

Appendix: Natural languages data sources

This document contains references to descriptive sources of the data on numeral systems used in the present study. A detailed description of each language's numeral system can be found in a separate appendix document, *Appendix_language_types.pdf*

Language	Abbreviation	Type	Source
Abkhaz	abk	Type 4-Abkhaz	Chirikba (2003)
Abun	abu	Type 1B	Berry et al. (1999)
Acoma	aco	Type 1A	Maring (1967)
Albanian	alb	Type 1A	Newmark et al. (1980)
Arabic (Egyptian)	aeg	Type 1A	Mitchell (1956)
Arawak	ara	Type 5-Arawak	Pet (2011)
Archi	arc	Type 1A	https://lingweb.eva.mpg.de/channumerals/Archi.htm
Armenian (Eastern)	arm	Type 1A	Dum-Tragut (2009)
Aymara	aym	Type 1A	Hardman (2001)
Bagirmi	bag	Type 1A	Keegan and Djibrine (2016)
Bambara	bam	Type 2A	Bird et al. (1977)
Basaa	bas	Type 1A	Nurse and Philippson (2006)
Basque	bsq	Type 4A	De Rijk (2007)
Batak (Karo)	bkr	Type 1B	Woollams et al. (1996)
Bawm	baw	Type 2A	Reichle (1981)
Berber Middle Atlas (Tamazigt)	bma	Type 1A	Penchoen (1973)
Bribri	bri	Type 1A	Yasugi et al. (1995)
Burmese	brm	Type 1A	Cornyn and Roop (1968)
Burushaski	bur	Type 4A	Noboru (2012)
Cahuilla	cah	Type 3A	Yasugi et al. (1995)
Chamorro	cha	Type 1A	https://lingweb.eva.mpg.de/channumerals/Chamorro.htm
Chinantec (Lealao)	cle	Type 4A	Yasugi et al. (1995)

Chuukese	cuu	Type 1A	https://lingweb.eva.mpg.de/channumerals/Chuukese-Trukese.htm
Chuvash	chv	Type 2B	Krueger (1997)
Comanche	cmn	Type 1A	Charney (1993)
Damana	dam	Type 1A	https://lingweb.eva.mpg.de/channumerals/Malayo.htm
Diola-Fogny	dio	Type 5-Diola	Sapir (1965)
Drehu	dre	Type 5-Drehu	https://lingweb.eva.mpg.de/channumerals/Drehu-Dehu.htm
English	eng	Type 2-English	/
Evenki	eve	Type 1A	Nedjalkov (2014)
Ewe	ewe	Type 1A	https://lingweb.eva.mpg.de/channumerals/Ewe.htm
Fijian	fij	Type 1A	Dixon (1988)
Finnish	fin	Type 1A	Karlsson (2013)
French	fre	Type 4-French	Lang and Perez (2004)
Fulfulde	fum	Type 3A	Breedveld (1995)
Garó	gar	Type 2-Garó	Keith (1874)
Georgian	geo	Type 4A	Hewitt (1995)
German	ger	Type 1A	Donaldson (2007)
Goajiro	goa	Type 1A	https://lingweb.eva.mpg.de/channumerals/Wayuu.htm
Gola	gol	Type 5-Gola	Westermann (1921)
Greek (Modern)	grk	Type 2A	Holton et al. (2012)
Guarani	gua	Type 3A	Guasch (1976)
Haida	hai	Type 6-Haida	Keen (1906)
Hausa	hau	Type 1A	Migeod (1914)
Hebrew	heb	Type 1A	Glinert (2004)
Hindi	hin	Type 1-Hindi	McGregor (1977)
Hmong Njua	hmo	Type 2A	Taweesak (1984)
Huave	hve	Type 4-Huave	https://lingweb.eva.mpg.de/channumerals/Huave-Mateo-del-Mar.htm
Hungarian	hun	Type 2A	Rounds (2009)
Hunzib	hzb	Type 2A	Van den Berg (1995)
Hupa	hup	Type 1A	Golla (1970)
Igbo	igb	Type 1A	Emenanjo (1987)
Indonesian	ind	Type 1C	Sneddon et al. (2012)
Ingush	ing	Type 4-Ingush	Nichols (2011)
Iraqw	irq	Type 1A	Mous (1993)

Irish	iri	Type 4A	Dillon and Cróinín (1961)
Japanese	jpn	Type 1A	Akiyama and Akiyama (2012)
Jaqaru	jaq	Type 1A	https://lingweb.eva.mpg.de/channumerals/Jaqaru.htm
Kabardian	kab	Type 1A	Colarusso (1992)
Khana	kan	Type 5-Kana	https://lingweb.eva.mpg.de/channumerals/Khana.htm
Kannada	knd	Type 3-Kannada	Kittel (1993)
Kanuri	knr	Type 1A	https://lingweb.eva.mpg.de/channumerals/Kanuri-Central.htm
Kayah Li (Eastern)	kyl	Type 3-Kayahli	Solnit (1997)
Khalaj	khl	Type 6-Khalaj	Doerfer (1988)
Khalkha (Mongolian)	kha	Type 1A	Kullmann and Tserenpil (2005)
Khanty	kty	Type 3-Khanty	Filchenko (2007)
Kilivila	klv	Type 6-Kilivila	Senft (2011)
Kiribati (Gilbertese)	krb	Type 1B	https://lingweb.eva.mpg.de/channumerals/Kiribati.htm
Korean	kor	Type 1A	Yeon and Brown (2013)
Koromfe	kfe	Type 2A	Rennison (2013)
Koyraboro Seni	kse	Type 1A	https://lingweb.eva.mpg.de/channumerals/Songhay-Koyraboro-Senni.htm
Kunama	knm	Type 3-Kunuma	https://lingweb.eva.mpg.de/channumerals/Kunama.htm
Lak	lak	Type 1A	https://lingweb.eva.mpg.de/channumerals/Lak.htm
Lakota	lkt	Type 1A	https://lingweb.eva.mpg.de/channumerals/Lakota.htm
Lango	lan	Type 1A	Noonan (2011)
Latvian	lat	Type 1A	Praulinskis (2012)
Lavukaleve	lav	Type 1A	Terrill (2011)
Lega	leg	Type 1A	Botne (2003)
Lezgian	lez	Type 4-Lezgian	Haspelmath (2011)
Malagasy	mal	Type 1A	Garvey (1964)
Mandarin	mnd	Type 1A	Lin (2001)
Mangab-Mbula	mmb	Type 5-Mangab-Mbula	Bugenhagen et al. (1991)
Maori	mao	Type 1A	Bauer (2003)

Mapudungun	map	Type 1A	Smeets (2008)
Mixtec (Atatlahuca)	mxh	Type 4-MixtecA	Yasugi et al. (1995)
Mixtec (Chalcatongo)	mxh	Type 4-MixtecC	Macaulay (1996)
Nahuatl (Sierra de Zacapoaxtla)	nsz	Type 5-Nahuatl	Yasugi et al. (1995)
Khoekhoe (Nama Hottentot)	kho	Type 1A	Hagman (1973)
Navajo	nav	Type 1A	Young and Morgan (1943)
Ndyuka (Aukan)	ndy	Type 1A	https://www.languagesandnumbers.com/how-to-count-in-aukan/en/djk/
Nenets (Tundra)	ntu	Type 3B	Nikolaeva (2014)
Nez Perce	nez	Type 1A	https://lingweb.eva.mpg.de/channumerals/Nez-Perce.htm
Nivkh	niv	Type 1A	Gruzdeva (1998)
Nkore-Kiga	nko	Type 1A	Nkore-Kiga Taylor (1985)
Noon	noo	Type 3A	Soukka (1999)
Nubian (Dongolese)	nbd	Type 2A	https://lingweb.eva.mpg.de/channumerals/Nubian-Andaandi.htm
Oneida	ond	Type 1A	Abbott (2000)
Oromo (Harar)	orh	Type 1A	Owens (1985)
Otomi (Mezquital)	otm	Type 5A	Hess (1962)
Paiwan	pai	Type 1B	https://lingweb.eva.mpg.de/channumerals/Paiwan.htm
Persian	prs	Type 1A	Lambton (1974)
Pohnpeian	poh	Type 1A	https://lingweb.eva.mpg.de/channumerals/Pohnpeian-Ponapean.htm
Quechua Imbabura	qim	Type 1A	Cole (1985)
Quileute	qui	Type 3-Quileute	Andrade (1933)
Rapanui	rap	Type 1A	Du Feu (2012)
Russian	rus	Type 2-Russian	Timberlake (2004)

Sahu	sah	Type 1B	https://lingweb.eva.mpg.de/channumerals/Sahu.htm
Sango	san	Type 1B	Samarin (1967)
Sapuan	sap	Type 1C	Jacq and Sidwell (1999)
Sorbian Upper	sou	Type 1A	https://lingweb.eva.mpg.de/channumerals/UpperSorbian.htm
Spanish	spa	Type 1A	Kattán-Ibarra and Pountain (2004)
Supyire	sup	Type 5-Supyire	Carlson (2011)
Swahili	swa	Type 1A	https://lingweb.eva.mpg.de/channumerals/Swahili.htm
Taba-East Makian	tab	Type 1B	https://lingweb.eva.mpg.de/channumerals/Makian-East.htm
Tagalog	tag	Type 1C	Schachter and Otones (1983)
Tarahumara (Western)	twe	Type 3B	Yasugi et al. (1995)
Telugu	tel	Type 1A	Krishnamurti and Gwynn (1985)
Thai	tha	Type 1A	Smyth (2005)
Tommo So Dogon	tms	Type 6 - Tommo So	Plungian (1995)
Tsez (Dido)	tsz	Type 4A	https://lingweb.eva.mpg.de/channumerals/Dido.htm
Tuareg	tug	Type 1A	Penchoen (1973)
Tukang Besi	tuk	Type 1B	Donohue (2011)
Turkish	tur	Type 2B	Kornfilt (2013)
Vietnamese	vie	Type 1A	Thompson (1988)
Yagua	yag	Type 3A	https://lingweb.eva.mpg.de/channumerals/Yagua.htm
Yakut	ykt	Type 2—Yakut	https://lingweb.eva.mpg.de/channumerals/Yakut.htm
Yucatec	yct	type 4-yucatec	Tozzer (1921)
Zulu	zul	Type 1A	Stuart (1940)

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