

## Comparative Reconstruction

Using information from sets of cognates from different (but apparently related) languages, we can embark on a procedure called comparative reconstruction. **The aim of this procedure is to reconstruct what must have been an earlier or even the possible “proto” form in the common ancestral language.** In carrying out this procedure, we can make use of *two very general principles*. **The majority principle** is very straightforward. If, in a cognate set, three words begin with a [p] sound and one word begins with a [b] sound, then our best guess is that the majority have retained the original sound (i.e. [p]). **The most natural development principle** is based on the fact that certain types of sound change are very common, as shown in Table 17.1, whereas changes in the other direction are extremely unlikely.

Table 17.1 Direction of change Examples

1 Final vowels often disappear

vino → vin

2 Voiceless sounds become voiced, often between vowels muta → muda

3 Stops become fricatives ripa → riva

4 Consonants become voiceless at the end of words rizu → ris

### Comparing Cognates

If we take some examples of cognates from three languages, as shown below, we can make a start on comparative reconstruction by deciding what was the most likely form of the initial sound in the original source of all three. Since the written forms can often be misleading, we check that the **initial sounds** of the words in languages A and B are all [k], while in language C, the initial sound in all the words is [ʃ].

A	B	C
cantare	cantar	chanter (“sing”)
catena	cadena	chaîne (“chain”)
caro	caro	cher (“dear”)
cavallo	caballo	cheval (“horse”)

### Sound Reconstruction

Within the small set of languages just presented, the majority principle would be used to argue that the initial sound [k] in languages A and B is older than the [ʃ] sound in language C. Adding support to this analysis, the [k] sound is a stop consonant and the [ʃ] sound is a fricative. According to one part

of the “most natural development principle” (in Table 17.1), change occurs in the direction of stops becoming fricatives, so the [k] sound is more likely to have been the original. We have started on the comparative reconstruction of the common origins of some words in Italian (A), Spanish (B) and French (C). In this case, we have a way of checking our reconstruction because the common origin for these three languages is known to be Latin. When we check the Latin cognates of the words listed, we find *cantare*, *catena*, *carus* and *caballus*, confirming that [k] was the initial sound.

## Word Reconstruction

Looking at a non-Indo-European set of cognates, we can imagine receiving the following data from a linguist recently returned from an expedition to a remote region of the Amazon. The examples are a set of cognates from three related languages, but what would the proto-forms have looked like?

Languages 1	2	3
Protoforms		
mube	mupe	mup _____ (“stream”)
abadi	apati	apat _____ (“rock”)
agana	akana	akan _____ (“knife”)
enugu	enuku	enuk _____ (“diamond”)

Using the majority principle, we can suggest that the older forms will most likely be based on language 2 or language 3. If this is correct, then the consonant changes must have been:

[p] → [b],

[t] → [d] and

[k] → [g] in order to produce the later forms in language 1.

There is a pattern in these changes: voiceless sounds became voiced between vowels. So, languages 2 and 3 have older forms than language 1. Which of the two lists, 2 or 3, contains the older forms? Remembering one other “most natural development” type of sound change (i.e. final vowels often disappear), we can propose that the words in language 3 have consistently lost the final vowels still present in the words of language 2. Our best guess, then, is that the forms listed for language 2 are closest to what must have been the original proto-forms.