Decimal Numeral Base

One aspect of numeral expressions is the multiplicational base that is used. Some languages use a decimal numeral base: the general structure of numerals in those languages is *m10+n* (the actual order of elements being disregarded; however, see Numeral Composition 10+n and Numeral Composition 20+n, for a discussion on sequencing), meaning that some lower numeral *m* is a multiplier of 10 (or an element that is derived from it) added to it by some other lower numeral *n* as a typical way of forming numerals above ten. When categorizing a language as using a decimal base, the overall structure of forming numbers up to 99 has been taken as diagnostic. The existence of a lexeme ‘20’ without any obvious derivational relationship to any other numeral or numeral base has not been regarded as counterevidence as long as ‘20’ is not routinely used as a recurring element for forming numbers beyond the interval 20-29 (see Vigesimal Numeral Base). Sanjan Pashai, as displayed in ‎(1), is an example of a language using a decimal base. However, the numerals ‘40’, ‘50’, etc., are obvious Persian loan forms, setting the language off from some of its closest relatives that apply a vigesimal system.

1. Sanjan Pashai [glh(sn)] (Indo-Aryan)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ‘6’ | ʂɛ | lower numeral n=6 | ‘46’ | tɕele ʂɛ | 4x(10)+6 |
| ‘10’ | *dɑː* | decimal base 10 | ‘50’ | *pendʑɑː* | 5x(10) |
| ‘16’ | *ʂuj* | n+(10) | ‘60’ | *ɕæːst* | 6x(10) |
| ‘20’ | *wəst* | non-derived lexeme 20 | ‘70’ | *haːftɑːd* | 7x(10) |
| ‘26’ | *wəstə ʂɛ* | 20+6 | ‘80’ | *haːɕtɑːd* | 8x(10) |
| ‘30’ | *triju* | 3x(10) | ‘90’ | *nawad* | 9x(10) |
| ‘36’ | *triju ʂɛ* | 3x(10)+6 | ‘100’ | *sad* | non-derived lexeme 100 |
| ‘40’ | *tɕel* | 4x(10) | ‘110’ | *iː sadu dɛ* | 1x100+10 |

A decimal base is present in approximately a third of the sample, essentially in its peripheral western and southern parts.

|  |  |  |
| --- | --- | --- |
| Feature value | # of varieties displaying it | % |
| Present | 19 | 32 |
| Absent | 39 | 66 |
| Indeterminate | 1 | 2 |