

## Area centered on Frisian

This area consist almost exclusively of Germanic languages, but captures also French. The unusual characteristics include:

- Polar question are marked by word order only
- Some word order variability (object/verb and adjective/noun)
- Some unusual phonological characteristics (uvular continuants, front rounded vowels)
- A ‘have’-perfect and tense suppletion
- The existence of relative pronouns
- No distance contrast in demonstrative pronouns

| Language             | Family        | Genus    | Codepoints in WALS |
|----------------------|---------------|----------|--------------------|
| French               | Indo-European | Romance  | 136                |
| English              | Indo-European | Germanic | 138                |
| German               | Indo-European | Germanic | 128                |
| Dutch                | Indo-European | Germanic | 67                 |
| Danish               | Indo-European | Germanic | 45                 |
| Frisian              | Indo-European | Germanic | 22                 |
| Frisian(Western)     | Indo-European | Germanic | 3                  |
| Alsatian             | Indo-European | Germanic | 1                  |
| Dutch(Brabantic)     | Indo-European | Germanic | 1                  |
| Dutch(Limburg)       | Indo-European | Germanic | 1                  |
| Dutch(Zeeuws)        | Indo-European | Germanic | 1                  |
| Frisian(Eastern)     | Indo-European | Germanic | 1                  |
| Frisian(North)       | Indo-European | Germanic | 1                  |
| German(Appenzell)    | Indo-European | Germanic | 1                  |
| German(Bavarian)     | Indo-European | Germanic | 1                  |
| German(Bern)         | Indo-European | Germanic | 1                  |
| German(Hannover)     | Indo-European | Germanic | 1                  |
| German(Mansfeldisch) | Indo-European | Germanic | 1                  |
| German(Ostschweiz)   | Indo-European | Germanic | 1                  |
| German(Riparian)     | Indo-European | Germanic | 1                  |
| German(Thurgau)      | Indo-European | Germanic | 1                  |
| German(Thuringian)   | Indo-European | Germanic | 1                  |
| German(Westphalian)  | Indo-European | Germanic | 1                  |
| German(Zurich)       | Indo-European | Germanic | 1                  |
| LowGerman            | Indo-European | Germanic | 1                  |
| Luxembourgeois       | Indo-European | Germanic | 1                  |

| <b>mean rarity</b> | <b>WALS feature</b> | <b>Feature Description</b>                               | <b>WALS value</b> | <b>Value Description</b>                                               |
|--------------------|---------------------|----------------------------------------------------------|-------------------|------------------------------------------------------------------------|
| 8.39               | 116                 | Polar Questions                                          | 4                 | Interrogative word order                                               |
| 2.86               | 83                  | Order of Object and Verb                                 | 3                 | Both orders with neither order dominant                                |
| 2.04               | 86                  | Order of Genitive and Noun                               | 3                 | Both orders occur with neither order dominant                          |
| 1.53               | 97                  | Order of Object Verb and the Order of Adjective and Noun | 3                 | Verb-object and adjective-noun (VO&AdjN)                               |
|                    |                     |                                                          | 5                 | Languages not falling into one of the preceding four types             |
| 7.96               | 6                   | Uvular Consonants                                        | 3                 | Uvular continuants only                                                |
| 4.15               | 11                  | Front Rounded Vowels                                     | 2                 | High and mid                                                           |
| 1.91               | 3                   | Consonant-Vowel Ratio                                    | 1                 | Low                                                                    |
| 7.93               | 68                  | The Perfect                                              | 1                 | Perfect of the 'have'-type (derived from a possessive construction)    |
| 7.56               | 78                  | Coding of Evidentiality                                  | 5                 | Separate particle                                                      |
| 1.92               | 76                  | Overlap between Situational and Epistemic Modal Marking  | 1                 | markers that can code both situational and epistemic modality          |
| 1.51               | 79                  | Suppletion According to Tense and Aspect                 | 1                 | Suppletion according to tense                                          |
|                    |                     |                                                          | 3                 | Suppletion in both tense and aspect                                    |
| 1.86               | 70                  | The Morphological Imperative                             | 2                 | second singular imperatives but no second plural imperatives           |
|                    |                     |                                                          | 4                 | second person imperatives that do not distinguish singular and plural  |
| 4.58               | 41                  | Distance Contrasts in Demonstratives                     | 1                 | No distance contrast                                                   |
| 4.32               | 115                 | Negative Indefinite Pronouns and Predicate Negation      | 2                 | Negative indefinites preclude predicate negation                       |
|                    |                     |                                                          | 3                 | Negative indefinites show mixed behaviour                              |
| 3.46               | 122                 | Relativization on Subjects                               | 1                 | Relative pronoun                                                       |
| 1.83               | 46                  | Indefinite Pronouns                                      | 3                 | Special indefinites                                                    |
|                    |                     |                                                          | 4                 | Mixed indefinites                                                      |
| 1.97               | 106                 | Reciprocal Constructions                                 | 3                 | There are both reflexive and non-reflexive reciprocal constructions.   |
| 1.72               | 123                 | Relativization on Obliques                               | 1                 | Relative Pronoun Strategy                                              |
| 3.14               | 15                  | Weight-Sensitive Stress                                  | 4                 | Right-oriented: The antepenultimate is involved                        |
|                    |                     |                                                          | 6                 | Combined: Both Right-edge and unbounded                                |
| 2.75               | 16                  | Weight Factors in Weight-Sensitive Stress Systems        | 3                 | Coda consonant: closed syllables are heavy for stress                  |
|                    |                     |                                                          | 4                 | Long vowel + Coda: long vowels or closed syllables                     |
| 2.40               | 28                  | Case Syncretism                                          | 2                 | Inflectional case marking is syncretic for core cases only             |
|                    |                     |                                                          | 3                 | Inflectional case marking is syncretic for core and non-core cases     |
| 1.65               | 30                  | Number of Genders                                        | 3                 | Three                                                                  |
| 1.62               | 21                  | Exponence of Selected Inflectional Formatives            | 2                 | Case + number                                                          |
| 1.50               | 32                  | Systems of Gender Assignment                             | 2                 | Semantic assignment                                                    |
|                    |                     |                                                          | 3                 | Semantic and formal assignment                                         |
| 2.18               | 27                  | Reduplication                                            | 3                 | No productive reduplication                                            |
| 2.02               | 136                 | M-T Pronouns                                             | 2                 | M-T pronouns, paradigmatic                                             |
| 1.55               | 133                 | Number of Basic Colour Categories                        | 7                 | More than 10 categories                                                |
| 1.90               | 121                 | Comparative Constructions                                | 4                 | Particle Comparative                                                   |
| 1.65               | 119                 | Nominal and Locational Predication                       | 2                 | Shared (i.e. identical) encoding of nominal and locational predication |
| 1.53               | 128                 | Utterance Complement Clauses                             | 2                 | Balanced/deranked                                                      |

## Area centered on Adyghe

This area captures the Caucasus. The rare features include:

- Various unusual phonological characteristics (pharyngeals, lateral obstruants, uvular stops)
- Demonstrative prefixes
- Unusual case marking structure (active/inactive, four or more genders, many syncretisms)
- Complex verb morphology with tense/aspect suppletion

| Language              | Family             | Genus              | Codepoints<br>in WALS |
|-----------------------|--------------------|--------------------|-----------------------|
| KarachayBalkar        | Altaic             | Turkic             | 34                    |
| Noghay                | Altaic             | Turkic             | 17                    |
| Urum                  | Altaic             | Turkic             | 1                     |
| TatarNoghay(Alabugat) | Altaic             | Turkic             | 1                     |
| Krymchak              | Altaic             | Turkic             | 1                     |
| Ossetic               | Indo-European      | Iranian            | 44                    |
| Zazaki                | Indo-European      | Iranian            | 13                    |
| Georgian              | Kartvelian         | Kartvelian         | 124                   |
| Laz                   | Kartvelian         | Kartvelian         | 13                    |
| Svan                  | Kartvelian         | Kartvelian         | 4                     |
| Mingrelian            | Kartvelian         | Kartvelian         | 2                     |
| Godoberi              | Nakh-Daghestanian  | AvarAndicTsezic    | 30                    |
| Bagvalal              | Nakh-Daghestanian  | AvarAndicTsezic    | 12                    |
| Tsez                  | Nakh-Daghestanian  | AvarAndicTsezic    | 10                    |
| Karata                | Nakh-Daghestanian  | AvarAndicTsezic    | 4                     |
| Chamalal              | Nakh-Daghestanian  | AvarAndicTsezic    | 3                     |
| Andi                  | Nakh-Daghestanian  | AvarAndicTsezic    | 1                     |
| Hinukh                | Nakh-Daghestanian  | AvarAndicTsezic    | 1                     |
| Khvarshi              | Nakh-Daghestanian  | AvarAndicTsezic    | 1                     |
| Ingush                | Nakh-Daghestanian  | Nakh               | 105                   |
| TsovaTush             | Nakh-Daghestanian  | Nakh               | 42                    |
| Chechen               | Nakh-Daghestanian  | Nakh               | 40                    |
| Abkhaz                | NorthwestCaucasian | NorthwestCaucasian | 128                   |
| Kabardian             | NorthwestCaucasian | NorthwestCaucasian | 46                    |
| Ubykh                 | NorthwestCaucasian | NorthwestCaucasian | 30                    |
| Adyghe(Abzakh)        | NorthwestCaucasian | NorthwestCaucasian | 17                    |
| Abaza                 | NorthwestCaucasian | NorthwestCaucasian | 7                     |
| Adyghe(Temirgoy)      | NorthwestCaucasian | NorthwestCaucasian | 2                     |
| Adyghe(Shapsugh)      | NorthwestCaucasian | NorthwestCaucasian | 1                     |

| mean rarity | WALS feature | Feature Description                                 | WALS value | Value Description                                                  |
|-------------|--------------|-----------------------------------------------------|------------|--------------------------------------------------------------------|
| 10.43       | 19           | Presence of Uncommon Consonants                     | 7,4        | Pharyngeals                                                        |
| 4.22        | 8            | Lateral Consonants                                  | 5,4        | lateral obstruents                                                 |
| 3.10        | 6            | Uvular Consonants                                   | 2,4        | Uvular stops                                                       |
| 1.71        | 1            | Consonant Inventories                               | 5          | Large                                                              |
| 4.88        | 116          | Polar Questions                                     | 5          | Absence of declarative morphemes                                   |
| 4.31        | 88           | Order of Demonstrative and Noun                     | 3          | Demonstrative prefix on noun                                       |
| 1.56        | 94           | Order of Adverbial Subordinator and Clause          | 4          | Suffixal adverbial subordinators                                   |
|             |              |                                                     | 5          | More than one type of adverbial subordinators with none dominant   |
| 4.13        | 78           | Coding of Evidentiality                             | 6          | Mixed systems                                                      |
| 3.10        | 73           | The Optative                                        | 1          | Inflectional optative present                                      |
| 1.82        | 77           | Semantic Distinctions of Evidentiality              | 3          | Both direct and indirect evidentials                               |
| 3.08        | 98           | Alignment of Case Marking of Full Noun Phrases      | 6          | Active - inactive                                                  |
| 2.14        | 30           | Number of Genders                                   | 4,5        | Four or more                                                       |
| 1.63        | 28           | Case Syncretism                                     | 3          | Inflectional case marking is syncretic for core and non-core cases |
| 1.60        | 50           | Asymmetrical Case-Marking                           | 4          | Subtractive-quantitatively asymmetrical case-marking               |
|             |              |                                                     | 6          | Syncretism in relevant NP-types                                    |
| 2.41        | 124          | 'Want' Complement Subjects                          | 3          | The complement subject is left implicit or expressed overtly       |
| 2.28        | 42           | Pronominal and Adnominal Demonstratives             | 3          | Different inflectional features                                    |
| 2.18        | 109          | Applicative Constructions                           | 4          | Benefactive and other; transitive base only                        |
| 2.01        | 80           | Verbal Number and Suppletion                        | 2,3        | Singular-plural pairs                                              |
| 1.91        | 22           | Inflectional Synthesis of the Verb                  | 6          | 10-11 categories per word                                          |
| 1.79        | 79           | Suppletion According to Tense and Aspect            | 3          | Suppletion in both tense and aspect                                |
| 1.91        | 115          | Negative Indefinite Pronouns and Predicate Negation | 2          | Negative indefinites preclude predicate negation                   |
| 1.90        | 128          | Utterance Complement Clauses                        | 2          | Balanced/deranked                                                  |
| 1.63        | 46           | Indefinite Pronouns                                 | 3          | Special indefinites                                                |
|             |              |                                                     | 4          | Mixed indefinites                                                  |
| 1.63        | 108          | Antipassive Constructions                           | 1          | Antipassive with patient-like argument left implicit               |
| 1.61        | 136          | M-T Pronouns                                        | 2          | M-T pronouns, paradigmatic                                         |

## Area centered on Bikol

This area captures the Austronesian languages from the Philippines. The unusual characteristics do not really show a clear picture:

- Existential construction for indefinite pronouns
- Definiteness combined with case marking
- Multiple politeness levels
- Second position clitics
- VSO order

| Language                | Family              | Genus                | Codepoints in WALS |
|-------------------------|---------------------|----------------------|--------------------|
| Tagalog                 | Austronesian        | Meso-Philippine      | 123                |
| Cebuano                 | Austronesian        | Meso-Philippine      | 33                 |
| Bikol                   | Austronesian        | Meso-Philippine      | 22                 |
| Mamanwa                 | Austronesian        | Meso-Philippine      | 22                 |
| Hiligaynon              | Austronesian        | Meso-Philippine      | 19                 |
| HanunŪo                 | Austronesian        | Meso-Philippine      | 5                  |
| Aklanon                 | Austronesian        | Meso-Philippine      | 4                  |
| WarayWaray              | Austronesian        | Meso-Philippine      | 1                  |
| Batak                   | Austronesian        | Meso-Philippine      | 1                  |
| Kapampangan             | Austronesian        | Northern-Philippines | 27                 |
| Agta(Central)           | Austronesian        | Northern-Philippines | 26                 |
| Ifugao(Batad)           | Austronesian        | Northern-Philippines | 25                 |
| Pangasinan              | Austronesian        | Northern-Philippines | 24                 |
| Bontok                  | Austronesian        | Northern-Philippines | 24                 |
| Ilocano                 | Austronesian        | Northern-Philippines | 20                 |
| Balangao                | Austronesian        | Northern-Philippines | 4                  |
| Dumagat(Casiguran)      | Austronesian        | Northern-Philippines | 2                  |
| Kankanay                | Austronesian        | Northern-Philippines | 2                  |
| Itawis                  | Austronesian        | Northern-Philippines | 2                  |
| Karao                   | Austronesian        | Northern-Philippines | 1                  |
| Ibanag                  | Austronesian        | Northern-Philippines | 1                  |
| Manobo(WesternBukidnon) | Austronesian        | Southern-Philippines | 24                 |
| Maranao                 | Austronesian        | Southern-Philippines | 12                 |
| Binukid                 | Austronesian        | Southern-Philippines | 3                  |
| Kulamanen               | Austronesian        | Southern-Philippines | 3                  |
| Magindanao              | Austronesian        | Southern-Philippines | 1                  |
| Tiruray                 | Austronesian        | South-Mindanao       | 17                 |
| Chavacano               | Creoles and Pidgins | NA                   | 5                  |

| <b>mean<br/>rarity</b> | <b>WALS<br/>feature</b> | <b>Feature Description</b>                                       | <b>WALS<br/>value</b> | <b>Value Description</b>                                                 |
|------------------------|-------------------------|------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------------|
| 16.68                  | 46                      | Indefinite Pronouns                                              | 5                     | Existential construction                                                 |
| 7.83                   | 24                      | Locus of Marking in Possessive Noun Phrases                      | 5                     | Other types (floating marking)                                           |
| 5.33                   | 21                      | Exponence of Selected Inflectional Formatives                    | 3                     | Case + referentiality                                                    |
| 1.61                   | 32                      | Systems of Gender Assignment                                     | 2                     | Semantic assignment                                                      |
| 1.56                   | 37                      | Definite Articles                                                | 4                     | No definite article but indefinite article                               |
| 3.45                   | 45                      | Politeness Distinctions in Pronouns                              | 3                     | Second person pronouns encode multiple politeness distinctions           |
| 3.11                   | 134                     | Green and Blue                                                   | 4                     | Black-or-blue and green                                                  |
| 2.65                   | 82                      | Order of Subject and Verb                                        | 2                     | Subject follows verb (VS)                                                |
| 2.22                   | 87                      | Order of Adjective and Noun                                      | 3                     | Both orders of noun and modifying adjective occur, with neither dominant |
| 1.93                   | 81                      | Order of Subject, Object and Verb                                | 3                     | Verb-subject-object (VSO)                                                |
| 1.90                   | 91                      | Order of Degree Word and Adjective                               | 3                     | Both orders occur with neither order dominant                            |
| 1.69                   | 97                      | the Order of Object and Verb and the Order of Adjective and Noun | 3                     | Verb-object and adjective-noun (VO&AdjN)                                 |
| 1.54                   | 92                      | Position of Polar Question Particles                             | 3                     | Question particle in second position in sentence                         |
| 2.42                   | 105                     | Ditransitive Constructions: The Verb 'Give'                      | 4                     | Mixed                                                                    |
| 2.24                   | 123                     | Relativization on Obliques                                       | 5                     | Not possible                                                             |
| 2.04                   | 100                     | Alignment of Verbal Person Marking                               | 3                     | Ergative alignment                                                       |
| 2.02                   | 108                     | Antipassive Constructions                                        | 1                     | Antipassive with patient-like argument left implicit                     |
| 1.95                   | 16                      | Weight Factors in Weight-Sensitive Stress Systems                | 3,4                   | Coda consonant: closed syllables are heavy for stress                    |
| 1.92                   | 76                      | Overlap between Situational and Epistemic Modal Marking          | 1                     | markers that can code both situational and epistemic modality            |
| 1.88                   | 72                      | Imperative-Hortative Systems                                     | 3                     | The language has both a maximal and a minimal system                     |
| 1.50                   | 73                      | The Optative                                                     | 1                     | Inflectional optative present                                            |
| 1.71                   | 112                     | Negative Morphemes                                               | 3                     | Negative particle                                                        |
| 1.52                   | 127                     | Reason Clauses                                                   | 2                     | Balanced/deranked                                                        |
| 1.51                   | 54                      | Distributive Numerals                                            | 3                     | Marked by prefix                                                         |

## Area based on Walmatjarri

This area captures the Northwest of Australia. The unusual characteristics include:

- Inpositions
- Juxtaposition for complex sentence structures (conjunction, relative clause, also nominal plural)
- Strong freedom of word order
- Various unusual lexical characteristics

| Language               | Family            | Genus        | Codepoints<br>in WALS |
|------------------------|-------------------|--------------|-----------------------|
| Gooniyandi             | Australian        | Bunuban      | 113                   |
| Bunuba                 | Australian        | Bunuban      | 16                    |
| Miriwung               | Australian        | Djeragan     | 6                     |
| Kitja                  | Australian        | Djeragan     | 0                     |
| Jaminjung              | Australian        | Jaminjungan  | 22                    |
| MurrinhPatha           | Australian        | MurrinhPatha | 41                    |
| Nyulnyul               | Australian        | Nyulnyulan   | 27                    |
| Warrwa                 | Australian        | Nyulnyulan   | 20                    |
| Yawuru                 | Australian        | Nyulnyulan   | 15                    |
| Nyigina                | Australian        | Nyulnyulan   | 14                    |
| Bardi                  | Australian        | Nyulnyulan   | 13                    |
| Warlpiri               | Australian        | PamaNyungan  | 37                    |
| Djaru                  | Australian        | PamaNyungan  | 33                    |
| Ngaanyatjarra          | Australian        | PamaNyungan  | 24                    |
| Karadjeri              | Australian        | PamaNyungan  | 10                    |
| Walmatjari             | Australian        | PamaNyungan  | 7                     |
| Pintupi                | Australian        | PamaNyungan  | 6                     |
| Nyangumarda            | Australian        | PamaNyungan  | 5                     |
| MartuWangka            | Australian        | PamaNyungan  | 4                     |
| Yulparija              | Australian        | PamaNyungan  | 4                     |
| Mantjiltjara           | Australian        | PamaNyungan  | 4                     |
| Gurindji               | Australian        | PamaNyungan  | 1                     |
| Ngarinyman             | Australian        | PamaNyungan  | 1                     |
| Maringarr              | Australian        | WesternDaly  | 9                     |
| Ungarinjin             | Australian        | Wororan      | 88                    |
| Gunin                  | Australian        | Wororan      | 16                    |
| Worora                 | Australian        | Wororan      | 11                    |
| Wardaman               | Australian        | Yangmanic    | 86                    |
| Kriol(FitzroyCrossing) | CreolesandPidgins | NA           | 5                     |

| mean rarity | WALS feature | Feature Description                         | WALS value | Value Description                                                                |
|-------------|--------------|---------------------------------------------|------------|----------------------------------------------------------------------------------|
| 13.63       | 85           | Order of Adposition and Noun Phrase         | 3          | Inpositions                                                                      |
| 7.42        | 51           | Position of Case Affixes                    | 8          | Inpositional clitics                                                             |
| 2.42        | 104          | Order of Person Markers on the Verb         | 5          | Person marking of both the A and P arguments                                     |
| 1.73        | 57           | Position of Pronominal Possessive Affixes   | 3          | Both possessive prefixes and possessive suffixes, with neither primary           |
| 7.45        | 90           | Order of Relative Clause and Noun           | 5          | Adjoined relative clause                                                         |
| 4.63        | 33           | Coding of Nominal Plurality                 | 5          | Plural by complete reduplication of stem                                         |
| 3.80        | 111          | Nonperiphrastic Causative Constructions     | 3          | Compound type but no morphological type                                          |
| 3.70        | 64           | Nominal and Verbal Conjunction              | 3          | Nominal and verbal conjunction are primarily expressed by juxtaposition          |
| 6.00        | 74           | Situational Possibility                     | 3          | cannot express situational possibility with affixes on verbs                     |
| 3.57        | 78           | Coding of Evidentiality                     | 5          | Separate particle                                                                |
| 1.87        | 71           | The Prohibitive                             | 3          | construction other than the second singular imperative and a sentential negative |
| 5.75        | 134          | Green and Blue                              | 4          | Black-or-blue and green                                                          |
| 2.94        | 130          | Finger and Hand                             | 1          | Identity: a single word denotes both 'hand' and 'finger' and/or 'fingers'        |
| 2.81        | 135          | Red and Yellow                              | 5          | Red and yellow not both encoded in any basic color term                          |
| 1.63        | 131          | Nominal Bases                               | 6          | Restricted                                                                       |
| 3.17        | 83           | Order of Object and Verb                    | 3          | Both orders with neither order dominant                                          |
| 2.27        | 86           | Order of Genitive and Noun                  | 3          | Both orders occur with neither order dominant                                    |
| 2.22        | 82           | Order of Subject and Verb                   | 3          | Both orders with neither order dominant                                          |
| 2.19        | 81           | Order of Subject, Object and Verb           | 5          | Object-verb-subject (OVS)                                                        |
|             |              |                                             | 7          | Lacking a dominant word order                                                    |
| 2.16        | 108          | Antipassive Constructions                   | 2          | Antipassive with patient-like argument expressed as oblique complement           |
| 1.97        | 18           | Absence of Common Consonants                | 3          | No fricatives                                                                    |
| 1.71        | 105          | Ditransitive Constructions: The Verb 'Give' | 4          | Mixed                                                                            |
| 1.65        | 119          | Nominal and Locational Predication          | 2          | Shared (i.e. identical) encoding of nominal and locational predication           |



## Area centered on Lummi

This area captures the Coastal Northwest Area, basically Salishan with some surrounding languages. The unusual characteristics include:

- Many unusual phonological characteristics (ejectives, lateral obstruents, uvular stop/continuants, absence of nasals)
- Various forms of clitics and unusual prefixes
- VS order, but otherwise very flexible in word order
- Four way demonstrative contrast
- Complex verbal morphology

| Language                   | Family      | Genus             | Codepoints in WALS |
|----------------------------|-------------|-------------------|--------------------|
| Quileute                   | Chimakuan   | Chimakuan         | 55                 |
| Chemakum                   | Chimakuan   | Chimakuan         | 2                  |
| Kalapuya                   | Kalapuyan   | Kalapuyan         | 4                  |
| Alsea                      | OregonCoast | Alsea             | 10                 |
| Chinook(Lower)             | Penutian    | Chinookan         | 25                 |
| Chinook(Upper)             | Penutian    | Chinookan         | 20                 |
| Sahaptin(Northern)         | Penutian    | Sahaptian         | 20                 |
| Molala                     | Penutian    | Molala            | 1                  |
| Squamish                   | Salishan    | Central Salish    | 94                 |
| Halkomelem                 | Salishan    | Central Salish    | 31                 |
| Comox                      | Salishan    | Central Salish    | 17                 |
| Lushootseed                | Salishan    | Central Salish    | 16                 |
| Clallam                    | Salishan    | Central Salish    | 4                  |
| Salish(SamishStraits)      | Salishan    | Central Salish    | 3                  |
| Salish(SouthernPugetSound) | Salishan    | Central Salish    | 3                  |
| Lummi                      | Salishan    | Central Salish    | 1                  |
| Salish(Straits)            | Salishan    | Central Salish    | 1                  |
| Songish                    | Salishan    | Central Salish    | 1                  |
| Saanich                    | Salishan    | Central Salish    | 1                  |
| Shuswap                    | Salishan    | Interior Salish   | 46                 |
| Lillooet                   | Salishan    | Interior Salish   | 26                 |
| Thompson                   | Salishan    | Interior Salish   | 10                 |
| Columbia-Wenatchi          | Salishan    | Interior Salish   | 1                  |
| Tillamook                  | Salishan    | Tillamook         | 4                  |
| Chehalis(Upper)            | Salishan    | Tsamosan          | 21                 |
| Makah                      | Wakashan    | Southern Wakashan | 80                 |
| Nuuchahnulth               | Wakashan    | Southern Wakashan | 44                 |
| Nitinaht                   | Wakashan    | Southern Wakashan | 2                  |

| <b>mean rarity</b> | <b>WALS feature</b> | <b>Feature Description</b>                                       | <b>WALS value</b> | <b>Value Description</b>                                               |
|--------------------|---------------------|------------------------------------------------------------------|-------------------|------------------------------------------------------------------------|
| 5.50               | 7                   | Glottalized Consonants                                           | 8,6,2             | Ejectives                                                              |
| 3.82               | 8                   | Lateral Consonants                                               | 5,4               | lateral obstruents                                                     |
| 2.95               | 6                   | Uvular Consonants                                                | 4                 | Uvular stops and continuants                                           |
| 1.64               | 2                   | Vowel Quality Inventories                                        | 1                 | Small                                                                  |
| 1.54               | 1                   | Consonant Inventories                                            | 5                 | Large                                                                  |
| 1.52               | 3                   | Consonant-Vowel Ratio                                            | 5                 | High                                                                   |
| 1.51               | 18                  | Absence of Common Consonants                                     | 4                 | No nasals                                                              |
| 4.33               | 128                 | Utterance Complement Clauses                                     | 3                 | Deranked                                                               |
| 2.89               | 92                  | Position of Polar Question Particles                             | 3                 | Question particle in second position in sentence                       |
| 2.82               | 57                  | Position of Pronominal Possessive Affixes                        | 3                 | Both possessive prefixes and possessive suffixes, with neither primary |
| 1.66               | 101                 | Expression of Pronominal Subjects                                | 3                 | Pronominal subjects are expressed by clitics with variable host        |
| 2.13               | 51                  | Position of Case Affixes                                         | 7                 | Prepositional clitics                                                  |
|                    |                     |                                                                  | 2                 | Case prefixes                                                          |
| 2.50               | 82                  | Order of Subject and Verb                                        | 2                 | Subject follows verb (VS)                                              |
| 2.35               | 81                  | Order of Subject, Object and Verb                                | 4                 | Verb-object-subject (VOS)                                              |
|                    |                     |                                                                  | 3                 | Verb-subject-object (VSO)                                              |
| 2.34               | 88                  | Order of Demonstrative and Noun                                  | 3                 | Demonstrative prefix on noun                                           |
| 2.11               | 97                  | the Order of Object and Verb and the Order of Adjective and Noun | 3                 | Verb-object and adjective-noun (VO&AdjN)                               |
| 2.01               | 90                  | Order of Relative Clause and Noun                                | 7                 | Mixed types of relative clause with none dominant                      |
| 1.75               | 86                  | Order of Genitive and Noun                                       | 3                 | Both orders occur with neither order dominant                          |
| 1.59               | 89                  | Order of Numeral and Noun                                        | 3                 | Both orders of numeral and noun with neither order dominant            |
| 2.66               | 114                 | Subtypes of Asymmetric Standard Negation                         | 4                 | Subtypes A/Fin and A/NonReal                                           |
|                    |                     |                                                                  | 5                 | Subtypes A/Fin and A/Cat                                               |
| 1.71               | 112                 | Negative Morphemes                                               | 3                 | Negative particle                                                      |
| 1.57               | 113                 | Symmetric and Asymmetric Standard Negation                       | 2                 | Asymmetric standard negation only: Type Asy                            |
| 2.25               | 41                  | Distance Contrasts in Demonstratives                             | 4                 | Four-way contrast                                                      |
| 2.06               | 108                 | Antipassive Constructions                                        | 1                 | Antipassive with patient-like argument left implicit                   |
| 1.91               | 22                  | Inflectional Synthesis of the Verb                               | 6                 | 10-11 categories per word                                              |
| 1.72               | 58                  | Obligatory Possessive Inflection                                 | 1                 | Obligatorily possessed nouns exist                                     |

## Area centered on West Greenlandic

An area in northeastern Canada, capturing basically Eskimo-Aleut, Algonquin and Northern Iroquoian. Typical rare features include:

- Various unusual lexical characteristics
- One aberrant phonological characteristic (no bilabials and no nasals)
- Word order is characterised by great freedom with sentential clitics
- Hierarchical person marking on verb
- Absence of number differentiation in person marking

| Language                   | Family        | Genus              | Codepoints in WALS |
|----------------------------|---------------|--------------------|--------------------|
| Greenlandic (West)         | Eskimo-Aleut  | Eskimo-Aleut       | 123                |
| Greenlandic (South)        | Eskimo-Aleut  | Eskimo-Aleut       | 2                  |
| Greenlandic (East)         | Eskimo-Aleut  | Eskimo-Aleut       | 3                  |
| Inuktitut( QuebecLabrador) | Eskimo-Aleut  | Eskimo-Aleut       | 4                  |
| Inuktitut( Salluit)        | Eskimo-Aleut  | Eskimo-Aleut       | 4                  |
| Beothuk                    | Beothuk       | Beothuk            | 2                  |
| PassamaquoddyMaliseet      | Algic         | Algonquian         | 82                 |
| Ojibwa (Eastern)           | Algic         | Algonquian         | 45                 |
| Cree (Eastern)             | Algic         | Algonquian         | 20                 |
| Massachusett               | Algic         | Algonquian         | 16                 |
| Montagnais                 | Algic         | Algonquian         | 8                  |
| Micmac                     | Algic         | Algonquian         | 8                  |
| Munsee                     | Algic         | Algonquian         | 8                  |
| Unami                      | Algic         | Algonquian         | 4                  |
| Atikamekw                  | Algic         | Algonquian         | 2                  |
| Abenaki (Western)          | Algic         | Algonquian         | 2                  |
| Naskapi                    | Algic         | Algonquian         | 2                  |
| Mahican                    | Algic         | Algonquian         | 2                  |
| Algonquin                  | Algic         | Algonquian         | 2                  |
| Nanticoke                  | Algic         | Algonquian         | 1                  |
| Oneida                     | Iroquoian     | Northern-Iroquoian | 101                |
| Seneca                     | Iroquoian     | Northern-Iroquoian | 45                 |
| Mohawk                     | Iroquoian     | Northern-Iroquoian | 35                 |
| Wyandot                    | Iroquoian     | Northern-Iroquoian | 8                  |
| Cayuga                     | Iroquoian     | Northern-Iroquoian | 5                  |
| Onondaga                   | Iroquoian     | Northern-Iroquoian | 2                  |
| Icelandic                  | Indo-European | Germanic           | 61                 |

| mean rarity | WALS feature | Feature Description                                                      | WALS value | Value Description                                                         |
|-------------|--------------|--------------------------------------------------------------------------|------------|---------------------------------------------------------------------------|
| 12.02       | 135          | Red and Yellow                                                           | 4          | Red and yellow-or-green                                                   |
| 8.78        | 134          | Green and Blue                                                           | 5          | Yellow-or-green-or-blue                                                   |
| 8.77        | 136          | M-T Pronouns                                                             | 3          | M-T pronouns, non-paradigmatic                                            |
| 1.75        | 130          | Finger and Hand                                                          | 1          | Identity: a single word denotes both 'hand' and 'finger' and/or 'fingers' |
| 9.58        | 18           | Absence of Common Consonants                                             | 5          | No bilabials or nasals                                                    |
| 2.97        | 82           | Order of Subject and Verb                                                | 3          | Both orders with neither order dominant                                   |
| 2.51        | 85           | Order of Adposition and Noun Phrase                                      | 5          | No adpositions                                                            |
| 2.00        | 83           | Order of Object and Verb                                                 | 3          | Both orders with neither order dominant                                   |
| 1.65        | 92           | Position of Polar Question Particles                                     | 3          | Question particle in second position in sentence                          |
| 1.60        | 101          | Expression of Pronominal Subjects                                        | 3          | Pronominal subjects are expressed by clitics with variable host           |
| 1.60        | 95           | the Order of Object and Verb and the Order of Adposition and Noun Phrase | 3          | Verb-object and postpositional (VO&Postp)                                 |
|             |              |                                                                          | 5          | Languages not falling into one of the preceding four types                |
| 2.73        | 100          | Alignment of Verbal Person Marking                                       | 5          | Hierarchical alignment                                                    |
|             |              |                                                                          | 4          | Active alignment                                                          |
| 2.39        | 104          | Order of Person Markers on the Verb                                      | 4          | Person marking of the A or P argument                                     |
| 2.65        | 128          | Utterance Complement Clauses                                             | 2          | Balanced/deranked                                                         |
| 2.21        | 21           | Exponence of Selected Inflectional Formatives                            | 2          | Case + number                                                             |
| 1.88        | 52           | Comitatives and Instrumentals                                            | 3          | Mixed                                                                     |
| 1.71        | 50           | Asymmetrical Case-Marking                                                | 4          | Subtractive-quantitatively asymmetrical case-marking                      |
| 1.65        | 25           | Locus of Marking: Whole-language Typology                                | 3          | Consistently double-marking                                               |
| 1.62        | 31           | Sex-based and Non-sex-based Gender Systems                               | 3          | Non-sex-based gender system                                               |
| 1.57        | 28           | Case Syncretism                                                          | 2          | Inflectional case marking is syncretic for core cases only                |
| 2.18        | 27           | Reduplication                                                            | 3          | No productive reduplication                                               |
| 2.12        | 68           | The Perfect                                                              | 1          | Perfect of the 'have'-type (derived from a possessive construction)       |
| 1.81        | 78           | Coding of Evidentiality                                                  | 5          | Separate particle                                                         |
| 1.50        | 79           | Suppletion According to Tense and Aspect                                 | 2          | Suppletion according to aspect                                            |
| 2.09        | 40           | Inclusive/Exclusive Distinction in Verbal Inflection                     | 4          | Only inclusive differentiated                                             |
| 1.74        | 35           | Plurality in Independent Personal Pronouns                               | 2          | Number-indifferent pronouns                                               |
| 1.66        | 39           | Inclusive/Exclusive Distinction in Independent Pronouns                  | 2          | 'We' and 'I' identical                                                    |
| 1.55        | 17           | Rhythm Types                                                             | 3          | Dual: system has both trochaic and iambic feet                            |
|             |              |                                                                          | 5          | Absent: no rhythmic stress                                                |
| 1.52        | 115          | Negative Indefinite Pronouns and Predicate Negation                      | 3          | Negative indefinites show mixed behaviour                                 |

## Area centered on Pirahã

This area captures a genetically highly diverse area of Amazonia. The unusual characteristics include:

- The absence of various ‘normal’ characteristics of language (no numeral-noun modification, only plural imperatives, no personal pronouns, no reciprocals)
- Exuberance of semantic distinctions (degrees of remoteness in tense, many possessive classes, many genders)
- Object-Subject word order
- Juxtaposition/zero marking for constructions (relative clauses, conjunction, argument marking)
- Some unusual phonology: ejectives, implosives, glottalized resonants, missing /g/

| Language           | Family           | Genus            | Codepoints in WALS |
|--------------------|------------------|------------------|--------------------|
| Paumari            | Arauan           | Arauan           | 100                |
| Banawa             | Arauan           | Arauan           | 4                  |
| Jarawara           | Arauan           | Arauan           | 4                  |
| Jamamadi           | Arauan           | Arauan           | 3                  |
| Deni               | Arauan           | Arauan           | 3                  |
| Apurina            | Arawakan         | Arawakan         | 110                |
| Bare               | Arawakan         | Arawakan         | 41                 |
| Iranxe             | Arawakan         | Arawakan         | 22                 |
| Baure              | Arawakan         | Arawakan         | 21                 |
| Aikana             | Arawakan         | Arawakan         | 14                 |
| Hixkaryana         | Cariban          | Cariban          | 123                |
| Cayuvava           | Cayuvava         | Cayuvava         | 84                 |
| Wari               | Chapacura-Wanhan | Chapacura-Wanhan | 115                |
| Itonama            | Itonama          | Itonama          | 28                 |
| Jabuti             | Jabuti           | Jabuti           | 10                 |
| Canamari           | Katukinan        | Katukinan        | 2                  |
| Kwaza              | Kwaza            | Kwaza            | 13                 |
| Rikbaktsa          | MacroGe          | Rikbaktsa        | 8                  |
| Piraha             | Mura             | Mura             | 114                |
| Nambikuara         | Nambikuaran      | Nambikuaran      | 47                 |
| Chacobo            | Panoan           | Panoan           | 39                 |
| Karipunado-Guapore | Panoan           | Panoan           | 2                  |
| Eseejja            | Tacanan          | Tacanan          | 32                 |
| Karitiana          | Tupian           | Arikem           | 7                  |
| Gaviao             | Tupian           | Monde            | 18                 |
| Munduruku          | Tupian           | Munduruku        | 12                 |
| Mekens             | Tupian           | Tupari           | 18                 |
| Karu               | Tupian           | Tupi-Guarani     | 24                 |
| Nadib              | Vaupes-Japura    | Vaupes-Japura    | 19                 |

| <b>mean<br/>rarity</b> | <b>WALS<br/>feature</b> | <b>Feature Description</b>                              | <b>WALS<br/>value</b> | <b>Value Description</b>                                                          |
|------------------------|-------------------------|---------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------|
| 25.44                  | 89                      | Order of Numeral and Noun                               | 4                     | Numeral only modifies verb                                                        |
| 7.47                   | 70                      | The Morphological Imperative                            | 3                     | second plural imperatives but no second singular imperatives                      |
| 4.08                   | 35                      | Plurality in Independent Personal Pronouns              | 1                     | No independent subject pronouns                                                   |
|                        |                         |                                                         | 2                     | Number-indifferent pronouns                                                       |
| 3.76                   | 39                      | Inclusive/Exclusive Distinction in Independent Pronouns | 1                     | No grammaticalised marking at all                                                 |
| 1.64                   | 99                      | Alignment of Case Marking of Pronouns                   | 7                     | None                                                                              |
| 1.58                   | 106                     | Reciprocal Constructions                                | 1                     | There are no non-iconic reciprocal constructions.                                 |
| 6.22                   | 66                      | The Past Tense                                          | 3                     | Past/non-past distinction marked; at least 4 degrees of remoteness distinguished  |
| 3.39                   | 59                      | Possessive Classification                               | 4                     | More than five classes                                                            |
| 2.15                   | 30                      | Number of Genders                                       | 4                     | Four                                                                              |
| 4.73                   | 81                      | Order of Subject, Object and Verb                       | 6                     | Object-subject-verb (OSV)                                                         |
|                        |                         |                                                         | 5                     | Object-verb-subject (OVS)                                                         |
|                        |                         |                                                         | 4                     | Verb-object-subject (VOS)                                                         |
| 3.52                   | 90                      | Order of Relative Clause and Noun                       | 5                     | Adjoined relative clause                                                          |
| 3.05                   | 64                      | Nominal and Verbal Conjunction                          | 3                     | Nominal and verbal conjunction are primarily expressed by juxtaposition           |
| 1.97                   | 111                     | Nonperiphrastic Causative Constructions                 | 3                     | Compound type but no morphological type                                           |
| 1.80                   | 25                      | Locus of Marking: Whole-language Typology               | 4                     | Consistently zero-marking                                                         |
| 2.83                   | 46                      | Indefinite Pronouns                                     | 4                     | Mixed indefinites                                                                 |
| 2.73                   | 7                       | Glottalized Consonants                                  | 8                     | Ejectives, implosives and glottalized resonants                                   |
| 1.83                   | 8                       | Lateral Consonants                                      | 3                     | Laterals, but no /l/ or obstruent lateral                                         |
| 1.69                   | 5                       | Voicing and Gaps in Plosive Systems                     | 4                     | Missing /g/                                                                       |
| 1.76                   | 57                      | Position of Pronominal Possessive Affixes               | 3                     | Both possessive prefixes and possessive suffixes, with neither primary            |
| 1.74                   | 14                      | Fixed Stress Locations                                  | 5                     | Antepenultimate: stress is on the antepenultimate (third from the right) syllable |
| 1.64                   | 27                      | Reduplication                                           | 2                     | Full reduplication only                                                           |
| 1.58                   | 100                     | Alignment of Verbal Person Marking                      | 3                     | Ergative alignment                                                                |
|                        |                         |                                                         | 6                     | Split alignment                                                                   |