

THE  
PRINCETON REVIEW.

OCTOBER, 1854.

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No. IV.

Editor's Introduction

ART. I.—*India: Its Past and Future.*

1. *Indische Alterthumskunde* von Christian Lassen, ord. Prof. an der Universität zu Bonn. 1ster Band. *Geographie und die älteste Geschichte.* Bonn, 1847. 2ter Band. *Geschichte von Buddha bis auf die Ballabhi und jüngere Gupta Dynastie.* 1852.
2. *The Calcutta Review.*

A well known writer of Great Britain at times indulges in the imaginary vision of some traveller from New Zealand taking his stand, in the midst of a vast solitude, on a broken arch of London Bridge to sketch the ruins of St. Paul's. This, to a majority of readers, suggests a time immeasurably remote, a time that will, that can never come. And this we must call natural. The same spirit exists in all ages. Doubtless, the men of Nineveh, in their pride and power, never dreamt that civilization and knowledge should once fix their abode in continents utterly unknown to them; and that travellers from distant regions, from an isle, cold, dreary, and barbarous in their time, should in vain labour to decypher on some mouldering pedestal the name of their proudest chief. Doubtless the princes, the philosophers, the merchants, of tumultuous Alexandria,

*From Henry Green.*

ART. II.—Origin of Writing.

*The Development of Writing*, by Dr. H. Steinthal, Privatdocent in the University of Berlin, 1852. 8vo. pp. 113.

*Palaeography an aid in Linguistic Investigations shown particularly in the Sanscrit*, by Dr. Richard Lepsius, extraordinary Professor at Berlin 1842. 8vo. pp. 101.\*

WE have placed the names of these treatises at the head of this article without the design either of discussing or of reproducing the philosophical speculations which they contain. We are constrained to admit that they are too dreamy or too intangible for our taste or our comprehension. Nor is it our purpose to bring forward an original discussion of our own, with the hope of throwing new light upon a question so often and so profoundly treated, and which nevertheless remains involved in so much mystery and obscurity. We shall simply, without committing ourselves positively in its favour, but for the sake of its readier presentation, appear as the advocate of one of the most plausible of the many ingenious hypotheses, by which the attempt has been made to account for the origin of writing. And in so doing we shall pretend to no refined ingenuity and no profundity of research: we shall aim at nothing farther than in the plainest and most familiar way to render this scheme intelligible even to non-scientific readers.

It is surprising how the evidences of divine wisdom and foresight thicken about him, who has once commenced to observe them. The defect of one of the smallest members of the human frame would have rendered all the skill with which the rest was constructed abortive, and have made man's creation a failure. Without the eye, for instance, mankind could not have subsisted. Without the tongue they would have remained for ever in a state of idiocy or barbarism. There is no more elementary truth in human advancement, than that mind must be acted on by mind in order to its culture and development. The material world furnishes an abundance of objects for every sense,

\* Die Entwicklung der Schrift, von D. H. Steinthal u. s. w.

Paläographie als mittel für die Sprachforschung zunächst am Sanskrit nachgewiesen, von Dr. Richard Lepsius, u. s. w.

and its phenomena afford endless food for reflection. But in order that the spirit may be brought to act upon what is thus furnished for it, it must be roused and stimulated by spirit. "Iron sharpeneth iron," said the wisest of men; "so a man sharpeneth the countenance of his friend." A man isolated from his species from the first moment of his being, would of necessity be scarcely lifted above the brutes. Only by intercourse with his fellows can he be humanized. Hence language, the medium of intercourse between man and man, is the great humanizer; and without the gift of speech civilization and culture would be impossible. How sublime in its simplicity, and how grand in its results, is this conception of making thought audible, and opening thus, through the medium of an outward sense, communication between mind and mind! These invisible, intangible, immaterial, mysterious agents within us can thus be brought in contact: the thoughts, ideas, feelings, knowledge, experience of one can be forthwith imparted to another. The man of hoary hairs can put the stripling, in the outset of his course, in possession of that which he laboured long years to obtain. The man of earnest thought can stamp his impress upon those around him, and waken in them an activity like his own. Set free by the faculty of speech, man's spirit no longer lives alone, shut up a prisoner in solitary confinement in its mortal cell. The doors are thrown wide open and the man is set in living connection with all around him. Knowledge no longer streams in barely through his single perceptions, or is the product of his single reflections. The eyes of those around see for him: their minds think for him; for their experience and their thoughts can now be added to his own. And his intellectual power and wealth grows without limit, as the tiny drop, by kindred drops falling thick and fast around it in a summer's shower, forms first a rill, a rivulet, a brook, a river, and at last a flood.

And yet the sphere of man, though thus vastly widened by the gift of speech, is still narrow and contracted. Speech has opened communication for us with a little circle just around us, those whom we personally meet. If we would gather up the experience of men in other lands, and add their thoughts to our own, we must, like the wise men of ancient times, Pythagoras, Plato, Herodotus, travel far and near. But few can do this;

and how few of their species can be personally visited, even by those who do possess ability to travel! From how large a part of the race are we necessarily cut off! And then the men of past generations are buried in the dust. Are they by consequence lost for ever to the world? And have all their earnest thoughts and zealous labours, and careful observations been sunk irrecoverably like lead in the wide waste of waters? Have all the genius, and the intellect of former days vanished thus, leaving no trace behind? And must those of each age be in this way lost to their successors? Who will give to the absent a tongue, and to the dead a tongue? We need an instrument to annihilate for us time and space, and to prevent this monstrous waste of intellectual power and acquisition; to take the evanescent thought, and to convert it—not into an equally evanescent sound that dies away upon the ear as soon as it is uttered, but give to it a permanent and tangible and portable form. We need some magic wand, some potent spell to give immortality to thoughts; to bring around us the great and good of this and of every land, of this and of all past ages, and bid them talk with us at our own homes, and unlade all the wisdom they have gathered at our feet; to put our minds into living contact with all the world at once, and all who have ever lived, so that all their rich furniture of cultivated thought and pure and elevated taste, and ripe judgment and matured experience, the intellectual treasures of mankind gathered through long ages, may be displayed before us. This would sound like some wild dream of enchantment, had it not all been realized, and that by a method as simple in its principles as its results are magnificent.

You can sit in your library, in your easy chair, with your fire blazing brightly on your own hearth before you, and you can there converse with men of every age and every clime. You can travel back long centuries before the Christian era, and can stand face to face with Moses and Solomon and Isaiah. Or you can sit at the feet of the Son of God himself, or talk with his apostles of all that they were commissioned to make known of the salvation he achieved. Turn to Grecian antiquity; and the father of history will tell you all that he could learn in his long journeys and careful observations of the state and origin of ancient empires. Blind old Homer will sing again for you

his immortal song. Demosthenes will thunder as of old at the rostrum. Socrates and Plato and Aristotle will entertain you with their profound and elaborate inquiries. Or Rome will send you her historians and poets and orators and logicians and philosophers, all ready in their turn to communicate to you their maturest thoughts, their most brilliant conceptions, and their gathered stores of knowledge. Still seated by your own cheerful fireside, you can follow down the stream of time, and summon around you, at your bidding, the rare, commanding intellects of each successive age—those who have toiled most and achieved most in any favourite department of thought or learning—till you come to the busy, bustling present. And then, if you choose, you can take up the newspaper of to-day, and learn what twenty millions have been seeing and hearing and thinking and doing yesterday, from Maine to Louisiana—in fact, what has, within a few weeks, been taking place all round the globe. You have, thus, the whole civilized world put into your service; looking out for you, listening for you, labouring to increase your stores. The astronomer, with his telescope, be he at Harvard, at Greenwich, at Berlin, or at Washington, is determining for you the magnitudes and movements of the stars. The chemist is experimenting for you in his laboratory. The geologist is examining for you the structure of the earth. The traveller is inspecting for you the manners and the sights of foreign climes. The antiquarian is digging for you among the hoary ruins of Nineveh and Thebes. The orator, the metaphysician, the poet, are busy, each with their several labours, that they may increase the stores of your intellect, or add to the refinement of your taste. You have all the intellect of the world, all the eyes and ears and fingers of ancient and of modern times laid under contribution: the entire results of their labours are at your service. Instead of picking up scanty bits of knowledge by your single observations, with no assistance and no stimulus, nothing but the natural and uninstructed workings of your single powers, you have here gathered into one accessible and available mass the combined labours, experience, and reflections of the greatest sages, most profound thinkers, and acute observers. This is what our fairy has achieved. The fairy's name is WRITING—her magic wand,

the pen. Her office is to record thought; no matter how that record be made, so that it be brought into a permanent, accessible, intelligible form, for the use of other men and other times. This alone gives permanence to intellectual achievements, and makes progressive advances in knowledge and civilization possible. But for this, the acquisitions of each generation would be buried with it, and an increase of knowledge from age to age would be as impossible as it was in the old mythology, for the daughters of Danaus to fill with water their casks without a bottom.

Perhaps all our readers have smiled over the amazement of the savage, of whom the missionary Williams speaks, when he for the first time saw ideas conveyed by writing. It was impossible for him to conceive how a chip, on which rude characters had been traced by a bit of charcoal, could say to Mrs. Williams that her husband needed a hatchet. The idea of conveying intelligence by written signs is so familiar to us, and seems so simple, so very common-place, that many may scarcely have thought of there being any thing wonderful or mysterious about it. But the more we reflect upon it, the better we will be able to enter into the surprise of the South Sea Islander, and the less strange we will think it that he held fast to that mysterious chip, and displayed it as a charm exultingly to his equally astonished fellows. The moment we ask ourselves seriously, how the conception was first reached—how the first idea of it ever came to enter any one's mind, we will begin to be sensible of the amazing difficulties of the subject. We interrogate profane history, Who first taught mankind to write? The only answer that we hear comes from far, far back beyond authentic records. The subject is all involved in mythology and fable, from which no credible account can possibly be disentangled. Baffled in our search we turn to the sacred history. It informs us of the origin of many arts. It tells us who first wrought in brass and iron, who first taught men to dwell in tents with flocks and herds, who first constructed the harp and organ. But it says not a word as to the origin of writing.

Throwing these things together which have now been recited, the importance, the indispensableness, in fact, of the art of

writing to the culture and progress of man, the difficulties seemingly almost insurmountable attending its first conception, and the silence of history, sacred and profane, as to its origin, many have been led to think that it could not have been a human invention at all, that it must have been equally with speech itself the direct gift of God; and that there is truth as well as fable in the pagan mythology which made letters the invention of the gods. And there are some circumstances which at first sight do throw an air of plausibility as well as sanctity around this theory. The patriarchs, it has been alleged, were not acquainted with writing: else when Abram bargained with the children of Heth for the cave and field of Machpelah, why was not a written deed drawn up in evidence of the contract? To be sure, this very transaction has been appealed to on the other side, and from the money current with the merchant, which we are told he paid, it has been argued that coins imply figures and inscriptions, and these the art of writing. Passing this by, however, we find no plain mention of the art of writing till Israel were in the wilderness journeying toward Sinai. It is mentioned but once, (and may not that, it is said, have been by anticipation?) before the people were assembled around that sacred mountain to receive the ten commands written in stone by God's own finger. Now what hinders our supposing that those letters, so mysteriously graven on the two tables of stone, reveal the origin of writing—that God taught this sacred art to Moses, he to Israel, Israel to the world? The plausibility of this solution is increased by the fact, well known, or easily ascertained, that all the alphabets of Europe, and several of those of Asia, can be undeniably traced back to the Hebrew letter as the common centre from which they are severally derived. Why not then accord to the chosen people, chosen to bless all nations with the true religion, the additional honour of first receiving, then dispensing for the benefit of mankind, the divine gift of letters?

Nor does it seem derogatory to the Most High that he should thus interfere for such a purpose. It is not barely that letters are so essential to the progress of the race in civilization and worldly culture. But there was a juncture in the economy of grace which seemed just then to call for special interposition.

A traditional revelation had been tried long enough to prove its insufficiency for the purposes of man. A great addition was now to be made to the revelation previously existing : such as could not be preserved pure for a single generation, if left solely to tradition and the memory of men. For the salvation of the race some method must be made known by which it could be permanently recorded. There is much that is attractive about this theory. The whole difficulty of the origin of letters is in an instant solved by the interposition of God for such a worthy cause. And it gives a pleasing sacredness to letters, thus to connect them with God as their immediate giver, and with the everlasting welfare of man as the immediate end of their bestowment.

This theory, however, cannot in fairness be maintained. It has against it the fact, that no intimation is given in the sacred record that writing was first made known at Sinai ; that it is even mentioned once as employed before the giving of the law, so that the knowledge of it could not have been derived from that event ; and, that from intimations in the books of Moses, it would appear, that the people possessed a familiarity with writing for the most ordinary purposes, which supposes a longer acquaintance with the art than on this theory could be allowed. Besides, there have been facts developed recently, from the monuments of Egypt, which seem to put the Sinaitic origin of writing completely out of the question. Actual alphabetic writing has been discovered there, which they who pretend to knowledge in such matters say is demonstrably older than the time of Moses. At any rate, it is not God's ordinary method to give to man, by inspiration, instruction in the arts of civilized life. The faculties with which he has been endowed are sufficient for these purposes, and he is left to develop them for himself. But letters lose not, thus, one whit of sacredness in our eyes, nor is our indebtedness to the Most High at all diminished for this inestimable boon. What comes to us through the instrumentality of second causes, should wake our thankfulness to the Author of all good, no less than if it came directly, or by miracle. And it exhibits more the wise orderings of a far-reaching Providence, that when the necessity for the art of writing came in God's scheme of grace, there it

was, already furnished; all the steps had been already taken, and the invention was complete: there was no such lack of foresight, as failed to anticipate the crisis till it came, and then must supply the deficiency by miracle.

If, then, writing is to be regarded as a human invention, there is a probability in the supposition, that, like other inventions, it reached its perfection, not all at once, but by slow degrees. And, in fact, various steps can now be pointed out, through which it has with considerable plausibility been argued that this art passed, in its progress toward its present development.

The first in order is what is commonly called picture-writing. This simplest, most elemental stage of the process, consists in conveying the ideas of things, or of events, by the representation of the things, or the events, themselves. To convey the idea of a house, or of a man, the picture is drawn of one of those objects. If the house has been burned, or the man has been slain, the former is pictured as in flames, the latter as pierced through by the weapon that inflicted the fatal wound. This method has naturally been employed, even by the most barbarous people, to transmit the memory of important historical facts. Its existence among the Mexicans, and the Aborigines of North America, is well known. Nearly one hundred pages are devoted to the elucidation of this subject by Schoolcraft, in the first volume of his great work on the Indian Tribes, published by the authority of Congress, and many curious illustrations are given. So, too, the Egyptians and the Assyrians portrayed upon the walls of their temples and palaces events which they would hand down to memory. And it is mainly from this very source, that the learned are now laboriously gathering up the lost history of these ancient empires. There it is written by themselves. And we can now obtain as clear an idea of many of the usages of these nations, and of the character of their life, though they have been extinct for ages upon ages, as though they were in existence still—so vividly and so minutely has all been depicted. The soldier may be seen plying all the enginery of his dreadful art, the husbandman engaged in the various processes of agriculture; and they who are curious in such matters, may learn the fashions of

ladies' dress, the style of domestic furniture, and the etiquette of a public entertainment in the time of the Pharaohs. This mode of conveying ideas is, evidently, very limited in its application, and belongs, in its exclusive use, only to the rudest state of the art. We say, *in its exclusive use*—for it has, within its own limited range, advantages peculiar to itself, and in which no other method of conveying thoughts can rival it; and, consequently, it has not yet been, and never will be, abandoned. The vividness of pictorial delineation is far beyond anything that can be attained by verbal description. It is employed at this day by the painter, who has carried it to its highest perfection. It is no less the grand conceptions of a vigorous mind which impress those who gaze upon the productions of a Raphael and a Michael Angelo, than it is the same which thrills his soul who follows, in his thundering periods, the prince of Grecian orators.

But, whatever advantages may attend this primary method of recording thoughts, it is, evidently, very limited in its range. It is only sensible and material things which can be thus depicted. The immaterial and the abstract, the whole world of ideas and emotions, find no appropriate representation. What painter can represent a soul, or thought, or abstract ideas, such as goodness, greatness, and the like? To cover this new field, a second step became necessary in the progress of our art. This is ideographic writing—in which ideas, incapable of direct pictorial exhibition, are represented by some conventional sign, some natural symbol, it may be, or some symbol purely arbitrary. The figurative language of every tongue under the sun suggests such symbols in abundance, whence the transition to their employment in written signs is natural and easy. The idea of innocence might as easily be conveyed by a lamb in a picture, as in a figure of speech: so, by the dove, gentleness; by the lion, courage; and by the ass, stupidity. By an extension of the same process, a circle might represent eternity, as having neither beginning nor end; the eye might represent omniscience; a crown, regal dominion; and so on. Such ideographs are to be found, as is well known, in the hieroglyphics of Egypt; though these are not exclusively composed of such symbols, as was once supposed.

This method of writing must also be very limited, or it will grow to be exceedingly cumbrous. Every fresh idea must have an emblem of its own; and as the list is extended, it becomes more and more burdensome to the memory. And yet it would be unjust to pass it by without acknowledging that it too has advantages peculiar to itself, and speaking as it does to the imagination, or to the power of association, it has a power greater even than that of words. It is of precisely the same nature with figurative language or symbolic actions. We would feel that a great element of power in our language was lost, if we were deprived of all figurative expressions, or of all expressions based on figures. It is often represented as though ideographic writing were necessarily ambiguous or obscure, as though the symbol might stand for anything the interpreter might fancy, and there were nothing in any case to determine its signification. As an example of ambiguity, may be mentioned the symbolical letter sent by the King of Scythia to the Persian Darius, when the latter in his inconsiderate pursuit had become entangled in that wild and inhospitable region. It consisted simply of a bird, a mouse, a frog and five arrows, left without explanation. This Darius interpreted as a surrender of themselves and of their country: the mouse representing the land, the frog the water, the bird the air, (or, according to Herodotus IV. 131, 132, their swift horses,) and the arrows their military power. But one of his advisers more shrewdly explained it to mean, that unless the Persians could soar through the air like a bird, or burrow in the ground as a mouse, or dive beneath the water as a frog, they could not escape the arrows of the Scythians. Symbols are ambiguous, however, only to those who possess not the key. If it be agreed upon that a given sign shall represent a certain idea, there will be no difficulty in knowing, when the sign is seen, what is the idea intended by it. In fact, words themselves are arbitrary signs of thought addressed to the ear, as ideographs are addressed to the eye. And yet those who have been instructed in the meaning of words find no difficulty or obscurity in their employment; though to a foreigner, unacquainted with their meaning, they might convey not a single idea, or an erroneous one. Symbols, however, have this advantage even over words,

that in many cases they are not arbitrary, but naturally, and of themselves expressive. Who does not feel the power of that beautiful allegory which the immortal Bunyan has drawn of the Christian life? Under his graphic pen it stands all pictured before us: the Slough of Despond, the Strait Gate, the Narrow Way, the Hill Difficulty, the Delectable Mountains, the Land of Drowsiness, the River without a Bridge. Who thinks of any obscurity here? Could the meaning be plainer if stripped of its symbols, and expressed in literal terms? But how much of its beauty and of its force would then be gone!

An important part of divine revelation was, under the former dispensation, conveyed by the language of symbols. And yet the sacrifices and the ritual of the Old Testament spoke with no doubtful meaning to the devout worshipper. So too in the case of those sacred symbols perpetuated among Christians, the holy supper, and baptism with water. There is no obscurity about them, because their meaning is wrapped up in symbols; and there is an impressiveness about them which no form of speech could equal. The national flag is a symbol purely arbitrary, and yet intelligible. What American can see the stars and stripes, and not recognize in them the emblem of the sovereignty of his own glorious land? The devices of heraldry were a species of ideographic writing composed of arbitrary symbols. And travellers tell us that the Turkish ladies, brought up in ignorance of letters, are yet ingenious enough to hold correspondence with their lovers by the ideographic method, and that a bouquet of flowers skilfully selected is made to speak unerringly the language of the heart. The language too of the deaf and dumb is in part ideographic. They have an alphabet, to be sure, which they play off upon their nimble fingers; but besides this they have another mode of communicating their ideas, in which each sign denotes not a letter, nor a word, but a thing or a thought, and their whole meaning can be thus conveyed more quickly, as well as more forcibly, than by the employment of words. If it be said of a man that he is a dog in the manger, or that he is a snake in the grass, no one would have any difficulty in divining the meaning. And why should there be any more difficulty in suggesting the ideas of surly snappishness or sly hostility by

the pictorial representation of a dog in the manger, or of a snake in the grass, than by the employment of the words?

It has been claimed already in favour of this method of writing, that it may be free from ambiguity, and that it has an expressiveness peculiar to itself. It may even be proper to go further, and to add, that in application to some purposes it is really the best method of writing ever discovered. The language of mathematics, for instance, is purely ideographic. The figures 1, 2, 3, &c., are signs not of sounds, nor of words, but simply of ideas. They simply suggest numerical relations. So the various algebraic signs denoting addition, subtraction, division, powers, roots, equality, &c., and the additional signs of the Calculus, and of Astronomy, the symbols for the various planets, for perigee, apogee, conjunction, opposition, etc., are all ideographs. They have nothing to do with the names of the things, much less with the sounds of the names; they signify directly the things themselves. Consequently they are independent of all variety of language, and are just as intelligible to the man who calls them one thing, as to the man who would call them another. The same mathematical calculation can be read and understood with equal ease by English, French, Italians, Spaniards, and Russians, though they may not know respectively a word of the others' language. The mathematical signs would convey exactly the same idea to every one of them; and yet were they to undertake to pronounce what they read, it would be a perfect jargon; one would render it into English, another into Spanish, and so on, each into his own tongue.

So again the notation of music is ideographic. The signs stand not for the names of things, but for things themselves; its staves, and clefs, and rests, and flats, and sharps, and repeats, and staccato, and crescendo, its minims, and crotchets, and demisemiquavers, are all ideographs. They have nothing to do with words, but only with the relations of harmony which they are designed to indicate. They belong not to one language nor to another. They are lifted above all differences of language, and can be read irrespective of them. The performer of one land will read off the same harmony from a piece of music, as a performer from any other land.

This facility afforded by mathematical and musical signs of

being read with equal ease by men of every language, has suggested to some minds the inquiry, whether some universal method of writing cannot be invented, which shall be independent of all differences of language, and shall be capable of being used and being equally understood everywhere, thus affording a medium of communication between all the nations of the earth. Mathematics and music have each their own system of writing, intelligible equally to all cultivated nations. Cannot the same thing be done in other matters? Cannot some similar process be extended over the whole range of human thought and intercourse? It is a grand conception, but one, we fear, which is destined never to be realized. We doubt if even this inventive age will be able to bring out of it anything of practical value toward such an end. And, yet, who can pronounce it utterly impracticable? This very thing is now done, on a somewhat limited scale indeed, and by an unwieldy process; but who knows how it may be simplified by some inventive genius? The Chinese character is at this day read differently in different sections of that great empire. There are parts of the country whose spoken tongues have perhaps scarcely anything in common, and yet the written Chinese is equally intelligible in all. It would be understood alike, yet read by each in his own tongue. We confess, however, that we are little inclined to believe that any complete ideographic system could be introduced without its being as cumbersome as the Chinese, with its 25 to 50,000 characters; for every fresh idea must have its distinct sign.

The palpable inconveniences and objections attending this method of writing led to a third step in the progress of our art, of still greater importance than either which had preceded, and which finally issued in that employed now and for ages past by the great body of the civilized world, to wit, phonographic writing, or writing representative of sound. This is the radical difference between this method and either of its predecessors, that it aims not at images of things, nor signs of ideas, but signs of sound. This connects it at once with language. The picture writing and the ideograph, as we have seen, have nothing to do with language. They represent directly things or ideas. Phonographic writing only represents their names.

Language is the utterance of thought; writing is the notation of language; and therefore only indirectly and mediately expresses things and thoughts. To employ a commercial figure: thoughts are our intellectual property. Spoken language is the currency by which the value of that property is directly represented. Writing is the bank note or the bill of exchange drawn at sight and payable in coin, representing directly not the property itself, but the gold and silver, which are the immediate representatives of property.

Here, if anywhere, is the halting place of the theory of the gradual invention of writing. The transition from the methods before described of representing things, to this of representing sound, seems indeed very abrupt; and it may be, and has been doubted, whether they furnished any preparation for this whatever; it may be thought that phonographic writing might as easily have been invented without those initiatory stages, or before them, as it could after them. Indeed, there have been some to claim that the writing of sound was the primary original method, and that the ideograph was only used in the Egyptian hieroglyphics for instance, as a secret cypher to conceal from the vulgar and the uninitiated a meaning known only to the priests. But in the view of the advocates of the theory which we have undertaken to represent to our readers, it may be shown from the writing in use among the Chinese, that this seeming chasm can be bridged. Theirs was manifestly, at first, picture writing. There are 608 of their characters, and those among the first invented, in which a plain resemblance can be traced between the original form and the object represented by it. Their primary forms, as given by the Chinese philologists, are simply outlines of the objects themselves. These have been modified in the course of time, and by the changes in their writing materials from the iron style and bamboo tablet to the hair pencil and their paper; but the resemblance is still very perceptible. Then they have another class of 107 characters, which are simple ideographs; thus the moon, half appearing, is made to represent *evening*; the sun, just above the horizon, signifies *morning*; the mouth, with something in it, means *sweet*.

A third class, of 740 characters, consists of compound

ideographs, in which two or three symbols are combined in one character to express a single idea: thus the figures of the sun and moon, placed in juxtaposition, express brightness; two trees put side by side, mean a forest; three trees forming a triangle, mean a thicket; the emblems of *dog* and *mouth* combined, mean to bark; *woman* and *broom* denotes a wife; *pencil* and *to speak*, is a book or to write, which is the pencil speaking.

From these as their initial points, they proceeded to form another class of characters, which is by far the most numerous of any in the language, amounting to 21,180. They consist of a picture or imitative symbol, united to another character, which loses its own meaning, and merely gives its sound to the compound. Without some such method as this, the Chinese would be obliged to employ an entirely new and independent character for every different idea. But by this plan of forming new combinations by the union of symbols expressing idea and sound, they are enabled to increase the number of their characters to any extent without multiplying the original symbols. To make this more plain we will cite an example from Williams's Middle Kingdom, I. p. 464, from which the preceding facts relating to this language have been chiefly derived. "Supposing," he says, "a new insect was to be described, whose name had never yet been written, but which was well known in its native localities by the term *nan*. It would be sufficient to designate this insect to all persons living where it was found, by selecting a well understood character, but without reference to its meaning, only having the exact sound *nan*, such as the insect itself was called in that place, and joining it to the symbol *chung*, meaning insect." *Chung*, in the combination, loses its sound; and *nan*, which, standing by itself, means *south*, in the combination loses its sense. "It would [accordingly] signify to every one who knew the sound and meaning of the component parts, the insect *nan*: and be read *nan*, meaning an insect." In like manner the Chinese have no difficulty in writing foreign proper names by combining characters to represent the sound of the various syllables, disregarding their proper original meaning: thus the character for *beautiful*, prefixed to the character for *scholar*,

spells *Mr.* : and the two characters signifying *frame* and *not*, spell *coffee*.

These facts show that symbols of sound could arise, and have arisen, out of symbols of thought and picture representations of things. The same transition, precisely, has taken place in the hieroglyphics of Egypt. It was at one time supposed that these mysterious characters, which were a puzzle even to the old Greeks and Romans, were all picture symbols or ideographs. It has been discovered, however, by the laborious and successful investigations of modern times, that a great proportion of them are phonographic. The necessity of finding some method to record the names of their monarchs upon the monuments erected by them, or in their honour, seems to have given birth to the idea here. The picture of an object is made to stand for the first sound in its name, and thus the word is spelled out by a combination of such pictures. This would be the same as if it were desired to represent the word *hat*, and for that purpose we were to join together the figures of a *hand*, an *apple* and a *top*, which, taking the first sounds of each, would spell h-a-t. Now this method has been pursued to a great extent in the Egyptian hieroglyphics. From the proper names in which it seems first to have been employed, it was extended to other words and sentences, so that it is found that a great part of these strange devices are capable of being spelled into words and read; and there are grammars and dictionaries of this, just as there are of any written language. For example, the Coptic name of an eagle is *aham* : consequently the picture of an eagle stands for the letter A. A lion stands for L, because its Coptic name is *lobo* : and an owl for M, the first sound in its name, *moulad*, &c. Of course it will be easily seen that by this method of writing the same sound might come to have several representatives : and this has actually been found to be the case. Thus A may be represented by an *arm*, or by the leaf of the aquatic plant *achi*, etc., as well as by an eagle.

It is thus found in two entirely distinct and independent examples, the writing of the Chinese and that of the ancient Egyptians, that what was originally pictorial or ideographic passed over by a natural, perhaps it may even be said, by a neces-

sary process, into the phonographic. And thus is reached the grand idea which has given birth to the modern and most perfect systems of writing, viz: the idea of representing by written characters not things nor thoughts, but sound. The idea has been reached; but it is yet only a rudimental conception and needs to be developed. Just so he who produced the first simple pipe from reeds had fallen upon the idea of instrumental music; but how far his primitive notes were removed from the swelling harmony of the full-toned organ, he who has an ear may judge. And he who first discovered that the steam issuing from a heated flask could be instantly condensed by plunging it into cold water, had seized the embryo idea of the steam engine. But it is an enormous stride from that original idea to the locomotive and the steamship.

We have seen the Chinese emblems employed as signs of sound, not of a simple elementary sound, however, but the complex one of a syllable or a word. In the hieroglyphics we find a further analysis of sound into simpler elements; but the very same sound may have three, four, or a dozen representatives. This is still too complicated and cumbrous. Two or three hundred signs, although a wonderful relief to him who has known nothing but the ideograph, and simplicity itself compared with the 25,000 characters of China, are yet too burdensome. Gradually one sign established itself for each sound, and the rest were dropped as superfluous. This would effect, of course, a vast reduction in the number of the characters, and in the complexity of the system. But it was still a slow and tedious process, if for every sound represented a full picture must be made or a complicated symbol; accordingly the individual symbols of sound which were still retained, were gradually simplified. From the full picture they were reduced to the mere outline; from a complete outline to a simple draught of the most necessary parts, until a form was reached that could be made by a single, or at the utmost, by a few strokes of the pen. Thus, if an ox (in Hebrew and Phenician *Aleph*) represent A, the figure of the ox is successively lopped off and abbreviated until nothing is left but the rude outline of the head with the projecting horns; and as in the course of successive mutations this letter has gone round a complete circle so as to have come back

again very nearly to its original form, as it appears on the oldest Phœnician monuments, any one may see for himself that the capital Roman A inverted bears a rude resemblance to the head and horns of an ox. A similar recurrence to something like its original form has taken place in M, denoting water, (Hebrew *mayim*) and borrowing its shape from the waves on the surface of that element. O took its form from the eye. Q from the head. T from a cross, the upper arm having been in the course of time neglected.

Thus by a variety of steps, such as those detailed above, the true theory of phonographic writing may be supposed to have been reached. This theory is, that the various sounds of a spoken language should be reduced to their simplest elements, and these be represented each by a single sign, and that of easy formation. The perfection of the various systems which practically grew out of this theory, depended wholly upon the skill and success with which these principles were in various cases applied, the power of the analysis by which the sounds were reduced to their primary elements, and the simplicity of the characters respectively employed to represent them. Here the modes adopted divide into two branches. The less simple is the syllabic writing, in which, as its name implies, each character represents a syllable, a consonant followed by a vowel. Of this the Ethiopic is an instance, in which there are 182 signs, representing as many syllables. These are all based, however, upon 26 forms, indicating so many consonants, which are variously modified to denote the character of the accompanying vowel. The Sanscrit also follows a syllabic system. So do the Cherokee Indians of our own country. The other branch referred to above, and far the simpler of the two, is the alphabetic. This is superior to every other method of writing which has yet been adopted, not only in simplicity, but in compass and power. Its capacity for expressing the various combinations of sound is immense beyond conception. The 26 letters of our alphabet, which a child can learn in a day, at least it is said, if we remember correctly, that John Wesley's mother taught them all to him in one day, are capable of expressing not only the 30 or 40,000, or whatever number of words we may have in the English language, but with a few additions for peculiar sounds

occasionally met with in other tongues, they would record with perfect ease every word in all the thousands of languages spoken over the habitable globe. Thus 26, or at the utmost 30 or 40 characters, and these capable of being made by one or two strokes of the pen, are made the key to all the mysteries contained in language, and unlock every treasury of human thought; and by their aid, somewhat simplified and abbreviated, the practised stenographer will record word for word the utterances of the most rapid speaker for hours together. By them and the aid of movable types, an invention which alphabetic writing first rendered possible, our presses are scattering intelligence and learning broadcast over the world. By the aid of a notation founded upon them, the telegraph carries our messages with the speed of lightning. What a change from the stately and laboured and multitudinous hieroglyphics!

The single characters arrived at, the mode of grouping them is a matter of convenience or of taste. It by no means follows as a thing of course that each succeeding letter is to be set to the right of its predecessor, simply because we have been accustomed to that method all our lives. The direction of their writing has been as various among different people as could well be imagined. Thus the Chinese dispose their characters in perpendicular columns written from the top to the bottom of the page, the columns being themselves arranged from right to left, each column as it is added being placed to the left of that before it. The Tartars write also in perpendicular columns, but commence at the opposite side of the page, at the left hand, disposing their columns from left to right. The Mexican picture writing differed from both the preceding in beginning at the bottom and being written upwards to the top. The majority of languages, however, are written horizontally; those of Europe generally in the same direction with our own, towards the right; some of the Asiatic languages, the Hebrew, Syriac and Arabic particularly, in the reverse direction toward the left; while the ancient Greek was at one period written both ways at once, that is to say, in alternate lines, first toward the right, then toward the left; just as in ploughing a field it is first traversed in one direction, then in the opposite; an analogy which,

as every lad advanced enough to have a smattering of Greek grammar knows, gave name to that method of writing.

The method of connecting the characters together is equally arbitrary. In Sanscrit the different letters are not joined immediately with each other, but are suspended in common from a line drawn over them all, like so many pot-hooks and hangers ranged upon the old fashioned crane of our grandmothers. In Syriac the position of the uniting stroke is beneath the letters, in place of above them, and the individual characters appear to rise in succession out of it. In Japanese the line of junction is perpendicular, and the letters are strung along on either side. While in many languages, as in the running hand of our own, the terminating stroke of one letter attaches it to another, and the final letter of the word is perhaps distinguished by a larger than the ordinary flourish. Or yet again, as in the case of the Hebrew and the Ethiopic, each character stands distinct by itself unconnected with any other. Some methods of writing make no distinction between words, scarcely even between sentences; in others each is plainly distinguished.

Much might here be said upon the correlation subsisting between different languages and their respective alphabets, how alphabets have been modified to suit languages, and what reflex influence has been exerted again upon languages by their alphabets; also upon the history of various alphabets, (for some of them, our own for example, have quite a history,) and the mutations they have undergone as they have passed from hand to hand and from people to people, with the causes and the results of these mutations; then upon all the questions arising in comparative palaeography, which has of late grown to be quite a science, and is not without important practical results, affecting not literature merely, but even points debated in theology, showing the filiation of various alphabets, their common derivation and relation to each other; and, to mention no more of the topics growing out of this theme, the wonderful resuscitation which has been effected by the combined efforts of eminent scholars of our own day, of several lost alphabets, particularly the discovery of the key to the hieroglyphics, that enigma of ages, the singular arrow-headed character of the Persian monuments, and of those recently exhumed at Nineveh, and the Zend character,

containing the writings of the famous sage Zoroaster. We shall however, pass these by, and refer to but a single point in conclusion, which seems a necessary finish to the train of thought which we have been pursuing.

We have traced the history of our art, agreeably to the hypothesis which for the time we are representing, from its rudest, its most elementary beginnings, to its present development. It has been seen how to pictures of things may have been added symbols of ideas, and to these may have succeeded the grand conception, in which was wrapped, in embryo, what has since been unfolded into existing systems of writing—that of giving representations of sound. It has been seen how, by successive modifications and improvements growing out of this radical conception, the modern modes of writing, whether syllabic or alphabetic, may have originated. The vast power and superior advantages of this last have been pointed out. Has the term of all progression in this respect been now reached? or is there anything yet latent and unfolded in the future superior to what has been already attained? Our alphabet, plainly, is not perfect. Like our language, it has been of slow and gradual growth. Neither owes its existence to one man, or one age, or one class of circumstances. The necessities of the people who have employed them have consciously, or unconsciously, given to both their present shape and character. The result of this gradual and unpremeditated evolution has been, that neither our language nor our alphabet is strictly philosophical in its character, nor rigidly uniform in its details. A careful analysis of the sounds of our language would show, that they do not correspond exactly in number with the twenty-six symbols of sound that compose our alphabet. And the most superficial inquiry into the powers of our letters will reveal, that each letter does not stand strictly as the representative of a single sound, but in some cases of two, three, or even four: and that, on the other hand, the same sound is in different connections represented not by one sign merely, but by several. A in *fate*, *fat*, *far*, and *fall*, has four different sounds, though that one letter stands for the whole of them. C is sometimes sounded as *k*, sometimes as *s*, sometimes as *sh*, and, combined with H, has still another sound, distinct from any of the

preceding, *ch*. And every one, probably, has made himself merry with the half-dozen different sounds which have been tacked on to the poor, unfortunate termination, *ough*. It is one thing in *though*, another in *through*, another in *plough*, another in *tough*, another in *cough*, and another in *hough*. Again, the sound *k* is, in *cat*, written with a *c*; in *kitten*, the very same sound is written with a *k*; in *back*, with *c* and *k* together; in *chord*, with *ch*. Besides all which, letters are sometimes used to signify no sound at all. What is the use of six letters in spelling *tongue*? or of four in the first syllable of *beauty*? or of three out of the four with which *phthisic* commences?

There are, undoubtedly, blemishes in our system of orthography, which will be considered fair game by pedants, and a pretext for changes by innovators. And the present mode of writing the English language is not, perhaps, to be considered an absolute fixity, nor need it be supposed that those laws of change, which have wrought such revolutions in it already, have wholly ceased to be operative. It is altogether possible that some future generations may regard some of our modes of spelling as barbarous and uncouth, as we do those of the days of Chaucer or of Spenser.

And yet, we must confess that we are not prepared to follow in the wake of those who advocate a reconstruction of our whole orthographic system, who propose to abolish our present alphabet, or, at least, to tinker it into a more philosophical shape, and then to apply the phonetic principle in its utmost rigour, and to spell every word precisely according to its sound, tolerating no unnecessary letters, nor any of variable power. This thing, as is well known, has been already done by some of the more adventurous sort. And any of our readers who may have chanced to see books, or papers, printed after this new-fangled method, have probably had to look twice, before they could satisfy themselves whether what they saw was really English, or was some foreign and outlandish tongue. There is, to be sure, something plausible in the principles alleged by the advocates of this new system; and the undeniable awkwardness in the present mode of spelling some words in our language, gives them, occasionally, quite a show of reason.

But we have little faith in the introduction of such an exten-

sive system of change as they propose. It would involve a complete revolution in our whole literature. There is not a book now existing in the language, that would be intelligible to a generation brought up after the new alphabet. The whole would have to be remodelled. And we would like to be sure that a thing was perfectly right, and that it would not need to be presently remodelled afresh, before incurring the responsibility and the inconveniences of such a change. It will be better to let the alterations which take place in the future be like those which have gone on in the past—adopting no novelty until it has first approved itself to the mass of intelligent readers and writers, who employ the language, and who must, after all, be allowed to shape it.

Besides, we are not so sure that this absolutely rigid system, of spelling with a sole regard to sound, is, even in theory, the very best for our language, and for others like it, the French, for example, where it would make even greater havoc than with us. The strict idea of phonographic writing certainly requires that each character should always represent one and the same sound, and that each sound should always be represented by one and the same character. Now this is very nearly the case in some languages, viz., the Spanish and the German. But, in the English, it is not so. The phonographic has been modified by the presence of another element, the etymological. In many of those spellings which seem so anomalous at first sight, the written word has preserved indications of its origin and history, which have been lost in its pronunciation. Pronounce the word *reign*—and it might be doubtful from the sound whence it was derived, or how it came to mean kingly sway; but write it, and the merest tyro in the languages will tell you that it is derived from the Latin *regnum*. So the *b* in *doubt*, and the *g* in *phlegm*, and the *p* and the *l* in *psalm*, seem to be needless incumbrances; and yet those very letters give the key at once to the derivation of those words from the Latin *dubitare*, and the Greek  $\phi\lambda\epsilon\gamma\mu\alpha$  and  $\psi\alpha\lambda\mu\omicron\varsigma$ . And even the outrageous waste of letters in spelling *phthisic* points, true as the needle to the pole, to its Greek original. Words of similar sound, but different derivation, are also kept apart by the variety of their spelling.

An innovation which would, at a stroke, obliterate all this, and it runs very beautifully through our orthographic system, is much more bold than useful. We are inclined, therefore, to insist upon the necessity of adhering to the old-fashioned spelling for some time yet to come, in spite of the danger we incur of being condemned as foes to progress and reform.

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ART. III.—*St. Ignatius and the Jesuits.*

*Vie de saint Ignace, fondateur de la compagnie de Jésus. Par le P. Dom. Bouhours.* Paris, Méquignon junior, 1826.

*Histoire générale de la naissance, et des progrès de la compagnie de Jésus, et analyse de ses constitutions, et principes.* Par Christ. Coudrette. Paris, 1761.

IN a former number,\* while considering the “character of Pascal,” and noticing his “Provincial Letters,” we had occasion to exhibit the doctrines and policy of the Jesuits; to vindicate the justice of the author in unfolding their system; and to show the probable tendency of the work in hastening their downfall. We are not, however, satisfied with that examination; we would extend our inquiries further, and learn still more of this extraordinary society. The investigation requires impartiality. We have placed at the head of our article two works—the one by an advocate, and the other by an opponent of the Jesuits; and by looking at both sides, we shall be prepared to seek and find the truth. We have no desire to multiply the faults of those whose character we describe; to impute to them principles, or consequences of principles, which they disown; to charge evils upon a system of which it was only in part the cause; or to draw stronger conclusions than the premises warrant. Though we may express ourselves strongly, yet we wish to avoid all animadversion not supported by fact; to indulge in no rancorous denunciation, and to weep, rather than triumph, over the exposed faults of those who call themselves Christians, and bear the sacred name of Jesus.

We shall consider the character of him who instituted the

\* The No. for January, 1854.