SUPPLEMENTARY MATERIALS FOR 'ON THE ORDER OF DEMONSTRATIVE, NUMERAL, ADJECTIVE, AND NOUN'

Language 94(4).798–833, 2018

Matthew S. Dryer
University at Buffalo

1: List of languages in the 576-language sample, organized by word order type
- 1.1. N-A-Num-Dem (nAND)
- 1.2. Dem-Num-A-N (DNAn)
- 1.3. Dem-N-A-Num (DnAN)
- 1.4. Dem-Num-N-A (DNnA)
- 1.5. N-A-Dem-Num (nADN)
- 1.6. Num-N-A-Dem (NnAD)
- 1.7. Dem-N-Num-A (DnNA)
- 1.8. N-Dem-A-Num (nDAN)
- 1.9. N-Num-A-Dem (nNAD)
- 1.10. N-Dem-Num-A (nDNA)
- 1.11. Dem-A-N-Num (DAnN)
- 1.12. Num-A-N-Dem (NAnD)
- 1.13. A-N-Num-Dem (AnND)
- 1.14. Num-N-Dem-A (NnDA)
- 1.15. A-N-Dem-Num (AnDN)
- 1.16. Dem-A-Num-N (DANn)
- 1.17. Num-Dem-A-N (NDAn)
- 1.18. N-Num-Dem-A (nNDA)

2. Sources for each of the languages in the 576-language sample
3. General comments on data in §4 to §12 (Tables 3 to 10 and 13)
4. Data for Table 3
   - 4.1. Semantic adjectives are verbs, adjective is closer to noun than numeral (both occur on the same side of the noun)
   - 4.2. Semantic adjectives are verbs, numeral is closer to noun than adjective (both occur on the same side of the noun)
   - 4.3. Semantic adjectives are not verbs, adjective is closer to noun than numeral (both occur on the same side of the noun)
   - 4.4. Semantic adjectives are not verbs, numeral is closer to noun than adjective (both occur on the same side of the noun)
5. Data for Table 4
   - 5.1. Semantic adjectives are verbs, adjective is closer to noun than demonstrative (both occur on the same side of the noun)
   - 5.2. Semantic adjectives are verbs, demonstrative is closer to noun than adjective (both occur on the same side of the noun)
   - 5.3. Semantic adjectives are not verbs, adjective is closer to noun than demonstrative (both occur on the same side of the noun)
   - 5.4. Semantic adjectives are not verbs, demonstrative is closer to noun than adjective (both occur on the same side of the noun)

6. Data for Table 5
    6.1. Has numeral classifiers, numeral is closer to noun than demonstrative (both occur on the same side of the noun)
    6.2. Has numeral classifiers, demonstrative is closer to noun than numeral (both occur on the same side of the noun)
    6.3. Lacks numeral classifiers, numeral is closer to noun than demonstrative (both occur on the same side of the noun)
    6.4 Lacks numeral classifiers, demonstrative is closer to noun than numeral (both occur on the same side of the noun)
7. Data for Table 6
    7.1. Has numeral classifiers, adjective is closer to noun than numeral (both occur on the same side of the noun)
    7.2. Has numeral classifiers, numeral is closer to noun than adjective (both occur on the same side of the noun)
    7.3. Lacks numeral classifiers, adjective is closer to noun than numeral (both occur on the same side of the noun)
    7.4. Lacks numeral classifiers, numeral is closer to noun than adjective (both occur on the same side of the noun)
8. Data for Table 7
    8.1. Semantic adjective is verb and precedes noun
    8.2. Semantic adjective is verb and follows noun
    8.3. Semantic adjective is not verb and precedes noun
    8.4. Semantic adjective is not verb and follows noun
9. Data for Table 8
    9.1. Has numeral classifiers, numeral and demonstrative occur on same side of noun
    9.2. Has numeral classifiers, numeral and demonstrative occur on opposite side of noun
    9.3. Lacks numeral classifiers, numeral and demonstrative occur on same side of noun
    9.4. Lacks numeral classifiers, numeral and demonstrative on different sides of noun
10. Data for Table 9
    10.1. Language has numeral classifiers and adjective and numeral occur on same side of noun
    10.2. Language has numeral classifiers and adjective and numeral occur on opposite sides of noun
    10.3. Language lacks numeral classifiers and adjective and numeral occur on same side of noun
    10.4. Language lacks numeral classifiers and adjective and numeral occur on opposite sides of noun
11. Data for Table 10
    11.1. Semantic adjective and relative clause both precede noun (and semantic adjective is not a verb)
    11.2. Semantic adjective follows noun and relative clause precedes noun (and semantic adjective is not a verb)

11.3. Semantic adjective precedes noun and relative clause follows noun (and semantic adjective is not a verb)
11.4. Semantic adjective and relative clause both follow noun (and semantic adjective is not a verb)
12. Data for Table 13
12.1. Semantic adjective is verb, adjective and numeral both precede noun
12.2. Semantic adjective is verb, adjective precedes noun, and numeral follows noun
12.3. Semantic adjective not verb, adjective follows noun, and numeral precedes noun
12.4. Semantic adjective not verb, adjective and numeral both follow noun
12.5. Semantic adjective not verb, adjective and numeral both precede noun
12.6. Semantic adjective not verb, adjective precedes noun, and numeral follows noun
12.7. Semantic adjective not verb, adjective follows noun, and numeral precedes noun
12.8. Semantic adjective not verb, adjective and numeral both follow noun
13. Illustrating the computation of adjusted frequency
14. An alternative more conservative way to compute adjusted frequency
15. Maps showing each of the 18 attested orders in the 576-language sample
15.1. Map for N-A-Num-Dem (nAND)
15.2. Map for Dem-Num-A-N (DNAn)
15.3. Map for Dem-N-A-Num (DnAN)
15.4. Map for Dem-Num-N-A (DNnA)
15.5. Map for N-A-Dem-Num (nADN)
15.6. Map for Num-N-A-Dem (NnAD)
15.7. Map for Dem-N-Num-A (DnNA)
15.8. Map for N-Dem-A-Num (nDAN)
15.9. Map for N-Num-A-Dem (nNAD)
15.10. Map for N-Dem-Num-A (nDNA)
15.11. Map for Dem-A-N-Num (DAnN)
15.12. Map for Num-A-N-Dem (NAnD)
15.13. Map for A-N-Num-Dem (AnND)
15.14. Map for Num-N-Dem-A (NnDA)
15.15. Map for A-N-Dem-Num (AnDN)
15.16. Map for Dem-A-Num-N (DANn)
15.17. Map for Num-Dem-A-N (NDAn)
15.18. Map for N-Num-Dem-A (nNDA)
16. Bibliography for languages in the 576-language sample

All lists of languages in these supplementary materials list languages in the format

x: Y: z_1, ... z_n

where x is the name of the family (not all caps), Y is the name of the genus (all caps), and z_1 to z_n (not all caps) are the languages in that genus of the type in question. The ISO-

code is placed in square brackets following the language name.

1. List of languages in the 576 language sample, grouped by word order type, in order given in Tables 2 and 11.

1.1. N-A-Num-Dem (nAND) (Line 1 of Tables 2 and 11) (182 languages, 85 genera):

Niger-Congo: BANTOID: Chichewa [nya], Maore Comorian [swb], Ndumu [nmd], Mungbam [mij], Tikar [tik]
Niger-Congo: NUPOID: Gwari [gbr]
Niger-Congo: DEFOID: Yoruba [yor]
Niger-Congo: IDOMOID: Igede [ige]
Niger-Congo: EDOID: Engenni [enn]
Niger-Congo: IGBOID: Igbo [ibo], Iká [ikk]
Niger-Congo: PLATOID: Birom [bom]
Niger-Congo: CROSS RIVER: Leggbó [agb]
Niger-Congo: KWA: Akan [aka], Baule [tul], Nkonya [nko], Chumburung [ncu], Ebrie [ebr], Selee [snw], Logba [lgq], Igo [ahl], Tafi [tcd], Ewe [ewe], Fongbe [fon]
Niger-Congo: SAMBA-DURU: Dii [dur], Samba Leko [ndi], Doyayo [dow]
Niger-Congo: MBUMIC: Mbum [mdd]
Niger-Congo: DAY: Day [dai]
Niger-Congo: KULANGO-LOROM: Kulango [nku]
Niger-Congo: NORTHERN-CENTRAL GUR: Koromfe [kfz]
Niger-Congo: SOUTHERN-CENTRAL GUR: Chakali [cli]
Niger-Congo: CANGIN: Ndut [ndv]
Mande: EASTERN MANDE: Busa [bqp]
Mande: WESTERN MANDE: Vai [vai]
Dogon: DOGON: Tommo So [dto]
Songhay: SONGHAY: Koyraboro Senni [ses], Zarma [dje], Koyra Chiini [khq]
Saharan: WESTERN SAHARAN: Kanuri [knc]
East Sudanic: NILOTIC: Nyangatom [nnj], Turkana [tuv]
Central Sudanic: MORU-MA'DI: Logoti [log]
Kunama: KUNAMA: Kunama [kun]
Koman: KOMAN: Gwama [kmq]
Afro-Asiatic: BIU-MANDARA: Malgwa [--]
Afro-Asiatic: WEST CHADIC: Ngizim [ngi]
Afro-Asiatic: LOWLAND EAST CUSHITIC: Oromo (Harar) [hae]
Afro-Asiatic: YAAKU: Yaaku [muu]
Austro-Asiatic: PALAUNGIC: Palaung [pll], Lawa (Eastern) [lwl], Plang [blr]
Austro-Asiatic: VIETIC: Thavung [thm]
Austro-Asiatic: BAHNARIC: Stieng [sti], Mnong (Central) [cmo], Loven [lbo], Brao [brb]
Austro-Asiatic: KHMER: Khmer [khm]
Austro-Asiatic: PEARIC: Kasong [cog], Chong [cog]
Sino-Tibetan: KAREN: Karen (Sgaw) [ksw]

Sino-Tibetan: BODIC: Tibetan (Drokpa) [bod], Lhomi [lhm], Kham (Nangchen) [khg], Kham (Dege) [khg]
Sino-Tibetan: KUKI-CHIN: Lotha [njh], Ao [njo], Angami [njm], Naga (Tangkhul) [nmf], Bawm [bgr]
Sino-Tibetan: BURMESE-LOLO: Nuosu [iii]
Tai-Kadai: KAM-TAI: Thai [tha]
Austronesian: MINAHASAN: Tondano [tdn]
Austronesian: CELEBIC: Tukang Besi [khc]
Austronesian: NORTH BORNEO: Begak-Ida'an [dbj]
Austronesian: SAMA-BAJAW: Yakan [yka]
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Nias [nia]
Austronesian: MOKLEN-MOKEN: Moken [mwt]
Austronesian: CENTRAL MALAYO-POLYNESIAN: Buru [agh], Batuley [bay], Nuaulu [nxl], Selaru [slu], Tugun [tzn], Leti [lti], Keo [xxk]
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Irarutu [irh], Taba [mky], Biak [bhw], Ambai [amk]
Austronesian: OCEANIC: Arop-Sissano [aps], Kairiru [kxa], Sio [xsi], Arop-Lokep [apr], Awad Bing [bcu], Maleu [mgl], Jabêm [jae], Bukawa [buk], Labu [lbu], Buang (Mapos) [bzh], Sudest [tgo], Bali-Vitu [bbn], Amara [aie], Kara (in Papua New Guinea) [leu], Nalik [nal], Loniu [los], Lenakel [tnl], Kosraean [kos], Pingilapese [pif], Mokilese [mkj], Avava [tmv], Vinmavis [vnm], Mwotlap [mlv], Ambae (Lolovoli Northeast) [omb], Unua [onu], Daakaka [bpa], Lewo [lww], Rotuman [rtm], Ifira-Mele [mxe]
Trans-New Guinea: DUNA: Duna [duc]
Trans-New Guinea: ANGAN: Baruya [byr], Menya [mcr]
Trans-New Guinea: FINISTERRE-HUON: Borong [ksr], Selepet [spl], Komba [kpf], Nabak [naf], Iyo [nca]
Trans-New Guinea: CHIMBU: Golin [gvf]
Trans-New Guinea: ENGAN: Huli [hui], Kyaka [kyc]
Trans-New Guinea: OK: Tifal [tif], Bimin [bhl], Mian [mpt]
Trans-New Guinea: DANI: Nggem [nbq]
Trans-New Guinea: MADANG: Anamuxra [imi], Siroi [ssd], Bargam [mlp], Maia [sks], Mauwake [mhl], Usan [wnu], Waskia [wsk]
Trans-New Guinea: MEK: Yale (Kosarek) [kkl]
Trans-New Guinea: BINANDEREAN: Guhu-Samane [ghs], Binandere [bhg], Orokaiva [okv], Korafe [kpr]
Mairasi: MAIRASI: Mairasi [zrs]
Koiarian: KOIARIAN: Koita [kqi], Koiali (Mountain) [kpx], Barai [bbb]
Timor-Alor-Pantar: MAKASAE-FATALUKU-OIRATA: Fataluku [ddg]
Timor-Alor-Pantar: GREATER ALOR: Woisika [woi], Klon [kyo], Adang [adn]
Bosavi: BOSAVI: Edolo [etr]
East Strickland: EAST STRICKLAND: Odoodee [kkc]
Kwerba: KWERBA: Isirawa [srl]
Dagan: DAGAN: Daga [dgz]
Abun: ABUN: Abun [kgr]
Maybrat: MAYBRAT: Maybrat [ayz]

Hatam: HATAM-MANSIM: Hatam [had]
West Papuan: NORTH HALMAHERAN: Tidore [tvo]
Skou: KRISA: I'saka [ksi]
Skou: SERRA HILLS: Poko-Rawo [rwa]
East Bird's Head: EAST BIRD'S HEAD: Meyah [mej], Moskona [mtj]
Torricelli: URIM: Urim [uri]
Torricelli: WAPEI-PALEI: Au [avt], Yeri [yev], Walman [van]
Torricelli: MARIENBERG: Kamasau [kms]
Sepik: ABAU: Abau [aau]
Sepik: YELLOW RIVER: Namia [nnm]
Pama-Nyungan: NORTHERN PAMA-NYUNGAN: Kugu Nganhcara [uwa], Kuuk Thaayorre [thd]
Pama-Nyungan: CENTRAL PAMA-NYUNGAN: Arrernte (Mparntwe) [aer]
Pama-Nyungan: WESTERN PAMA-NYUNGAN: Ngaanyatjarra [ntj]
Siouan: CORE SIOUAN: Mandan [mhq], Assiniboine [asb]
Muskogean: MUSKOGEAN: Choctaw [cho], Chickasaw [cic]
Chibchan: TALAMANCA: Bribri [bzd]
Chibchan: GUAYMIIC: Ngäbere [gym]

1.2. Dem-Num-A-N (DNAn) (Line 2 of Tables 2 and 11) (113 languages, 57 genera):

Khoe-Kwadi: KHOE-KWADI: Nama [naq], //Ani [hnh]
Afro-Asiatic: MAO: Northern Mao [myf]
Afro-Asiatic: NORTH OMOTIC: Yemsa [jnj], Kullo [dwr], Gamo [gmv]
Afro-Asiatic: HIGHLAND EAST CUSHITIC: Sidaama [sid]
Afro-Asiatic: SEMITIC: Harari [har]
Indo-European: GERMANIC: Norwegian [nor], English [eng]
Indo-European: SLAVIC: Russian [rus], Polish [pol], Bulgarian [bul], Serbian-Croatian [srp]
Indo-European: GREEK: Greek (Modern) [ell]
Indo-European: ARMENIAN: Armenian (Eastern) [hye]
Indo-European: IRANIAN: Ossetic [oss], Pashto [pst], Wakhi [wbl], Shughni [sgh], Baluchi [bgn]
Indo-European: INDIC: Marathi [mar], Konkani [knn], Urdu [urd], Lamani [lmn], Gojri [gju], Gujarati [guj], Kumauni [kfy], Nepali [npi], Kalami [gwc], Torwali [trw], Panjabi [pan], Brokskat [bkk], Palula [phl], Kashmiri [kas], Bengali [ben]
Uralic: SAMOYEDIC: Nenets (Tundra) [yrk]
Uralic: UGRIC: Hungarian [hun], Khanty [kca]
Uralic: PERMIC: Udmurt [udm]
Uralic: FINNIC: Finnish [fin], Estonian [ekk]
Altaic: MONGOLIC: Dagur [dta], Mangghuer [mjg], Santa [sce]
Altaic: TUNGUSIC: Evenki [evn], Udihe [ude]
Altaic: TURKIC: Turkish [tur], Azerbaijani [azj], Saryg Yugur [ybe], Uzbek [uzn], Bashkir [bak], Tatar [tat]
Korean: KOREAN: Korean [kor]
Japonic: JAPANESE: Japanese [jpn]

Yeniseian: YENISEIAN: Ket [ket]
Kartvelian: KARTVELIAN: Georgian [kat]
Nakh-Daghestanian: AVAR-ANDIC-TSEZIC: Godoberi [gdo], Tsez [ddo], Hunzib [huz]
Nakh-Daghestanian: LEZGIC: Archi [aqc]
Burushaski: BURUSHASKI: Burushaski [bsk]
Dravidian: SOUTH-CENTRAL DRAVIDIAN: Kuvi [kxv]
Dravidian: SOUTHERN DRAVIDIAN: Kannada [kan], Tamil [tam], Malayalam [mal]
Austro-Asiatic: MUNDA: Santali [sat]
Sino-Tibetan: CHINESE: Mandarin [cmn], Cantonese [yue]
Sino-Tibetan: BODIC: Chantyal [chx], Bunan [bfu], Kinnauri [kfk], Darma [drd], Byansi [bee]
Sino-Tibetan: MAHAKIRANTI: Magar [mrd], Kham [kjl], Hayu [vay], Chepang [cdm], Athpare [aph]
Austronesian: RUKAI: Rukai (Tanan) [dru]
Austronesian: EAST FORMOSAN: Amis [ami]
Austronesian: PALAUAN: Palauan [pau]
Austronesian: OCEANIC: Patpatar [gfk], Wuvulu [wuv]
Trans-New Guinea: KAINANTU-GOROKA: Awa [awa], Hua [ygr], Kanite [kmu]
Sepik: SEPIK HILL: Sare [dju], Alamblak [amp]
Solomons East Papuan: SAVOSAVO: Savosavo [svs]
Solomons East Papuan: BILUA: Bilua [blb]
Tiwian: TIWIAN: Tiwi [tiw]
Pama-Nyungan: SOUTHEASTERN PAMA-NYUNGAN: Bandjalang [bdy]
Salishan: CENTRAL SALISH: Musqueam [hur]
Totonacan: TOTONACAN: Tepehua (Huehuetla) [tee]
Mixe-Zoque: MIXE-ZOQUE: Mixe (Ayutla) [mxp]
Mayan: MAYAN: Huastec (Southeastern) [hus], Tzeltal [tzh], Ixil [ixl], Sipakapense [qum]
Oto-Manguean: OTOMIAN: Otomí (Mezquital) [ote]
Uto-Aztecan: TEPIMAN: Pima Bajo [pia]
Uto-Aztecan: CAHITA: Yaqui [yaq]
Barbacoan: BARBACOAN: Awa Pit [kwi]
Quechuan: QUECHUAN: Quechua (Huallaga) [qub]
Aymaran: AYMARAN: Jaqaru [jqr]
Araucanian: ARAUCANIAN: Mapudungun [arn]
Tucanoan: TUCANOAN: Siona [snn], Secoya [sey]
Uru-Chipaya: URU-CHIPAYA: Chipaya [cap]
Arawakan: INLAND NORTHERN ARAWAKAN: Resígaro [rgr]
Arawakan: CARIBBEAN ARAWAKAN: Arawak [arw]
Cariban: CARIBAN: Panare [pbh]

1.3. Dem-N-A-Num (DnAN) (Line 3 of Tables 2 and 11) (53 languages, 40 genera):

Sandawe: SANDAWE: Sandawe [sad]

Niger-Congo: BANTOID: Kifuliiru [flr], Akoose [bss]
Niger-Congo: KWA: Anufo [cko]
Niger-Congo: SENUFO: Nanerge [sen]
Mande: EASTERN MANDE: Mona [moa]
Mande: WESTERN MANDE: Jeli [jek], Mandinka (Gambian) [mnk], Xasonga [kao], Jalonke [yal], Bobo Madaré (Southern) [bwq], Dzùùngoo [dnn]
East Sudanic: NUBIAN: Nubian (Dongolese) [dgl], Nubian (Kunuz) [xnz]
East Sudanic: NILOTIC: Bari [bfa]
Afro-Asiatic: WEST CHADIC: Miya [mkf]
Afro-Asiatic: SEMITIC: Arabic (Eastern Libyan) [ayl]
Sino-Tibetan: TUJIA: Tujia (Northern) [tji]
Sino-Tibetan: BODIC: Nar-Phu [npa], Kurtöp [xkz]
Sino-Tibetan: QIANGIC: Pumi [pmi]
Sino-Tibetan: rGYALRONG: Gyarong (Cogtse) [jya], rGyalrong (Caodeng) [jya]
Sino-Tibetan: BODO-GARO: Kokborok [trp], Garo [grt]
Sino-Tibetan: NORTHERN NAGA: Naga (Leinong) [lzn]
Sino-Tibetan: MRU: Hkongso [anl]
Sino-Tibetan: BURMESE-LOLO: Burmese [mya]
Sino-Tibetan: TANI: Apatani [apt]
Austronesian: OCEANIC: Tawala [tbo], Iduna [viv], Mekeo [mek], Sinaugoro [snc]
Trans-New Guinea: FINISTERRE-HUON: Nankina [nnk]
Trans-New Guinea: CHIMBU: Kuman [kue]
Trans-New Guinea: MADANG: Tauya [tya]
Koiarian: KOIARIAN: Ömie [aom]
Timor-Alor-Pantar: GREATER ALOR: Abui [abz]
Eleman: TATE: Kaki Ae [tbd]
Nimboran: NIMBORAN: Nimboran [nir]
Sepik: RAM: Awtuw [kmn]
South Bougainville: SOUTH BOUGAINVILLE: Motuna [siw]
Wagiman: WAGIMAN: Wagiman [waq]
Haida: HAIDA: Haida [hai]
Yuchi: YUCHI: Yuchi [yuc]
Muskogean: MUSKOGEAN: Creek [mus]
Chibchan: CHIBCHA-DUIT: Muisca [chb]
Choco: CHOCO: Emberá (Northern) [emp]
Sáliban: PIAROA: Piaroa [pid]
Tupian: TUPI-GUARANÍ: Yuqui [yuq]
Arauan: ARAUAN: Kulina [cul]
Tacanan: TACANAN: Araona [aro]
Fulniô: FULNIô: Fulniô [fun]

1.4. Dem-Num-N-A (DNnA) (Line 4 of Tables 2 and 11) (40 languages, 32 genera):

Afro-Asiatic: SEMITIC: Chaldean (Modern) [cld], Arabic (Gulf) [afb]
Indo-European: ROMANCE: Sardinian [sro], French [fra], Catalan [cat], Spanish [spa]

Indo-European: IRANIAN: Kurmanji [kmr], Zazaki [diq]
Austro-Asiatic: KHASIAN: Khasi [kha]
South Andamanese: SOUTH ANDAMANESE: Jarawa (in Andamans) [anq]
Austronesian: OCEANIC: Madak [mmx], Vinitiri [vmg], Hawaiian [haw]
Kuot: KUOT: Kuot [kto]
Na-Dene: ATHAPASKAN: Sarcee [srs]
Algic: ALGONQUIAN: Ottawa [otw]
Mayan: MAYAN: Mam [mam]
Oto-Manguean: PAMEAN: Pame (Southern) [pmz]
Oto-Manguean: OTOMIAN: Otomí (Santiago Mexquititlan) [otq]
Kiowa-Tanoan: KIOWA-TANOAN: Towa [tow]
Uto-Aztecan: TAKIC: Luiseño [lui]
Uto-Aztecan: AZTECAN: Nahuatl (Huasteca) [nhe]
Uto-Aztecan: TUBAR: Tubar [tbu]
Chibchan: TALAMANCA: Boruca [brn]
Páezan: PÁEZAN: Páez [pbb]
Urarina: URARINA: Urarina [ura]
Chonan: CHONAN: Selknam [ona]
Nadahup: NADAHUP: Hup [jup], Dâw [kwa]
Cacua-Nukak: CACUA-NUKAK: Cacua [cbv]
Tucanoan: TUCANOAN: Kotiria [gvc]
Tupian: TUPARI: Akuntsú [aqz]
Tupian: TUPI-GUARANÍ: Guaraní [gug]
Arawakan: CENTRAL ARAWAKAN: Paresi [pab]
Arawakan: PURUS: Apurinã [apu]
Arawakan: BOLIVIA-PARANA: Baure [brg]
Arawakan: EASTERN ARAWAKAN: Palikur [plu]
Peba-Yaguan: PEBA-YAGUAN: Yagua [yad]
Tacanan: TACANAN: Cavineña [cav]
Macro-Ge: OFAYÉ: Ofayé [opy]

1.5. N-A-Dem-Num (nADN) (Line 5 of Tables 2 and 11) (36 languages, 19 genera):

Niger-Congo: BANTOID: Kenyang [ken], Aghem [agq], Babungo [bav], Mundani [mnf]
Niger-Congo: NUPOID: Nupe [nup]
Niger-Congo: KWA: Gungbe [guw]
Niger-Congo: SOUTHERN-CENTRAL GUR: Sisaala (Western) [ssl]
Niger-Congo: EGA: Ega [ega]
Mande: WESTERN MANDE: Maninka (Western) [mlq]
Dogon: DOGON: Jamsay [djm]
Afro-Asiatic: BIU-MANDARA: Uldeme [udl]
Austro-Asiatic: PALAUNGIC: Parauk [prk]
Sino-Tibetan: BODIC: Tibetan (Modern Literary) [bod], Tibetan (Standard Spoken) [bod]
Sino-Tibetan: QIANGIC: Qiang [cng]

Sino-Tibetan: KUKI-CHIN: Naga (Mao) [nbi]
Sino-Tibetan: BURMESE-LOLO: Lisu [lis], Lolo (Yao'An) [ycl], Lalo [yik], Bisu [bzi], Akha [ahk], Hani [hni]
Sino-Tibetan: NUNGISH: Anong [nun]
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Warembori [wsa]
Austronesian: OCEANIC: Maisin [mbq], Takia [tbc], Lusi [khl], Roro [rro], Kaulong [pss], Araki [akr], Tamambo [mla], Mavea [mkv], Port Sandwich [psw]
Trans-New Guinea: MADANG: Kobon [kpw]
Koiarian: KOIARIAN: Koiari [kbk]
Western Daly: WAGAYDY: Maranungku [zmr]

1.6. Num-N-A-Dem (NnAD) (Line 6 of Tables 2 and 11) (67 languages, 27 genera):

Niger-Congo: WOLOF: Wolof [wof]
Basque: BASQUE: Basque [eus]
Indo-European: CELTIC: Breton [bre], Welsh [cym], Manx [glv]
Austro-Asiatic: VIETIC: Vietnamese [vie]
Austro-Asiatic: KATUIC: Pacoh [pac]
Austro-Asiatic: BAHNARIC: Sre [kpm], Rengao [ren]
Austro-Asiatic: ASLIAN: Jahai [jhi], Temiar [tea]
Miao-Yao: MIAO-YAO: Hmong Njua [hnj], Xong [mmr]
Tai-Kadai: KAM-TAI: Dong (Southern) [kmc], Sanjiang Kam [cov], Yay [pcc], Nung (in Vietnam) [nut]
Austronesian: ATAYALIC: Seediq [trv]
Austronesian: BILIC: Tboli [tbl]
Austronesian: SANGIRIC: Toratán [rth]
Austronesian: CELEBIC: Muna [mnb], Wolio [wlo], Pendau [ums], Padoe [pdo]
Austronesian: SOUTH SULAWESI: Selayar [sly]
Austronesian: NORTH BORNEO: Tatana' [txx]
Austronesian: SAMA-BAJAW: Bajau (West Coast) [bdr]
Austronesian: LAMPUNGIC: Lampung [ljp]
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Alas [btz], Batak (Karo) [btx], Gayo [gay]
Austronesian: MALAYO-SUMBAWAN: Sundanese [sun], Minangkabau [min], Indonesian [ind], Acehnese [ace], Cham (Eastern) [cjm]
Austronesian: CENTRAL MALAYO-POLYNESIAN: Manggarai [mqy]
Austronesian: OCEANIC: Tungak [lcm], Tigak [tgc], Seimat [ssg], Halia [hla], Taiof [sps], Sisiqa [baa], Roviana [rug], Hoava [hoa], Kokota [kkk], Woleaian [woe], Longgu [lgu], Wala [lgl], Kwaio [kwd], 'Are'are [alu], Fijian [fij], Niuean [niu], Rapanui [rap]
Oto-Manguean: AMUZGOAN: Amuzgo [azg]
Oto-Manguean: MIXTECAN: Trique (Copala) [trc], Mixtec (Jicaltepec) [mio], Mixtec (Diuxi-Tilantongo) [xtd], Mixtec (Yosondúa) [mpm]
Oto-Manguean: POPOLOCAN: Mazatec (Chiquihuitlán) [maq]
Oto-Manguean: CHINANTECAN: Chinantec (Comaltepec) [cco], Chinantec (Lealao) [cle]

Oto-Manguean: ZAPOTECAN: Chatino (Sierra Occidental) [ctp], Zapotec (Isthmus) [zai], Zapotec (Juarez) [zaa], Zapotec (Zoogocho) [zpq]
Arawakan: CARIBBEAN ARAWAKAN: Goajiro [guc]

1.7. Dem-N-Num-A (DnNA) (Line 7 of Tables 2 and 11) (12 languages, 10 genera):

Niger-Congo: BANTOID: Digo [dig], Bembe [bmb], Bakueri [bri]
Fur: FUR: Fur [fvr]
East Sudanic: NILOTIC: Camus [saq]
Afro-Asiatic: LOWLAND EAST CUSHITIC: Bayso [bsw]
Trans-New Guinea: MADANG: Girawa [bbr]
Trans-New Guinea: MEK: Una [mtg]
Na-Dene: ATHAPASKAN: Slave [den]
Wappo-Yukian: WAPPO: Wappo [wao]
Tucanoan: TUCANOAN: Retuarã [tnc]
Arawakan: INLAND NORTHERN ARAWAKAN: Tariana [tae]

1.8. N-Dem-A-Num (nDAN) (Line 8 of Tables 2 and 11) (13 languages, 11 genera):

Niger-Congo: BANTOID: Swahili [swh], Nkore-Kiga [cgg], Runyankore [nyn]
Niger-Congo: BUA: Lua [nie]
Niger-Congo: MEL: Baga Sitemu [bsp]
Niger-Congo: CANGIN: Noon [snf]
Niger-Congo: BAK: Diola-Fogny [dyo]
East Sudanic: DAJU: Laggori [liu]
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Mor [mhz]
Austronesian: OCEANIC: Koluwawa [klx]
West Papuan: NORTH HALMAHERAN: Pagu [pgu]
Anêm: ANêM: Anêm [anz]
Pama-Nyungan: WESTERN PAMA-NYUNGAN: Pitjantjatjara [pjt]

1.9. N-Num-A-Dem (nNAD) (Line 9 of Tables 2 and 11) (11 languages, 9 genera):

Niger-Congo: PLATOID: Migili [mgi]
Mande: EASTERN MANDE: Dan [dnj]
Maban: MABAN: Maba [mde]
East Sudanic: NILOTIC: Luo [luo], Lango [laj]
Afro-Asiatic: LOWLAND EAST CUSHITIC: Oromo (Waata) [ssn]
Austronesian: OCEANIC: Kele [sbc], Buma [tkw]
Timor-Alor-Pantar: MAKASAE-FATALUKU-OIRATA: Makasae [mkz]
South Bird's Head: SOUTH BIRD'S HEAD: Inanwatan [szp]
Sulka: SULKA: Sulka [sua]

1.10. N-Dem-Num-A (nDNA) (Line 10 of Tables 2 and 11) (8 languages, 6 genera):

Niger-Congo: BANTOID: Nyakyusa [nyy], Nchane [ncr]

Kordofanian: HEIBAN: Moro [mor]
Songhay: SONGHAY: Tadaksahak [dsq]
Kuliak: KULIAK: Ik [ikx], So [teu]
Afro-Asiatic: LOWLAND EAST CUSHITIC: Rendille [rel]
Torricelli: KOMBIO-ARAPESH: Arapesh (Abu) [aah]

1.11. Dem-A-N-Num (DAnN) (Line 11 of Tables 2 and 11) (12 languages, 7 genera):

Indo-European: INDIC: Oriya [ory]
Sino-Tibetan: BODIC: Tamang (Eastern) [taj], Gurung [gvr], Tshangla [tsj], Purki [prx]
Sino-Tibetan: MAHAKIRANTI: Newari (Kathmandu) [new]
Trans-New Guinea: KAINANTU-GOROKA: Yagaria [ygr], Fore [for]
Trans-New Guinea: ENGAN: Kewa [kew]
Pawaian: PAWAIAN: Pawaian [pwa]
Sepik: NDU: Ambulas [abt], Iatmul [ian]

1.12. Num-A-N-Dem (NAnD) (Line 12 of Tables 2 and 11) (8 languages, 5 genera):

Austronesian: OCEANIC: Ramoaaina [rai], Xârâcùù [ane], Iaai [iai]
Penutian: TSIMSHIANIC: Tsimshian (Coast) [tsi]
Mayan: MAYAN: Chortí [caa], Jakaltek [jac]
Xincan: XINCAN: Xinca (Guazacapán) [xin]
Creole: CREOLE: Ndyuka [djk]

1.13. A-N-Num-Dem (AnND) (Line 13 of Tables 2 and 11) (5 languages, 3 genera):

Niger-Congo: CROSS RIVER: Efik [efi], Ibibio [ibb]
Niger-Congo: UBANGI: Sango [sag], Mayogo [mdm]
Sino-Tibetan: TANI: Galo [adl]

1.14. Num-N-Dem-A (NnDA) (Line 14 of Tables 2 and 11) (5 languages, 3 genera):

Austro-Asiatic: KATUIC: Katu [ktv]
Austronesian: YAPESE: Yapese [yap]
Austronesian: OCEANIC: Kilivila [kij], Teop [tio], Drehu [dhv]

1.15. A-N-Dem-Num (AnDN) (Line 15 of Tables 2 and 11) (5 languages, 3 genera):

Niger-Congo: BANTOID: Kako [kkj]
Niger-Congo: UBANGI: Munzombo [moj], Baka (in Cameroon) [bkc], Linda [liy]
Sino-Tibetan: BAI: Bai [bca]

1.16. Dem-A-Num-N (DANn) (Line 16 of Tables 2 and 11) (3 languages, 2 genera):

Indo-European: INDIC: Dhivehi [div]

Nakh-Daghestanian: NAKH: Chechen [che], Ingush [inh]

1.17. Num-Dem-A-N (NDAn) (Line 17 of Tables 2 and 11) (2 languages, 2 genera):

Indo-European: NURISTANI: Waigali [wbk]
Mixe-Zoque: MIXE-ZOQUE: Popoluca (Sierra) [poi]

1.18. N-Num-Dem-A (nNDA) (Line 18 of Tables 2 and 11) (1 language, 1 genus):

Niger-Congo: BANTOID: Haya [hay]

2. Sources for each of the languages in the 576-language set

'Are'are [alu]	NnAD	Naitoro (2013: 72, 88)
//Ani [hnh]	DNAn	Heine (1999: 34)
Abau [aau]	nAND	Lock (2011: 77, 106, 109)
Abui [abz][1]	DnAN	Kratochvil (2007: 14)
Abun [kgr]	nAND	Berry and Berry (1999: 67, 69)
Acehnese [ace]	NnAD	Durie (1985: 130, 136)
Adang [adn]	nAND	Haan (2001: 124)
Aghem [agq]	nADN	Hyman (1979: 27)
Akan [aka]	nAND	Christaller (1875: 106)
Akha [ahk]	nADN	Hansson (2003: 241)
Akoose [bss]	DnAN	Hedinger (2008: 34)
Akuntsú [aqz]	DNnA	Aragon (2014: 176)
Alamblak [amp]	DNAn	Bruce (1984: 99)
Alas [btz]	NnAD	Soravia (2007: 59)
Amara [aie]	nAND	Thurston (1996: 213)
Ambae (Lolovoli Northeast) [omb]	nAND	Hyslop (2001: 105)
Ambai [amk]	nAND	Silzer (1983: 85)
Ambulas [abt]	DAnN	Wilson (1980: 85, 91)
Amis [ami]	DNAn	Wu (2006: 99)
Amuzgo [azg]	NnAD	Stewart and Stewart (2000: 410, 412)
Anamuxra [imi]	nAND	Ingram (2001: 288)
Anêm [anz]	nDAN	Thurston (1982: 25)
Angami [njm]	nAND	Giridhar (1980: 57)
Anong [nun]	nADN	Sun and Liu (2009: 115)
Anufo [cko]	DnAN	Smye (2004: 41)
Ao [njo][2]	nAND	Coupe (2007: 201, 209), Gowda (1975: 63)
Apatani [apt][3]	DnAN	Abraham (1985: 66-67, 124-125)
Apurinã [apu][4]	DNnA	Polak (1894: 4), Facundes (2000: 458)

[1] The formula in Kratochvil (2007: 14) includes an item “Dem” at the end of the noun phrase. This denote “anaphoric demonstratives”, while “Dei” at the beginning of the noun phrase denotes demonstratives used exophorically. I treat the latter as demonstratives for the purposes of this study.

[2] While the formula given by Coupe (2007: 201) includes both prenominal and postnominal positions for “attributes”, the prenominal position is reserved for relative clauses, so semantic adjectives follow the verb (p. 209).

[3] Although Abraham (1985: 124 and elsewhere) describes a set of words he calls determiners following the noun which exhibit a distal-proximate distinction, these words only occur on subjects, the glosses never seem to use English demosntratives, and there are examples where these occur with noun phrases glossed as indefinite, so I treat the prenominal position (p. 29) as basic.

Arabic (Eastern Libyan) [ayl][5]	DnAN	Owens (1984: 81), Abdunnabi (2000: 231-232)
Arabic (Gulf) [afb]	DNnA	Holes (1990: 60, 62)
Araki [akr]	nADN	François (2002: 102)
Araona [aro][6]	DnAN	Emkow (2006: 368)
Arapesh (Abu) [aah]	nDNA	Nekitel (1985: 95)
Arawak [arw]	DNAn	Pet (1987: 91)
Archi [aqc]	DNAn	Kibrik (1994: 341-342)
Armenian (Eastern) [hye]	DNAn	Dum-Tragut (2009: 599), Stevick (1955: 56)
Arop-Lokep [apr]	nAND	D'Jernes (2002: 255)
Arop-Sissano [aps]	nAND	Whitacre (1986: 29)
Arrernte (Mparntwe) [aer]	nAND	Wilkins (1989: 102, 418)
Assiniboine [asb][7]	nAND	Cumberland (2005: 384)
Athpare [aph]	DNAn	Ebert (1997: 108)
Au [avt]	nAND	Scorza (1985: 240)
Avava [tmv]	nAND	Crowley (2006: 64)
Awa [awa]	DNAn	Loving (1973: 78-80)
Awa Pit [kwi]	DNAn	Curnow (1997: 117)
Awad Bing [bcu]	nAND	Bennett and Bennett (1998: 178-179)
Awtuw [kmn][8]	DnAN	Feldman (1986: 116)
Azerbaijani [azj]	DNAn	Lee (1996: 124)
Babungo [bav]	nADN	Schaub (1985: 77)
Baga Sitemu [bsp]	nDAN	Ganong (1998: 28)
Bai [bca]	AnDN	Wiersma (2003: 669)
Bajau (West Coast) [bdr]	NnAD	Miller (2007: 312)
Baka (in Cameroon) [bkc]	AnDN	Kilian-Hatz (1995: 22), Brisson and Boursier (1979: ix)
Bakueri [bri]	DnNA	Kagaya (1992: 25-26)
Bali-Vitu [bbn]	nAND	van den Berg and Bachet (2006: 64)

[4] Facundes (2000: 458) gives a formula showing that the demonstrative and numeral precede the noun, in that order. Polak (1894: 4) describes the language as Noun-Adjective.

[5] The formula in Owens (1984: 81) shows both prenominal and postnominal positions for demonstratives, but Abdunnabi (2000: 231-232) implies that the prenominal one is dominant.

[6] Numerals in Araona greater than three precede the noun, while the words for 'one', 'two', and 'three' follow the noun. I treat the postnominal position as the dominant one, on the assumption that the three smallest numerals are more frequent than higher numerals.

[7] The formula given by Cumberland (2005: 384) shows quantifiers (including numerals) either preceding or following a demonstrative, but p. 367 explains that N-Dem-Num order involves partitive meaning ('three of those ...') while N-Num-Dem involves the meaning relevant to this study ('those three ...').

[8] Although the rule given by Feldman (1986: 116) allows numerals to either precede or follow the noun, my text counts show postnominal numerals to be more frequent.

Baluchi [bgn]	DNAn	Axenov (2006: 232)
Bandjalang [bdy]	DNAn	Sharpe (2005: 98)
Barai [bbb]	nAND	Olson (1975: 490)
Bargam [mlp]	nAND	Hepner (2006: 91)
Bari [bfa]	DnAN	Spagnolo (1933: 58, 75, 85)
Baruya [byr]	nAND	Lloyd (1989: 4, 95)
Bashkir [bak]	DNAn	Poppe (1964: 81), Berta (1998: 297)
Basque [eus]	NnAD	Saltarelli et al. (1988: 80)
Batak (Karo) [btx]	NnAD	Woollams (1996: 106)
Batuley [bay]	nAND	Daigle (2015: 99)
Baule [tul]	nAND	N'Guessan (1983: 296)
Baure [brg]	DNnA	Danielsen (2007: 169), Baptista and Wallin (1967 : 42)
Bawm [bgr]	nAND	Reichle (1981: 37, 42)
Bayso [bsw][9]	DnNA	Hayward (1979: 118)
Begak-Ida'an [dbj]	nAND	Goudswaard (2005: 271, 273)
Bembe [bmb]	DnNA	Iorio (2011: 64)
Bengali [ben]	DNAn	Thompson (2010: 299), Thompson (2012: 127)
Biak [bhw]	nAND	van den Heuvel (2006: 201)
Bilua [blb]	DNAn	Obata (2003: 77)
Bimin [bhl]	nAND	Weber (1997: 47)
Binandere [bhg]	nAND	Wilson (1996: 82)
Birom [bom]	nAND	Bouquiaux (1970: 276, 278)
Bisu [bzi]	nADN	Person (2000: 39), Day (2009: 57)
Bobo Madaré (Southern) [bwq]	DnAN	Sanou (1978: 219-222, 231)
Borong [ksr]	nAND	Olkkonen and Olkkonen (2000: 16)
Boruca [brn][10]	DNnA	Quesada (1994: 41), Castro (2010: 213)
Brao [brb]	nAND	Keller (1976: 29-30)
Breton [bre]	NnAD	Press (1986: 46, 77, 104)
Bribri [bzd]	nAND	Margery Peña (1982: xxvii)
Brokskat [bkk]	DNAn	Ramaswami (1982: 86)
Buang (Mapos) [bzh]	nAND	Hooley (1970: 186)
Bukawa [buk]	nAND	Eckermann (2007: 106)
Bulgarian [bul]	DNAn	Scatton (1993: 223)
Buma [tkw]	nNAD	Tryon (2002: 576)
Bunan [bfu]	DNAn	Widmer (2014: 360), Widmer (2017: 315)
Burmese [mya]	DnAN	Soe (1999: 39)
Buru [agh]	nAND	Grimes (1991: 185)
Burushaski [bsk]	DNAn	Lorimer (1935: 404)

[9] Adjectives more often precede the noun in Bayso, but more often follow if there is another modifier (Hayward 1979: 118).

[10] The formula in Castro (2010: 213) says Dem-Quant-N-Quant-Adj, without identifying what governs the two positions of quantifiers, but the discussion in Quesada (1994: 41) implies that numerals normally precede the noun.

Busa [bqp]	nAND	Wedekind (1972: 23)
Byansi [bee]	DNAn	Trivedi (1991: 24)
Cacua [cbv][11]	DNnA	Bolanos (2016: 211)
Camus [saq]	DnNA	Heine (1980: 109)
Cantonese [yue]	DNAn	Matthews and Yip (1994: 88)
Catalan [cat]	DNnA	Hualde (1992: 116, 131)
Cavineña [cav][12]	DNnA	Guillaume (2008: 70-71)
Chakali [cli]	nAND	Brindle (2010: 280; 2017: 386)
Chaldean (Modern) [cld]	DNnA	Sara (1974: 101)
Cham (Eastern) [cjm]	NnAD	Thurgood (2005: 498)
Chantyal [chx]	DNAn	Noonan (2003a: 329)
Chatino (Sierra Occidental) [ctp]	NnAD	Pride (1965: 29)
Chechen [che]	DANn	Johanna Nichols (pc)
Chepang [cdm]	DNAn	Caughley (1982: 40)
Chichewa [nya]	nAND	Bentley and Kulemeka (2001: 221
Chickasaw [cic]	nAND	Pamela Munro (pc)
Chinantec (Comaltepec) [cco]	NnAD	Anderson (1989: 55)
Chinantec (Lealao) [cle]	NnAD	Rupp (1989: 61, 73)
Chipaya [cap]	DNAn	Cerrón-Palomino (2006: 195)
Choctaw [cho]	nAND	Nicklas (1979: 27-28)
Chong [cog]	nAND	Rojanakul (2009: 103)
Chortí [caa]	NAnD	Perez Martinez (1994: 118)
Chumburung [ncu]	nAND	Hansford (1990: 71)
Creek [mus]	DnAN	Martin (2011: 372), Jack Martin (pc)
Daakaka [bpa]	nAND	von Prince (2015: 96)
Daga [dgz]	nAND	Murane (1974: 89)
Dagur [dta]	DNAn	Martin (1961)
Dan [dnj][13]	nNAD	Doneux (1968: 39-40)
Darma [drd]	DNAn	Willis (2007: 316)
Dâw [kwa]	DNnA	Martins (2004: 544-545)
Day [dai]	nAND	Nougayrol (1979: 137-138)

[11] Although the formula in Bolanos (2016: 211) says Dem-Num-Adj-N-Adj, the author mentions (p. 116) that the postnominal position for adjectives is more common.

[12] It is clear from the formula in Guillaume (2008: 70) that the numeral precedes the noun and the adjective follows. There is one slot preceding the numeral, namely relative clause, but Guillaume (2008: 71) explains that this is usually filled by a very specific type of relative clause, one involving a demonstrative adverb followed by a copula verb. This is the only way to express an adnominal demonstrative in Caveneña.

[13] The numeral can precede or follow the adjective in Dan, but the order depends on the definiteness of the noun phrase: it precedes the adjective if the noun phrase is definite, but follows if it is indefinite. Since noun phrases with a demonstrative are definite, I treat Dan as nNAD for the purposes of this study (Doneux 1968: 39).

Dhivehi [div][14]	DANn	Cain and Gair (2000: 33), Cain (2000: 78), Gnanadesikan (2017: 191, 194)
Digo [dig]	DnNA	Nicolle (2013: 29, 81)
Dii [dur]	nAND	Bohnhoff (2010: 155)
Diola-Fogny [dyo]	nDAN	Sapir (1965: 87)
Dong (Southern) [kmc]	NnAD	Yang and Edmondson (2008: 527)
Doyayo [dow]	nAND	Wiering and Wiering (1994: 166)
Drehu [dhv]	NnDA	Tryon (1967: 60-61)
Duna [duc]	nAND	San Roque (2008: 128)
Dzùùngoo [dnn]	DnAN	Solomiac (2007: 309, 319)
Ebrie [ebr]	nAND	Bolé-Richard (1983a: 334)
Edolo [etr]	nAND	Gossner (1994: 91)
Efik [efi]	AnND	Mensah (2011: 97, 101)
Ega [ega]	nADN	Bolé-Richard (1983b: 380)
Emberá (Northern) [emb][15]	DnAN	Mortensen (1999: 39)
Engenni [enn]	nAND	Thomas (1978: 114)
English [eng]	DNAn	personal knowledge
Estonian [ekk]	DNAn	Tauli (1983: 189)
Evenki [evn]	DNAn	Nedjalkov (1997: 86)
Ewe [ewe]	nAND	Ameka (1991: 45)
Fataluku [ddg]	nAND	Langford (2007: 49)
Fijian [fij]	NnAD	Dixon (1988: 112)
Finnish [fin]	DNAn	Dal Pozzo (2007: 13)
Fongbe [fon]	nAND	Lefebvre and Brousseau (2002: 56)
Fore [for]	DAnN	Scott (1978: 89)
French [fra]	DNnA	personal knowledge
Fulniô [fun]	DnAN	Costa (1999: 108)
Fur [fvr]	DnNA	Beaton (1968: 58, 76)
Galo [adl][16]	AnND	Post (2007: 291)
Gamo [gmv]	DNAn	Taylor (1994: 59)
Garo [grt]	DnAN	Burling (2003: 392-393)
Gayo [gay]	NnAD	Eades (2005: 201)
Georgian [kat]	DNAn	Vogt (1971: 220)

[14] The statements in Cain and Gair (2000: 33) and Cain (2000: 78) only make it clear that the numeral immediately precedes the noun in Dhivehi, without explicitly stating that the demonstrative precedes the adjective (although it does in the one example they cite). However, Gnanadesikan (2017: 194) is explicit about the demonstrative preceding the adjective.

[15] Although Mortensen (1999) does not appear to be explicit about adjectives being closer to the noun than numerals, this is implied by the fact that the case clitics attach to adjectives rather than the noun but to the noun when there is a numeral (p. 39).

[16] The formula in Post (2007: 291) does not explicitly mention adjectives, but semantic adjectives modifying nouns are formally relative clauses (p. 295), which the formula does represent as preceding the noun.

Girawa [bbr]	DnNA	Gasaway, Sims and Lillie (1992: 47)
Goajiro [guc]	NnAD	Ehrman (1972: 41)
Godoberi [gdo]	DNAn	Kibrik (1996: 153)
Gojri [gju]	DNAn	Losey (2002: 107)
Golin [gvf]	nAND	Bunn (1974; 79, 82-83)
Greek (Modern) [ell]	DNAn	Mackridge (1985: 193-194)
Guaraní [gug]	DNnA	Gregores and Suarez (1967: 150)
Guhu-Samane [ghs]	nAND	Gamudze, Hadzata and King (2014: 25)
Gujarati [guj]	DNAn	Doctor (2004: 77)
Gungbe [guw]	nADN	Aboh (1999: 94)
Gurung [gvr]	DAnN	Glover (1974: 96-97)
Gwama [kmq]	nAND	Kievit and Robertson (2012: 85-86)
Gwari [gbr]	nAND	Hyman and Magaji (1970: 46)
Gyarong (Cogtse) [jya]	DnAN	Lin (1993: 471), Nagano (2003: 471)
Haida [hai]	DnAN	Enrico (2003: 58-62)
Halia [hla]	NnAD	Allen and Allen (1987: 18, 21, 39)
Hani [hni]	nADN	Li (1990: 155)
Harari [har]	DNAn	Mitiku (2003: 478)
Hatam [had]	nAND	Reesink (1999: 79)
Hawaiian [haw][17]	DNnA	Elbert and Pukui (1979: 41)
Haya [hay]	nNDA	Byarushengo (1977: 13)
Hayu [vay]	DNAn	Michailovsky (1988: 170)
Hkongso [anl]	DnAN	Wright (2009: 34)
Hmong Njua [hnj]	NnAD	Harriehausen (1990: 98, 144)
Hoava [hoa]	NnAD	Davis (2003: 34)
Hua [ygr]	DNAn	Haiman (1980: 257)
Huastec (Southeastern) [hus]	DNAn	Kondic (2012: 141)
Huli [hui]	nAND	Lomas (1988: 222)
Hungarian [hun]	DNAn	Kenesei et al. (1998: 102)
Hunzib [huz]	DNAn	Van Den Berg (1995: 117)
Hup [jup]	DNnA	Epps (2008: 284)
I'saka [ksi]	nAND	Donohue and San Roque (2004: 90)
Iaai [iai]	NAnD	Lynch (2002a: 781)
Iatmul [ian]	DAnN	Staalsen (1965: 18-19)
Ibibio [ibb]	AnND	Kaufmann (1969: 189)
Iduna [viv]	DnAN	Huckett (1974: 90)
Ifira-Mele [mxe]	nAND	Clark (2002x??: 685)
Igbo [ibo]	nAND	Emenanjo (1987: 80)
Igede [ige]	nAND	Bergman (1981: 18)
Igo [ahl]	nAND	Gblem (1995: 187)
Ik [ikx]	nDNA	Serzisko (1989: 391), Heine (1983: 86)
Iká [ikk]	nAND	Maho (1998: 21)
Inanwatan [szp]	nNAD	DeVries (2004: 64)

[17] Semantic adjectives are called ‘qualifiers’ by Elbert and Pukui (1979).

Indonesian [ind]	NnAD	Sneddon (1996: 132, 155-156)
Ingush [inh]	DANn	Nichols (1994: 116), Nichols (2011: 445)
Irarutu [irh]	nAND	Matsumura and Matsumara (1991: 105), Jackson (2014: 64)
Isirawa [srl]	nAND	Oguri (1976: 87)
Ixil [ixl]	DNAn	Townsend (1986: 3)
Iyo [nca]	nAND	Minter (2009: 83)
Jabêm [jae]	nAND	Dempwolff (1939: 279), Bradshaw and Czobor (2005: 91)
Jahai [jhi]	NnAD	Burenhult (2005: 140)
Jakaltek [jac]	NAnD	Day (1973: 66, 99)
Jalonke [yal]	DnAN	Lüpke (2005: 100)
Jamsay [djm]	nADN	Heath (2008: 15)
Japanese [jpn]	DNAn	Kimio Tanihara (p.c.)
Jaqaru [jqr]	DNAn	Hardman (2000: 107)
Jarawa (in Andamans) [anq]	DNnA	Kumar (2012: 208-209)
Jeli [jek]	DnAN	Tröbs (1998: 166)
Kairiru [kxa]	nAND	Wivell (1981: 39)
Kaki Ae [tbd]	DnAN	Clifton (1997: 30)
Kako [kkj]	AnDN	Ernst (1992: 121)
Kalami [gwc][18]	DNAn	Baart (1999: 25)
Kamasau [kms]	nAND	Sanders and Sanders (1994: 6)
Kanite [kmu]	DNAn	Gibson and McCarthy (2002: 67)
Kannada [kan]	DNAn	Schiffman (1983: 98), Sridhar (1990: 98)
Kanuri [knc]	nAND	Lukas (1937: 30, 128), Hutchison (1981: 203)
Kara (in Papua New Guinea) [leu]	nAND	Dryer (2013: 59)
Karen (Sgaw) [ksw]	nAND	Jones (1961: 43)
Kashmiri [kas]	DNAn	Wali and Koul (1997: 103)
Kasong [cog]	nAND	Sunee (2002: 62)
Katu [ktv]	NnDA	Costello (1969: 22, 34)
Kaulong [pss][19]	nADN	Ross (2002b: 395)
Kele [sbc]	nNAD	Ross (2002c: 132)
Kenyang [ken]	nADN	Ramirez (1998: 28)
Keo [xxk]	nAND	Baird (2002: 186)
Ket [ket]	DNAn	Werner (1997: 335)
Kewa [kew]	DAnN	Franklin (2010: 2)
Kham (Dege) [khg]	nAND	Häsler (1999: 93, 238)

[18] In definite noun phrases, the order of numeral, adjective and noun is Num-Adj-N, while in indefinite noun phrases the order is Adj-Num-N.

[19] The formula given by Ross (2002b: 395) might suggest that the order is N-Dem-A-Num. However, the item that Ross treats as "Dem" can also mean 'the' and a contrast between 'this' and 'that' is coded by a deictic word that occurs after the adjective and before the numeral.

Kham (Nangchen) [khg]	nAND	Causemann (1989: 78); (unchecked)
Kham [kjl]	DNAn	Watters (2002: 192)
Khanty [kca]	DNAn	Filchenko (2007: 303; 2010: 309)
Khasi [kha]	DNnA	Rabel (1961: 131)
Khmer [khm]	nAND	Ehrman (1970: 19), Haiman (2011: 141)
Kifuliiru [flr]	DnAN	Otterloo and Otterloo (2011: 138-139)
Kilivila [kij]	NnDA	Senft (1986: 105)
Kinnauri [kfk]	DNAn	Sharma (1988: 114)
Klon [kyo]	nAND	Baird (2008: 81)
Kobon [kpw]	nADN	Davies (1981: 65)
Koiali (Mountain) [kpx]	nAND	Garland and Garland (1975: 434)
Koiari [kbk]	nADN	Dutton (1996: 60)
Koita [kqi]	nAND	Dutton (1975: 315)
Kokborok [trp][20]	DnAN	Karapurkar (1976: 32, 91)
Kokota [kkk]	NnAD	Palmer (2002: 505)
Koluwawa [klx]	nDAN	Guderian and Guderian (2002: 58, 61)
Komba [kpf]	nAND	Southwell (1979: 135, 137)
Konkani [knn]	DNAn	Almeida (1985: 234)
Korafe [kpr]	nAND	Farr (1999: 67)
Korean [kor]	DNAn	Sohn (1994: 117)
Koromfe [kfz]	nAND	Rennison (1997: 87)
Kosraean [kos]	nAND	Lee (1975: 237)
Kotiria [gvc]	DNnA	Stenzel (2013: 196)
Koyra Chiini [khq]	nAND	Heath (1999a: 83)
Koyraboro Senni [ses]	nAND	Heath (1999b: 114)
Kugu Nganhcara [uwa]	nAND	Smith and Johnson (2000: 388)
Kulango [nku]	nAND	Elders (2008: 294)
Kulina [cul]	DnAN	Dienst (2014: 225)
Kullo [dwr]	DNAn	Allan (1976: 328)
Kuman [kue]	DnAN	Trefry (1969: 38)
Kumauni [kfy]	DNAn	Apte and Pattanayak (1967: 61)
Kunama [kun]	nAND	Thompson (1983: 304)
Kuot [kto]	DNnA	Chung and Chung (1996: 18), Lindstrom (2002: 3)
Kurmanji [kmr]	DNnA	Strunk (2003: 1)
Kurtöp [xkz]	DnAN	Hyslop (2011: 254)
Kuuk Thaayorre [thd]	nAND	Gaby (2006: 277; 2017: 195)
Kuvi [kxv]	DNAn	Israel (1979: 257-258)
Kwaio [kwd]	NnAD	Keesing (1985: 85)
Kyaka [kyc]	nAND	Draper and Draper (2002: 17, 21)
Labu [lbu]	nAND	Siegel (1984: 95)
Laggori [liu]	nDAN	Alamin Mubarak (2006: 23)

[20] Although the formula given by Karapurkar (1976: 91) gives positions for adjectives both before and after the noun, the preceding discussion only mentions postnominal position, so I treat this as the dominant order.

Lalo [yik]	nADN	Björverud (1998: 117)
Lamani [lmn]	DNAn	Trail (1970: 83)
Lampung [ljp]	NnAD	Walker (1976: 17)
Lango [laj]	nNAD	Noonan (1992: 154)
Lawa (Eastern) [lwl]	nAND	Blok (2013: 56)
Leggbó [agb]	nAND	Hyman (n.d.)
Lenakel [tnl]	nAND	Lynch (1978: 74)
Leti [lti]	nAND	Van Engelenhoven (1995: 166)
Lewo [lww]	nAND	Early (1994: 186)
Lhomi [lhm]	nAND	Vesalainen (2016: 49)
Linda [liy]	AnDN	Cloarec-Heiss (1986: 75, 217);
Lisu [lis]	nADN	Bradley (2003: 227-228)
Logba [lgq]	nAND	Dorvlo (2008: 69)
Logoti [log][21]	nAND	Tucker (1940: 289), Irumu (1986: 250)
Lolo (Yao'An) [ycl]	nADN	Merrifield (2010: 85, 89)
Longgu [lgu]	NnAD	Hill (2002: 545)
Loniu [los]	nAND	Hamel (1985: 144; 1994: 89)
Lotha [njh]	nAND	Acharya (1983: 120-121)
Loven [lbo]	nAND	Jacq (2001: 364, 379)
Lua [nie]	nDAN	Vanderkooi (2000: 24)
Luiseño [lui]	DNnA	Malécot (1963: 208)
Luo [luo]	nNAD	Omondi (1982: 71, 123, 245)
Lusi [khl]	nADN	Counts (1969: 125, 135, 138)
Maba [mde]	nNAD	Trenga (1947: 71, 80)
Madak [mmx]	DNnA	Lee (2005: 2)
Magar [mrd]	DNAn	Grunow-Hårsta (2008: 362)
Maia [sks]	nAND	Hardin (2002: 93)
Mairasi [zrs]	nAND	Peckham (2000: 108)
Maisin [mbq]	nADN	Ross (1984: 53)
Makasae [mkz]	nNAD	Huber (2008: 45)
Malayalam [mal]	DNAn	Asher and Kumari (1997: 133)
Maleu [mgl]	nAND	Haywood (1996: 163)
Malgwa [--]	nAND	Löhr (2002: 239)
Mam [mam][22]	DNnA	England (1983: 140)
Mandan [mhq][23]	nAND	Mixco (1997: 21, 38)

[21] The claim that the adjective precedes the numeral and demonstrative is based on Irumu (1986: 250). The claim that the demonstrative follows the numeral is based on Tucker (1940: 289).

[22] Adjectives precede the noun in Mam (England 1983: 197) when there is no other modifier of the noun, but follow if there is another modifier.

[23] Although the formula given by Mixco (1997: 38) does not include adjectives, it is clear that adjectives precede numerals in Mandan, since p. 38 that the definite article enclitic attaches to relative clauses (and this includes semantic adjectives (p. 21)), while the

Mandarin [cmn]	DNAn	Li and Thompson (1981: 124), Wang (2012: 21)
Mandinka (Gambian) [mnk]	DnAN	Rowlands (1959: 46, 65)
Manggarai [mqy]	NnAD	Semiun (1993: 40, 42-43)
Mangghuer [mjg]	DNAn	Slater (2003: 90)
Maninka (Western) [mlq]	nADN	Delafosse (1929: 266)
Manx [glv]	NnAD	Broderick (2010: 342)
Maore Comorian [swb]	nAND	Alnet (2009: 72-73)
Mapudungun [arn]	DNAn	Smeets (2008: 131), Hernandez et al (2006: 67)
Maranungku [zmr]	nADN	Tryon (1970: 16)
Marathi [mar]	DNAn	Pandharipande (1997: 157), Dhongde and Wali (2009: 195)
Mauwake [mhl]	nAND	Berghäll (2010: 207; 2015: 231)
Mavea [mkv]	nADN	Guerin (2011: 142)
Maybrat [ayz]	nAND	Dol (1999: 141; 2007: 127), Brown (1990: 47)
Mayogo [mdm]	AnND	Sawka (2001: 64)
Mazatec (Chiquihuitlán) [maq]	NnAD	Jamieson (1974: 1)
Mbum [mdd]	nAND	Hagège (1970: 242)
Mekeo [mek]	DnAN	Amala, Magaiva and van Deelen (2015: 22)
Menya [mcr]	nAND	Whitehead (2004: 47)
Meyah [mej]	nAND	Gravelle (2004: 167, 176; 2011: 145, 151)
Mian [mpt]	nAND	Fedden (2011: 203)
Migili [mgi]	nNAD	Stofberg (1978: 232)
Minangkabau [min]	NnAD	Crouch (2009: 65)
Mixe (Ayutla) [mxp]	DNAn	Romero (2009: 269)
Mixtec (Diuxi-Tilantongo) [xtd]	NnAD	Kuiper and Olam (1991: 269, 276)
Mixtec (Jicaltepec) [mio]	NnAD	Bradley (1970: 50, 60)
Mixtec (Yosondúa) [mpm]	NnAD	Farris (1992: 73, 83-84)
Miya [mkf][24]	DnAN	Schuh (1998: 257, 277)
Mnong (Central) [cmo]	nAND	Bequette (2013: 28, 33)
Moken [mwt]	nAND	Chantanakomes (1980: 158)
Mokilese [mkj]	nAND	Harrison (1976: 105)
Mona [moa]	DnAN	Fleming (1995: 56-57)
Mor [mhz]	nDAN	Laycock (1978: 299)
Moro [mor]	nDNA	Black and Black (1971: 26), Jenks (2014: 248)
Moskona [mtj]	nAND	Gravelle (2010: 215)
Motuna [siw]	DnAN	Onishi (1994; 222-223, 231)
Muisca [chb]	DnAN	Ostler (1994: 215)

formula on p. 38 shows the definite article clitic preceding quantifiers (including numerals).

[24] While the formula given by Schuh (1998: 277) shows position for adjectives both before and after the noun, he says (p. 257) that the preferred position for adjectivs is after the noun.

Muna [mnb][25]	NnAD	Van Den Berg (1989: 110, 133)
Mundani [mnf]	nADN	Parker (1989: 168)
Mungbam [mij]	nAND	Lovegren (2013: 176)
Munzombo [moj]	AnDN	Boyi (1983: 256)
Musqueam [hur]	DNAn	Suttles (2004: 66, 339)
Mwotlap [mlv]	nAND	Crowley (2002a: 592), François (2005: 122)
Nabak [naf]	nAND	Fabian et al. (1998: 72)
Naga (Leinong) [lzn]	DnAN	Gwa (2010: 87)
Naga (Mao) [nbi][26]	nADN	Giridhar (1994: 248)
Naga (Tangkhul) [nmf]	nAND	Arokianathan (1987: 145)
Nahuatl (Huasteca) [nhe][27]	DNnA	Beller and Beller (1979: 233)
Nalik [nal]	nAND	Volker (1998: 109)
Nama [naq]	DNAn	Hagman (1977: 21)
Namia [nnm]	nAND	Feldpausch and Feldpausch (1992: 51)
Nanerge [sen]	DnAN	Ouedraogo (1984: 460, 470, 477)
Nankina [nnk]	DnAN	Spaulding and Spaulding (1994: 118, 148-149)
Nar-Phu [npa]	DnAN	Noonan (2003b: 348)
Nchane [ncr]	nDNA	Boutwell (2010: 9)
Ndumu [nmd]	nAND	Biton (1969: 628)
Ndut [ndv]	nAND	Morgan (1996: 44)
Ndyuka [djk]	NAnD	Huttar and Huttar (1994: 203, 215, 220)
Nenets (Tundra) [yrk]	DNAn	Nikolaeva (2014: 171)
Nepali [npi]	DNAn	Acharya (1990: 98, 100; 1991: 98, 100)
Newari (Kathmandu) [new]	DAnN	Malla (1985: 71, 85)
Ngaanyatjarra [ntj]	nAND	Douglas (1964: 85)
Ngäbere [gym]	nAND	Quesada Pacheco (2008: 147-149)
Nggem [nbq]	nAND	Etherington (2002: 42)
Ngizim [ngi]	nAND	Schuh (1972: 165-166)
Nias [nia][28]	nAND	Lea Brown (p.c.)
Nimboran [nir]	DnAN	May (1997: 161)
Niuean [niu]	NnAD	Seiter (1980: 27, 46)
Nkonya [nko]	nAND	Painter (1970: 282)
Nkore-Kiga [cgg]	nDAN	Taylor (1985: 55)
Noon [snf]	nDAN	Soukka (2000: 133)
Northern Mao [myf]	DNAn	Ahland (2012: 309)
Norwegian [nor]	DNAn	Lohndal (2007: 294)

[25] Although the formula in Van Den Berg (1989: 133) allows numerals (there called measure phrases) either before of after the noun, the preferred position is before the noun (p. 110)

[26] The formula includes demonstratives before the noun, but the discussion implies that the postnominal position is more common.

[27] Formula p. 251 says Dem-Num-A-N-A, but the text says that it is adjectives for 'good' and 'big' that precede the noun, while others follow, so I treat N-Adj as basic.

[28] Numerals in Nias either precede or follow the noun, but when definite follow the noun.

Nuaulu [nxl]	nAND	Bolton (1990: 71)
Nubian (Dongolese) [dgl]	DnAN	Armbruster (1960: 320, 359)
Nubian (Kunuz) [xnz]	DnAN	Abdel-Hafiz (1988: 205, 207)
Nung (in Vietnam) [nut]	NnAD	Saul and Wilson (1980: 14)
Nuosu [iii]	nAND	Gerner (2013: 64)
Nupe [nup]	nADN	Smith (1967: 19-20)
Nyakyusa [nyy]	nDNA	Lusekelo (2009: 322)
Nyangatom [nnj]	nAND	Schröder and Kadanya (2011: 20)
Odoodee [kkc]	nAND	Hays and Hays (2002: 55)
Ofayé [opy]	DNnA	De Oliveira (2006: 106)
Ömie [aom]	DnAN	Austing and Upia (1975: 522-523, 528)
Oriya [ory][29]	DAnN	Neukom and Patnaiki (2003: 125)
Orokaiva [okv]	nAND	Healey et al. (1969: 49)
Oromo (Harar) [hae]	nAND	Owens (1985: 86)
Oromo (Waata) [ssn]	nNAD	Heine (1981: 35)
Ossetic [oss]	DNAn	David Eschler (pc)
Otomí (Mezquital) [ote]	DNAn	Hess (1968: 47-49)
Otomí (Santiago Mexquititlan) [otq]	DNnA	Palancar (2009: 92, 119)
Ottawa [otw]	DNnA	Kathol and Rhodes (1999: 75, 78)
Pacoh [pac]	NnAD	Alves (2006: 43)
Padoe [pdo]	NnAD	Karhunen (1994: 17, 45)
Páez [pbb]	DNnA	Rojas (1998: 202)
Pagu [pgu]	nDAN	Wimbish (1991: 25)
Palauan [pau]	DNAn	Josephs (1975: 480)
Palaung [pll]	nAND	Mak (2012: 24)
Palikur [plu]	DNnA	Green and Green (1972: 23-25)
Palula [phl]	DNAn	Liljegren (2008: 245, 2016: 280)
Pame (Southern) [pmz]	DNnA	Manrique (1967: 346)
Panare [pbh]	DNAn	Payne and Payne (2013: 268)
Panjabi [pan] CK forA=V	DNAn	Gill and Gleason (1963: 167)
Parauk [prk]	nADN	Seng (2012: 61)
Paresi [pab][30]	DNnA	Brandão (2014: 218)
Pashto [pst]	DNAn	Tegey and Robson (1996: 171), Robson and Tegey (2009: 754)
Patpatar [gfk][31]	DNAn	Condra (1989: 89, 92-93, 103-104);CKed

[29] Although the numeral more often precedes the noun in Oriya, it more commonly follows if the noun phrase is definite (Neukom and Patnaiki (2003: 117). Since noun phrases with a demonstrative are definite, I treat the language as Dem-A-N-Num.

[30] The formula in Brandão (2014: 218) shows the demonstrative and numeral preceding the noun, in that order, while she says (p. 131) that the adjective more often follows then noun.

Pawaian [pwa][32]	DAnN	Trefry (1969: 38)
Pendau [ums]	NnAD	Quick (2007: 148)
Piaroa [pid]	DnAN	Krute (1989: 146)
Pima Bajo [pia]	DNAn	Estrada Fernández (2014: 114)
Pingilapese [pif]	nAND	Good and Welley (1989: 8)
Pitjantjatjara [pjt]	nDAN	Bowe (1990: 31, 35)
Plang [blr]	nAND	Lewis (2008: 52)
Poko-Rawo [rwa]	nAND	own fieldwork
Polish [pol]	DNAn	Barbara Jacennik (pc)
Popoluca (Sierra) [poi][33]	NDAn	de Jong Boudreault (2009: 237, 248), Lynda de Jong Boudreault (pc)
Port Sandwich [psw]	nADN	Crowley (2002b: 653)
Pumi [pmi]	DnAN	Ding (1998), Ding (2014: 162)
Purki [prx]	DAnN	Rangan (1979: 122), Sharma (2004: 72)
Qiang [cng]	nADN	LaPolla (2003: 39)
Quechua (Huallaga) [qub]	DNAn	Weber (1989: 17)
Ramoaaina [rai][34]	NAnD	Davies and Fritzell (1992: 21, 39)
Rapanui [rap]	NnAD	Chapin (1978: 152)
Rendille [rel]	nDNA	Heine (1976: 196)
Rengao [ren]	NnAD	Gregerson (1979: 125, 130)
Resígaro [rgr]	DNAn	Allin (1976: 223)
Retuarã [tnc][35]	DnNA	Strom (1992: 53)
rGyalrong (Caodeng) [jya]	DnAN	Sun (2003: 498);
Roro [rro]	nADN	Kim and Kim (1998: 41)
Rotuman [rtm]	nAND	Schmidt (2002: 823), Vamarasi (2002: 46)
Roviana [rug]	NnAD	Corston-Oliver (2002: 476)
Rukai (Tanan) [dru]	DNAn	Li (1973: 73)
Runyankore [nyn]	nDAN	Morris and Kirwan (1972: 167)
Russian [rus]	DNAn	Rijkhoff (1997: 343)

[31] The formula given by Condra (1989: 89) shows both demonstratives and adjectives either preceding or following the noun, but the discussion on pp. 92-93 implies that DemN is basic while that on 103-104 implies that AdjN is basic)

[32] Although the formula in Trefry (1969: 38) provides the possibility of adjectives either preceding or following the noun, the discussion on p. 38 implies that the prenominal position is the dominant one.

[33] It is clear from de Jong Boudreault (2009: 237, 248) that all three modifiers of the noun precede the noun and that the numeral precedes both the demonstrative and the adjective. Lynda de Jong Boudreault (pc) confirms that the demonstrative precedes the adjective.

[34] The formula given by Davies and Fritzell (1992: 39) includes slots for adjectives both before and after the noun, but only a few adjectives follow the noun (p. 21).

[35] Modifiers in general precede the noun in Retuarã, but only one modifier can precede the noun; in noun phrases containing a demonstrative, numeral and adjective, the demonstrative precedes the noun while the numeral and adjective follow, in that order (Strom 1992: 53).

Samba Leko [ndi]	nAND	Fabre (2002: 202)
Sandawe [sad][36]	DnAN	Eaton (2008: 108), Steeman2012., van de Kimmenade1954.
Sango [sag]	AnND	Samarin (1967: 62)
Sanjiang Kam [cov]	NnAD	Wu (2015: 173)
Santa [sce]	DNAn	Field (1997: 243)
Santali [sat]	DNAn	Ghosh (2004: 76)
Sarcee [srs]	DNnA	Cook (1984: 60)
Sardinian [sro]	DNnA	Jones (1993: 45)
Sare [dju]	DNAn	Sumbuk (1999: 125)
Saryg Yugur [ybe]	DNAn	Roos (2000: 138)
Savosavo [svs]	DNAn	Wegener (2008: 121; 2012: 119)
Secoya [sey]	DNAn	Johnson and Levinsohn (1990: 50)
Seediq [trv]	NnAD	Tsukida (2005: 304)
Seimat [ssg]	NnAD	Wozna and Wilson (2005: 32)
Selaru [slu]	nAND	Coward (1990: 44)
Selayar [sly][37]	NnAD	Basri (1999: 37, 38, 44, 86, 89)
Selee [snw]	nAND	Agbetsoamedo (2014: 27)
Selepet [spl]	nAND	McElhanon (1972: 76)
Selknam [ona][38]	DNnA	Najlis (1973: 54, 74)
Serbian-Croatian [srp]	DNAn	Browne and Alt (2004: 63)
Shughni [sgh]	DNAn	Edelman and Dodykhudoeva (2009: 801)
Sidaama [sid]	DNAn	Kawachi (2007: 513)
Sinaugoro [snc]	DnAN	Kolia (1975: 123)
Sio [xsi]	nAND	Clark and Clark (1987: 46)
Siona [snn]	DNAn	Wheeler (1970: 76)
Sipakapense [qum]	DNAn	Barrett (1999: 200, 202)
Siroi [ssd]	nAND	Wells (1979: 44)
Sisaala (Western) [ssl]	nADN	Moran (2006: 113)
Sisiqa [baa]	NnAD	Ross (2002d: 460)
Slave [den]	DnNA	Rice (1989: 998)
So [teu]	nDNA	Serzisko (1989: 391)
Spanish [spa]	DNnA	Green (1988: 104)
Sre [kpm]	NnAD	Manley (1972: 82)
Stieng [sti]	nAND	Miller (1976: 21)

[36] The classification of Sandawe as DemN is based on Eaton (2008). Both Steeman (2012) and van de Kimmenade (1954: 17) claim that NDem is the basic order. However, Eaton claims that the postnominal one is anaphoric, implying the prenominal one is exophoric.

[37] Numerals precede nouns Basri (1999: 37), while adjectives follow nouns (p. 38) and demonstratives are enclitics that attach to adjectives if there is one (p. 44, 86, 89).

[38] Semantic adjectives occur in relative clauses attributively and these follow the noun (Najlis 1973: 74). The demonstrative and numeral precede the noun in that order (Najlis 1973: 54)

Sudest [tgo]	nAND	Anderson and Ross (2002: 330)
Sulka [sua]	nNAD	Tharp (1996: 115)
Sundanese [sun]	NnAD	Hardjadibrata (1985: 38-40)
Swahili [swh]	nDAN	Ashton (1947: 52), Rugemalira (2007: 142, 144)
Taba [mky]	nAND	Bowden (1997: 204; 2001: 179)
Tadaksahak [dsq]	nDNA	Christiansen-Bolli (2010: 143)
Tafi [tcd]	nAND	Bobuafor (2013: 99)
Taiof [sps]	NnAD	Ross (2002a: 429-430)
Takia [tbc]	nADN	Ross (2002e: 227)
Tamambo [mla]	nADN	Jauncey (2011: 177)
Tamang (Eastern) [taj]	DAnN	Mazaudon (2003: 297)
Tamil [tam]	DNAn	Asher (1982: 65)
Tariana [tae][39]	DnNA	Aikhenvald (2003: 475, 477, 479)
Tatana' [txx]	NnAD	Dillon (1994: 13), Dunn and Peck (1988: 207)
Tatar [tat]	DNAn	Poppe (1968: 114)
Tauya [tya]	DnAN	MacDonald (1990: 85, 105)
Tawala [tbo]	DnAN	Ezard (1997: 139)
Tboli [tbl][40]	NnAD	Porter (1977; 52)
Temiar [tea]	NnAD	Benjamin (1976: 155), Carey (1961)
Teop [tio]	NnDA	Mosel and Spriggs (1992: 42), Mosel and Thiesen (2007: 97)
Tepehua (Huehuetla) [tee]	DNAn	Kung (2007: 405)
Thai [tha]	nAND	Smyth (2002: 36)
Thavung [thm]	nAND	Srisakorn (2008: 88)
Tibetan (Drokpa) [bod]	nAND	Kretschmar (1986: 84)
Tibetan (Modern Literary) [bod]	nADN	Goldstein (1991: 51-52)
Tibetan (Standard Spoken) [bod]	nADN	DeLancey (2003: 273)
Tidore [tvo]	nAND	Van Staden (2000: 193)
Tifal [tif]	nAND	Boush (1975: 43-44)
Tigak [tgc]	NnAD	Beaumont (1979: 58, 60, 64)
Tikar [tik]	nAND	Stanley (1991: 211)
Tiwi [tiw]	DNAn	Osborne (1974: 73)
Tommo So [dto]	nAND	McPherson (2013: 106, 169)
Tondano [tdn]	nAND	Sneddon (1975: 114)
Toratán [rth]	NnAD	Himmelmann and Wolff (1999: 28)

[39] The demonstrative always precedes the noun, and although adjectives and numeral can either precede or follow the noun, only one modifier of the noun can precede the noun, so in noun phrases containing a demonstrative, numeral and adjective, the numeral and adjective will both follow the noun (Aikhenvald 2003: 479). When there are both a numeral and adjective following the noun, the numeral comes first (p. 477).

[40] Although the formula Dem-Num-N-A-Dem gives two positions for demonstratives, the examples in the grammar are overwhelmingly NDem.

Torwali [trw]	DNAn	Lunsford (2001: 45)
Towa [tow]	DNnA	Myers (1970: 6-8)
Trique (Copala) [trc]	NnAD	Hollenbach (1992: 279)
Tsez [ddo]	DNAn	Alekseev and Radzhabov (2004: 148)
Tshangla [tsj]	DAnN	Andvik (1999: 124, 2003: 441, 2010: 78)
Tsimshian (Coast) [tsi]	NAnD	Dunn (1979: 56-57)
Tubar [tbu]	DNnA	Lionnet (1978: 41)
Tugun [tzn]	nAND	Hinton (1991: 45)
Tujia (Northern) [tji]	DnAN	Brassett, Brassett and Lu (2006: 106)
Tukang Besi [khc]	nAND	Donohue (1999a: 304)
Tungak [lcm]	NnAD	Fast (1990: 34)
Turkana [tuv]	nAND	Dimmendaal (1983: 206)
Turkish [tur]	DNAn	Kornfilt (1997: 109)
Tzeltal [tzh]	DNAn	Polian (2004: 163; 2013: 395)
Udihe [ude]	DNAn	Nikolaeva and Tolskaya (2001: 505)
Udmurt [udm]	DNAn	Winkler (2001: 69)
Uldeme [udl]	nADN	de Colombel (2005: 29)
Una [mtg]	DnNA	Louwerse (1988: 92)
Unua [onu]	nAND	Pearce (2011: 186, 2015: 206)
Urarina [ura]	DNnA	Olawsky (2006: 654)
Urdu [urd]	DNAn	Z. Faquih (pc)
Urim [uri]	nAND	Hemmilä and Luoma (1987: 122)
Usan [wnu]	nAND	Reesink (1987: 120)
Uzbek [uzn]	DNAn	Boeschoten (1998: 371)
Vai [vai]	nAND	Welmers (1976: 66)
Vietnamese [vie]	NnAD	Binh (1971: 139)
Vinitiri [vmg]	DNnA	Van Der Mark (2007: 110)
Vinmavis [vnm]	nAND	Crowley (2002c: 642)
Waigali [wbk]	NDAn	Degener (1998: 226-227)
Wakhi [wbl]	DNAn	Bashir (2009: 840)
Wala [lgl]	NnAD	Lovegren, Mitchell and Nakagawa (2015: 109)
Walman [van]	nAND	own data
Wappo [wao]	DnNA	Thompson et al (2006: 8)
Warembori [wsa]	nADN	Donohue (1999b: 20)
Waskia [wsk]	nAND	Ross and Paol (1978: 38)
Welsh [cym]	NnAD	Willis (2006: 5)
Woisika [woi]	nAND	Schapper (2014: 307)
Woleaian [woe]	NnAD	Sohn (1975: 168, 170)
Wolio [wlo]	NnAD	Anceaux (1952: 37)
Wolof [wof][41]	NnAD	Njie (1982: 69-74)

[41] The demonstrative follows the noun (Njie 1982: 72-73), as does the adjective, but preceding the demonstrative (Njie 1982: 74). The numeral precedes the noun (Njie 1982: 69).

Wuvulu [wuv]	DNAn	Hafford (2014: 66)
Xârâcùù [ane]	NAnD	Lynch (2002b: 769)
Xasonga [kao]	DnAN	Koité-Herschel (1981: 115, 118)
Xinca (Guazacapán) [xin][42]	NAnD	Rogers (2010: 196, 219)
Xong [mmr]	NnAD	Sposato (2015: 2, 319)
Yaaku [muu]	nAND	Heine (1975: 40)
Yagaria [ygr][43]	DAnN	Renck (1975: 167)
Yagua [yad]	DNnA	Payne and Payne (1990: 349)
Yakan [yka][44]	nAND	Brainard and Behrens (2002: 29-30)
Yale (Kosarek) [kkl]	nAND	Heeschen (1992: 29)
Yapese [yap]	NnDA	Jensen (1977: 153, 166, 168)
Yaqui [yaq]	DNAn	Lindenfeld (1973: 25-26, 78)
Yay [pcc]	NnAD	Boonsawasd (2012: 152)
Yemsa [jnj]	DNAn	Lamberti (1993: 270)
Yeri [yev]	nAND	Wilson (2017: 303)
Yoruba [yor]	nAND	Bamgbose (1966: 124), Rowlands (1969: 125)
Yuchi [yuc]	DnAN	Linn (2001: 399, 403, 408), Wagner (1934: 346)
Yuqui [yuq]	DnAN	Villafañe (2004: 79)
Zapotec (Isthmus) [zai]	NnAD	Pickett et al. (1998: 40)
Zapotec (Juarez) [zaa]	NnAD	Foreman (2006: 203)
Zapotec (Zoogocho) [zpq]	NnAD	Sonnenschein (2004: 154)
Zarma [dje]	nAND	Tersis (1972: 121-122)
Zazaki [diq]	DNnA	Paul (2009: 128)

[42] The formula given by Rogers (2010: 219) shows two positions for adjectives, one before the noun and one after the noun, but he reports (p. 196) that the prenominal position is more common.

[43] The formula in Renck (1975: 167) allows adjectives in postnominal position, but p. 180 implies that the prenominal position is the dominant one.

[44] Both orders of numeral and noun in Yakan are possible, but the prenominal one is for indefinite noun phrases while the postnominal one is for definite noun phrases. Since noun phrases containing a demonstrative are definite, I treat the NNum order as basic for the purposes of this study. Although Brainard and Behrens (2002) do not appear to discuss the order of postnominal adjective and numeral in Yakan, there is a clitic -in (of complex function) that follows adjectives but precedes numerals, implying that the position for adjectives precedes that for numerals.

3. General comments on data in §5 to §13 (Tables 3 to 10 and 13)

The set of languages that provide the basis of the data in Tables 3 to 10 and 13 is not the same as the 576-language basic sample represented in Tables 1, 2, and 11. Nor is the set of languages for these nine tables the same for each table. All data comes from my typological database, which contains data for over 2100 languages. The different samples are due in part to my having only partial data for many of the languages in my database.

There are some languages in Tables 3, 4, 5, and 6 involving different languages where two modifiers occur on the same side of the noun that are not in the basic 576-language sample, where it is possible to identify a dominant order of two modifiers, but not the third modifier. For example, Kagulu [kki] is included in Tables 3 and 4 as a language in which the adjective occurs on the same side of the noun as both the numeral and the demonstrative but occurs outside both of them. Kagulu is not included in the 576-sample since it is not clear whether there is a dominant order of the numeral and demonstrative, whether the numeral occurs inside the demonstrative or outside it. (Note that if it more often occurs inside the demonstrative, the language would be a second instance of the rarest type in the sample, nNDA.)

4. Data for Table 3

	Adj closer to noun than Num		Adj further from noun than Num		Percent closer
	#Lgs	Frequency	#Lgs	Frequency	
Adj is verb	53	27.90	7	3.25	.90
Adj is not verb	214	69.17	21	5.04	.93

Table 3
Relationship between whether semantic adjectives are verbs and whether they occur closer to the noun than numerals when both occur on the same side of the noun

4.1. Semantic adjectives are verbs, adjective is closer to noun than numeral (both occur on the same side of the noun) (53 languages, 39 genera):

Niger-Congo: BANTOID: Aghem [agq].
Niger-Congo: NUPOID: Nupe [nup].
Niger-Congo: KWA: Selee [snw].
Niger-Congo: CANGIN: Ndut [ndv].
Songhay: SONGHAY: Koyra Chiini [khq].
East Sudanic: NILOTIC: Turkana [tuv].
Afro-Asiatic: MAO: Northern Mao [myf].
Korean: KOREAN: Korean [kor].
Ainu: AINU: Ainu [ain].
Sino-Tibetan: MAHAKIRANTI: Chepang [cdm], Athpare [aph].
Sino-Tibetan: QIANGIC: Qiang [cng], Pumi [pmi].
Sino-Tibetan: rGYALRONG: Gyarong (Cogtse) [jya].

Sino-Tibetan: BODO-GARO: Kokborok [trp], Garo [grt].
Sino-Tibetan: KUKI-CHIN: Ao [njo], Naga (Mao) [nbi].
Sino-Tibetan: BURMESE-LOLO: Burmese [mya], Nuosu [iii].
Sino-Tibetan: NUNGISH: Anong [nun].
Austronesian: RUKAI: Rukai (Tanan) [dru].
Austronesian: EAST FORMOSAN: Amis [ami].
Austronesian: PALAUAN: Palauan [pau].
Austronesian: CELEBIC: Tukang Besi [khc].
Austronesian: NORTH BORNEO: Begak-Ida'an [dbj].
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Nias [nia].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Tugun [tzn], Leti [lti].
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Taba [mky], Biak [bhw].
Austronesian: OCEANIC: Sudest [tgo], Roro [rro], Amara [aie], Wuvulu [wuv], Mokilese [mkj], Mavea [mkv].
Trans-New Guinea: OK: Tifal [tif].
Bosavi: BOSAVI: Edolo [etr].
Maybrat: MAYBRAT: Maybrat [ayz].
Hatam: HATAM-MANSIM: Hatam [had].
West Papuan: NORTH HALMAHERAN: Pagu [pgu].
East Bird's Head: EAST BIRD'S HEAD: Moskona [mtj].
Eskimo-Aleut: ESKIMO: Greenlandic (West) [kal].
Haida: HAIDA: Haida [hai].
Siouan: CORE SIOUAN: Mandan [mhq], Assiniboine [asb].
Muskogean: MUSKOGEAN: Choctaw [cho], Creek [mus].
Mixe-Zoque: MIXE-ZOQUE: Zoque (Chimalapa) [zoh].
Oto-Manguean: OTOMIAN: Otomí (Mezquital) [ote].
Arawakan: CARIBBEAN ARAWAKAN: Arawak [arw].
Tacanan: TACANAN: Araona [aro].

4.2. Semantic adjectives are verbs, numeral is closer to noun than adjective (both occur on the same side of the noun) (7 languages, 6 genera):

Kordofanian: HEIBAN: Moro [mor].
Songhay: SONGHAY: Tadaksahak [dsq].
East Sudanic: NILOTIC: Luo [luo].
Kuliak: KULIAK: Ik [ikx], So [teu].
Austronesian: OCEANIC: Paamese [pma].
Na-Dene: ATHAPASKAN: Slave [den].

4.3. Semantic adjectives are not verbs, adjective is closer to noun than numeral (both occur on the same side of the noun) (214 languages, 118 genera):

Khoe-Kwadi: KHOE-KWADI: Nama [naq], //Ani [hnh].
Sandawe: SANDAWE: Sandawe [sad].
Niger-Congo: BANTOID: Chichewa [nya], Swahili [swh], Runyankore [nyn],

Ndumu [nmd], Mungbam [mij], Tikar [tik].
Niger-Congo: EDOID: Engenni [enn].
Niger-Congo: IGBOID: Igbo [ibo], Iká [ikk].
Niger-Congo: JUKUNOID: Jukun [jbu].
Niger-Congo: PLATOID: Birom [bom].
Niger-Congo: KWA: Anufo [cko], Logba [lgq], Igo [ahl], Ewe [ewe], Adioukrou [adj].
Niger-Congo: SAMBA-DURU: Dii [dur], Doyayo [dow].
Niger-Congo: BUA: Lua [nie].
Niger-Congo: MEL: Baga Sitemu [bsp].
Niger-Congo: CANGIN: Noon [snf].
Kordofanian: KATLA-TIMA: Tima [tms].
Mande: EASTERN MANDE: Mona [moa], Busa [bqp].
Mande: WESTERN MANDE: Mandinka (Gambian) [mnk], Vai [vai], Bobo Madaré (Southern) [bwq], Dzùùngoo [dnn].
Dogon: DOGON: Donno So [dds], Jamsay [djm], Tommo So [dto].
Saharan: EASTERN SAHARAN: Beria [zag].
Saharan: WESTERN SAHARAN: Kanuri [knc].
East Sudanic: NUBIAN: Nubian (Dongolese) [dgl], Nubian (Kunuz) [xnz].
East Sudanic: DAJU: Laggori [liu].
East Sudanic: NILOTIC: Bari [bfa].
Kunama: KUNAMA: Kunama [kun].
Koman: KOMAN: Gwama [kmq].
Afro-Asiatic: NORTH OMOTIC: Yemsa [jnj], Kullo [dwr], Gamo [gmv].
Afro-Asiatic: WEST CHADIC: Ngizim [ngi], Miya [mkf].
Afro-Asiatic: HIGHLAND EAST CUSHITIC: Sidaama [sid].
Afro-Asiatic: LOWLAND EAST CUSHITIC: Oromo (Harar) [hae].
Afro-Asiatic: YAAKU: Yaaku [muu].
Afro-Asiatic: SEMITIC: Harari [har].
Indo-European: GERMANIC: Swedish [swe], Norwegian [nor], German [deu], English [eng].
Indo-European: SLAVIC: Russian [rus], Polish [pol], Czech [ces], Bulgarian [bul], Serbian-Croatian [srp].
Indo-European: GREEK: Greek (Modern) [ell].
Indo-European: ARMENIAN: Armenian (Eastern) [hye].
Indo-European: IRANIAN: Ossetic [oss], Pashto [pst], Wakhi [wbl], Baluchi [bgn].
Indo-European: INDIC: Marathi [mar], Urdu [urd], Lamani [lmn], Gujarati [guj], Kumauni [kfy], Kalami [gwc], Torwali [trw], Brokskat [bkk], Palula [phl], Kashmiri [kas].
Uralic: SAMOYEDIC: Nenets (Tundra) [yrk].
Uralic: UGRIC: Hungarian [hun], Khanty [kca].
Uralic: PERMIC: Udmurt [udm].
Uralic: FINNIC: Finnish [fin].
Altaic: MONGOLIC: Dagur [dta], Mangghuer [mjg].
Altaic: TUNGUSIC: Evenki [evn], Udihe [ude].
Altaic: TURKIC: Azerbaijani [azj], Uzbek [uzn], Bashkir [bak], Tatar [tat].

Yeniseian: YENISEIAN: Ket [ket].
Kartvelian: KARTVELIAN: Georgian [kat].
Nakh-Daghestanian: AVAR-ANDIC-TSEZIC: Godoberi [gdo], Tsez [ddo], Hunzib [huz].
Burushaski: BURUSHASKI: Burushaski [bsk].
Dravidian: SOUTH-CENTRAL DRAVIDIAN: Kuvi [kxv].
Dravidian: SOUTHERN DRAVIDIAN: Kannada [kan], Malayalam [mal].
Austro-Asiatic: MUNDA: Remo [bfw].
Sino-Tibetan: KAREN: Karen (Sgaw) [ksw].
Sino-Tibetan: BODIC: Nar-Phu [npa], Chantyal [chx], Tibetan (Modern Literary) [bod], Lhomi [lhm], Kurtöp [xkz], Kinnauri [kfk], Darma [drd], Byansi [bee].
Sino-Tibetan: MAHAKIRANTI: Magar [mrd].
Sino-Tibetan: KUKI-CHIN: Lotha [njh], Naga (Tangkhul) [nmf], Bawm [bgr].
Sino-Tibetan: BURMESE-LOLO: Lolo (Yao'An) [ycl].
Sino-Tibetan: TANI: Apatani [apt].
Austronesian: MINAHASAN: Tondano [tdn].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Nuaulu [nxl], Selaru [slu].
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Warembori [wsa].
Austronesian: OCEANIC: Maisin [mbq], Arop-Sissano [aps], Takia [tbc], Sio [xsi], Maleu [mgl], Lusi [khl], Jabêm [jae], Bukawa [buk], Labu [lbu], Buang (Mapos) [bzh], Tawala [tbo], Koluwawa [klx], Iduna [viv], Ala'ala [nrz], Loniu [los], Xârâcùù [ane], Daakaka [bpa], Maori [mri].
Trans-New Guinea: DUNA: Duna [duc].
Trans-New Guinea: ANGAN: Menya [mcr].
Trans-New Guinea: FINISTERRE-HUON: Nabak [naf], Iyo [nca], Nankina [nnk].
Trans-New Guinea: CHIMBU: Golin [gvf], Kuman [kue].
Trans-New Guinea: ENGAN: Kyaka [kyc].
Trans-New Guinea: OK: Bimin [bhl], Mian [mpt].
Trans-New Guinea: DANI: Nggem [nbq].
Trans-New Guinea: MADANG: Kobon [kpw], Anamuxra [imi], Tauya [tya], Amele [aey], Bargam [mlp], Maia [sks], Mauwake [mhl], Usan [wnu].
Trans-New Guinea: MEK: Yale (Kosarek) [kkl].
Trans-New Guinea: BINANDEREAN: Guhu-Samane [ghs], Orokaiva [okv].
Mairasi: MAIRASI: Mairasi [zrs].
Koiarian: KOIARIAN: Barai [bbb], Ömie [aom].
Timor-Alor-Pantar: GREATER ALOR: Klon [kyo].
East Strickland: EAST STRICKLAND: Odoodee [kkc].
Dagan: DAGAN: Daga [dgz].
Eleman: TATE: Kaki Ae [tbd].
Nimboran: NIMBORAN: Nimboran [nir].
Skou: WESTERN SKOU: Wutung [wut].
Skou: SERRA HILLS: Poko-Rawo [rwa].
Torricelli: URIM: Urim [uri].
Torricelli: WAPEI-PALEI: Au [avt], Yeri [yev], Walman [van].
Torricelli: KOMBIO-ARAPESH: Arapesh (Mountain) [ape].
Torricelli: MARIENBERG: Kamasau [kms].

Sepik: ABAU: Abau [aau].
Sepik: RAM: Awtuw [kmn].
Sepik: YELLOW RIVER: Namia [nnm].
Sepik: SEPIK HILL: Sare [dju], Alamblak [amp].
Solomons East Papuan: SAVOSAVO: Savosavo [svs].
Anêm: ANêM: Anêm [anz].
South Bougainville: SOUTH BOUGAINVILLE: Motuna [siw].
Tiwian: TIWIAN: Tiwi [tiw].
Wagiman: WAGIMAN: Wagiman [waq].
Pama-Nyungan: NORTHERN PAMA-NYUNGAN: Kugu Nganhcara [uwa], Kuuk Thaayorre [thd].
Pama-Nyungan: SOUTHEASTERN PAMA-NYUNGAN: Bandjalang [bdy].
Pama-Nyungan: CENTRAL PAMA-NYUNGAN: Arrernte (Mparntwe) [aer].
Pama-Nyungan: WESTERN PAMA-NYUNGAN: Pitjantjatjara [pjt].
Yuchi: YUCHI: Yuchi [yuc].
Penutian: TSIMSHIANIC: Tsimshian (Coast) [tsi].
Penutian: KLAMATH-MODOC: Klamath [kla].
Totonacan: TOTONACAN: Tepehua (Huehuetla) [tee].
Mixe-Zoque: MIXE-ZOQUE: Mixe (Ayutla) [mxp].
Mayan: MAYAN: Jakaltek [jac], Sipakapense [qum].
Uto-Aztecan: NUMIC: Paiute (Northern) [pao], Tümpisa Shoshone [par].
Uto-Aztecan: TEPIMAN: Pima Bajo [pia].
Uto-Aztecan: CAHITA: Yaqui [yaq].
Xincan: XINCAN: Xinca (Guazacapán) [xin].
Chibchan: TALAMANCA: Bribri [bzd].
Chibchan: GUAYMIIC: Ngäbere [gym].
Chibchan: CHIBCHA-DUIT: Muisca [chb].
Choco: CHOCO: Emberá (Northern) [emp].
Barbacoan: BARBACOAN: Awa Pit [kwi].
Quechuan: QUECHUAN: Quechua (Huallaga) [qub].
Aymaran: AYMARAN: Jaqaru [jqr].
Araucanian: ARAUCANIAN: Mapudungun [arn].
Tupian: TUPI-GUARANÍ: Yuqui [yuq].
Arauan: ARAUAN: Kulina [cul].
Uru-Chipaya: URU-CHIPAYA: Chipaya [cap].
Arawakan: INLAND NORTHERN ARAWAKAN: Resígaro [rgr].
Fulniô: FULNIÔ: Fulniô [fun].

4.4. Semantic adjectives are not verbs, numeral is closer to noun than adjective (both occur on the same side of the noun) (21 languages, 15 genera):

Niger-Congo: BANTOID: Zulu [zul], Nyakyusa [nyy], Kagulu [kki], Haya [hay], Bembe [bmb].
Niger-Congo: PLATOID: Migili [mgi].
Maban: MABAN: Maba [mde].
Fur: FUR: Fur [fvr].

Afro-Asiatic: LOWLAND EAST CUSHITIC: Rendille [rel], Oromo (Waata) [ssn].
Indo-European: INDIC: Dhivehi [div].
Nakh-Daghestanian: NAKH: Chechen [che], Ingush [inh].
Austronesian: OCEANIC: Kele [sbc].
Trans-New Guinea: MADANG: Girawa [bbr].
Trans-New Guinea: MEK: Una [mtg].
South Bird's Head: SOUTH BIRD'S HEAD: Inanwatan [szp].
Senagi: SENAGI: Anggor [agg].
Torricelli: KOMBIO-ARAPESH: Arapesh (Abu) [aah].
Wappo-Yukian: WAPPO: Wappo [wao].
Tucanoan: TUCANOAN: Retuarã [tnc].

5. Data for Table 4

	Adj closer to noun than Dem		Adj further from noun than Dem		Percent closer
	#Lgs	Frequency	#Lgs	Frequency	
Adj is verb	66	32.64	5	2.63	.93
Adj is not verb	217	67.32	20	6.92	.91

Table 4
Relationship between whether semantic adjectives are verbs and whether they occur closer to the noun than demonstratives when both occur on the same side of the noun

5.1. Semantic adjectives are verbs, adjective is closer to noun than demonstrative (both occur on the same side of the noun) (66 languages, 47 genera):

Niger-Congo: BANTOID: Aghem [agq].
Niger-Congo: NUPOID: Nupe [nup].
Niger-Congo: KWA: Selee [snw].
Niger-Congo: CANGIN: Ndut [ndv].
Songhay: SONGHAY: Koyra Chiini [khq].
East Sudanic: NILOTIC: Luo [luo], Turkana [tuv].
Afro-Asiatic: MAO: Northern Mao [myf].
Korean: KOREAN: Korean [kor].
Austro-Asiatic: ASLIAN: Jahai [jhi], Temiar [tea].
Austro-Asiatic: NICOBARESE: Nicobarese (Car) [caq].
Sino-Tibetan: MAHAKIRANTI: Chepang [cdm], Athpare [aph].
Sino-Tibetan: QIANGIC: Qiang [cng].
Sino-Tibetan: KUKI-CHIN: Ao [njo], Naga (Mao) [nbi].
Sino-Tibetan: BURMESE-LOLO: Nuosu [iii].
Sino-Tibetan: NUNGISH: Anong [nun].
Austronesian: ATAYALIC: Seediq [trv].
Austronesian: RUKAI: Rukai (Tanan) [dru].
Austronesian: EAST FORMOSAN: Amis [ami].
Austronesian: PALAUAN: Palauan [pau].

Austronesian: NORTHERN LUZON: Ilocano [ilo].
Austronesian: CELEBIC: Wolio [wlo], Tukang Besi [khc], Pendau [ums].
Austronesian: NORTH BORNEO: Begak-Ida'an [dbj], Tatana' [txx].
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Nias [nia].
Austronesian: MALAYO-SUMBAWAN: Acehnese [ace].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Tugun [tzn], Leti [lti].
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Taba [mky], Biak [bhw].
Austronesian: OCEANIC: Sudest [tgo], Roro [rro], Amara [aie], Wuvulu [wuv], Hoava [hoa], Mokilese [mkj], Pohnpeian [pon], Nahavaq [sns], Mavea [mkv].
Trans-New Guinea: OK: Tifal [tif].
Bosavi: BOSAVI: Edolo [etr].
Maybrat: MAYBRAT: Maybrat [ayz].
Hatam: HATAM-MANSIM: Hatam [had].
West Papuan: NORTH HALMAHERAN: Ternate [tft].
East Bird's Head: EAST BIRD'S HEAD: Moskona [mtj].
Iwaidjan: IWAIDJAN: Maung [mph].
Eskimo-Aleut: ESKIMO: Greenlandic (West) [kal].
Algic: YUROK: Yurok [yur].
Algic: ALGONQUIAN: Blackfoot [bla].
Salishan: CENTRAL SALISH: Halkomelem (Upriver) [hur].
Siouan: CORE SIOUAN: Mandan [mhq], Assiniboine [asb].
Muskogean: MUSKOGEAN: Choctaw [cho].
Mixe-Zoque: MIXE-ZOQUE: Zoque (Chimalapa) [zoh].
Hokan: SERI: Seri [sei].
Oto-Manguean: OTOMIAN: Otomí (Mezquital) [ote].
Oto-Manguean: MIXTECAN: Mixtec (Jicaltepec) [mio].
Oto-Manguean: ZAPOTECAN: Zapotec (Isthmus) [zai].
Arawakan: CARIBBEAN ARAWAKAN: Goajiro [guc], Arawak [arw].
Je-Jabutí: GE-KAINGANG: Canela [ram].

5.2. Semantic adjectives are verbs, demonstrative is closer to noun than adjective (both occur on the same side of the noun) (5 languages, 4 genera):

Kordofanian: HEIBAN: Moro [mor].
Songhay: SONGHAY: Tadaksahak [dsq].
Kuliak: KULIAK: Ik [ikx], So [teu].
West Papuan: NORTH HALMAHERAN: Pagu [pgu].

5.3. Semantic adjectives are not verbs, adjective is closer to noun than demonstrative (both occur on the same side of the noun) (217 languages, 115 genera):

Kxa: =|HOAN: =|Hoan [huc].
Khoe-Kwadi: KHOE-KWADI: Nama [naq], //Ani [hnh].
Niger-Congo: BANTOID: Chichewa [nya], Ndumu [nmd], Mungbam [mij], Tikar [tik].

Niger-Congo: EDOID: Engenni [enn].
Niger-Congo: IGBOID: Igbo [ibo], Iká [ikk].
Niger-Congo: PLATOID: Migili [mgi], Birom [bom].
Niger-Congo: KWA: Logba [lgq], Igo [ahl], Ewe [ewe].
Niger-Congo: SAMBA-DURU: Dii [dur], Doyayo [dow].
Niger-Congo: MBUMIC: Mundang [mua].
Niger-Congo: PEUL-SERER: Fulfulde (Nigerian) [fuv], Fulfulde (Adamawa) [fub].
Niger-Congo: WOLOF: Wolof [wof].
Mande: EASTERN MANDE: Busa [bqp].
Mande: WESTERN MANDE: Vai [vai].
Dogon: DOGON: Donno So [dds], Jamsay [djm], Tommo So [dto].
Saharan: EASTERN SAHARAN: Beria [zag].
Saharan: WESTERN SAHARAN: Kanuri [knc], Tubu [dzg].
Maban: MABAN: Maba [mde].
East Sudanic: NILOTIC: Acholi [ach].
Central Sudanic: MORU-MA'DI: Moru [mgd], Lugbara [lgg].
Kunama: KUNAMA: Kunama [kun].
Koman: KOMAN: Gwama [kmq].
Afro-Asiatic: NORTH OMOTIC: Yemsa [jnj], Kullo [dwr], Gamo [gmv].
Afro-Asiatic: EGYPTIAN-COPTIC: Coptic [cop].
Afro-Asiatic: BIU-MANDARA: Tera [ttr], Margi [mrt], Mina [hna], Buduma [bdm], Zina [jia].
Afro-Asiatic: WEST CHADIC: Ngizim [ngi].
Afro-Asiatic: HIGHLAND EAST CUSHITIC: Sidaama [sid].
Afro-Asiatic: LOWLAND EAST CUSHITIC: Oromo (Harar) [hae], Oromo (Waata) [ssn].
Afro-Asiatic: YAAKU: Yaaku [muu].
Afro-Asiatic: SEMITIC: Harari [har].
Basque: BASQUE: Basque [eus].
Indo-European: CELTIC: Breton [bre], Welsh [cym].
Indo-European: GERMANIC: Norwegian [nor], English [eng].
Indo-European: SLAVIC: Russian [rus], Polish [pol], Bulgarian [bul], Serbian-Croatian [srp].
Indo-European: GREEK: Greek (Modern) [ell].
Indo-European: ARMENIAN: Armenian (Eastern) [hye].
Indo-European: IRANIAN: Ossetic [oss], Pashto [pst], Wakhi [wbl], Baluchi [bgn].
Indo-European: INDIC: Dhivehi [div], Marathi [mar], Urdu [urd], Lamani [lmn], Gujarati [guj], Kumauni [kfy], Kalami [gwc], Torwali [trw], Brokskat [bkk], Palula [phl], Kashmiri [kas], Dameli [dml], Oriya [ory].
Uralic: SAMOYEDIC: Nenets (Tundra) [yrk].
Uralic: UGRIC: Hungarian [hun], Khanty [kca].
Uralic: PERMIC: Udmurt [udm].
Uralic: FINNIC: Finnish [fin].
Altaic: MONGOLIC: Dagur [dta], Mangghuer [mjg].
Altaic: TUNGUSIC: Evenki [evn], Udihe [ude].
Altaic: TURKIC: Azerbaijani [azj], Uzbek [uzn], Bashkir [bak], Tatar [tat].

Yeniseian: YENISEIAN: Ket [ket].
Kartvelian: KARTVELIAN: Georgian [kat].
Northwest Caucasian: NORTHWEST CAUCASIAN: Abkhaz [abk].
Nakh-Daghestanian: NAKH: Chechen [che], Ingush [inh].
Nakh-Daghestanian: AVAR-ANDIC-TSEZIC: Godoberi [gdo], Tsez [ddo], Hunzib [huz].
Burushaski: BURUSHASKI: Burushaski [bsk].
Dravidian: NORTHERN DRAVIDIAN: Malto [mjt].
Dravidian: SOUTH-CENTRAL DRAVIDIAN: Gondi [gno], Kuvi [kxv].
Dravidian: SOUTHERN DRAVIDIAN: Kannada [kan], Malayalam [mal].
Sino-Tibetan: KAREN: Karen (Sgaw) [ksw].
Sino-Tibetan: BODIC: Gurung [gvr], Chantyal [chx], Tshangla [tsj], Tibetan (Modern Literary) [bod], Lhomi [lhm], Purki [prx], Kinnauri [kfk], Darma [drd], Byansi [bee].
Sino-Tibetan: MAHAKIRANTI: Newari (Kathmandu) [new], Magar [mrd].
Sino-Tibetan: KUKI-CHIN: Lotha [njh], Naga (Tangkhul) [nmf], Bawm [bgr].
Sino-Tibetan: BURMESE-LOLO: Lolo (Yao'An) [ycl].
Austronesian: MINAHASAN: Tondano [tdn].
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Batak (Karo) [btx].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Nuaulu [nxl], Selaru [slu], Tetun [tet].
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Warembori [wsa].
Austronesian: OCEANIC: Maisin [mbq], Tobati [tti], Arop-Sissano [aps], Takia [tbc], Sio [xsi], Maleu [mgl], Bariai [bch], Lusi [khl], Jabêm [jae], Bukawa [buk], Labu [lbu], Buang (Mapos) [bzh], Ala'ala [nrz], Loniu [los], Kele [sbc], Roviana [rug], Erromangan [erg], Daakaka [bpa].
Trans-New Guinea: DUNA: Duna [duc].
Trans-New Guinea: ANGAN: Menya [mcr].
Trans-New Guinea: FINISTERRE-HUON: Nabak [naf], Iyo [nca].
Trans-New Guinea: KAINANTU-GOROKA: Yagaria [ygr], Fore [for].
Trans-New Guinea: CHIMBU: Golin [gvf].
Trans-New Guinea: ENGAN: Kyaka [kyc], Kewa [kew].
Trans-New Guinea: OK: Bimin [bhl], Mian [mpt].
Trans-New Guinea: DANI: Nggem [nbq].
Trans-New Guinea: MADANG: Kobon [kpw], Nend [anh], Anamuxra [imi], Amele [aey], Bargam [mlp], Maia [sks], Mauwake [mhl], Usan [wnu].
Trans-New Guinea: MEK: Yale (Kosarek) [kkl].
Trans-New Guinea: BINANDEREAN: Guhu-Samane [ghs], Orokaiva [okv].
Mairasi: MAIRASI: Mairasi [zrs].
Koiarian: KOIARIAN: Barai [bbb].
Timor-Alor-Pantar: GREATER ALOR: Klon [kyo].
Timor-Alor-Pantar: EAST PANTAR: Teiwa [twe].
East Strickland: EAST STRICKLAND: Odoodee [kkc].
South Bird's Head: SOUTH BIRD'S HEAD: Inanwatan [szp].
Dagan: DAGAN: Daga [dgz].

Pawaian: PAWAIAN: Pawaian [pwa].
Skou: WESTERN SKOU: Wutung [wut].
Skou: SERRA HILLS: Poko-Rawo [rwa].
Torricelli: URIM: Urim [uri].
Torricelli: WAPEI-PALEI: Au [avt], Yeri [yev], Walman [van].
Torricelli: KOMBIO-ARAPESH: Arapesh (Mountain) [ape].
Torricelli: MARIENBERG: Kamasau [kms].
Sepik: ABAU: Abau [aau].
Sepik: YELLOW RIVER: Namia [nnm].
Sepik: SEPIK HILL: Sare [dju], Alamblak [amp].
Sepik: NDU: Ambulas [abt], Iatmul [ian].
Solomons East Papuan: SAVOSAVO: Savosavo [svs].
Tiwian: TIWIAN: Tiwi [tiw].
Pama-Nyungan: NORTHERN PAMA-NYUNGAN: Kugu Nganhcara [uwa], Kuuk Thaayorre [thd].
Pama-Nyungan: SOUTHEASTERN PAMA-NYUNGAN: Bandjalang [bdy].
Pama-Nyungan: CENTRAL PAMA-NYUNGAN: Arrernte (Mparntwe) [aer].
Penutian: SAHAPTIAN: Nez Perce [nez].
Totonacan: TOTONACAN: Tepehua (Huehuetla) [tee].
Mixe-Zoque: MIXE-ZOQUE: Mixe (Ayutla) [mxp].
Mayan: MAYAN: Sipakapense [qum].
Oto-Manguean: AMUZGOAN: Amuzgo [azg].
Oto-Manguean: MIXTECAN: Mixtec (Yosondúa) [mpm].
Uto-Aztecan: NUMIC: Paiute (Northern) [pao].
Uto-Aztecan: TEPIMAN: O'odham [ood], Pima Bajo [pia].
Uto-Aztecan: TARAHUMARAN: Tarahumara (Central) [tar].
Uto-Aztecan: CAHITA: Yaqui [yaq].
Chibchan: TALAMANCA: Bribri [bzd], Teribe [tfr].
Chibchan: GUAYMIIC: Ngäbere [gym].
Barbacoan: BARBACOAN: Awa Pit [kwi].
Quechuan: QUECHUAN: Quechua (Huallaga) [qub], Quechua (Imbabura) [qvi].
Aymaran: AYMARAN: Jaqaru [jqr].
Araucanian: ARAUCANIAN: Mapudungun [arn].
Uru-Chipaya: URU-CHIPAYA: Chipaya [cap].
Arawakan: INLAND NORTHERN ARAWAKAN: Resígaro [rgr].

5.4. Semantic adjectives are not verbs, demonstrative is closer to noun than adjective (both occur on the same side of the noun) (20 languages, 13 genera):

Niger-Congo: BANTOID: Zulu [zul], Nyakyusa [nyy], Kikuyu [kik], Kagulu [kki], Swahili [swh], Runyankore [nyn], Haya [hay].
Niger-Congo: BUA: Lua [nie].
Niger-Congo: MEL: Baga Sitemu [bsp].
Niger-Congo: CANGIN: Noon [snf].
East Sudanic: DAJU: Laggori [liu].
Afro-Asiatic: LOWLAND EAST CUSHITIC: Rendille [rel].

Afro-Asiatic: SOUTHERN CUSHITIC: Iraqw [irk].
Austronesian: YAPESE: Yapese [yap].
Austronesian: OCEANIC: Koluwawa [klx], Kilivila [kij].
Torricelli: KOMBIO-ARAPESH: Arapesh (Abu) [aah].
Anêm: ANêM: Anêm [anz].
Baining: BAINING: Mali [gcc].
Pama-Nyungan: WESTERN PAMA-NYUNGAN: Pitjantjatjara [pjt].

6. Data for Table 5

	Num closer to noun than Dem		Num further from noun than Dem		Percent closer
	#Lgs	Frequency	#Lgs	Frequency	
Lg has numeral classifiers	78	31.45	10	1.67	.95
Lg lacks numeral classifiers	167	59.70	37	9.30	.87

Table 5
Relationship between whether a language has numeral classifiers and whether numerals occur closer to the noun than the demonstratives when both occur on the same side of the noun

6.1. Has numeral classifiers, numeral is closer to noun than demonstrative (both occur on the same side of the noun) (78 languages, 52 genera):

Mande: EASTERN MANDE: Busa [bqp], Boko [bqc].
Indo-European: IRANIAN: Baluchi [bgn].
Indo-European: INDIC: Bengali [ben].
Uralic: UGRIC: Hungarian [hun].
Altaic: MONGOLIC: Mangghuer [mjg].
Altaic: TURKIC: Turkish [tur], Azerbaijani [azj], Uzbek [uzn].
Korean: KOREAN: Korean [kor].
Japonic: JAPANESE: Japanese [jpn].
Burushaski: BURUSHASKI: Burushaski [bsk].
Dravidian: NORTHERN DRAVIDIAN: Malto [mjt].
Austro-Asiatic: MUNDA: Santali [sat].
Austro-Asiatic: KHASIAN: Khasi [kha].
Austro-Asiatic: PALAUNGIC: Palaung [pll], Lawa (Eastern) [lwl].
Austro-Asiatic: BAHNARIC: Stieng [sti], Mnong (Central) [cmo], Loven [lbo], Brao [brb].
Austro-Asiatic: KHMER: Khmer [khm].
Austro-Asiatic: PEARIC: Kasong [cog].
Austro-Asiatic: NICOBARESE: Nicobarese (Car) [caq].
Sino-Tibetan: CHINESE: Mandarin [cmn], Cantonese [yue].
Sino-Tibetan: KAREN: Karen (Sgaw) [ksw].
Sino-Tibetan: BODIC: Chantyal [chx].
Sino-Tibetan: MAHAKIRANTI: Hayu [vay], Athpare [aph].

Sino-Tibetan: BURMESE-LOLO: Nuosu [iii].
Sino-Tibetan: TANI: Galo [adl].
Tai-Kadai: KAM-TAI: Lao [lao], Thai [tha], Yong [yno].
Austronesian: RUKAI: Rukai (Tanan) [dru].
Austronesian: PALAUAN: Palauan [pau].
Austronesian: GREATER CENTRAL PHILIPPINE: Mamanwa [mmn].
Austronesian: CELEBIC: Tukang Besi [khc].
Austronesian: NORTH BORNEO: Begak-Ida'an [dbj].
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Nias [nia].
Austronesian: MOKLEN-MOKEN: Moken [mwt].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Buru [agh], Nuaulu [nxl], Tetun [tet], Tetun Dili [tdt], Tugun [tzn], Keo [xxk].
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Irarutu [irh], Taba [mky], Ambai [amk].
Austronesian: OCEANIC: Sudest [tgo], Nalik [nal], Wuvulu [wuv], Loniu [los], Kele [sbc], Pingilapese [pif].
Timor-Alor-Pantar: GREATER ALOR: Woisika [woi], Klon [kyo], Adang [adn].
Timor-Alor-Pantar: EAST PANTAR: Teiwa [twe].
Abun: ABUN: Abun [kgr].
Maybrat: MAYBRAT: Maybrat [ayz].
Hatam: HATAM-MANSIM: Hatam [had].
West Papuan: NORTH HALMAHERAN: Tidore [tvo].
East Bird's Head: EAST BIRD'S HEAD: Meyah [mej].
Sepik: ABAU: Abau [aau].
Na-Dene: TLINGIT: Tlingit [tli].
Algic: ALGONQUIAN: Ottawa [otw].
Totonacan: TOTONACAN: Tepehua (Huehuetla) [tee].
Mayan: MAYAN: Tzeltal [tzh].
Chibchan: TALAMANCA: Bribri [bzd], Teribe [tfr].
Chibchan: GUAYMIIC: Ngäbere [gym].
Arawakan: BOLIVIA-PARANA: Baure [brg].
Arawakan: EASTERN ARAWAKAN: Palikur [plu].
Arawakan: CARIBBEAN ARAWAKAN: Arawak [arw].
Peba-Yaguan: PEBA-YAGUAN: Yagua [yad].

6.2. Has numeral classifiers, demonstrative is closer to noun than numeral (both occur on the same side of the noun) (10 languages, 5 genera):

Austro-Asiatic: PALAUNGIC: Parauk [prk].
Sino-Tibetan: QIANGIC: Qiang [cng].
Sino-Tibetan: BURMESE-LOLO: Lisu [lis], Lolo (Yao'An) [ycl], Lalo [yik], Bisu [bzi], Akha [ahk], Hani [hni].
Sino-Tibetan: BAI: Bai [bca].
Sino-Tibetan: NUNGISH: Anong [nun].

6.3. Lacks numeral classifiers, numeral is closer to noun than demonstrative (both occur on the same side of the noun) (167 languages, 111 genera):

Kxa: =|HOAN: =|Hoan [huc].
Khoe-Kwadi: KHOE-KWADI: //Ani [hnh].
Niger-Congo: BANTOID: Eton [eto], Mungbam [mij].
Niger-Congo: NUPOID: Gwari [gbr].
Niger-Congo: IDOMOID: Igede [ige].
Niger-Congo: EDOID: Engenni [enn].
Niger-Congo: IGBOID: Igbo [ibo], Iká [ikk].
Niger-Congo: UKAAN: Ikaan [kcf].
Niger-Congo: CROSS RIVER: Obolo [ann], Efik [efi], Ibibio [ibb].
Niger-Congo: KWA: Akan [aka], Chumburung [ncu], Ebrie [ebr], Selee [snw], Logba [lgq], Igo [ahl], Tafi [tcd], Ewe [ewe].
Niger-Congo: SAMBA-DURU: Dii [dur].
Niger-Congo: MBUMIC: Mundang [mua].
Niger-Congo: NORTHERN-CENTRAL GUR: Ngangam [gng].
Niger-Congo: SOUTHERN-CENTRAL GUR: Chakali [cli].
Niger-Congo: CANGIN: Ndut [ndv].
Mande: EASTERN MANDE: Dan [dnj].
Mande: WESTERN MANDE: Vai [vai].
Dogon: DOGON: Tommo So [dto].
Songhay: SONGHAY: Koyraboro Senni [ses].
Maban: MABAN: Maba [mde].
East Sudanic: NILOTIC: Acholi [ach], Nyangatom [nnj], Turkana [tuv].
Kunama: KUNAMA: Kunama [kun].
Koman: KOMAN: Gwama [kmq].
Afro-Asiatic: MAO: Northern Mao [myf].
Afro-Asiatic: NORTH OMOTIC: Yemsa [jnj], Wolaytta [wal], Kullo [dwr].
Afro-Asiatic: BIU-MANDARA: Buduma [bdm], Zina [jia].
Afro-Asiatic: WEST CHADIC: Ngizim [ngi].
Afro-Asiatic: HIGHLAND EAST CUSHITIC: Sidaama [sid].
Afro-Asiatic: YAAKU: Yaaku [muu].
Afro-Asiatic: SEMITIC: Amharic [amh], Harari [har].
Indo-European: ROMANCE: French [fra], Spanish [spa].
Indo-European: GERMANIC: English [eng].
Indo-European: SLAVIC: Russian [rus], Bulgarian [bul].
Indo-European: GREEK: Greek (Modern) [ell].
Indo-European: ARMENIAN: Armenian (Eastern) [hye].
Indo-European: IRANIAN: Ossetic [oss], Shughni [sgh], Kurmanji [kmr], Zazaki [diq].
Indo-European: INDIC: Dhivehi [div], Konkani [knn], Gujarati [guj], Kumauni [kfy], Panjabi [pan], Palula [phl], Dameli [dml].
Uralic: SAMOYEDIC: Nenets (Tundra) [yrk].
Uralic: UGRIC: Khanty [kca].
Uralic: PERMIC: Udmurt [udm].

Uralic: FINNIC: Finnish [fin].
Altaic: TUNGUSIC: Evenki [evn], Udihe [ude].
Altaic: TURKIC: Bashkir [bak].
Yeniseian: YENISEIAN: Ket [ket].
Kartvelian: KARTVELIAN: Georgian [kat].
Nakh-Daghestanian: NAKH: Ingush [inh].
Nakh-Daghestanian: AVAR-ANDIC-TSEZIC: Tsez [ddo], Hunzib [huz].
Nakh-Daghestanian: LEZGIC: Lezgian [lez].
Dravidian: SOUTH-CENTRAL DRAVIDIAN: Kuvi [kxv].
Dravidian: SOUTHERN DRAVIDIAN: Kannada [kan].
Sino-Tibetan: BODIC: Bunan [bfu], Kinnauri [kfk], Darma [drd], Byansi [bee].
Sino-Tibetan: MAHAKIRANTI: Magar [mrd].
Sino-Tibetan: KUKI-CHIN: Lotha [njh], Ao [njo], Sema [nsm], Naga (Tangkhul) [nmf], Bawm [bgr].
South Andamanese: SOUTH ANDAMANESE: Jarawa (in Andamans) [anq].
Austronesian: EAST FORMOSAN: Amis [ami].
Austronesian: NORTHERN LUZON: Ilocano [ilo].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Selaru [slu].
Austronesian: OCEANIC: Arop-Sissano [aps], Sio [xsi], Awad Bing [bcu], Bariai [bch], Bukawa [buk], Buang (Mapos) [bzh], Kara (in Papua New Guinea) [leu], Buma [tkw], Anejom [aty], Avava [tmv], Mwotlap [mlv], Nahavaq [sns], Unua [onu], Efate (South) [erk], Ifira-Mele [mxe].
Trans-New Guinea: DUNA: Duna [duc].
Trans-New Guinea: ANGAN: Menya [mcr].
Trans-New Guinea: FINISTERRE-HUON: Iyo [nca].
Trans-New Guinea: KAINANTU-GOROKA: Awa [awa].
Trans-New Guinea: CHIMBU: Dom [doa].
Trans-New Guinea: ENGAN: Kyaka [kyc].
Trans-New Guinea: OK: Mian [mpt].
Trans-New Guinea: DANI: Nggem [nbq].
Trans-New Guinea: MADANG: Anamuxra [imi], Bargam [mlp], Mauwake [mhl], Usan [wnu].
Trans-New Guinea: MEK: Yale (Kosarek) [kkl].
Trans-New Guinea: BINANDEREAN: Guhu-Samane [ghs].
Timor-Alor-Pantar: MAKASAE-FATALUKU-OIRATA: Fataluku [ddg].
Bosavi: BOSAVI: Edolo [etr].
East Strickland: EAST STRICKLAND: Odoodee [kkc].
South Bird's Head: SOUTH BIRD'S HEAD: Inanwatan [szp].
Kwerba: KWERBA: Isirawa [srl].
Dagan: DAGAN: Daga [dgz].
Skou: WESTERN SKOU: Skou [skv].
Skou: KRISA: I'saka [ksi].
Skou: SERRA HILLS: Poko-Rawo [rwa].
Torricelli: URIM: Urim [uri].
Torricelli: WAPEI-PALEI: Walman [van].
Torricelli: MARIENBERG: Kamasau [kms].

Sepik: YELLOW RIVER: Namia [nnm].
Sepik: SEPIK HILL: Sare [dju], Alamblak [amp].
Solomons East Papuan: BILUA: Bilua [blb].
Pama-Nyungan: NORTHERN PAMA-NYUNGAN: Ngawun [nxn].
Pama-Nyungan: CENTRAL PAMA-NYUNGAN: Arrernte (Mparntwe) [aer].
Pama-Nyungan: WESTERN PAMA-NYUNGAN: Ngaanyatjarra [ntj].
Siouan: CORE SIOUAN: Assiniboine [asb].
Muskogean: MUSKOGEAN: Choctaw [cho].
Mixe-Zoque: MIXE-ZOQUE: Mixe (Ayutla) [mxp].
Oto-Manguean: PAMEAN: Pame (Southern) [pmz].
Oto-Manguean: OTOMIAN: Otomí (Mezquital) [ote], Otomí (Santiago Mexquititlan) [otq].
Kiowa-Tanoan: KIOWA-TANOAN: Towa [tow].
Uto-Aztecan: TEPIMAN: Pima Bajo [pia].
Uto-Aztecan: CAHITA: Yaqui [yaq].
Uto-Aztecan: AZTECAN: Nahuatl (Huasteca) [nhe].
Uto-Aztecan: TUBAR: Tubar [tbu].
Chibchan: TALAMANCA: Boruca [brn].
Páezan: PÁEZAN: Páez [pbb].
Barbacoan: BARBACOAN: Awa Pit [kwi].
Urarina: URARINA: Urarina [ura].
Quechuan: QUECHUAN: Quechua (Huallaga) [qub].
Araucanian: ARAUCANIAN: Mapudungun [arn].
Chonan: CHONAN: Selknam [ona].
Nadahup: NADAHUP: Hup [jup].
Yurakare: YURAKARE: Yuracare [yuz].
Tupian: TUPARI: Akuntsú [aqz].
Uru-Chipaya: URU-CHIPAYA: Chipaya [cap].
Arawakan: PURUS: Apurinã [apu].
Tacanan: TACANAN: Cavineña [cav].
Macro-Ge: OFAYÉ: Ofayé [opy].

6.4 Lacks numeral classifiers, demonstrative is closer to noun than numeral (both occur on the same side of the noun) (37 languages, 22 genera):

NoClsfr&NumOutsideDem
Niger-Congo: BANTOID: Nyakyusa [nyy], Nkore-Kiga [cgg], Runyankore [nyn], Kako [kkj], Aghem [agq], Babungo [bav], Mundani [mnf], Nchane [ncr].
Niger-Congo: NUPOID: Nupe [nup].
Niger-Congo: KWA: Gungbe [guw].
Niger-Congo: UBANGI: Munzombo [moj], Baka (in Cameroon) [bkc].
Niger-Congo: BUA: Lua [nie].
Niger-Congo: SOUTHERN-CENTRAL GUR: Sisaala (Western) [ssl].
Niger-Congo: CANGIN: Noon [snf].
Kordofanian: HEIBAN: Moro [mor].
Songhay: SONGHAY: Tadaksahak [dsq].

East Sudanic: DAJU: Laggori [liu].
Kuliak: KULIAK: Ik [ikx], So [teu].
Afro-Asiatic: BIU-MANDARA: Uldeme [udl].
Afro-Asiatic: LOWLAND EAST CUSHITIC: Rendille [rel].
Sino-Tibetan: BODIC: Tibetan (Standard Spoken) [bod].
Sino-Tibetan: KUKI-CHIN: Naga (Mao) [nbi].
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Warembori [wsa].
Austronesian: OCEANIC: Takia [tbc], Lusi [khl], Kove [kvc], Kaulong [pss], Tamambo [mla], Mavea [mkv], Port Sandwich [psw].
Trans-New Guinea: MADANG: Kobon [kpw].
West Papuan: NORTH HALMAHERAN: Pagu [pgu].
Torricelli: KOMBIO-ARAPESH: Arapesh (Abu) [aah].
Western Daly: WAGAYDY: Maranungku [zmr].
Mixe-Zoque: MIXE-ZOQUE: Popoluca (Sierra) [poi].

7. Data for Table 6

	Adj closer to noun than Num		Adj closer to noun than Num		Percent closer
	#Lgs	Freq.	#Lgs	Freq.	
Lg has numeral classifiers	88	30.10	4	2.50	.92
Lg lacks numeral classifiers	176	60.69	19	6.27	.91

Table 6
Relationship between whether a language has numeral classifiers and whether semantic adjectives occur closer to the noun than the numeral when both occur on the same side of the noun

7.1. Has numeral classifiers, adjective is closer to noun than numeral (both occur on the same side of the noun) (88 languages, 52 genera):

Mande: EASTERN MANDE: Busa [bqp].
Indo-European: IRANIAN: Baluchi [bgn].
Indo-European: INDIC: Bengali [ben].
Uralic: UGRIC: Hungarian [hun].
Altaic: MONGOLIC: Mangghuer [mjg].
Altaic: TURKIC: Turkish [tur], Azerbaijani [azj], Uzbek [uzn].
Korean: KOREAN: Korean [kor].
Japonic: JAPANESE: Japanese [jpn].
Burushaski: BURUSHASKI: Burushaski [bsk].
Austro-Asiatic: MUNDA: Santali [sat], Remo [bfw].
Austro-Asiatic: PALAUNGIC: Palaung [pll], Lawa (Eastern) [lwl], Parauk [prk].
Austro-Asiatic: BAHNARIC: Stieng [sti], Mnong (Central) [cmo], Loven [lbo], Brao [brb].
Austro-Asiatic: KHMER: Khmer [khm].
Austro-Asiatic: PEARIC: Kasong [cog].

Austro-Asiatic: ASLIAN: Semelai [sza].
Sino-Tibetan: CHINESE: Mandarin [cmn], Wu [Wu], Cantonese [yue].
Sino-Tibetan: KAREN: Karen (Sgaw) [ksw].
Sino-Tibetan: TUJIA: Tujia (Northern) [tji].
Sino-Tibetan: BODIC: Chantyal [chx].
Sino-Tibetan: MAHAKIRANTI: Hayu [vay], Athpare [aph].
Sino-Tibetan: QIANGIC: Qiang [cng], Pumi [pmi].
Sino-Tibetan: rGYALRONG: Gyarong (Cogtse) [jya], rGyalrong (Caodeng) [jya].
Sino-Tibetan: BODO-GARO: Kokborok [trp], Garo [grt].
Sino-Tibetan: NORTHERN NAGA: Naga (Leinong) [lzn].
Sino-Tibetan: MRU: Hkongso [anl].
Sino-Tibetan: BURMESE-LOLO: Burmese [mya], Lisu [lis], Lolo (Yao'An) [ycl], Nuosu [iii], Lalo [yik], Bisu [bzi], Akha [ahk], Hani [hni].
Sino-Tibetan: NUNGISH: Anong [nun].
Sino-Tibetan: TANI: Nishi [njz], Apatani [apt].
Tai-Kadai: KAM-TAI: Thai [tha].
Austronesian: RUKAI: Rukai (Tanan) [dru].
Austronesian: PALAUAN: Palauan [pau].
Austronesian: CELEBIC: Tukang Besi [khc].
Austronesian: NORTH BORNEO: Begak-Ida'an [dbj].
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Nias [nia].
Austronesian: MOKLEN-MOKEN: Moken [mwt].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Buru [agh], Nuaulu [nxl], Tugun [tzn], Keo [xxk].
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Irarutu [irh], Taba [mky], Ambai [amk].
Austronesian: OCEANIC: Sudest [tgo], Nalik [nal], Wuvulu [wuv], Loniu [los], Pingilapese [pif].
Timor-Alor-Pantar: GREATER ALOR: Woisika [woi], Abui [abz], Klon [kyo], Adang [adn].
Abun: ABUN: Abun [kgr].
Maybrat: MAYBRAT: Maybrat [ayz].
Hatam: HATAM-MANSIM: Hatam [had].
West Papuan: NORTH HALMAHERAN: Tidore [tvo].
East Bird's Head: EAST BIRD'S HEAD: Meyah [mej].
Sepik: ABAU: Abau [aau].
Haida: HAIDA: Haida [hai].
Penutian: TSIMSHIANIC: Tsimshian (Coast) [tsi].
Totonacan: TOTONACAN: Tepehua (Huehuetla) [tee].
Mayan: MAYAN: Chontal Maya [chf], Tzeltal [tzh], Jakaltek [jac].
Chibchan: TALAMANCA: Bribri [bzd].
Chibchan: GUAYMIIC: Ngäbere [gym].
Arawakan: CARIBBEAN ARAWAKAN: Arawak [arw].

7.2. Has numeral classifiers, numeral is closer to noun than adjective (both occur on the same side of the noun) (4 languages, 4 genera):

Austronesian: OCEANIC: Kele [sbc].
Na-Dene: ATHAPASKAN: Slave [den].
Tucanoan: TUCANOAN: Retuarã [tnc].
Arawakan: INLAND NORTHERN ARAWAKAN: Tariana [tae].

7.3. Lacks numeral classifiers, adjective is closer to noun than numeral (both occur on the same side of the noun) (176 languages, 108 genera):

Khoe-Kwadi: KHOE-KWADI: //Ani [hnh].
Sandawe: SANDAWE: Sandawe [sad].
Niger-Congo: BANTOID: Nkore-Kiga [cgg], Runyankore [nyn], Akoose [bss], Aghem [agq], Babungo [bav], Mundani [mnf], Mungbam [mij].
Niger-Congo: NUPOID: Nupe [nup], Gwari [gbr].
Niger-Congo: IDOMOID: Igede [ige].
Niger-Congo: EDOID: Engenni [enn].
Niger-Congo: IGBOID: Igbo [ibo], Iká [ikk].
Niger-Congo: KWA: Akan [aka], Anufo [cko], Chumburung [ncu], Ebrie [ebr], Selee [snw], Logba [lgq], Igo [ahl], Tafi [tcd], Ewe [ewe], Gungbe [guw].
Niger-Congo: SAMBA-DURU: Dii [dur].
Niger-Congo: BUA: Lua [nie].
Niger-Congo: SOUTHERN-CENTRAL GUR: Sisaala (Western) [ssl], Chakali [cli].
Niger-Congo: CANGIN: Ndut [ndv], Noon [snf].
Kordofanian: KATLA-TIMA: Tima [tms].
Mande: EASTERN MANDE: Mona [moa].
Mande: WESTERN MANDE: Xasonga [kao], Vai [vai].
Dogon: DOGON: Tommo So [dto].
Songhay: SONGHAY: Koyraboro Senni [ses].
Saharan: EASTERN SAHARAN: Beria [zag].
East Sudanic: NUBIAN: Nubian (Dongolese) [dgl], Nubian (Kunuz) [xnz].
East Sudanic: DAJU: Laggori [liu].
East Sudanic: NILOTIC: Nyangatom [nnj], Turkana [tuv].
Kunama: KUNAMA: Kunama [kun].
Koman: KOMAN: Gwama [kmq].
Afro-Asiatic: MAO: Northern Mao [myf].
Afro-Asiatic: NORTH OMOTIC: Yemsa [jnj], Kullo [dwr].
Afro-Asiatic: BIU-MANDARA: Uldeme [udl].
Afro-Asiatic: WEST CHADIC: Ngizim [ngi].
Afro-Asiatic: HIGHLAND EAST CUSHITIC: Sidaama [sid].
Afro-Asiatic: YAAKU: Yaaku [muu].
Afro-Asiatic: SEMITIC: Harari [har].
Indo-European: GERMANIC: English [eng].
Indo-European: SLAVIC: Russian [rus], Bulgarian [bul].
Indo-European: GREEK: Greek (Modern) [ell].
Indo-European: ARMENIAN: Armenian (Eastern) [hye].

Indo-European: IRANIAN: Ossetic [oss], Shughni [sgh].
Indo-European: INDIC: Konkani [knn], Gujarati [guj], Kumauni [kfy], Panjabi [pan], Palula [phl].
Uralic: SAMOYEDIC: Nenets (Tundra) [yrk].
Uralic: UGRIC: Khanty [kca].
Uralic: PERMIC: Udmurt [udm].
Uralic: FINNIC: Finnish [fin].
Altaic: TUNGUSIC: Evenki [evn], Udihe [ude].
Altaic: TURKIC: Bashkir [bak].
Ainu: AINU: Ainu [ain].
Yeniseian: YENISEIAN: Ket [ket].
Kartvelian: KARTVELIAN: Georgian [kat].
Nakh-Daghestanian: AVAR-ANDIC-TSEZIC: Tsez [ddo], Hunzib [huz].
Dravidian: SOUTH-CENTRAL DRAVIDIAN: Kuvi [kxv].
Dravidian: SOUTHERN DRAVIDIAN: Kannada [kan].
Sino-Tibetan: BODIC: Nar-Phu [npa], Tibetan (Standard Spoken) [bod], Kurtöp [xkz], Bunan [bfu], Kinnauri [kfk], Darma [drd], Byansi [bee].
Sino-Tibetan: MAHAKIRANTI: Magar [mrd].
Sino-Tibetan: KUKI-CHIN: Lotha [njh], Ao [njo], Naga (Mao) [nbi], Naga (Tangkhul) [nmf], Bawm [bgr].
Austronesian: EAST FORMOSAN: Amis [ami].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Selaru [slu].
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Warembori [wsa].
Austronesian: OCEANIC: Arop-Sissano [aps], Takia [tbc], Sio [xsi], Awad Bing [bcu], Lusi [khl], Bukawa [buk], Buang (Mapos) [bzh], Iduna [viv], Sinaugoro [snc], Kaulong [pss], Kara (in Papua New Guinea) [leu], Iaai [iai], Avava [tmv], Mwotlap [mlv], Tamambo [mla], Mavea [mkv], Unua [onu], Port Sandwich [psw], Ifira-Mele [mxe].
Trans-New Guinea: DUNA: Duna [duc].
Trans-New Guinea: ANGAN: Menya [mcr].
Trans-New Guinea: FINISTERRE-HUON: Iyo [nca], Nankina [nnk].
Trans-New Guinea: KAINANTU-GOROKA: Awa [awa].
Trans-New Guinea: ENGAN: Kyaka [kyc].
Trans-New Guinea: OK: Mian [mpt].
Trans-New Guinea: DANI: Nggem [nbq].
Trans-New Guinea: MADANG: Kobon [kpw], Anamuxra [imi], Bargam [mlp], Mauwake [mhl], Usan [wnu].
Trans-New Guinea: MEK: Yale (Kosarek) [kkl].
Trans-New Guinea: BINANDEREAN: Guhu-Samane [ghs].
Timor-Alor-Pantar: MAKASAE-FATALUKU-OIRATA: Fataluku [ddg].
Bosavi: BOSAVI: Edolo [etr].
East Strickland: EAST STRICKLAND: Odoodee [kkc].
Kwerba: KWERBA: Isirawa [srl].
Dagan: DAGAN: Daga [dgz].
Eleman: TATE: Kaki Ae [tbd].
Nimboran: NIMBORAN: Nimboran [nir].

West Papuan: NORTH HALMAHERAN: Pagu [pgu].
Skou: WESTERN SKOU: Wutung [wut].
Skou: KRISA: I'saka [ksi].
Skou: SERRA HILLS: Poko-Rawo [rwa].
Torricelli: URIM: Urim [uri].
Torricelli: WAPEI-PALEI: Walman [van].
Torricelli: MARIENBERG: Kamasau [kms].
Sepik: RAM: Awtuw [kmn].
Sepik: YELLOW RIVER: Namia [nnm].
Sepik: SEPIK HILL: Sare [dju], Alamblak [amp].
Solomons East Papuan: BILUA: Bilua [blb].
Western Daly: WAGAYDY: Maranungku [zmr].
Pama-Nyungan: CENTRAL PAMA-NYUNGAN: Arrernte (Mparntwe) [aer].
Pama-Nyungan: WESTERN PAMA-NYUNGAN: Ngaanyatjarra [ntj].
Eskimo-Aleut: ESKIMO: Greenlandic (West) [kal].
Yuchi: YUCHI: Yuchi [yuc].
Siouan: CORE SIOUAN: Assiniboine [asb].
Penutian: KLAMATH-MODOC: Klamath [kla].
Muskogean: MUSKOGEAN: Choctaw [cho], Creek [mus].
Mixe-Zoque: MIXE-ZOQUE: Mixe (Ayutla) [mxp], Popoluca (Sierra) [poi], Zoque (Chimalapa) [zoh].
Oto-Manguean: OTOMIAN: Otomí (Mezquital) [ote].
Uto-Aztecan: NUMIC: Paiute (Northern) [pao].
Uto-Aztecan: TEPIMAN: Pima Bajo [pia].
Uto-Aztecan: CAHITA: Yaqui [yaq].
Xincan: XINCAN: Xinca (Guazacapán) [xin].
Chibchan: PAYA: Pech [pay].
Chibchan: CHIBCHA-DUIT: Muisca [chb].
Choco: CHOCO: Emberá (Northern) [emp].
Barbacoan: BARBACOAN: Awa Pit [kwi].
Quechuan: QUECHUAN: Quechua (Huallaga) [qub].
Araucanian: ARAUCANIAN: Mapudungun [arn].
Tupian: TUPI-GUARANÍ: Yuqui [yuq].
Arauan: ARAUAN: Kulina [cul].
Uru-Chipaya: URU-CHIPAYA: Chipaya [cap].
Tacanan: TACANAN: Araona [aro].
Creole: CREOLE: Ndyuka [djk].

7.4. Lacks numeral classifiers, numeral is closer to noun than adjective (both occur on the same side of the noun) (19 languages, 17 genera):

Tuu: TUU: N|Uuki [ngh].
Niger-Congo: BANTOID: Nyakyusa [nyy], Nchane [ncr].
Kordofanian: HEIBAN: Moro [mor].
Mande: EASTERN MANDE: Dan [dnj].
Songhay: SONGHAY: Tadaksahak [dsq].

Maban: MABAN: Maba [mde].
Fur: FUR: Fur [fvr].
East Sudanic: NILOTIC: Camus [saq].
Kuliak: KULIAK: Ik [ikx], So [teu].
Afro-Asiatic: LOWLAND EAST CUSHITIC: Rendille [rel].
Indo-European: INDIC: Dhivehi [div].
Nakh-Daghestanian: NAKH: Ingush [inh].
Austronesian: OCEANIC: Buma [tkw].
South Bird's Head: SOUTH BIRD'S HEAD: Inanwatan [szp].
Senagi: SENAGI: Anggor [agg].
Torricelli: KOMBIO-ARAPESH: Arapesh (Abu) [aah].
Wappo-Yukian: WAPPO: Wappo [wao].

8. Data for Table 7

	NAdj		AdjN		Percent
	#Lgs	Frequency	#Lgs	Frequency	NAdj
Adj is verb	120	44.39	37	15.38	.74
Adj is not verb	348	70.22	197	37.66	.65

Table 7
Relationship between whether semantic adjectives are verbs and the order of adjective and noun

8.1. Semantic adjective is verb and precedes noun (37 languages, 33 genera):

Niger-Congo: CROSS RIVER: Ibibio [ibb].
Ijoid: IJOID: Ijo (Kolokuma) [ijc].
East Sudanic: SURMIC: Majang [mpe].
Afro-Asiatic: MAO: Northern Mao [myf].
Afro-Asiatic: LOWLAND EAST CUSHITIC: Qafar [aar].
Korean: KOREAN: Korean [kor].
Ainu: AINU: Ainu [ain].
Nivkh: NIVKH: Nivkh [niv].
Austro-Asiatic: MUNDA: Korku [kfq].
Austro-Asiatic: NICOBARESE: Nicobarese (Car) [caq].
Sino-Tibetan: MAHAKIRANTI: Chepang [cdm], Athpare [aph].
Sino-Tibetan: BODO-GARO: Deuri [der].
Austronesian: RUKAI: Rukai (Tanan) [dru].
Austronesian: TSOU: Tsou [tsu].
Austronesian: EAST FORMOSAN: Amis [ami].
Austronesian: CHAMORRO: Chamorro [cha].
Austronesian: PALAUAN: Palauan [pau].
Austronesian: NORTHERN LUZON: Ilocano [ilo].
Austronesian: OCEANIC: Wuvulu [wuv].
Iwaidjan: IWAIDJAN: Maung [mph].

Eskimo-Aleut: ESKIMO: Iñupiaq [esk].
Algic: YUROK: Yurok [yur].
Algic: ALGONQUIAN: Blackfoot [bla], Arapaho [arp].
Chimakuan: CHIMAKUAN: Quileute [qui].
Salishan: CENTRAL SALISH: Halkomelem (Upriver) [hur].
Penutian: TSIMSHIANIC: Gitksan [git].
Oregon Coast: COOSAN: Coos (Hanis) [csz].
Oregon Coast: SIUSLAWAN: Siuslaw [sis].
Mixe-Zoque: MIXE-ZOQUE: Olutec [plo], Zoque (Copainalá) [zoc], Zoque (Chimalapa) [zoh].
Washo: WASHO: Washo [was].
Oto-Manguean: OTOMIAN: Otomí (Mezquital) [ote].
Arawakan: CARIBBEAN ARAWAKAN: Arawak [arw].
Bora-Huitotoan: HUITOTO: Huitoto (Minica) [hto].

8.2. Semantic adjective is verb and follows noun (120 languages, 73 genera):

Niger-Congo: BANTOID: Aghem [agq].
Niger-Congo: NUPOID: Nupe [nup].
Niger-Congo: KWA: Selee [snw].
Niger-Congo: CANGIN: Ndut [ndv].
Kordofanian: KATLA-TIMA: Katla [kcr].
Kordofanian: HEIBAN: Otoro [otr], Moro [mor].
Kordofanian: TALODI: Masakin [jle].
Kadu: KADUGLI: Katcha [xtc], Krongo [kgo].
Songhay: SONGHAY: Koyra Chiini [khq], Tadaksahak [dsq].
East Sudanic: NILOTIC: Anywa [anu], Luo [luo], Turkana [tuv].
Kuliak: KULIAK: Ik [ikx], So [teu].
Afro-Asiatic: BERBER: Ghadames [gha], Tamashek [taq].
Afro-Asiatic: BIU-MANDARA: Lamang [hia].
Austro-Asiatic: ASLIAN: Jahai [jhi], Temiar [tea].
Sino-Tibetan: KAREN: Karen (Bwe) [bwe].
Sino-Tibetan: QIANGIC: Qiang [cng], Pumi [pmi].
Sino-Tibetan: rGYALRONG: Gyarong (Cogtse) [jya].
Sino-Tibetan: BODO-GARO: Kokborok [trp], Garo [grt].
Sino-Tibetan: KUKI-CHIN: Mikir [mjw], Ao [njo], Naga (Mao) [nbi], Naga (Zeme) [nzm], Chin (Tiddim) [ctd].
Sino-Tibetan: BURMESE-LOLO: Burmese [mya], Nuosu [iii].
Sino-Tibetan: NUNGISH: Anong [nun].
Sino-Tibetan: DIGAROAN: Digaro [mhu].
Austronesian: ATAYALIC: Seediq [trv].
Austronesian: PAIWAN: Paiwan [pwn].
Austronesian: CELEBIC: Wolio [wlo], Tukang Besi [khc], Pendau [ums].
Austronesian: NORTH BORNEO: Begak-Ida'an [dbj], Timugon [tih], Kimaragang [kqr], Tatana' [txx], Belait [beg].
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Nias [nia].

Austronesian: MALAYO-SUMBAWAN: Acehnese [ace].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Tugun [tzn], Leti [lti].
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Taba [mky], Biak [bhw].
Austronesian: OCEANIC: Sudest [tgo], Dawawa [dww], Roro [rro], Amara [aie], Madak [mmx], Hoava [hoa], Mokilese [mkj], Pohnpeian [pon], Paamese [pma], Nahavaq [sns], Mavea [mkv], Tuvaluan [tvl].
Trans-New Guinea: OK: Tifal [tif].
Bosavi: BOSAVI: Edolo [etr].
Maybrat: MAYBRAT: Maybrat [ayz].
Hatam: HATAM-MANSIM: Hatam [had].
West Papuan: NORTH HALMAHERAN: Ternate [tft], Sahu [saj], Pagu [pgu], West Makian [mqs].
Skou: WARAPU: Barupu [wra].
East Bird's Head: EAST BIRD'S HEAD: Moskona [mtj].
Solomons East Papuan: LAVUKALEVE: Lavukaleve [lvk].
Kuot: KUOT: Kuot [kto].
Eskimo-Aleut: ESKIMO: Greenlandic (West) [kal].
Haida: HAIDA: Haida [hai].
Na-Dene: ATHAPASKAN: Slave [den], Sarcee [srs], Hupa [hup].
Algic: WIYOT: Wiyot [wiy].
Algic: ALGONQUIAN: Ottawa [otw].
Siouan: CORE SIOUAN: Mandan [mhq], Assiniboine [asb], Lakhota [lkt].
Zuni: ZUNI: Zuni [zun].
Muskogean: MUSKOGEAN: Choctaw [cho], Creek [mus], Seminole [mus].
Hokan: CHIMARIKO: Chimariko [cid].
Hokan: YUMAN: Cocopa [coc], Maricopa [mrc].
Oto-Manguean: OTOMIAN: Otomí (Santiago Mexquititlan) [otq].
Oto-Manguean: MIXTECAN: Mixtec (Jicaltepec) [mio].
Oto-Manguean: CHINANTECAN: Chinantec (Palantla) [cpa].
Oto-Manguean: ZAPOTECAN: Zapotec (Isthmus) [zai].
Oto-Manguean: SUBTIABA-TLAPANEC: Tlapanec [tcf].
Uto-Aztecan: TEPIMAN: Tepehuan (Southeastern) [stp].
Uto-Aztecan: CORACHOL: Cora [crn].
Misumalpan: MISUMALPAN: Sumu [yan].
Chonan: CHONAN: Selknam [ona].
Kwaza: KWAZA: Kwaza [xwa].
Ticuna: TICUNA: Ticuna [tca].
Tucanoan: TUCANOAN: Kotiria [gvc].
Tupian: YURUNA: Juruna [jur].
Tupian: TUPARI: Mekens [skf].
Tupian: TUPI-GUARANÍ: Kayabí [kyz], Guaraní [gug], Kamaiurá [kay], Cocama [cod].
Arawakan: CENTRAL ARAWAKAN: Paresi [pab].
Arawakan: EASTERN ARAWAKAN: Palikur [plu].
Arawakan: CARIBBEAN ARAWAKAN: Goajiro [guc].

Matacoan: MATACOAN: Wichí [mtp].
Tacanan: TACANAN: Araona [aro].
Guató: GUATÓ: Guató [gta].
Macro-Ge: OFAYÉ: Ofayé [opy].
Je-Jabutí: GE-KAINGANG: Canela [ram].

8.3. Semantic adjective is not verb and precedes noun (197 languages, 86 genera):

Khoe-Kwadi: KHOE-KWADI: Korana [kqz], Nama [naq], //Ani [hnh].
Niger-Congo: BANTOID: Kako [kkj].
Niger-Congo: GBAYA-MANZA-NGBAKA: Gbeya Bossangoa [gbp], Mbodomo [gmm].
Niger-Congo: UBANGI: Ngbandi [ngb], Sango [sag], Mayogo [mdm], Baka (in Cameroon) [bkc], Linda [liy], Zande [zne], Nzakara [nzk], Barambu [brm].
Central Sudanic: LENDU: Lendu [led], Ngiti [niy].
Central Sudanic: KRESH: Aja [aja].
Afro-Asiatic: NORTH OMOTIC: Yemsa [jnj], Maale [mdy], Kullo [dwr], Gamo [gmv], Zayse [zay].
Afro-Asiatic: BIU-MANDARA: Gude [gde].
Afro-Asiatic: WEST CHADIC: Hausa [hau], Pa'a [pqa].
Afro-Asiatic: CENTRAL CUSHITIC: Kemant [ahg].
Afro-Asiatic: HIGHLAND EAST CUSHITIC: Sidaama [sid].
Afro-Asiatic: SEMITIC: Tigré [tig], Harari [har], Chaha [sgw].
Indo-European: GERMANIC: Danish [dan], Swedish [swe], Faroese [fao], Norwegian [nor], German [deu], English [eng], Frisian [fry].
Indo-European: SLAVIC: Russian [rus], Ukrainian [ukr], Polish [pol], Czech [ces], Bulgarian [bul], Serbian-Croatian [srp].
Indo-European: BALTIC: Latvian [lav].
Indo-European: GREEK: Greek (Modern) [ell].
Indo-European: ARMENIAN: Armenian (Eastern) [hye].
Indo-European: IRANIAN: Ossetic [oss], Pashto [pst], Wakhi [wbl], Ormuri [oru], Baluchi [bgn].
Indo-European: INDIC: Dhivehi [div], Sinhala [sin], Marathi [mar], Romani (Welsh) [rmw], Hindi [hin], Urdu [urd], Lamani [lmn], Gujarati [guj], Kumauni [kfy], Kalami [gwc], Torwali [trw], Brokskat [bkk], Palula [phl], Kashmiri [kas], Dameli [dml], Bhojpuri [bho], Oriya [ory], Rajbanshi [rjs].
Uralic: SAMOYEDIC: Nenets (Tundra) [yrk].
Uralic: UGRIC: Hungarian [hun], Khanty [kca], Mansi [mns].
Uralic: PERMIC: Udmurt [udm].
Uralic: FINNIC: Finnish [fin].
Altaic: MONGOLIC: Dagur [dta], Mangghuer [mjg], Kalmyk [xal].
Altaic: TUNGUSIC: Even [eve], Evenki [evn], Manchu [mnc], Udihe [ude].
Altaic: TURKIC: Chuvash [chv], Khalaj [klj], Azerbaijani [azj], Uzbek [uzn], Bashkir [bak], Tatar [tat].
Yeniseian: YENISEIAN: Ket [ket].
Kartvelian: KARTVELIAN: Georgian [kat].

Nakh-Daghestanian: NAKH: Tsova-Tush [bbl], Chechen [che], Ingush [inh].
Nakh-Daghestanian: AVAR-ANDIC-TSEZIC: Godoberi [gdo], Khwarshi [khv], Tsez [ddo], Hinuq [gin], Hunzib [huz].
Nakh-Daghestanian: LEZGIC: Khinalug [kjj], Lezgian [lez], Rutul [rut], Tsakhur [tkr].
Burushaski: BURUSHASKI: Burushaski [bsk].
Dravidian: NORTHERN DRAVIDIAN: Brahui [brh], Malto [mjt].
Dravidian: SOUTH-CENTRAL DRAVIDIAN: Gondi [gno], Kuvi [kxv].
Dravidian: SOUTHERN DRAVIDIAN: Kannada [kan], Malayalam [mal].
Austro-Asiatic: MUNDA: Mundari [unr], Juang [jun], Gorum [pcj], Remo [bfw].
Sino-Tibetan: DHIMALISH: Dhimal [dhi].
Sino-Tibetan: BODIC: Gurung [gvr], Chantyal [chx], Tshangla [tsj], Purki [prx], Kinnauri [kfk], Darma [drd], Byansi [bee].
Sino-Tibetan: MAHAKIRANTI: Newari (Kathmandu) [new], Thangmi [thf], Magar [mrd], Thulung [tdh], Wambule [wme], Limbu [lif].
Sino-Tibetan: BODO-GARO: Bodo [brx].
Sino-Tibetan: TANI: Galo [adl], Mising [mrg], Tagin [dap].
Austronesian: OCEANIC: Xârâcùù [ane].
Trans-New Guinea: KAINANTU-GOROKA: Agarabi [agd], Yagaria [ygr], Fore [for].
Trans-New Guinea: ENGAN: Kewa [kew].
Trans-New Guinea: AWJU-DUMUT: Korowai [khe].
Trans-New Guinea: MEK: Eipo [eip].
Yareban: YAREBAN: Yareba [yrb].
Pawaian: PAWAIAN: Pawaian [pwa].
Eastern Trans-Fly: EASTERN TRANS-FLY: Meryam Mir [ulk].
Torricelli: KOMBIO-ARAPESH: Arapesh (Mountain) [ape].
Sepik: NUKUMA: Kwoma [kmo].
Sepik: SEPIK HILL: Sare [dju], Alamblak [amp].
Sepik: NDU: Ambulas [abt], Iatmul [ian].
Solomons East Papuan: SAVOSAVO: Savosavo [svs].
Tiwian: TIWIAN: Tiwi [tiw].
Bunaban: BUNABAN: Bunuba [bck].
Nyulnyulan: NYULNYULAN: Nyulnyul [nyv], Bardi [bcj].
Tangkic: TANGKIC: Kayardild [gyd], Yukulta [gcd].
Pama-Nyungan: NORTHERN PAMA-NYUNGAN: Biri [bzr].
Pama-Nyungan: SOUTHEASTERN PAMA-NYUNGAN: Wembawemba [xww], Muruwari [zmu], Bandjalang [bdy], Yuwaalaraay [kld].
Iroquoian: SOUTHERN IROQUOIAN: Cherokee [chr].
Penutian: TSIMSHIANIC: Tsimshian (Coast) [tsi].
Penutian: KLAMATH-MODOC: Klamath [kla].
Penutian: SAHAPTIAN: Klikitat [yak], Nez Perce [nez].
Penutian: YOKUTS: Wikchamni [yoi].
Totonacan: TOTONACAN: Tepehua (Huehuetla) [tee], Tepehua (Tlachichilco) [tpt].
Mixe-Zoque: MIXE-ZOQUE: Mixe (Ayutla) [mxp].

Mayan: MAYAN: Lacandón [lac], Jakaltek [jac], Sipakapense [qum].
Tequistlatecan: TEQUISTLATECAN: Chontal (Huamelultec Oaxaca) [clo].
Uto-Aztecan: NUMIC: Paiute (Northern) [pao], Shoshone [shh], Tümpisa Shoshone [par].
Uto-Aztecan: TEPIMAN: O'odham [ood], Nevome [pia], Pima Bajo [pia].
Uto-Aztecan: TARAHUMARAN: Tarahumara (Western) [tac], Tarahumara (Central) [tar].
Uto-Aztecan: CAHITA: Yaqui [yaq].
Xincan: XINCAN: Xinca (Guazacapán) [xin].
Huarpe: HUARPE: Allentiac [--].
Barbacoan: BARBACOAN: Awa Pit [kwi].
Hibito-Cholón: HIBITO-CHOLÓN: Cholón [clh].
Quechuan: QUECHUAN: Quechua (Huallaga) [qub], Quechua (Imbabura) [qvi].
Aymaran: AYMARAN: Aymara (Central) [ayr], Jaqaru [jqr].
Araucanian: ARAUCANIAN: Mapudungun [arn].
Tucanoan: TUCANOAN: Cubeo [cub].
Cayuvava: CAYUVAVA: Cayuvava [cyb].
Uru-Chipaya: URU-CHIPAYA: Chipaya [cap], Uru [ure].
Arawakan: YANESHA': Yanesha' [ame].
Arawakan: INLAND NORTHERN ARAWAKAN: Resígaro [rgr].
Cariban: CARIBAN: Akawaio [ake].

8.4. Semantic adjective is not verb and follows noun (348 languages, 172 genera):

Kxa: =|HOAN: =|Hoan [huc].
Sandawe: SANDAWE: Sandawe [sad].
Niger-Congo: BANTOID: Zulu [zul], Ronga [rng], Chichewa [nya], Lamba [lam], Nyakyusa [nyy], Kikuyu [kik], Nyamwezi [nym], Kagulu [kki], Swahili [swh], Bena (Tanzania) [bez], Runyankore [nyn], Haya [hay], Bembe [bmb], Ndumu [nmd], Nzadi [nzd], Luvale [luv], Lunda [lun], Kwangali [kwn], Tunen [tvu], Mungbam [mij], Tikar [tik].
Niger-Congo: EDOID: Engenni [enn].
Niger-Congo: IGBOID: Igbo [ibo], Iká [ikk].
Niger-Congo: JUKUNOID: Kuteb [kub], Jukun [jbu].
Niger-Congo: PLATOID: Migili [mgi], Birom [bom].
Niger-Congo: KAINJI: Duka [dud], Amo [amo].
Niger-Congo: KWA: Anufo [cko], Logba [lgq], Igo [ahl], Ewe [ewe], Adioukrou [adj].
Niger-Congo: UBANGI: Dongo [doo].
Niger-Congo: SAMBA-DURU: Dii [dur], Doyayo [dow].
Niger-Congo: MUMUYE-YANDANG: Mumuye [mzm].
Niger-Congo: MBUMIC: Mundang [mua].
Niger-Congo: BUA: Lua [nie].
Niger-Congo: NORTHERN-CENTRAL GUR: Mooré [mos], Dagbani [dag].
Niger-Congo: MEL: Baga Sitemu [bsp], Mani [buy], Kisi [kiz].
Niger-Congo: PEUL-SERER: Fulfulde (Nigerian) [fuv], Fulfulde (Adamawa) [fub].

Niger-Congo: WOLOF: Wolof [wof].
Niger-Congo: CANGIN: Noon [snf].
Kordofanian: KATLA-TIMA: Tima [tms].
Mande: EASTERN MANDE: Mona [moa], Busa [bqp].
Mande: WESTERN MANDE: Mandinka (Gambian) [mnk], Mauka [mxx], Vai [vai], Bobo Madaré (Southern) [bwq], Dzùùngoo [dnn].
Dogon: DOGON: Donno So [dds], Jamsay [djm], Tommo So [dto].
Saharan: EASTERN SAHARAN: Beria [zag].
Saharan: WESTERN SAHARAN: Kanuri [knc], Tubu [dzg].
Maban: MABAN: Maba [mde], Masalit [mls], Runga [rou].
Fur: FUR: Fur [fvr].
East Sudanic: NUBIAN: Nubian (Dongolese) [dgl], Nubian (Kunuz) [xnz], Midob [mei].
East Sudanic: SURMIC: Murle [mur], Baale [koe], Tennet [tex], Koegu [xwg], Mursi [muz].
East Sudanic: NYIMANG: Nyimang [nyi].
East Sudanic: TEMEIN: Temein [teq].
East Sudanic: TAMAN: Tama [tma].
East Sudanic: DAJU: Laggori [liu].
East Sudanic: NILOTIC: Shilluk [shk], Acholi [ach], Bari [bfa], Maasai [mas], Sebei [kpz], Pokot [pko].
Central Sudanic: BONGO-BAGIRMI: Ngambay [sba], Mbay [myb], Kara (in Central African Republic) [kah], Yulu [yul].
Central Sudanic: MORU-MA'DI: Moru [mgd], Lugbara [lgg], Ma'di [mhi].
Central Sudanic: MANGBUTU-EFE: Mamvu [mdi].
Central Sudanic: MANGBETU: Mangbetu [mdj].
Kunama: KUNAMA: Kunama [kun].
Koman: KOMAN: Gwama [kmq].
Afro-Asiatic: SOUTH OMOTIC: Aari [aiw], Dime [dim].
Afro-Asiatic: DIZOID: Dizi [mdx].
Afro-Asiatic: NORTH OMOTIC: Koorete [kqy].
Afro-Asiatic: EGYPTIAN-COPTIC: Coptic [cop].
Afro-Asiatic: BERBER: Berber (Siwa) [siz], Berber (Middle Atlas) [tzm], Berber (Rif) [rif], Berber (Figuig) [grr].
Afro-Asiatic: MASA: Masa [mcn].
Afro-Asiatic: BIU-MANDARA: Tera [ttr], Margi [mrt], Mina [hna], Musgu [mug], Mbara [mpk], Buduma [bdm], Zina [jia].
Afro-Asiatic: WEST CHADIC: Pero [pip], Goemai [ank], Ngizim [ngi], Miya [mkf].
Afro-Asiatic: LOWLAND EAST CUSHITIC: Rendille [rel], Somali [som], Oromo (Harar) [hae], Oromo (Waata) [ssn].
Afro-Asiatic: YAAKU: Yaaku [muu].
Afro-Asiatic: DAHALO: Dahalo [dal].
Afro-Asiatic: SOUTHERN CUSHITIC: Iraqw [irk], Burunge [bds].
Afro-Asiatic: SEMITIC: Chaldean (Modern) [cld], Neo-Aramaic (Assyrian) [aii], Mandaic (Modern) [mid], Hebrew (Modern) [heb], Maltese [mlt], Arabic

(Egyptian) [arz], Arabic (Gulf) [afb], Arabic (Iraqi) [acm], Arabic (Moroccan) [ary], Arabic (Syrian) [apc].
Basque: BASQUE: Basque [eus].
Indo-European: ROMANCE: French [fra], Spanish [spa], Portuguese [por], Romanian [ron].
Indo-European: CELTIC: Irish [gle], Breton [bre], Welsh [cym].
Indo-European: ALBANIAN: Albanian [sqi].
Indo-European: IRANIAN: Kurdish (Central) [ckb], Kurmanji [kmr], Zazaki [diq], Persian [pes], Tajik [tgk].
Indo-European: INDIC: Domari (Modern) [rmt].
Altaic: MONGOLIC: Bao'an [peh].
Northwest Caucasian: NORTHWEST CAUCASIAN: Ubykh [uby], Abkhaz [abk].
Austro-Asiatic: KHASIAN: Khasi [kha].
Sino-Tibetan: KAREN: Karen (Sgaw) [ksw].
Sino-Tibetan: BODIC: Nar-Phu [npa], Tibetan (Modern Literary) [bod], Lhomi [lhm], Kurtöp [xkz], Ladakhi [lbj], Sikkimese [sip].
Sino-Tibetan: KUKI-CHIN: Lotha [njh], Naga (Tangkhul) [nmf], Bawm [bgr].
Sino-Tibetan: BURMESE-LOLO: Lolo (Yao'An) [ycl].
Sino-Tibetan: TANI: Apatani [apt].
Sino-Tibetan: LEPCHA: Lepcha [lep].
South Andamanese: SOUTH ANDAMANESE: Jarawa (in Andamans) [anq].
Austronesian: MINAHASAN: Tondano [tdn].
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Batak (Karo) [btx].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Nuaulu [nxl], Selaru [slu], Tetun [tet].
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Warembori [wsa].
Austronesian: YAPESE: Yapese [yap].
Austronesian: OCEANIC: Maisin [mbq], Sobei [sob], Tobati [tti], Arop-Sissano [aps], Takia [tbc], Sio [xsi], Maleu [mgl], Bariai [bch], Lusi [khl], Jabêm [jae], Bukawa [buk], Labu [lbu], Buang (Mapos) [bzh], Tawala [tbo], Gumawana [gvs], Koluwawa [klx], Iduna [viv], Kilivila [kij], Ala'ala [nrz], Loniu [los], Kele [sbc], Roviana [rug], Erromangan [erg], Daakaka [bpa], Maori [mri].
Trans-New Guinea: EAST KUTUBU: Foe [foi].
Trans-New Guinea: FASU: Fasu [faa].
Trans-New Guinea: DUNA: Duna [duc].
Trans-New Guinea: ANGAN: Menya [mcr].
Trans-New Guinea: FINISTERRE-HUON: Nabak [naf], Iyo [nca], Rawa [rwo], Nankina [nnk].
Trans-New Guinea: KAINANTU-GOROKA: Siane [snp].
Trans-New Guinea: CHIMBU: Golin [gvf], Salt-Yui [sll], Kuman [kue], Dom [doa].
Trans-New Guinea: ENGAN: Kyaka [kyc].
Trans-New Guinea: ASMAT-KAMORO: Asmat [cns].
Trans-New Guinea: AWJU-DUMUT: Wambon [wms], Kombai [tyn].

Trans-New Guinea: OK: Bimin [bhl], Mian [mpt].
Trans-New Guinea: DANI: Nggem [nbq].
Trans-New Guinea: MADANG: Kobon [kpw], Nend [anh], Anamuxra [imi], Tauya [tya], Girawa [bbr], Amele [aey], Bargam [mlp], Maia [sks], Mauwake [mhl], Usan [wnu].
Trans-New Guinea: MEK: Yale (Kosarek) [kkl], Una [mtg].
Trans-New Guinea: BINANDEREAN: Guhu-Samane [ghs], Orokaiva [okv].
Trans-New Guinea: GOILALAN: Kunimaipa [kup].
Mairasi: MAIRASI: Mairasi [zrs].
Koiarian: KOIARIAN: Barai [bbb], Ömie [aom].
Timor-Alor-Pantar: GREATER ALOR: Klon [kyo].
Timor-Alor-Pantar: EAST PANTAR: Teiwa [twe].
East Strickland: EAST STRICKLAND: Odoodee [kkc].
South Bird's Head: SOUTH BIRD'S HEAD: Inanwatan [szp].
Sentani: SENTANI: Sentani [set].
Dagan: DAGAN: Daga [dgz].
Turama-Kikorian: TURAMA-KIKORIAN: Rumu [klq].
Eleman: TATE: Kaki Ae [tbd].
Senagi: SENAGI: Anggor [agg].
Border: BORDER: Amanab [amn], Imonda [imn].
Nimboran: NIMBORAN: Nimboran [nir].
Skou: WESTERN SKOU: Wutung [wut].
Skou: SERRA HILLS: Poko-Rawo [rwa].
Torricelli: URIM: Urim [uri].
Torricelli: WAPEI-PALEI: Au [avt], Yeri [yev], Walman [van].
Torricelli: KOMBIO-ARAPESH: Urat [urt], Kombio [xbi], Arapesh (Abu) [aah].
Torricelli: MARIENBERG: Kamasau [kms].
Torricelli: MONUMBO: Monumbo [mxk].
Gapun: GAPUN: Gapun [gpn].
Sepik: ABAU: Abau [aau].
Sepik: RAM: Awtuw [kmn].
Sepik: YELLOW RIVER: Namia [nnm].
Ramu-Lower Sepik: ANNABERG: Rao [rao].
Anêm: ANêM: Anêm [anz].
Baining: BAINING: Mali [gcc].
South Bougainville: SOUTH BOUGAINVILLE: Motuna [siw].
Gaagudju: GAAGUDJU: Gaagudju [gbu].
Gunwinyguan: NGALAKAN: Ngalakan [nig].
Mangarrayi-Maran: MANGARRAYI: Mangarrayi [mpc].
Wagiman: WAGIMAN: Wagiman [waq].
Yangmanic: YANGMANIC: Wardaman [wrr].
Maningrida: NAKKARA: Nakkara [nck].
Maningrida: NDJéBBANA: Ndjébbana [djj].
Mirndi: DJINGILI: Djingili [jig].
Southern Daly: NGANKIKURUNGKURR: Ngankikurungkurr [nam].
Western Daly: BRINGEN: Marrithiyel [mfr].

Western Daly: WAGAYDY: Emmi [amy].
Bunaban: BUNABAN: Gooniyandi [gni].
Worrorran: WORRORRAN: Gunin [gww], Ungarinjin [ung].
Pama-Nyungan: NORTHERN PAMA-NYUNGAN: Uradhi [urf], Kugu Nganhcara [uwa], Kuuk Thaayorre [thd], Guugu Yimidhirr [kky], Kuku-Yalanji [gvn], Yidiny [yii], Dyirbal [dbl], Kalkatungu [ktg].
Pama-Nyungan: CENTRAL PAMA-NYUNGAN: Diyari [dif], Arrernte (Mparntwe) [aer].
Pama-Nyungan: WESTERN PAMA-NYUNGAN: Pitjantjatjara [pjt], Ngadjumaja [nju].
Yuchi: YUCHI: Yuchi [yuc].
Siouan: CORE SIOUAN: Osage [osa].
Caddoan: CADDOAN: Wichita [wic].
Takelma: TAKELMA: Takelma [tkm].
Wappo-Yukian: WAPPO: Wappo [wao].
Karok: KAROK: Karok [kyh].
Hokan: YUMAN: Kiliwa [klb].
Tonkawa: TONKAWA: Tonkawa [tqw].
Tol: TOL: Tol [jic].
Oto-Manguean: AMUZGOAN: Amuzgo [azg].
Oto-Manguean: MIXTECAN: Mixtec (Atatlahuca) [mib], Mixtec (Ocotepec) [mie], Mixtec (Peñoles) [mil], Mixtec (Yosondúa) [mpm].
Oto-Manguean: ZAPOTECAN: Chatino (Yaitepec) [ctp].
Uto-Aztecan: TAKIC: Luiseño [lui], Cupeño [cup].
Uto-Aztecan: AZTECAN: Nahuatl (Huasteca) [nhe], Nahuatl (Michoacán) [ncl], Nahuatl (Tetelcingo) [nhg].
Misumalpan: MISUMALPAN: Miskito [miq].
Yanomam: YANOMAM: Shiriana [shb].
Chibchan: RAMA: Rama [rma].
Chibchan: TALAMANCA: Bribri [bzd], Teribe [tfr].
Chibchan: GUAYMIIC: Ngäbere [gym], Buglere [sab].
Chibchan: ARHUACIC: Ika [arh].
Chibchan: CHIBCHA-DUIT: Muisca [chb].
Warao: WARAO: Warao [wba].
Mura: MURA: Pirahã [myp].
Choco: CHOCO: Emberá (Northern) [emp], Epena Pedee [sja].
Alacalufan: ALACALUFAN: Qawasqar [alc].
Tucanoan: TUCANOAN: Retuarã [tnc].
Jivaroan: JIVAROAN: Aguaruna [agr].
Tupian: ARIKEM: Karitiana [ktn].
Tupian: RAMARAMA: Karó (Arára) [arr].
Tupian: TUPI-GUARANÍ: Émérillon [eme], Yuqui [yuq].
Arauan: ARAUAN: Kulina [cul], Jarawara [jaa].
Arawakan: PRE-ANDINEARAWAKAN: Campa (Axininca) [cpc].
Arawakan: INLAND NORTHERN ARAWAKAN: Achagua [aca].
Peba-Yaguan: PEBA-YAGUAN: Yagua [yad].

Cariban: CARIBAN: Carib (De'kwana) [mch], Apalaí [apy], Hixkaryana [hix].
Tacanan: TACANAN: Cavineña [cav].
Fulniô: FULNIÔ: Fulniô [fun].

9. Data for Table 8

	Num and Dem occur on same side of noun		Num and Dem occur on different sides of noun		Percent same side
	#Lgs	Frequency	#Lgs	Frequency	
Lg has numeral classifiers	129	31.35	75	14.70	.68
Lg lacks numeral classifiers	283	70.84	77	19.94	.78

Table 8
Relationship between whether the language has numeral classifiers and whether numeral and demonstrative occur on the same side of the noun

9.1. Has numeral classifiers, numeral and demonstrative occur on same side of noun (129 languages, 69 genera):

Mande: EASTERN MANDE: Busa [bqp], Boko [bqc].
Indo-European: IRANIAN: Baluchi [bgn], Persian [pes], Tajik [tgk].
Indo-European: INDIC: Darai [dry], Bengali [ben], Rajbanshi [rjs], Halbi [hlb].
Uralic: UGRIC: Hungarian [hun].
Altaic: MONGOLIC: Mangghuer [mjg].
Altaic: TURKIC: Turkish [tur], Azerbaijani [azj], Uzbek [uzn].
Korean: KOREAN: Korean [kor].
Japonic: JAPANESE: Japanese [jpn].
Burushaski: BURUSHASKI: Burushaski [bsk].
Dravidian: NORTHERN DRAVIDIAN: Kurukh [kru], Malto [mjt].
Austro-Asiatic: MUNDA: Santali [sat], Kharia [khr], Juang [jun], Remo [bfw].
Austro-Asiatic: KHASIAN: Khasi [kha], Pnar [pbv].
Austro-Asiatic: PALAUNGIC: Palaung [pll], Lawa (Eastern) [lwl], Parauk [prk].
Austro-Asiatic: KHMUIC: Mlabri (Minor) [mra], Khmu' [kjg].
Austro-Asiatic: BAHNARIC: Stieng [sti], Mnong (Central) [cmo], Loven [lbo], Brao [brb].
Austro-Asiatic: KHMER: Khmer [khm].
Austro-Asiatic: PEARIC: Kasong [cog].
Austro-Asiatic: MONIC: Mon [mnw].
Austro-Asiatic: NICOBARESE: Nicobarese (Car) [caq].
Sino-Tibetan: CHINESE: Mandarin [cmn], Wu [Wu], Cantonese [yue].
Sino-Tibetan: KAREN: Karen (Pwo) [kjp], Kayah Li (Eastern) [eky], Karen (Bwe) [bwe], Karen (Sgaw) [ksw].
Sino-Tibetan: DHIMALISH: Dhimal [dhi].
Sino-Tibetan: BODIC: Chantyal [chx].
Sino-Tibetan: MAHAKIRANTI: Thangmi [thf], Hayu [vay], Thulung [tdh],

Wambule [wme], Camling [rab], Athpare [aph].
Sino-Tibetan: QIANGIC: Qiang [cng].
Sino-Tibetan: BURMESE-LOLO: Achang [acn], Lisu [lis], Lolo (Yao'An) [ycl], Nuosu [iii], Lalo [yik], Bisu [bzi], Akha [ahk], Hani [hni].
Sino-Tibetan: BAI: Bai [bca].
Sino-Tibetan: NUNGISH: Anong [nun].
Sino-Tibetan: TANI: Galo [adl].
Tai-Kadai: KAM-TAI: Lao [lao], Thai [tha], Yong [yno].
Austronesian: RUKAI: Rukai (Tanan) [dru].
Austronesian: PALAUAN: Palauan [pau].
Austronesian: GREATER CENTRAL PHILIPPINE: Mamanwa [mmn].
Austronesian: CELEBIC: Tukang Besi [khc].
Austronesian: NORTH BORNEO: Begak-Ida'an [dbj].
Austronesian: BARITO: Ma'anyan [mhy].
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Nias [nia].
Austronesian: MOKLEN-MOKEN: Moken [mwt].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Buru [agh], Nuaulu [nxl], Paulohi [plh], Lamaholot [slp], Tetun [tet], Tetun Dili [tdt], Tugun [tzn], Keo [xxk].
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Irarutu [irh], Taba [mky], Ambai [amk].
Austronesian: OCEANIC: Sudest [tgo], Nalik [nal], Wuvulu [wuv], Loniu [los], Kele [sbc], Pingilapese [pif].
Timor-Alor-Pantar: GREATER ALOR: Woisika [woi], Klon [kyo], Adang [adn].
Timor-Alor-Pantar: EAST PANTAR: Teiwa [twe].
Abun: ABUN: Abun [kgr].
Maybrat: MAYBRAT: Maybrat [ayz].
Hatam: HATAM-MANSIM: Hatam [had].
Mpur: MPUR: Mpur [akc].
West Papuan: NORTH HALMAHERAN: Tidore [tvo].
East Bird's Head: EAST BIRD'S HEAD: Meyah [mej].
Sepik: ABAU: Abau [aau].
Na-Dene: TLINGIT: Tlingit [tli].
Na-Dene: ATHAPASKAN: Hupa [hup].
Algic: YUROK: Yurok [yur].
Algic: ALGONQUIAN: Ottawa [otw].
Salishan: CENTRAL SALISH: Halkomelem (Upriver) [hur].
Penutian: CHINOOKAN: Chinook (Lower) [chh].
Penutian: SAHAPTIAN: Yakima [yak].
Totonacan: TOTONACAN: Totonac (Misantla) [tlc], Tepehua (Huehuetla) [tee].
Mayan: MAYAN: Huastec [hus], Lacandón [lac], Chol [ctu], Tzeltal [tzh].
Tarascan: TARASCAN: Purépecha [tsz].
Chibchan: TALAMANCA: Bribri [bzd], Teribe [tfr].
Chibchan: GUAYMIIC: Ngäbere [gym], Buglere [sab].
Hibito-Cholón: HIBITO-CHOLÓN: Cholón [clh].
Nambikuaran: NAMBIKUARAN: Nambikuára (Southern) [nab].

Tucanoan: TUCANOAN: Barasano [bsn].
Arawakan: BOLIVIA-PARANA: Baure [brg].
Arawakan: EASTERN ARAWAKAN: Palikur [plu].
Arawakan: CARIBBEAN ARAWAKAN: Arawak [arw].
Peba-Yaguan: PEBA-YAGUAN: Yagua [yad].

9.2. Has numeral classifiers, numeral and demonstrative occur on opposite side of noun (75 languages, 41 genera):

Clsfr&NumNNotDemN
Niger-Congo: CROSS RIVER: Kana [ogo].
Indo-European: INDIC: Oriya [ory].
Austro-Asiatic: VIETIC: Vietnamese [vie].
Austro-Asiatic: KATUIC: Pacoh [pac], Katu [ktv].
Austro-Asiatic: BAHNARIC: Chrau [crw], Sre [kpm], Bahnar [bdq], Rengao [ren], Sedang [sed].
Austro-Asiatic: ASLIAN: Jahai [jhi], Semelai [sza].
Sino-Tibetan: TUJIA: Tujia (Northern) [tji].
Sino-Tibetan: BODIC: Gurung [gvr], Tibetan (Dongwang) [khg].
Sino-Tibetan: MAHAKIRANTI: Newari (Kathmandu) [new].
Sino-Tibetan: QIANGIC: Pumi [pmi].
Sino-Tibetan: NAXI: Naxi [nxq].
Sino-Tibetan: rGYALRONG: Gyarong (Cogtse) [jya], rGyalrong (Caodeng) [jya].
Sino-Tibetan: BODO-GARO: Bodo [brx], Kachari [xac], Dimasa [dis], Kokborok [trp], Garo [grt], Atong [aot].
Sino-Tibetan: NORTHERN NAGA: Naga (Leinong) [lzn], Tutsa [tvt].
Sino-Tibetan: KUKI-CHIN: Mikir [mjw].
Sino-Tibetan: MRU: Hkongso [anl].
Sino-Tibetan: BURMESE-LOLO: Maru [mhx], Burmese [mya].
Sino-Tibetan: NUNGISH: Dulong [duu], Rawang [raw].
Sino-Tibetan: TANI: Mising [mrg], Apatani [apt].
Sino-Tibetan: DIGAROAN: Idu [clk].
Miao-Yao: MIAO-YAO: Hmong Njua [hnj], Xong [mmr], Bunu (Younou) [buh].
Tai-Kadai: HLAI: Hlai (Baoding) [lic].
Tai-Kadai: KADAI: Gelao [giq].
Tai-Kadai: KAM-TAI: Dong (Southern) [kmc], Sanjiang Kam [cov], Yay [pcc], Nung (in Vietnam) [nut].
Austronesian: PAIWAN: Paiwan [pwn].
Austronesian: CELEBIC: Muna [mnb], Pendau [ums], Padoe [pdo].
Austronesian: SOUTH SULAWESI: Selayar [sly].
Austronesian: SAMA-BAJAW: Bajau (West Coast) [bdr].
Austronesian: LAMPUNGIC: Lampung [ljp].
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Alas [btz].
Austronesian: MALAYO-SUMBAWAN: Iban [iba], Minangkabau [min], Indonesian [ind], Acehnese [ace], Cham (Eastern) [cjm].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Manggarai [mqy].

Austronesian: OCEANIC: Kilivila [kij], Kiribati [gil], Woleaian [woe], Wala [lgl], Kwaio [kwd].
Timor-Alor-Pantar: GREATER ALOR: Abui [abz].
Haida: HAIDA: Haida [hai].
Na-Dene: ATHAPASKAN: Slave [den].
Penutian: TSIMSHIANIC: Tsimshian (Coast) [tsi].
Mayan: MAYAN: Chuj [cac], Jakaltek [jac], Kanjobal (Western) [knj].
Chimúan: CHIMÚAN: Mochica [omc].
Tucanoan: TUCANOAN: Retuarã [tnc].
Arawakan: INLAND NORTHERN ARAWAKAN: Tariana [tae].

9.3. Lacks numeral classifiers, numeral and demonstrative occur on same side of noun (283 languages, 176 genera):

Tuu: TUU: N|Uuki [ngh].
Kxa: =|HOAN: =|Hoan [huc].
Kxa: JU-KUNG: Ju|'hoan [knw].
Khoe-Kwadi: KHOE-KWADI: //Ani [hnh].
Niger-Congo: BANTOID: Nyakyusa [nyy], Nkore-Kiga [cgg], Runyankore [nyn], Eton [eto], Kako [kkj], Aghem [agq], Babungo [bav], Mundani [mnf], Mungbam [mij], Nchane [ncr].
Niger-Congo: NUPOID: Nupe [nup], Gwari [gbr].
Niger-Congo: IDOMOID: Igede [ige].
Niger-Congo: EDOID: Engenni [enn].
Niger-Congo: IGBOID: Igbo [ibo], Iká [ikk].
Niger-Congo: JUKUNOID: Kuteb [kub].
Niger-Congo: UKAAN: Ikaan [kcf].
Niger-Congo: CROSS RIVER: Obolo [ann], Efik [efi], Ibibio [ibb].
Niger-Congo: KAINJI: Amo [amo].
Niger-Congo: KWA: Akan [aka], Chumburung [ncu], Ebrie [ebr], Selee [snw], Logba [lgq], Igo [ahl], Tafi [tcd], Ewe [ewe], Gungbe [guw].
Niger-Congo: UBANGI: Ngbandi [ngb], Munzombo [moj], Baka (in Cameroon) [bkc].
Niger-Congo: SAMBA-DURU: Dii [dur].
Niger-Congo: MBUMIC: Mundang [mua].
Niger-Congo: BUA: Lua [nie].
Niger-Congo: NORTHERN-CENTRAL GUR: Dagbani [dag], Ngangam [gng].
Niger-Congo: SOUTHERN-CENTRAL GUR: Sisaala (Western) [ssl], Chakali [cli].
Niger-Congo: MEL: Mani [buy].
Niger-Congo: CANGIN: Ndut [ndv], Noon [snf].
Kordofanian: HEIBAN: Moro [mor].
Mande: EASTERN MANDE: Dan [dnj].
Mande: WESTERN MANDE: Vai [vai].
Dogon: DOGON: Tommo So [dto].
Kadu: KADUGLI: Krongo [kgo].

Songhay: SONGHAY: Koyraboro Senni [ses], Tadaksahak [dsq].
Saharan: EASTERN SAHARAN: Beria [zag].
Maban: MABAN: Maba [mde].
East Sudanic: SURMIC: Koegu [xwg].
East Sudanic: EASTERN JEBEL: Gaahmg [tbi].
East Sudanic: DAJU: Laggori [liu].
East Sudanic: NILOTIC: Nyangatom [nnj], Turkana [tuv].
Kuliak: KULIAK: Ik [ikx], So [teu].
Central Sudanic: BONGO-BAGIRMI: Baka (in Sudan) [bdh], Ngambay [sba].
Central Sudanic: MORU-MA'DI: Ma'di [mhi].
Central Sudanic: MANGBUTU-EFE: Mamvu [mdi].
Central Sudanic: LENDU: Ngiti [niy].
Berta: BERTA: Berta [wti].
Kunama: KUNAMA: Kunama [kun].
Koman: KOMAN: Gwama [kmq].
Afro-Asiatic: SOUTH OMOTIC: Dime [dim].
Afro-Asiatic: MAO: Northern Mao [myf].
Afro-Asiatic: NORTH OMOTIC: Yemsa [jnj], Maale [mdy], Wolaytta [wal], Kullo [dwr].
Afro-Asiatic: MASA: Masa [mcn].
Afro-Asiatic: EAST CHADIC: Lele [llk], Kera [ker].
Afro-Asiatic: BIU-MANDARA: Uldeme [udl], Gude [gde], Buduma [bdm], Zina [jia].
Afro-Asiatic: WEST CHADIC: Goemai [ank], Ngizim [ngi].
Afro-Asiatic: HIGHLAND EAST CUSHITIC: Sidaama [sid].
Afro-Asiatic: LOWLAND EAST CUSHITIC: Qafar [aar], Rendille [rel].
Afro-Asiatic: YAAKU: Yaaku [muu].
Afro-Asiatic: DAHALO: Dahalo [dal].
Afro-Asiatic: SEMITIC: Maltese [mlt], Amharic [amh], Harari [har].
Indo-European: ROMANCE: French [fra], Spanish [spa].
Indo-European: GERMANIC: English [eng].
Indo-European: SLAVIC: Russian [rus], Bulgarian [bul].
Indo-European: BALTIC: Latvian [lav].
Indo-European: GREEK: Greek (Modern) [ell].
Indo-European: ARMENIAN: Armenian (Eastern) [hye].
Indo-European: IRANIAN: Ossetic [oss], Shughni [sgh], Kurmanji [kmr], Zazaki [diq].
Indo-European: INDIC: Dhivehi [div], Konkani [knn], Domari (Modern) [rmt], Gujarati [guj], Kumauni [kfy], Panjabi [pan], Palula [phl], Dameli [dml].
Uralic: SAMOYEDIC: Nenets (Tundra) [yrk], Selkup [sel].
Uralic: UGRIC: Khanty [kca], Mansi [mns].
Uralic: PERMIC: Udmurt [udm].
Uralic: FINNIC: Finnish [fin].
Yukaghir: YUKAGHIR: Yukaghir (Kolyma) [yux].
Altaic: TUNGUSIC: Evenki [evn], Udihe [ude].
Altaic: TURKIC: Turkmen [tuk], Bashkir [bak].

Ainu: AINU: Ainu [ain].
Chukotko-Kamchatkan: NORTHERN CHUKOTKO-KAMCHATKAN: Chukchi [ckt].
Yeniseian: YENISEIAN: Ket [ket].
Kartvelian: KARTVELIAN: Georgian [kat].
Nakh-Daghestanian: NAKH: Ingush [inh].
Nakh-Daghestanian: AVAR-ANDIC-TSEZIC: Khwarshi [khv], Tsez [ddo], Hinuq [gin], Hunzib [huz].
Nakh-Daghestanian: LEZGIC: Lezgian [lez].
Dravidian: CENTRAL DRAVIDIAN: Kolami [kfb].
Dravidian: SOUTH-CENTRAL DRAVIDIAN: Kuvi [kxv].
Dravidian: SOUTHERN DRAVIDIAN: Kannada [kan].
Austro-Asiatic: MUNDA: Mundari [unr].
Sino-Tibetan: BODIC: Tibetan (Standard Spoken) [bod], Bunan [bfu], Kinnauri [kfk], Darma [drd], Byansi [bee].
Sino-Tibetan: MAHAKIRANTI: Magar [mrd].
Sino-Tibetan: KUKI-CHIN: Meithei [mni], Lotha [njh], Ao [njo], Naga (Mao) [nbi], Sema [nsm], Naga (Tangkhul) [nmf], Koireng [nkd], Bawm [bgr].
South Andamanese: SOUTH ANDAMANESE: Jarawa (in Andamans) [anq].
Austronesian: EAST FORMOSAN: Amis [ami].
Austronesian: CHAMORRO: Chamorro [cha].
Austronesian: NORTHERN LUZON: Ilocano [ilo].
Austronesian: MALAYO-SUMBAWAN: Manadonese [xmm].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Selaru [slu].
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Warembori [wsa].
Austronesian: OCEANIC: Arop-Sissano [aps], Takia [tbc], Sio [xsi], Awad Bing [bcu], Bariai [bch], Lusi [khl], Kove [kvc], Bukawa [buk], Adzera [azr], Wampar [lbq], Buang (Mapos) [bzh], Kaulong [pss], Kara (in Papua New Guinea) [leu], Buma [tkw], Anejom [aty], Avava [tmv], Mwotlap [mlv], Tamambo [mla], Nahavaq [sns], Mavea [mkv], Unua [onu], Port Sandwich [psw], Efate (South) [erk], Ifira-Mele [mxe].
Trans-New Guinea: FASU: Fasu [faa].
Trans-New Guinea: DUNA: Duna [duc].
Trans-New Guinea: ANGAN: Menya [mcr].
Trans-New Guinea: FINISTERRE-HUON: Iyo [nca].
Trans-New Guinea: KAINANTU-GOROKA: Awa [awa].
Trans-New Guinea: CHIMBU: Dom [doa].
Trans-New Guinea: ENGAN: Kyaka [kyc].
Trans-New Guinea: AWJU-DUMUT: Kombai [tyn].
Trans-New Guinea: OK: Mian [mpt].
Trans-New Guinea: DANI: Nggem [nbq].
Trans-New Guinea: MADANG: Kobon [kpw], Anamuxra [imi], Bargam [mlp], Mauwake [mhl], Usan [wnu].
Trans-New Guinea: MEK: Yale (Kosarek) [kkl].
Trans-New Guinea: BINANDEREAN: Guhu-Samane [ghs].
Trans-New Guinea: GOILALAN: Kunimaipa [kup].

Timor-Alor-Pantar: MAKASAE-FATALUKU-OIRATA: Fataluku [ddg].
Bosavi: BOSAVI: Edolo [etr].
East Strickland: EAST STRICKLAND: Odoodee [kkc].
Kwerba: KWERBA: Isirawa [srl].
Dagan: DAGAN: Daga [dgz].
Kiwaian: KIWAIAN: Kiwai (Southern) [kjd].
Senagi: SENAGI: Anggor [agg].
Border: BORDER: Waris [wrs].
West Papuan: NORTH HALMAHERAN: Pagu [pgu].
Skou: WESTERN SKOU: Skou [skv], Wutung [wut].
Skou: KRISA: I'saka [ksi].
Skou: SERRA HILLS: Poko-Rawo [rwa].
Skou: WARAPU: Barupu [wra].
Torricelli: URIM: Urim [uri].
Torricelli: WAPEI-PALEI: Walman [van].
Torricelli: KOMBIO-ARAPESH: Kombio [xbi], Arapesh (Abu) [aah].
Torricelli: MARIENBERG: Kamasau [kms].
Sepik: YELLOW RIVER: Namia [nnm].
Sepik: NUKUMA: Kwoma [kmo].
Sepik: SEPIK HILL: Sare [dju], Alamblak [amp].
Yelî Dnye: YELî DNYE: Yelî Dnye [yle].
Solomons East Papuan: LAVUKALEVE: Lavukaleve [lvk].
Solomons East Papuan: BILUA: Bilua [blb].
Western Daly: WAGAYDY: Maranungku [zmr].
Pama-Nyungan: NORTHERN PAMA-NYUNGAN: Ngawun [nxn].
Pama-Nyungan: CENTRAL PAMA-NYUNGAN: Arrernte (Mparntwe) [aer].
Pama-Nyungan: WESTERN PAMA-NYUNGAN: Ngaanyatjarra [ntj].
Siouan: CORE SIOUAN: Assiniboine [asb].
Iroquoian: SOUTHERN IROQUOIAN: Cherokee [chr].
Penutian: KLAMATH-MODOC: Klamath [kla].
Penutian: SAHAPTIAN: Nez Perce [nez].
Mixe-Zoque: MIXE-ZOQUE: Mixe (Ayutla) [mxp], Popoluca (Sierra) [poi], Zoque (Copainalá) [zoc], Zoque (Chimalapa) [zoh].
Oto-Manguean: PAMEAN: Pame (Southern) [pmz].
Oto-Manguean: OTOMIAN: Otomí (Mezquital) [ote], Otomí (Santiago Mexquititlan) [otq].
Oto-Manguean: MATLATZINCAN: Ocuilteco [ocu].
Oto-Manguean: CHICHIMEC: Chichimeca-Jonez [pei].
Kiowa-Tanoan: KIOWA-TANOAN: Towa [tow].
Uto-Aztecan: NUMIC: Paiute (Northern) [pao], Ute [ute].
Uto-Aztecan: TAKIC: Cupeño [cup].
Uto-Aztecan: TEPIMAN: Pima Bajo [pia].
Uto-Aztecan: TARAHUMARAN: Tarahumara (Western) [tac].
Uto-Aztecan: CAHITA: Yaqui [yaq].
Uto-Aztecan: AZTECAN: Nahuatl (Huasteca) [nhe].
Uto-Aztecan: CORACHOL: Cora [crn].

Uto-Aztecan: TUBAR: Tubar [tbu].
Yanomam: YANOMAM: Shiriana [shb].
Chibchan: TALAMANCA: Boruca [brn].
Páezan: PÁEZAN: Páez [pbb].
Barbacoan: BARBACOAN: Awa Pit [kwi].
Urarina: URARINA: Urarina [ura].
Quechuan: QUECHUAN: Quechua (Huallaga) [qub], Quechua (Imbabura) [qvi].
Aymaran: AYMARAN: Aymara (Southern) [ayc].
Araucanian: ARAUCANIAN: Mapudungun [arn].
Puelche: PUELCHE: Gününa Küne [pue].
Chonan: CHONAN: Selknam [ona].
Nadahup: NADAHUP: Hup [jup].
Cayuvava: CAYUVAVA: Cayuvava [cyb].
Yurakare: YURAKARE: Yuracare [yuz].
Timote-Cuica: TIMOTE-CUICA: Cuica [--].
Cofán: COFÁN: Cofán [con].
Tupian: YURUNA: Juruna [jur].
Tupian: TUPARI: Akuntsú [aqz].
Tupian: TUPI-GUARANÍ: Émérillon [eme].
Kapixana: KAPIXANA: Kanoê [kxo].
Uru-Chipaya: URU-CHIPAYA: Chipaya [cap].
Arawakan: PURUS: Apurinã [apu].
Arawakan: INLAND NORTHERN ARAWAKAN: Baré [bae].
Cariban: CARIBAN: Carib [car].
Tacanan: TACANAN: Cavineña [cav].
Macro-Ge: OFAYÉ: Ofayé [opy].
Macro-Ge: KARAJÁ: Karajá [kpj].

9.4. Lacks numeral classifiers, numeral and demonstrative on different sides of noun (77 languages, 55 genera):

Sandawe: SANDAWE: Sandawe [sad].
Niger-Congo: BANTOID: Tunen [tvu], Akoose [bss], Mmen [bfm].
Niger-Congo: CROSS RIVER: Ogbronuagum [ogu].
Niger-Congo: KAINJI: Duka [dud].
Niger-Congo: KRU: Seme [sif].
Niger-Congo: KWA: Anufo [cko].
Niger-Congo: SENUFO: Supyire [spp].
Mande: EASTERN MANDE: Mona [moa].
Mande: WESTERN MANDE: Xasonga [kao].
Fur: FUR: Fur [fvr].
East Sudanic: NUBIAN: Nubian (Dongolese) [dgl], Nubian (Kunuz) [xnz].
East Sudanic: NILOTIC: Camus [saq].
Afro-Asiatic: BERBER: Tamashek [taq].
Afro-Asiatic: SEMITIC: Hebrew (Modern) [heb].
Basque: BASQUE: Basque [eus].

Indo-European: CELTIC: Welsh [cym].
Altaic: MONGOLIC: Bao'an [peh].
Austro-Asiatic: ASLIAN: Temiar [tea].
Sino-Tibetan: BODIC: Tamang (Eastern) [taj], Nar-Phu [npa], Thakali [ths], Tshangla [tsj], Kyirong [kgy], Kurtöp [xkz], Purki [prx].
Sino-Tibetan: KUKI-CHIN: Chin (Tiddim) [ctd].
Sino-Tibetan: LEPCHA: Lepcha [lep].
Great Andamanese: GREAT ANDAMANESE: Great Andamanese [akj].
Austronesian: ATAYALIC: Seediq [trv].
Austronesian: BILIC: Tboli [tbl].
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Gayo [gay].
Austronesian: MALAYO-SUMBAWAN: Sundanese [sun].
Austronesian: YAPESE: Yapese [yap].
Austronesian: OCEANIC: Iduna [viv], Sinaugoro [snc], Tungak [lcm], Teop [tio], Hoava [hoa], Iaai [iai], Drehu [dhv], 'Are'are [alu], Rapanui [rap].
Trans-New Guinea: OKSAPMIN: Oksapmin [opm].
Trans-New Guinea: FINISTERRE-HUON: Nankina [nnk].
Sentani: SENTANI: Sentani [set].
Pawaian: PAWAIAN: Pawaian [pwa].
Eleman: TATE: Kaki Ae [tbd].
Nimboran: NIMBORAN: Nimboran [nir].
Sepik: RAM: Awtuw [kmn].
Sepik: NUKUMA: Kwanga [kwj].
Sepik: NDU: Ambulas [abt], Iatmul [ian].
Yuchi: YUCHI: Yuchi [yuc].
Muskogean: MUSKOGEAN: Creek [mus].
Wappo-Yukian: WAPPO: Wappo [wao].
Oto-Manguean: AMUZGOAN: Amuzgo [azg].
Oto-Manguean: MIXTECAN: Trique (Copala) [trc], Mixtec (Diuxi-Tilantongo) [xtd].
Oto-Manguean: CHINANTECAN: Chinantec (Comaltepec) [cco].
Oto-Manguean: ZAPOTECAN: Chatino (Yaitepec) [ctp], Zapotec (Zoogocho) [zpq].
Xincan: XINCAN: Xinca (Guazacapán) [xin].
Chibchan: RAMA: Rama [rma].
Chibchan: CHIBCHA-DUIT: Muisca [chb].
Warao: WARAO: Warao [wba].
Choco: CHOCO: Emberá (Northern) [emp].
Tupian: ARIKEM: Karitiana [ktn].
Tupian: TUPI-GUARANÍ: Yuqui [yuq].
Arauan: ARAUAN: Paumarí [pad], Kulina [cul].
Matacoan: MATACOAN: Wichí [mtp].
Tacanan: TACANAN: Araona [aro].
Creole: CREOLE: Ndyuka [djk], Saramaccan [srm].

10. Data for Table 9

	Num and Adj occur on same side of noun		Num and Adj occur on different sides of noun		Percent same side
	#Lgs	Frequency	#Lgs	Frequency	
Lg has numeral classifiers	149	33.38	60	11.27	.75
Lg lacks numeral classifiers	296	71.88	77	22.11	.76

Table 9
Relationship between whether the language has numeral classifiers and whether numeral and adjective occur on the same side of the noun

10.1. Language has numeral classifiers and adjective and numeral occur on same side of noun (149 languages, 76 genera):

Mande: EASTERN MANDE: Busa [bqp], Boko [bqc].
Indo-European: IRANIAN: Baluchi [bgn].
Indo-European: INDIC: Darai [dry], Bengali [ben], Rajbanshi [rjs], Halbi [hlb].
Uralic: UGRIC: Hungarian [hun].
Altaic: MONGOLIC: Mangghuer [mjg].
Altaic: TURKIC: Turkish [tur], Azerbaijani [azj], Uzbek [uzn].
Korean: KOREAN: Korean [kor].
Japonic: JAPANESE: Japanese [jpn].
Burushaski: BURUSHASKI: Burushaski [bsk].
Dravidian: NORTHERN DRAVIDIAN: Kurukh [kru], Malto [mjt].
Austro-Asiatic: MUNDA: Santali [sat], Juang [jun], Remo [bfw].
Austro-Asiatic: PALAUNGIC: Palaung [pll], Lawa (Eastern) [lwl], Parauk [prk].
Austro-Asiatic: KHMUIC: Mlabri (Minor) [mra], Khmu' [kjg].
Austro-Asiatic: BAHNARIC: Stieng [sti], Mnong (Central) [cmo], Loven [lbo], Brao [brb].
Austro-Asiatic: KHMER: Khmer [khm].
Austro-Asiatic: PEARIC: Kasong [cog].
Austro-Asiatic: MONIC: Mon [mnw].
Austro-Asiatic: NICOBARESE: Nicobarese (Car) [caq].
Sino-Tibetan: CHINESE: Mandarin [cmn], Wu [Wu], Cantonese [yue].
Sino-Tibetan: KAREN: Karen (Pwo) [kjp], Kayah Li (Eastern) [eky], Karen (Bwe) [bwe], Karen (Sgaw) [ksw].
Sino-Tibetan: TUJIA: Tujia (Northern) [tji].
Sino-Tibetan: DHIMALISH: Dhimal [dhi].
Sino-Tibetan: BODIC: Chantyal [chx], Tibetan (Dongwang) [khg].
Sino-Tibetan: MAHAKIRANTI: Thangmi [thf], Hayu [vay], Thulung [tdh], Wambule [wme], Athpare [aph], Belhare [byw].
Sino-Tibetan: QIANGIC: Qiang [cng], Pumi [pmi].
Sino-Tibetan: NAXI: Naxi [nxq].
Sino-Tibetan: rGYALRONG: Gyarong (Cogtse) [jya], rGyalrong (Caodeng) [jya].

Sino-Tibetan: BODO-GARO: Dimasa [dis], Kokborok [trp], Garo [grt].
Sino-Tibetan: NORTHERN NAGA: Naga (Leinong) [lzn].
Sino-Tibetan: KUKI-CHIN: Mikir [mjw], Mizo [lus], Chin (Mara) [mrh].
Sino-Tibetan: MRU: Hkongso [anl].
Sino-Tibetan: JINGPHO: Jingpho [kac].
Sino-Tibetan: BURMESE-LOLO: Maru [mhx], Burmese [mya], Lisu [lis], Lolo (Yao'An) [ycl], Nuosu [iii], Lalo [yik], Bisu [bzi], Akha [ahk], Hani [hni].
Sino-Tibetan: NUNGISH: Rawang [raw], Anong [nun].
Sino-Tibetan: TANI: Miri (Hill) [mrg], Apatani [apt].
Sino-Tibetan: DIGAROAN: Digaro [mhu].
Tai-Kadai: KAM-TAI: Lao [lao], Thai [tha].
Austronesian: RUKAI: Rukai (Tanan) [dru].
Austronesian: PAIWAN: Paiwan [pwn].
Austronesian: PALAUAN: Palauan [pau].
Austronesian: CELEBIC: Tukang Besi [khc].
Austronesian: NORTH BORNEO: Begak-Ida'an [dbj].
Austronesian: BARITO: Ma'anyan [mhy].
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Nias [nia].
Austronesian: MOKLEN-MOKEN: Moklen [mkm], Moken [mwt].
Austronesian: MALAYO-SUMBAWAN: Cham (Western) [cja].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Buru [agh], Nuaulu [nxl], Paulohi [plh], Lamaholot [slp], Tetun [tet], Tetun Dili [tdt], Tugun [tzn], Keo [xxk].
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Irarutu [irh], Taba [mky], Ambai [amk].
Austronesian: OCEANIC: Sudest [tgo], Nalik [nal], Wuvulu [wuv], Loniu [los], Kele [sbc], Belep [yly], Pingilapese [pif].
Timor-Alor-Pantar: GREATER ALOR: Woisika [woi], Abui [abz], Klon [kyo], Adang [adn].
Timor-Alor-Pantar: EAST PANTAR: Teiwa [twe].
Abun: ABUN: Abun [kgr].
Maybrat: MAYBRAT: Maybrat [ayz].
Hatam: HATAM-MANSIM: Hatam [had].
Mpur: MPUR: Mpur [akc].
West Papuan: NORTH HALMAHERAN: Tidore [tvo].
East Bird's Head: EAST BIRD'S HEAD: Meyah [mej].
Sepik: ABAU: Abau [aau].
Haida: HAIDA: Haida [hai].
Na-Dene: ATHAPASKAN: Slave [den].
Algic: YUROK: Yurok [yur].
Wakashan: NORTHERN WAKASHAN: Kwakw'ala [kwk].
Salishan: CENTRAL SALISH: Halkomelem (Upriver) [hur].
Salishan: INTERIOR SALISH: Thompson [thp].
Penutian: TSIMSHIANIC: Tsimshian (Coast) [tsi].
Penutian: CHINOOKAN: Chinook (Lower) [chh].
Totonacan: TOTONACAN: Totonac (Misantla) [tlc], Tepehua (Huehuetla) [tee],

Tepehua (Tlachichilco) [tpt].
Mayan: MAYAN: Huastec [hus], Lacandón [lac], Itzaj [itz], Chol [ctu], Chontal Maya [chf], Tzeltal [tzh], Jakaltek [jac], Kanjobal (Western) [knj].
Chibchan: TALAMANCA: Bribri [bzd], Teribe [tfr].
Chibchan: GUAYMIIC: Ngäbere [gym], Buglere [sab].
Chimúan: CHIMÚAN: Mochica [omc].
Hibito-Cholón: HIBITO-CHOLÓN: Cholón [cht].
Nambikuaran: NAMBIKUARAN: Nambikuára (Southern) [nab].
Tucanoan: TUCANOAN: Retuarã [tnc].
Arawakan: INLAND NORTHERN ARAWAKAN: Tariana [tae].
Arawakan: CARIBBEAN ARAWAKAN: Arawak [arw].
Total Clsfr&AN=NumN=76 #Lgs=149

10.2. Language has numeral classifiers and adjective and numeral occur on opposite sides of noun (60 languages, 31 genera):

Clsfr&ANNotNumN
Indo-European: IRANIAN: Kurdish (Central) [ckb], Persian [pes], Tajik [tgk].
Indo-European: INDIC: Oriya [ory].
Austro-Asiatic: KHASIAN: Khasi [kha], Pnar [pbv].
Austro-Asiatic: VIETIC: Vietnamese [vie].
Austro-Asiatic: KATUIC: Pacoh [pac], Katu [ktv].
Austro-Asiatic: BAHNARIC: Chrau [crw], Sre [kpm], Bahnar [bdq], Rengao [ren], Sedang [sed].
Austro-Asiatic: ASLIAN: Jahai [jhi], Semelai [sza].
Sino-Tibetan: BODIC: Gurung [gvr].
Sino-Tibetan: MAHAKIRANTI: Newari (Kathmandu) [new].
Sino-Tibetan: BODO-GARO: Bodo [brx].
Sino-Tibetan: BAI: Bai [bca].
Sino-Tibetan: TANI: Galo [adl], Mising [mrg], Tagin [dap].
Sino-Tibetan: DIGAROAN: Idu [clk].
Miao-Yao: MIAO-YAO: Hmong Njua [hnj], Xong [mmr], Iu Mien [ium], Bunu (Younou) [buh].
Tai-Kadai: HLAI: Hlai (Baoding) [lic].
Tai-Kadai: KADAI: Gelao [giq].
Tai-Kadai: KAM-TAI: Dong (Southern) [kmc], Sanjiang Kam [cov], Maonan [mmd], Yay [pcc], Nung (in Vietnam) [nut].
Austronesian: CELEBIC: Muna [mnb], Pendau [ums], Padoe [pdo].
Austronesian: SOUTH SULAWESI: Selayar [sly].
Austronesian: SAMA-BAJAW: Bajau (West Coast) [bdr].
Austronesian: LAMPUNGIC: Lampung [ljp].
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Alas [btz].
Austronesian: MALAYO-SUMBAWAN: Iban [iba], Minangkabau [min], Indonesian [ind], Acehnese [ace], Cham (Eastern) [cjm].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Manggarai [mqy].
Austronesian: OCEANIC: Kilivila [kij], Kiribati [gil], Woleaian [woe], Wala [lgl],

Kwaio [kwd], Marquesan [mrq].
Na-Dene: ATHAPASKAN: Hupa [hup].
Algic: ALGONQUIAN: Ottawa [otw].
Tarascan: TARASCAN: Purépecha [tsz].
Arawakan: BOLIVIA-PARANA: Baure [brg].
Arawakan: EASTERN ARAWAKAN: Palikur [plu].
Peba-Yaguan: PEBA-YAGUAN: Yagua [yad].

10.3. Language lacks numeral classifiers and adjective and numeral occur on same side of noun (296 languages, 182 genera):

Tuu: TUU: N|Uuki [ngh].
Kxa: =|HOAN: =|Hoan [huc].
Kxa: JU-KUNG: Ju|'hoan [knw].
Khoe-Kwadi: KHOE-KWADI: //Ani [hnh].
Sandawe: SANDAWE: Sandawe [sad].
Niger-Congo: BANTOID: Nyakyusa [nyy], Nkore-Kiga [cgg], Runyankore [nyn], Tunen [tvu], Akoose [bss], Aghem [agq], Babungo [bav], Mundani [mnf], Mungbam [mij], Nchane [ncr].
Niger-Congo: NUPOID: Nupe [nup], Gwari [gbr].
Niger-Congo: IDOMOID: Igede [ige].
Niger-Congo: EDOID: Engenni [enn].
Niger-Congo: IGBOID: Igbo [ibo], Iká [ikk].
Niger-Congo: JUKUNOID: Kuteb [kub].
Niger-Congo: PLATOID: Fyem [pym].
Niger-Congo: UKAAN: Ikaan [kcf].
Niger-Congo: CROSS RIVER: Ogbronuagum [ogu].
Niger-Congo: KAINJI: Duka [dud], Amo [amo].
Niger-Congo: KRU: Seme [sif].
Niger-Congo: KWA: Akan [aka], Anufo [cko], Chumburung [ncu], Ebrie [ebr], Selee [snw], Logba [lgq], Igo [ahl], Tafi [tcd], Ewe [ewe], Gungbe [guw].
Niger-Congo: SENUFO: Supyire [spp].
Niger-Congo: SAMBA-DURU: Dii [dur].
Niger-Congo: MBUMIC: Mundang [mua].
Niger-Congo: BUA: Lua [nie].
Niger-Congo: NORTHERN-CENTRAL GUR: Dagbani [dag].
Niger-Congo: SOUTHERN-CENTRAL GUR: Sisaala (Western) [ssl], Chakali [cli].
Niger-Congo: MEL: Mani [buy].
Niger-Congo: CANGIN: Ndut [ndv], Noon [snf].
Kordofanian: KATLA-TIMA: Tima [tms].
Kordofanian: HEIBAN: Moro [mor].
Kordofanian: TALODI: Masakin [jle].
Mande: EASTERN MANDE: Dan [dnj], Mona [moa].
Mande: WESTERN MANDE: Xasonga [kao], Vai [vai].
Dogon: DOGON: Tommo So [dto].

Kadu: KADUGLI: Krongo [kgo].
Songhay: SONGHAY: Koyraboro Senni [ses], Tadaksahak [dsq].
Saharan: EASTERN SAHARAN: Beria [zag].
Maban: MABAN: Maba [mde].
Fur: FUR: Fur [fvr].
East Sudanic: NUBIAN: Nubian (Dongolese) [dgl], Nubian (Kunuz) [xnz].
East Sudanic: SURMIC: Koegu [xwg].
East Sudanic: EASTERN JEBEL: Gaahmg [tbi].
East Sudanic: DAJU: Shatt [shj], Laggori [liu].
East Sudanic: NILOTIC: Acholi [ach], Camus [saq], Nyangatom [nnj], Turkana [tuv], Sebei [kpz].
Kuliak: KULIAK: Ik [ikx], So [teu].
Central Sudanic: BONGO-BAGIRMI: Ngambay [sba].
Central Sudanic: MORU-MA'DI: Ma'di [mhi].
Central Sudanic: MANGBUTU-EFE: Mamvu [mdi].
Central Sudanic: MANGBETU: Mangbetu [mdj].
Central Sudanic: LENDU: Ngiti [niy].
Central Sudanic: KRESH: Kresh [krs].
Berta: BERTA: Berta [wti].
Kunama: KUNAMA: Kunama [kun].
Koman: KOMAN: Gwama [kmq].
Afro-Asiatic: SOUTH OMOTIC: Dime [dim].
Afro-Asiatic: DIZOID: Dizi [mdx].
Afro-Asiatic: MAO: Northern Mao [myf].
Afro-Asiatic: NORTH OMOTIC: Yemsa [jnj], Maale [mdy], Wolaytta [wal], Kullo [dwr].
Afro-Asiatic: MASA: Masa [mcn].
Afro-Asiatic: EAST CHADIC: Lele [llk], Kera [ker].
Afro-Asiatic: BIU-MANDARA: Uldeme [udl], Buduma [bdm], Zina [jia].
Afro-Asiatic: WEST CHADIC: Goemai [ank], Ngizim [ngi].
Afro-Asiatic: HIGHLAND EAST CUSHITIC: Sidaama [sid].
Afro-Asiatic: LOWLAND EAST CUSHITIC: Qafar [aar], Rendille [rel], Konso [kxc].
Afro-Asiatic: YAAKU: Yaaku [muu].
Afro-Asiatic: DAHALO: Dahalo [dal].
Afro-Asiatic: SOUTHERN CUSHITIC: Iraqw [irk].
Afro-Asiatic: SEMITIC: Amharic [amh], Harari [har].
Indo-European: GERMANIC: English [eng].
Indo-European: SLAVIC: Russian [rus], Bulgarian [bul].
Indo-European: BALTIC: Latvian [lav].
Indo-European: GREEK: Greek (Modern) [ell].
Indo-European: ARMENIAN: Armenian (Eastern) [hye].
Indo-European: IRANIAN: Ossetic [oss], Shughni [sgh].
Indo-European: INDIC: Dhivehi [div], Konkani [knn], Gujarati [guj], Kumauni [kfy], Panjabi [pan], Palula [phl], Dameli [dml].
Uralic: SAMOYEDIC: Nenets (Tundra) [yrk], Selkup [sel].

Uralic: UGRIC: Khanty [kca], Mansi [mns].
Uralic: PERMIC: Udmurt [udm].
Uralic: FINNIC: Finnish [fin].
Yukaghir: YUKAGHIR: Yukaghir (Kolyma) [yux].
Altaic: MONGOLIC: Bao'an [peh].
Altaic: TUNGUSIC: Evenki [evn], Udihe [ude].
Altaic: TURKIC: Turkmen [tuk], Bashkir [bak].
Ainu: AINU: Ainu [ain].
Chukotko-Kamchatkan: NORTHERN CHUKOTKO-KAMCHATKAN: Chukchi [ckt].
Yeniseian: YENISEIAN: Ket [ket].
Kartvelian: KARTVELIAN: Georgian [kat].
Nakh-Daghestanian: NAKH: Ingush [inh].
Nakh-Daghestanian: AVAR-ANDIC-TSEZIC: Khwarshi [khv], Tsez [ddo], Hinuq [gin], Hunzib [huz].
Nakh-Daghestanian: LEZGIC: Lezgian [lez].
Dravidian: CENTRAL DRAVIDIAN: Kolami [kfb].
Dravidian: SOUTH-CENTRAL DRAVIDIAN: Kuvi [kxv].
Dravidian: SOUTHERN DRAVIDIAN: Kannada [kan].
Austro-Asiatic: MUNDA: Mundari [unr].
Sino-Tibetan: BODIC: Nar-Phu [npa], Tibetan (Standard Spoken) [bod], Kyirong [kgy], Kurtöp [xkz], Bunan [bfu], Kinnauri [kfk], Darma [drd], Byansi [bee].
Sino-Tibetan: MAHAKIRANTI: Magar [mrd].
Sino-Tibetan: KUKI-CHIN: Lotha [njh], Ao [njo], Naga (Mao) [nbi], Sema [nsm], Naga (Tangkhul) [nmf], Koireng [nkd], Chin (Tiddim) [ctd], Bawm [bgr].
Sino-Tibetan: LEPCHA: Lepcha [lep].
Great Andamanese: GREAT ANDAMANESE: Great Andamanese [akj].
Shompen: SHOMPEN: Shompen [sii].
Austronesian: EAST FORMOSAN: Amis [ami].
Austronesian: CHAMORRO: Chamorro [cha].
Austronesian: NORTHERN LUZON: Ilocano [ilo].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Selaru [slu].
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Warembori [wsa].
Austronesian: OCEANIC: Arop-Sissano [aps], Takia [tbc], Sio [xsi], Awad Bing [bcu], Bariai [bch], Lusi [khl], Kove [kvc], Bukawa [buk], Adzera [azr], Buang (Mapos) [bzh], Iduna [viv], Sinaugoro [snc], Kaulong [pss], Kara (in Papua New Guinea) [leu], Buma [tkw], Anejom [aty], Iaai [iai], Avava [tmv], Mwotlap [mlv], Tamambo [mla], Nahavaq [sns], Mavea [mkv], Unua [onu], Port Sandwich [psw], Efate (South) [erk], Ifira-Mele [mxe].
Trans-New Guinea: FASU: Fasu [faa].
Trans-New Guinea: DUNA: Duna [duc].
Trans-New Guinea: ANGAN: Menya [mcr].
Trans-New Guinea: FINISTERRE-HUON: Iyo [nca], Nankina [nnk].
Trans-New Guinea: KAINANTU-GOROKA: Awa [awa].
Trans-New Guinea: CHIMBU: Dom [doa].
Trans-New Guinea: ENGAN: Kyaka [kyc].

Trans-New Guinea: AWJU-DUMUT: Kombai [tyn].
Trans-New Guinea: OK: Mian [mpt].
Trans-New Guinea: DANI: Nggem [nbq].
Trans-New Guinea: MADANG: Kobon [kpw], Anamuxra [imi], Bargam [mlp], Mauwake [mhl], Usan [wnu].
Trans-New Guinea: MEK: Yale (Kosarek) [kkl].
Trans-New Guinea: BINANDEREAN: Guhu-Samane [ghs].
Trans-New Guinea: GOILALAN: Kunimaipa [kup].
Timor-Alor-Pantar: MAKASAE-FATALUKU-OIRATA: Fataluku [ddg].
Bosavi: BOSAVI: Edolo [etr].
East Strickland: EAST STRICKLAND: Odoodee [kkc].
South Bird's Head: SOUTH BIRD'S HEAD: Inanwatan [szp].
Sentani: SENTANI: Sentani [set].
Kwerba: KWERBA: Isirawa [srl].
Dagan: DAGAN: Daga [dgz].
Eleman: TATE: Kaki Ae [tbd].
Kiwaian: KIWAIAN: Kiwai (Southern) [kjd].
Senagi: SENAGI: Anggor [agg].
Border: BORDER: Waris [wrs].
Nimboran: NIMBORAN: Nimboran [nir].
West Papuan: NORTH HALMAHERAN: Pagu [pgu].
Skou: WESTERN SKOU: Skou [skv], Wutung [wut].
Skou: KRISA: I'saka [ksi].
Skou: SERRA HILLS: Poko-Rawo [rwa].
Skou: WARAPU: Barupu [wra].
Torricelli: URIM: Urim [uri].
Torricelli: WAPEI-PALEI: Walman [van].
Torricelli: KOMBIO-ARAPESH: Kombio [xbi], Arapesh (Abu) [aah].
Torricelli: MARIENBERG: Kamasau [kms].
Sepik: RAM: Awtuw [kmn].
Sepik: YELLOW RIVER: Namia [nnm].
Sepik: NUKUMA: Kwanga [kwj], Kwoma [kmo].
Sepik: SEPIK HILL: Sare [dju], Alamblak [amp].
Yelî Dnye: YELî DNYE: Yelî Dnye [yle].
Solomons East Papuan: LAVUKALEVE: Lavukaleve [lvk].
Solomons East Papuan: BILUA: Bilua [blb].
Western Daly: WAGAYDY: Maranungku [zmr].
Pama-Nyungan: CENTRAL PAMA-NYUNGAN: Arrernte (Mparntwe) [aer].
Pama-Nyungan: WESTERN PAMA-NYUNGAN: Ngaanyatjarra [ntj].
Eskimo-Aleut: ESKIMO: Iñupiaq [esk], Greenlandic (West) [kal].
Yuchi: YUCHI: Yuchi [yuc].
Siouan: CORE SIOUAN: Assiniboine [asb].
Iroquoian: SOUTHERN IROQUOIAN: Cherokee [chr].
Penutian: KLAMATH-MODOC: Klamath [kla].
Penutian: SAHAPTIAN: Nez Perce [nez].
Muskogean: MUSKOGEAN: Choctaw [cho], Creek [mus].

Wappo-Yukian: WAPPO: Wappo [wao].
Mixe-Zoque: MIXE-ZOQUE: Mixe (Ayutla) [mxp], Popoluca (Sierra) [poi], Zoque (Copainalá) [zoc], Zoque (Chimalapa) [zoh].
Hokan: CHIMARIKO: Chimariko [cid].
Oto-Manguean: OTOMIAN: Otomí (Mezquital) [ote].
Oto-Manguean: MATLATZINCAN: Ocuilteco [ocu].
Uto-Aztecan: NUMIC: Paiute (Northern) [pao].
Uto-Aztecan: TEPIMAN: Pima Bajo [pia].
Uto-Aztecan: TARAHUMARAN: Tarahumara (Western) [tac].
Uto-Aztecan: CAHITA: Yaqui [yaq].
Xincan: XINCAN: Xinca (Guazacapán) [xin].
Chibchan: PAYA: Pech [pay].
Chibchan: RAMA: Rama [rma].
Chibchan: CHIBCHA-DUIT: Muisca [chb].
Warao: WARAO: Warao [wba].
Choco: CHOCO: Emberá (Northern) [emp].
Barbacoan: BARBACOAN: Awa Pit [kwi].
Quechuan: QUECHUAN: Quechua (Huallaga) [qub], Quechua (Imbabura) [qvi].
Aymaran: AYMARAN: Aymara (Southern) [ayc].
Araucanian: ARAUCANIAN: Mapudungun [arn].
Cayuvava: CAYUVAVA: Cayuvava [cyb].
Cofán: COFÁN: Cofán [con].
Tupian: TUPI-GUARANÍ: Yuqui [yuq].
Arauan: ARAUAN: Paumarí [pad], Kulina [cul].
Uru-Chipaya: URU-CHIPAYA: Chipaya [cap].
Cariban: CARIBAN: Carib [car].
Tacanan: TACANAN: Araona [aro].
Creole: CREOLE: Ndyuka [djk], Saramaccan [srm].

10.4. Language lacks numeral classifiers and adjective and numeral occur on opposite sides of noun (77 languages, 57 genera):

Niger-Congo: BANTOID: Kako [kkj], Mmen [bfm].
Niger-Congo: CROSS RIVER: Efik [efi], Ibibio [ibb].
Niger-Congo: UBANGI: Ngbandi [ngb], Munzombo [moj], Baka (in Cameroon) [bkc].
Central Sudanic: BONGO-BAGIRMI: Baka (in Sudan) [bdh].
Afro-Asiatic: BERBER: Tamashek [taq].
Afro-Asiatic: BIU-MANDARA: Gude [gde].
Afro-Asiatic: WEST CHADIC: Pa'a [pqa].
Afro-Asiatic: SEMITIC: Hebrew (Modern) [heb], Maltese [mlt].
Basque: BASQUE: Basque [eus].
Indo-European: ROMANCE: French [fra], Spanish [spa].
Indo-European: CELTIC: Welsh [cym].
Indo-European: IRANIAN: Kurmanji [kmr], Zazaki [diq].
Indo-European: INDIC: Domari (Modern) [rmt].

Austro-Asiatic: ASLIAN: Temiar [tea].
Sino-Tibetan: BODIC: Tamang (Eastern) [taj], Thakali [ths], Tshangla [tsj], Purki [prx].
South Andamanese: SOUTH ANDAMANESE: Jarawa (in Andamans) [anq].
Austronesian: ATAYALIC: Seediq [trv].
Austronesian: BILIC: Tboli [tbl].
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Gayo [gay].
Austronesian: MALAYO-SUMBAWAN: Sundanese [sun], Manadonese [xmm].
Austronesian: YAPESE: Yapese [yap].
Austronesian: OCEANIC: Tungak [lcm], Teop [tio], Hoava [hoa], Drehu [dhv], 'Are'are [alu], Rapanui [rap].
Trans-New Guinea: KAINANTU-GOROKA: Yagaria [ygr].
Pawaian: PAWAIAN: Pawaian [pwa].
Sepik: NDU: Ambulas [abt], Iatmul [ian].
Oto-Manguean: PAMEAN: Pame (Southern) [pmz].
Oto-Manguean: OTOMIAN: Otomí (Santiago Mexquititlan) [otq].
Oto-Manguean: CHICHIMEC: Chichimeca-Jonez [pei].
Oto-Manguean: AMUZGOAN: Amuzgo [azg].
Oto-Manguean: MIXTECAN: Trique (Copala) [trc], Mixtec (Diuxi-Tilantongo) [xtd], Mixtec (Peñoles) [mil].
Oto-Manguean: CHINANTECAN: Chinantec (Comaltepec) [cco].
Oto-Manguean: ZAPOTECAN: Chatino (Yaitepec) [ctp], Zapotec (Zoogocho) [zpq].
Kiowa-Tanoan: KIOWA-TANOAN: Towa [tow].
Uto-Aztecan: NUMIC: Ute [ute].
Uto-Aztecan: TAKIC: Cupeño [cup].
Uto-Aztecan: AZTECAN: Nahuatl (Huasteca) [nhe].
Uto-Aztecan: CORACHOL: Cora [crn].
Uto-Aztecan: TUBAR: Tubar [tbu].
Yanomam: YANOMAM: Shiriana [shb].
Chibchan: TALAMANCA: Boruca [brn].
Páezan: PÁEZAN: Páez [pbb].
Urarina: URARINA: Urarina [ura].
Puelche: PUELCHE: Gününa Küne [pue].
Chonan: CHONAN: Selknam [ona].
Nadahup: NADAHUP: Hup [jup].
Timote-Cuica: TIMOTE-CUICA: Cuica [--].
Tupian: ARIKEM: Karitiana [ktn].
Tupian: YURUNA: Juruna [jur].
Tupian: TUPARI: Akuntsú [aqz].
Tupian: TUPI-GUARANÍ: Émérillon [eme].
Kapixana: KAPIXANA: Kanoê [kxo].
Arawakan: PURUS: Apurinã [apu].
Arawakan: INLAND NORTHERN ARAWAKAN: Baré [bae].
Matacoan: MATACOAN: Wichí [mtp].
Tacanan: TACANAN: Cavineña [cav].

Macro-Ge: OFAYÉ: Ofayé [opy].
Macro-Ge: KARAJÁ: Karajá [kpj].

11. Data for Table 10

	AdjN		NAdj	
	#Lgs	Frequency	#Lgs	Frequency
RelN	63	20.87	21	10.91
NRel	54	15.99	200	58.14

Table 10
Relationship between the order of semantic adjective and noun and the order of relative clause and noun in languages where semantic adjectives are not verbs

11.1. Semantic adjective and relative clause both precede noun (and semantic adjective is not a verb) (63 languages, 32 genera):

Khoe-Kwadi: KHOE-KWADI: Nama [naq].
Afro-Asiatic: NORTH OMOTIC: Yemsa [jnj], Maale [mdy], Kullo [dwr], Gamo [gmv], Zayse [zay].
Afro-Asiatic: CENTRAL CUSHITIC: Kemant [ahg].
Afro-Asiatic: HIGHLAND EAST CUSHITIC: Sidaama [sid].
Afro-Asiatic: SEMITIC: Tigré [tig], Harari [har], Chaha [sgw].
Indo-European: INDIC: Dhivehi [div], Sinhala [sin], Lamani [lmn].
Uralic: SAMOYEDIC: Nenets (Tundra) [yrk].
Uralic: UGRIC: Khanty [kca], Mansi [mns].
Altaic: MONGOLIC: Dagur [dta], Mangghuer [mjg], Kalmyk [xal].
Altaic: TUNGUSIC: Even [eve], Evenki [evn], Manchu [mnc].
Altaic: TURKIC: Chuvash [chv], Uzbek [uzn], Bashkir [bak], Tatar [tat].
Nakh-Daghestanian: NAKH: Tsova-Tush [bbl], Chechen [che], Ingush [inh].
Nakh-Daghestanian: AVAR-ANDIC-TSEZIC: Khwarshi [khv], Hinuq [gin], Hunzib [huz].
Nakh-Daghestanian: LEZGIC: Lezgian [lez], Tsakhur [tkr].
Burushaski: BURUSHASKI: Burushaski [bsk].
Dravidian: SOUTH-CENTRAL DRAVIDIAN: Kuvi [kxv].
Dravidian: SOUTHERN DRAVIDIAN: Malayalam [mal].
Austro-Asiatic: MUNDA: Mundari [unr], Gorum [pcj].
Sino-Tibetan: DHIMALISH: Dhimal [dhi].
Sino-Tibetan: BODIC: Gurung [gvr], Chantyal [chx], Tshangla [tsj], Purki [prx].
Sino-Tibetan: MAHAKIRANTI: Newari (Kathmandu) [new], Thulung [tdh], Limbu [lif].
Sino-Tibetan: TANI: Galo [adl], Mising [mrg].
Trans-New Guinea: KAINANTU-GOROKA: Yagaria [ygr].
Trans-New Guinea: MEK: Eipo [eip].
Yareban: YAREBAN: Yareba [yrb].
Sepik: NUKUMA: Kwoma [kmo].

Sepik: SEPIK HILL: Sare [dju], Alamblak [amp].
Sepik: NDU: Ambulas [abt], Iatmul [ian].
Solomons East Papuan: SAVOSAVO: Savosavo [svs].
Iroquoian: SOUTHERN IROQUOIAN: Cherokee [chr].
Quechuan: QUECHUAN: Quechua (Huallaga) [qub], Quechua (Imbabura) [qvi].
Uru-Chipaya: URU-CHIPAYA: Chipaya [cap].

11.2. Semantic adjective follows noun and relative clause precedes noun (and semantic adjective is not a verb) (21 languages, 17 genera):

Afro-Asiatic: SOUTH OMOTIC: Dime [dim].
Afro-Asiatic: NORTH OMOTIC: Koorete [kqy].
Basque: BASQUE: Basque [eus].
Altaic: MONGOLIC: Bao'an [peh].
Northwest Caucasian: NORTHWEST CAUCASIAN: Ubykh [uby], Abkhaz [abk].
Sino-Tibetan: BODIC: Nar-Phu [npa], Tibetan (Modern Literary) [bod], Sikkimese [sip].
Sino-Tibetan: KUKI-CHIN: Naga (Tangkhul) [nmf].
Sino-Tibetan: BURMESE-LOLO: Lolo (Yao'An) [ycl].
Sino-Tibetan: TANI: Apatani [apt].
Trans-New Guinea: ENGAN: Kyaka [kyc].
Trans-New Guinea: ASMAT-KAMORO: Asmat [cns].
Trans-New Guinea: MADANG: Maia [sks].
Trans-New Guinea: MEK: Yale (Kosarek) [kkl], Una [mtg].
East Strickland: EAST STRICKLAND: Odoodee [kkc].
Turama-Kikorian: TURAMA-KIKORIAN: Rumu [klq].
Eleman: TATE: Kaki Ae [tbd].
Sepik: RAM: Awtuw [kmn].

11.3. Semantic adjective precedes noun and relative clause follows noun (and semantic adjective is not a verb) (54 languages, 30 genera):

Niger-Congo: GBAYA-MANZA-NGBAKA: Gbeya Bossangoa [gbp], Mbodomo [gmm].
Niger-Congo: UBANGI: Sango [sag], Mayogo [mdm], Baka (in Cameroon) [bkc], Linda [liy], Nzakara [nzk], Barambu [brm].
Afro-Asiatic: BIU-MANDARA: Gude [gde].
Afro-Asiatic: WEST CHADIC: Hausa [hau], Pa'a [pqa].
Indo-European: GERMANIC: Danish [dan], Swedish [swe], Faroese [fao], Norwegian [nor], German [deu], English [eng], Frisian [fry].
Indo-European: SLAVIC: Russian [rus], Ukrainian [ukr], Polish [pol], Czech [ces], Bulgarian [bul].
Indo-European: BALTIC: Latvian [lav].
Indo-European: GREEK: Greek (Modern) [ell].
Indo-European: IRANIAN: Pashto [pst], Wakhi [wbl], Baluchi [bgn].
Indo-European: INDIC: Romani (Welsh) [rmw], Dameli [dml].

Uralic: FINNIC: Finnish [fin].
Altaic: TURKIC: Khalaj [klj].
Kartvelian: KARTVELIAN: Georgian [kat].
Dravidian: NORTHERN DRAVIDIAN: Brahui [brh].
Sino-Tibetan: MAHAKIRANTI: Magar [mrd].
Tiwian: TIWIAN: Tiwi [tiw].
Tangkic: TANGKIC: Kayardild [gyd], Yukulta [gcd].
Pama-Nyungan: NORTHERN PAMA-NYUNGAN: Biri [bzr].
Penutian: TSIMSHIANIC: Tsimshian (Coast) [tsi].
Penutian: KLAMATH-MODOC: Klamath [kla].
Penutian: SAHAPTIAN: Nez Perce [nez].
Totonacan: TOTONACAN: Tepehua (Huehuetla) [tee], Tepehua (Tlachichilco) [tpt].
Mayan: MAYAN: Jakaltek [jac], Sipakapense [qum].
Uto-Aztecan: NUMIC: Paiute (Northern) [pao].
Uto-Aztecan: TEPIMAN: O'odham [ood], Pima Bajo [pia].
Uto-Aztecan: TARAHUMARAN: Tarahumara (Central) [tar].
Uto-Aztecan: CAHITA: Yaqui [yaq].
Xincan: XINCAN: Xinca (Guazacapán) [xin].
Tucanoan: TUCANOAN: Cubeo [cub].
Arawakan: YANESHA': Yanesha' [ame].

11.4. Semantic adjective and relative clause both follow noun (and semantic adjective is not a verb) (200 languages, 96 genera):

Kxa: =|HOAN: =|Hoan [huc].
Sandawe: SANDAWE: Sandawe [sad].
Niger-Congo: BANTOID: Zulu [zul], Chichewa [nya], Kikuyu [kik], Kagulu [kki], Swahili [swh], Bena (Tanzania) [bez], Runyankore [nyn], Haya [hay], Bembe [bmb], Nzadi [nzd], Luvale [luv], Lunda [lun], Kwangali [kwn], Tunen [tvu], Mungbam [mij].
Niger-Congo: EDOID: Engenni [enn].
Niger-Congo: IGBOID: Igbo [ibo], Iká [ikk].
Niger-Congo: JUKUNOID: Kuteb [kub], Jukun [jbu].
Niger-Congo: PLATOID: Migili [mgi], Birom [bom].
Niger-Congo: KAINJI: Duka [dud], Amo [amo].
Niger-Congo: KWA: Anufo [cko], Logba [lgq], Ewe [ewe], Adioukrou [adj].
Niger-Congo: SAMBA-DURU: Dii [dur], Doyayo [dow].
Niger-Congo: MUMUYE-YANDANG: Mumuye [mzm].
Niger-Congo: MBUMIC: Mundang [mua].
Niger-Congo: BUA: Lua [nie].
Niger-Congo: NORTHERN-CENTRAL GUR: Dagbani [dag].
Niger-Congo: MEL: Mani [buy], Kisi [kiz].
Niger-Congo: PEUL-SERER: Fulfulde (Nigerian) [fuv], Fulfulde (Adamawa) [fub].
Niger-Congo: WOLOF: Wolof [wof].
Niger-Congo: CANGIN: Noon [snf].

Mande: EASTERN MANDE: Mona [moa], Busa [bqp].
Mande: WESTERN MANDE: Bobo Madaré (Southern) [bwq].
Saharan: EASTERN SAHARAN: Beria [zag].
Saharan: WESTERN SAHARAN: Kanuri [knc], Tubu [dzg].
Maban: MABAN: Maba [mde], Masalit [mls], Runga [rou].
Fur: FUR: Fur [fvr].
East Sudanic: NUBIAN: Nubian (Dongolese) [dgl], Nubian (Kunuz) [xnz].
East Sudanic: SURMIC: Murle [mur], Tennet [tex], Koegu [xwg], Mursi [muz].
East Sudanic: NILOTIC: Acholi [ach], Bari [bfa], Maasai [mas], Sebei [kpz], Pokot [pko].
Central Sudanic: BONGO-BAGIRMI: Ngambay [sba], Mbay [myb], Kara (in Central African Republic) [kah], Yulu [yul].
Central Sudanic: MORU-MA'DI: Moru [mgd], Lugbara [lgg], Ma'di [mhi].
Kunama: KUNAMA: Kunama [kun].
Koman: KOMAN: Gwama [kmq].
Afro-Asiatic: SOUTH OMOTIC: Aari [aiw].
Afro-Asiatic: DIZOID: Dizi [mdx].
Afro-Asiatic: EGYPTIAN-COPTIC: Coptic [cop].
Afro-Asiatic: BERBER: Berber (Middle Atlas) [tzm], Berber (Rif) [rif], Berber (Figuig) [grr].
Afro-Asiatic: MASA: Masa [mcn].
Afro-Asiatic: BIU-MANDARA: Tera [ttr], Margi [mrt], Mina [hna], Musgu [mug], Mbara [mpk], Buduma [bdm], Zina [jia].
Afro-Asiatic: WEST CHADIC: Pero [pip], Ngizim [ngi], Miya [mkf].
Afro-Asiatic: LOWLAND EAST CUSHITIC: Rendille [rel], Somali [som], Oromo (Harar) [hae], Oromo (Waata) [ssn].
Afro-Asiatic: DAHALO: Dahalo [dal].
Afro-Asiatic: SOUTHERN CUSHITIC: Iraqw [irk], Burunge [bds].
Afro-Asiatic: SEMITIC: Chaldean (Modern) [cld], Neo-Aramaic (Assyrian) [aii], Mandaic (Modern) [mid], Hebrew (Modern) [heb], Maltese [mlt], Arabic (Egyptian) [arz], Arabic (Gulf) [afb], Arabic (Iraqi) [acm], Arabic (Moroccan) [ary], Arabic (Syrian) [apc].
Indo-European: ROMANCE: French [fra], Spanish [spa], Portuguese [por], Romanian [ron].
Indo-European: CELTIC: Irish [gle], Breton [bre], Welsh [cym].
Indo-European: ALBANIAN: Albanian [sqi].
Indo-European: IRANIAN: Kurdish (Central) [ckb], Zazaki [diq], Persian [pes], Tajik [tgk].
Indo-European: INDIC: Domari (Modern) [rmt].
Austro-Asiatic: KHASIAN: Khasi [kha].
Sino-Tibetan: KAREN: Karen (Sgaw) [ksw].
Austronesian: MINAHASAN: Tondano [tdn].
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Batak (Karo) [btx].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Nuaulu [nxl], Selaru [slu], Tetun [tet].

Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Warembori [wsa].
Austronesian: YAPESE: Yapese [yap].
Austronesian: OCEANIC: Sobei [sob], Tobati [tti], Arop-Sissano [aps], Takia [tbc], Sio [xsi], Maleu [mgl], Jabêm [jae], Labu [lbu], Tawala [tbo], Koluwawa [klx], Iduna [viv], Kilivila [kij], Ala'ala [nrz], Loniu [los], Kele [sbc], Roviana [rug], Erromangan [erg], Daakaka [bpa], Maori [mri].
Trans-New Guinea: FINISTERRE-HUON: Iyo [nca], Rawa [rwo].
Trans-New Guinea: MADANG: Amele [aey].
Koiarian: KOIARIAN: Barai [bbb].
Timor-Alor-Pantar: GREATER ALOR: Klon [kyo].
Timor-Alor-Pantar: EAST PANTAR: Teiwa [twe].
Dagan: DAGAN: Daga [dgz].
Senagi: SENAGI: Anggor [agg].
Skou: WESTERN SKOU: Wutung [wut].
Torricelli: URIM: Urim [uri].
Torricelli: WAPEI-PALEI: Yeri [yev], Walman [van].
Torricelli: KOMBIO-ARAPESH: Urat [urt], Kombio [xbi].
Gapun: GAPUN: Gapun [gpn].
Sepik: ABAU: Abau [aau].
Baining: BAINING: Mali [gcc].
South Bougainville: SOUTH BOUGAINVILLE: Motuna [siw].
Gunwinyguan: NGALAKAN: Ngalakan [nig].
Mangarrayi-Maran: MANGARRAYI: Mangarrayi [mpc].
Worrorran: WORRORRAN: Ungarinjin [ung].
Pama-Nyungan: NORTHERN PAMA-NYUNGAN: Kugu Nganhcara [uwa], Kuuk Thaayorre [thd], Dyirbal [dbl], Kalkatungu [ktg].
Pama-Nyungan: CENTRAL PAMA-NYUNGAN: Arrernte (Mparntwe) [aer].
Yuchi: YUCHI: Yuchi [yuc].
Caddoan: CADDOAN: Wichita [wic].
Hokan: YUMAN: Kiliwa [klb].
Oto-Manguean: AMUZGOAN: Amuzgo [azg].
Oto-Manguean: MIXTECAN: Mixtec (Ocotepec) [mie], Mixtec (Peñoles) [mil], Mixtec (Yosondúa) [mpm].
Oto-Manguean: ZAPOTECAN: Chatino (Yaitepec) [ctp].
Uto-Aztecan: TAKIC: Luiseño [lui].
Uto-Aztecan: AZTECAN: Nahuatl (Huasteca) [nhe], Nahuatl (Michoacán) [ncl], Nahuatl (Tetelcingo) [nhg].
Chibchan: TALAMANCA: Teribe [tfr].
Chibchan: GUAYMIIC: Ngäbere [gym], Buglere [sab].
Choco: CHOCO: Emberá (Northern) [emp].
Jivaroan: JIVAROAN: Aguaruna [agr].
Tupian: ARIKEM: Karitiana [ktn].
Tupian: TUPI-GUARANÍ: Émérillon [eme].
Arauan: ARAUAN: Kulina [cul].
Arawakan: PRE-ANDINEARAWAKAN: Campa (Axininca) [cpc].
Arawakan: INLAND NORTHERN ARAWAKAN: Achagua [aca].

Peba-Yaguan: PEBA-YAGUAN: Yagua [yad].
Cariban: CARIBAN: Carib (De'kwana) [mch], Hixkaryana [hix].
Tacanan: TACANAN: Cavineña [cav].
Fulniô: FULNIÔ: Fulniô [fun].

12. Data for Table 13

Adj is verb			Adj is not verb		
	NumN	NNum		NumN	NNum
AdjN	12.21	0.95	AdjN	32.16	4.60
NAdj	15.74	28.06	NAdj	15.61	51.53

Table 13
Adjusted frequencies bearing on Greenberg's Universal 18, distinguishing languages where semantic adjectives are verbs and languages where they are not verbs

Note that the adjusted frequencies in Table 13 are computed differently both from Tables 2 and 11 and from Tables 3 to 10. For Tables 2 and 11, the adjusted frequencies were computed for each order, one at a time, in the sense that the random sets constructed were constructed independently for each of the orders. For Tables 3 to 10, random sets included both types on each line. For Table 13, the adjusted frequencies are based on one for Adj is verb, the other form Adj is not verb. I.e. the random sets for Adj is verb includes all four types defined by the order of adjective and noun and the order of numeral and noun.

The following table (Table 13B) is not in the paper, but gives the raw numbers of languages underlying the adjusted frequencies given in Table 13.

Adj is verb			Adj is not verb		
	NumN	NNum		NumN	NNum
AdjN	29	2	AdjN	141	33
NAdj	36	74	NAdj	61	246

Table 13B
Number of languages bearing on Greenberg's Universal 18, distinguishing languages where semantic adjectives are verbs and languages where they are not verbs

12.1. Semantic adjective is verb, adjective and numeral both precede noun (29 languages, 26 genera):

Ijoid: IJOID: Ijo (Kolokuma) [ijc].
Afro-Asiatic: MAO: Northern Mao [myf].
Afro-Asiatic: LOWLAND EAST CUSHITIC: Qafar [aar].
Korean: KOREAN: Korean [kor].
Ainu: AINU: Ainu [ain].
Austro-Asiatic: MUNDA: Korku [kfq].

Austro-Asiatic: NICOBARESE: Nicobarese (Car) [caq].
Sino-Tibetan: MAHAKIRANTI: Chepang [cdm], Athpare [aph].
Austronesian: RUKAI: Rukai (Tanan) [dru].
Austronesian: EAST FORMOSAN: Amis [ami].
Austronesian: CHAMORRO: Chamorro [cha].
Austronesian: PALAUAN: Palauan [pau].
Austronesian: NORTHERN LUZON: Ilocano [ilo].
Austronesian: OCEANIC: Wuvulu [wuv].
Iwaidjan: IWAIDJAN: Maung [mph].
Eskimo-Aleut: ESKIMO: Iñupiaq [esk].
Algic: YUROK: Yurok [yur].
Algic: ALGONQUIAN: Blackfoot [bla].
Chimakuan: CHIMAKUAN: Quileute [qui].
Salishan: CENTRAL SALISH: Halkomelem (Upriver) [hur].
Oregon Coast: COOSAN: Coos (Hanis) [csz].
Oregon Coast: SIUSLAWAN: Siuslaw [sis].
Mixe-Zoque: MIXE-ZOQUE: Olutec [plo], Zoque (Copainalá) [zoc], Zoque (Chimalapa) [zoh].
Oto-Manguean: OTOMIAN: Otomí (Mezquital) [ote].
Arawakan: CARIBBEAN ARAWAKAN: Arawak [arw].
Bora-Huitotoan: HUITOTO: Huitoto (Minica) [hto].

12.2. Semantic adjective is verb, adjective precedes noun, and numeral follows noun (2 languages, 2 genera):

Niger-Congo: CROSS RIVER: Ibibio [ibb].
East Sudanic: SURMIC: Majang [mpe].

12.3. Semantic adjective not verb, adjective follows noun, and numeral precedes noun (36 languages, 27 genera):

Afro-Asiatic: BERBER: Ghadames [gha], Tamashek [taq].
Austro-Asiatic: ASLIAN: Jahai [jhi], Temiar [tea].
Austronesian: ATAYALIC: Seediq [trv].
Austronesian: CELEBIC: Wolio [wlo], Pendau [ums].
Austronesian: NORTH BORNEO: Timugon [tih], Tatana' [txx].
Austronesian: MALAYO-SUMBAWAN: Acehnese [ace].
Austronesian: OCEANIC: Madak [mmx], Hoava [hoa].
Kuot: KUOT: Kuot [kto].
Na-Dene: ATHAPASKAN: Sarcee [srs], Hupa [hup].
Algic: ALGONQUIAN: Ottawa [otw].
Zuni: ZUNI: Zuni [zun].
Oto-Manguean: OTOMIAN: Otomí (Santiago Mexquititlan) [otq].
Oto-Manguean: MIXTECAN: Mixtec (Jicaltepec) [mio].
Oto-Manguean: CHINANTECAN: Chinantec (Palantla) [cpa].
Oto-Manguean: ZAPOTECAN: Zapotec (Isthmus) [zai].

Oto-Manguean: SUBTIABA-TLAPANEC: Tlapanec [tcf].
Uto-Aztecan: CORACHOL: Cora [crn].
Chonan: CHONAN: Selknam [ona].
Ticuna: TICUNA: Ticuna [tca].
Tucanoan: TUCANOAN: Kotiria [gvc].
Tupian: YURUNA: Juruna [jur].
Tupian: TUPI-GUARANÍ: Kayabí [kyz], Guaraní [gug], Kamaiurá [kay], Cocama [cod].
Arawakan: CENTRAL ARAWAKAN: Paresi [pab].
Arawakan: EASTERN ARAWAKAN: Palikur [plu].
Arawakan: CARIBBEAN ARAWAKAN: Goajiro [guc].
Matacoan: MATACOAN: Wichí [mtp].
Macro-Ge: OFAYÉ: Ofayé [opy].

12.4. Semantic adjective not verb, adjective and numeral both follow noun (74 languages, 43 genera):

Niger-Congo: BANTOID: Aghem [agq].
Niger-Congo: NUPOID: Nupe [nup].
Niger-Congo: KWA: Selee [snw].
Niger-Congo: CANGIN: Ndut [ndv].
Kordofanian: HEIBAN: Otoro [otr], Moro [mor].
Kordofanian: TALODI: Masakin [jle].
Kadu: KADUGLI: Katcha [xtc], Krongo [kgo].
Songhay: SONGHAY: Koyra Chiini [khq], Tadaksahak [dsq].
East Sudanic: NILOTIC: Anywa [anu], Luo [luo], Turkana [tuv].
Kuliak: KULIAK: Ik [ikx], So [teu].
Afro-Asiatic: BIU-MANDARA: Lamang [hia].
Sino-Tibetan: KAREN: Karen (Bwe) [bwe].
Sino-Tibetan: QIANGIC: Qiang [cng], Pumi [pmi].
Sino-Tibetan: rGYALRONG: Gyarong (Cogtse) [jya].
Sino-Tibetan: BODO-GARO: Kokborok [trp], Garo [grt].
Sino-Tibetan: KUKI-CHIN: Mikir [mjw], Ao [njo], Naga (Mao) [nbi], Naga (Zeme) [nzm], Chin (Tiddim) [ctd].
Sino-Tibetan: BURMESE-LOLO: Burmese [mya], Nuosu [iii].
Sino-Tibetan: NUNGISH: Anong [nun].
Sino-Tibetan: DIGAROAN: Digaro [mhu].
Austronesian: PAIWAN: Paiwan [pwn].
Austronesian: CELEBIC: Tukang Besi [khc].
Austronesian: NORTH BORNEO: Begak-Ida'an [dbj].
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Nias [nia].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Tugun [tzn], Leti [lti].
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Taba [mky], Biak [bhw].
Austronesian: OCEANIC: Sudest [tgo], Dawawa [dww], Roro [rro], Amara [aie], Mokilese [mkj], Pohnpeian [pon], Paamese [pma], Nahavaq [sns], Mavea

[mkv].
Trans-New Guinea: OK: Tifal [tif].
Bosavi: BOSAVI: Edolo [etr].
Maybrat: MAYBRAT: Maybrat [ayz].
Hatam: HATAM-MANSIM: Hatam [had].
West Papuan: NORTH HALMAHERAN: Ternate [tft], Sahu [saj], Pagu [pgu], West Makian [mqs].
Skou: WARAPU: Barupu [wra].
East Bird's Head: EAST BIRD'S HEAD: Moskona [mtj].
Solomons East Papuan: LAVUKALEVE: Lavukaleve [lvk].
Eskimo-Aleut: ESKIMO: Greenlandic (West) [kal].
Haida: HAIDA: Haida [hai].
Na-Dene: ATHAPASKAN: Slave [den].
Siouan: CORE SIOUAN: Mandan [mhq], Assiniboine [asb], Lakhota [lkt].
Muskogean: MUSKOGEAN: Choctaw [cho], Creek [mus], Seminole [mus].
Hokan: CHIMARIKO: Chimariko [cid].
Hokan: YUMAN: Cocopa [coc], Maricopa [mrc].
Misumalpan: MISUMALPAN: Sumu [yan].
Tacanan: TACANAN: Araona [aro].

12.5. Semantic adjective not verb, adjective and numeral both precede noun (141 languages, 66 genera):

Khoe-Kwadi: KHOE-KWADI: Korana [kqz], Nama [naq], //Ani [hnh].
Central Sudanic: LENDU: Lendu [led], Ngiti [niy].
Afro-Asiatic: NORTH OMOTIC: Yemsa [jnj], Maale [mdy], Kullo [dwr], Gamo [gmv], Zayse [zay].
Afro-Asiatic: HIGHLAND EAST CUSHITIC: Sidaama [sid].
Afro-Asiatic: SEMITIC: Tigré [tig], Harari [har], Chaha [sgw].
Indo-European: GERMANIC: Danish [dan], Swedish [swe], Faroese [fao], Norwegian [nor], German [deu], English [eng].
Indo-European: SLAVIC: Russian [rus], Ukrainian [ukr], Polish [pol], Czech [ces], Bulgarian [bul], Serbian-Croatian [srp].
Indo-European: BALTIC: Latvian [lav].
Indo-European: GREEK: Greek (Modern) [ell].
Indo-European: ARMENIAN: Armenian (Eastern) [hye].
Indo-European: IRANIAN: Ossetic [oss], Pashto [pst], Wakhi [wbl], Baluchi [bgn].
Indo-European: INDIC: Dhivehi [div], Marathi [mar], Romani (Welsh) [rmw], Hindi [hin], Urdu [urd], Lamani [lmn], Gujarati [guj], Kumauni [kfy], Kalami [gwc], Torwali [trw], Brokskat [bkk], Palula [phl], Kashmiri [kas], Dameli [dml], Bhojpuri [bho], Rajbanshi [rjs].
Uralic: SAMOYEDIC: Nenets (Tundra) [yrk].
Uralic: UGRIC: Hungarian [hun], Khanty [kca], Mansi [mns].
Uralic: PERMIC: Udmurt [udm].
Uralic: FINNIC: Finnish [fin].
Altaic: MONGOLIC: Dagur [dta], Mangghuer [mjg].

Altaic: TUNGUSIC: Evenki [evn], Udihe [ude].
Altaic: TURKIC: Chuvash [chv], Khalaj [klj], Azerbaijani [azj], Uzbek [uzn], Bashkir [bak], Tatar [tat].
Yeniseian: YENISEIAN: Ket [ket].
Kartvelian: KARTVELIAN: Georgian [kat].
Nakh-Daghestanian: NAKH: Tsova-Tush [bbl], Chechen [che], Ingush [inh].
Nakh-Daghestanian: AVAR-ANDIC-TSEZIC: Godoberi [gdo], Khwarshi [khv], Tsez [ddo], Hinuq [gin], Hunzib [huz].
Nakh-Daghestanian: LEZGIC: Lezgian [lez], Rutul [rut], Tsakhur [tkr].
Burushaski: BURUSHASKI: Burushaski [bsk].
Dravidian: NORTHERN DRAVIDIAN: Malto [mjt].
Dravidian: SOUTH-CENTRAL DRAVIDIAN: Gondi [gno], Kuvi [kxv].
Dravidian: SOUTHERN DRAVIDIAN: Kannada [kan], Malayalam [mal].
Austro-Asiatic: MUNDA: Mundari [unr], Juang [jun], Remo [bfw].
Sino-Tibetan: DHIMALISH: Dhimal [dhi].
Sino-Tibetan: BODIC: Chantyal [chx], Kinnauri [kfk], Darma [drd], Byansi [bee].
Sino-Tibetan: MAHAKIRANTI: Thangmi [thf], Magar [mrd], Thulung [tdh], Wambule [wme], Limbu [lif].
Austronesian: OCEANIC: Xârâcùù [ane].
Trans-New Guinea: KAINANTU-GOROKA: Agarabi [agd].
Eastern Trans-Fly: EASTERN TRANS-FLY: Meryam Mir [ulk].
Torricelli: KOMBIO-ARAPESH: Arapesh (Mountain) [ape].
Sepik: NUKUMA: Kwoma [kmo].
Sepik: SEPIK HILL: Sare [dju], Alamblak [amp].
Solomons East Papuan: SAVOSAVO: Savosavo [svs].
Tiwian: TIWIAN: Tiwi [tiw].
Nyulnyulan: NYULNYULAN: Nyulnyul [nyv].
Tangkic: TANGKIC: Kayardild [gyd].
Pama-Nyungan: NORTHERN PAMA-NYUNGAN: Biri [bzr].
Pama-Nyungan: SOUTHEASTERN PAMA-NYUNGAN: Bandjalang [bdy].
Iroquoian: SOUTHERN IROQUOIAN: Cherokee [chr].
Penutian: TSIMSHIANIC: Tsimshian (Coast) [tsi].
Penutian: KLAMATH-MODOC: Klamath [kla].
Penutian: SAHAPTIAN: Klikitat [yak], Nez Perce [nez].
Totonacan: TOTONACAN: Tepehua (Huehuetla) [tee], Tepehua (Tlachichilco) [tpt].
Mixe-Zoque: MIXE-ZOQUE: Mixe (Ayutla) [mxp].
Mayan: MAYAN: Lacandón [lac], Jakaltek [jac], Sipakapense [qum].
Uto-Aztecan: NUMIC: Paiute (Northern) [pao], Tümpisa Shoshone [par].
Uto-Aztecan: TEPIMAN: O'odham [ood], Nevome [pia], Pima Bajo [pia].
Uto-Aztecan: TARAHUMARAN: Tarahumara (Western) [tac].
Uto-Aztecan: CAHITA: Yaqui [yaq].
Xincan: XINCAN: Xinca (Guazacapán) [xin].
Huarpe: HUARPE: Allentiac [--].
Barbacoan: BARBACOAN: Awa Pit [kwi].
Hibito-Cholón: HIBITO-CHOLÓN: Cholón [cht].

Quechuan: QUECHUAN: Quechua (Huallaga) [qub], Quechua (Imbabura) [qvi].
Aymaran: AYMARAN: Aymara (Central) [ayr], Jaqaru [jqr].
Araucanian: ARAUCANIAN: Mapudungun [arn].
Tucanoan: TUCANOAN: Cubeo [cub].
Cayuvava: CAYUVAVA: Cayuvava [cyb].
Uru-Chipaya: URU-CHIPAYA: Chipaya [cap].
Arawakan: INLAND NORTHERN ARAWAKAN: Resígaro [rgr].

12.6. Semantic adjective not verb, adjective precedes noun, and numeral follows noun (33 languages, 17 genera):

Niger-Congo: BANTOID: Kako [kkj].
Niger-Congo: GBAYA-MANZA-NGBAKA: Gbeya Bossangoa [gbp], Mbodomo [gmm].
Niger-Congo: UBANGI: Ngbandi [ngb], Sango [sag], Mayogo [mdm], Baka (in Cameroon) [bkc], Linda [liy], Zande [zne], Nzakara [nzk], Barambu [brm].
Afro-Asiatic: BIU-MANDARA: Gude [gde].
Afro-Asiatic: WEST CHADIC: Hausa [hau], Pa'a [pqa].
Indo-European: INDIC: Sinhala [sin], Oriya [ory].
Austro-Asiatic: MUNDA: Gorum [pcj].
Sino-Tibetan: BODIC: Gurung [gvr], Tshangla [tsj], Purki [prx].
Sino-Tibetan: MAHAKIRANTI: Newari (Kathmandu) [new].
Sino-Tibetan: BODO-GARO: Bodo [brx].
Sino-Tibetan: TANI: Galo [adl], Mising [mrg], Tagin [dap].
Trans-New Guinea: KAINANTU-GOROKA: Yagaria [ygr], Fore [for].
Trans-New Guinea: ENGAN: Kewa [kew].
Trans-New Guinea: MEK: Eipo [eip].
Yareban: YAREBAN: Yareba [yrb].
Pawaian: PAWAIAN: Pawaian [pwa].
Sepik: NDU: Ambulas [abt], Iatmul [ian].

12.7. Semantic adjective not verb, adjective follows noun, and numeral precedes noun (61 languages, 35 genera):

Niger-Congo: WOLOF: Wolof [wof].
Afro-Asiatic: EGYPTIAN-COPTIC: Coptic [cop].
Afro-Asiatic: BERBER: Berber (Middle Atlas) [tzm], Berber (Rif) [rif], Berber (Figuig) [grr].
Afro-Asiatic: LOWLAND EAST CUSHITIC: Somali [som].
Afro-Asiatic: SEMITIC: Chaldean (Modern) [cld], Neo-Aramaic (Assyrian) [aii], Mandaic (Modern) [mid], Hebrew (Modern) [heb], Maltese [mlt], Arabic (Gulf) [afb], Arabic (Iraqi) [acm], Arabic (Moroccan) [ary].
Basque: BASQUE: Basque [eus].
Indo-European: ROMANCE: French [fra], Spanish [spa], Romanian [ron].
Indo-European: CELTIC: Irish [gle], Breton [bre], Welsh [cym].
Indo-European: ALBANIAN: Albanian [sqi].

Indo-European: IRANIAN: Kurdish (Central) [ckb], Kurmanji [kmr], Zazaki [diq], Persian [pes], Tajik [tgk].
Indo-European: INDIC: Domari (Modern) [rmt].
Northwest Caucasian: NORTHWEST CAUCASIAN: Ubykh [uby].
Austro-Asiatic: KHASIAN: Khasi [kha].
South Andamanese: SOUTH ANDAMANESE: Jarawa (in Andamans) [anq].
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Batak (Karo) [btx].
Austronesian: YAPESE: Yapese [yap].
Austronesian: OCEANIC: Kilivila [kij], Roviana [rug].
Yangmanic: YANGMANIC: Wardaman [wrr].
Bunaban: BUNABAN: Gooniyandi [gni].
Pama-Nyungan: NORTHERN PAMA-NYUNGAN: Kuku-Yalanji [gvn], Kalkatungu [ktg].
Caddoan: CADDOAN: Wichita [wic].
Karok: KAROK: Karok [kyh].
Oto-Manguean: AMUZGOAN: Amuzgo [azg].
Oto-Manguean: MIXTECAN: Mixtec (Atatlahuca) [mib], Mixtec (Ocotepec) [mie], Mixtec (Peñoles) [mil], Mixtec (Yosondúa) [mpm].
Oto-Manguean: ZAPOTECAN: Chatino (Yaitepec) [ctp].
Uto-Aztecan: TAKIC: Luiseño [lui], Cupeño [cup].
Uto-Aztecan: AZTECAN: Nahuatl (Huasteca) [nhe], Nahuatl (Michoacán) [ncl], Nahuatl (Tetelcingo) [nhg].
Misumalpan: MISUMALPAN: Miskito [miq].
Yanomam: YANOMAM: Shiriana [shb].
Tupian: ARIKEM: Karitiana [ktn].
Tupian: TUPI-GUARANÍ: Émérillon [eme].
Arawakan: INLAND NORTHERN ARAWAKAN: Achagua [aca].
Peba-Yaguan: PEBA-YAGUAN: Yagua [yad].
Cariban: CARIBAN: Carib (De'kwana) [mch], Hixkaryana [hix].
Tacanan: TACANAN: Cavineña [cav].

12.8. Semantic adjective not verb, adjective and numeral both follow noun (246 languages, 119 genera):

Kxa: =|HOAN: =|Hoan [huc].
Sandawe: SANDAWE: Sandawe [sad].
Niger-Congo: BANTOID: Zulu [zul], Chichewa [nya], Nyakyusa [nyy], Nyamwezi [nym], Kagulu [kki], Swahili [swh], Runyankore [nyn], Haya [hay], Bembe [bmb], Ndumu [nmd], Nzadi [nzd], Luvale [luv], Lunda [lun], Kwangali [kwn], Tunen [tvu], Mungbam [mij], Tikar [tik].
Niger-Congo: EDOID: Engenni [enn].
Niger-Congo: IGBOID: Igbo [ibo], Iká [ikk].
Niger-Congo: JUKUNOID: Kuteb [kub], Jukun [jbu].
Niger-Congo: PLATOID: Migili [mgi], Birom [bom].
Niger-Congo: KAINJI: Duka [dud], Amo [amo].

Niger-Congo: KWA: Anufo [cko], Logba [lgq], Igo [ahl], Ewe [ewe], Adioukrou [adj].
Niger-Congo: UBANGI: Dongo [doo].
Niger-Congo: SAMBA-DURU: Dii [dur], Doyayo [dow].
Niger-Congo: MUMUYE-YANDANG: Mumuye [mzm].
Niger-Congo: MBUMIC: Mundang [mua].
Niger-Congo: BUA: Lua [nie].
Niger-Congo: NORTHERN-CENTRAL GUR: Mooré [mos], Dagbani [dag].
Niger-Congo: MEL: Baga Sitemu [bsp], Mani [buy], Kisi [kiz].
Niger-Congo: PEUL-SERER: Fulfulde (Nigerian) [fuv], Fulfulde (Adamawa) [fub].
Niger-Congo: CANGIN: Noon [snf].
Kordofanian: KATLA-TIMA: Tima [tms].
Mande: EASTERN MANDE: Mona [moa], Busa [bqp].
Mande: WESTERN MANDE: Mandinka (Gambian) [mnk], Mauka [mxx], Vai [vai], Bobo Madaré (Southern) [bwq], Dzùùngoo [dnn].
Dogon: DOGON: Donno So [dds], Jamsay [djm], Tommo So [dto].
Saharan: EASTERN SAHARAN: Beria [zag].
Saharan: WESTERN SAHARAN: Kanuri [knc], Tubu [dzg].
Maban: MABAN: Maba [mde], Masalit [mls].
Fur: FUR: Fur [fvr].
East Sudanic: NUBIAN: Nubian (Dongolese) [dgl], Nubian (Kunuz) [xnz], Midob [mei].
East Sudanic: SURMIC: Murle [mur], Baale [koe], Tennet [tex], Koegu [xwg], Mursi [muz].
East Sudanic: TEMEIN: Temein [teq].
East Sudanic: DAJU: Laggori [liu].
East Sudanic: NILOTIC: Shilluk [shk], Acholi [ach], Bari [bfa], Maasai [mas], Sebei [kpz], Pokot [pko].
Central Sudanic: BONGO-BAGIRMI: Ngambay [sba], Mbay [myb], Kara (in Central African Republic) [kah], Yulu [yul].
Central Sudanic: MORU-MA'DI: Moru [mgd], Lugbara [lgg], Ma'di [mhi].
Central Sudanic: MANGBUTU-EFE: Mamvu [mdi].
Central Sudanic: MANGBETU: Mangbetu [mdj].
Kunama: KUNAMA: Kunama [kun].
Koman: KOMAN: Gwama [kmq].
Afro-Asiatic: SOUTH OMOTIC: Aari [aiw], Dime [dim].
Afro-Asiatic: DIZOID: Dizi [mdx].
Afro-Asiatic: NORTH OMOTIC: Koorete [kqy].
Afro-Asiatic: MASA: Masa [mcn].
Afro-Asiatic: BIU-MANDARA: Tera [ttr], Margi [mrt], Mina [hna], Musgu [mug], Mbara [mpk], Buduma [bdm], Zina [jia].
Afro-Asiatic: WEST CHADIC: Pero [pip], Goemai [ank], Ngizim [ngi], Miya [mkf].
Afro-Asiatic: LOWLAND EAST CUSHITIC: Rendille [rel], Oromo (Harar) [hae], Oromo (Waata) [ssn].
Afro-Asiatic: YAAKU: Yaaku [muu].

Afro-Asiatic: DAHALO: Dahalo [dal].
Afro-Asiatic: SOUTHERN CUSHITIC: Iraqw [irk], Burunge [bds].
Altaic: MONGOLIC: Bao'an [peh].
Sino-Tibetan: KAREN: Karen (Sgaw) [ksw].
Sino-Tibetan: BODIC: Nar-Phu [npa], Tibetan (Modern Literary) [bod], Lhomi [lhm], Kurtöp [xkz], Ladakhi [lbj], Sikkimese [sip].
Sino-Tibetan: KUKI-CHIN: Lotha [njh], Naga (Tangkhul) [nmf], Bawm [bgr].
Sino-Tibetan: BURMESE-LOLO: Lolo (Yao'An) [ycl].
Sino-Tibetan: TANI: Apatani [apt].
Sino-Tibetan: LEPCHA: Lepcha [lep].
Austronesian: MINAHASAN: Tondano [tdn].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Nuaulu [nxl], Selaru [slu], Tetun [tet].
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Warembori [wsa].
Austronesian: OCEANIC: Maisin [mbq], Sobei [sob], Tobati [tti], Arop-Sissano [aps], Takia [tbc], Sio [xsi], Maleu [mgl], Bariai [bch], Lusi [khl], Jabêm [jae], Bukawa [buk], Labu [lbu], Buang (Mapos) [bzh], Tawala [tbo], Gumawana [gvs], Koluwawa [klx], Iduna [viv], Ala'ala [nrz], Loniu [los], Kele [sbc], Erromangan [erg], Daakaka [bpa], Maori [mri].
Trans-New Guinea: FASU: Fasu [faa].
Trans-New Guinea: DUNA: Duna [duc].
Trans-New Guinea: ANGAN: Menya [mcr].
Trans-New Guinea: FINISTERRE-HUON: Nabak [naf], Iyo [nca], Rawa [rwo], Nankina [nnk].
Trans-New Guinea: CHIMBU: Golin [gvf], Kuman [kue], Dom [doa].
Trans-New Guinea: ENGAN: Kyaka [kyc].
Trans-New Guinea: ASMAT-KAMORO: Asmat [cns].
Trans-New Guinea: AWJU-DUMUT: Kombai [tyn].
Trans-New Guinea: OK: Bimin [bhl], Mian [mpt].
Trans-New Guinea: DANI: Nggem [nbq].
Trans-New Guinea: MADANG: Kobon [kpw], Anamuxra [imi], Tauya [tya], Girawa [bbr], Amele [aey], Bargam [mlp], Maia [sks], Mauwake [mhl], Usan [wnu].
Trans-New Guinea: MEK: Yale (Kosarek) [kkl], Una [mtg].
Trans-New Guinea: BINANDEREAN: Guhu-Samane [ghs], Orokaiva [okv].
Trans-New Guinea: GOILALAN: Kunimaipa [kup].
Mairasi: MAIRASI: Mairasi [zrs].
Koiarian: KOIARIAN: Barai [bbb], Ömie [aom].
Timor-Alor-Pantar: GREATER ALOR: Klon [kyo].
Timor-Alor-Pantar: EAST PANTAR: Teiwa [twe].
East Strickland: EAST STRICKLAND: Odoodee [kkc].
South Bird's Head: SOUTH BIRD'S HEAD: Inanwatan [szp].
Sentani: SENTANI: Sentani [set].
Dagan: DAGAN: Daga [dgz].
Turama-Kikorian: TURAMA-KIKORIAN: Rumu [klq].
Eleman: TATE: Kaki Ae [tbd].

Senagi: SENAGI: Anggor [agg].
Border: BORDER: Imonda [imn].
Nimboran: NIMBORAN: Nimboran [nir].
Skou: WESTERN SKOU: Wutung [wut].
Skou: SERRA HILLS: Poko-Rawo [rwa].
Torricelli: URIM: Urim [uri].
Torricelli: WAPEI-PALEI: Au [avt], Yeri [yev], Walman [van].
Torricelli: KOMBIO-ARAPESH: Urat [urt], Kombio [xbi], Arapesh (Abu) [aah].
Torricelli: MARIENBERG: Kamasau [kms].
Sepik: ABAU: Abau [aau].
Sepik: RAM: Awtuw [kmn].
Sepik: YELLOW RIVER: Namia [nnm].
Anêm: ANêM: Anêm [anz].
Baining: BAINING: Mali [gcc].
South Bougainville: SOUTH BOUGAINVILLE: Motuna [siw].
Wagiman: WAGIMAN: Wagiman [waq].
Maningrida: NDJéBBANA: Ndjébbana [djj].
Southern Daly: NGANKIKURUNGKURR: Ngankikurungkurr [nam].
Western Daly: BRINGEN: Marrithiyel [mfr].
Western Daly: WAGAYDY: Emmi [amy].
Worrorran: WORRORRAN: Ungarinjin [ung].
Pama-Nyungan: NORTHERN PAMA-NYUNGAN: Kugu Nganhcara [uwa], Kuuk Thaayorre [thd], Guugu Yimidhirr [kky], Yidiny [yii], Dyirbal [dbl].
Pama-Nyungan: CENTRAL PAMA-NYUNGAN: Diyari [dif], Arrernte (Mparntwe) [aer].
Pama-Nyungan: WESTERN PAMA-NYUNGAN: Pitjantjatjara [pjt].
Yuchi: YUCHI: Yuchi [yuc].
Takelma: TAKELMA: Takelma [tkm].
Wappo-Yukian: WAPPO: Wappo [wao].
Chibchan: RAMA: Rama [rma].
Chibchan: TALAMANCA: Bribri [bzd], Teribe [tfr].
Chibchan: GUAYMIIC: Ngäbere [gym], Buglere [sab].
Chibchan: CHIBCHA-DUIT: Muisca [chb].
Warao: WARAO: Warao [wba].
Choco: CHOCO: Emberá (Northern) [emp], Epena Pedee [sja].
Tucanoan: TUCANOAN: Retuarã [tnc].
Tupian: TUPI-GUARANÍ: Yuqui [yuq].
Arauan: ARAUAN: Kulina [cul].
Fulniô: FULNIÔ: Fulniô [fun].

13. Illustrating the computation of adjusted frequency

In this section, I illustrate how the adjusted frequency is computed for one of the word order types, DAnN (line 11 of Tables 2 and 11). As shown in Table 2, the total number of languages of this type is 12, falling in 7 genera:

Dem-A-N-Num (DAnN) (Line 11 of Tables 2 and 11) (12 languages, 7 genera):

Indo-European: INDIC: Oriya [ory]
Sino-Tibetan: BODIC: Tamang (Eastern) [taj], Gurung [gvr], Tshangla [tsj], Purki [prx]
Sino-Tibetan: MAHAKIRANTI: Newari (Kathmandu) [new]
Trans-New Guinea: KAINANTU-GOROKA: Yagaria [ygr], Fore [for]
Trans-New Guinea: ENGAN: Kewa [kew]
Pawaian: PAWAIAN: Pawaian [pwa]
Sepik: NDU: Ambulas [abt], Iatmul [ian]

The random samples contain a subset of these languages such that for each pair of languages in the random sample, they must be in different genera and there must be at least ten languages between them. The adjusted frequency is 5.33, the mean size of these samples (over 10000 trials). An example of one of these samples, containing five languages, is the following:

Indo-European: INDIC: Oriya [ory]
Sino-Tibetan: BODIC: Tamang (Eastern) [taj]
Trans-New Guinea: KAINANTU-GOROKA: Yagaria [ygr]
Trans-New Guinea: ENGAN: Kewa [kew]
Sepik: NDU: Ambulas [abt]

It was not possible to add other languages to this sample since (1) Gurung, Tsangla, Purki, Fore and Iatmul are all in the same genus as one of these five languages; (2) Newari (Kathmandu) is excluded since there are no languages (in my database) between it and Tamang (Eastern) (both are in Nepal); and (3) Pawaian is excluded since there are only five languages between it and Yagaria (both are in Papua New Guinea).

Some samples contain six languages:

Indo-European: INDIC: Oriya [ory]
Sino-Tibetan: BODIC: Purki [prx]
Sino-Tibetan: MAHAKIRANTI: Newari (Kathmandu) [new]
Trans-New Guinea: KAINANTU-GOROKA: Fore [for]
Trans-New Guinea: ENGAN: Kewa [kew]
Sepik: NDU: Ambulas [abt]

It is not possible to add further languages to this sample since (1) Gurung, Tsangla, Tamang (Eastern), Fore and Iatmul are all in the same genus as one of these five

languages; (2) Pawaian is excluded since there are no languages between it and Fore.

And some samples contain four languages:

Indo-European: INDIC: Oriya [ory]
Sino-Tibetan: BODIC: Gurung [gvr]
Pawaian: PAWAIAN: Pawaian [pwa]
Sepik: NDU: Ambulas [abt]

It is not possible to add further languages to this sample since (1) Purki, Tsangla, Tamang (Eastern), Fore and Iatmul are all in the same genus as one of these five languages; (2) Newari (Kathmandu) is excluded since there are only five languages between it and Gurung (both are in Nepal); (3) Kewa is excluded since there are only five languages between it and Pawaian; and (4) Yagaria is excluded since there are only five languages between it and Pawaian.

14. An alternative more conservative way to compute adjusted frequency

The paper uses a notion of adjusted frequency to determine the relative frequency of different types of languages. This is based on the mean value over 10000 trials of random samples of languages of a given type such that any pair of languages in the sample must satisfy the following two criteria: (1) the two languages must be in different genera; and (2) there must be not more than ten languages (among the 2129 languages in my database) between the two languages, where a language X is between two languages Y and Z if the distance (in kilometres) from X to Y and the distance from X to Z are both less than the distance from Y to Z. In this section, I discuss a more conservative way to compute adjusted frequency that may be a more accurate way to measure relative frequency. The goal of constructing random samples of languages in computing adjusted frequency is to maximize the degree of independence among the languages in the sample, since an accidentally high frequency of a type within a set of related languages or languages in contact with each other can skew the numbers and create the illusion that one type is more frequent than another for linguistic reasons when in fact it is only more frequent due to historical accident. This section discusses the question of whether the method of computing adjusted frequency in the paper is sufficiently conservative. The method used in the paper was used because the more conservative method discussed in this section created a ‘ceiling’ effect among more frequent types so that the ratio between adjusted frequencies was not representative. This was considered important for the study by Futrell, Levy and Dryer (2017).

In this section, I will discuss this more conservative method of computing adjusted frequency and examine two ways in which the ranking of types in Tables 2 and 11 in the paper is different using this more conservative method. The method of computing adjusted frequency in the paper attempts to control for geography by requiring that pairs of languages in random samples have at least ten languages between them. The alternative more conservative method discussed in this section controls for geography in two ways, both in terms of the number of languages between them and in terms of actual distance between them in kilometres. More specifically, every pair of languages in each

sample must satisfy the following three conditions: (1) the two languages must be in different genera; (2) there must be at least 30 languages between them; and (3) the two languages must be at least 1000 km apart.

The following two tables repeat the data in Tables 2 and 11 but add an additional column on the right showing the adjusted frequency determined in this more conservative way, listing them in order based on this alternative more conservative method for computing adjusted frequency.

		Icon1	Icon2	Asym	Harmony	NAdj	#*'s	#lgs	#gen	Adjusted frequency	Alternative adjusted frequency
1	**DNAn**					*	**1**	**113**	**57**	**35.56**	**21.50**
2	nAND						0	182	85	44.17	19.40
3	DnAN				*		1	53	40	29.95	16.66
4	DNnA				*		1	40	32	22.12	13.65
5	NnAD				*		1	67	27	14.54	8.60
6	nADN	*					1	36	19	14.80	7.96
7	**DnNA**		*		*		**2**	**12**	**10**	**9.75**	**7.00**
8	nDAN	*					1	13	11	9.00	7.00
9	nNAD		*				1	11	9	9.00	6.50
10	nDNA	*	*				2	8	6	5.67	4.75
11	NAnD				*	*	2	8	5	4.00	4.00
12	AnND				*	*	2	5	3	3.00	3.00
13	NnDA	*			*		2	5	3	3.00	3.00
14	DAnN				*	*	2	12	7	5.34	2.67
15	AnDN	*			*	*	3	5	3	2.50	2.00
16	DANn		*	*		*	3	3	2	2.00	2.00
17	NDAn	*		*		*	3	2	2	2.00	2.00
18	**nNDA**	*	*				**2**	**1**	**1**	**1.00**	1.00
19	NADn	*		*		*	3	0	0	0	0
20	NDnA	*		*	*		3	0	0	0	0
21	ADnN	*		*	*	*	4	0	0	0	0
22	ADNn	*	*	*		*	4	0	0	0	0
23	ANDn	*	*	*		*	4	0	0	0	0
24	ANnD		*	*	*	*	4	0	0	0	0

Table 2B
Frequencies of different orders and degree of conformity with my five principles with added column showing alternative adjusted frequency

		Cinque			My data			
		marked options	#marked options	#lgs acc. to Cinque	#lgs (my sample)	# genera	Adjusted frequency	Alternative adjusted frequency
1	DNAn	none	0	very many	113	57	35.56	21.50
2	nAND	none	0	very many	182	85	44.17	19.40
3	DnAN	27f	1	many	53	40	29.95	16.66
4	DNnA	27f	1	many	40	32	22.12	13.65
5	***NnAD***	***27e, 27f***	***2+***	***few***	***67***	***27***	***14.54***	***8.60***
6	nADN	27c	1	few	36	19	14.80	7.96
7	***DnNA***	***27c, 27f***	***2***	***very few***	***12***	***10***	***9.75***	***7.00***
8	***nDAN***	***27d***	***1+/****	***very few***	***13***	***11***	***9.00***	***7.00***
9	nNAD	27c	1	few	11	9	9.00	6.50
10	nDNA	27c	1	few	8	6	5.67	4.75
11	NAnD	27e, 27f	2	very few	8	5	4.00	4.00
12	AnND	27e, 27f	2+	very few	5	3	3.00	3.00
13	NnDA	*	*	none	5	3	3.00	3.00
14	DAnN	27e, 27f	2+	very few	12	7	5.34	2.67
15	AnDN	27c, 27e, 27f	3+	very few	5	3	2.50	2.00
16	DANn	*	*	none	3	2	2.00	2.00
17	NDAn	*	*	none	2	2	2.00	2.00
18	nNDA	*	*	none	1	1	1.00	1.00
19	NADn	*	*	none	0	0	0	0
20	NDnA	*	*	none	0	0	0	0
21	ADnN	*	*	none	0	0	0	0
22	ADNn	*	*	none	0	0	0	0
23	ANDn	*	*	none	0	0	0	0
24	ANnD	*	*	none	0	0	0	0

Table 11B
Comparing Cinque's predicted frequencies with actual frequencies in my sample, with added column showing alternative adjusted frequency

There are three ways in which the relative ranking of the types is different between the two ways of computing adjusted frequency: (1) the relative frequency of the two most common orders is different, with DNAn the more frequent than nAND using the more conservative way of computing adjusted frequency; (2) the relative frequency of nADN and NnAD (lines 5 and 6) is different; and (3) DAnN is much less frequent using the more conservative method, ranking 11th in Tables 2 and 11, but ranking 14th in Tables 2B and 11B using the more conservative method. I will discuss the first and third of these differences, discussing the third one first.

DAnN has an adjusted frequency in Table 2 of 5.34, but when we compute the adjusted frequency in the more conservative way, it has an adjusted frequency of only

2.67. To get an intuitive idea why its adjusted frequency is so much smaller when computed the conservative way, it is useful to look at the map showing the 12 DAnN languages in §15.11 below. The map shows that all of the DAnN languages in my database fall into two general areas: (1) Papua New Guinea; and (2) a number of languages in Nepal and India, along the border with Tibet and one language further south in India. The samples using the method of adjusted frequency used in the paper contain either two or three languages from Papua New Guinea (those in the Trans-New Guinea, Pawaian, and Sepik families). However, using the more conservative method for computing adjusted frequency, it is not possible to include more than one language in New Guinea, since all of these languages are less than 1000 km from each other. It is sometimes possible to select two languages from India and Nepal, and sometimes only one, depending on what language is randomly picked first. If Tamang (Eastern) or Gurung is chosen randomly as the first language from India or Nepal, then it is not possible to chose a second language from this region, since (1) Tshangla and Purki are in the same genus as both of these; and (2) both Tamang (Eastern) and Gurung are less than 1000 km from both Newari (Kathmandu) and Oriya. If one of the other four languages is chosen first, then it WILL be possible to add a second language from India or Nepal since for each of these four languages there is another language of India or Nepal that is in a different genus that is more than 1000 km away and that is separated by at least 30 languages. For example, if Newari (Kathmandu) is chosen first, then it is possible to choose Purki as a second language from the region, since Purki is 1200 km from Newari (Kathmandu) and there are 43 languages between them. Note that there are two languages from this region which have the property that if they are chosen first, that will be the only language from this region, while there are four languages which have the property that if they are chosen first, it will be possible to choose a second language from this region. What this means is that in a large number of trials, two thirds of the samples will contain three languages while one third will contain two languages, which is why the mean is 2.67.

The question then is whether this conservative method is superior. When one looks at the map in §15.11, it looks like all the DAnN languages are in just these two regions, suggesting that perhaps we only have two independent phenomena. However, the cluster of languages in New Guinea is misleading, since the two Sepik languages are fairly distant from the Trans-New Guinea languages of this type, at least distant in the sense that there are many languages between them. The closest other DAnN language to the Sepik language Ambulas is Kewa, which is only 380 km away. However, because of the high language density, there are 41 languages in my database between Ambulas and Kewa. And among the 37 languages in my database between Ambulas and Kewa for which I have data on the order of adjective and noun, only 10 are AdjN. Similarly, among the 37 languages in my database between Ambulas and Kewa for which I have data on the order of demonstrative and noun, barely half (19) are DemN. This suggests that it is unlikely that the DAnN order in Ambulas is related somehow to the DAnN order in Kewa and the other DAnN Trans-New Guinea languages, so that the conservative method may be overly conservative.

On the other hand, the conservative method allows inclusion of both Purki and Newari (Kathmandu), since they are in different genera while being over 1000 km apart with more than 30 languages between them. However, given that Purki is not only a

Bodic language but a Tibetic language and given the proximity of Newari to other Tibetic languages, it is not clear that the existence of DAnN order in both Purki and Newari is a coincidence. Thus, in this instance, it is not clear that the conservative method is conservative enough.

Contrast this situation with the situation with NAnD (line 12 of Tables 2 and 11). The adjusted frequency of this type is 4.00 under both ways of computing adjusted frequency. One can get an intuitive idea why the adjusted frequency is the same under both methods by examining the map in §15.12. The languages with this order are more widely distributed than those for DAnN. There are three languages in the western Pacific (though two are very close so that there may appear to be only one), one on the west coast of Canada, three languages in Guatemala (though again they are so close it may not be obvious from the map that there are three of them) and one in Surinam. The three languages in the western Pacific are all in the Oceanic genus of Austronesian, so it is not possible to include more than one from this area. Two of languages in Guatemala are both in same genus, Mayan, so it is not possible to include more than one of them, and the other language is located too close to the two Mayan languages for it to be possible to include more than one language from Guatemala. But under both methods, it is possible for samples to include one language from the western Pacific, the one language from the west coast of Canada, one language from Guatemala, and the one language from Surinam.

I turn now to the second instance where the more conservative method discussed in this section yields a different ranking of types from the ranking based on the method used in the paper, namely the ranking of the two most common types, nAND and DNAn. The method used in this paper assigns a higher adjusted frequency to nAND compared to DNAn (44.17 vs. 35.56), while the more conservative method discussed in this section assigns a higher adjusted frequency to DNAn (21.50 vs. 19.40). One can get an intuitive idea of the source of this difference by examining the maps showing these two types in §15.1 and §15.2. The map showing nAND languages in §15.1 shows most of the nAND languages in two large areas, one covering much of Africa, but primarily a belt across central Africa, and a large area extending from Tibet down through Indonesia, Papua New Guinea and Pacific islands to the east of New Guinea. Outside that area, there are relatively few nAND languages: four in Australia (though two are too close to be distinct on the map), four in the United States, and two in Central America. There are none in the rest of Eurasia and none in South America. The map in §15.2 shows a somewhat more diverse distribution of DNAn languages. Although the majority of DNAn languages are in mainland Eurasia, they are widely spread across mainland Eurasia, absent only in southeast Asia. Furthermore, although there are fewer DNAn languages outside Eurasia, they are spread over many areas. They exist is two fairly distant areas within Africa (Ethiopia and southwest Africa); there are a number in the western Pacific, New Guinea and Australia; there is one in western Canada; there are a number spread out over Mexico and Guatemala; and they cover much of South America other than Brazil.

The less conservative method used in the paper allows many nAND languages to be chosen from the two large regions where they are concentrated, but the more conservative method sharply decreases the number selected because of the concentration of this type in certain areas. The more conservative method does not decrease the number of DNAn languages that can be in a sample to the same extent because of their somewhat broader distribution.

It is possible to make this more concrete by examining four maps illustrating samples for each of the two types under the two methods. Fig. 1 is a map illustrating an example of a sample of nAND languages under the method used in the paper:

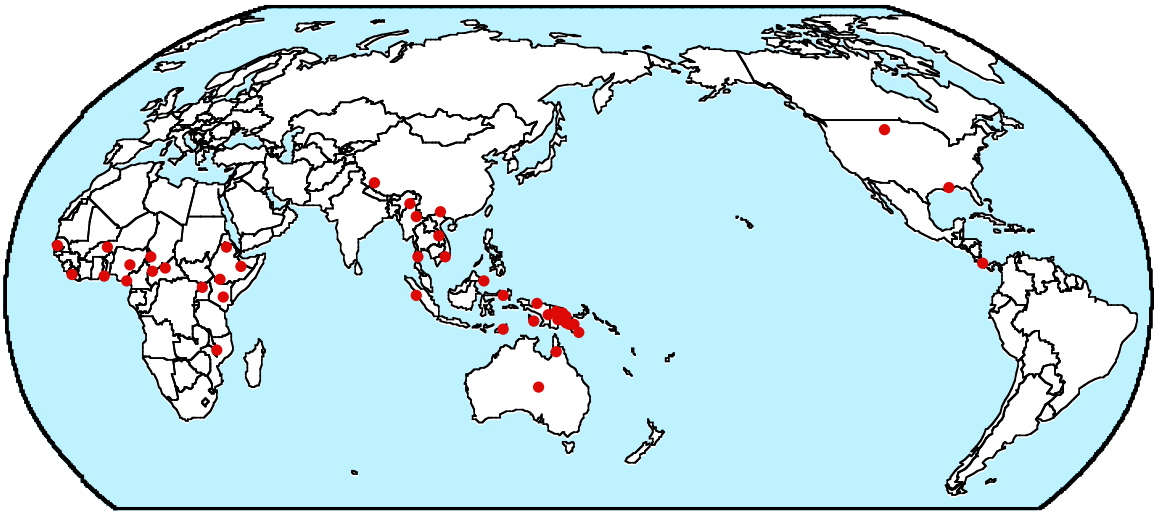


Fig. 1
Sample of nAND languages using method for computing adjusted frequency employed in the paper

This sample contains a total of 42 languages, including 15 languages from Africa, 6 languages from mainland southeast Asia (including Tibet), 7 Austronesian languages, 9 Papuan languages, 2 languages in Australia, 2 in the United States, and one in Central America. The following is a list of these languages:

Africa:
- Niger-Congo: BANTOID: Chichewa [nya].
- Niger-Congo: NUPOID: Gwari [gbr].
- Niger-Congo: EDOID: Engenni [enn].
- Niger-Congo: KWA: Akan [aka].
- Niger-Congo: SAMBA-DURU: Dii [dur].
- Niger-Congo: DAY: Day [dai].
- Niger-Congo: NORTHERN-CENTRAL GUR: Koromfe [kfz].
- Niger-Congo: CANGIN: Ndut [ndv].
- Mande: WESTERN MANDE: Vai [vai].
- Saharan: WESTERN SAHARAN: Kanuri [knc].
- East Sudanic: NILOTIC: Nyangatom [nnj].
- Central Sudanic: MORU-MA'DI: Logoti [log].
- Kunama: KUNAMA: Kunama [kun].
- Afro-Asiatic: LOWLAND EAST CUSHITIC: Oromo (Harar) [hae].
- Afro-Asiatic: YAAKU: Yaaku [muu].

Mainland southeast Asia:
- Austro-Asiatic: PALAUNGIC: Palaung [pll].

Austro-Asiatic: VIETIC: Thavung [thm].
Austro-Asiatic: BAHNARIC: Stieng [sti].
Sino-Tibetan: BODIC: Tibetan (Drokpa) [bod].
Sino-Tibetan: KUKI-CHIN: Lotha [njh].
Sino-Tibetan: BURMESE-LOLO: Nuosu [iii].

Austronesian:
Austronesian: MINAHASAN: Tondano [tdn].
Austronesian: NORTH BORNEO: Begak-Ida'an [dbj].
Austronesian: NORTHWEST SUMATRA-BARRIER ISLANDS: Nias [nia].
Austronesian: MOKLEN-MOKEN: Moken [mwt].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Batuley [bay].
Austronesian: SOUTH HALMAHERA - WEST NEW GUINEA: Biak [bhw].
Austronesian: OCEANIC: Arop-Sissano [aps].

Papuan:
Trans-New Guinea: DUNA: Duna [duc].
Trans-New Guinea: ANGAN: Baruya [byr].
Trans-New Guinea: FINISTERRE-HUON: Borong [ksr].
Trans-New Guinea: CHIMBU: Golin [gvf].
Trans-New Guinea: MADANG: Anamuxra [imi].
Trans-New Guinea: MEK: Yale (Kosarek) [kkl].
Trans-New Guinea: BINANDEREAN: Korafe [kpr].
Timor-Alor-Pantar: GREATER ALOR: Woisika [woi].
Torricelli: MARIENBERG: Kamasau [kms].

Australia:
Pama-Nyungan: NORTHERN PAMA-NYUNGAN: Kugu Nganhcara [uwa].
Pama-Nyungan: CENTRAL PAMA-NYUNGAN: Arrernte (Mparntwe) [aer].

United States:
Siouan: CORE SIOUAN: Mandan [mhq].
Muskogean: MUSKOGEAN: Choctaw [cho].

Central America:
Chibchan: TALAMANCA: Bribri [bzd].

Fig. 2 is an analogous map illustrating a sample of nAND languages, but using the more conservative method:

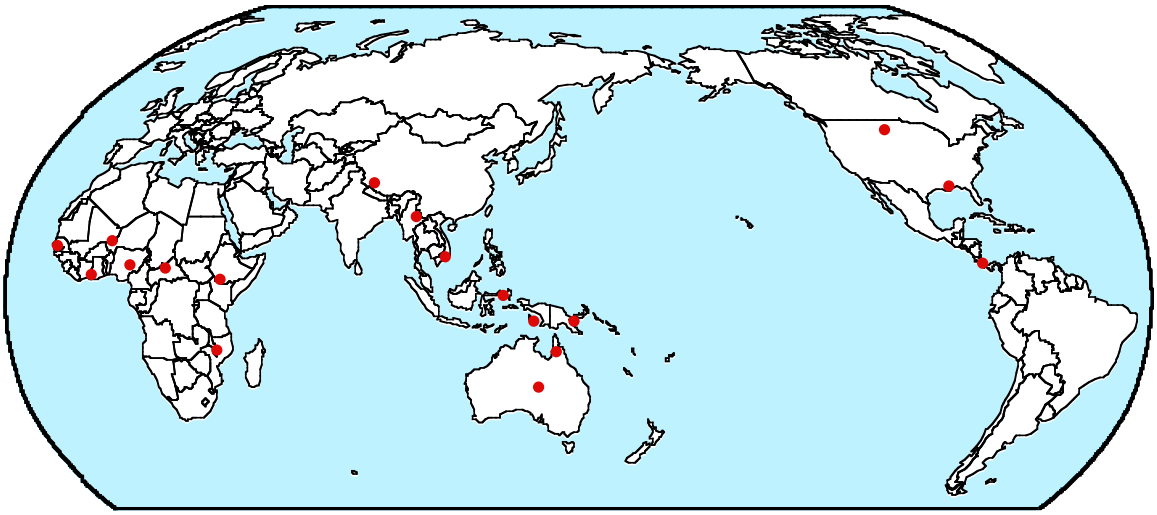


Fig. 2
Sample of nAND languages using alternative method for computing adjusted frequency discussed in this section

This sample contains 18 languages, 7 of them from Africa, 3 from southeast Asia, 3 Austronesian languages, 2 from Australia, 2 from the United States and one from Central America:

Africa:
Niger-Congo: BANTOID: Chichewa [nya].
Niger-Congo: NUPOID: Gwari [gbr].
Niger-Congo: KWA: Baule [tul].
Niger-Congo: DAY: Day [dai].
Niger-Congo: CANGIN: Ndut [ndv].
Songhay: SONGHAY: Koyraboro Senni [ses].
East Sudanic: NILOTIC: Nyangatom [nnj].
Mainland Eurasia:
Austro-Asiatic: PALAUNGIC: Palaung [pll].
Austro-Asiatic: BAHNARIC: Stieng [sti].
Sino-Tibetan: BODIC: Tibetan (Drokpa) [bod].
Austronesian:
Austronesian: MINAHASAN: Tondano [tdn].
Austronesian: CENTRAL MALAYO-POLYNESIAN: Batuley [bay].
Austronesian: OCEANIC: Sio [xsi].
Australia:
Pama-Nyungan: NORTHERN PAMA-NYUNGAN: Kugu Nganhcara [uwa].
Pama-Nyungan: CENTRAL PAMA-NYUNGAN: Arrernte (Mparntwe) [aer].
United States:
Siouan: CORE SIOUAN: Mandan [mhq].
Muskogean: MUSKOGEAN: Choctaw [cho].
Central America:

Chibchan: TALAMANCA: Bribri [bzd].

Note that the reduction of languages from the method used in the paper to the conservative method sharply reduces the number of languages from areas where there is a concentration of nAND languages, but leaves the same number of languages from areas where nAND languages are sparse. More specifically, it reduces the number of languages from Africa from 15 to 7, the number from mainland southeast Asia from 6 to 3, the number of Austronesian languages from 7 to 3, the number of Papuan languages from 9 to zero, but leaves the same number in Australia, the United States, and Central America. The sharp reduction in New Guinea results from the fact that one of the three Austronesian languages in this sample, namely Sio, is from the east coast of New Guinea and all the Papuan languages are too close to Sio to be included. Under other samples not including Sio, at most one Papuan language can be included for the same reason.

Fig. 3 is a map showing an example of a sample for DNAn languages based on the method used in the paper:

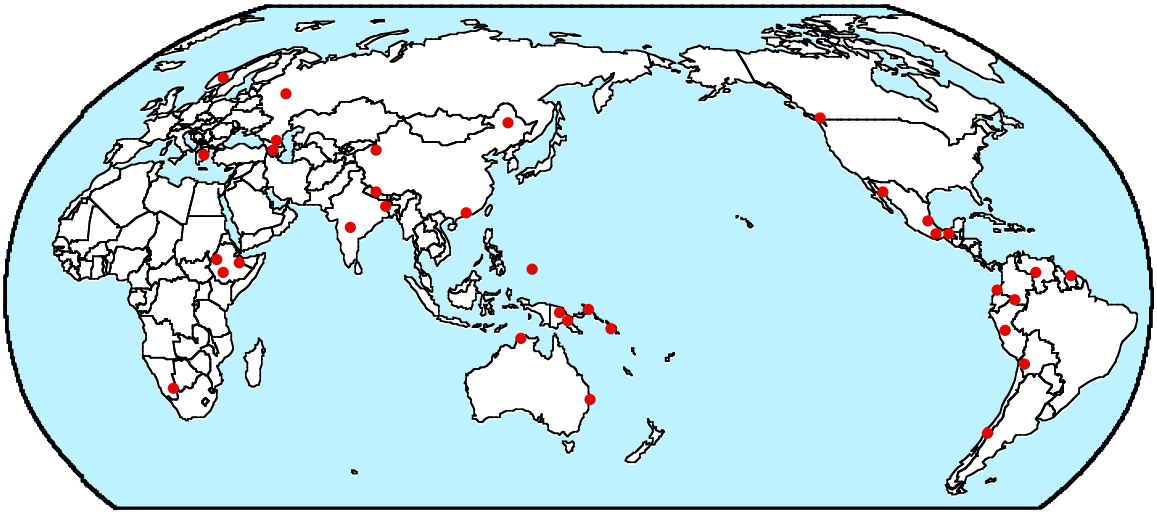


Fig. 3
Sample of DNAn languages using method for computing adjusted frequency employed in the paper

This sample contains 34 languages, including 4 from Africa, 10 from mainland Eurasia, 2 Austronesian languages, 3 Papuan languages (including one from the Solomon Islands), two from Australia, one from western Canada, 4 from Mexico, and 7 from South America:

Africa:
Khoe-Kwadi: KHOE-KWADI: Nama [naq].
Afro-Asiatic: MAO: Northern Mao [myf].
Afro-Asiatic: NORTH OMOTIC: Kullo [dwr].
Afro-Asiatic: SEMITIC: Harari [har].

Eurasia:
Indo-European: GERMANIC: Norwegian [nor].
Indo-European: SLAVIC: Russian [rus].
Indo-European: GREEK: Greek (Modern) [ell].
Indo-European: ARMENIAN: Armenian (Eastern) [hye].
Indo-European: IRANIAN: Ossetic [oss].
Indo-European: INDIC: Marathi [mar].
Altaic: MONGOLIC: Dagur [dta].
Altaic: TURKIC: Saryg Yugur [ybe].
Austro-Asiatic: MUNDA: Santali [sat].
Sino-Tibetan: CHINESE: Cantonese [yue].
Sino-Tibetan: BODIC: Chantyal [chx].
Oceania:
Austronesian: PALAUAN: Palauan [pau].
Austronesian: OCEANIC: Patpatar [gfk].
Trans-New Guinea: KAINANTU-GOROKA: Awa [awa].
Sepik: SEPIK HILL: Sare [dju].
Solomons East Papuan: SAVOSAVO: Savosavo [svs].
Tiwian: TIWIAN: Tiwi [tiw].
Pama-Nyungan: SOUTHEASTERN PAMA-NYUNGAN: Bandjalang [bdy].
North America:
Salishan: CENTRAL SALISH: Musqueam [hur].
Totonacan: TOTONACAN: Tepehua (Huehuetla) [tee].
Mixe-Zoque: MIXE-ZOQUE: Mixe (Ayutla) [mxp].
Mayan: MAYAN: Tzeltal [tzh].
Uto-Aztecan: TEPIMAN: Pima Bajo [pia].
South America:
Barbacoan: BARBACOAN: Awa Pit [kwi].
Quechuan: QUECHUAN: Quechua (Huallaga) [qub].
Araucanian: ARAUCANIAN: Mapudungun [arn].
Uru-Chipaya: URU-CHIPAYA: Chipaya [cap].
Arawakan: INLAND NORTHERN ARAWAKAN: Resígaro [rgr].
Arawakan: CARIBBEAN ARAWAKAN: Arawak [arw].
Cariban: CARIBAN: Panare [pbh].

Note that this is smaller than the number of languages in Fig. 1, the analogous map for nAND languages, where there are 42 languages.

Finally, Fig. 4 is a map showing an example of a sample for DNAn languages based on the more conservative method discussed in this section:

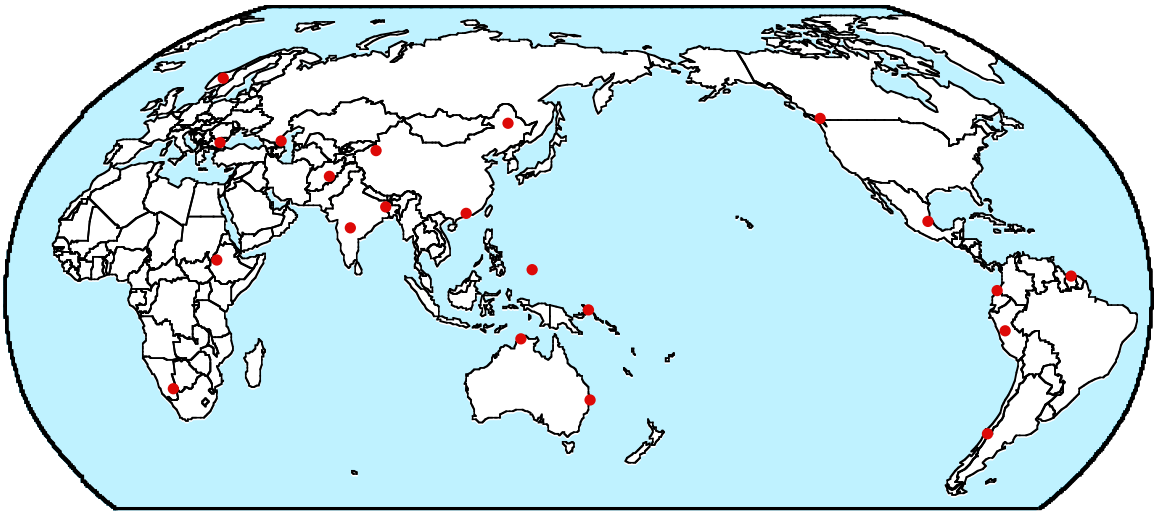


Fig. 4
Sample of DNAn languages using alternative method for computing adjusted frequency discussed in this section

This sample contains 21 languages, 2 from Africa, 9 from mainland Eurasia, 2 Austronesian languages, 2 from Australia, 2 from North America and 4 from South America:

Africa:
Khoe-Kwadi: KHOE-KWADI: Nama [naq].
Afro-Asiatic: MAO: Northern Mao [myf].
Mainland Eurasia:
Indo-European: GERMANIC: Norwegian [nor].
Indo-European: SLAVIC: Bulgarian [bul].
Indo-European: IRANIAN: Pashto [pst].
Indo-European: INDIC: Marathi [mar].
Altaic: MONGOLIC: Dagur [dta].
Altaic: TURKIC: Saryg Yugur [ybe].
Nakh-Daghestanian: AVAR-ANDIC-TSEZIC: Godoberi [gdo].
Austro-Asiatic: MUNDA: Santali [sat].
Sino-Tibetan: CHINESE: Cantonese [yue].
Austronesian:
Austronesian: PALAUAN: Palauan [pau].
Austronesian: OCEANIC: Patpatar [gfk].
Australia:
Tiwian: TIWIAN: Tiwi [tiw].
Pama-Nyungan: SOUTHEASTERN PAMA-NYUNGAN: Bandjalang [bdy].
North America:
Salishan: CENTRAL SALISH: Musqueam [hur].
Totonacan: TOTONACAN: Tepehua (Huehuetla) [tee].
South America:
Barbacoan: BARBACOAN: Awa Pit [kwi].

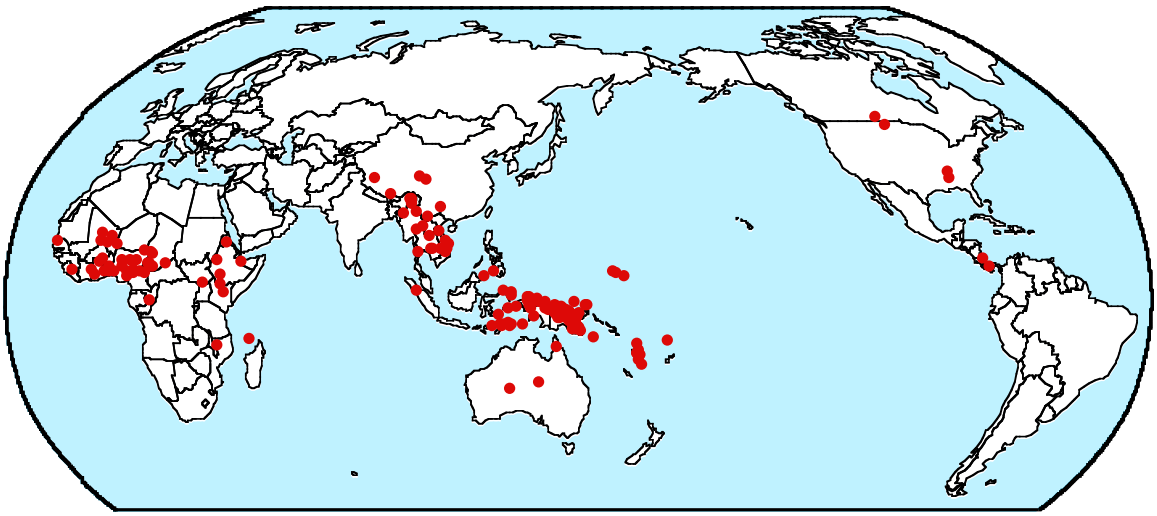
Quechuan: QUECHUAN: Quechua (Huallaga) [qub].
Araucanian: ARAUCANIAN: Mapudungun [arn].
Arawakan: CARIBBEAN ARAWAKAN: Arawak [arw].

Why is the sample larger for nAND languages using the method used in the paper while the sample is larger for DNAn languages using the more conservative method discussed in this section? As noted above, the more conservative method for nAND languages contains the same number of languages from areas where this order is less common but far fewer from the areas where this order is more common. The situation with DNAn languages is different in two ways. First, the sample using the more conservative method contains almost as many languages from mainland Eurasia as the sample using the less conservative method used in the paper (9 languages versus 10). This reflects the fact that the DNAn languages are spread over a very wide area so that it is possible to include almost as many languages using the more conservative criteria. Second, there are many DNAn languages outside Eurasia, with a wide distribution, more than the number of nAND languages outside Africa and the area stretching from Tibet to the western Pacific.

But is the conservative method better? As noted above, the conservative method may be too conservative, disallowing inclusion of pairs of languages which share a word order due to chance. On the other hand the number of DNAn languages of Eurasia may be overrepresented even under the more conservative method precisely because DNAn order is by far the most common order over a large area of Eurasia. I leave it to further research to decide this question. Ideally, future research will develop superior methods for controlling for geography.

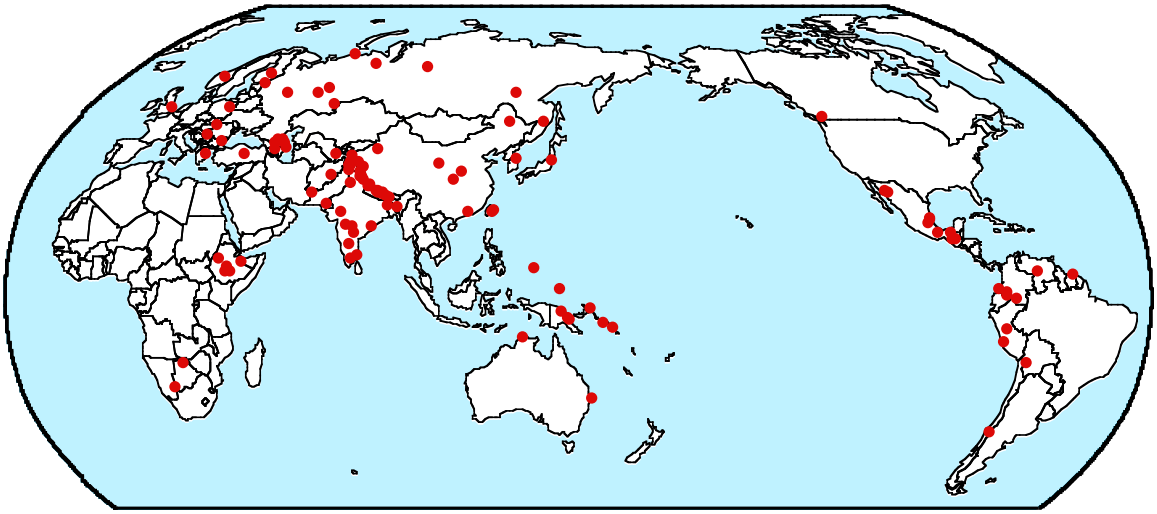
15. Maps showing each of the 18 attested orders in the 576-language sample

15.1. Map for N-A-Num-Dem (nAND)



nAND

15.2. Map for Dem-Num-A-N (DNAn)

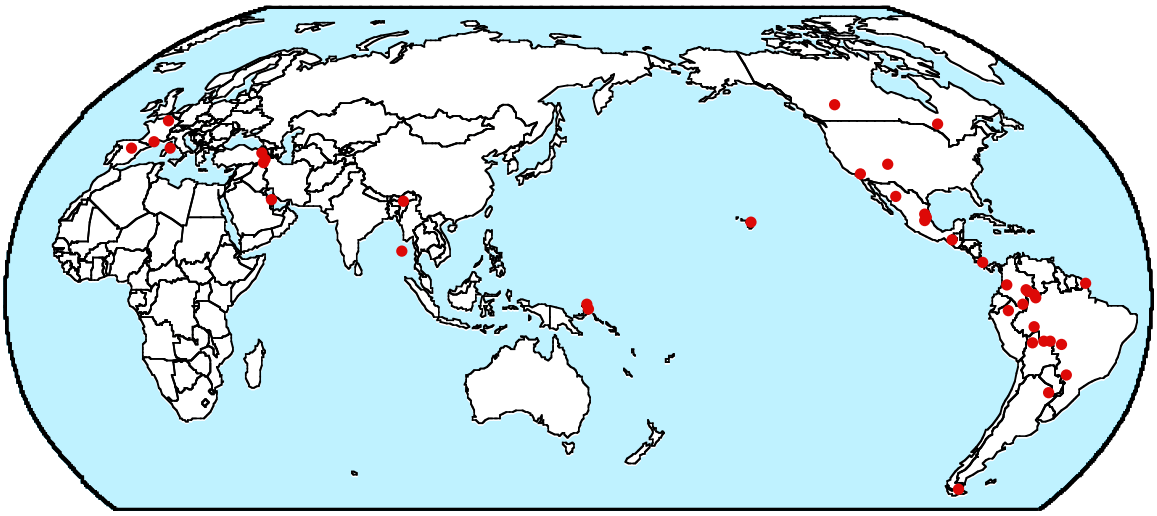


DNAn

15.3. Map for Dem-N-A-Num (DnAN)

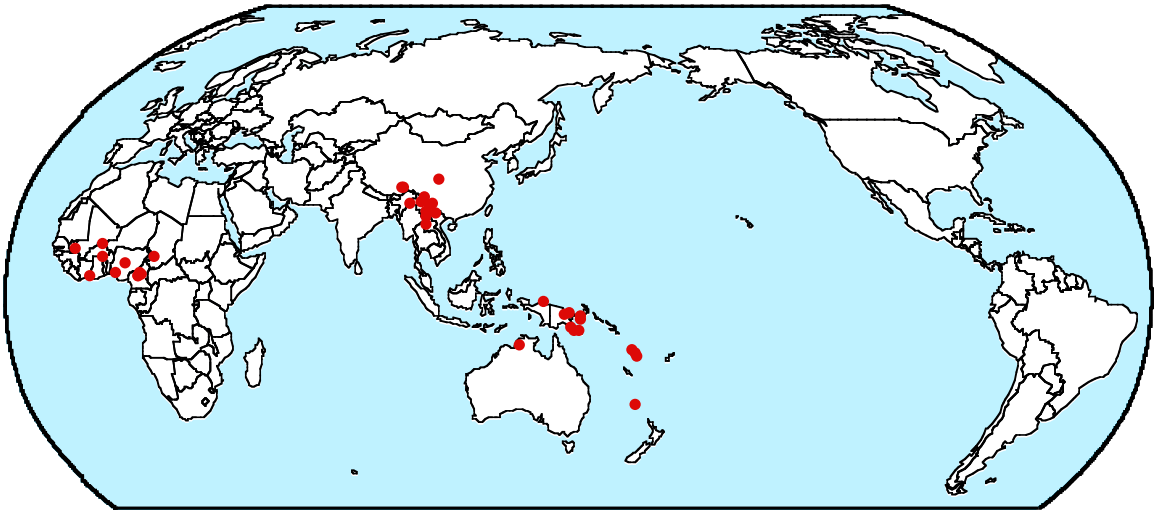
DnAN

15.4. Map for Dem-Num-N-A (DNnA)



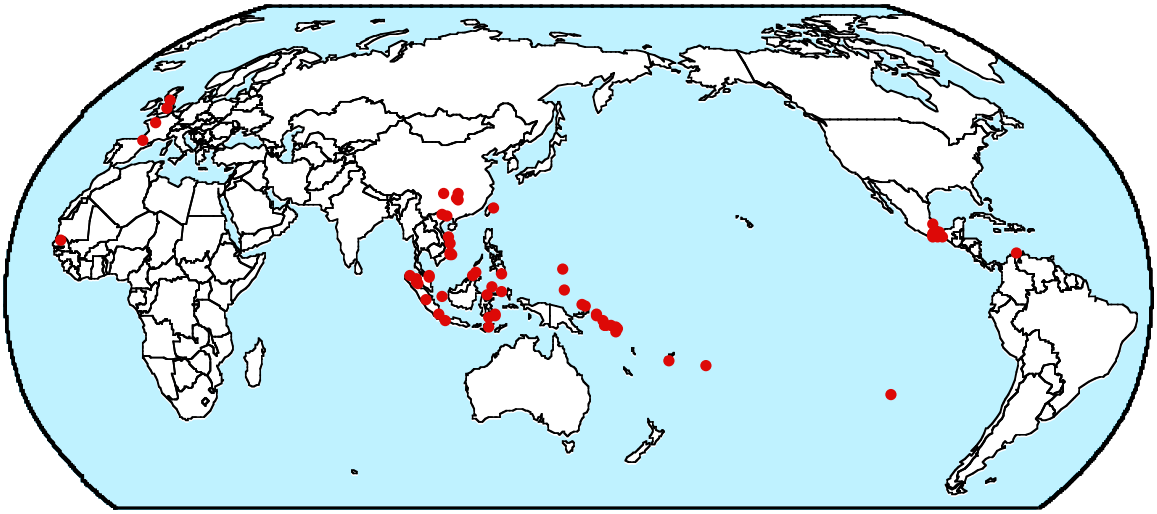
DNnA

15.5. Map for N-A-Dem-Num (nADN)



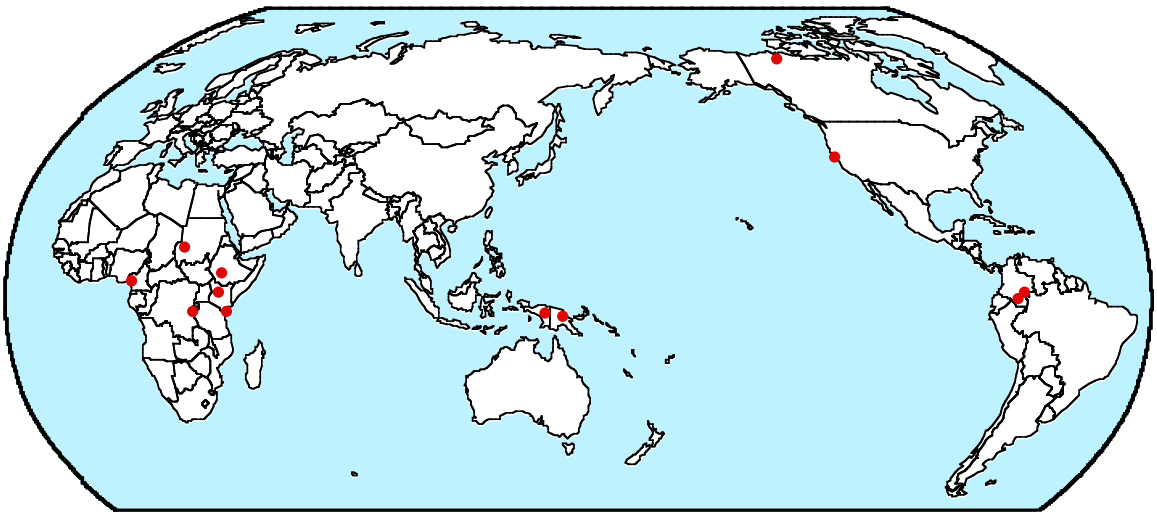
nADN

15.6. Map for Num-N-A-Dem (NnAD)



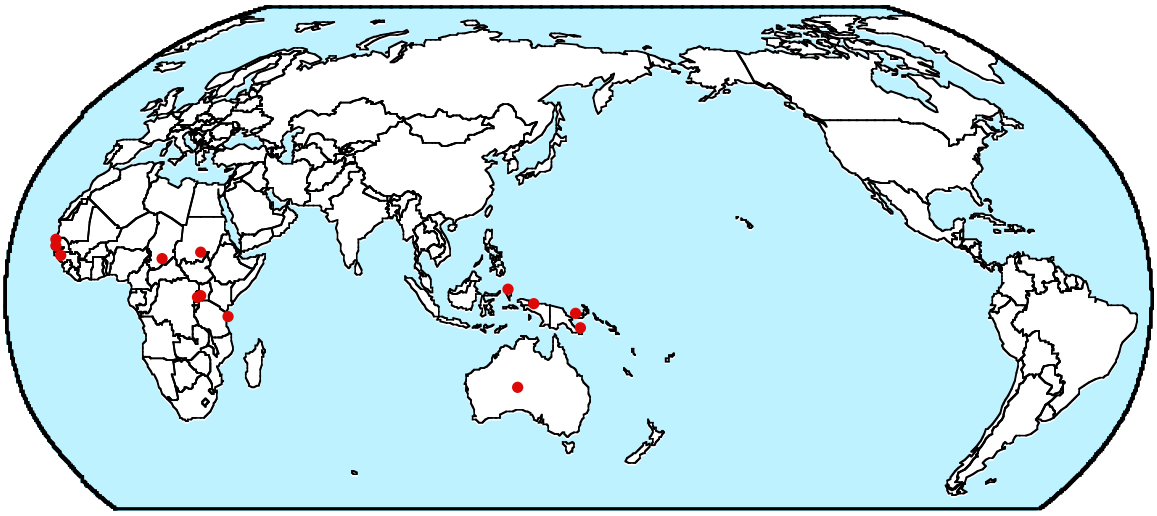
NnAD

15.7. Map for Dem-N-Num-A (DnNA)



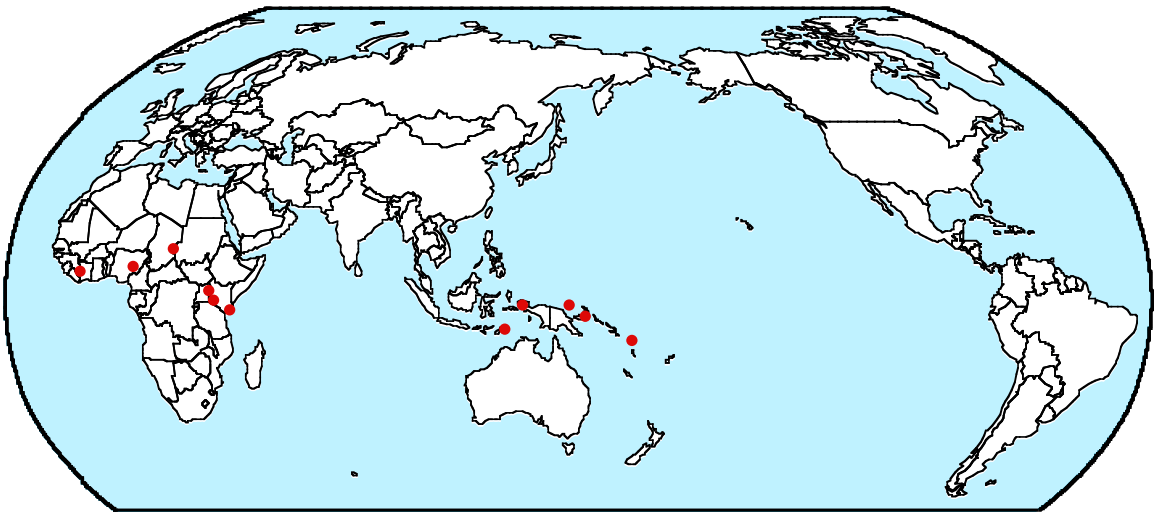
DnNA

15.8. Map for N-Dem-A-Num (nDAN)



nDAN

15.9. Map for N-Num-A-Dem (nNAD)

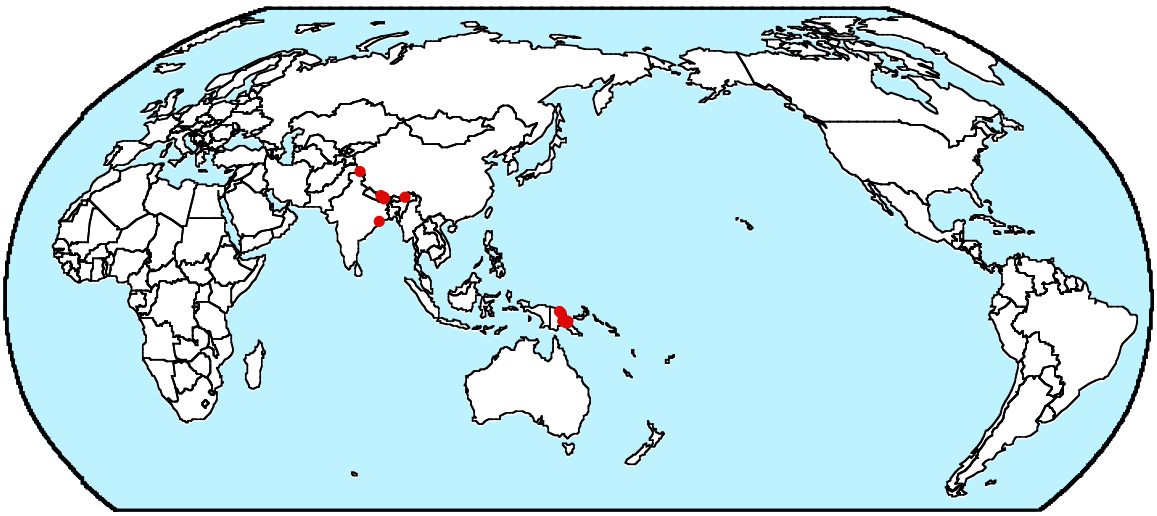


nNAD

15.10. Map for N-Dem-Num-A (nDNA)

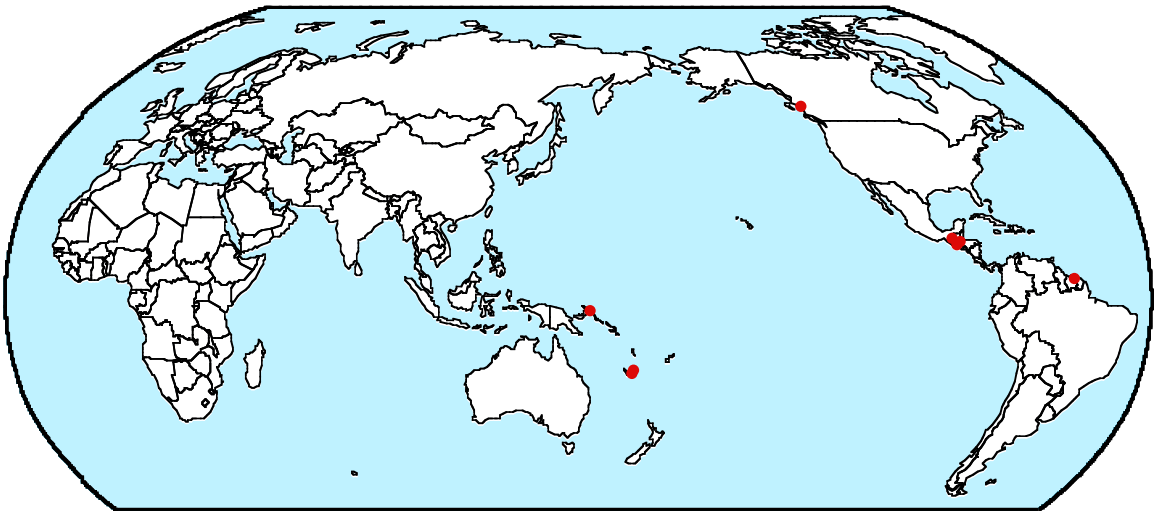
nDNA

15.11. Map for Dem-A-N-Num (DAnN)



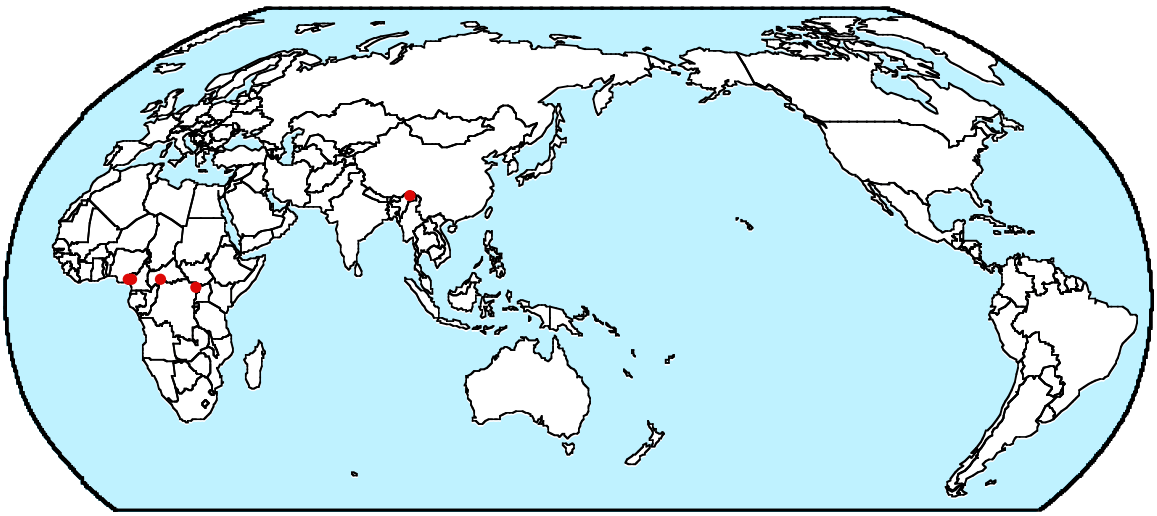
DAnN

15.12. Map for Num-A-N-Dem (NAnD)



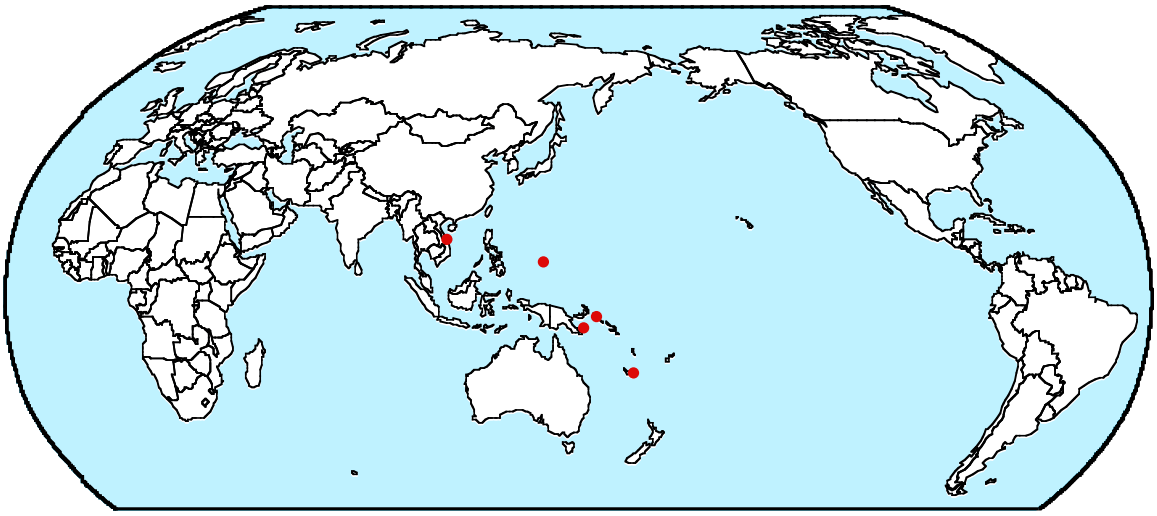
NAnD

15.13. Map for A-N-Num-Dem (AnND)



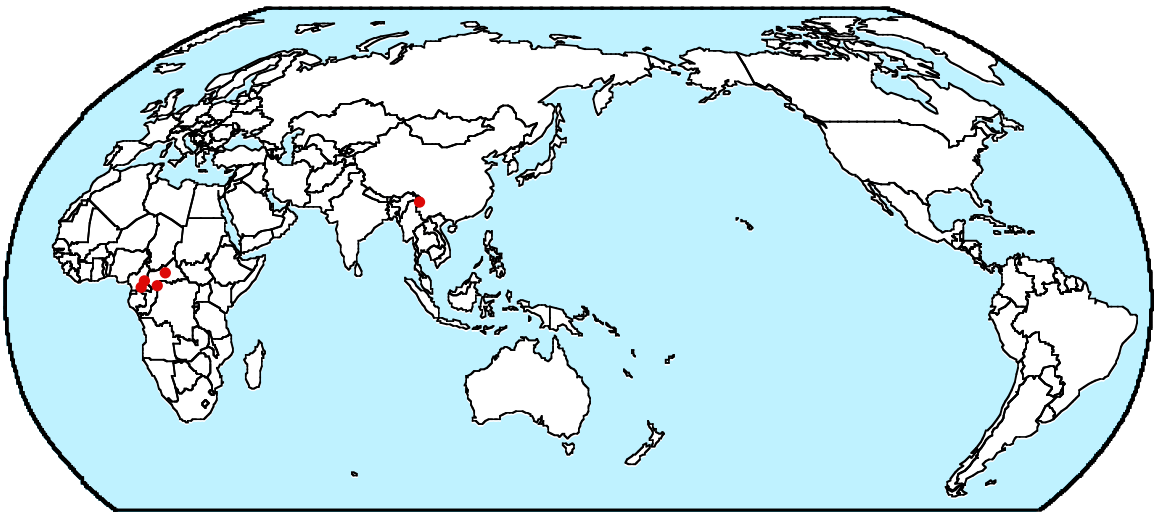
AnND

15.14. Map for Num-N-Dem-A (NnDA)



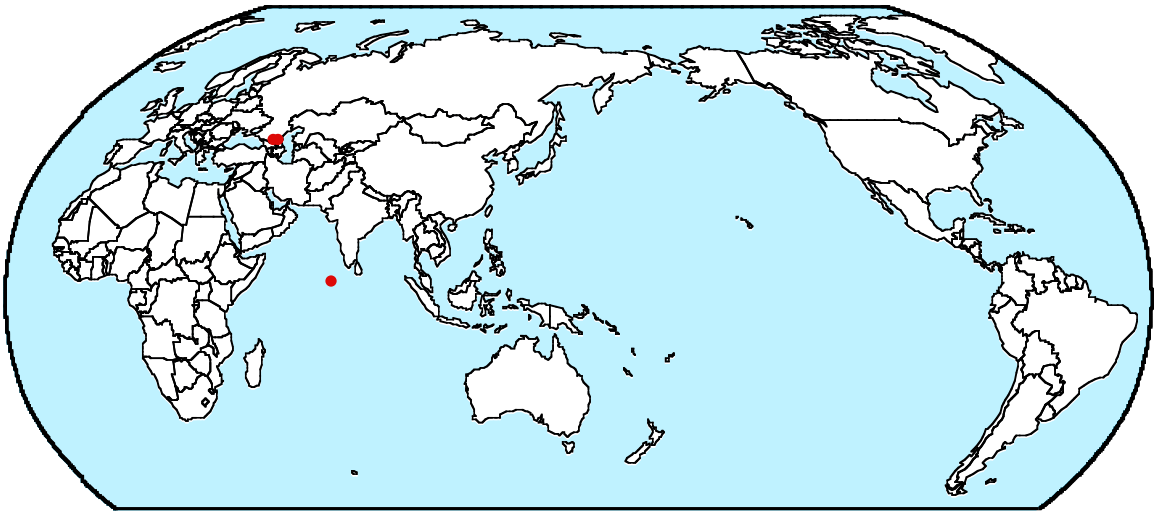
NnDA

15.15. Map for A-N-Dem-Num (AnDN)



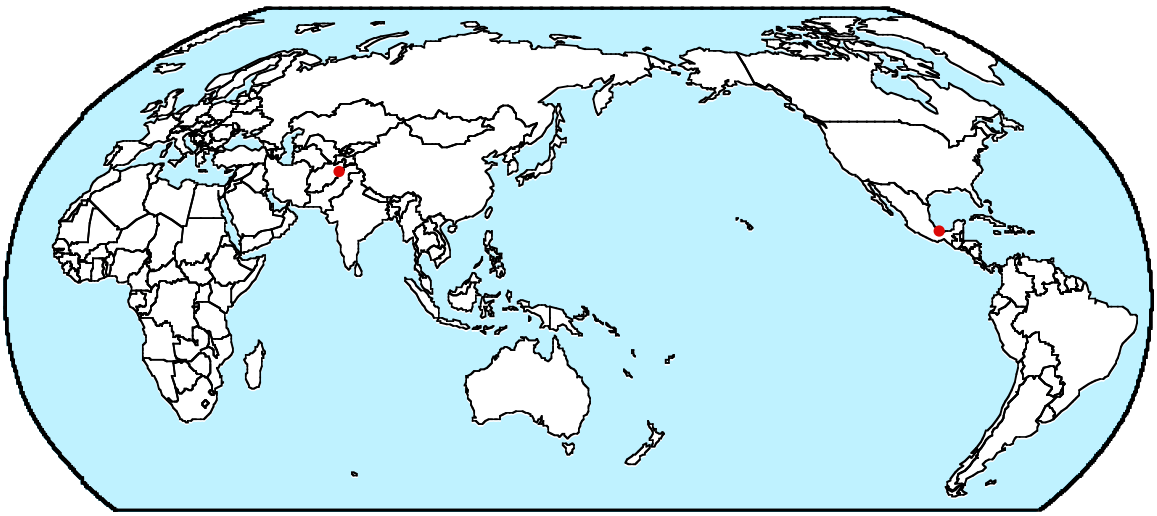
AnDN

15.16. Map for Dem-A-Num-N (DANn)



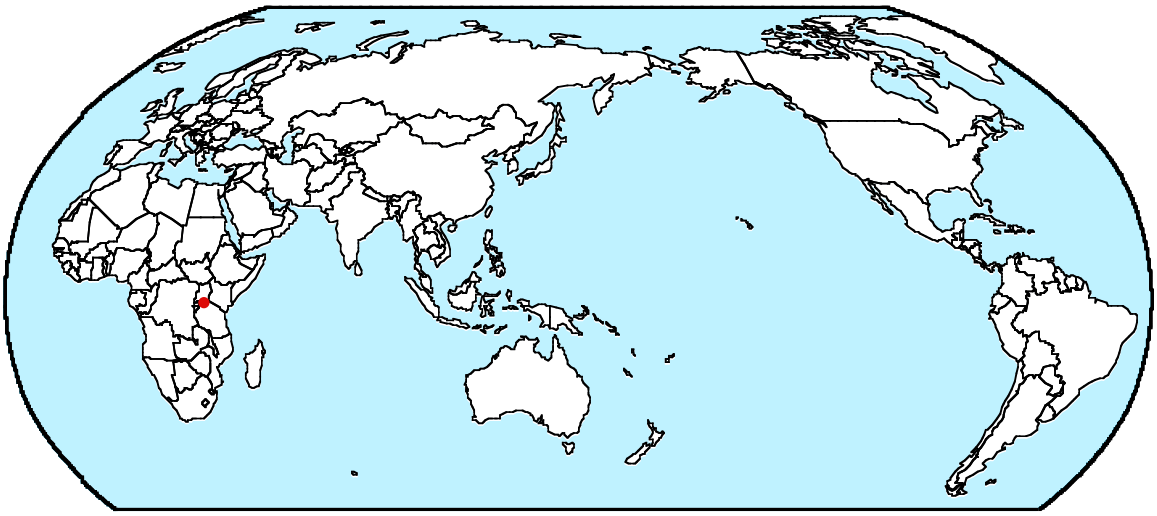
DANn

15.17. Map for Num-Dem-A-N (NDAn)



NDAn

15.18. Map for N-Num-Dem-A (nNDA)



nNDA

16. Bibliography for languages in the 576-language sample

ABDEL-HAFIZ, AHMED SOKARNO. 1988. *A reference grammar of Kunuz Nubian.* State University of New York at Buffalo doctoral dissertation.

ABDUNNABI, AWAD WANIS. 2000. *A descriptive grammar of Libyan Arabic: a structural approach.* University of Exeter doctoral dissertation.

ABOH, ENOCH. 1999. *From the syntax of Gungbe to the grammar of Gbe.* Université de Genève doctoral dissertation.

ABRAHAM, P. T. 1985. *Apatani grammar.* Mysore: Central Institute of Indian Languages.

ACHARYA, JAYARAJ. 1990. *A descriptive grammar of Nepali and an analyzed corpus.* Georgetown University doctoral dissertation.

ACHARYA, JAYARAJ. 1991. *A descriptive grammar of Nepali and an analyzed corpus.* Washington, D.C.: Georgetown University. Press.

ACHARYA, K. P. 1983. *Lotha grammar.* Mysore: Central Institute of Indian Languages.

AGBETSOAMEDO, YVONNE. 2014. *Aspects of the grammar and lexicon of Sɛlɛɛ.* Stockholm University doctoral dissertation.

AHLAND, MICHAEL BRYAN. 2012. *A grammar of Northern Mao (Màwés Aas'è).* University of Oregon doctoral dissertation.

AIKHENVALD, ALEXANDRA. 2003. *A grammar of Tariana, from northwest Amazonia.* Cambridge: Cambridge University Press.

ALAMIN MUBARAK, SUZAN. 2006. An initial description of Laggori noun morphology and noun phrase. *Insights into Nilo-Saharan language, History and culture: Proceedings of the 9th Nilo-Saharan linguistic colloquium, Institute of African and Asian Studies, University of Khartoum*, *16-19 February 2004*, ed. by Al-Amin Abu-Manga, Leoma Gilley, and Anne Storch, 9–24. Köln: Cologne: Rüdiger Köppe.

ALEKSEEV, M. E. AND RADZHABOV, R. N. 2004. Tsez. *The North East Caucasian languages: part 1*, ed. by Michael Job, 115–168. Ann Arbor: Caravan Books..

ALLAN, EDWARD J. 1976. Kullo. *The non-Semitic languages of Ethiopia*, ed. by M. Lionel Bender, 324–350. East Lansing, Michigan: African Studies Center, Michigan State University.

ALLEN, JERRY. 1987. *Halia grammar. Data papers on Papua New Guinea languages 32*. Ukarumpa: Summer Institute of Linguistics.

ALLIN, TREVOR REGINALD. 1976. *A grammar of Resígaro.* Horsleys Green, England: Buckinghamshire: SIL.

ALMEIDA, MATTHEW. 1985. *A description of Konkani (India).* Georgetown University doctoral dissertation.

ALNET, AIMEE JOHANSEN. 2009. *The clause structure of the Shimaore dialect of Comorian (Bantu).* University of Illinois at Urbana-Champaign doctoral dissertation.

ALVES, MARK J. 2000. *A Pacoh analytic grammar.* University of Hawai'i at Manoa doctoral dissertation.

AMALA, ARTHUR, ALPHONSE MAGAIVA AND LEANIE VAN DEELEN. 2015. *Tentative grammar description for the Mekeo [mek] language.* Ms. SIL.

AMEKA, FELIX K. 1991. *Ewe: its grammatical constructions and illucutionary devices.* Australian National University doctoral dissertation.

ANCEAUX, JOHANNES CORNELIS. 1952. *The Wolio language: outline of grammatical description and texts.* Rijksuniversiteit te Leiden doctoral dissertation.

ANDERSON, JUDI L. 1989. *Comaltepec Chinantec syntax.* The Summer Institute of Linguistics and the University of Texas at Arlington.

ANDERSON, MIKE AND MALCOLM ROSS. 2002. Sudest. *The Oceanic languages*, ed. by John Lynch, Malcolm Ross and Terry Crowley, 322–346. Richmond: Curzon.

ANDVIK, ERIK E. 1999. *Tshangla grammar.* University of Oregon doctoral dissertation.

ANDVIK, ERIK. 2003. Tshangla. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 439–455. New York: London: Routledge.

ANDVIK, ERIK E. 2010. *A grammar of Tshangla.* Leidn: Brill.

APTE, MAHADEV L. AND D. P. PATTANAYAK. 1967. *An outline of Kumauni grammar.* Durham, North Carolina: Program In Comparative Studies On Southern Asia, Duke University.

ARAGON, CAROLINA COELHO. 2014. *A grammar of Akuntsú, a Tupían language.* University of Hawai'i at Manoa doctoral dissertation.

ARMBRUSTER, CHARLES H. 1960. *Dongolese Nubian: a grammar.* Cambridge: Cambridge University Press.

AROKIANATHAN, S. 1987. *Tangkhul Naga grammar.* Mysore: Central Institute of Indian Languages.

ASHER, R. E. 1982. *Tamil.* Amsterdam: North-Holland.

ASHER, R. E. AND T. C. KUMARI. 1997. *Malayalam.* London: Routledge.

ASHTON, ERIC ORMEROD. 1947. *Swahili grammar.* London: Longmans, Green and Co.

AUSTING, JOHN F. AND RANDOLPH UPIA. 1975. Highlights of Ömie morphology. *Studies in languages of central and south-east Papua*, ed. by Tom E. Dutton, 513–598. *Pacific linguistics, Series C, no. 29*. Canberra: Research School of Pacific and Asian Studies, Australian National University.

AXENOV, SERGE. 2006. *The Balochi language of Turkmenistan: a corpus based grammatical description.* Uppsala Universitet doctoral dissertation.

BAART, JOAN L. G. 1999. *A sketch of Kalam Kohistani grammar.* Islamabad: National Institute of Pakistan Studies, Quaid-i-Azam University and Summer Institute of Linguistics.

BAIRD, LOUISE. 2002. *A grammar of Keo: an Austronesian language of east Nusantara.* Australian National University doctoral dissertation.

BAIRD, LOUISE. 2008. *A grammar of Klon: a non-Austronesian language of Alor, Indonesia. Pacific linguistics 596.* Canberra: Research School of Pacific and Asian Studies, The Australian National University.

BAMGBOṢE, AYỌ. 1966. *A grammar of Yoruba.* Cambridge: Cambridge University Press.

BAPTISTA, PRISCILLA M. AND WALLIN, RUTH. 1967. Baure. *Bolivian Indian grammars 1*, ed. by Esther Matteson, 27–84. Norman: Summer Institute of Linguistics of the University of Oklahoma.

BARRETT, EDWARD R. 1999. *A grammar of Sipakapense Maya.* University of Texas at Austin doctoral dissertation.

BASHIR, ELENA. 2009. Wakhi. *The Iranian languages*, ed. by Gernot Windfuhr, 825–862. London: Routledge.

BASRI, HASAN. 1999. *Phonological and syntactic reflections of the morphological structure of Selayarese.* State University of New York at Stony Brook doctoral dissertation.

BEATON, A. C. 1968. *A grammar of the Fur language* . Sudan Research Unit, University of Khartoum.

BEAUMONT, CLIVE H. 1979. *The Tigak language of New Ireland. Pacific linguistics, Series B, no. 58.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

BELLER, RICHARD AND BELLER, PATRICIA. 1979. Huasteca Nahuatl. *Studies in Uto-Aztecan grammar 2: Modern Aztec grammatical sketches*, ed. by Ronald W. Langacker, 199–306. Dallas: Summer Institute of Linguistics and the University of Texas at Arlington.

BENJAMIN, GEOFFREY. 1976. An outline of Temiar grammar. *Austroasiatic studies part I*, ed. by Philip N. Jenner, Laurence C. Thompson and Stanley Starosta, 129–187. Honolulu: University Press of Hawaii.

BENNETT, D. J. AND R. J. BENNETT. 1998. Awad Bing grammar essentials. In *Papers in Austronesian linguistics* 5. *Pacific linguistics, Series A, no. 92*, 149–275. Canberra: Research School of Pacific and Asian Studies, Australian National University.

BENTLEY, MAYRENE AND ANDREW KULEMEKA. 2001. *Chichewa.* Munich: Lincom.

BEQUETTE, REBECCA LEE ELAINE. 2013. *Participant reference, deixis, and anaphora in Bunong narrative discourse.* SIL International.

BERGHÄLL, LIISA. 2010. *Mauwake reference grammar.* University of Helsinki doctoral dissertation.

BERGHÄLL, LIISA. 2015. *A grammar of Mauwake.* Berlin: Language Science Press.

BERGMAN, RICHARD. 1981. *An outline of Igede grammar* . Dallas: SIL.

BERRY, KEITH AND CHRISTINE BERRY. 1999. *A description of Abun: a West Papuan language of Irian Jaya. Pacific linguistics, Series B, no. 115.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

BERTA, ÁRPÁD. 1998. Tatar and Bashkir. *The Turkic languages*, ed. by Lars Johanson and Éva Csató-Johanson, 283–300. London: Routledge.

BESNIER, NIKO. 2000. *Tuvaluan: a Polynesian language of the central Pacific.* London: Routledge.

BINH, DU'O'NG THANH. 1971. *A tagmemic comparison of the structure of English and Vietnamese sentences.* The Hague: Mouton.

BITON, ALEXANDER. 1969. *Dictionnaire ndumu-mbede-français et français-ndumumbede / Petit flore de la région de Franceville (Gabon) / Grammaire mbudundeme.* Libreville: Archevêché de Libreville.

BJÖRVERUD, SUSANNA. 1998. *A grammar of Lalo.* Lund University doctoral dissertation.

BLACK, KEITH AND BLACK, ELIZABETH. 1971. *The Moro language: grammar and dictionary.* Khartoum: Sudan Research Unit, University of Khartoum.

BLOK, GREG. 2013. *A descriptive grammar of Eastern Lawa.* Payap University MA thesis.

BOBUAFOR, MERCY. 2013. *A grammar of Tafi.* Rijksuniversiteit te Leiden doctoral dissertation.

BOESCHOTEN, HENDRIK. 1998. Uzbek. *The Turkic languages*, ed. by Lars Johanson and Éva A. Csató, 357–378. London: Routledge.

BOHNHOFF, LEE EDWARD. 2010. *A description of Dii: phonology, grammar, and discourse.* Ngaoundéré, Cameroun: Dii Literature Team.

BOLAÑOS, KATHERINE. 2016. *A grammar of Kakua.* Universiteit van Amsterdam doctoral dissertation.

BOLÉ-RICHARD, RÉMY. 1983a. L'ébrié. *Atlas des langues kwa de Cote d'Ivoire, Vol.* 1, ed. by Georges Hérault, 307–357. Abidjan: Institut de Linguistique Appliquée, Université de Abidjan; and Paris: Agence de Coopération Culturelle et Technique.

BOLÉ-RICHARD, RÉMY. 1983b. La classification nominale en Ega. *Journal of West African languages* 13. 51–62.

BOLTON, ROSEMARY ANN. 1990. *A preliminary description of Nuaulu phonology and grammar.* University of Texas at Arlington MA thesis.

BOONSAWASD, ATTASITH. 2012. *A grammar of Bouyei.* Mahidol University doctoral dissertation.

BOUQUIAUX, LUC. 1970. *La langue birom (Nigeria septentrional): phonologie, morphologie, syntaxe.* Paris: Société d'Édition.

BOUSH, AL. 1975. *Tifal grammar essentials.* Unpublished typescript. Ukarumpa, Papua New Guinea: The Summer Institute of Linguistics.

BOUTWELL, RICHARD L. 2010. *A sketch grammar of the Nchane language.* Yaoundé: SIL Cameroon.

BOWDEN, JOHN. 1997. *Taba (Makian Dalam): description of an Austronesian language from eastern Indonesia.* University of Melbourne doctoral dissertation.

BOWDEN, JOHN. 2001. *Taba: description of a southern Halmahera language. Pacific linguistics 514.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

BOWE, HEATHER J. 1990. *Categories, constituents and constituent order in Pitjantjatjara: an aboriginal language of Australia.* London: Routledge.

BOYI, JEAN. 1983. *Le munzombo (langue oubanguienne): étude du nom.* Université de la Sorbonne Nouvelle (Paris 3) doctoral dissertation.

BRADLEY, C. HENRY. 1970. *A linguistic sketch of Jicaltepec Mixtec.* Dallas: Norman: Summer Institute of Linguistics of the University of Oklahoma.

BRADLEY, DAVID. 2003. Lisu. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 222–235. London: Routledge.

BRADSHAW, JOEL AND FRANCISC CZOBOR. 2005. *Otto Dempwolff's grammar of the Jabêm language in New Guinea.* Honolulu: University of Hawai'i Press.

BRAINARD, SHERRI AND DIETLINDE BEHRENS. 2002. *A grammar of Yakan.* Linguistic Society of the Philippines.

BRANDÃO, ANA PAULA BARROS. 2014. *A reference grammar of Paresi-Haliti (Arawak).* University of Texas at Austin doctoral dissertation.

BRASSETT, CECILIA, PHILIP BRASSETT AND MEIYAN LU. 2006. *The Tujia language.* Munich: Lincom.

BRINDLE, JONATHAN A. 2010. *Aspects of the Chakali language.* Trondheim: Norwegian University of Science and Technology doctoral dissertation.

BRINDLE, JONATHAN. 2017. *A dictionary and grammatical outline of Chakali* . Berlin: Language Science Press.

BRISSON, ROBERT AND BOURSIER, DANIEL. 1979. *Petit dictionnaire Baka-Français.* Douala: Collège Libermann.

BRODERICK, GEORGE. 2010. Manx. *The Celtic languages*, ed. by Martin J. Ball and Nicole Müller, 305–356. London: Routledge.

BROWN, WILLIAM U. 1990. Mai Brat nominal phrases. *Miscellaneous studies of Indonesian and other languages in Indonesia, part x*, ed. by Bambang Kaswanti Purwo, 43–61. Jakarta: Universitas Katolik Indonesia Atma Jaya.

BROWNE, WAYLES AND THERESA ALT. 2004. *A handbook of Bosnian, Serbian and Croatian.* [Durham, NC] : Slavic and East European Language Research Center (SEELRC), Duke University.

BRUCE, LES. 1984. *The Alamblak language of Papua New Guinea (East Sepik). Pacific linguistics, Series C, no. 81.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

BUNN, GORDON. 1974. *Golin grammar. Workpapers in Papua New Guinea languages* 5. Ukarumpa: Summer Institute of Linguistics.

BURENHULT, NICLAS. 2005. *A grammar of Jahai. Pacific linguistics 566.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

BURLING, ROBBINS. 2003. Garo. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 387–400. London: Routledge.

BYARUSHENGO, ERNEST R. 1977. Preliminaries. *Haya grammatical structure*, ed. by Ernest R. Byarushengo, Alessandro Duranti and Larry M. Hyman, 1–15. Los Angeles: Department of Linguistics, University of Southern California.

CAIN, BRUCE DWAYNE. 2000. *Dhivehi (Maldivian): a synchronic and diachronic study.* Cornell University doctoral dissertation.

CAIN, BRUCE D. AND JAMES W. GAIR. 2000. *Dhivehi (Maldivian).* Munich: Lincom.

CAREY, ISKANDER. 1961. *Tengleq Kui Serok: an introduction to the Temiar language with an ethnographical summary.* Kuala Lumpur: Dewan Bahasa dan Pustaka.

CASTRO, DAMARIS. 2010. The noun phrase in Boruca: studying a recently extinct language. *STUF* 63. 196–220.

CAUGHLEY, ROSS C. 1982. *Syntax and morphology of the verb in Chepang. Pacific linguistics, Series B, no. 84.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

CAUSEMANN, MARGRET. 1989. *Dialekt und Erzählungen der Nangchenpas.* Bonn: VGH Wissenschaftsverlag.

CERRÓN-PALOMINO, RODOLFO. 2006. *El chipaya o lengua de los hombres del agua.* Lima: Fondo Editorial, Pontificia Universidad Católica del Perú.

CHANTANAKOMES, VEENA. 1980. *A description of Moken: a Malayo-Polynesian language.* Mahidol University MA thesis.

CHAPIN, PAUL G. 1978. Easter Island: a characteristic VSO language. *Syntactic typology*, ed. by Winfred P. Lehmann, 139–168. Austin: University of Texas Press.

CHRISTALLER, REV. J. G. 1875. *A grammar of the Asante and Fante language called Tshi (Chwee, Twi).* Gold Coast: Basel German Evangelical Mission.

CHRISTIANSEN-BOLLI, REGULA. 2010. *A grammar of Tadaksahak: a Berberised Songhay language (Mali).* Cologne: Rüdiger Köppe.

CHUNG, KYUNG-JA AND CHUNG, CHUL-HWA. 1996. Kuot grammar essentials. *Two non-Austronesian grammars from the islands*, ed. by John M. Clifton, 1–75. Ukarumpa: Summer Institute of Linguistics.

CLARK, ROSS. 2002. Ifira-Mele. *The Oceanic languages*, ed. by John Lynch, Malcolm Ross and Terry Crowley, 681–693. Richmond: Curzon.

CLARK, STEPHEN AND DAWN CLARK. 1987. *Sio grammar essentials.* Ukarumpa: Summer Institute of Linguistics. Online: https://www.sil.org/resources/archives/31124.

CLIFTON, JOHN M. 1997. The Kaki Ae language. *Materials on languages in danger of disappearing in the Asia-Pacific region No 1: some endangered languages of Papua New Guinea: Kaki Ae, Musom, and Aribwatsa*, ed. by Stephen A. Wurm, 3–66. Canberra: Research School of Pacific and Asian Studies, Australian National University.

CLOAREC-HEISS, FRANCE. 1986. *Dynamique et équilibre d'une syntaxe: le banda-linda de Centrafrique.* Cambridge: Cambridge University Press.

CONDRA, ED. 1989. *Patpatar grammar essentials.* Ukarumpa: Summer Institute of Linguistics.

COOK, EUNG-DO. 1984. *A Sarcee grammar.* Vancouver: University of British Columbia Press.

CORSTON-OLIVER, SIMON. 2002. Roviana. *The Oceanic languages*, ed. by John Lynch, Malcolm Ross and Terry Crowley, 467–497. Richmond: Curzon.

COSTELLO, NANCY A. 1969. The Katu noun phrase. *Mon-Khmer studies* 3. 21–35. Saigon: Summer Institute of Linguistics and Linguistic Circle of Saigon.

COUNTS, DAVID R. 1969. *A grammar of Kaliai-Kove.* Honolulu: University of Hawaii Press.

COUPE, ALEXANDER ROBERTSON. 2007. *A grammar of Mongsen Ao.* Berlin: Mouton de Gruyter.

COWARD, DAVID F. 1990. *An introduction to the grammar of Selaru.* University of Texas at Arlington MA thesis.

CROUCH, SOPHIE. 2009. *Voice and verb morphology in Minangkabau, a language of west Sumatra, Indonesia.* University of Western Australia MA thesis.

CROWLEY, TERRY. 2002a. Mwotlap. *The Oceanic languages*, ed. by John Lynch, Malcolm Ross and Terry Crowley, 587–598. Richmond: Curzon.

CROWLEY, TERRY. 2002b. Port Sandwich. *The Oceanic languages*, ed. by John Lynch, Malcolm Ross and Terry Crowley, 650–659. Richmond: Curzon.

CROWLEY, TERRY. 2002c. Vinmavis. *The Oceanic languages*, ed. by John Lynch, Malcolm Ross and Terry Crowley, 638–649. Richmond: Curzon.

CROWLEY, TERRY. 2006. *The Avava language of central Malakula (Vanuatu). Pacific linguistics 574.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

CUMBERLAND, LINDA A. 2005. *A grammar of Assiniboine: a Siouan language of the northern plains (Montana, Saskatchewan).* Indiana University doctoral dissertation.

CURNOW, TIMOTHY. 1997. *A grammar of Awa Pit (Cuaiquier): an indigenous language of south-western Colombia.* Australian National University doctoral dissertation.

D'JERNES, LUCILLE S. 2002. Arop-Lokep. *The Oceanic languages*, ed. by John Lynch, Malcolm Ross and Terry Crowley, 249–269. Richmond: Curzon.

DA COSTA, JANUACELE FRANCISCA. 1999. *Yathe, a última língua nativa do nordeste do Brasil: aspectos morfofonológicos e morfo-sintáticos.* Federal University of Pernambuco doctoral dissertation.

DAIGLE, BENJAMIN T. 2015. *A grammar sketch of Batuley: an Austronesian language of Aru, eastern Indonesia.* Rijksuniversiteit te Leiden MA thesis.

DAL POZZO, LENA. 2007. *The Finnish noun phrase.* Università Ca' Foscari di Venezia MA thesis.

DANIELSEN, SWINTHA. 2007. *Baure: an Arawak language of Bolivia.* Leiden: Research School of Asian, African and Amerindian Studies.

DAVIES, JOHN. 1981. *Kobon.* Amsterdam: North-Holland.

DAVIES, ROBYN AND LISBETH FRITZELL. 1992. *Duke of York grammar essentials (Ramoaaine).* Ukarumpa: Summer Institute of Linguistics.

DAVIS, KAREN. 2003. *A grammar of the Hoava language, western Solomons. Pacific linguistics 535.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

DAY, CHRISTOPHER. 1973. *The Jacaltec language.* Bloomington: Indian University.

DAY, GILLIAN RUTH DAVID. 2009. *The Doi Chom Phu Bisu noun phrase.* Payap University MA thesis.

DE COLOMBEL, VÉRONIQUE. 2005. *La langue ouldémé (nord-Cameroun): grammaire, texte, dictionnaire.* Louvain: Peeters.

DE JONG BOUDREAULT, LYNDA J. 2009. *A grammar of Sierra Popoluca (Soteapanec, a Mixe-Zoquean language).* University of Texas at Austin doctoral dissertation.

DE OLIVEIRA, MARIA DAS DORES . 2006. *Ofayé, a língua do povo do mel: fonologia e gramática.* Universidade Federal de Alagoas doctoral dissertation.

DE VRIES, LOURENS J. 2004. *A short grammar of Inanwatan: an endangered language of the Bird's Head of Papua, Indonesia. Pacific linguistics 560.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

DEGENER, ALMUTH. 1998. *Die Sprache von Nisheygram im Afghanischen Hindukusch.* Wiesbaden: Otto Harrassowitz.

DELAFOSSE, MAURICE. 1929. *La langue mandingue et ses dialectes (malinké, bambara, dioula), volumes I and II.* Paris: Librairie Orientaliste Paul Geuthner.

DELANCEY, SCOTT. 2003. Lhasa Tibetan. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 270–288. London: Routledge.

DEMPWOLFF, OTTO. 1939. *Grammatik der Jabêm-Sprache auf Neuguinea.* Hamburg: Friederichsen, de Gruyter.

DHONGDE, RAMESH VAMAN AND KASHI WALI. 2009. *Marathi.* Amsterdam: John Benjamins.

DIENST, STEFAN. 2014. *A grammar of Kulina.* Berlin: De Gruyter Mouton.

DILLON, JOHN ALBERT. 1994. *A grammatical description of Tatana' (Malaysia).* University of Texas at Arlington MA thesis.

DIMMENDAAL, GERRIT JAN. 1983. *The Turkana language.* Dordrecht: Foris Publications.

DING, PICUS SIZHI. 2014. *A grammar of Prinmi: based on the central dialect of northwest Yunnan, China.* Leiden: Brill.

DING, SIZHI. 1998. *Fundamentals of Prinmi (Pumi): a Tibeto-Burman language of northwestern Yunnan, China.* Australian National University doctoral dissertation.

DIXON, R. M. W. 1988. *A grammar of Boumaa Fijian.* Chicago: University of Chicago Press.

DOCTOR, RAIMOND. 2004. *A grammar of Gujarati.* Munich: Lincom.

DOL, PHILOMENA. 1999. *A grammar of Maybrat: a language of Bird's Head, Irian Jaya, Indonesia.* Rijksuniversiteit te Leiden doctoral dissertation.

DOL, PHILOMENA. 2007. *A grammar of Maybrat: a language of the Bird's Head Peninsula, Papua Province, Indonesia. Pacific linguistics 586.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

DONEUX, JEAN L. 1968. *Esquisse grammaticale du dan.* Dakar: Publications de Département de Linguistique Générale et Linguistique Africaine de la Faculté des Lettres et Sciences Humaine de l'Université de Dakar.

DONOHUE, MARK. 1999a. *A grammar of Tukang Besi.* Berlin: Mouton de Gruyter.

DONOHUE, MARK. 1999b. *Warembori.* Munich: Lincom.

DONOHUE, MARK AND LILA SAN ROQUE. 2004. *I'saka: a sketch grammar of a language of north-central New Guinea. Pacific linguistics 554*. Canberra: Research School of Pacific and Asian Studies, Australian National University.

DORVLO, KOFI. 2008. *A grammar of Logba (Ikpana).* Rijksuniversiteit te Leiden doctoral dissertation.

DOUGLAS, WILFRID H. 1964. *An introduction to the Western Desert language: a pedagogical description of the Western Desert language, based on the dialect spoken at Warburton Ranges, Western Australia. Oceanic linguistic monographs* 4. Sydney: University of Sydney.

DRAPER, NORM AND SHEILA DRAPER. 2002. *Dictionary of Kyaka Enga: Papua New Guinea. Pacific linguistics 532.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

DRYER, MATTHEW S. 2013. *A grammatical description of Kara-Lemakot. Asia-Pacific linguistics 9.* Canberra: Asia-Pacific linguistics.

DUM-TRAGUT, JASMINE. 2009. *Armenian: Modern Eastern Armenian.* Amsterdam: John Benjamins.

DUNN, JOHN ASHER. 1979. *A reference grammar for the Coast Tsimshian language.* Ottawa: National Museum of Man.

DUNN, PHYLLIS AND CHARLES PECK. 1988. Noun phrases in Tatana'. *Borneo language studies I: Sabah syntax papers*, ed. by Charles Peck, 206–227. Dallas: Summer Institute of Linguistics.

DURIE, MARK. 1985. *A grammar of Acehnese: on the basis of a dialect of north Aceh.* Dordrecht: Foris Publications.

DUTTON, TOM E. 1975. A Koita grammar sketch and vocabulary. *Studies in languages of central and south-east Papua. Pacific linguistics, Series C, no. 29*, ed. by Tom E. Dutton, 281–412. Canberra: Research School of Pacific and Asian Studies, Australian National University.

DUTTON, TOM E. 1996. *Koiari.* Munich: Lincom.

EADES, DOMENYK. 2005. *A grammar of Gayo: a language of Aceh, Sumatra. Pacific linguistics 567.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

EARLY, ROBERT J. 1994. *A grammar of Lewo, Vanuatu.* Australian National University doctoral dissertation.

EATON, HELEN. 2008. *Sandawe grammar.* SIL International.

EBERT, KAREN. 1997. *A grammar of Athpare.* Munich: Lincom.

ECKERMANN, WILLIAM. 2007. *A descriptive grammar of the Bukawa language of the Morobe Province of Papua New Guinea. Pacific linguistics 585.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

EDELMAN, D. (JOY) I. AND LEILA R. DODYKHUDOEVA. 2009. Shughni. *The Iranian languages*, ed. by Gernot Windfuhr, 787–824. London: Routledge.

EHRMAN, MADELINE ELIZABETH. 1972. *Contemporary Cambodian: grammatical sketch.* Washington, D.C.: Foreign Service Institute.

EHRMAN, SUSAN BARBARA. 1972. *Wayuunaiki: a grammar of Guajiro.* Columbia University doctoral dissertation.

ELBERT, SAMUEL H. AND PUKUI, MARY KAWENA. 1979. *Hawaiian grammar.* Honolulu: University of Hawaii Press.

ELDERS, STEFAN. 2008. *Grammaire kulango (parler de Bouna, Côte d'Ivoire).* Cologne: Rüdiger Köppe Verlag.

EMENANJO, NOLUE E. 1987. *Elements of Modern Igbo grammar.* Ibadan: University Press Limited.

EMKOW, CAROLA. 2006. *A grammar of Araona, an Amazonian language of northwestern Bolivia.* LaTrobe University doctoral dissertation.

ENGLAND, NORA C. 1983. *A grammar of Mam, a Mayan language.* Austin: University of Texas Press.

ENRICO, JOHN. 2003. *Haida syntax.* Lincoln: University of Nebraska Press.

EPPS, PATIENCE. 2008. *A grammar of Hup.* Berlin: Mouton de Gruyter.

ERNST, URS. 1992. *Esquisse grammaticale du kakɔ.* Yaoundé: Société Internationale de Linguistique.

ESTRADA FERNANDEZ, ZARINA. 2014. *Gramática de referencia del pima bajo.* Hermosillo, Sonora: Universidad de Sonora.

ETHERINGTON, PAUL ANTHONY. 2002. *Nggem morphology and syntax.* Northern Territory University MA thesis.

EZARD, BRYAN. 1997. *A grammar of Tawala: an Austronesian language of the Milne Bay area, Papua New Guinea. Pacific linguistics, Series C, no. 137.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

FABIAN, GRACE, EDMUND FABIAN AND BRUCE WATERS. 1998. *Morphology, syntax and cohesion in Nabak, Papua New Guinea. Pacific linguistics, Series C, no. 144*. Canberra: Research School of Pacific and Asian Studies, Australian National University.

FABRE, GWENAËLLE. 2002. *Le samba leko, langue Adamawa du Cameroun.* Université de la Sorbonne Nouvelle (Paris 3) doctoral dissertation.

FACUNDES, SIDNEY DA SILVA. 2000. *The language of the Apurinã people of Brazil (Maipure/Arawak).* State University of New York at Buffalo doctoral dissertation.

FARR, CYNTHIA J. M. 1999. *The interface between syntax and discourse in Korafe: a Papuan language of Papua New Guinea. Pacific linguistics, Series C, no. 148.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

FARRIS, EDWIN R. 1992. A syntactic sketch of Yosondúa Mixtec. *Studies in the syntax of Mixtecan languages 4*, ed. by C. Henry Bradley and Barbara E. Hollenbach, 1–171. Summer Institute of Linguistics.

FAST, LESLEY. 1990. Tungak grammar essentials. *Two grammatical studies*, ed. by John R. Roberts, 1–72. Ukarumpa: Summer Institute of Linguistics.

FEDDEN, SEBASTIAN OLCHER. 2011. *A grammar of Mian.* Berlin: Mouton de Gruyter.

FELDMAN, HARRY. 1986. *A grammar of Awtuw. Pacific linguistics, Series B, no. 94.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

FELDPAUSCH, THOMAS AND BECKY FELDPAUSCH. 1992. Namia grammar essentials. *Namia and Amanab grammar essentials*, ed. by John R. Roberts, 1–97. *Data papers on Papua New Guinea languages* 39. Ukarumpa: Summer Institute of Linguistics.

FIELD, KENNETH LYNN. 1997. *A grammatical overview of Santa Mongolian.* University of California at Santa Barbara doctoral dissertation.

FILCHENKO, ANDREY Y. 2007. *A grammar of Eastern Khanty.* Rice University doctoral dissertation.

FILCHENKO, ANDREY Y. 2010. *Aspects of the grammar of Eastern Khanty.* Tomsk: TSPU Press.

FLEMING, CAROLINA B. 1995. *An introduction to Mona grammar.* University of Texas at Arlington MA thesis.

FOREMAN, JOHN OLEN. 2006. *The morphosyntax of subjects in Macuiltianguis Zapotec.* University of California at Los Angeles doctoral dissertation.

FRANÇOIS, ALEXANDRE. 2002. *Araki: a disappearing language of Vanuatu. Pacific linguistics 522.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

FRANÇOIS, ALEXANDRE. 2005. A typological overview of Mwotlap. *Linguistic typology* 9. 115–146.

FRANKLIN, KARL J. 2010. The word in Kewa. *Piakandatu ami Dr. Howard P. McKaughan*, ed. by Loren Billings and Nelleke Goudswaard, 110–134. Manila: Linguistic Society of the Philippines and SIL Philippines.

GABY, ALICE R. 2006. *A grammar of Kuuk Thaayorre.* University of Melbourne doctoral dissertation.

GABY, ALICE R. 2017. *A grammar of Kuuk Thaayorre.* Berlin: De Gruyter Mouton.

GAMUDZE, TITUS, TOM HADZATA AND PHIL KING. 2013. *Tentative grammar description for the Guhu Samane language spoken in Morobe Province.* Ms. Ukarumpa: SIL.

GANONG, TINA W. 1998. *Features of Baga morphology, syntax, and narrative discourse.* University of Texas at Arlington MA thesis.

GARLAND, ROGER AND SUSAN GARLAND. 1975. A grammar sketch of Mountain Koiali. *Studies in languages of central and south-east Papua*, ed. by Tom E. Dutton, 413–470. *Pacific linguistics, Series C, no. 29*. Canberra: Research School of Pacific Studies, Australian National University.

GASAWAY, EILEEN AND HEATHER SIMS. 1992. *Girawa grammar.* Ukarumpa: Summer Institute of Linguistics.

GBLEM, MASSANVI. 1995. *Description systematique de l'igo (langue du sud-ouest du Togo).* Université Stendhal (Grenoble 3) doctoral dissertation.

GERNER, MATTHIAS. 2013. *A grammar of Nuosu.* Berlin: De Gruyter Mouton.

GHOSH, ARUN. 2008. Santali. *The Munda languages*, ed. by Gregory D. S. Anderson, 11–98. London: Routledge.

GIBSON, GWEN AND JOY MCCARTHY. 2002 [1967]. Kanite grammar sketch. Ms. Online: https://www.sil.org/resources/archives/31080.

GILL, HARJEET SINGH AND HENRY A. GLEASON, JR. 1963. *A reference grammar of Panjabi.* Hartford: Hartford Seminary Foundation.

GIRIDHAR, P. P. 1980. *Angami grammar.* Mysore: Central Institute of Indian Languages.

GIRIDHAR, P. P. 1994. *Mao Naga grammar.* Mysore: Central Institute of Indian Languages.

GLOVER, WARREN W. 1974. *Sememic and grammatical structures in Gurung (Nepal).* Norman, Okla.: The Summer Institute of Linguistics and the University of Texas at Arlington.

GNANADESIKAN, AMALIA E. 2017. *Dhivehi: the language of the Maldives.* Berlin: De Gruyter Mouton.

GOLDSTEIN, MELVYN C. 1991. *Essentials of Modern Literary Tibetan: a reading course and reference grammar.* Berkeley and Los Angeles: University of California Press.

GOOD, ELAINE M. AND WELDIS WELLEY. 1989. A preliminary grammar sketch, text and vocabulary of Pingilapese. *Papers in Kosraean and Ponapeic*, *Pacific linguistics, Series C, no. 112*, ed. by Elaine M. Good and Weldis Welley, 1–114. Canberra: Research School of Pacific Studies, the Australian National University.

GOSSNER, JAN D. 1994. *Aspects of Edolo grammar.* University of Texas at Arlington MA thesis.

GOUDSWAARD, NELLEKE. 2005. *The Begak (Ida'an) language of Sabah.* Vrije Universiteit Amsterdam doctoral dissertation.

GOWDA, K. S. GURUBASAVE. 1975. *Ao grammar.* Mysore: Central Institute of Indian Languages.

GRAVELLE, GILLES. 2004. *The Meyah language of Papua.* Vrije Universiteit Amsterdam doctoral dissertation.

GRAVELLE, GILLES. 2011. *Meyah: a language of West Papua, Indonesia. Pacific linguistics 619.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

GRAVELLE, GLORIA. 2010. *A grammar of Moskona: an east Bird's Head language of West Papua, Indonesia.* Vrije Universiteit Amsterdam doctoral dissertation.

GREEN, HAROLD AND GREEN, DIANA. 1972. *Surface structure of Palikur grammar.* Brazil: The Summer Institute of Linguistics and the University of Texas at Arlington.

GREEN, JOHN N. 1988. Spanish. *The Romance languages*, ed. by Martin Harris and Nigel Vincent, 79–130. London: Routledge.

GREGERSON, KENNETH. 1979. *Predicate and argument in Rengao grammar.* Dallas: The Summer Institute of Linguistics and the University of Texas at Arlington.

GREGORES, EMMA AND JORGE A. SUÁREZ. 1967. *A description of colloquial Guaraní.* The Hague: Mouton de Gruyter.

GRIMES, CHARLES E. 1991. *The Buru language of eastern Indonesia.* Australian National University doctoral dissertation.

GRUNOW-HÅRSTA, KAREN A. 2008. *A descriptive grammar of two Magar dialects of Nepal: Tanahu and Syangja Magar.* University of Wisconsin at Milwaukee doctoral dissertation.

GUDERIAN, BRAD AND TONI GUDERIAN. 2002. *Koluwawa grammar essentials.* Ms. SIL.

GUÉRIN, VALÉRIE M. P. R. 2011. *A grammar of Mavea: an Oceanic language of Vanuatu.* Honolulu: University of Hawai'i Press.

GUILLAUME, ANTOINE. 2008. *A grammar of Cavineña.* Berlin: Mouton de Gruyter.

GWA, OHN MAR HTUN. 2010. *A comparison of imperfectivity in Leinong Naga, Burmese, and Lisu.* Payap University MA thesis.

HAAN, JOHNSON WELEM. 2001. *The grammar of Adang: a Papuan language spoken on the island of Alor, East Nusa Tenggara, Indonesia.* University of Sydney doctoral dissertation.

HAFFORD, JAMES A. 2014. *Wuvulu grammar and vocabulary.* University of Hawai'i at Mānoa doctoral dissertation.

HAGÈGE, CLAUDE. 1970. *La langue mbum de Nganha (Cameroun): phonologie-grammaire.* Paris: Centre National de la Récherche Sciéntifique.

HAGMAN, ROY S. 1977. *Nama Hottentot grammar.* Bloomington: Indiana University.

HAIMAN, JOHN. 1980. *Hua: a Papuan language of the eastern Highlands of New Guinea.* Amsterdam: John Benjamins.

HAMEL, PATRICIA J. 1985. *A grammar of Loniu.* University of Kansas doctoral dissertation.

HAMEL, PATRICIA J. 1994. *A grammar and lexicon of Loniu, Papua New Guinea. Pacific linguistics, Series C, no. 103.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

HANSFORD, KEIR LEWIS. 1990. *A grammar of Chumburung: a structure-function hierarchical description of the syntax of a Ghanaian language.* University of London doctoral dissertation.

HANSSON, INGA-LILL. 2003. Akha. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy LaPolla, 236–252.

HARDIN, BARBARA. 2002. *Maia grammar essentials.* Ms. SIL. Online: https://www.sil.org/resources/archives/49138.

HARDJADIBRATA, R. R. 1985. *Sundanese: a syntactical analysis. Pacific linguistics, Series D, Special Publications 65*. Canberra, Australia: Research School of Pacific Studies, Australian National University.

HARDMAN, MARTHA J. 2000. *Jaqaru.* Munich: Lincom.

HARRIEHAUSEN, BETTINA. 1990. *Hmong Njua.* Berlin: De Gruyter.

HARRISON, SHELDON P. 1976. *Mokilese reference grammar.* Honolulu: University of Hawaii Press.

HÄSLER, KATRIN. 1999. *A grammar of the Tibetan Dege (Sde dge) dialect.* Universität Bern doctoral dissertation.

HAYS, DARRELL AND KERTTU HAYS. 2002. *Odoodee grammar essentials.* Ms. SIL. Online: https://www.sil.org/resources/archives/53964.

HAYWARD, RICHARD J. 1979. Bayso revisited: some preliminary linguistic observations ; part 2. *Bulletin of the School of Oriental and African Studies* 42. 101–132.

HAYWOOD, GRAHAM. 1996. A Maleu grammar outline and text. *Studies in the languages of New Britain and New Ireland 1: Austronesian languages of the north New Guinea Cluster in northwestern New Britain*, ed. by Malcolm D. Ross, 145–196. *Pacific linguistics, Series C, no. 135*. Canberra: Research School of Pacific and Asian Studies, Australian National University.

HEALEY, ALAN, AMBROSE ISOROEMBO AND MARTIN CHITTLEBOROUGH. 1969. Preliminary notes on Orokaiva grammar. *Papers in New Guinea linguistics 9. Pacific linguistics, Series A, no. 18*, 33–64. Canberra: Research School of Pacific and Asian Studies, Australian National University.

HEATH, JEFFREY. 1999a. *A grammar of Koyra Chiini: the Songhay of Timbuktu.* Berlin: Mouton de Gruyter.

HEATH, JEFFREY. 1999b. *A grammar of Koyraboro (Koroboro) Senni: the Songhay of Gao, Mali.* Cologne: Rüdiger Köppe.

HEATH, JEFFREY. 2008. *A grammar of Jamsay.* Berlin: Mouton de Gruyter.

HEDINGER, ROBERT. 2008. *A grammar of Akoose: a northwest Bantu language.* Dallas: SIL International.

HEESCHEN, VOLKER. 1992. *A dictionary of the Yale (Kosarek) language (with a sketch of grammar and English index).* Berlin: Dietrich Reimer.

HEINE, BERND. 1975. Notes on the Yaaku language (Kenya). *Afrika und Übersee* 58. 27–61, 119–138.

HEINE, BERND. 1976. Notes on the Rendille language (Kenya). *Afrika und Übersee* 59. 176–223.

HEINE, BERND. 1980. Camus, a Maa dialect. *The non-Bantu languages of Kenya*, ed. by Bernd Heine, 99–140. Berlin: Dietrich Reimer.

HEINE, BERND. 1981. *The Waata dialect of Oromo: grammatical sketch and vocabulary.* Berlin: Dietrich Reimer.

HEINE, BERND. 1983. *The Ik language.* Ms. Cologne: Universitat zu Koln.

HEINE, BERND. 1999. *The //Ani: grammatical notes and texts.* Köln: Institut für Afrikanistik, Universität zu Köln.

HEMMILÄ, RITVA AND PIRKKO LUOMA. 1987. *Urim grammar.* Ukarumpa: SIL.

HEPNER, MARK. 2006. *Bargam grammar sketch.* Ms. Ukarumpa: SIL.

HERNÁNDEZ SALLÉS, ARTURO, NELLY RAMOS PIZARRO AND ROSA HUENCHULAF CAYUQUEO. 2006. *Gramática básica de la lengua mapuche: tomo I.* Temuco: Universidad Católica de Temuco.

HESS, HARWOOD H. 1968. *The syntactic structure of Mezquital Otomi.* Berlin: Mouton de Gruyter.

HILL, DEBORAH. 2002. A grammar sketch of Longgu. *The Oceanic languages*, ed. by John Lynch, Malcolm Ross and Terry Crowley, 538–561

HIMMELMANN, NIKOLAUS P. AND JOHN U. WOLFF. 1999. *Toratán (Ratahan).* Munich: Lincom.

HINTON, BRYAN DOUGLAS. 1991. *Aspects of Tugun phonology and syntax.* University of Texas at Arlington MA thesis.

HOLES, CLIVE. 1990. *Gulf Arabic.* London: Routledge.

HOLLENBACH, BARBARA E. 1992. A syntactic sketch of Copala Trique. *Studies in the syntax of Mixtecan languages 4*, ed. by C. Henry Bradley and Barbara E. Hollenbach, 173–431. Dallas: Summer Institute of Linguistics and the University of Texas at Arlington.

HOOLEY, BRUCE ARTHUR. 1970. *Mapos Buang, Territory of New Guinea.* University of Pennsylvania doctoral dissertation.

HUALDE, JOSÉ I. 1992. *Catalan.* London: Routledge.

HUBER, JULIETTE. 2008. *First steps towards a grammar of Makasae: a language of East Timor.* Munich: Lincom.

HUCKETT, JOYCE. 1974. Notes on Iduna grammar. *Three studies in languages of eastern Papua*, ed. by Alan Healey, 63–133. Ukarumpa: Summer Institute of Linguistics.

HUTCHISON, JOHN P. 1981. *A reference grammar of the Kanuri language.* Madison: African studies program, University of Wisconsin.

HUTTAR, GEORGE L. AND MARY L. HUTTAR. 1994. *Ndyuka.* London: Routledge.

HYMAN, LARRY M. (ed.) 1979. *Aghem grammatical structure: with special reference to noun classes, tense-aspect and focus marking. Southern California occasional papers in linguistics 7*. Los Angeles: Dept. of Linguistics, University. of Southern California.

HYMAN, LARRY M. 2002. The noun and noun phrase. Ms. Online: http://linguistics.berkeley.edu/~hyman/papers/unpub/leggbo-n-structure.pdf

HYMAN, LARRY M. AND DANIEL J. MAGAJI. 1970. *Essentials of Gwari grammar.* Ibadan, Nigeria: Institute of African Studies, University of Ibadan.

HYSLOP, CATRIONA. 2001. *The Lolovoli dialect of the north-east Ambae language, Vanuatu. Pacific linguistics 515.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

HYSLOP, GWENDOLYN. 2011. *A grammar of Kurtöp.* University of Oregon doctoral dissertation.

INGRAM, ANDREW. 2001. *Anamuxra: a language of Madang Province, Papua New Guinea.* University of Sydney doctoral dissertation.

IORIO, DAVID. 2011. The noun phrase in Kibembe (D54). *Newcastle working papers in linguistics* 17. 46–65.

IRUMU, AGOZIA-KARIO. 1986. *Description du logoti (nord-est du Zaïre): phonologie, esquisse grammaticale et lexique logoti-français.* Université de la Sorbonne Nouvelle (Paris 3) doctoral dissertation.

ISRAEL, M. 1979. *A grammar of the Kuvi language.* Trivandrum: Dravidian Linguistics Association.

JACKSON, JASON. 2014. *A grammar of Irarutu.* University of Hawai'i at Mānoa doctoral dissertation.

JACQ, PASCALE. 2001. *A description of Jruq (Loven): a Mon-Khmer language of the Lao PDR.* Australian National University MA thesis.

JAMIESON, CAROLE. 1974. Chiquihuitlan Mazatec phrases. *SIL Mexico workpapers* 1. 1–7.

JAUNCEY, DOROTHY G. 2011. *Tamambo, the language of west Malo, Vanuatu. Pacific linguistics 622.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

JENKS, PETER. 2014. Head movement in Moro DPs: evidence for a unified theory of movement. *Proceedings of the 31st West Coast Conference on Formal Linguistics*, ed. Robert E. Santana-LaBarge, 248–257. Somerville, MA: Cascadilla Proceedings Project.

JENSEN, JOHN THAYER. 1977. *Yapese reference grammar* . Honolulu: University Press of Hawai'i.

JOHNSON, ORVILLE E. AND STEPHEN E. LEVINSOHN. 1990. *Gramática Secoya.* Quito: Instituto Lingüístico de Verano.

JONES, MICHAEL ALLAN. 1993. *Sardinian syntax.* London: Routledge.

JONES, ROBERT B. JR. 1961. *Karen linguistic studies: description, comparison and texts.* Berkeley and Los Angeles: University of California Press.

JOSEPHS, LEWIS S. 1975. *Palauan reference grammar.* Honolulu: University of Hawaii Press.

KAGAYA, RYOHEI. 1992. *A classified vocabulary of the Bakueri language.* Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.

KARAPURKAR, PUSHPA PAI. 1976. *Kokborok grammar.* Mysore: Central Institute of Indian Linguistics.

KARHUNEN, MARJO. 1994. The noun phrase in Padoe. *Studies in Sulawesi linguistics* III, ed. by James N. Sneddon, 17–48. Jakarta: Universitas Katolik Indonesia Atma Jaya.

KATHOL, ANDREAS AND RICHARD A. RHODES. 2000. Constituency and linearization of Ojibwe nominals. *Proceedings of WSCLA 4: The Workshop on structure and Constituency in languages of the Americas*, ed. by Marion Caldecott, Suzanne Gessner and Eun-Sook Kim, 75–91. Vancouver: University of British Columbia.

KAUFMAN, ELAINE MARLOWE. 1968. *Ibibio grammar.* University of California at Berkeley doctoral dissertation.

KAWACHI, KAZUHIRO. 2007. *A grammar of Sidaama (Sidamo): a Cushitic language of Ethiopia.* University of Buffalo doctoral dissertation.

KEESING, ROGER M. 1985. *Kwaio grammar. Pacific linguistics, Series B, no. 88.* Canberra: Australian National University.

KELLER, CHARLES. 1976. *A grammatical sketch of Brao, a Mon-Khmer language.* University of North Dakota MA thesis.

KENESEI, ISTVÁN, ROBERT M. VAGO AND ANNA FENYVESI. 1998. *Hungarian.* London: Routledge.

KIBRIK, ALEKSANDR E. 1994. Archi. *The North East Caucasian languages part 2*, ed. by Rieks Smeets, 297–365. Delmar, NY: Caravan Books.

KIBRIK, ALEKSANDR E. 1996. *Godoberi.* Munich: Lincom.

KIEVIT, DIRK AND ERIKA ROBERTSON. 2012. Notes on Gwama grammar. *Studies in African linguistics* 41. 39–97.

KILIAN-HATZ, CHRISTA. 1995. *Das Baka: Grundzüge einer Grammatik aus der Grammatikalisierungsperspektive.* Köln: Institut für Afrikanistik, Universität zu Köln.

KIM, NAMSOO AND DUCKSHIN KIM. 1998. *Waima grammar essentials.* Ms. Ukarumpa: SIL.

KOITE-HERSCHEL, UTE. 1981. La translation du constituent verbal: le cas du xasonga. *Mandenkan* 2. 3–16.

KOLIA, JOHN A. 1975. A Balawaia grammar sketch and vocabulary. *Studies in languages of central and south-east Papua*, ed. by Tom E. Dutton, 107–226. Canberra: Research School of Pacific and Asian Studies, Australian National University.

KONDIĆ, SNJEŽANA. 2012. *A grammar of South Eastern Huastec, a Mayan language from Mexico.* University of Sydney doctoral dissertation.

KORNFILT, JAKLIN. 1997. *Turkish.* London: Routledge.

KRATOCHVÍL, FRANTIŠEK. 2007. *A grammar of Abui: a Papuan language of Alor.* Rijksuniversiteit te Leiden doctoral dissertation.

KRETSCHMAR, MONIKA. 1986. *Erzählungen und Dialekt der Drokpas aus Südwest-Tibet.* Sankt Augustin: VGH Wissenschaftsverl.

KRUTE, LAURENCE DANA. 1989. *Piaroa nominal morphosemantics.* Columbia University doctoral dissertation.

KUIPER, ALBERTHA AND ORAM, JOY. 1991. A syntactic sketch of Diuxi-Tilantongo Mixtec. *Studies in the syntax of Mixtecan languages 3*, ed. by C. Henry Bradley and Barbara E. Hollenbach, 179–408. Dallas: Summer Institute of Linguistics and the University of Texas at Arlington.

KUMAR, PRAMOD. 2012. *Descriptive and typological study of Jarawa.* Jawaharlal Nehru University doctoral dissertation.

KUNG, SUSAN SMYTHE. 2007. *A descriptive grammar of Huehuetla Tepehua.* University of Texas at Austin doctoral dissertation.

LAMBERTI, MARCELLO. 1993. *Materialien zum Yemsa.* Heidelberg: Universitätsverlag C. Winter.

LANGFORD, KATRINA MICHELLE. 2007. *Bahasa Fataluku dan kaidah tata bahasa universal.* Universitas Gadjah Mada, Yogyakarta MA thesis.

LAPOLLA, RANDY J. WITH CHENGLONG HUANG. 2003. *A grammar of Qiang with annotated texts and glossary.* Berlin: Mouton de Gruyter.

LAYCOCK, DONALD C. 1978. A little Mor. *Proceedings of the second international conference on Austronesian Linguistics: Fascicle 1*, ed. by Stephen Wurm and Lois Carrington, 285–316. Canberra: Research School of Pacific and Asian Studies, Australian National University.

LEE, KEE-DONG. 1975. *Kusaiean reference grammar.* Honolulu: University of Hawaii Press.

LEE, ROBERT. 2005 [1976-1988]. Madak noun phrases. Ukarumpa: Ms.

LEE, SOOMAN NOAH. 1996. *A grammar of Iranian Azerbaijani.* University of Sussex doctoral dissertation.

LEFEBVRE, CLAIRE AND ANNE-MARIE BROUSSEAU. 2002. *A grammar of Fongbe.* Berlin: Mouton de Gruyter.

LEWIS, EMILY. 2008. *Grammatical studies of Man Noi Plang.* Payap University MA thesis.

LI, CHARLES N. AND THOMPSON, SANDRA A. 1981. *Mandarin Chinese: a functional reference grammar.* Berkeley: Berkeley, Calif.: University of California Press.

LI, PAUL JEN-KUEI. 1973. *Rukai structure. Institute of History and Philology, Special Publication* 64. Taipei: Academia Sinica.

LI, YONGSUI. 1990. *Haniyu Yufa* [brief description of the Hani language]. Beijing: Minzu Chubanshe.

LILJEGREN, HENRIK. 2008. *Towards a grammatical description of Palula: an Indo-Aryan language of the Hindu Kush.* Stockholm University doctoral dissertation.

LILJEGREN, HENRIK. 2016. *A grammar of Palula* . Berlin: Language Science Press.

LIN, XIANGRONG. 1993. *Jiarongyu yanjiu.* Chengdu: Sichuan Minzu Chubanshe.

LINDENFELD, JACQUELINE. 1973. *Yaqui syntax.* Berkeley and Los Angeles: University of California Press.

LINDSTRÖM, EVA. 2002. *Topics in the grammar of Kuot a non-Austronesian language of New Ireland, Papua New Guinea: a non-Austronesian language of New Ireland, Papua New Guinea.* University of Stockholm doctoral dissertation.

LINN, MARY SARAH. 2001. *A grammar of Euchee (Yuchi).* University of Kansas doctoral dissertation.

LIONNET, ANDRES. 1978. *El idioma tubar y los tubares.* México: Universidad Iberoamericana.

LLOYD, RICHARD G. 1969. Gender in a New Guinea language: Baruya nouns and noun phrases. In *Papers in New Guinea linguistics* 10, *Pacific linguistics, Series A, no. 22*, 25–68. Canberra: Research School of Pacific and Asian Studies, Australian National University.

LOCK, ARNOLD. 2011. *Abau grammar*. *Data papers on Papua New Guinea languages 57*. Papua New Guinea: SIL-PNG Academic Publications.

LOHNDAL, TERJE. 2007. On the structure and development of nominal phrases in Norwegian. *Nominal determination: typology, context constraints, and historical*

emergence, ed. by Elisabeth Stark, Elisabeth Leiss, and Werner Abraham, 287–310. Amsterdam: John Benjamins.

LÖHR, DORIS. 2002. *Die Sprache der Malgwa (Nárá Málgwa): grammatische Erstbeschreibung einer zentraltschadischen Sprache nordost-Nigerias.* Frankfurt am Main: Peter Lang.

LOMAS, GABE. 1988. *The Huli language of Papua New Guinea.* Macquarie University doctoral dissertation.

LORIMER, D. L. R. 1935. *The Burushaski language.* Oslo: H. Aschehoug and Co.

LOSEY, WAYNE E. 2002. *Writing Gojri: linguistic and sociolinguistic constraints on a standardized orthography for the Gujars of south Asia.* University of North Dakota MA thesis.

LOUWERSE, JOHN. 1988. *The morphosyntax of Una in relation to discourse structure. Pacific linguistics, Series B, no. 100.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

LOVEGREN, JESSE. 2013. *Mungbam grammar.* State University of New York at Buffalo doctoral dissertation.

LOVEGREN, JESSE, ALICE MITCHELL AND NATSUKO NAKAGAWA. 2015. *The Wala language of Malaita, Solomon Islands.* Canberra: Asia-Pacific Linguistics.

LOVING, RICHARD. 1973. An outline of Awa grammatical structures. *The languages of the Eastern Family of the East New Guinea Highland Stock*, ed. by Howard McKaughan, 65–87. Seattle: University of Washington.

LUKAS, JOHANNES. 1937. *A study of the Kanuri language: grammar and vocabulary.* London, New York and Toronto: Oxford University Press.

LUNSFORD, WAYNE A. 2001. *An overview of linguistic structures in Torwali, a language of northern Pakistan.* University of Texas at Arlington MA thesis.

LÜPKE, FRIEDERIKE. 2005. *A grammar of Jalonke argument structure.* Radboud Universiteit Nijmegen doctoral dissertation.

LUSEKELO, AMANI. 2009. The structure of the Nyakyusa noun phrase. *Nordic journal of African studies* 18. 305–331.

LYNCH, JOHN. 1978. *A grammar of Lenakel. Pacific linguistics, Series B, no. 55.* Canberra: Research School of Pacific Studies, Australian National University.

LYNCH, JOHN. 2002a. Iaai. *The Oceanic languages* , ed. by John Lynch, Malcolm Ross and Terry Crowley, 776–791. Richmond: Curzon.

LYNCH, JOHN. 2002b. Xârâcùù. *The Oceanic languages*, ed. by John Lynch, Malcolm Ross and Terry Crowley, 765–775. Richmond: Curzon.

MACDONALD, LORNA. 1990. *A grammar of Tauya.* Berlin: Mouton de Gruyter.

MACKRIDGE, PETER. 1985. *The modern Greek language: a descriptive analysis of standard modern Greek.* Oxford: Oxford University Press.

MAHO, JOUNI FILIP. 1998. *Notes on nouns and noun phrases in Iká.* Dept. of Oriental and African Languages, Göteborg University.

MAK, PANDORA. 2012. *Golden Palaung: a grammatical description.* Canberra, ACT: Asia-Pacific Linguistics.

MALÉCOT, ANDRÉ. 1963. Luiseño, a structural analysis II: morphosyntax. *International journal of American linguistics* 29. 196–210.

MALLA, KAMAL P. 1985. *Contemporary Newari: a working outline.* Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.

MANLEY, TIMOTHY. 1972. *Outline of Sre structure.* Honolulu: University of Hawaii Press.

MANRIQUE CASTAÑEDA, LEONARDO. 1967. Jiliapan Pame. *The Handbook of Middle American Indians, Vol. 5*, ed. by Norman McQuown, 341–348. Austin: University of Texas Press.

MARGERY PEÑA, ENRIQUE. 1982. *Diccionario español-bribri, bribri-español.* San José: Editorial Universidad de Costa Rica.

MARTIN, JACK B. 2011. *A grammar of Creek (Muskogee).* Lincoln: University of Nebraska Press.

MARTIN, SAMUEL E. 1961. *Dagur Mongolian: grammar, texts, and lexicon.* Bloomington: Indiana University.

MARTINS, SILVANA ANDRADE. 2004. *Fonologia e gramática Dâw.* Vrije Universiteit Amsterdam doctoral dissertation.

MATSUMURA, TAKASHI AND MICHIKO MATSUMURA. 1991. A preliminary grammar sketch of the Irarutu language. In *Workpapers in Indonesian languages and cultures 10: Irian Jaya*, 75–113. Cenderawasih University and SIL.

MATTHEWS, STEPHEN AND VIRGINIA YIP. 1994. *Cantonese: a comprehensive grammar.* London: Routledge.

MAY, KEVIN. 1997. *A study of the Nimboran language: phonology, morphology, and phrase structure.* LaTrobe University MA thesis.

MAZAUDON, MARTINE. 2003. Tamang. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 291–314. London: Routledge.

MCELHANON, KENNETH A. 1972. *Selepet grammar: part I: from root to phrase. Pacific linguistics, Series B, no. 21.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

MCPHERSON, LAURA. 2013. *A grammar of Tommo So.* Berlin: De Gruyter Mouton.

MENSAH, EYO OFFIONG. 2011. The structure of noun phrases in Efik. *British journal of humanities and social sciences* 3. 96–112.

MERRIFIELD, JUDITH THOMAS. 2010. *Yao'an Lolo grammar sketch.* Graduate Institute of Applied Linguistics MA thesis.

MICHAILOVSKY, BOYD. 1988. *La langue hayu.* Paris: Éditions du Centre National de la Recherche Scientifique.

MILLER, MARK T. 2007. *A grammar of West Coast Bajau.* University of Texas Arlington, PhD thesis. University of Texas at Arlington doctoral dissertation.

MILLER, VERA GRACE. 1976. *An overview of Stiêng grammar.* University of North Dakota MA thesis.

MINTER, PAUL. 2009. *Iyo grammar sketch.* Ukarumpa, Papua New Guinea: SIL-PNG Academic Publications.

MITIKU CHERINET, BENIAM. 2013. *Harari: a descriptive grammar.* Addis Ababa University doctoral dissertation.

MIXCO, MAURICIO J. 1997. *Mandan.* Munich: Lincom.

MORAN, STEVEN PAUL. 2006. *A grammatical sketch of Isaalo (Western Sisaala).* Eastern Michigan University MA thesis.

MORGAN, DANIEL R. 1996. *Overview of grammatical structures of Ndut: a Cangin language of Senegal.* University of Texas at Arlington MA thesis.

MORRIS, H.F. AND B.R. KIRWAN. 1972. *A Runyankore grammar.* Nairobi: East African Literature Bureau.

MORTENSEN, CHARLES ARTHUR. 1999. *A reference grammar of northern Embera languages.* SIL International and University of Texas at Arlington.

MOSEL, ULRIKE AND RUTH SPRIGGS. 1992. *A sketch grammar of Teop.* Canberra: Australian National University. Unpublished.

MOSEL, ULRIKE WITH YVONNE THIESEN. 2007. *The Teop sketch grammar.* Ms. University of Kiel.

MURANE, ELIZABETH. 1974. *Daga grammar: from morpheme to discourse.* The Summer Institute of Linguistics and the University of Texas at Arlington.

MYERS, BEATRICE. 1970. *Towa phrase structure.* University of North Dakota MA thesis.

N'GUESSAN, JÉRÉMIE KOUADIO. 1983. Le baoulé. *Atlas des langues kwa de Cote d'Ivoire, Vol. 1*, ed. by Georges Hérault, 277–306. Abidjan and Paris: Institut de Linguistique Appliquée, Agence de Coopération Culturelle et Technique (ACCT).

NAGANO, YASUHIKO. 2003. Cogtse Gyarong. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 469–489. London: Routledge.

NAITORO, KATERINA. 2013. *A sketch grammar of 'Are'are: the sound system and morpho-syntax.* University of Canterbury MA thesis.

NAJLIS, ELENA L. 1973. *Lengua selknam.* Filología y Lingüística. Buenos Aires: Instituto de Filología y Lingüística, Universidad del Salvador.

NEDJALKOV, IGOR. 1997. *Evenki.* London: Routledge.

NEKITEL, OTTO. 1985. *Sociolinguistic aspects of Abu', a Papuan language of the Sepik area, Papua New Guinea.* Australian National University doctoral dissertation.

NEUKOM, LUKAS AND MANIDEEPA PATNAIK. 2003. *A grammar of Oriya.* Zürich: Seminar für Allgemeine Sprachwissenschaft.

NICHOLS, JOHANNA. 1994. Ingush. *The North East Caucasian languages, Part 2* , ed. by Rieks Smeets, 79–146. New York: Caravan Books, Delmar.

NICHOLS, JOHANNA. 2011. *Ingush grammar.* Berkeley: University of California Press.

NICKLAS, THURSTON DALE. 1979. *Reference grammar of the Choctaw language.* Durant, OK: Choctaw Bilingual Education Program, Southeastern Oklahoma State University.

NICOLLE, STEVE. 2013. A grammar of Digo: a Bantu language of Kenya and Tanzania. Dallas, Texas: SIL International.

NIKOLAEVA, IRINA. 2014. *A grammar of Tundra Nenets.* Berlin: Mouton de Gruyter.

NIKOLAEVA, IRINA AND MARIA TOLSKAYA. 2001. *A grammar of Udihe.* Berlin: Mouton de Gruyter.

NJIE, CODU MBASSY. 1982. *Description syntaxique du wolof de Gambie.* Dakar: Nouvelles Editions africaines.

NOONAN, MICHAEL. 1992. *A grammar of Lango.* Berlin: Mouton de Gruyter.

NOONAN, MICHAEL. 2003a. Chantyal. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 315–335. London: Routledge.

NOONAN, MICHAEL. 2003b. Nar-Phu. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 336–352. London: Routledge.

NOUGAYROL, PIERRE. 1979. *Le day de Bouna (Tchad), I: phonologie, syntagmatique nominale, synthématique.* Paris: SELAF.

OBATA, KAZUKO. 2003. *A grammar of Bilua.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

OGURI, HIROKO. 1976. Form and meaning in the Isirawa noun phrase. *Irian* 5. 85–106.

OLAWSKY, KNUT. 2006. *A grammar of Urarina.* Berlin: Mouton de Gruyter.

OLKKONEN, KAIJA AND SOINI OLKKONEN. 2000. *Borong (Kosorong) grammar for a related language.* Ms. Ukarumpa: SIL.

OLSON, MICHAEL L. 1975. Barai grammar highlights. *Studies in languages of central and south-east Papua*, ed. by Tom E. Dutton, 471–512. *Pacific linguistics, Series C, no. 29*. Canberra: Research School of Pacific Studies, Australian National University.

OMONDI, LUCIA NDONG'A. 1982. *The major syntactic structures of Dholuo.* Berlin: Dietrich Reimer Verlag.

ONISHI, MASAYUKI. 1994. *A grammar of Motuna (Bougainville, Papua New Guinea).* Australian National University doctoral dissertation.

OSBORNE, C. R. 1974. *The Tiwi language: grammar, myths and dictionary of the Tiwi language spoken on Melville and Bathurst Islands, northern Australia.* Canberra: Australian Inst. of Aboriginal Studies.

OSTLER, NICHOLAS. 1994. Syntactic typology of Muisca - a sketch. *Language in the Andes*, ed. by Peter Cole and Gabrielle Hermon and Mario D. Martin, 205–230. Newark: University of Delaware.

OUEDRAOGO, AWA. 1984. *Essai de description du Nanerge, langue Sénufo parlée en Haute-Volta.* Université de la Sorbonne Nouvelle (Paris 3) doctoral dissertation.

OWENS, JONATHAN. 1984. *A short reference grammar of eastern Libyan Arabic.* Wiesbaden: Otto Harrassowitz Verlag.

OWENS, JONATHAN. 1985. *A grammar of Harar Oromo (northeastern Ethiopia).* Hamburg: Helmut Buske.

PAINTER, COLIN. 1970. *Gonja: a phonological and grammatical study.* Indiana University Publications, African Series 1. Bloomington: Indiana University.

PALANCAR, ENRIQUE. 2009. *Gramática y textos del Hñöñhö: Otomí de San Ildefonso Tultepec, Queretaro.* Mexico City: Plaza y Valdés.

PALMER, BILL. 2002. A grammar sketch of Kokota. *The Oceanic languages*, ed. by John Lynch, Malcolm Ross and Terry Crowley, 498–524.

PANDHARIPANDE, RAJESHWARI V. 1997. *Marathi.* London: Routledge.

PARKER, ELIZABETH. 1989. Le nom et le syntagme nominal en mundani. *Description de langues camerounaises*, ed. by Daniel Barreteau and Robert Hedinger, 131–177. Paris: Agence de Coopération Culturelle et Technique.

PAYNE, DORIS L. AND THOMAS E. PAYNE. 1990. Yagua. *Handbook of Amazonian languages, Vol. 2*, ed. by Desmond C. Derbyshire and Geoffrey K. Pullum, 249–474. Berlin/New York: Berlin: Mouton de Gruyter.

PAYNE, THOMAS E. AND DORIS L. PAYNE. 2013. *A typological grammar of Panare: a Cariban language of Venezuela.* Leiden: Brill.

PEARCE, ELIZABETH. 2011. Two or three things in the Unua noun phrase. *Topics in Oceanic morphosyntax*, ed. by Claire Moyse-Faurie and Joachim Sabel, 163–202. Berlin: De Gruyter Mouton.

PEARCE, ELIZABETH. 2015. *A grammar of Unua. Pacific linguistics 647.* Berlin: De Gruyter Mouton.

PECKHAM, NANCY. 2000. *Tentative Mairasi grammar.* Ms.

PÉREZ MARTÍNEZ, VITALINO. 1994. *Gramática del idioma ch'orti'.* Guatemala: Proyecto Linuistico Francisco Marroquin.

PERSON, ROGER K. 2000. *Sentence final particles in Bisu narrative.* University of Texas at Arlington doctoral dissertation.

PET, WILLEM J. A. 1987. *Lokono Dian: the Arawak language of Suriname: a sketch of its grammatical structure and lexicon.* Cornell University doctoral dissertation.

PICKETT, VELMA B., CHERYL BLACK AND VICENTE MARCIAL CERQUEDA. 2001. *Gramática popular del zapoteco del Istmo.* 2nd edn. Coyoacán: Instituto Lingüístico de Verano.

POLAK, J. E. R. 1894. *A grammar and vocabulary of the Ipurina language.* London: Kegan Paul Trench, Trübner, and Company.

POLIAN, GILLES. 2004. *Elements de grammaire du tseltal.* Université de la Sorbonne Nouvelle (Paris 3) doctoral dissertation.

POLIAN, GILLES. 2013. *Gramática del tseltal de Oxchuc.* Ciudad de México: Centro de Investigaciones y Estudios Superiores en Antropología Social.

POPPE, NICHOLAS N. 1964. *Bashkir Manual.* Bloomington: Indiana University.

POPPE, NICHOLAS. 1968. *Tatar manual: descriptive grammar and texts with a Tatar-English glossary.* Bloomington: Indiana University.

PORTER, DORIS. 1977. *A Tboli grammar.* Manila: Linguistic Society of the Philippines.

POST, MARK. 2007. *A grammar of Galo.* LaTrobe University doctoral dissertation.

PRESS, IAN. 1986. *A grammar of Modern Breton.* Berlin: Mouton de Gruyter.

PRIDE, KITTY. 1965. *Chatino syntax.* Norman, Oklahoma: Summer Institute of Linguistics of the University of Oklahoma.

QUESADA PACHECO, MIGUEL ÁNGEL. 1994. La lengua boruca en manuscritos del siglo XIX. *Estudios de Lingüística Chibcha* 13. 7–100.

QUESADA PACHECO, MIGUEL ÁNGEL. 2008. *Gramática de la lengua guaymí (ngäbe).* Munich: Lincom.

QUICK, PHIL. 2007. *A grammar of the Pendau language of central Sulawesi, Indonesia. Pacific linguistics 590.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

RABEL, LILI. 1961. *Khasi, a language of Assam.* Baton Rouge: Louisiana State University.

RAMASWAMI, N. 1982. *Brokskat grammar.* Mysore: Central Institute of Indian Languages.

RAMIREZ, CHRISTI. 1998. *The Kenyang noun phrase.* SIL Cameroon; Ministry of Scientific and Technical Research, Cameroon.

RANGAN, K. 1979. *Purki grammar.* Mysore: Central Institute of Indian Languages.

REESINK, GER P. 1987. *Structures and their functions in Usan: a Papuan language of Papua New Guinea.* Amsterdam: John Benjamins.

REESINK, GER P. 1999. *A grammar of Hatam: Bird's Head Peninsula Irian Jaya. Pacific linguistics, Series C, no. 146.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

REICHLE, VERENA. 1981. *Bawm language and lore: Tibeto-Burman area.* Frankfurt am Main: Peter Lang.

RENCK, GÜNTHER L. 1975. *A grammar of Yagaria. Pacific linguistics, Series B, no. 40.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

RENNISON, JOHN R. 1997. *Koromfe.* London: Routledge.

RICE, KEREN. 1989. *A grammar of Slave.* Berlin: Mouton de Gruyter.

RIJKHOFF, JAN. 1997. Order in the noun phrase. In Anna Siewierska, ed. *Constituent order in the languages of Europe*, 321–382. Berlin: Mouton de Gruyter.

ROBSON, BARBARA AND HABIBULLAH TEGEY. 2009. Pashto. *The Iranian languages*, ed. by Gernot Windfuhr, 721–772. London: Routledge.

ROGERS, CHRISTOPHER. 2010. *A comparative grammar of Xinkan.* University of Utah doctoral dissertation.

ROJANAKUL, NATTAMON. 2009. *Chong syntax.* Mahidol University MA thesis.

ROJAS CURIEUX, TULIO ENRIQUE. 1998. *La lengua páez.* Bogotá: Ministerio de Cultura.

ROMERO-MENDEZ, RODRIGO. 2009. *A reference grammar of Ayutla Mixe (Tukyo'm ayuujk).* State University of New York at Buffalo doctoral dissertation.

ROOS, MARTI. 2000. *The Western Yugur (Yellow Uygur) language: grammar, texts, vocabulary.* Rijksuniversiteit te Leiden doctoral dissertation.

ROSS, MALCOLM AND JOHN NATU PAOL. 1978. *A Waskia grammar sketch and vocabulary. Pacific linguistics, Series B, no. 56.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

ROSS, MALCOLM. 1984. Maisin: a preliminary sketch. In *Papers in New Guinea linguistics* 23. 1–82. Canberra: Research School of Pacific Studies, Australian National University.

ROSS, MALCOLM. 2002a. A grammar sketch of Taiof. *The Oceanic languages*, ed. by John Lynch, Malcolm Ross and Terry Crowley, 426–439.

ROSS, MALCOLM. 2002b. Kaulong. *The Oceanic languages*, ed. by John Lynch, Malcolm Ross and Terry Crowley, 387–409. Richmond: Curzon.

ROSS, MALCOLM. 2002c. Kele. *The Oceanic languages*, ed. by John Lynch, Malcolm Ross and Terry Crowley, 123–147. Richmond: Curzon.

ROSS, MALCOLM. 2002d. Sisiqa. *The Oceanic languages*, ed. by John Lynch, Malcolm Ross and Terry Crowley, 456–466. Richmond: Curzon.

ROSS, MALCOLM. 2002e. Takia. *The Oceanic languages*, ed. by John Lynch, Malcolm Ross and Terry Crowley, 216–248. Richmond: Curzon.

ROWLANDS, EVAN C. 1959. *A grammar of Gambian Mandinka.* London: School of Oriental and African Studies, University of London.

ROWLANDS, EVAN C. 1969. *Teach yourself Yoruba.* London: English University. Press.

RUGEMALIRA, JOSEPHAT MUHOZI. 2007. The structure of the Bantu noun phrase. *SOAS working papers in linguistics* 15. 135–148.

RUPP, JAMES E. 1989. *Lealao Chinantec syntax.* The Summer Institute of Linguistics and the University of Texas at Arlington.

SALTARELLI, MARIO. 1988. *Basque.* New York: Croom Helm

SAMARIN, WILLIAM J. 1967. *A grammar of Sango.* The Hague and Berlin: Mouton de Gruyter.

SAN ROQUE, LILA. 2008. *An introduction to Duna grammar.* Australian National University doctoral dissertation.

SANDERS, ARDEN G. AND JOY SANDERS. 1994. *Kamasau (Wand Tuan) grammar: morpheme to discourse.* Online: http://www.sil.org/pacific/png/abstract.asp?id=47683.

SANDONATO, MARIE. 1994. Zazaki. *Typological studies in negation*, ed. by Peter Kahrel and René van den Berg, 125–142. Amsterdam: John Benjamins.

SANOU, DAFRASSI JEAN-FRANÇOIS. 1978. *La langue bobo de Tondogosso (Bobo-Dioulasso) (Haute-Volta).* Université de Paris V - René Descartes doctoral dissertation.

SAPIR, DAVID J. 1965. *A grammar of Diola-Fogny: a language spoken in the Basse-Casamance region of Senegal.* Cambridge: Cambridge University Press.

SARA, SALOMON I. 1974. *A description of modern Chaldean.* The Hague: Mouton de Gruyter.

SAUL, JANICE E. AND NANCY FREIBERGER WILSON. 1980. *Nung grammar.* Dallas: The Summer Institute of Linguistics and the University of Texas at Arlington.

SAWKA, KENNETH STANLEY. 2001. *Aspects of Mayogo grammar.* University of Texas at Arlington MA thesis.

SCATTON, ERNEST. 1993. Bulgarian. *The Slavonic languages*, ed. by Bernard Comrie and Greville Corbett, 188–248. London: Routledge.

SCHAPPER, ANTOINETTE. 2014. Kamang. *Papuan languages of Timor, Alor and Pantar: sketch grammars, vol. 1*, ed. by Antoinette Schapper, 223–274. Berlin: Mouton de Gruyter.

SCHAUB, WILLI. 1985. *Babungo.* London: Croom Helm.

SCHIFFMAN, HAROLD F. 1983. *A reference grammar of spoken Kannada.* Seattle: University of Washington Press.

SCHMIDT, HANS. 2002. Rotuman. *The Oceanic languages*, ed. by John Lynch, Malcolm Ross and Terry Crowley, 815–832. Richmond: Curzon.

SCHRÖDER, MARTIN AND JAMES LOKUUDA KADANYA. 2011. *A brief grammar of the Nyangatom language.* Addis Ababa, Ethiopia: SIL Ethiopia.

SCHUH, RUSSELL G. 1972. *Aspects of Ngizim syntax.* University of California at Los Angeles doctoral dissertation.

SCHUH, RUSSELL G. 1998. *A grammar of Miya.* Berkeley and Los Angeles: University of California Press.

SCORZA, DAVID. 1985. A sketch of Au morphology and syntax. In *Papers in New Guinea linguistics 22. Pacific linguistics, Series A, no. 63*, 215–273. Canberra: Research School of Pacific Studies, Australian National University.

SCOTT, GRAHAM. 1978. *The Fore language of Papua New Guinea. Pacific linguistics, Series B, no. 47.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

SEITER, WILLIAM J. 1980. *Studies in Niuean syntax.* New York: Garland.

SEMIUN, AGUSTINUS. 1993. *The basic grammar of Manggarai: Kempo subdialect.* LaTrobe University MA thesis.

SENFT, GUNTER. 1986. *Kilivila: the language of the Trobriand islanders.* Berlin: Mouton de Gruyter.

SENG MAI, MA. 2012. *A descriptive grammar of Wa.* Payap University MA thesis.

SERZISKO, FRITZ. 1989. The Kuliak languages: a structural comparison. *Topics in Nilo-Saharan Linguistics*, ed. by M. Lionel Bender, 385–404. Hamburg: Helmut Buske.

SHARMA, DEVI D. 1988. *A descriptive grammar of Kinnauri.* Delhi: Mittal Publications.

SHARMA, DEVI D. 2004. *A descriptive grammar of Purki and Balti.* New Delhi: Mittal Publications.

SHARPE, MARGARETH C. 2005. *Grammar and texts of the Yugambeh-Bundjalung dialect chain in eastern Australia.* Munich: Lincom.

SIEGEL, JEFF. 1984. Introduction to the Labu language. In *Papers in New Guinea linguistics 23, Pacific linguistics, Series A, no. 69*, 83–159. Canberra: Research School of Pacific and Asian Studies, Australian National University.

SILZER, PETER JAMES. 1983. *Ambai: an Austronesian language of Irian Jaya, Indonesia.* Australian National University doctoral dissertation.

SLATER, KEITH W. 2003. *A grammar of Mangghuer: a Mongolic language of China's Quinghai-Gansu sprachbund.* London: Routledge.

SMEETS, INEKE. 2008. *A grammar of Mapuche.* Berlin: Mouton de Gruyter.

SMITH, IAN AND STEVE JOHNSON. 2000. Kugu Nganhcara. *Handbook of Australian languages, Vol. 5*, ed. by R.M.W. Dixon and Barry Blake, 357–507. Oxford: Oxford University Press.

SMITH, NEILSON VOYNE. 1967. *An outline grammar of Nupe.* London: SOAS.

SMYE, GRAHAM. 2004. *A grammar of Anufɔ.* Legon: Institute of African Studies, University of Ghana.

SMYTH, DAVID. 2002. *Thai: an essential grammar.* London: Routledge.

SNEDDON, JAMES N. 1975. *Tondano phonology and grammar. Pacific linguistics, Series B, no. 38.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

SNEDDON, JAMES N. 1996. *Indonesian reference grammar.* St. Leonards, Australia: Allen and Unwin.

SOE, MYINT. 1999. *A grammar of Burmese.* University of Oregon doctoral dissertation.

SOHN, HO-MIN. 1975. *Woleaian reference grammar.* Honolulu: University of Hawaii Press.

SOHN, HO-MIN. 1994. *Korean.* London: Routledge.

SOLOMIAC, PAUL. 2007. *Phonologie et morphosyntaxe et du dzùùngoo de Samogohiri.* Université Lumière Lyon 2 doctoral dissertation.

SONNENSCHEIN, AARON HUEY. 2004. *A descriptive grammar of San Bartolome Zoogocho Zapotec.* University of Southern California doctoral dissertation.

SORAVIA, GIULIO. 2007. *The Alas language (northern Sumatra).* Bologna: Università di Bologna, Alma Mater Studiorum.

SOUKKA, MARIA. 2000. *A descriptive grammar of Noon: a Cangin language of Senegal.* Munich: Lincom.

SOUTHWELL, NEVILLE. 1979. *Komba grammar sketch.* Ms.

SPAGNOLO, LORENZO M. 1933. *Bari grammar.* Verona: Missioni Africane.

SPAULDING, CRAIG AND PAT SPAULDING. 1994. *Phonology and grammar of Nankina.* Ms. Ukarumpa, Papua New Guinea: The Summer Institute of Linguistics.

SPOSATO, ADAM. 2015. *A grammar of Xong.* State University of New York at Buffalo doctoral dissertation.

SRIDHAR, S. N. 1990. *Kannada.* London: Routledge.

SRISAKORN, PREEDAPORN. 2008. *So (Thavung) grammar.* Mahidol University doctoral dissertation.

STAALSEN, PHILIP. 1965. *Iatmul grammar sketch.* Ms. SIL.

STANLEY, CAROL. 1991. *Description morpho-syntaxique de la langue tikar (parlée au Cameroun).* Epinay sur Seine: Société internationale de linguistique.

STEEMAN, SANDER. 2012. *A grammar of Sandawe: a Khoisan language of Tanzania.* Rijksuniversiteit te Leiden doctoral dissertation.

STENZEL, KRISTINE. 2013. *A reference grammar of Kotiria (Wanano).* University of Nebraska Press.

STEVICK, EARL WILSON. 1955. *Syntax of colloquial East Armenian.* Ithaca: Cornell University doctoral dissertation.

STEWART, CLOYD AND RUTH STEWART. 2000. *Amuzgo de San Pedro Amuzgos, Oaxaca.* Coyoacán: Instituto Lingüístico de Verano.

STOFBERG, YVONNE F. 1978. *Migili grammar.* Dallas: Summer Institute of Linguistics.

STROM, CLAY. 1992. *Retuarã syntax.* Dallas: Summer Institute of Linguistics and the University of Texas at Arlington.

STRUNK, JAN. 2003. *The structure of the Kurdish noun phrase.* Online: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.523.3363&rep=rep1&type=pdf

SUMBUK, KENNETH MEMSON. 1999. *Morphosyntax of Sare.* University of Waikato doctoral dissertation.

SUN, HONGKAI AND GUANGKUN LIU. 2009. *A grammar of Anong: language death under intense contact.* Leiden: E. J. Brill.

SUN, JACKSON T.-S. 2003. Caodeng rGyalrong. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 490–502. London: Routledge.

SUNEE, KAMNUANSIN. 2002. *Kasong syntax.* Mahidol University MA thesis.

SUTTLES, WAYNE. 2004. *Musqueam reference grammar.* Vancouver: University of British Columbia Press.

TAULI, VALTER. 1983. *Standard Estonian grammar, part II: syntax.* Uppsala: Almqvist and Wiksell.

TAYLOR, CHARLES. 1985. *Nkore-Kiga.* London: Croom Helm.

TAYLOR, NICHOLAS. 1994. *Gamo syntax.* University of London doctoral dissertation.

TEGEY, HABIBULLAH AND BARBARA ROBSON. 1996. *A reference grammar of Pashto.* Washington, DC: Washington D.C: Center for Applied Linguistics.

TERSIS, NICOLE. 1972. *Le zarma (République du Niger): étude du parler djerma de Dosso.* Paris: Centre National de la Récherche Sciéntifique.

THARP, DOUGLAS. 1996. Sulka grammar essentials. *Two non-Austronesian grammars from the islands*, ed. by John M. Clifton, 77–179. Ukarumpa: Summer Institute of Linguistics.

THOMAS, ELAINE. 1978. *A grammatical description of the Engenni language.* The Summer Institute of Linguistics and the University of Texas at Arlington.

THOMPSON, DAVID E. 1983. Kunama: phonology and noun phrase. *Nilo-Saharan language studies*, ed. by Marvin Lionel Bender, 281–322. East Lansing: African Studies Center, Michigan State University.

THOMPSON, HANNE-RUTH. 2010. *Bengali: a comprehensive grammar.* Amsterdam: John Benjamins.

THOMPSON, HANNE-RUTH. 2012. *Bengali.* Amsterdam: John Benjamins.

THOMPSON, SANDRA A., JOSEPH SUNG-YUL PARK AND CHARLES N. LI. 2006. *A reference grammar of Wappo.* Berkeley and Los Angeles: University of California Press.

THURGOOD, GRAHAM. 2005. Phan Rang Cham. *The Austronesian languages of Asia and Madagascar*, ed. by Alexander Adelaar and Nikolaus Himmelmann, 489–512. London: Routledge.

THURSTON, WILLIAM. 1982. *A comparative study of Anêm and Lusi. Pacific linguistics, Series B, no. 83.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

THURSTON, WILLIAM R. 1996. Amara: an Austronesian language of northwestern New Britain. *Studies in the languages of New Britain and New Ireland 1: Austronesian languages of the north New Guinea Cluster in northwestern New Britain*, ed. by Malcolm D. Ross, 197–248. *Pacific linguistics, Series C, no. 135*. Canberra: Research School of Pacific and Asian Studies, Australian National University.

TOWNSEND, PAUL G. 1986. *Noun phrases in Cotzal Ixil.* Guatemala City: Summer Institute of Linguistics.

TRAIL, RONALD L. 1970. *The grammar of Lamani.* Dallas: Norman, Oklahoma.

TREFRY, DAVID. 1969. *A comparative study of Kuman and Pawaian. Pacific linguistics, Series B, no. 13.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

TRENGA, GEORGES. 1947. *Le Bura-Mabang du Ouadaï: notes pour servir à l'étude de la langue Maba.* Paris: Institut d'Éthnologie.

TRIVEDI, G. M. 1991. *Descriptive grammar of Byansi: a Bhotiya language.* Calcutta: Anthropological Survey of India, Goverment of India.

TRÖBS, HOLGER. 1998. *Funktionale Sprachbeschreibung des Jeli (West-Mande).* Cologne: Rüdiger Köppe.

TRYON, DARRELL T. 1968. *Dehu grammar. Pacific linguistics, Series B, no. 7.* Canberra: Australian National University.

TRYON, DARRELL T. 1970. *An introduction to Maranungku. Pacific linguistics, Series B, no. 15*. Canberra: The Australian National University.

TRYON, DARRELL. 2002. Buma. *The Oceanic languages*, ed. by John Lynch, Malcolm Ross and Terry Crowley, 573–586. Richmond: Curzon.

TSUKIDA, NAOMI. 2005. Seediq. *The Austronesian languages of Asia and Madagascar*, ed. by Alexander Adelaar and Nikolaus Himmelmann, 291–325. London: Routledge.

TUCKER, ARCHIBALD N. 1940. The Moru-Ma'di language group. In *The Eastern Sudanic languages, Vol. 1*, 89–379. Oxford: Oxford University Press.

VAMARASI, MARIT. 2002. *Rotuman.* Munich: Lincom.

VAN DE KIMMENADE, MARTIN. 1954. *Essai de grammaire et vocabulaire de la langue sandawe.* Posieux: Anthropos Institut.

VAN DEN BERG, HELMA. 1995. *A grammar of Hunzib (with texts and lexicon).* Munich: Lincom.

VAN DEN BERG, RENÉ. 1989. *A grammar of the Muna language.* Dordrecht: Foris.

VAN DEN BERG, RENÉ AND PETER BACHET. 2006. *Vitu grammar sketch.* Ukarumpa: Summer Institute of Linguistics.

VAN DEN HEUVEL, WILCO. 2006. *Biak: description of an Austronesian language of Papua.* Vrije Universiteit Amsterdam doctoral dissertation.

VAN DER MARK, SHEENA. 2007. *A grammar of Vinitiri: an Austronesian language from Papua New Guinea.* LaTrobe University doctoral dissertation.

VAN ENGELENHOVEN, AONE. 1995. *A description of the Leti language (as spoken in Tutukei).* Rijksuniversiteit te Leiden doctoral dissertation.

VAN OTTERLOO, KAREN AND ROGER VAN OTTERLOO. 2011. *The Kifuliiru language, Volume 2.* SIL International Publications.

VAN STADEN, MIRIAM. 2000. *Tidore: a linguistic description of a language of the north Moluccas.* Rijksuniversiteit te Leiden doctoral dissertation.

VANDERKOOI, DIANE R. 2000. *Cohesion and salience in Niellim narrative: a look at discourse particles and participant reference.* University of Texas at Arlington MA thesis.

VESALAINEN, OLAVI. 2016. *A grammar sketch of Lhomi.* SIL International.

VILLAFAÑE, LUCRECIA. 2004. *Descripción de la lengua yuki.* Katholieke Universiteit Nijmegen doctoral dissertation.

VOGT, HANS. 1971. *Grammaire de la langue géorgienne.* Oslo: Universitetsforlaget.

VOLKER, CRAIG ALAN. 1998. *The Nalik language of New Ireland, Papua New Guinea.*. New York: Peter Lang.

VON PRINCE, KILU. 2015. *A grammar of Daakaka.* Berlin: DeGruyter Mouton.

WAGNER, GUNTER. 1934. Yuchi. *Handbook of American Indian languages: Volume 3, Bulletin of American Ethnology 40*, ed. by Franz Boas, 293–384. Washington:

Government Printing Office.

WALI, KASHI AND OMKAR N. KOUL. 1996. *Kashmiri: a cognitive-descriptive grammar.* London: Routledge.

WALKER, DALE F. 1976. *A grammar of the Lampung language: the Pesisir dialect of Way Lima.* Jakarta: Universitas Katolik Indonesia Atma Jaya.

WANG, HONGLEI. 2012. *The syntactic structure of Chinese nominal phrases.* Northwestern University doctoral dissertation.

WATTERS, DAVID E. 2002. *A grammar of Kham.* Cambridge: Cambridge University Press.

WEBER, DAVID JOHN. 1989. *A grammar Huallaga (Huánuco) Quechua.* Berkeley: Berkeley and Los Angeles: University of California Press.

WEBER, THOMAS. 1997. *Bimin grammar essentials.* Ms.

WEDEKIND, CHARLOTTE. 1972. *An outline of the grammar of Busa (Nigeria).* Christian-Albrechts-Universität zu Kiel doctoral dissertation.

WEGENER, CLAUDIA U. 2008. *A grammar of Savosavo, a Papuan language of the Solomon Islands.* Radboud Universiteit Nijmegen doctoral dissertation.

WEGENER, CLAUDIA U. 2012. *A grammar of Savosavo.* Berlin: Mouton de Gruyter.

WELLS, MARGARET A. 1979. *Siroi grammar. Pacific linguistics, Series B, no. 51.* Canberra: Research School of Pacific and Asian Studies, Australian National University.

WELMERS, WILLIAM E. 1976. *A grammar of Vai.* Berkeley and Los Angeles: University of California Press.

WERNER, HEINRICH. 1997. *Die Ketische Sprache.* Wiesbaden: Otto Harrassowitz.

WHEELER, ALVA L. 1970. *Grammar of the Siona language, Colombia, South America.* University of California at Berkeley doctoral dissertation.

WHITACRE, STEVE. 1986. *Arop/Sissano grammar essentials.* Ms.

WHITEHEAD, CARL R. 2004. *A reference grammar of Menya, an Angan language of Papua New Guinea.* University of Manitoba doctoral dissertation.

WIDMER, MANUEL. 2014. *A descriptive grammar of Bunan.* Universität Bern doctoral dissertation.

WIDMER, MANUEL. 2017. *A descriptive grammar of Bunan.* Berlin: Mouton.

WIERING, ELISABETH AND MARINUS WIERING. 1994. *The Doyayo language: selected studies.* The Summer Institute of Linguistics and the University of Texas at Arlington.

WIERSMA, GRACE. 2003. Yunnan Bai. *The Sino-Tibetan languages*, ed. by Graham Thurgood and Randy J. LaPolla, 651–673. London: Routledge.

WILKINS, DAVID P. 1989. *Mparntwe Arrernte (Aranda): studies in the structure and semantics of grammar.* Australian National University doctoral dissertation.

WILLIS, CHRISTINA M. 2007. *A descriptive grammar of Darma: an endangered Tibeto-Burman language.* University of Texas at Austin doctoral dissertation.

WILLIS, DAVID. 2006. Against N-raising and NP-raising analyses of Welsh noun phrases . *Lingua* 116: 1807–1839.

WILSON, JENNIFER. 2017. *A grammar of Yeri: a Torricelli language of Papua New Guinea.* State University of New York at Buffalo doctoral dissertation.

WILSON, JONATHAN P. 1996. *Binandere nominal structures.* University of Texas at Arlington MA thesis.

WILSON, PATRICIA R. 1980. *Ambulas grammar. Workpapers in Papua New Guinea languages* 26. Ukarumpa, Papua New Guinea: The Summer Institute of Linguistics.

WIMBISH, SANDRA GAY. 1991. *An introduction to Pagu through the analysis of narrative discourse.* MA Thesis, University of Texas at Arlington;

WINKLER, EBERHARD. 2001. *Udmurt.* Munich: Lincom.

WIVELL, RICHARD. 1981. *Kairiru grammar.* University of Auckland MA thesis.

WOOLLAMS, GEOFF. 1996. *A grammar of Karo Batak, Sumatra. Pacific linguistics, Series C, 130*. Canberra: Research School of Pacific and Asian Studies, Australian National University.

WOZNA, BEATA AND THERESA WILSON. 2005. *Seimat Grammar Essentials. Data papers on Papua New Guinea languages*, 48. Ukarumpa, Papua New Guinea: The Summer Institute of Linguistics.

WRIGHT, JONATHAN MICHAEL. 2009. *Hkongso grammar sketch.* Graduate Institute of Applied Linguistics MA thesis.

WU, JING-LAN JOY. 2006. *Verb classification, case marking, and grammatical relations in Amis.* State University of New York at Buffalo doctoral dissertation.

WU, MANXIANG. 2015. *A grammar of Sanjiang Kam.* University of Hong Kong doctoral dissertation.

YANG, TONGYIN AND JEROLD A. EDMONDSON. 2008. Kam. *The Tai-Kadai languages*, ed. by Anthony V. N. Diller and Jerold A. Edmondson and Yongxian Luo, 509–584. London: Routledge.