

## 89. Order of Numeral and Noun

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### 1. Defining the values

This map shows the order of cardinal numerals with respect to a noun they modify. Cardinal numerals are words denoting the number of things referred to, as in English *four chairs*, in contrast to ordinal numerals, which specify the rank in some order of objects, as in English *the fourth chair*. See also Map 131 on numeral bases and Map 53 on ordinal numerals.

@	1.	Numeral precedes noun (NumN)	430
@	2.	Numeral follows noun (NNum)	515
@	3.	Both orders of numeral and noun with neither order dominant	54
@	4.	Numeral only modifies verb	2
			total
			1001

The first type shown on the map consists of languages in which **the numeral precedes the noun**. English is an instance of such a language, as is Selknam (Chon; Tierra del Fuego, Argentina), illustrated in (1).

- (1) Selknam (Najlis 1973: 28)

*ʃèàwken-èn naʔ*

three-F woman

Num N

‘three women’

The second type consists of languages in which **the numeral follows the noun**. Examples of such languages include Pumi (Tibeto-Burman; China), as in (2a), and Jul’hoan (Northern Khoisan; Namibia), as in (2b).

- (2) a. Pumi (Ding 1998: 191)

*qüa xüé*

pig eight

N Num

‘eight pigs’

b. Jul'hoan (Dickens 1992: 61)

*jú        tsán   gèà   tjù    n!áng*

person   two   be   house   in

N        Num

‘There are two people in the house.’

The third type shown on the map are languages in which **both orders of numeral and noun occur with neither order dominant** (see “Determining Dominant Word Order” on p. 371). An example of such a language is Acoma (Keresan; New Mexico), as in (3).

(3) Acoma (Maring 1967: 119)

a. *t<sup>y</sup>ának’a   wáaštítá*

four        fawn

‘four fawns’

b. *kák<sup>ha</sup>ǎa   t<sup>h</sup>úwé*

wolf        two

‘two wolves’

In most languages with both orders of numeral and noun, it is not clear whether there is any difference in meaning associated with the two orders. In Nias (Austronesian; Sumatra, Indonesia), the noun phrase is interpreted as indefinite when the numeral

precedes the noun, as in (4a), but definite when it follows, as in (4b).

(4) Nias (Brown, in press)

- a.    *öfa*    *geu*            *m-baßi*    *s=afusi*  
          four    CLF            ABS-pig    REL=white  
          ‘four white pigs’
- b.    *baßi-ra*                *s=afusi*    *si=öfa*    *geu*  
          pig-3PL.POSS    REL=white    REL=four    CLF  
          ‘their four white pigs’

In some languages there is a split among numerals, some preceding the noun, others following. For example, in Egyptian Arabic, the numerals for ‘one’ and ‘two’ follow the noun, while higher numerals precede the noun, as in (5).

(5) Egyptian Arabic (Gary and Gamal-Eldin 1982: 111)

- a.    *binteen*    *?itneen*                    b.    *talat*    *banaat*  
          girl.DU    two                                three    girl.PL  
          ‘two girls’                                ‘three girls’

This variety of Arabic is shown on the map as lacking a dominant order of numeral and noun. In Moroccan Arabic, only the numeral for ‘one’ follows the noun, as in (6a), while all other numerals precede the noun, as in (6b).

(6) Moroccan Arabic (Harrell 1962: 206)

a.	<i>mṛa</i>	<i>wehda</i>	b.	<i>žuž</i>	<i>ktub</i>
	woman	one.F		two	book
	‘one woman’			‘two books’	

When only one numeral differs from the others in position, as in Moroccan Arabic, the position of the other numerals is treated as dominant. Hence, Moroccan Arabic is shown on the map as having numeral before noun as the dominant order. Iraqi Arabic is intermediate between Egyptian and Moroccan Arabic: the numeral for ‘one’ follows, the numeral for ‘two’ either precedes or follows, and numerals higher than two normally precede (Erwin 1963: 348). It is shown on the map as lacking a dominant order of numeral and noun.

In most languages in which some numerals precede the noun while others follow, both of the two sets of numerals represent continuous sequences of numbers, so that there is some

number  $n$  such that numerals from 1 to  $n$  occur on one side of the noun while numerals greater than  $n$  occur on the other side. For Egyptian Arabic, illustrated above in (5), the value of  $n$  is 2. For Tauya (Madang, Trans-New Guinea; Papua New Guinea), the value of  $n$  is 4 (MacDonald 1990: 117-118). For Nivkh (isolate; Sakhalin Island, Russia), the value of  $n$  is 5 (Panfilov 1962: 129-130). For Runga (Maban; Chad), the value of  $n$  is 6 (Nougayrol 1990: 40-42).

There are other languages which do not exhibit a pattern with a single cutoff point. The majority of exceptions appear to be languages in which the numeral for ‘two’ occurs on one side of the noun, while the numeral for ‘one’ and higher numerals occur on the other side. Examples of languages of this sort include Shipibo-Konibo (Panoan; Peru; Pilar Valenzuela, p.c.) and Coptic (Egyptian; Lambdin 1983: 56). A more unusual case is provided by Obolo (Benue-Congo; Nigeria), in which the numerals for 10, 20, and 400 precede the noun, while other numerals consisting of one word follow. The special treatment of 20 and 400 reflects the vigesimal system (see Map 131). With numerals consisting of more than one word, the first word (which will normally be one of the words for ‘ten’, ‘twenty’, or

‘four hundred’) will precede the noun, while the remainder will follow the noun, as in (7c).

(7) Obolo (Faraclas 1984: 27, 37)

- |    |                       |            |           |                    |            |            |
|----|-----------------------|------------|-----------|--------------------|------------|------------|
| a. | <i>óbóp</i>           | <i>úwù</i> | b.        | <i>úwù</i>         | <i>ílé</i> | <i>ítá</i> |
|    | four.hundred          | house      |           | house              | big        | three      |
|    | ‘four hundred houses’ |            |           | ‘three big houses’ |            |            |
| c. | <i>étíp</i>           | <i>úwù</i> | <i>mè</i> | <i>gò</i>          |            |            |
|    | twenty                | house      | and       | five               |            |            |
|    | ‘twenty-five houses’  |            |           |                    |            |            |

Welsh is similar to this in that numerals consisting of more than one word place the first word in the numeral phrase before the noun, and the remainder following the noun (Williams 1980: 41). Because a numeral consisting of a single word precedes the noun, and these include the most frequent numerals, Welsh is shown on the map as NumN; for analogous reasons, Obolo is coded as NNum.

The final type shown on the map is languages in which the numeral does not combine syntactically with the noun at all, but occurs **only as a modifier of the verb**. There are only two languages in my data in which this construction is the only

normal way to express numerals, in close proximity to each other in western Brazil, namely Arára Karó (Tupian) and Wari' (Chapacura-Wanhan; Everett and Kern 1997: 154-155, 221, 347), the former illustrated in (8).

(8) Arára Karó (Gabas 1999: 172)

*maʔwít ip ʔiy matet cagárokōm=nem*

man fish catch.IND yesterday two=ADVZ

'The man caught two fish yesterday.'

This construction is somewhat similar to the English construction illustrated in (9), in which the word *all* appears in a position associated with adverbial elements.

(9) *The guests have all left.*

There are many other languages that allow this option alongside a construction in which the numeral occurs in the noun phrase. For example, in Kutenai (isolate; western North America), there are two sorts of numeral words, one illustrated in (10a), in which the numeral occurs in the noun phrase with the noun (*ki=ʔas niʔtahaʔ* 'two men'), the other illustrated in (10b), in which the



numeral is a preverb modifying the verb, somewhat analogous to the Arára Karó construction in (8).

(10) Kutenai (own data)

a. *xa-s*            *ki=?as*            *niɕtahaɬ*    *?at*

then-OBV    SUBORD=two    young.man    HAB

*mitx-ni*            *ni?-s*            *numa-s*

shoot.at-INDIC    the-OBV    thunder-OBV

‘Then two young men would shoot at the thunder.’

b. *n=?as-iɬ*            *?upiɬ-iɬ-ni*            *?a-qɬmakniɬ*

IND=two-PREVERB    kill-PASS-IND    Indian

‘Two Indians were killed.’

Languages like Kutenai which have both constructions are coded according to the construction in which the numeral combines with the noun; hence Kutenai is shown as placing the numeral before the noun.

## 2. Geographical distribution

The two orders of numeral and noun show very clear geographical patterns. There is a large area in which almost all

languages place the numeral before the noun, which covers most of Europe and Asia except for an area in Southeast Asia described below, extending southeastward into Indonesia, the Philippines and western Micronesia and extending southwestward into the Middle East and across North Africa. It is also the dominant order in the Americas, especially in the westernmost regions of the United States and Mexico.

The order with the numeral after the noun is the overwhelmingly preferred order in sub-Saharan Africa, and the majority of exceptions are geographically peripheral within this region, namely in the far south of Africa, in the extreme northwest (in the vicinity of Senegal), and in the northeastern region of Ethiopia and Eritrea. This order also predominates in an area within Southeast Asia, but the boundaries of this area are different from the boundaries of the Southeast Asian area found with other word order characteristics. In particular, it excludes the languages of Vietnam and languages in southern China to the north and northeast of Vietnam and it excludes the languages of Indonesia and the Philippines. Conversely, it extends further to the northwest than some other word order characteristics do, including Tibeto-Burman languages of northeast India, Myanmar, and adjacent areas of China. Even among the more

western Tibeto-Burman languages, there is a mixture of the two orders of numeral and noun. Noun-numeral order is also the dominant type in New Guinea and among the languages of the easternmost islands of Indonesia.

Both types are interspersed amongst each other among the languages of the Pacific, including the eastern islands of New Guinea and in Australia. The two orders are about equally common among the languages of Canada and the United States east of the Rocky Mountains, with a notable pocket of noun-numeral languages in the southeastern United States.

Languages lacking a dominant order of numeral and noun are somewhat more common in Australia and in western Indonesia.

### 3. Theoretical issues

In many languages, numerals must occur with classifiers, as in (11).

(11) Nusu (Tibeto-Burman; southern China; Sun and Lu 1986: 44)

*va*<sup>53</sup>*za*<sup>55</sup>      *nga*<sup>55</sup>      *gɔ̃*<sup>35</sup>

little.pig      five      CLF

‘five little pigs’

In such languages, the numeral is not really modifying the noun, at least not directly, but rather is modifying the classifier. For such languages, the map shows the order of the noun relative to this phrase consisting of numeral and classifier. Whether this phrase actually modifies the noun is itself something that is often unclear. It has been proposed for some languages that the classifier is the real head of the noun phrase and the numeral and noun are both dependents of the classifier. See Map 55 on numeral classifiers.

The issue of what element is the head also sometimes arises sometimes in languages without numeral classifiers. It has been proposed that some numerals in Russian serve as heads (Babby 1987). Similarly, in Rif Berber (Morocco), most modifiers follow the noun, while numerals precede; but the construction they occur in is the same as the genitive construction, as illustrated in (12), suggesting that the numeral is the head, not a modifier.

(12) Rif Berber (Kossmann 2000: 160, 108)

- |   |  |
|---|--|
| a. <i>tlata n tawrar</i><br>three GEN hill<br>‘three hills’ | b. <i>axxam n weryaz</i><br>house GEN man<br>‘the man’s house’ |
|---|--|

The issue of which element is the head is ignored in coding languages for this map.

There are other languages in which the numeral can be argued not to be a modifier of the noun. One type is represented by Kutenai (isolate; British Columbia etc.), in which the numeral is the verb in an internally-headed relative clause. This is illustrated above in (10a), where the noun *niɬtahaʔ* ‘young man’ is grammatically the subject of the verb *ʔas* ‘two’. For the purposes of this map, languages are coded according to the order of numeral and noun, regardless of whether the relationship is one of modification or not; since the normal order is that shown in (10a), Kutenai is coded as placing the numeral before the noun. The fact that the numeral is grammatically a verb in Kutenai (as it is also in Nias in (4) above) is ignored for the purposes of this map.