

THE EVOLUTION OF EXPRESSED THOUGHT.

BY F. W. FITZPATRICK.

IN writing to a friend, did you ever stop to think how wonderful it is that you can thus convey to your friend the duplication of your thoughts, the innermost workings of your mind? Probably you have not. Familiarity with wonderful things breeds a species of contempt for them. We accept writing and printing, travel by rapid train or in an automobile or aeroplane, the sending of wireless messages, all these things as mere matters of course, and marvel not. With writing it is much as with all the other inventions that have been carried to a high degree of perfection and simplicity. We are so far from the clumsy beginnings of the thing, we are so very familiar with it only in its perfected form, that few of us ever bother our minds as to how it came about or the steps through which it has progressed to its present perfected state. Had it not been for writing, "speaking signs", in some form or other and of however rude a character, what would we know today of what took place yesterday or a hundred or a thousand years ago? Yet less than a century ago it was still impossible to write the correct history of those signs, the forerunners, or the forebears, of our modern writing; but researchers into archeology, and learned philologists have delved into the antiquities of Egypt, of the Orient, of Mexico, and the older civilizations, and have been able to decipher the meanings of the signs and writings they found, and have done it so well that today we have positive information where even but a few years ago all was conjecture. The findings of these men make interesting reading.

In the earliest times, man sought to leave behind him or to communicate to his fellows his thought or a simple record of what he had done. To accomplish this he had recourse to the most elementary means, fit only to give the slightest idea of the fact he wished to state. He associated the idea with the physical object made or observed by him. Later on, as he grew wiser, he discovered a

mnemonical aid to his own remembrance of what he had done or to the perpetuation of that information to others in the shape of fashioning out of natural objects, boulders, tree limbs, etc., rude representations of this or that. Later still he began to draw rough outlines of animals or men, with dried clay, upon the smooth surface of rocks. Then he discovered several pigments, and filled in solidly with color between those outlines he had learned to draw.

The artist, Alexander beautifully illustrates this process of evolution of the art of writing, or, as he shows it, printing, in his masterly series of paintings in the lobby of the Library of Congress at Washington. In one panel he depicts a lot of primitive men building up a heap of stones by the seaside, a "cairn" to mark the stage in the journey of that tribe. In the next panel is shown an Arabian story-teller declaiming to his people "tradition". Following these panels is one wherein an Egyptian workman is cutting hieroglyphics over a portal to a temple; then follows an American Indian "picture-writing" or telling the story of his people's wars by depicting warriors, horses, and arrows in distemper color upon the crudely dressed skin of a deer. Next is a monk in his cloister cell, patiently toiling away at illuminating a manuscript, telling us the story of the Middle Ages; and then comes Guttenburg and his assistants at work about his printing press, the most useful invention of all times.

But, to get back to our great-grandfathers' fore-fathers. From drawing upon smooth surfaces, it was but a step to incising similar pictures with a sharp instrument upon trees, or even engraving them upon rocks. Some primitive tribes, however, had the draftsman's bump so little developed that they never got to the picture stage, but were content with certain rudimentary combinations of straight and oblique lines, that meant something to themselves, and that it has taken us an age and many sulphurous exclamations to decipher. They traced those lines upon skins and upon dried leaves, and did get far enough along to cut them into trees and rocks. Others used bits of grass-woven string, knotted here and there to mean certain things. The fellow who ties a knot in his handkerchief to remember something he has to do during the day, is but reverting to the expedients of his ancient tribal forebears.

Chinese tradition has it that this knotting of strings and also the cutting of little twigs to varying lengths originated in Hoango, and, as a matter of fact, the more or less barbarous tribes, the Miaos and others of southwestern China, still use those modes of

communication. In Peru, under the Incas, knotted strings of different lengths and colors were the mediums of a really high order of "speaking signs", in which much subtlety of expression was possible.

One of the sacred books of China, the Y-King, describes a lot of mysterious signs invented by their famed king, Fou-hi, that were nothing more than representations of knotted strings affixed to twigs that in turn were notched. These notched sticks, khi-mous, were used by the Tartar chiefs in transmitting their orders until the introduction of the ouigour alphabet of Syrian origin. When the Germanic peoples first became acquainted with the Latin letters, they called them *buchstaben*, associating them in their minds with the notched sticks of their ancestors. And the Scandinavians still have their *bak-stafin*, or divining-rods, undoubtedly traceable back to the same origin.

Our North American Indians intercommunicated, and recorded events, by means of as rudely drawn picture-signs as we were guilty of in our early childhood, before we graduated into the colored pencils and ground-glass stage of our existence. Yet they managed to convey much information by those self-same rough pictures, their history, their mythologies, their medicine prescriptions and a host of other matters. The farther south you trace these Indians the higher cultivation do you find, and the nearer approach to refinement of expression as well as of execution in their pictures. When Cortez first penetrated into Mexico in 1519, he found that the people had carried their picture language to such perfection that it was indeed an art. In this ideographic painting, they used the same tropes and figures of thought as we do in speech, metaphor, metonymy and synecdoche. In that they resembled the Egyptians: could they have been of common origin? Both peoples used a part to represent a whole, or even an entire class. For instance, did they wish to convey the idea of retreat, they merely drew a lance or an arrow and a pair of human legs running from the lance. That was as clear to them and to our scientists today as if they had drawn two full bands of warriors, one fleeing from the other. Certainly it involved much less work, a sort of Pitman stenographic system, that gives us an arm brandising a sort of hatchet against another arm protected by a shield to show that such a man successfully withstood the attack of such another. This manner of abbreviation must not be confounded, however, with the Chinese hoei-i signs or combinations. The two

systems are radically different. With the Chinese it was merely a qualification, a sort of constant adjective formation. With them a bird and a human mouth pictured together meant to sing; an eye in water, tears; an ear between two flaps of a screen door, to listen, etc.

With the more cultivated nations, this picture language soon grew into a veritable science, too involved and subtle for the ordinary mortal; it became the mode of communication between the official and the priestly classes, and its deciphering today involves the greatest research into, and most intimate familiarity with, their ways and ideas. Unless you know that they thought the vulture bred from the female alone, how could you surmise that that bird was the Egyptian symbol of maternity? Or that the goose stood for filial devotion, if you had not learned that the Nile goose was supposed to care for the parent bird until the latter finally shuffled off into the green lotus fields of goose heaven?

This picture painting and engraving was not only done upon rocks and tree trunks, but was used architecturally to decorate the portals of the temples; in fact, whole fronts of buildings were so covered, and became lasting inscriptions; aye, complete histories of the times and the people. But these were immovable books, so to speak. A demand arose for something that could be carried away if the people were attacked, or that could be moved if they found a more fertile country; some durable record, but one that could be transported more easily than could a temple or a tree. So they took to drawing their figures upon dried skins, broad palm leaves, and rudely woven stuffs. Some enthusiasts, notably the Polynesians, used their own skin for that purpose. That, possibly, was the beginning of tattooing. Upon those stalwart islanders you could read the story of their lives, their feats of valor, their exploits, even the records of their obligations and debts. We still brand our cattle with certain signs that set them apart as ours, our sailormen still tattoo certain signs of their trade upon their chests and arms, and it was not so many centuries ago that our fathers branded criminals with a letter that stood for the crime of which they were found guilty. Some one has said that it takes a thousand generations to completely eradicate all trace of a custom!

Soon these peoples, as conditions changed and civilization progressed, wrote or made signs and figures more and more frequently, until by dint of freedom in drawing, practice, and much abbreviation, they reduced their different series of figures to merest

signs, a system almost tachygraphic, and to us, at this date, bearing little resemblance to the forms they are supposed to represent. They grow more and more cursive. Witness the hieratic writing upon some of the older papyri. This again was improved upon, and all semblance to the old forms is lost in the writings we find that were executed under the later Pharaohs and Ptolemies, demotic writing.

In China these picture-signs were even more conventionalized than among the Egyptians or Mexicans. They became mere up and down strokes, with a few side ones thrown in to keep peace in the family. The writing ceased to be figurative to become purely semiographic or formations representing clusters of ideas or ideograms. And thence grew the cuneiform writing, each sign bearing no longer any semblance to a picture, but having a defined value mnemonically, and many of them even phonetically.

We are passing from one system to another,—half an hour to cover all of them! Do you want an idea of the time taken for the evolution of picture writing? From the time we know some peoples were using it—there is every reason to suppose, too, that others used it centuries before that—to the period we have just glanced at, when it began to be cumbersome and grew into cuneiform and other conventional lines, over fifteen centuries had elapsed.

Our scholars have deciphered nearly all of these forms, excepting only the Hittite inscriptions and the katoun signs upon some of the Yucatan monuments that still remain closed books to them and, needless to add, spurs to redoubled efforts toward getting at their true meaning.

It is an interesting but too long a task to trace this transition, where a sign ceases to represent a real object and simply recalls to mind the sound of the word that has been selected as its name, all through the inscriptions and papyri and clay tablets of the Egyptians, the Assyrians, the Chinese, the Babylonians, and the Medes.

The Chinese language and writing of today has grown but little from that old form. They have no grammar, at least as we understand the term; a word can mean twenty different things, dependent upon its position in a sentence. And so it is with the old phonetic writing. A sign meant this or that dependent upon its position with other signs; and then again minor signs accompanied it to still further explain it. Note the terra-cotta tablets found at Nineveh; they are veritable graphic concordances. There are three columns of signs: the central one is composed of the cuneiform

characters to be explained, the column to the left gives the phonetic form, and that to the right the Assyrian equivalent.

The Egyptians were the first to drift into some semblance of an alphabet system, but they gave up their old ideographic forms most reluctantly, and only because commercial and other necessities demanded the clearer, and in every way better mode of intercommunication; for those old forms had religious and historical significance, and, in some cases, were really objects of veneration. Indeed, some of them were believed to have been revealed to them directly by their great god, Thoth!

Such transitions were easier far to a people less susceptible to the claims of tradition. The Japanese, for instance, about the third century of our era, borrowed, we may say, the Chinese language in its entirety. They took its idioms and syllables and comparatively new form of alphabet, impressed upon all of these their own phonetic sounds, and where the Chinese used but monosyllables, they, a polysyllabic people, fixed up the words of more than one syllable by as many single signs as they had syllables and for centuries have gotten along with the old manyo-kana of the forty-seven borrowed Chinese characters.

But we are getting ahead of our story.

The Mexicans, the Chinese, and the Assyrians did not get beyond the idea of a syllable. The Egyptians went marching on. They conceived the notion of letters that represented not only vowel but consonants, a sort of abstraction of the vocal sounds that allowed of what might be called "clearer motion". Their vowels, as we may notice in the Coptic of our own time, were vague sounds.

The Phenicians completed the work, and gave the world an alphabet of twenty-two letters, a dozen of which may be traced back to the old hieratic writing of two thousand years before our era.

All the modern alphabets, excepting perhaps the Korean,—that takes its characters from the earliest Chinese figures,—are Canaanitish in their derivation, and it is well established that the Phenician alphabet is the male ancestor of all the alphabets of Europe and Asia.

The most archaic of Grecian alphabets, attributed by them as a heavenly invention of that fabulous personage, Cadmus, are manifestly borrowed from Phenicia. The oldest Greek alphabet that we know of, that given us in the inscriptions found upon the island of Thera, dating back to the eighth century before Christ, proves

this most conclusively. The Greeks soon modified these configurations and characters, and before long their writing lost all semblance to its prototype. The Greeks always were great fellows to borrow something particularly good from their neighbors, and then perfect it to the point where the lender could not recognize it.

At first they, like the Phenicians, wrote from right to left. Then they took the notion to write the first line from right to left, the next one from left to right, and following down so, alternately, first one way and then the next. Presumably they did that to imitate as nearly as they could on a flat surface the serpent-like inscriptions they were then engraving on their vases, beginning at the top at the right and winding on down around and around. Later they adopted the left-to-right system altogether. Kirchlhoff has cleared up many cloudy points about the early Greek writing, how those in the West adopted an alphabet of twenty-five letters, while those of the East stuck to their original twenty-six, the Ionians using but twenty-four, whereas the Eolo-Dorian alphabet had twenty-eight. About the fifth century before our era, and as a consequence perhaps of a great convention of school-teachers (?), they abandoned all these different alphabets, to settle upon one, a modified Ionian of twenty-four letters, and made it the standard for all Greece.

The Hellenic colonies that settled in Sicily and toward the center of Italy, carried thither their Eolo-Dorian alphabet, and it is the root of the Etruscan and Latin alphabets from which all western European alphabets have sprung.

If you have time and opportunity, follow the Phenician inspiration, as it might be called, through all those early ramifications. You will be able to trace it through the famed inscriptions of Mescha, the king of Moab; that other inscription you will find upon each of the bronze and iron weights of Nimrod, and that inscription upon the sarcophagus of Eschmounasar in the Louvre. You can trace it down all through the Semitic writing and the early Hebrew,—not that square Hebrew we are used to and dates back only to the first century of our own era, but the good old Hebrew untainted by Greek and other Gentile influences.

The Syrians were the first to join their characters together as we do in writing, and from them sprang the Auranian and Sabian alphabets, examples of which writing we have in the inscriptions found about Sinai: they, in turn, were the progenitors of the Arab

alphabet that, unchanged today, is used in the later magnificent manuscripts, the *veskhk* or "copyists' alphabet".

The influence of this Syrian formation is seen even in the Chinese and other Oriental alphabets. In the seventh century A. D., certain Nestorian monks penetrated into Tartary and did much to improve if not change the people's inscription of *Si-ngua-fou*. The Mongols, Manchus, and Kalmucks followed suit.

Interesting, but too confusing and long, are the twistings and turnings of the Phœnician root through the magadhic and other alphabets of India, of Numidia, and of Ethiopia. Nor can we take the time to even glance at Zendish, the Pahlavic, the Himyaritic, and the other thousand and one subdivisions of our subject.

As peoples and religions grew in strength, so, in the same ratio, was their mode of writing learned by or imposed upon other peoples; hence it is that one epoch in history shows the preponderance of one system or language over that of another, perhaps inferior to the former. It was evolution, if you wish, but not an evolution based upon scientific progression. Now no nation penetrated further into the "contiguous territory of the enemy" than did the Romans so it can not matter for much surprise that the Latin alphabet was carried so far and wide. And where it was not implanted on the point of the lance as it were, made the "official" alphabet of the conquered region, it was more peacefully introduced by the apostles and early missionaries of the church.

The formation and application of the Latin alphabet, with its resultant writing, may be divided into three sections for our study. The first comprises the period from its beginning up the thirteenth century A. D.; the second on up to the sixteenth century; and the third to our own times.

During the first, and much of the second period, capitals were used in all inscriptions upon all coins and other important places, but they had lost much of their majestic form and regularity; they hardly bore any resemblance to the fine old lettering found upon the friezes of the earlier temples and basilicæ. They became well named; they were called "rustic". To hide the fact that people could not draw them as accurately as of old, the corners were rounded off, exaggerated tails were fixed, and much flourishing was resorted to. Besides, much less capitalization was used; little letters predominated in the manuscripts of that period. The goose-quill came into use about the seventh century and was responsible for much cursive, scratchy writing.

The second period might be called a perfecting, upon almost entirely new lines, of the first's debased forms. What we call the "Gothic", a really pretty writing, came into vogue. It lent itself admirably to the art of the illuminator, who reached the very top-most rung of the ladder of perfection in the fifteenth century. The missals and Bibles and public documents, yes, even the private letters done by the scribes of those days, were marvels of pictorial as well as of chirographic art.

The multiplicity of deeds and other legal forms, the exigencies of commerce, and the growing tendency to record events and impressions, and the awakening of the people from the literary lethargy of the Middle Ages, impelled inventors to devise something easier, cheaper, and quicker than fingers and pens to make books and copies. Guttenberg supplied the needed improvement, and from his time may be dated the downfall of writing as an art. Stenography and the typewriter have completed the work.

Some scientists are craning their necks awaiting the coming of some new form of writing or alphabet. They argue that we have reached but another step in the evolution of language and expression; that Volapuk, Esperanto, or some other mode of expression and signs not now thought of, will be the perfected outcome of their efforts. Our best authorities agree, however, that we have built the completed structure, that nothing better can be done. We may devise new and more rapid typesetting processes, and speak into phonographs that will reel off finished books at the other end, but our alphabet, our expression, our form of speech and its reduction to legible duplication can not be improved upon. And why are they not right? Is it not so with art, for instance? We have photography, engraving, lithograph, for reproducing pictures; automatic tools, pneumatic carving appliances for statuary, wonderful facilities for building that our fathers knew not of; but I think the reader will agree with me that the limit of perfection and beauty and originality in painting, in sculpture and in architecture was reached some time ago.

At times it is with regret that I contemplate all this typewriting and printing and dictation to feminine or mechanical ears. It all robs us of the great advantage there used to be in "reading writing". As we can trace the civilization and refinement of the early races through their inscriptions and papyri, so we used to be able to trace the characteristics, the nature, the very thoughts almost of our correspondents when they used to write to us. To-

day all letters are the same, they all wear the blue or green masked type-face and are words, merely words! The character, the soul is not there. I have before me, as I write—I am an old-fashioned fellow and have not yet learned the new-fangled typewriting or dictation system, and may I long be preserved from it!—the original or fac-simile writing of many celebrities, and how clearly that writing shows me their personality; writing is indeed an open book with double indexes to character. There is the small, neat and legible handwriting of Grover Cleveland. You think a great man, a big man in every sense of the word, must needs write a great dashing hand? Not at all. Look at that writing. To the uninitiated it looks "clerky". It is the writing of a thinker, an original thinker, a man who can and will do big things and who brooks no opposition while he is doing them. Another writing not unlike this is Edison's, small and almost "copper plate" in its regularity, and the two men are not unlike. There is Sarah Bernhardt's, written not a year ago, getting a wee bit shaky, but still the scratchy, nervous jabs of genius. See how dissimilar is Chamberlain's from Salisbury's; and could two men be more unlike? Note the painstaking and exact yet sure writing of Pasteur and Jules Verne's is of the same order; the gentlemanly and self-satisfied writing of Lowell, and who would take Thomas Carlyle's writing for anyone's else or for writing at all for that matter? And Robespierre's and Napoleon's, the lamented Victoria's and McKinley's, and Hanna's and the rest of them, the mighty ones; interesting all, and sad the thought that this art of writing is so fast becoming obsolete. Scarce have we a man's signature now to gauge his character by; and what will future generations do when they wish to trace this or that trait through the present age, when they have nothing to judge by, save the everlasting same Remington or Underwood or Smith, or the hundred other indistinguishable blue or black, English, French, German or Italian marks we are making today? Mere "speaking signs" indeed.