural: *k f i* {kix} (non-finite *ki?* {ki}) [Popovich & Popovich 2005: 16; Campos 2009: 122]. Phonology: /ptek/ or /ptec/.  
**Pataxo Hahahae:** Not attested.

#### 44. KNEE

Maxakali *kupvçii* {kopaxux} (1), Pataxo Hahahae =*mahi* ~ =*mahai* (1).

##### References and notes:

**Maxakali:** Popovich & Popovich 2005: 17; Campos 2009: 80 (*kupvçoi* {kopaxox}); Antunes 1999: 26, 35. Phonology: /kupacic/.  
**Pataxo Hahahae:** Pickering 1961 (*ñ*=*mayi*); Bahetá 1982 (*a*=*mah'ə*).

#### 45. KNOW

Maxakali *ñmšññ* {yümüg} (1).

##### References and notes:

**Maxakali:** Popovich & Popovich 2005: 57 (*ñmšññ* {yümmüg}); Campos 2009: 80, 135, 234 (*ñmā?* ~ *ñmšññ* ~ *ñm* {yümā ~ yümüg ~ yümü}); Antunes 1999: 39 (quoted variably as {yümü}); Silva f.n. Phonology: /ñmĩk/.  
**Pataxo Hahahae:** Not attested.

#### 46. LEAF

Maxakali *mĩçp=çii* ~ *mĩ=çii* {*mĩm xux* ~ *mĩxux*} (1), Pataxo Hahahae *hñm*=*hñi* (1).

##### References and notes:

**Maxakali:** Popovich & Popovich 2005: 26, 51; Campos 2009: 93, 96; Antunes 1999: 38 (quoted as {xux} 'small things, such as leaves, grass'). Polysemy: 'green grass / plants / shrubs / leaf'. Cf. *mĩç=çuxp* {*mĩn=xop*} translated as 'leaf' in [Araújo 2000: 114], which probably means actually 'trees' ('tree-COL'). Phonology: /mĩp=cic/.  
**Pataxo Hahahae:** Bahetá 1982 (*hama*=*hñ*).

#### 47. LIE

Maxakali *piçp* {pip} (1), Pataxo Hahahae *hñ*=*gũm* ~ *ñ*=*gũm* (2).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 36; Campos 2009: 116; Antunes 1999: 31. Non-finite: *pihi?* {pihi} [Silva f.n., *contra* Campos 2009: 116]. Polysemy: 'to be located vertically.PL / to reside.PL / to lie.SG'. Plural: *nũx̃m* {nõm} [Silva f.n.], glossed as 'to rest / to recline' in [Popovich & Popovich 2005: 31]. Distinct from *çix̃p* {cip} 'to be located vertically.SG' (non-finite *çihix̃p* {xihip}) [Popovich & Popovich 2005: 48; Campos 2009: 117; Antunes 1999: 37; Araújo 2000: 119], of which *pix̃p* {pip} is a suppletive plural. Cf. *nãĩkute?* {yãykote}, glossed as 'lying' in [Antunes 1999: 39] but as 'in the middle of' in [Popovich & Popovich 2005: 53].

**Pataxo Hahahae:** Bahetá 1982 (*hã=g'um*). Glossed as 'to sleep' in [Pickering 1961 (*ĩ=g'um*)].

### 48. LIVER

Maxakali *çix̃p=kĩnãĩ* {*xupkũnãiy*} (1), Pataxo Hahahae *çam=ĩnĩĩ* (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 51. The meaning of individual morphemes is unclear; the proposed morphemic division is motivated by the disagreement in nasality. Phonology: /cip=kinãc/ or /cip=knãc/.

**Pataxo Hahahae:** Pickering 1961 (*ç'am=ĩngãĩ*); Bahetá 1982 (*çam=ãĩ'ãĩ*).

### 49. LONG

Maxakali *tuhvĩ / tvĩ* {*tohox / tox*} (1), Pataxo Hahahae *kuhũĩ / kuĩ* (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 43; Campos 2009: 143, 287; Antunes 1999: 31; Araújo 2000: 119; Gudschinsky, Popovich & Popovich 1970: 84 (*tvĩhnãx̃m* {toxnãm}). Can be used in a classifier-like manner ([Araújo 2000: 109]). Polysemy: 'long / tall / far / vine'. Phonology: /tuc/.

**Pataxo Hahahae:** Pickering 1961 (*kuh'ui / kũĩ*); Bahetá 1982 (*kəh'vĩ* 'vine'). Polysemy: 'long / vine'. Attested in the phrase *ç'ipãĩkũĩ* 'the neck is long' [Pickering 1961].

### 50. LOUSE

Maxakali *kiq̃* {*kut*} (1), Pataxo Hahahae *çeiçui* (2) / *pakaçε* ~ *pokçõñ* (3).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 21; Antunes 1999: 26; Araújo 2000: 36. Polysemy: 'parasite / insect / louse'. Phonology: /kit/.

**Pataxo Hahahae:** Pickering 1961 (*çεĩ<sup>h</sup>u*). Pickering 1961 (*p'akaçε* 'few lice (?)); Bahetá 1982 (*pokçõñ*).

### 51. MAN

Maxakali *tihĩĩ / tiĩ* {*tihik / tik*} (1), Pataxo Hahahae *kahnĩako* ~ *kahnĩkç* (2).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 42; Campos 2009: 44; Antunes 1999: 33; Araújo 2000: 24; Gudschinsky, Popovich & Popovich 1970: 80; Silva f.n. Refers specifically to indigenous men. Distinct from *piɔ* {pit} 'male / brother of a female ego' [Popovich & Popovich 2005: 36; Antunes 1999: 35; Silva f.n.], which can also be used as a suffix ([Araújo 2000: 22]). Phonology: /tik/.

**Pataxo Hahahae:** Pickering 1961 (*ka miako*); Bahetá 1982 (*kahnak'ɔ*); Scheibe 1957 ({kahnākó}).

## 52. MANY

Maxakali *ɕuhi?* {*xohi*} (1).

### References and notes:

**Maxakali:** Campos 2009: 75; Antunes 1999: 37 (as *ɕuh i* {*xohix*} 'all / many'); Silva f.n. Polysemy: 'many / to abound / to be numerous / PL'. In [Popovich & Popovich 2005: 48], the root is attested as *ɕuh i* {*xohix*} with the meanings 'all / ten'. According to Silva [f.n.], used predominantly by young speaker, whereas older speakers prefer *pidää-hoik* {*punethok*} [Popovich & Popovich 2005: 37; Campos 2009: 39 (*pudää-hoik* {*ponethok*}); Antunes 1999: 31; Gudschinsky, Popovich & Popovich 1970: 80], which is apparently itself a negation of unattested *\*pidää* {*\*punet*}, a probable borrowing (as suggested by the segment *d*). Cf. *tãx̣m-nãñi* {*tãmnãg*}, translated as 'muito' ('many', 'much' or 'very') in [Antunes 1999: 32] but as 'overripe / spoiled' in [Popovich & Popovich 2005: 40]. Phonology: /cui/.

**Pataxo Hahahae:** Not attested.

## 53. MEAT

Maxakali *nĩɔ̃ ~ ɕoiŋ=nĩɔ̃* {*yĩn ~ xogyĩn*} (1), Pataxo Hahahae *xim* (2) / *mohab* (3).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 48, 55; Campos 2009: 80; Antunes 1999: 37, 39; Araújo 2000: 76; Silva 2014: 111; Gudschinsky, Popovich & Popovich 1970: 83. Polysemy: 'meat / muscle / body' (for *nĩɔ̃* {*yĩn*} only). Phonology: /jɪt/.

**Pataxo Hahahae:** Pickering 1961. Pickering 1961. Glossed as 'ear' by Scheibe [1957 ({e-mohábm})].

## 53. MEAT

Pataxo Hahahae *ɕu=iŋ* (1).

### References and notes:

**Pataxo Hahahae:** Bahetá 1982 (*ɕu=iŋ*).

## 54. MOON

Maxakali *mãñõɔ̃-hãj* {*mãyõnhex*} (1), Pataxo Hahahae *mãñũ-čia* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 24; Araújo 2000: 22. Literally 'celestial.body-female'. Cf. *mãñõɔ̃-(hãj)-?ãdɔ̃j* {*mãyõn(hex) ânuk*}

'full moon' (lit. 'celestial.body(-female)-round'), *māṁōḡ-ḡä ka?* {māyōn xexka} 'half moon' (lit. 'celestial.body-big'), *māṁōḡ-kuhu-hnāḡṁ* {māyōn kohonāḡ} 'new moon' (lit. 'celestial.body-finish.off-DIM') [Popovich & Popovich 2005: 2, 24]. Phonology: /māṁūt-hek/ or /māṁūt-hec/.

**Pataxo Hahahae:** Scheibe 1957 ([maputiá]). Translated as 'star' in [Bahetá 1982] (*maṁu-č'ia*), where *aṁh'o* without any known etymology is quoted in the meaning 'moon'. However, if *-č'ia* is indeed a feminine suffix (cf. 'woman'), Scheibe's gloss is more compatible with Maxakalí cosmology than the one found in [Bahetá 1982]. The root *māṁū-* is a general root for celestial bodies.

## 55. MOUNTAIN

Maxakali *nīṁtiṁ* {*yīktix* ~ *yīytix*} (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 54; Campos 2009: 140; Antunes 1999: 39. Polysemy: 'steep hill / mountain'. Cf. *mīka-ḡḡä ka?* {mīkax xexka} (literally 'big stone'), translated as 'mountain' in [Antunes 1999: 39] but as 'machete' in [Popovich & Popovich 2005: 25]. Even though both can be used in the meaning 'mountain', we leave only the morphologically simple item in the main list. Phonology: /ṁīktik/, /ṁīktic/, /ṁīctik/ or /ṁīctic/.

**Pataxo Hahahae:** Not attested.

## 56. MOUTH

Maxakali *nīṁ-kvṁ* ~ *ṁi:-kvṁ* {*yīykoḡ*} (1), Pataxo Hahahae =*taka-oṁ* (2).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 56. Literally 'speak-hole'. Sometimes attested as *nī-kvṁ* {*yīkoḡ*} [Popovich & Popovich 2005: 65, 71, 72; Campos 2009: 291; Antunes 1999: 36]. Phonology: /ṁīk-kuc/ (the velar coda in /ṁīk/ 'to speak' is evident in the causative *nīṁ-āhā?* {*yīḡāhā*} [Antunes 1999: 39; Araújo 2000: 119]).

**Pataxo Hahahae:** Pickering 1961 (*t=taka-'o*). Bahetá [1982] quotes another root with no known external parallels: *aṁ=t'aṁ*.

## 57. NAME

Maxakali *ḡi=ḡäḡ-ḡai* / =*ḡä=ḡäḡ-ḡai* {*xuxet'ax* / =*āxet'ax*} (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 3, 52; Campos 2009: 78, 149; Antunes 1999: 21, 38. A nominalization of *ḡi=ḡäḡ* / =*ḡä=ḡäḡ* {*xuxet* / =*āxet*} 'to call'. Phonology: /ci=cet-ac/ / /=A=cet-ac/.

**Pataxo Hahahae:** Not attested.

## 58. NECK

Maxakali *ḡḡṁṁ=nī-kṁḡp* {*xuknīkup*} (1), Pataxo Hahahae =*čipai* (2).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 50; Gudschinsky, Popovich & Popovich 1970: 86. The meaning of individual morphemes is unclear, except *-kixp* {-kup} 'long object'; the proposed morphemic division is motivated by the disagreement in nasality. Phonology: /cik=nĩ-kip/.

**Pataxo Hahahae:** Pickering 1961 (*ĩ=č'ipa*); Bahetá 1982 (*a=č'ip'a*). Cf. *č'ipà ĭkūĩ* 'the neck is long' [Pickering 1961].

## 59. NEW

Maxakali *tixp* {*tup*} (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 43; Campos 2009: 287; Antunes 1999: 33; Gudschinsky, Popovich & Popovich 1970: 83. Can be used in a classifier-like manner ([Araújo 2000: 108], translated as 'new / pure / brand-new'). Phonology: /tip/.

**Pataxo Hahahae:** Not attested.

## 60. NIGHT

Maxakali *?ãĩ=mnĩĩ* {*ãmnĩy*} (1), Pataxo Hahahae *ha=gĩ* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 1; Campos 2009: 111; Antunes 1999: 21. Polysemy: 'night / darkness'. A nominalization of *m n ĩ ĩ* {*mũnĩy*} 'black'. Phonology: /ãp=pnĩk/ or /ãp=pnĩc/.

**Pataxo Hahahae:** Bahetá 1982 (*ha=gĩ*).

## 61. NOSE

Maxakali *çipixp* {*xupup*} (1), Pataxo Hahahae =*çihĩ* (2).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 51; Antunes 1999: 38; Silva 2014: 109. Polysemy: 'nose / protuberance'. Phonology: /cipip/.

**Pataxo Hahahae:** Pickering 1961 (*ĩ=č'ihĩ*); Bahetá 1982 (*a=č'ihĩ*).

## 62. NOT

Maxakali *?a=...=?a?* {*a=...=a*} (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 1, 57; Campos 2009: 128. The first part of this circumfix occurs immediately before an inactive verb or before the A argument of an active verb. The last part always follows the verb immediately. Distinct from =*hoĩk* [=hok] (existential negation, prohibitive, caritive) [Popovich & Popovich 2005: 11; Campos 2009: 127]; *?ãĩm-hoĩk* {*ãmhok*} 'no' [Popovich & Popovich 2005: 1; Antunes 1999: 21], *ka?* {*ka*} (prohibitive) [Popovich & Popovich 2005: 13; Campos 2009: 127]. Phonology: /a=...=a/.

**Pataxo Hahahae:** Not attested.

### 63. ONE

Maxakali *piçää* {*puxet*} (1), Pataxo Hahahae *abakačɛ* (2).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 39; Antunes 1999: 32. Polysemy: 'one / only one'. Phonology: /pçet/. There is also a borrowing: *?ũçm ~ ?ũ* {*õm ~ õ*} [Antunes 1999: 19; Silva f.n.] (< Portuguese *ũ* {um}); attested as {*ũm ~ ù*} in [Popovich & Popovich 2005: 44]), which is mainly used in constructions involving Portuguese borrowings.

**Pataxo Hahahae:** Scheibe 1957 (*abakačɛ*).

### 64. PERSON

Pataxo Hahahae *abkahəi* (1).

#### References and notes:

**Maxakali:** Not attested.

**Pataxo Hahahae:** Bahetá 1982 (*abkah'əj*).

### 65. RAIN

Maxakali *tähäi* / *täi* {*tehɛx* / *tex*} (1), Pataxo Hahahae *kɛhɛ* (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 41; Campos 2009: 260; Antunes 1999: 33; Araújo 2000: 119; Gudschinsky, Popovich & Popovich 1970: 80 (glossed as 'rain storm'). Phonology: /tɛç/.  
**Pataxo Hahahae:** Pickering 1961 (*k'ɛhɛ*); Bahetá 1982 (*kɛh'ɛ*).

### 66. RED

Maxakali *çi=ta?* / *=?ã=ta?* {*xuta* / *=ãta*} (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 3, 51 (quoted as {*xutta* / *ãta*}); Campos 2009: 78; Antunes 1999: 38. Phonology: /çi=ta/ / *=A=ta*/. Ranges from red to yellow.

**Pataxo Hahahae:** Not attested.

### 67. ROAD

Maxakali *pitahaə* / *pitaə* {*putahat* / *putat*} (1), Pataxo Hahahae *=wai?oi* (2).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 37; Campos 2009: 270; Araújo 2000: 120; Antunes 1999: 31. Polysemy: 'road / way / trail'. Cf. also *hudäi* {honex} 'road / highway' [Popovich & Popovich 2005: 11]; *mō-ĩη-ʔa i ~ mü-ʔa i* {mōg'ax ~ mōax} [Antunes 1999: 28, 35] (a nominalization of *mō-ĩη* {mōg} 'to go'). Phonology: /ptat/.

**Pataxo Hahaha:** Pickering 1961 (*am=b<sup>w</sup>a ʔo*).

## 68. ROOT

Maxakali *mĩḡm=niḡp=çatiḡ* {*mĩmyĩpxatit*} (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 25. Phonology: /mĩp=niḡp=çatit/.

**Pataxo Hahaha:** Not attested.

## 69. ROUND

Maxakali *ʔã=dḡik ~ dḡik* {*ãnuk ~ nuk*} (-1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 2 (*ʔã=dḡik* {*ãnuk*}); Campos 2009: 287 (*dḡik* {*nuk*}). Cf. *mō=ĩktu i* (*mōĩk-tu ʔ*) {*mōktox*} 'oblong round' [Popovich & Popovich 2005: 26]. Treated as a borrowing because of the segment *d*. Phonology: /dik/, /A=dik/.

**Pataxo Hahaha:** Not attested.

## 70. SAND

Maxakali *ʔãbuḡ* {*ãmot*} (-1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 2; Antunes 1999: 21. Treated as a borrowing because of the segment *b*. Phonology: /amut/.

**Pataxo Hahaha:** Not attested.

## 71. SAY

Maxakali *çḡ=ĩkti i / ʔã=ĩkti i* {*xuktux / =ãktux*} (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 1, 8; Campos 2009: 31, 86; Antunes 1999: 38. Polysemy: 'to say / to tell / to talk about'. When no object is found, occurs with a prefix: *hãḡm=ʔã=ĩkti i* {*hãm'ãktux*} 'to speak' [Popovich & Popovich 2005: 7, 32; Campos 2009: 137]. Distinct from *niḡ* {*yĩy*} 'to speak' [Popovich & Popovich 2005: 56; Campos 2009: 80; Antunes 1999: 39 (only causative)]. Phonology: /ci=ktic/ // /A=ktic/.

**Pataxo Hahaha:** Not attested.

## 72. SEE

Maxakali *pe-nāhā?* {*penāhā*} (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 35; Campos 2009: 268; Araújo 2000: 119 (attested as *pe-nāhā?* {*pe-nāhā?*}, non-finite *pe-nā?* {*pe-nā?*}). Short and non-finite: *pe-nā?* {*penā*}. Polysemy: 'to see / to look / to desire sexually'. Apparently a causative from an unattested *\*pe?* {*\*pe*} or *\*pā?* {*\*pet*}. Phonology: /pe-nā/ or /pet-nā/.

**Pataxo Hahahae:** Not attested.

## 73. SEED

Maxakali *çahaçp / çaçp ~ hãçp=çuçp=çaçp* {*xahap / xap ~ hãpxopxap*} (1), Pataxo Hahahae *mĩ=ka-hab* (2).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 9, 45, 46; Campos 2009: 76; Antunes 1999: 36. Polysemy: 'stone / seed / bead / necklace / headband / any round object' (only for *çaçp* {*xap*}). Phonology: /cap ~ hãp=cup=cap/.

**Pataxo Hahahae:** Pickering 1961 (*mĩ=ka-h'ab* 'seed'; *m'i=ka-hab* 'ground'). Polysemy: 'seed / ground'. In [Bahetá 1982 (*mi=ka-h'ab*)], only the meaning 'ground' is attested.

## 74. SIT

Maxakali *nĩçm* {*yũm*} (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 57; Campos 2009: 117; Antunes 1999: 39. Non-finite: *nĩ çm* {*yũm*}. Polysemy: 'to sit.SG / to squat.SG / to be located.SG'. Plural: *mãçm* {*mãm*} (non-finite *mãhãçm* {*mãhãm*}) [Popovich & Popovich 2005: 22; Campos 2009: 117; Antunes 1999: 35]. Phonology: /nĩp/.

**Pataxo Hahahae:** Not attested.

## 75. SKIN

Maxakali *çai* {*xax*} (1), Pataxo Hahahae *çok=çad* (2) / *paaĩ* (3).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 47; Campos 2009: 233; Antunes 1999: 36. Polysemy: 'cover / skin / bark / shell'. Antunes [1999: 36] also lists the meaning 'shirt'.

**Pataxo Hahahae:** Pickering 1961 (*çok=çad*). Bahetá 1982 (*paaĩ*). Polysemy: 'skin / leather'.

## 75. SKIN



Pataxo Hahahae *kũĩdã* (4).

**References and notes:**

**Pataxo Hahahae:** Bahetá 1982 (*kũĩdã*).

76. SLEEP

Maxakali *mũʔ=ɲ=õã* {*mõ yõn*} (1), Pataxo Hahahae *hã=gũm* ~ *ã=gũm* # (2).

**References and notes:**

**Maxakali:** Popovich & Popovich 2005: 26, 27, 29; Campos 2009: 126; Antunes 1999: 28; Araújo 2000: 24; Silva 2014: 114; Gudschinsky, Popovich & Popovich 1970: 81; Silva f.n. Homophonous with *mũʔ=ɲõã* {*mõ yõn*} 'to throw' [Campos 2009: 50; Silva f.n.], where *ɲ* {*y*} is part of the root and does not disappear in the imperative forms (finite *mũʔ=õã* {*mõ õn*}, non-finite *mũʔ=õã* {*mõ õn*}). Phonology: /mũ=ɲ=õt/.

**Pataxo Hahahae:** Pickering 1961 (*ã=gũm*). Glossed as 'to lie' in [Bahetá 1982 (*hã=gũm*)]; its Maxakalí cognate *nũĩm* {*nõm*} means 'to lie.PL', which raises doubts on the actual meaning of this root.

77. SMALL

Maxakali *kitĩĩ-nãĩĩ* {*kutĩynãg*} (1).

**References and notes:**

**Maxakali:** Popovich & Popovich 2005: 21 ('very little'); Campos 2009: 148 (*kitĩ-nãĩĩ* {*kutixnãg*}); Antunes 1999: 26, 33; Silva f.n. Cf. *tĩ-nãĩĩ* {*tĩynãg*} 'few'. More frequent than *kitõĩĩ-nãĩĩ* {*kutõgnãg*} 'small', *tõĩĩ-nãĩĩ* {*tõgnãg*} 'few' [Popovich & Popovich 2005: 21]. According to Silva [f.n.], *kitõĩĩ-nãĩĩ* {*kutõgnãg*} and *kitĩ-nãĩĩ* {*kutĩynãg*} contrast in size, the former referring to somewhat bigger objects than the latter. Distinct from the diminutive suffix *=nãĩĩ* {*=nãg*} [Campos 2009: 143; Araújo 2000: 47, 108; Gudschinsky, Popovich & Popovich 1970: 81]. Phonology: /kitik-nãk/.

**Pataxo Hahahae:** Not attested.

78. SMOKE

Maxakali *gũĩ* ~ *ki=gũĩ* {*gõy* ~ *kugõy*} (-1), Pataxo Hahahae *ʔv=ʔũĩ* (1).

**References and notes:**

**Maxakali:** Popovich & Popovich 2005: 4, 5, 19; Campos 2009: 18. Polysemy: 'smoke / cloud / fog / to smoke'. Treated as a borrowing because of the segment *g*. Phonology: /gũc/.

**Pataxo Hahahae:** Pickering 1961 (*ʔv=ʔũĩ*).

79. STAND

Maxakali *kĩnĩhãʔ-çixp* {*kũnĩhã xip*} (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 20. Glossed as 'to stand up'. Plural: *kñihã?-pixp* {kñihã pip}. Includes the verb *çixp* {xip} (non-finite *çihixp* {xihip}) 'to be located vertically.SG', plural *pixp* {pip} (non-finite *pihi?* {pihi}). Distinct from *zoik* {yok} 'to raise / to be straight / to straighten up' [Popovich & Popovich 2005: 56; Antunes 1999: 22 (translated as 'levantar')]. Phonology: /kñihã-cip/.

**Pataxo Hahahae:** Not attested.

## 80. STAR

Maxakali *mãñũ:=nãĩη {mãỹõnnãg}* (1), Pataxo Hahahae *mãñũ-hã* (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 24; Antunes 1999: 27; Araújo 2000: 47. Literally 'celestial.body-DIM'. Phonology: /mãñũt-nãk/.

**Pataxo Hahahae:** Pickering 1961 (*mãñũ-hã*); Scheibe 1957 ({mañũhá}). Attested with a different suffix in [Bahetá 1982]: *mañu-çĩa*.

## 81. STONE

Maxakali *mĩ=kaĩ-çaxp {mĩkax-xap}* (1), Pataxo Hahahae *pa?ai ~ bawai* (2).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 25; Silva 2014: 116; Gudschinsky, Popovich & Popovich 1970: 78. Derived from *mĩ=ka i* {mĩkax} 'knife / rock / stone' [Popovich & Popovich 2005: 24; Silva f.n.], attested in the compound *mĩ=ka i çã ka?* {mĩkax xexka} 'mountain' (literally 'big stone') in [Antunes 1999: 39], and *çahaxp / çaxp* {xahap / xap} 'necklace / headband' [Popovich & Popovich 2005: 9, 45, 46; Antunes 1999: 36], which is used as a classifier for stones, seeds, beads and any spheric objects. The meaning of individual morphemes (*mĩ* /mĩ/ and *ka i* /kac/) is unclear, but since the syllables diverge in nasality, they cannot constitute a root. Phonology: /mĩ=kac-cap/.

**Pataxo Hahahae:** Pickering 1961 (*p'a'ai*); Bahetá 1982 (*baw'a*); Scheibe 1957 ({paáy}). Cf. *mĩ=ka-hab* 'seed / ground' [Pickering 1961 (*m'i=ka-hab* 'ground', *mĩ=ka-h'ab* 'seed')].

## 82. SUN

Maxakali *mãñũõ {mãỹõn}* (1), Pataxo Hahahae *mãñũ* (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 23; Antunes 1999: 27; Araújo 2000: 22; Silva 2014: 116; Gudschinsky, Popovich & Popovich 1970: 79. Phonology: /mãñũt/.

**Pataxo Hahahae:** Scheibe 1957 ({mañu}). In [Bahetá 1982] another root without a known etymology is attested: *bek'õ i*

## 83. SWIM

Maxakali *kũnã:=kupv?=mõ-ĩη {kõnãg kopa mõg}* (1) / *põĩk=põĩη {põgprõg}* (-1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 17; Silva f.n. Literally 'to go by water'. Polysemy: 'to swim / to row a canoe'. Silva [f.n.] believes this construction to mean 'to swim underwater / to dive'; however, the other candidate for this slot means 'to dog paddle', which complicates the choice between the two, and I prefer to list both roots as synonyms. Cf. also  $\epsilon i \chi p$  {xup}, glossed as 'to hang / to swim' by Antunes [1999: 38] but attested only in the former meaning in [Popovich & Popovich 2005: 51]; Silva [f.n.] attests only the meanings 'to hang.SG / to stand over four paws / to be (of liquids)' for it. Phonology: /k<sup>w</sup>nãk=kupa=mũ-k/. Silva f.n. The author believes this verb to mean more precisely 'to dog paddle'; however, the other candidate for this slot means 'to swim underwater', which complicates the choice between the two, and I prefer to list both roots as synonyms. A likely onomatopoeia; *p* does not usually precede nasal vowels in native vocabulary. Phonology: /pũk=pũk/.

**Pataxo Hahahae:** Not attested. Not attested.

#### 84. TAIL

Maxakali  $n\tilde{a}$ - $k i \chi p$  { $n\tilde{a}gkup$ } (1), Pataxo Hahahae = $\eta \tilde{a}$  (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 29. Phonology: /nãk-kip/. Distinct from  $ka-\tilde{a} i$  {ka'ax} 'end' [Silva f.n.], translated as 'end / tail' in [Popovich & Popovich 2005: 15].

**Pataxo Hahahae:** Pickering 1961 ( $\tilde{a}=\eta g \tilde{a}$ ).

#### 85. THAT

Maxakali  $n\tilde{u} \tilde{?} \tilde{u} \tilde{x} m$  /  $n\tilde{u} \tilde{x} m$  { $n\tilde{o} \tilde{o} m$  /  $n\tilde{o} m$ } (0) /  $\tilde{?} \tilde{u} \tilde{h} \tilde{u} \tilde{x} m$  /  $\tilde{?} \tilde{u} \tilde{x} m$  { $\tilde{o} h \tilde{o} m$  /  $\tilde{o} m$ } (0).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 31; Antunes 1999: 29 ({ $n\tilde{o}$ }). Medial deixis. Phonology: /nũp/. Popovich & Popovich 2005: 33; Antunes 1999: 29; Gudschinsky, Popovich & Popovich 1970: 81. Distal deixis. Phonology: /ũp/.

**Pataxo Hahahae:** Not attested.

#### 86. THIS

Maxakali  $n\tilde{e} h \tilde{e}$  { $n\tilde{u} h \tilde{u}$ } (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 32; Araújo 2000: 121 (attested as  $n\tilde{e} h \tilde{e} \tilde{?} \eta$  { $n\tilde{u} h \tilde{u} g$ }); Antunes 1999: 29. Phonology: /nĩ(k)/.

**Pataxo Hahahae:** Not attested.

#### 87. THOU

Maxakali  $\tilde{a}$ - { $\tilde{a}$ -} (1) /  $\epsilon a \tilde{?}$  { $x a$ } (2).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: v; Campos 2009: 78; Antunes 1999: 21. Direct. Phonology: /a-/. Popovich & Popovich 2005: v; Campos 2009: 78, 86; Antunes 1999: 36. Oblique. Phonology: /ca/.

**Pataxo Hahahae:** Not attested. Cf. the phrase *ač'i amañ'a* 'have you bathed?' [Bahetá 1982].

## 88. TONGUE

Maxakali *ɲũĩɸõĩɲ* ~ *ɲĩɸõĩɲ* {*yõyxõg* ~ *yĩxõg*} (1), Pataxo Hahahae =*çũhũ* ~ =*çõhã* (1).

### References and notes:

**Maxakali:** Silva 2014: 113; Silva f.n. The form *ɲũĩɸõĩɲ* {*yõyxõg*} is used by older speaker, whereas *ɲĩɸõĩɲ* {*yĩxõg*} is used by younger speakers. Phonology: /ɲũccũk ~ ɲĩccũk/.

**Pataxo Hahahae:** Pickering 1961 (*ã=ç'vhw*); Bahetá 1982 (*a=çoh'ã*); Scheibe 1957 ({an-tõhũ}).

## 89. TOOTH

Maxakali *çvĩ* {*xox*} (1), Pataxo Hahahae =*çvĩ* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 50; Silva 2014: 111. Polysemy: 'tooth / sharp fragment'. Phonology: /cuc/.

**Pataxo Hahahae:** Pickering 1961 (*ã=ç'vũ*); Bahetá 1982 (*a=ç'ũ*); Scheibe 1957 ({an-tóy}).

## 90. TREE

Maxakali *mĩhĩĩm* / *mĩĩm* {*mĩhĩm* / *mĩm*} (1), Pataxo Hahahae *mĩm-nã* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 24, 25; Campos 2009: 80, 95; Antunes 1999: 27; Araújo 2000: 80; Gudschinsky, Popovich & Popovich 1970: 78. Polysemy: 'tree / wood'. Distinct from *kĩxp* {*kup*} 'bone / stick / tree / stalk' [Popovich & Popovich 2005: 20; Campos 2009: 260; Antunes 1999: 26], which is mostly used in a classifier-like manner. Cf. *kəhəjk* ~ *kĩhĩ?* / *kəjk* {*kuhuk* ~ *kuhu* / *kuk* ~ *ku*} 'firewood' [Popovich & Popovich 2005: 19; Antunes 1999: 25; Silva f.n.]. Phonology: /mĩp/.

**Pataxo Hahahae:** Scheibe 1957 ({*mihná*}). This word is translated as 'bed' by Azevedo [1936 (*mĩ-nã*)] and Pickering [1961 (*mĩm-nã*)].

## 91. TWO

Maxakali *tĩ* {*tix*} (1), Pataxo Hahahae *abaçε* (2).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 42; Campos 2009: 67. There is also a loan equivalent *dvĩ* {*nox*} [Antunes 1999: 19] (< Portuguese *dois* {*dois*}). Phonology: /tik/.

**Pataxo Hahahae:** Scheibe 1957 ({*abaçe*}).

## 92. GO

Maxakali *mō-ĩη {mōg}* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 26, 27; Antunes 1999: 21, 28, 30; Silva 2014: 114. Non-finite: *mū?* {mō}, serial: *mō-ĩ* {mūy}. Distinct from *ḡāĩ=hi?* {yāyhi} (non-finite *ḡāĩ=hi?* {yāyhít}) 'to walk' [Silva f.n.], glossed as 'to swarm (as bees) / to be full' in [Popovich & Popovich 2005: 53]; *hāĩp=kibεxp* {hāpkumep} 'to walk / to stroll / to travel' [Popovich & Popovich 2005: 8]. Phonology: /mū-k/.

**Pataxo Hahahae:** Not attested.

## 93. HOT

Maxakali *pəĩk-päi {pukpex}* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 37. Cf. the nominalization *hā=peĩk-päi* {hāmpukpex} 'hot weather' [Popovich & Popovich 2005: 7]. Phonology: /pik-pek/.

**Pataxo Hahahae:** Not attested.

## 94. WATER

Maxakali *kūnāĩāĩη / kūnāĩη {kōnāāg / kōnāg}* (1), Pataxo Hahahae *ηāhāĩ* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 17; Antunes 1999: 24, 41; Silva 2014: 114. Phonology: /k"nāk/.

**Pataxo Hahahae:** Pickering 1961 (*ηgāh'ā*); Bahetá 1982 (*ηahā* 'river'); Scheibe 1957 (*{nahasi}*). Polysemy: 'water / river'.

## 95. WE<sub>1</sub>

Maxakali *ḡĩ-mḡ-ĩη / ḡĩ-mĩ-ĩā? {yūmūg / yūmūā}* (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: v; Campos 2009: 78, 86. Inclusive. Direct / oblique. Phonology: /ḡĩ-mĩ-k/ / /ḡĩ-mĩ-ā/.

**Pataxo Hahahae:** Not attested.

## 95. WE<sub>2</sub>

Maxakali *ĩḡĩη-mḡ-ĩη / ĩḡĩη-mĩ-ĩā? {ūgmūg / ūgmūā}* (2).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: v; Campos 2009: 78, 86. Exclusive. Direct / oblique. Phonology: /k-mĩ-k/ / /k-mĩ-ā/.

## 96. WHAT

Maxakali *pitε?* ~ *pitε-ɣp* ~ *pitε-ʔĩĩm* {*pute* ~ *putep* ~ *pute ũm*} (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 37; Antunes 1999: 31. Phonology: /pte ~ pte-(ĩ)p/ or /pite ~ pite-(ĩ)p/.

**Pataxo Hahaha:** Not attested.

## 97. WHITE

Maxakali *pudoĩk* {*ponok*} (-1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 36 (quoted as {ponnok / =mnok}). Treated as a borrowing because of the segment *d*. Phonology: /pduk/.

**Pataxo Hahaha:** Not attested.

## 98. WHO

Maxakali *pitε?* ~ *pitε-ɣp* ~ *pitε-ʔĩĩm* {*pute* ~ *putep* ~ *pute ũm*} # (1).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 19, 37. Apparently expressed by the same root as 'what'. Cf. the particle *ʔĩĩm* {*ũm*} /p/, translated as 'who' by Gudschinsky, Popovich and Popovich [1970: 80]. Phonology: /pte ~ pte-(ĩ)p/ or /pite ~ pite-(ĩ)p/.

**Pataxo Hahaha:** Not attested.

## 99. WOMAN

Maxakali *ʔĩĩĩĩ* / *ʔĩĩ* {*ũhũn* / *ũn*} (1), Pataxo Hahaha *bεke-čia* (2).

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 44, 45; Antunes 1999: 33. Refers specifically to indigenous women. Distinct from *hü<sub>i</sub>* {hex} 'female / sister of a male ego' [Popovich & Popovich 2005: 10; Silva f.n.], which can also be used in a classifier-like manner ([Araújo 2000: 22, 108]). *ʔĩĩĩĩk* {*ãyuk*}, translated as 'woman' in an example in [Araújo 2000: 24], is probably the same word as *ʔĩĩĩĩĩk* {*ãyuhuk*} 'non-Indian' [Popovich & Popovich 2005: 4]. Phonology: /ĩt/.

**Pataxo Hahaha:** Bahetá 1982 (*bεkečičia*); Scheibe 1957 (*bektiá*). Pickering [1961] quotes another root: *ɲç'ekõĩ*.

## 100. YELLOW

Maxakali *ɲĩ=çij* {*yĩxux*} (1) / *ziiziɣp* {*yiyip*} (-1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 56; Araújo 2000: 90; Gudschinsky, Popovich & Popovich 1970: 78; Silva f.n. Ranges from blue through green to yellow (according to Silva [f.n.], it denotes any color that is not black, white or red). Antunes [1999: 36] cites  $\acute{c}i=ta-nĩ=\acute{c}i\grave{i}nãĩ\eta$  {xuttayixunãg} 'red-green-DIM'. Popovich & Popovich [2005: 3, 51] cite  $\acute{c}i=ta? / =\acute{c}ã=ta?$  {xuta / =ãta} (as {xutta / ãta}) 'red, yellow'. Phonology: /nĩ=cic/. Silva f.n. Refers to the color of a specific flower (the exact species is unknown). Treated as a non-native item because of the segment  $\acute{c}$ . Phonology: /yiyip/.

**Pataxo Hahahae:** Not attested.

### 101. FAR

Maxakali  $hã\tilde{x}p=tv\grave{i}$  {hãptox} (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 8; Antunes 1999: 23. Polysemy: 'far / distant'. A nominalization of  $tv\grave{i}$ {tox}, glossed as 'long / tall / far' in [Popovich & Popovich 2005: 43]. Phonology: /hãp=tuc/.

**Pataxo Hahahae:** Not attested.

### 102. HEAVY

Maxakali  $pit\grave{i}i$  {putux} (1).

#### References and notes:

**Maxakali:** Popovich & Popovich 2005: 38; Antunes 1999: 35; Gudschinsky, Popovich & Popovich 1970: 85. Polysemy: 'heavy / obstacle / rough (of a road)'. Phonology: /ptic/.

**Pataxo Hahahae:** Not attested.

### 103. NEAR

Maxakali  $hã\tilde{x}m=hi\grave{x}p$  {hãmhup} (1) /  $nĩka$  {yĩka} (2).

#### References and notes:

**Maxakali:** Silva f.n. Probably used for longer distances than  $nĩka$  {yĩka}, but the exact difference between  $hã\tilde{x}m=hi\grave{x}p$  {hãmhup} and  $nĩka$  {yĩka} is still under research. Often used with a diminutive suffix:  $hã\tilde{x}m=h\tilde{x}m-nãĩ\eta$  {hãmhũmnãg} [Popovich & Popovich 2005: 6]. Related to  $h\tilde{x}m-nãĩ\eta$  {hũmnãg} 'short / narrow' [Popovich & Popovich 2005: 12]. Distinct from the postposition  $mũ\acute{c}=\mu\grave{u}-ka-m\acute{c}$  {mõ yõkamũ} 'close to' [Popovich & Popovich 2005: 28]. Cf. the locative postposition  $kupv?$  {kopa} 'inside' [Popovich & Popovich 2005: 17], translated as 'near / between' in [Antunes 1999: 25]. Phonology: /hãp=hĩp-nãk/. Silva f.n. Probably used for very short distances, but the exact difference between  $hã\tilde{x}m=hi\grave{x}p$  {hãmhup} and  $nĩka$  {yĩka} is still under research. Attested with a diminutive suffix ( $nĩkãĩ\eta-nãĩ\eta$  {yĩkãgnãg}) by Popovich & Popovich [2005: 54] (but glossed as a postposition: 'very close to').

**Pataxo Hahahae:** Not attested.

### 104. SALT

Maxakali  $?ãbv\grave{a}-\acute{c}i\grave{i}-pã\grave{i}$  {ãmot xuxpex} (-1).

**References and notes:**

**Maxakali:** Popovich & Popovich 2005: 2; Antunes 1999: 21. Literally 'tasty sand'. According to Popovich & Popovich [ibid.], also attested as simply {āmōt}. Treated as a borrowing because of the segment *b*. Phonology: /amut-cic-pek/.

**Pataxo Hahahae:** Not attested.

105. SHORT

Maxakali *hĩĩm-nãĩη* {*hũmnãg*} (1).

**References and notes:**

**Maxakali:** Popovich & Popovich 2005: 12. Phonology: /hĩp-nāk/.

**Pataxo Hahahae:** Not attested.

106. SNAKE

Maxakali *kãñãñ* {*kãỹã*} (1), Pataxo Hahahae *ĩηĩ* (1).

**References and notes:**

**Maxakali:** Popovich & Popovich 2005: 15. Phonology: /kãñã/.

**Pataxo Hahahae:** Pickering 1961 (*ĩηgĩ*); Scheibe 1957 ({*anãỹ*}).

107. THIN

Maxakali *kiĩb-daiĩk* {*kumnak*} # (-1).

**References and notes:**

**Maxakali:** Popovich & Popovich 2005: 19. Literally 'dry bone'. It is unclear if this word can be applied to thin objects. Treated as a borrowing because of the segment *d*. Phonology: /kip-dak/.

**Pataxo Hahahae:** Not attested.

108. WIND

Maxakali *ĩãbiĩĩĩ* {*ãmũ'u*} (-1), Pataxo Hahahae *hĩm=çãĩ* (1).

**References and notes:**

**Maxakali:** Popovich & Popovich 2005: 2; Antunes 1999: 21; Gudschinsky, Popovich & Popovich 1970: 78. Treated as a borrowing because of the segment *b*. Phonology: /amiĩĩ/.

**Pataxo Hahahae:** Pickering 1961 (*hĩmç<sup>h</sup>ãĩ*).



## 109. WORM

Maxakali  $pi\phi\tilde{u}?\tilde{u}\tilde{t} / pi\phi\tilde{u}\tilde{t} \{pux\tilde{o}\tilde{y} / pux\tilde{o}y\} (-1)$ .

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 39; Gudschinsky, Popovich & Popovich 1970: 84. Polysemy: 'intestinal parasite / earthworm'. Treated as a borrowing because of the sequence  $\phi \tilde{V}$  Phonology: /pcũc/.

**Pataxo Hahaha:** Not attested.

## 110. YEAR

Maxakali  $h\tilde{a}\tilde{x}m=j\tilde{a}=\phiatab\tilde{y}ik \{h\tilde{a}my\tilde{a}yxatamuk\} (-1) / ?\tilde{a}\tilde{y} \sim ?\tilde{u}\tilde{a}\tilde{y} \{\tilde{a}n \sim \tilde{o}\tilde{a}n\} (-1)$ .

### References and notes:

**Maxakali:** Popovich & Popovich 2005: 7 ( $\{h\tilde{a}my\tilde{a}yxatamuk\}$ ); Antunes 1999: 23, 41 ( $\{h\tilde{a}my\tilde{a}yxatamuk\}$ ); Silva f.n. Literally 'NMLZ=REFL=sound.of.cicadas' (cicadas chirp yearly, around September or October, according to one of the consultants; however, another consultant in her sixties did not know what  $\phiatab\tilde{y}ik$  {xatamuk} meant). Treated as a non-native item because of the segment *b*. Phonology: /hãp=jãc=catamik/. Popovich & Popovich 2005: 2; Silva f.n. Borrowed from Portuguese 'ênu {ano} 'year' or ã 'ênu {um ano} 'one year' (however, in Maxakali  $?\tilde{u}\tilde{a}\tilde{y}$  {ôãn} may be used also in plural contexts:  $\phi ik\tilde{u}\tilde{a}\tilde{y} ?\tilde{u}\tilde{a}\tilde{y}$  {xikôên ôãn} 'fifty years' [Silva f.n.]). Phonology: /ãt ~ ããt/.

**Pataxo Hahaha:** Not attested.