33. Coding of Nominal Plurality

Matthew S. Dryer

1. Defining the values

This map shows the method by which a language indicates plurality with nouns. There are basically two ways in which languages indicate plurality. The first (and most common) involves changing the morphological form of the noun, as in English *dog, dogs*. The second involves indicating plurality by means of a morpheme that occurs somewhere else in the noun phrase, illustrated by the plural word in the example in (1) from Hawaiian, where the word *mau* has the same function as the plural suffix in English, but is a separate word modifying the noun.

(1)   Hawaiian (Elbert and Pukui 1979: 159)

     'elua   a'u   mau   i'a

     two   my   PL   fish

     'my two fish'

@	1.	Plural prefix		118
@	2.	Plural suffix		495
@	3.	Plural stem change		5
@	4.	Plural tone		2
@	5.	Plural by complete reduplication of stem		8
@	6.	Morphological plural with no method primary		34
@	7.	Plural word		150
@	8.	Plural clitic		59
@	9.	No plural		86
			total	957

Six of the values shown on the map involve ways of indicating plurality morphologically on the noun. The first of these is **plural prefixes**, illustrated by the example in (2) from Anindilyakwa (isolate; Northern Territory, Australia).

(2)   Anindilyakwa (Leeding 1989: 294)

   wirr-iyikwayiwa

   PL-child

'children'

The second of these is **plural suffixes**, illustrated by English and by the example in (3) from Nagatman (isolate; Papua New Guinea).

(3)   Nagatman (Campbell and Campbell 1987: 2)

*a`ma-**re***

dog-**PL**

'dogs'

The next three ways of forming plurals are considerably less common than the first two. Five languages are shown on the map as using **changes within the noun stem** as the primary means of forming plurals. These are two Nilotic languages in Sudan, Dinka (Nebel 1948: 3) and Nuer (Crazzolara 1933: 28; Frank 1999), two Yuman languages of the southwestern United States, Maricopa (Gordon 1986: 29) and Jamul Tiipay (Miller 2001: 115), and Laal, an isolate spoken in Chad (Boyeldieu 1982: 70-82). The primary means for forming plurals in these languages involves changes to the vowels within the noun stem, a means used for a number of nouns in English with irregular

plurals (e.g. *man, men; goose, geese*). The examples in (4) illustrate this for Maricopa.

(4)   Maricopa (Gordon 1986: 29)

humar	'child'	*humaar*	'children'
nchen	'older sibling	*nchiin*	'older siblings'
hat	'dog'	*haat*	'dogs'
mhay	'boy'	*mhaa*	'boys'

Note that Dinka and Nuer use stem changes as the primary means for forming different case forms as well (see Map 51).

The fourth way to form plurals is by **tone**. This is the primary means for only two languages shown on the map, Gworok (Niger-Congo; Nigeria; Adwiraah 1989: 28-32) and Ngiti (Central Sudanic, Nilo-Saharan; Democratic Republic of Congo), the latter illustrated in (5).

(5)   Ngiti (Kutsch Lojenga 1994: 135)

kamà	'chief'	*kámá*	'chiefs'
màlàyikà	'angel'	*màlàyíká*	'angels'
màlimò	'teacher'	*màlímó*	'teachers'
adɔ̀du	'my brother'	*adɔ́du*	'my brothers'

The fifth way to form plurals is by **complete reduplication** of the noun stem. Complete reduplication is the primary method for expressing plurality in eight languages on the map. In Indonesian, for example, the plural of *rumah* 'house' is *rumah-rumah* 'houses', and the plural of *perubahan* 'change' is *perubahan-perubahan* 'changes' (Sneddon 1996: 16-17). Note that if a language expresses plurality by reduplicating only part of the stem, then the language is classified here as prefixing or suffixing depending on whether it is the initial segment or the final segment of the stem that is reduplicated. For example, the normal means for pluralizing nouns in Pipil (Uto-Aztecan; El Salvador) is by reduplication of the first syllable of the noun stem as a prefix followed by /h/ (e.g. *rayis* 'root', *rahrayis* 'roots'; *tukat* 'spider', *tuhtukat* 'spiders'; Campbell 1985: 52); this is treated as prefixation for the purposes of this map.

The final type of languages that form their plurals by morphological means (the sixth type in the box) consists of languages that employ **two or more of the five methods just described** with little basis for saying that one of these five methods is primary, where a method is considered primary if it is used by at least twice as many nouns as any other method. For

example, there are languages like Misantla Totonac (Totonacan; Mexico), in which some nouns form their plural with prefixes, as in (6a), while others form their plural with suffixes, as in (6b).

(6)   Misantla Totonac (MacKay 1999: 355, 361)

      a.   *lii-šaaluh*   b.   *míŋ-kam-án*

           PL-pot   2.POSS-offspring-**PL**

           'pots'   'your offspring'

There are also a number of languages in which some nouns form their plurals by prefixation or suffixation while other nouns form their plurals by means of either tone or stem changes, without either of these methods being primary. Many varieties of Arabic, for example, have a large number of nouns whose plurals are formed by stem changes and a large number whose plurals are formed by suffixation. Mamvu, which is like Ngiti in being a Central Sudanic language of the Democratic Republic of Congo, combines tone with suffixation (Vorbichler 1971: 222). Note that if a language employs more than one method, such as both plural prefixes and plural suffixes, but one method is used with at least twice as many nouns as any other method, then the language is shown on the map according to the more common

type. For example, in Mono (Uto-Aztecan; California), only human nouns inflect for plural; there is one reduplicative prefix that is used on six nouns while all other human nouns take a suffix, so Mono is shown as employing suffixes (Norris 1986: 76-77).

The map does not distinguish affixes that only code plurality from affixes that code plurality in combination with other inflectional features of the noun. In Russian, for example, the plural affixes also code case and grammatical gender. In Swahili and other Bantu languages, the plural prefixes also code noun class.

In addition to the six morphological types of plurality, the map shows plural words and clitics. **Plural words** are words whose meaning is like that of plural affixes, but they are separate words, as illustrated by the Hawaiian example above in (1) and the example from Chalcatongo Mixtec (Oto-Manguean; Mexico) in (7).

(7)   Chalcatongo Mixtec (Macaulay 1996: 113)

     Ni-xáā̄=rí   *kʷaʔà*   *žúʔa*   *káni*   ***xináʔa***

     COMP-buy=1   many   rope   long   PL

‘I bought many long ropes’

Plural clitics are probably best thought of as a type of plural word, whose position is defined syntactically in that they have a specified position within the noun phrase, but which attach phonologically to whatever word happens to occur adjacent to that position within a particular noun phrase. For example, in Cayuvava (isolate; Bolivia), the plural clitic *me=* attaches to whatever is the first word in the noun phrase, as in (8).

(8)   Cayuvava (Key 1967: 50)

    me=rišɔ   rab,–   iri

    PL=new   paddle

    ‘new paddles’

In Sinaugoro (Oceanic, Austronesian; Papua New Guinea), the plural clitic follows other modifiers of the noun, except for numerals, which it precedes, and attaches to whatever word precedes it; in (9), it attaches to an adjective.

(9)   Sinaugoro (Kolia 1975: 124)

    belema   bara=ria   taulatoitoi

python   big**=PL**   six

'six big pythons'

As with plural affixes, the elements treated here as plural words and clitics occasionally code other grammatical features of the noun phrase as well. For example, in Khmer (Mon-Khmer; Cambodia) and in Maori (Polynesian, Austronesian; New Zealand) the plural words vary for definite and indefinite (Ehrman 1970: 43; Bauer 1993: 110), and thus can equally well be described as articles which vary for number. The plural words in Kisi (Atlantic, Niger-Congo; Guinea) and Sanuma (Yanomam; Venezuela and Brazil) agree with the noun in noun class (Childs 1995: 148; Borgman 1990: 144-148).

The final type shown on the map are languages apparently **lacking a morphological plural** for which there is also no evidence from available data of plural words or clitics, though in some languages such may exist. An example of a language lacking a plural is Maranungku (Daly; Northern Territory, Australia; Tryon 1970: 12). Although such languages may simply not indicate plurality at all, the plurality of nominal referents is coded on the verb if the nominal is an argument of

the verb and if the language is one that codes the number of that particular argument on the verb.

There are also languages lacking a way of expressing plurality that nevertheless have means of expressing singular or dual. For example, in Aari (Omotic, Afro-Asiatic; Ethiopia), there is a singulative suffix but no plural marking (Hayward 1990a: 444). In Kayardild (Tangkic; Queensland, Australia), there is a dual suffix and a suffix that means a lot of whatever the noun denotes, but not really a plural per se (Evans 1995: 184). In Imonda (Border family; Papua New Guinea), there are only five nouns that are marked for number, but the number marking with these nouns is a suffix that indicates that a noun is either singular or dual and whose absence indicates plural in the sense of three or more (Seiler 1985: 38-39)

Languages differ considerably in how widely they indicate plurality (see chapter 34 for further discussion). While in many languages all count nouns have plural forms, there are also many languages in which plurality is restricted to animate nouns, or to human nouns, or to a subset of human nouns. If a language only has plural forms for a very small number of nouns, it is not shown on the map as having a morphological plural. But in some languages that are shown on the map as

having a morphological plural, plural morphology may be restricted to a closed class of nouns, such as kinship nouns, as in Wambon (Trans-New Guinea; Papua, Indonesia; de Vries 1989: 36).

Similar variety is found with plural words and clitics. In Kutenai (isolate; western North America), the plural clitic is only used with kinship terms and the word meaning 'friend'. Languages lacking an indication of plurality within the noun phrase are simply the limiting case along a continuum of how widely languages code plurality. It is also the case that languages differ in the extent to which indication of plurality is required with semantically plural referents, even when a morphological form is available. In many languages, such indication is not obligatory, though again this also may vary with animacy or humanness.

2. Geographical distribution

The map shows plural suffixes greatly outnumbering all other types shown on the map. They are widely distributed throughout the world; the largest area in which they are not found is Southeast Asia and most of the area in which Austronesian

languages are spoken. The largest area in which plural prefixes are common is in Africa, especially among Bantu languages in the southern half of the continent, but also among languages in other branches of Niger-Congo. The map shows plural prefixes scattered among Austronesian languages in the general vicinity of Indonesia and the Philippines, an area in which plural suffixes are generally lacking, but various other types are also common in this area, including plural by complete reduplication, plural words, and absence of plural altogether. Plural prefixes are completely lacking from two large areas: (i) the entire mainland of Europe and Asia, except for one language in southern Vietnam; (ii) an area in the New World stretching from Guatemala south to include all of South America. Languages with more than one primary morphological method for forming plurals are especially common in North Africa, among Berber languages and various varieties of spoken Arabic. Plural words and clitics are most common in southeast Asia and among Austronesian languages, in West Africa, and in the Amazon basin in South America.

3. Theoretical issues

Corbett (2000) discusses a wide variety of theoretical issues

relating to plurality and number.