SCRIPT

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Summary

A script consists of a set of visible marks or graphs that are related to some structure in the linguistic system. General writing systems all analyze the linguistic form into constituents of meaning or sound. The Sumerian system seems to be the oldest writing system. The evolution of the alphabet involved two important achievements. The first was the invention of a consonantal writing system. The second was the invention of characters for representing vowels. The cultural transmission of memory was part of every culture long before there was writing. The content of that cultural memory was, however, limited by the ability of individuals to remember. The invention of signs for representing language – even if not all, or even very few were able to read them – shifted some of this burden from human brains and their ability to remember to objects, stone, clay, parchment, paper and the signs on these objects. The ease of acquisition of a script is an important factor in determining whether a script remains the possession of an elite or whether it can be democratized, that is, turned into a possession of ordinary people. Writing can also be a fine art, calligraphy, an art that has often been held to occupy the highest place among the visual arts in China.

1. Types of Writing Systems

A writing system consists of a set of visible marks or graphs that are related to some structure in the linguistic system. If a character represents a meaningful unit, such as a morpheme or a word, the script is called logographic writing, if it represents a syllable, it is called syllabic writing; if a segment of a syllable, it is called consonantal writing; and if a phoneme, it is called an alphabetic system.

Most alphabetic writing systems are not very consistent in associating a specific phoneme with a specific letter of the alphabet. A single sound may be written with three letters (,sch' in German, ,eau' in French). The same sound may be represented by a number of different graphemes (,plough', ,sow' in English), or different sounds by the same grapheme (,plough', ,through' in English). There is a technical phonetic alphabet devised by the International Phonetic Association, designed to transcribe any oral language into a common script.

The informational signs at a modern international airport are pictorial signs and have no direct relationship to any spoken language, and they are an extremely limited set of alternatives, just sufficient to direct a multilingual audience. Such writing is of little use for conveying new messages and it is not a general writing system.

General writing systems all analyze the linguistic form into constituents of meaning or sound. Chinese script is primarily a logographic script; each word or morpheme is represented by a single graph or character. Two words, even if they sound exactly the same, will be represented by entirely dissimilar characters. But that means that the number of logographic characters to be memorized is extremely large.

Syllabaries provide a distinctive symbol for each distinct syllable. A syllable is a unit of speech composed of a vowel sound or a combination of consonant and vowel sounds. A syllabary such as Linear B, the Mycenaean script dating from about 1400 BC, would have a graph for each syllable. Syllables are the most readily distinguishable units of speech, and consequently, the earliest of the sound-based, or phonographic, writing systems are syllabic. The number of syllables in a language, while differing considerably from language to language, is always quite large, some hundreds of graphs may be required to make a functioning syllabary.

Consonantal writing represents the consonantal value of a syllable while ignoring the vowels, with the result that a certain amount of guesswork is involved in determining which syllable is being represented. When a consonantal system is used to represent a language like English, discarding the vowel results in a highly ambiguous written expression. But in Hebrew and Arabic, the absence of characters representing vowels is much less serious, because in these languages vowel differences generally do not distinguish morphemes, but tense and aspect.

Alphabetic systems represent the phonological structure of the language. The alphabet presupposes the ability to analyze the syllable into consonant and vowel constituents. The economy of representation comes from the fact that a large number of syllables can be generated from a small set of these constituents. It is a script suited to representing a language in which morphological differences are marked in phonological differences. For the Chinese language a logographic system is more efficient.

Phonemes can be analyzed into sets of features. The phonemes represented by the letters n and d share the feature of the tongue touching the alveolar ridge above the upper teeth. Featural writing systems analyze the sounds described as consonants and vowels into their shared and distinguishing features. An examples of writing systems that employ at least in part a featural approach is the Korean Hangul (han'gul) script. In Hangul,

vowels are represented by long horizontal or vertical lines distinguished by small marks, while consonants are represented by two-dimensional signs that suggest the articulations involved: pairs of lines representing lips together, tongue touching the roof of the mouth, an open throat, and the like.

To facilitate fast and accurate recognition, the form of writing was improved by introducing spaces between the words, developing conventions for punctuation and paragraphing, and simplifying graphic forms. This evolution continued through the invention of printing and the invention of type fonts.

The particular form of writing, whether logographic, syllabic, or alphabetic, is less important than the existence of some form that is general enough to serve a full range of purposes. Literate societies, whether Chinese or Sumerian, have always been esteemed by nonliterate societies, which have borrowed heavily from them. Thus the Romans borrowed Greek literacy, and the Japanese and Koreans borrowed Chinese literacy. Once adopted and used for administrative, scientific, legal, and literary purposes, literacy altered the society that it was part of in a variety of ways.

Writing allows exactly repeatable statements to be circulated widely and preserved. It allows readers to scan a text back and forth and to study, compare, and interpret at their leisure. It allows writers to deliberate over word choice and to construct lists, tables, recipes, and indexes. It fosters an objectified sense of time, a linear conception of space. It separates the message from the author and from the context in which it was written, thereby "decontextualizing," or universalizing the meaning of, language. It allows the creation of new forms of verbal structure, like the syllogism, and of numerical structures, like the multiplication table. When writing becomes a predominant institutional and archival form it has contributed to the replacement of myth by history and the replacement of magic by skepticism and science. Writing has permitted the development of extensive bureaucracy, accounting, and legal systems organized on the basis of explicit rules and procedures. Writing has replaced face-to-face governance with written law and depersonalized administrative procedures. And, on the other hand, it has turned writers from scribes into authors and thereby contributed to the recognition of the importance of the thoughts of individuals and consequently to the development of individualism. (see *Media*)

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Bibliography

Cohen, Marcel (1970), La grande invention de l'écriture et son évolution. Paris [The history of signs and script]

MacLuhan, Marshall (1962), *The Gutenberg Galaxy*. Toronto : University of Toronto Press. [On media and the invention of printing, and its social consequences]

MacLuhan, Marshall and Quentin Fiore, *The medium is the massage. An inventory of effects.* London, Toronto 1967

Saussure, F. de (1916), Cours de linguistique générale. Paris, Lausanne. [Basic text of modern linguistics]

Sutton, James (1965), *Signs in action*. London, New York. Studio Vista, Reinhold. [on the use of signs and script]

Biographical Sketch

Peter Horn studied German and English at the University of the Witwatersrand. In 1971 he graduated Ph.D. from the University of the Witwatersrand with a thesis on "Rhythm and structure in the poetry of Paul Celan", and was offered the chair of German at the University of Cape Town in 1974. From 1987 to 1990 he was Dean of the Faculty of Arts, and from 1993-1994 Acting Deputy Vice-Chancellor of the University. He was president South African Association of German Studies (1989-1997), president of the Institute for Research into Austrian and International Literary Processes (Vienna) (2001-), on the executive committee of the Elias-Canetti-Gesellschaft, the National Executive of the Congress of South African Writers (COSAW) (1991 - 1992), the National Executive of the South African Writers' Association. Besides he was Honorary Vice President of the National Union of South African Students (1977-1981), Trustee of the South African Prisoners' Educational Trust Fund (1980-1985), and a member of the Interim Committee of the Unemployed Workers' Movement (1984/5). In 1974 he received the Pringle Prize of the South African English Academy for an essay to the concrete poetry, in 1992 he received the Noma Award for Publishing in Africa (Honourable Mention for Poems 1964-1989), and in 1993 the Alex La Guma/Bessie Head Award and in 2000 the Herman Charles Bosman Prize for the short story collection My Voice is under Control now. In 1994 the University of Cape Town granted him a Honorary Fellowship for life. Two of his volumes of poetry and numerous other publications by him were banned for possession during the Apartheid regime. His poems are anthologised in most major anthologies of South African poetry, and more than 100 have been published in journals. He has published numerous contributions to academic books, learned journals, and reviews and review articles.