Before going on to the last system in our typology, it is perhaps worth making it quite clear how these systems differ from that of English. Of course, it is possible in English to use the singular, the unmarked number, for more general reference, as in: *the lion is a noble beast*. Here we are not referring to one lion, but to lions more generally, so this usage is sometimes called 'generic'. We can also say *lions are noble beasts*. Hence in this type of expression, number is not particularly important.¹² But in most contexts we are forced to choose singular or plural, and the choice is significant. Imagine that I can see three lions in the garden. If I then say *there's a lion in the garden*, this is true but misleading, since the use of the singular in English implies that there is exactly one lion in the garden.

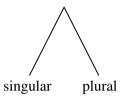


Figure 2.4 System with singular versus plural¹³

This leads us to the last possibility in our typology, and English is a good example of this. This is a system in which number must normally be expressed: there is no way of expressing general meaning (except by circumlocution), no forms outside the number system. We have the picture in figure 2.4. Let us consider our examples again, this time in normal English:

- (19) I saw a dog (exactly one)
- (20) I saw some dogs (more than one)

There is no form which would be appropriate for the readings of both (19) and (20). Indeed, this situation is taken by many people, including large numbers of linguists, to be completely normal and yet, as we have seen, there are many languages which employ rather different systems.

start here 2.2 Number values

Having established the place of general number as outside the number system, we now turn to the distinctions which may be drawn within number. We shall look at that part of the system in a given language which is of greatest interest in terms of

¹² Nevertheless, *the lion | lions | a lion* are not interchangeable in such uses; see Rusiecki (1991) for an interesting discussion of the differences.

Since English does not have general number, whether expressed by a unique form as in Bayso or by a form shared with another as in Japanese, the top node is unlabelled, leaving the opposition between singular and plural.

the distinctions available. This is often the personal pronoun, though sometimes particular classes of noun show greater possibilities. We return to relation between the different values and the different nominals in chapter 3.

2.2.1 The plural

The simplest system, and a common one, has an opposition:

singular plural

The singular–plural opposition is the primary one, on which all systems are built. Plural here refers to more than one real world entity. Quirk et al. (1985: 297) observe that English 'makes the division after "more than one" (one and a half days) unlike languages like French where plural implies 'two or more'.

2.2.2 The dual

The dual refers to two distinct real world entities. If a dual is added to our previous system, we have another common system:

singular dual plural

Examples can be found all over the world, for instance, in Upper Sorbian, a West Slavonic language (Stone 1993a). Some of the forms are given in table 2.1.

singular	dual	plural
ja 'I'	mój 'we two'	my 'we'
ty 'you'	wój 'you two'	wy 'you (all)'
hród 'palace, castle'	hrodaj 'two palaces/castles'	hrody 'palaces/castles'
dźĕłam '(I) work'	dźĕłamoj '(we two) work'	dźĕłamy '(we) work'

Table 2.1 *The dual in Upper Sorbian*

It is important to note that the introduction of the dual has an effect on the plural. More generally, a change in system gives the plural a different meaning; if the system is singular–dual–plural, the plural is for three or more real world entities, as noted by Saussure (1916/1971: 161). The dual has long fascinated linguists, a notable early example being Humboldt (1830); see Plank (1989) for illuminating discussion and references. Some Indo-Europeanists speculated on the reasons for what seemed its inevitable loss, unaware of the fact that in many languages from other families around the world it is thriving.¹⁴

For a discussion of semantic distinctions within the dual see Rukeyser (1997); for the related question of special forms for kin dyads in Australian languages see that reference, Dench (1987) and McGregor (1996). The dual's poetic functions in Slovene are considered

2.2.3 The trial

Just as the dual is for two, the trial is for referring to three distinct real world entities. Adding it in to systems like those just discussed gives the following system of number values:

singular dual trial plural

Such a system is found in Larike, a Central Moluccan language with 8,000–10,000 speakers on the western tip of Ambon Island, Central Maluku, Indonesia. Central Moluccan forms part of the Central Malayo-Polynesian subgroup of Austronesian; the data are from Laidig and Laidig (1990). Larike distinguishes singular, dual, trial and plural in its free pronouns (though there are no third person pronouns for non-human referents):

(21) Duma hima aridu na?a house that 1.TRIAL.EXCL own.it 'We three own that house'

It also makes these distinctions in its various series of pronominal affixes:

(22) Kalu iridu-ta-?eu, au-na-wela if 2.TRIAL-NEG-go 1.SG-IRR-go.home 'If you three don't want to go, I'm going home'

These affixes work on an agent–patient basis, hence the person–number affixes in (22) are agent markers.

It is interesting to note that the dual and trial forms originate from the numerals 'two' and 'three', and that the plural comes historically from 'four'. Such developments are fairly common in Austronesian languages (see §9.1.2 for explanation). However, as we shall see, there are descriptions of other languages where forms labelled 'trial' in the literature were once semantic trials but are now paucals, appropriate for use not only of three, but also of a small group greater than three. This shows again the need for care in the use of terms. The Larike trial is a genuine trial: 'it should be stated explicitly that Larike trials are true trial forms. In other words, they represent the quantity three, and are not used to refer to the more vague notion of several, as is a paucal or limited plural' (Laidig and Laidig 1990: 92). The Larike trial is 'facultative', a distinction to which we return in §2.3.3 below. Ngan'gityemerri (a Daly language with two dialects, Ngan'gikurunggurr and Ngan'giwumirri, and with 100 speakers, 300 miles SW of Darwin, Australia) also has a trial, strictly for three (Nicholas Reid 1990: 118–119 and personal

by Lenček (1982) and in Old English by Bragg (1989); the special development of the Icelandic dual is examined by Guðmundsson (1972). The dual will feature significantly in chapter 7, and its loss will be taken up in §9.1.2.

communication) as has Marrithiyel, another Daly family language (Ian Green 1989: 136–9). It occurs too in Anindilyakwa, the language of Groote Eylandt (the large island in the Gulf of Carpentaria, Northern Territory, Australia, about 1,000 speakers). In traditional Anindilyakwa it would have been more correct to call the form a paucal since it could be used for three to five, and not just for three; however, younger speakers, who have been through school, tend now to use it as a strict trial for three only (Velma Leeding 1989: 225 and personal communication). If

We have seen languages with genuine trials, appropriate just when referring to three entities. There is a question as to whether there are also languages with quadrals (for reference to four entities). However, having raised the issue of paucals, we shall first continue the analysis of these, and only then return to the question of quadrals.

2.2.4 The paucal

The paucal is used to refer to a small number of distinct real world entities. It is similar to the English quantifier 'a few' in meaning, particularly in that there is no specific upper bound that can be put on its use. (Its lower bound, like that of the plural, will vary according to the system in which it is embedded.) As noted earlier, Bayso has a paucal, with singular and plural, giving the following system (in addition to general number):

singular paucal plural

The paucal is used in Bayso for reference to a small number of individuals, from two to about six. Bayso has this system in nouns, as we saw in §2.1, but not in its pronouns (§4.5.4).¹⁷ The paucal is also found in Avar, but as a minor number there (§4.2.3).¹⁸

- ¹⁵ The trial is also facultative in Ngan'gityemerri, Marrithiyel and Anindilyakwa. For other languages with trials we do not have enough information to know whether they are facultative or obligatory; it may be that trials are always facultative.
- A clear inflectional trial is reported in Lenakel and other Tanna languages, which are part of Oceanic (Lynch 1977); Lynch is specific about the trial 'marking three only' (1986: 262). For evidence on the use of the trial in languages of Victoria and in Arabana see Hercus (1966); it is suggested (1966: 337) that the forms there originally meant 'a group of people standing or sitting together or associated with each other in some way'.
- Walapai (Hualapai), a Yuman language of north-western Arizona appears to have singular-paucal-plural for nouns, pronouns and verbs (Redden 1966: 149-50, 159); Pilagá, a Guaykuruan language of Argentina, has this system for classifiers, but the full number system includes a dual (Vidal 1997); Kayapó, a Jê language of Brazil, may have singular-paucal-plural in its pronoun system (Wiesemann 1986: 361, 368) but this requires further investigation.
- ¹⁸ The term 'restricted plural' may be found in place of 'paucal'. Sometimes the term 'paucal' is used for forms that are required with lower numerals. For instance, in constructions with

Systems with just a paucal in addition to singular and plural are rare. It is much more common to find it with a dual too, giving this system:

singular dual paucal plural

Here the meaning of the paucal changes to exclude two. This system is found, for instance, in Yimas, a Lower Sepik language with 250 speakers in the Sepik Basin of Papua New Guinea. The paucal is found in the pronoun and in the pronominal affixes on the verb. 'The paucal expresses a set of a few; more than two and usually less than seven, but the exact number varies quite widely according to context. Prototypically, however, it refers to a class of three to five individuals, and is always restricted to humans' (Foley 1991: 216). The restriction to humans is specific to Yimas, of course. The related language Murik formerly had this four-way number system for pronouns, nouns and agreeing adjectives (Foley 1986: 221–2). Another language with the system is Meryam Mir (Trans-Fly family) spoken in the eastern Torres Strait islands, but being squeezed out by Torres Strait Creole (Piper 1989). It too distinguishes singular, dual, paucal and plural (through complex morphology).

Dual and paucal are found in Fijian; for Boumaa Fijian, a dialect mutually intelligible with Standard Fijian, Dixon states that there is no fixed paucal–plural boundary, except that plural must be more than paucal. He points out a good example of its use in one of his texts:

It is an announcement about village work, which every adult person must do each Tuesday. The message is called out, by Suliano, three times, each in a different part of the village; it should reach the ears of one-third of the villagers each time. Suliano uses the paucal second person pronoun in addressing his listeners – you (*dou*, 2pa) listen, our (*odatou*, 1incpa) people in this part of the village. Then he says: I'm calling out the tasks of you (*omunuu*, 2pl), the women, for today because this is our (*oda*, 1incpl) day for village work. (Dixon 1988: 52; 'inc' = inclusive, 'pa' = paucal, 'pl' = plural)

Here the paucal is used for about twenty people, one-third of the adult villagers, and the plural for them all (about sixty). Schütz (1985: 251) also discusses the

the numerals '2', '3' and '4' in Russian, when they are in a direct case form, a special form of the noun is required, almost always the same as the genitive singular, but unique at least in terms of stress for a few nouns, for example *dva časá* 'two hours, two o'clock' (the genitive singular is *čása*). However, this special form depends entirely on the presence of the numeral, it is not part of the number system. This is shown by that fact that it is not possible to say *časá* meaning 'a small number (2–4) hours'. Hence the use of 'paucal' is inappropriate here. The use of the genitive singular is taken up in §6.7.1.

paucal in Fijian, and says that it can be used for three and for twelve. Some consultants put the limit at fifteen, others put it higher. He points out that contrast is more important than the specific number, and mentions a text in which approximately thirty people are referred to sometimes with the paucal and sometimes with the plural. Andrew Pawley (personal communication) also says that its range varies considerably according to the situation.¹⁹

This system (with dual and paucal) is found widely in other Oceanic languages besides Fijian, for instance in Paamese, spoken in Vanuatu. The factors governing the choice of paucal and plural have been well described:

The basic factor that is involved is the absolute size of the group being referred to. Intersecting with this parameter however is the question of relative size, i.e. whether the group being referred to is contrasted with some larger group within which it is subsumed. When the absolute number is low (say between three and about half a dozen), the paucal is generally used, whether or not there is any contrast with a larger group. (However, the plural will still very occasionally be used even with these low numbers when there is no such contrast.)

When the absolute number is in the middle range (say, between about half a dozen and a dozen or so), the most significant parameter is that of relative number. For instance, one's own patrilineage will be referred to paucally when it is contrasted with the village as a whole, which will be plural. On the other hand, the patrilineage will be expressed in the plural when contrasted with the nuclear family, which will be in the paucal.

As the absolute number increases over the middle range, relative number again becomes less significant, and the plural is generally used for all numbers over a dozen. (However, even with very large numbers, the paucal is occasionally used when the contrast in number is expressed. So, while the entire population of Paama will normally be expressed in the plural, even when contrasted with the country as a whole, it has been heard referred to paucally.) (Crowley 1982: 81)

Staying within Oceanic, the singular-dual-paucal-plural system also occurs in Manam, spoken on islands off the north coast of Papua New Guinea (Lichtenberk 1983: 108–9), and in Ambrym, which has around 400 speakers on the island of

¹⁹ For the system in Wayan (a local language within the Fijian subgroup with 2000 speakers on two islands at the western margin of Fiji) see Pawley and Sayaba (1990: 152, 156).

Ambrym in the New Hebrides (Paton 1971: 12–13). This paucal is clearly a trial in origin, but is now used for small groups of persons. There are numerous instances of former trials becoming paucals, for instance in Kwaio, Sa'a, Langalanga and Lau, all Malaitan languages spoken in the Solomon Islands (Simons 1986: 33).²⁰

It is found in Australian languages too, in Ungarinjin (Rumsey 1982) and in Murrinh-Patha, a Daly family language of north-west Australia. As I. Green (1993, chapter 6) points out, there have been two slightly different assessments of its paucal (which is found in the verb paradigm and in the free pronouns). Walsh (1976: 150) says the paucal is for 'no less than three individuals and up to about ten individuals', while Street (1987: 49) gives its range as three to approximately fifteen. This suggests again that its use varies from context to context.

	singular	dual	trial	paucal	plural
1 exclusive	yo	gel	getol	gehet	ge
1 inclusive	_	kito	kitol	kitahet	giet
2	wa	gol	gotol	gohet	go
3	e	dul	dietol	diehet	die

Table 2.2 Independent pronouns in Lihir

The paucal has been found in a more complex system too, with four other values, possibly in this configuration:

singular dual trial paucal plural

This system in question is found in Lihir, an Oceanic language spoken on a group of tiny islands off New Ireland (PNG). It is a member of the New Ireland Network, but does not belong to the same branch as Sursurunga and Tangga to be discussed below (Ross 1988: 258). The data are from Malcolm Ross (unpublished fieldnotes), from the dialect spoken on Lihir Island itself. As table 2.2 shows, five numbers are distinguished in each person, the only gap being the logically necessary one in that the first person singular cannot be inclusive. The same distinctions are found in the set of possessor suffixes (used on inalienables). The problem here is not the paucal, whose status is sure, but the 'trial', whose usage is not known. (If it is a paucal, giving the language a paucal and a greater paucal, then it would have a system like Sursurunga, discussed in §2.2.5 below.) Whether we have a trial or two paucals, Lihir is of considerable interest as a language with the maximum number of number values.

²⁰ The dual is less prone to this development. However, Blanc (1970: 45) notes that the former dual can be used for a small number in Arabic dialects, which suggests that a development of dual to paucal is possible.

-het

paucal

Lihir number markers		Proto-C	Oceanic numerals	Lihir numerals	
-1	dual	*rua	two	lo	two
-tol	trial	*tolu	three	laktul	three

four

burut

four

Table 2.3 *Lihir number markers (Malcolm Ross, personal communication)*

The origin of the forms can be traced back around 3,500 years to the Proto-Oceanic numerals, as given in table 2.3. Note that it is not only the paucal whose origin is obscured; comparison with the modern numerals shows that the origin of the dual and trial is no longer clear either. Such examples refute any suggestion that larger number systems might be no more than the use of numerals: in Lihir the number markers and numerals are evidently distinct.

*pati

We have seen that the paucal may be found in different systems, and the lower bound on the number of entities referred to varies accordingly.

2.2.5 The question of quadrals

We now consider whether there are languages with the following system:

Such languages would have a quadral, a set of forms specifically for the quantity four. If such languages exist, they are rare and all the claims come from within the Austronesian family. A well-documented suggested case is Sursurunga (Hutchisson 1986, and personal communications), which has some 4,000 speakers in southern New Ireland. It is one of the South New Ireland/West Solomonic languages, which form part of the New Ireland Network, that being a branch of Melanesian, within Oceanic, in turn part of Austronesian (Ross 1988: 258). The forms labelled quadral are restricted to the personal pronouns, but are found with all of them, the first person (inclusive and exclusive), the second and the third.

We retain the term 'quadral' in table 2.4 and in this section, while we give the reasons why it should be replaced for Sursurunga (as indeed should 'trial'); in later references to Sursurunga we replace it. Here is an example of a quadral form in use:

(23) gimhat káwán

1.EXCL.QUADRAL maternal.uncle:nephew/niece
'we four who are in an uncle-nephew/niece relationship'

Besides being used of four, the quadral has two other uses. First, plural pronouns are never used with terms for dyads (kinship pairs like uncle-nephew/niece in (23))

	singular	dual	trial	quadral	plural
1 exclusive 1 inclusive 2	iau — iáu ²¹ -i/on/ái	giur gitar gaur diar	gimtul gittul gamtul ditul	gimhat githat gamhat dihat	gim git gam di

Table 2.4 Emphatic pronouns in Sursurunga

and the quadral is then used instead for a minimum of four, and not just for exactly four (Hutchisson 1986: 10). The second additional use is in hortatory discourse; the speaker may use the first person inclusive quadral, suggesting joint action including the speaker, even though more than four persons are involved. These two special uses account for most instances of the quadral. If our terminology is based on meaning, the term 'quadral' is hardly appropriate, when in the majority of its uses the forms are not restricted to denoting foursomes. The forms might be better designated 'paucal'.

Let us consider the rest of the system in more detail (examples and judgements from Don Hutchisson, personal communications). The dual is used quite strictly for two people (if there are two it must be used, and if it is used it indicates two). It is also used for the singular when the referent is in a taboo relationship to the speaker. This is a special use (of the type to be discussed in §7.1) which does not alter the fact that its main use is as a regular dual. The trial will be used for three. But, it is also used for small groups, typically around three or four, and for nuclear families of any size. It is therefore not strictly a trial, rather it could be labelled a paucal (an appropriate gloss would be 'a few'). We saw earlier that the trial frequently develops in this way. The quadral, as we have noted, is primarily used in hortatory discourse and with dyad terms; but otherwise it is used with larger groups, of four or more (an appropriate gloss would be 'several'). This too would qualify as a paucal; we therefore have two paucals, a (normal/lesser) paucal (traditionally trial) and a greater paucal (traditionally quadral).

The next example is particularly helpful for distinguishing the use of the two forms. It is from a letter to Don Hutchisson written in 1976:

²¹ ά is used to indicate schwa (Φ); this is the preferred form according to Hutchisson (personal communication), rather than 'a, as in Hutchisson (1986: 20fn7). Other changes from the 1986 paper, like -hat for -at in the quadral, are based on personal communications.

iau lu mákái málálár gamtul minái i 1.SG HABITUAL see photo 2.TRIAL here in rum house

'I am thinking about you [QUADRAL] all the time because I often see the picture of you [TRIAL] here in my house'

The family consists of four members; the quadral is used first (perhaps to stress that all four are included), but then the writer moves to the trial, more normal usage for a small group. The entire family is intended in each case.

The next example is from a village meeting:

(25) Gamhat til tártár main gam han suri 2.QUADRAL from here 2.PL go **PURPOSE** chop kakau káián Himaul viles, honin on **TOPIC** Himaul village it cacao its today dihat má lu tangkabin sirai HABITUAL 3.QUADRAL **EMPHATIC** begin selling má . . . now

'You all from here (i.e. from this village) went to slash (for burning, then planting) Himaul village's cacao, which already they (i.e. people from Himaul) have begun to sell...'

This is hortatory discourse, so the initial quadral form is quite expected. But then the plural occurs for the subject/agent, soon after the quadral which was used to define the group the writer is referring to. The people from Himaul are also referred to with a quadral.

As an example of a plural, here is the beginning of a description of how to build a cook house.

(26) Ngo gim nem longoi pal, 1.PL.EXCL OBJ make when want cook.house gim urami bos gim ái han 1.PL.EXCL jungle 1.PL.EXCL **TOPIC** up.to go tan káláu mái tan wák. males and.TOPIC²² females

28

²² mái is a contraction of má 'and' and ái topic marker.

'When we (i.e. Sursurungas) want to build a cook house, we go up to the bush, that is we men and women.'

Here Hutchisson believed a quadral would not be used, since the group (Sursurungas in general) is too large. Similarly in the following example:

(27)Má máhán kis main git arwat 3.SG exist here 1.PL.INCL and war to enough mai a hit á bet. with 3.SG seven RELATER year

'And the war was here among us (i.e. in this area) for seven years.' (From a story about World War II.)

Use of the quadral in this example would limit the area being referred to, say to a single village or a small group of villages, or it would limit the group, say to those alive during the war and affected by it directly. Hence the plural, as we would expect, is for numbers of entities larger than are covered by the quadral; however, there is no strict dividing line (certainly not at the number five).

If we use semantic labels, as we have done in the rest of the chapter, we should not call the forms trials and quadrals. Both have functions we have seen with paucals elsewhere. We may therefore represent the system in Sursurunga like this:

singular dual paucal greater paucal plural

The system is no less interesting since it has a well documented five-valued number category.

Another language with five values is Sursurunga's close relative Tangga (Capell 1971: 260–2; Beaumont 1976: 390; confirmed by Malcolm Ross, personal communication; note that Capell and Beaumont used the term 'quadruple'). Here we know that there are five forms, but we do not have such detailed information as we have for Sursurunga. Yet it seems clear that the forms which have the numeral 'four' as their source are not quadrals but rather paucals (Malcolm Ross, personal communication citing Maurer 1966; this is also Schmidt's view given in Capell 1971: 261). Unfortunately, as with Lihir, we have no information on whether Tangga has a genuine trial or whether it has two paucals.

The third language which has been claimed to have a quadral is more distantly related; it is Marshallese, a member of the Micronesian group within Austronesian, with some 20,000 speakers on the Marshall Islands. It has five number forms for the first, second and third person pronouns (Bender 1969: 8–9). We shall return to it when we discuss facultative numbers in §2.3.3. As in Sursurunga, the form which has been called the quadral has an additional use: with groups of more than four it is often used rhetorically to give an illusion of

intimacy (Bender 1969: 159). Again, then, it appears that this may not be strictly a quadral; we shall therefore treat it as a paucal. Byron Bender (personal communication) has no evidence for any comparable extension to the trial, so we shall treat Marshallese as having singular, dual, trial, paucal and plural.

These are the three best claims for quadrals. There are several false trails in the literature, that is, suggestions of other Austronesian languages with quadrals, which turn out in fact to have four number values not five. In such cases, the plural may have a form in which the numeral four can be reconstructed. We return to the development of such forms with plural meaning in §9.1.2; their existence as plurals suggests that there might have been instances of the quadral number since lost. Or it may be that once the numeral four becomes grammaticalized as a number value, it is inevitably used for groups larger than four. We have found no clear case of a quadral, by which we mean a grammatical form for referring to four distinct real world entities in the way that trials refer to three.

2.2.6 Greater numbers

Languages may have a secondary split into normal and 'greater' (sometimes termed 'lesser' and 'greater') within certain number values. The two which may be split are the paucal and the plural. There are relatively few known cases of split numbers and the account here is tentative.

Consider first the paucal. It is rare to find a split in the paucal, but that is exactly what we found in Sursurunga (§2.2.5). Either set of forms (those labelled 'trial' and those labelled 'quadral') would independently be reckoned a paucal on semantic grounds. We therefore treat them as a paucal and a greater paucal.

Splits within the plural are more common. Claiming such a split, into greater and normal plural, implies that both would independently count as plural. Since even the lesser is a plural (used where languages with just one plural would use it), we shall call it simply 'plural'.²³ The 'greater plural' typically implies an excessive number, sometimes called 'plural of abundance', or else all possible instances of the referent, sometimes called the 'global plural'. We shall use 'greater plural' to cover the different types (abundance, global). The evidence is limited, but it comes from a variety of languages and sources, sufficient to indicate that there is an interesting phenomenon that deserves study. More examples with careful descriptions of their meanings would be welcome. Again the definition is a semantic one. There are many instances of nouns taking more than one plural marker (these are 'double plurals', for which see §5.3.6). We are concerned here only with instances

It may be objected that 'plural' is different if in opposition to a 'greater plural' as compared to when it is the only plural. But this is also true, as noted earlier, of 'plural' in a system with a dual and 'plural' in a system without. An advantage of avoiding 'lesser plural' is that this term is sometimes used for 'paucal'.

where the different plural forms have different meanings. (For instances where the ordinary plural is used with this effect see §7.3.2.)

Banyun

A potentially interesting case of a language with a greater plural is Banyun, a language of the West Atlantic branch of Niger-Kordofanian, spoken in Senegal and Guinea Bissau. There is a little information in Sauvageot (1967: 227–8). Nouns typically have singular and plural, distinguished by prefixes of the type shared by many Niger-Kordofanian languages:

(28)	bu-sumol	i-sumɔl²⁴
	SG-snake	PL-snake
	'snake'	'snakes'

In addition there is a greater plural (which Sauvageot calls 'unlimited'), in this case *ba-sumol* 'snakes', which Sauvageot suggests is used when the number cannot be counted or the speaker feels it unnecessary. There are various prefixes available to signal the greater plural; they are not equivalent in that one of them, *ti-* as in *ti-sumol* 'snakes (unlimited)' implies more than *ba-* as in *ba-sumol*. Noun phrase modifiers such as adjectives agree, distinguishing the various singular, plural and greater plural classes.²⁵ (A similar distinction is reported in Senufo, see discussion of Sauvageot's paper, 1967: 236.)

Fula

Related to Banyun, since both are members of the West Atlantic branch of Niger-Kordofanian, is Fula, which is widely spoken across west and central Africa (the Fouta Jalon dialect was discussed in §2.1 above). Here some nouns have two plurals 'one to imply a normal number of items and the other to imply a very large number of items' (Evans 1994: 21.6), for example, as shown in table 2.5. In the

Table 2.5 Plural forms in Fula

singular	plural	greater plural	gloss
ngesa	gese	geseeli	field
wuro	gure	gureeli	herd

²⁴ Sauvageot calls this the 'limited plural'; this term is confusing because it too has been used as a synonym for 'paucal' (for instance, by Capell 1976: 15; see also the quotation from Laidig and Laidig 1990: 92 in §2.2.3). We shall therefore avoid the term 'limited plural'.

²⁵ The existence of different agreement markers distinguishes Banyun from several languages with a greater plural.

second example, *gure* 'herds (plural)' might be the herds of one man, his flock of sheep, his goats and his cows. This is a case, however, where there is insufficient evidence to know whether we really have two plurals or a paucal and a plural.

Arabic

In Arabic too, there are nouns with two plural forms, and in describing Syrian Arabic Cowell (1964: 369) gives helpful pointers to their status. Recall first from §2.1 that some types of Arabic noun have a general ('collective') form, for instance $d entberack{o}bb\bar{a}n$ for which, given real world considerations, the natural gloss is 'flies'. If it matters to specify one fly, then there is the singular $d entberack{o}bb\bar{a}ne$; there is a corresponding dual $d entberack{o}bb\bar{a}nt\bar{e}n$ and a plural $d entberack{o}bb\bar{a}nat$. It would appear that anything one might want to say about flies is provided for. But this is one of the instances where there is a fifth form $d entberack{o}bab\bar{n}n$ 'many flies'. Cowell treats this as the plural of the collective. Such plurals may function, in his terms, as 'plurals of abundance' (for a formal approach to the semantics see Ojeda 1992a).

This is an instance of a recurring phenomenon, namely the formation of a plural whose predictable function is not required, and which takes on a different one. In Arabic, there is no obvious function for the plural of a collective when there is an ordinary plural available; where the 'extra' form exists, it may take other functions: one is the 'sort' reading as in English (§3.7.2), and another is the 'abundance' reading, so *dababīn* can mean 'various flies' or 'many flies'. When there is a plural of abundance (only certain of the nouns with collective forms have them) this may affect the meaning of the normal plural (sometimes then called the 'plural of paucity' so that the use of the latter implies that the entities referred to are few and are individually discriminated. However, this is not always the case.

Thus some Arabic nouns have two plurals; the relations between them vary. The existence of the greater plural may as it were 'push down' the ordinary plural into the position of a paucal (for the situation in Classical Arabic see Wright 1967: 234; the analysis is not uncontroversial, for discussion see Ratcliffe 1998: 79–81).

Hamer

In Hamer (or Hamar), it has been claimed by Lydall (1976, 1988) that a distinction can be drawn between a plural for a particular number ('particular plural', our 'plural') and plural for all instances ('global plural', a type of 'greater plural'). Hamer is a South Omotic language, which has about 15,000 speakers in the south-west corner of Ethiopia. Nouns have a general form, which, as in languages already discussed, stands outside the number system. Thus $k'\dot{u}li$ means 'goat' or 'goats'. This should be contrasted with the singular forms (Lydall 1988: 81–2), for which see table 2.6. The singular formed with the suffix -tal-a is for the male (of animates) and for the 'minor' singular of inanimates, used for something which is

Table 2.6 Number forms in Hamer

general form	singular	plural (particular plural)	greater plural (global plural)
k'úli 'goat(s)'	k'últa 'he-goat' k'úllo 'she-goat'	k'úlla 'the goats'	k'últono 'all goats'
goiti/goin 'path(s)'	goita 'path (little used)' goinno 'main path'	goinna 'the paths'	goitino 'all paths'

'small, minor, individual, infrequently used, or seldom found' (Lydall 1988: 79). The -no suffix, on the other hand, is used with certain nouns for a female (animate nouns) or, with inanimate nouns, for the 'major' singular, used for large and major things.²⁶

The contrast between the number forms in the table, according to Lydall, is between a particular number of items, and all items.²⁷ Unfortunately Lydall gives little more information on the choice. In particular, it would be good to know how different this system is from those where there is an interaction of number with definiteness (for which see §9.2.4).

Kaytetye

Kaytetye is an Arandic language (part of Pama-Nyungan) spoken in Central Australia. Information is from Harold Koch (personal communication; see Koch 1990 for some of the morphology, and for textual examples see Koch and Koch 1993). The pronouns distinguish singular, dual and plural. Nouns need not mark number: marking is most likely for nouns denoting humans and least likely for those denoting inanimates. In addition to having the three-way distinction of the pronouns, nouns split the plural into a normal plural marked with the suffix *-amerne*, and a greater (global) plural ('all the X in the universe of discourse'), marked with the suffix *-eynenge*. Both plurals can serve as antecedents for the single set of plural pronouns. Kaytetye then is a clear instance of a language with a greater plural alongside the normal plural. (Kaytetye is also interesting in respect of facultative number, a topic we discuss in §2.3.3 below.)

In the case of inanimate nouns, for single syllable nouns, and two-syllable nouns which end in a consonant, major singular and global plural will be identical in form (Lydall 1988: 80): nu 'fire' gives nuno 'large/main fire' (major singular) or 'fire considered as a whole' (global plural). In addition there is nuta 'small fire' and nuna 'the (particular) fires' (particular plural).

²⁷ As a curiosity, Larry Trask points out (personal communication) that there is a celebrated fictional example. J. R. R. Tolkien, in *The Lord of the Rings* invented a number of languages, including the elvish language Quenya. This language distinguishes a global plural from the ordinary plural: *el* 'star', *elen* 'stars', *elenath* '(all) the stars'.

Mokilese

Mokilese is a Micronesian language with around 400 speakers on Mokil Atoll (East Caroline Islands) and up to 1 000 speakers on Ponape. It has a greater plural in the personal pronouns (called the 'remote plural' by Harrison 1976: 88–9) as illustrated in table 2.7. *Ngoahi*, and *koawoa* are emphatic forms. Note that the plural is formed by the addition of -*i* to the dual; in fact the plural represents a former trial, and the old plural survives as the greater ('remote') plural (Sheldon Harrison, personal communication); these survivals are the key to understanding the otherwise surprising plurals of several related languages (see §9.1.2). The possessive suffixes, which attach to nouns, also have remote plural forms (for remote plural possessors). Determiners do not have distinct remote plural forms (they have only a singular–plural opposition); and nouns mark number only through demonstrative suffixes.

Table 2.7 Mokilese personal pronouns (Harrison 1976: 88)

	singular	dual	plural	greater plural (remote plural)
1st person exclusive	ngoah, ngoahi	kama	kamai	kimi
inclusive	_	kisa	kisai	kihs
2nd person	koah, koawoa	kamwa	kamwai	kimwi
3rd person	ih	ara, ira	arai, irai	ihr

The column headed 'plural' gives the normal plural forms. The remote plural forms are little used:

The remote pronouns refer to groups of people, usually large, and most of which are probably not directly present when being discussed. Thus, *kihs* 'we' refers to the speaker, the hearer, and a large group of people not present at the time of the conversation. Similarly, *kimi* 'we' refers to the speaker and to a group of others not present; *kimwi* 'you', to the hearer and others not present, and *ihr* 'they' to a group of people not present.

Since *kihs*, for example, commonly refers to very large groups of people, it is often used to refer to all the people of Mokil, or to the whole human race. (Harrison 1976: 89–90)²⁸

The plural would be for smaller but more significant groups, the remote for larger, amorphous groups, who are not main protagonists in what is being related. Remote pronouns may also be used in generic sentences.

²⁸ This account shows that the forms we have labelled 'greater plural', Harrison's 'remote plural', can be used both in the 'abundance' sense and in the 'global' sense.

Mele-Fila

A particularly interesting five-member system including a greater plural is found in Mele-Fila, an Eastern Oceanic language spoken on Vanuatu. The data are from Ross Clark (personal communications). In Mele-Fila, the article makes a three-way distinction which, were it the only number system, we would treat as singular—paucal—plural. The forms are in table 2.8, with the noun *nuaane* 'old man'. The underlying form of the plural article is /a/, but before nouns of more than two morae, the form is zero.

article distinctions	singular	paı	paucal plu		
article plus noun ('old man')	t-nuaane	ru nu	uaane nua		ane
pronoun distinctions	singular	dual	plural		greater plural
pronoun	aia	raaua	raateu		reafa
'constructed' number	singular	dual	paucal	plural	greater plural

Table 2.8 Number contrasts in Mele-Fila (data from Ross Clark)

The pronoun makes four distinctions rather than three, and the relation to the article is not straightforward. Let us consider the pronoun on its own first. It has singular and dual forms, and then the remaining space is divided between a plural and a greater (global) plural. For the singular, the match between article and pronoun is clear. However, the dual pronoun is appropriate only for some cases where the paucal article would be used. On the other hand, the pronoun *raateu* covers the remaining area of the paucal article, but splits the range of the plural article, the part left over being covered by *reafa*. If we put the two systems together we have five number distinctions, as in the last line of the table. Systems where different syntactic elements combine to give the full range of distinctions will be termed 'constructed number' systems; these will be discussed in more detail in §5.7.

Other languages claimed to have a greater plural include Zulu (Doke 1992: 79–80), Setswana (for nouns denoting animals, Cole 1955: 82), Miya (Schuh 1989: 175n3) and Breton (Trépos 1957: 266–7). It is noticeable that splits in the plural are more frequent for nouns than pronouns, and it may well be that it is usually only for limited groups of nouns, the extreme case here being Tigre, which has just one noun with a greater plural (*nälät* 'kind of deer', Palmer 1962: 39). However, we have also seen a split within the pronoun system, as in Mokilese.