

# 3

## The development of writing

---

Every once in a while my eight-year-old daughter comes up to me when I'm working and puts her arm around me in a transparently insincere display of affection, then walks away giggling. As soon as she's gone, I pat my hand around on my back to find a Post-it that says something like "I'm a knucklehead." You'd think that pronoun *I* wouldn't mean anything if I didn't put it there myself, but somehow I'm implicit in the utterance. She has visited a small indignity on me, and we both know it.

This is about the most powerful magic you can work with writing, putting a first-person pronoun into somebody else's mouth. It was probably no more than a couple of weeks after the invention of cuneiform in Sumer five millennia ago that some scribe had the idea of pressing the characters for "Kick me" into a clay tablet and fastening it to the back of the robes of a passing priest.

**Nunberg (2001)**

It is important, when we consider the development of writing, to keep in mind that a large number of the languages in the world today are used only in the spoken form. They do not have a written form. For those languages that have writing systems, the development of writing, as we know it, is a relatively recent phenomenon. We may be able to trace human attempts to represent information visually back to cave drawings made at least 20,000 years ago, or to clay tokens from about 10,000 years ago, which appear to have been an early attempt at bookkeeping, but these artifacts are best described as ancient precursors of writing. The earliest writing for which we have clear evidence is the kind that Geoffrey Nunberg is referring to as 'cuneiform' marked on clay tablets about 5,000 years ago. An ancient script that has a more obvious connection to writing systems in use today can be identified in inscriptions dated around 3,000 years ago.



Much of the evidence used in the reconstruction of ancient writing systems comes from inscriptions on stone or tablets. If those ancients were using other elaborate scripts on wood, leather or other perishable materials, we have lost them. But working from the inscriptions we do have, we can trace the development of one writing tradition, lasting a few thousand years, with which humans have sought to create a more permanent record of what was going on.



## Pictograms and ideograms

Cave drawings may serve to record some event (e.g. Humans 3, Buffaloes 1), but they are not usually thought of as any type of specifically linguistic message. They are usually treated as part of a tradition of pictorial art. When some of the ‘pictures’ came to represent particular images in a consistent way, we can begin to describe the product as a form of picture-writing, or **pictograms**. In this way, a form such as ☀ might come to be used for the sun. An essential part of this use of a representative symbol is that everyone should use a similar form to convey a roughly similar meaning. That is, a conventional relationship must exist between the symbol and its interpretation.

In time, this picture might develop into a more fixed symbolic form, such as ☉, and come to be used for ‘heat’ and ‘daytime’, as well as for ‘sun’. Note that as the symbol extends from ‘sun’ to ‘heat’, it is moving from something visible to something conceptual (and no longer a picture). This type of symbol is then considered to be part of a system of idea-writing, or **ideograms**. The distinction between pictograms and ideograms is essentially a difference in the relationship between the symbol and the entity it represents. The more ‘picture-like’ forms are pictograms and the more abstract derived forms are ideograms.


A key property of both pictograms and ideograms is that they do not represent words or sounds in a particular language. Modern pictograms, such as those represented in the accompanying illustration, are language-independent and can be understood with much the same basic conventional meaning in a lot of different places where a number of different languages are spoken.




It is generally thought that there were pictographic or ideographic origins for a large number of symbols that turn up in later writing systems. For example, in Egyptian hieroglyphics, the symbol  was used to refer to a house and derived from the diagrammatic representation of the floor-plan of a house. In Chinese writing, the character  was used for a river, and had its origins in the pictorial representation of a stream flowing between two banks. However, it is important to note that neither the Egyptian nor the Chinese written symbols are actually ‘pictures’ of a house or a river. They are more abstract. When we create symbols in a writing system, there is always an abstraction away from the physical world.

When the relationship between the symbol and the entity or idea becomes sufficiently abstract, we can be more confident that the symbol is probably being used to represent words in a language. In early Egyptian writing, the ideogram for water was . Much later, the derived symbol  came to be used for the actual word meaning ‘water’. When symbols are used to represent words in a language, they are described as examples of word-writing, or ‘logograms’.



## Logograms

A good example of logographic writing is the system used by the Sumerians, in the southern part of modern Iraq, around 5,000 years ago. Because of the particular shapes used in their symbols, these inscriptions are more generally described as **cuneiform** writing. The term cuneiform means ‘wedge-shaped’ and the inscriptions used by the Sumerians were produced by pressing a wedge-shaped implement into soft clay tablets, resulting in forms such as .




The form of this symbol really gives no clue to what type of entity is being referred to. The relationship between the written form and the object it represents has become arbitrary and we have a clear example of word-writing or a **logogram**. The cuneiform symbol above can be compared to a typical pictographic representation of the same fishy entity: . We can also compare the ideogram for the sun, presented earlier as , with the logogram used to refer to the same entity found in cuneiform writing: .

A modern writing system that is based, to a certain extent, on the use of logograms can be found in China. Many Chinese written symbols, or **characters**, are used as representations of the meaning of words, or parts of words, and not of the sounds of spoken language. One of the advantages of such a system is that two speakers of very different dialects of Chinese, who might have great difficulty understanding each other’s spoken forms, can both read the same written text. Chinese writing, with the longest continuous history of use as a writing system (i.e. 3,000 years), clearly has many other advantages for its users.




One major disadvantage is that quite a large number of different written symbols are required within this type of writing system, although the official list of modern Chinese characters for everyday use is limited to 2,500 characters. (Other lists contain up to 50,000 characters.) Remembering large numbers of different composite word symbols, however, does seem to present a substantial memory load, and the history of most other writing systems illustrates a development away from logographic writing. To accomplish this, some principled method is needed to go from symbols representing words (i.e. a logographic system) to a set of symbols that represent sounds (i.e. a phonographic system).

## Rebus writing

One way of using existing symbols to represent the sounds of language is through a process known as **rebus writing**. In this process, the symbol for one entity is taken over as the symbol for the sound of the spoken word used to refer to the entity. That symbol then comes to be used whenever that sound occurs in any words.




We can create an example, working with the sound of the English word *eye*. We can imagine how the pictogram  could have developed into the logogram . This logogram is pronounced as *eye* and, with the rebus principle at work, you could then refer to yourself as  (“I”), to one of your friends as








†○ (“Crosseye”), combine the form with the logogram for ‘deaf’ to produce “defy”, with the logogram for ‘boat’ to produce “bow-tie”, and so on.

Let’s take another, non-English, example, in which the ideogram  becomes the logogram , for the word pronounced *ba* (meaning ‘boat’). We can then produce a symbol for the word pronounced *baba* (meaning ‘father’) which would be . One symbol can thus be used in many different ways, with a range of meanings. What this process accomplishes is a sizeable reduction in the number of symbols needed in a writing system.

## Syllabic writing

In the last example, the symbol that is used for the pronunciation of parts of a word represents a combination (*ba*) of a consonant sound (*b*) and a vowel sound (*a*). This combination is one type of syllable. When a writing system employs a set of symbols each one representing the pronunciation of a syllable, it is described as **syllabic writing**.

There are no purely syllabic writing systems in use today, but modern Japanese can be written with a set of single symbols representing spoken syllables and is consequently often described as having a (partially) syllabic writing system, or a **syllabary**. In the early nineteenth century, a Cherokee named Sequoyah, living in North Carolina, invented a syllabic writing system that was widely used within the Cherokee community to create written messages from the spoken language. In these Cherokee examples,  (*ho*),  (*sa*) and  (*ge*), we can see that the written symbol in each case does not correspond to a single consonant (C) or a vowel (V), but to a syllable (CV).

Both the ancient Egyptian and the Sumerian writing systems evolved to the point where some of the earlier logographic symbols were used to represent spoken syllables. However, it is not until the time of the Phoenicians, inhabiting what is modern Lebanon between 3,000 and 4,000 years ago, that we find the full use of a syllabic writing system. Many of the symbols that the Phoenicians used were taken from earlier Egyptian writing. The Egyptian form  (meaning ‘house’) was adopted in a slightly reoriented form as . After being used logographically for the word pronounced *beth* (still meaning ‘house’), the symbol came to represent other syllables beginning with a *b* sound. Similarly, the Egyptian form  (meaning ‘water’) turns up as  and is used for syllables beginning with an *m* sound. So, a word that might be pronounced as *muba* could be written as , and the pronunciation *bima* could be written as  . Note that the direction of writing is from right to left. By about 3,000 years ago, the Phoenicians had stopped using logograms and had a fully developed syllabic writing system.

## Alphabetic writing













If you have a set of symbols being used to represent syllables beginning with, for example, a *b* sound or an *m* sound, then you are actually very close to a

situation in which the symbols can be used to represent single sound types in a language. This is, in effect, the basis of alphabetic writing. An **alphabet** is essentially a set of written symbols, each one representing a single type of sound. The situation just described is generally what seems to have occurred in the development of the writing systems of Semitic languages such as Arabic and Hebrew. Words written in these languages, in everyday use, largely consist of symbols for the consonant sounds in the word, with the appropriate vowel sounds being supplied by the reader (or rdr). This type of writing system is sometimes called a **consonantal alphabet**. The early version of Semitic alphabetic script, originating in the writing system of the Phoenicians, is the basic source of most other alphabets to be found in the world. Modified versions can be traced to the East into Iranian, Indian and South-East Asian writing systems and to the West through Greek.

The early Greeks took the alphabetizing process a stage further by also using separate symbols to represent the vowel sounds as distinct entities, and so created a remodeled system that included vowels. This change produced a distinct symbol for a vowel sound such as *a* (called ‘alpha’) to go with existing symbols for consonant sounds such as *b* (called ‘beta’), giving us single-sound writing or an ‘alphabet’. In fact, for some writers on the origins of the modern alphabet, it is the Greeks who should be given credit for taking the inherently syllabic system from the Phoenicians and creating a writing system in which the single-symbol to single-sound correspondence was fully realized.

From the Greeks, this revised alphabet passed to the rest of Western Europe through the Romans and, along the way, underwent several modifications to fit the requirements of the spoken languages encountered. As a result, we talk about the Roman alphabet as the writing system used for English. Another line of development took the same basic Greek writing system into Eastern Europe where Slavic languages were spoken. The modified version, called the Cyrillic alphabet (after St. Cyril, a ninth-century Christian missionary), is the basis of the writing system used in Russia today.

The actual form of a number of letters in modern European alphabets can be traced, as in the illustration, from their origins in Egyptian hieroglyphics.

Egyptian	Phoenician	Early Greek	Roman
			B
			M
			S
			K

## Written English

If indeed the origins of the alphabetic writing system were based on a correspondence between a single symbol and a single sound type, then one might reasonably ask why there is such a frequent mismatch between the forms of written English (*you know*) and the sounds of spoken English (*yu no*).

The answer to that question must be sought in a number of historical influences on the form of written English. The spelling of written English was largely fixed in the form that was used when printing was introduced into fifteenth-century England. At that time, there were a number of conventions regarding the written representation of words that had been derived from forms used in writing other languages, notably Latin and French. Moreover, many of the early printers were native Dutch speakers and could not make consistently accurate decisions about English pronunciations.

Perhaps more important is the fact that, since the fifteenth century, the pronunciation of spoken English has undergone substantial changes. For example, although we no longer pronounce the initial *k* sound or the internal *ch* sound, we still include letters indicating the older pronunciation in our contemporary spelling of the word *knight*. So, even if there had been a good written-letter to speech-sound correspondence at that time, and the printers had got it right, there would still be major discrepancies for the present-day speakers of English.

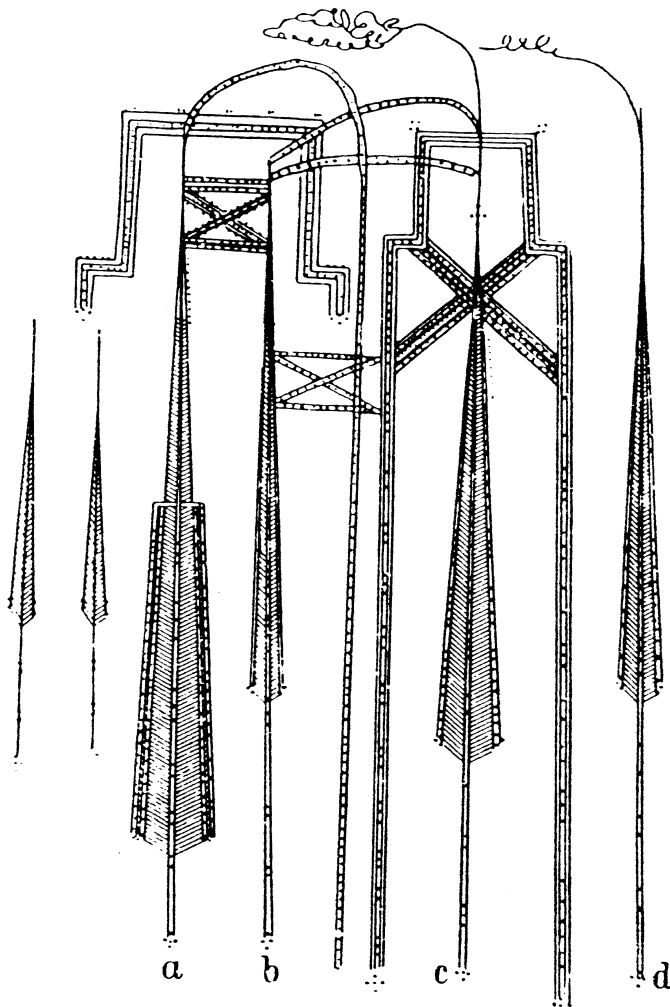
If we then add in the fact that a large number of older written English words were actually ‘recreated’ by sixteenth-century spelling reformers to bring their written forms more into line with what were supposed, sometimes erroneously, to be their Latin origins (e.g. *dette* became *debt*, *iland* became *island*), then the sources of the mismatch between written and spoken forms begin to become clear. Even when the revolutionary American spelling reformer Noah Webster was successful (in the USA) in revising a form such as British English *honour*, he only managed to go as far as *honor* (and not *onor*). His proposed revisions of *giv* (for *give*) and *laf* (for *laugh*) were in line with the alphabetic principle, but have obviously not been generally accepted. How we go about describing the sounds of English words in a consistent way, when the written forms provide such unreliable clues, is a problem we try to solve in chapter 4.

### ■ Study questions

- 1 What is the basic difference between pictograms and ideograms?
- 2 What is the basic difference between a logographic writing system and a phonographic writing system?
- 3 What happens in the process known as rebus writing?
- 4 Which modern language has a (partially) syllabic writing system?
- 5 What is the name given to the writing system used for Russian?
- 6 Where will you find the writing system with the longest history of continuous use?

### ■ Research tasks

- A What is boustrophedon writing and when was it used?
- B What kind of writing system is Hangul, where is it used and how are words written on the page?
- C The majority of symbols (QWERTY) on a keyboard used with a computer or typewriter belong to an alphabetic system. What about other symbols on the keyboard such as @, %, &, \$, \*, +? Are they alphabetic, syllabic, logographic or ideographic? How would you describe other special symbols such as ✂, ☞, ☺, ♥, ©, ☠, or :-)?
- D In the accompanying illustration there is a copy of a letter described in Jensen (1969). The letter is from a young woman of the Yukagirs who live in northern Siberia. The woman (c) is sending the letter to her departing sweetheart (b). What do you think the letter is communicating? Who are the other figures? What kind of 'writing' is this?



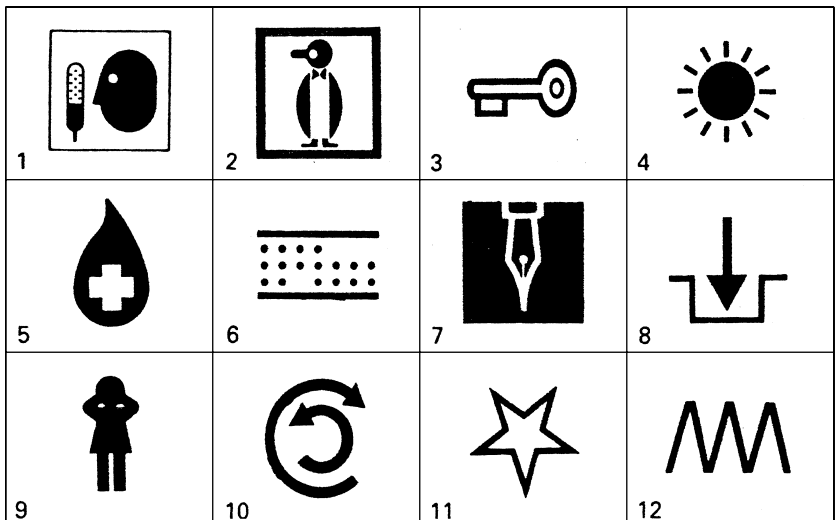
## ■ Discussion topics/projects

I According to Florian Coulmas, “the present distribution of scripts testifies to the close link between writing systems and religion” (2003: 201). Do you think that the spread of different religions (more than anything else) accounts for the different forms of writing used in the world today? What kind of evidence would you use to argue for or against this idea? (For background reading, see chapter 10 of Coulmas, 2003.)

II Pictograms may be language-independent, but they do not seem to be culture-independent. In order to interpret many pictographic and ideographic representations, we have to be familiar with cultural assumptions about what the symbols ‘mean’.

- (i) As a simple exercise, show the twelve symbols illustrated below to some friends and ask them if they know what each one means. (People may say they have never seen them before, but they should be encouraged to guess.)
- (ii) Next, provide them with the following list of ‘official meanings’ and ask them to decide which symbol goes with which meaning.
  - (a) agitate
  - (b) blood donors
  - (c) dry, heat
  - (d) keep frozen
  - (e) lock
  - (f) lost child
  - (g) registration
  - (h) telegrams
  - (i) open door or lid
  - (j) press, interview room
  - (k) protection and safety equipment
  - (l) turning basin maneuvering (boats)
- (iii) Can you describe what kinds of cultural assumptions are involved in the interpretation of these symbols?

(The symbols are from Ur, 1988.)





### ■ Further reading

Introductory accounts of the development of writing can be found in chapter 12 of Fromkin *et al.* (2003) or chapter 16 of O'Grady *et al.* (2005). More complete descriptions of writing systems are in Campbell (1997), Coulmas (2003), Sampson (1985) and in the encyclopedic volume by Daniels & Bright (1996). Classic volumes on the subject are Gelb (1963) and Jensen (1969). Illustrations of a wide range of contemporary scripts can be found in part 3 of Comrie *et al.* (1997) or Nakanishi (1990). For more information on ancient languages, see Woodard (2003) and, on the role of clay tokens as precursors of writing, see Schmandt-Besserat (1996). There are detailed studies of boustrophedon writing in Jeffery (1990) and, of Hangul, in Kim-Renaud (1997). For more information on the alphabet, see Man (2000) or Sacks (2003). For more on English spelling, see Carney (1997).