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THE ARCHAEOLOGY OF WORDS AND THE ALPHABET

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Just as long-buried artifacts can provide clues about the history of their former owners, so languages, and the symbols with which they are written, can help to throw light onto ancient matters. It is noted that there is no trace of an evolutionary origin for the alphabet, any more than there is for language. As is well known, many ancient peoples used their alphabet also as a system of numerals. Moreover, there seem to be connections between the alphabet and the calendar, which suggests that the forms and arrangement of the letters owe something to astronomy.

Introduction

There is abundant evidence that before widespread travel across the seas was undertaken by the Phoenicians, Greeks, Carthaginians, Egyptians, and Romans, certain key names and words had already been taken by land and water throughout the world, perhaps even to lands now buried under miles of ice, as, for example, the Antarctic continent.

Although these names and words have undergone change over the centuries, they can still be found in their changed forms when competent scholars study the native place names of rivers and mountains, of volcanoes, waterfalls, lakes, islands, regions, towns and cities.

Moreover these same names and words are found in personal and tribal names, in mythological and deified names, and in the names for animals, birds, fish, flowers, trees, foods, and parts of the body. Only half-concealed in the spoken and written languages of widely separated peoples in the world are intriguing clues to man's ancient past. These key words, blended into many combinations in many languages can be identified in two distinct groups. Words of the first group are found in all parts of the world. Key words of the second group are found in the Mediterranean area, Europe, Africa, parts of Asia, West Indies, Brazil, the Gulf Coast of Central America, the east coast of North America, Japan, the Philippines, Australia and New Zealand. Thus two old dispersions of people have been identified and recorded. Further it is startling that legends about the garden of Eden, the expulsion of Adam and Eve, the temptation by the serpent, the sharing of forbidden fruit, the confusion of tongues at the Tower of Babel, and the story of the great Flood were found in Middle America by the Spanish before priests began their work with the Indians. Clearly such claims by students of language must be examined.[1]

If we live in the kind of young world described in Genesis, if the world was destroyed in a universal Flood, if Noah's three sons and their wives began to repopulate the entire world, if the confusion of tongues really happened as described, if the Table of Nations is a true genealogy of nations and the accurate description of language families, there ought to be some hints of the great events half-buried in the languages which have come down to us. It is not necessary that there be such evidences, but just as ancient artifacts have been preserved over millennia down to the present, we need not be surprised to find equally ancient and impressive linguistic "artifacts" if we look closely at language.

What might we look for? The root meaning of some modern words could well go back to interesting facets of the daily life of our remote ancestors. If in very ancient times man was the kind of world traveler/navigator described above, there ought to be some linguistic relics lying around to support such a view of the past. If we live on a young earth, there ought to be some evidences in languages of interactions among peoples before the great separation occurred at Babel. If earliest man was as sophisticated as modern man, there is no reason to accept the notion that the alphabet was a relatively recent discovery made many thousands of years after cruder forms of speech had been

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developed, e.g., a syllabic system. If the old appearance of the earth is due to the consequence of a number of catastrophic events, some such memories ought to be concealed in some words which have come down to us. In much of the above, place names ought to be of particular value in shedding light on many aspects of the ancient past. All in all, language has unusual potential in relating back to our remote past. In this work we make something of a pioneering survey of words, the alphabet, and our number system which clearly was derived from the alphabet.

We know that even the most casual examination of our language and of place names—cities, lakes, rivers, mountains—shows many traces of the natives, the conquerors, and the immigrants for hundreds of years in the past. Scholars have noted that we can follow the path of Alexander the Great as he conquered the known world of his day by observing the place names that still exist all the way from Macedonia to India. These place names capture moments of history 2300 years ago. We are beginning to realize that place names go back farther still.

In the attempt to search into languages for clues to the ancient past, the searcher must be aware of some of the characteristics of language. Important information could well be overlooked otherwise.

It is essential that anyone who works with various Indo-European languages be acquainted with Grimm's law, which shows the orderly changes which many words have undergone from time to time and from language to language. Knowledge of Grimm's law helps one to see and understand why father, pater, and Vater are three forms of the same word, as are brother, frater, and Bruder. We also see precisely why the following word pairs are identical—the one being derived lawfully from the other: pes and foot, tres and three, duo and two, granum (grain) and corn, and cornu and horn. Awareness of the above helps the reader understand relevant examples given by linguists. The Jacob Grimm (1785-1863) who discovered the law is the same person who worked with his brother to collect the famous Grimm's Fairy Tales.[2]

Further, the modern form of a word or a place name is generally established on the basis of consonant structure, rather than on vowels, prefixes, suffixes, aspirates, etc. There are many examples in the Middle East of the interchangeability or confusion of L and R, just as we find today in the Orient. Consonants are astonishingly durable over the centuries within words. Amateurs are not qualified to establish relationships between words, since words that appear to be closely related may have nothing at all in common, e.g., the words cornu and corn above. Yet very dissimilar appearing words may be derived one from the other. When one studies examples, the concept of consonant structure becomes clearer: The word Philistine is precisely the same as the word Palestine, Copt is another way of spelling Egypt, Massilia is Marseille, Neapolis is Naples, Firenze is Florence, Gades is Cadiz, Megiddo is Armageddon, Iskanda is Alexander, Heracles is Hercules, Aryan is Iran, Ecuador is the word equator. We can understand that Venezuela means "Little Venice," when we know that the discoverer found a village erected on piles on the shore of the Gulf of Maracaibo in 1499 which reminded him of Venice.[3]

But there is another side of the coin. We look in vain for any relationship between the words Germany, Deutschland, and Allemande. Yet all three are exactly the same in geographical meaning. The word we use in this case depends on where we live. This fact poses many problems for the study of ancient place names.

Having discussed some possibilities one might look for in using language to search out the past, and being aware of several basic characteristics of language, we may now proceed to look for examples of how useful language can be to gain insights into the distant past.

Clues in Ancient Writing

Place names can give valuable clues for locating ancient sites. By taking seriously a place name given to him by Arab companions, Glueck rediscovered an important copper mining site in the Negev from the time of King Solomon, 3000 years ago. The Arabs kept referring to the place called Khirbet Nahas, which means "Copper Ruin."

Nelson Glueck observed that the most ancient geographical names are faithfully reflected in modern designations. As examples he cites the following from the Jordan Valley: Eriha is the word Jericho; Beisan is old Beth-shan; Damieh is biblical Adamah; and Tell Abil is Abel-beth-maachah. When the explorer or the archaeologist is searching for an ancient site it is crucial for him to pay attention to the modern place names in the area he is searching.[4,5]

Another value of word study is shown by the following. Based on lexical analysis, Semites must have lived together in an original land of rivers and no mountains. There is evidence that the land was in the Arabian Desert. Rawlinson observed that linguistic evidence showed the early existence in Arabia of at least two races: one in the north and central of Semitic peoples, and the other in the south, which was non-Semitic. The latter possessed a language resembling the dialects of aborigines in Ethiopia.[6,7]

Support for this analysis was reported by McClure. An extraordinary discovery was made in the Arabian desert—ancient rock carvings of tall black cattle people just like the Watusi-Masai of today in Africa. He suggests the possibility that the people of East Africa may very well be living descendants of the ancient ones who lived in Arabia when it was a fertile, well-watered land.[8]

From the above reference to rivers we can infer another point to be emphasized later, that we have clues to a golden time before a catastrophic event created the desert we now know in that region.

We can learn something about the sophistication of a culture and other insights of their life from the texts which have been preserved. Cyrus Gordon analyzed many ancient texts and believed he had identified ancient cryptograms of great interest. These are messages within messages.[9]

An old Mesopotamian language, Akkadian, was no longer in use after 1500 B.C. The fact that they had a word for iron, as well as for tin, copper, lead, gold, silver, and bronze, says a great deal about the culture of these people at that time in history. It is especially

interesting to note their familiarity with iron centuries before the Iron Age began, although it is possible they knew only meteoric iron at that time.[10]

Baring-Gould mentions the tradition in England that some of the counting-out rhymes, such as are found in nursery rhymes, may be relics of formulas used by the Druids in choosing human sacrifices.[11] It is entirely possible that similar rhymes served as mnemonic or memory devices for ancient mariners in plotting their voyages by the movements of constellations, each of which had an easily remembered common name.

Just as the Arab has a great many words for camel which show almost every imaginable state and condition, and the Eskimo does the same with words for snow, so the Egyptians used at least 37 terms for our word heaven and more than 370 specific astronomical terms. There is no way we can translate many of these terms accurately. This is a good example of how differently ancient man viewed the universe around him. There can be little doubt that the Egyptians and other ancients could read valuable information out of the stars, particularly with respect to navigation and other travel.[12]

Albright speaks too of the values of word and language studies for the historian in tracing interacting continuities, and in providing useful and sometimes unique evidence of otherwise indiscernible ethnic and cultural relationships far back in time. Further, he notes that the analysis of personal names is a powerful tool for tracing various ethnic elements in an old population. This study, for example, showed the surprising presence of Indo-Europeans in Syria and Palestine during the Late Bronze Age. The continued presence of Indo-Europeans is clearly noted in the Amarna Letters (thought of as from the 14th century B.C., but there is interesting evidence for reassigning the letters to the ninth century B.C.). Often we are dependent on personal and place names as our only source for an entire language. Albright makes the very interesting observation that although Egypt was not within the Semitic language family, there are few grammatical features which could be considered alien to Semitic languages, which may suggest a close relationship or other early interaction between the two.[13]

There are curious links between ancient languages. Albright comments on the fact that Sumerian, the oldest known literary language of man, showed a remarkable breakdown in the phonetic structure of individual words and compounds which are quite comparable to that which now exists in Chinese. There were so many syllables that had the same sound that Albright concludes they had to distinguish them by tones in the Chinese manner. While there is no direct evidence, he can draw no other conclusion. Similarly Sayce states that Sumerian is related to the language of China, and the first Chinese emigrants and the pre-Semitics of Chaldea were related linguistically and racially.[14, 15]

Albright speaks with amazement about the mobility of ancient languages (as though world-wide travel were a common thing) and he speaks confidently that scholars will soon locate Old World sources of elements of the oldest American cultures.[16]

The historical links between different areas in the ancient world and a further suggestion of widespread land and sea travel are illustrated by the strange duality of place names. Musri north of Assyria is the same as Musur or Misir, which is Egypt. Cush was an area in Cappadocia and later Cush became the name for Ethiopia. The place names of Makan and Meluhha in Babylonia were the same as names of districts far to the southwest, probably in the Sinai region. Akkad was the name for both Armenia and for the northern part of Babylonia.[17]

Ur of the Chaldees has been located in Sumer by a general consensus of scholars for many generations. From early studies of Ebla tablets it is beginning to dawn on scholars that Abraham probably came from another Ur many hundreds of miles to the northwest of Sumer. The point of interest is that man apparently traveled very widely. When he did so, he left clues behind in the form of place names and loan words to other languages.

We can infer at least some hint of catastrophic events in the past from clues left in the language. In actions we do not really understand, ancient writers give every appearance of describing a world which had undergone significant, even radical change. In a highly sophisticated age, Aristotle still referred respectfully to the grave testimony of the ancient writers. It is more than a bit significant that in the very earliest writing, the writers behave like worried and doubting commentators. They tried to explain a dimly understood tradition and half forgotten words once of great significance.

Neither in ancient Egypt nor in old Sumer could the ancients explain the origin of the star lists, the constellations, or even the names of their greatest gods. Every appearance is given of a world which had undergone significant, even radical change.[18]

Similarly in Homer the art of writing is associated with peril, and among many peoples writing was too sacred a thing to fall into the wrong hands, so sacred books were handed down orally from generation to generation even though writing for other common purposes was used.[19]

One final example will be given to show how clues to the ancient past might be derived from ancient writing. Already more than a century ago it was observed that much of mythology—a form of coded history in the minds of many scholars—relates scriptural happenings. Thus Jove may be but a corruption of the name Jehovah.[20]

The Alphabet as an Artifact

It seems fair to say that most people look at the alphabet and see nothing in particular—certainly nothing exciting. It has always been there. Scholarly accounts of the history of the alphabet reflect dull and incurious eyes. Still, most would agree that the alphabet is the greatest of all inventions, and there ought to be excitement and adventure about it. With only several exceptions, we cannot ask the same questions about the alphabet as we did earlier about ancient writing in general. However, we can expect to learn something about widespread early travel and unexpected interaction between distant nations as we fol-

low the quick spread of early forms of the alphabet. We also may learn something of early sophistication if we discover that the alphabet is older than generally thought, and we may even find relics in the alphabet hinting at catastrophes in the past. This seems to be expecting a great deal from a simple row of letters.

If we are to shed light on prehistory, or more properly, ancient history, the following questions will be important ones to pursue. The time of the origin of the alphabet is a vital question. Does the conventional account of the Phoenicians and the alphabet pretty much sum up the whole story? Does the development of the alphabet support an evolutionary view, or can we find evidence for early and unexpected sophistication in matters related to a writing system? If there is some great organizing principle for the manner in which the alphabet was drawn up, a number of peculiarities might be explained. Can we find any such organizing principle? It is crucial to attempt to learn where the symbols themselves came from. Are they familiar objects found in the ancient community? Are the symbols abstractions drawn from nature, or is there some other source? The order of the letters seems rather odd. Can we find any compelling reason for the manner in which they are arranged in ancient times? The fact that people are notably resistant to change has long been observed. Reforms of the alphabet seem to be unusually resistant despite the fact that such proposed reforms are often clearly superior and beneficial. George Bernard Shaw, for instance, was just one of many who invented a "better" alphabet; but his effort, like others before and after, failed to win acceptance. Is there something involved in the failures to accept reform which goes beyond typical resistance to change? There seem to be some indications that the alphabet was a more useful tool in the distant past than it now is. Is it possible to gain insights into the ancient world from this factor? The name of the inventor of the alphabet is given in some myths. Is it possible to identify the actual inventor, and if so, what light does this shed on ancient history for us?

When we look closely at the alphabet as an artifact, that is, as something shaped by human workmanship of historical interest, we can expect to find some clues to the nature of the ancient world which can help us fashion a more satisfactory framework for history.

Since there have been many, many modes of communication in the past, the question naturally arises as to whether these modes of expression can be placed into some kind of time sequence to show development from primitive and simple to modern and complex. Man has communicated by means of a thong with knots and its highly developed form, the quipus, the notched message stick, painted pebbles, beadwork or wampum, rock paintings and carvings, engraved and scratched bone and ivory, pictorial symbols, cuneiform writing on clay tablets, hieroglyphics painted or carved or pressed on various surfaces, drums, and smoke signals.[21]

The use of the quipus was far more widespread than one might think, and its peculiar pattern of use around the world is an example of how one might infer something about ancient travel. The quipus consisted of a main cord to which at given distances thinner cords of different colors were fastened. Each cord was knotted in various ways for special purposes, each color having its own significance. The Chinese have a tradition that the old fathers first used knotted cords to maintain the memory of events. Later they invented written characters which were then substituted for the knotted cords. The quipus was used along the west coast of Africa and in Egypt, in Australia, in China, and in the whole Pacific region from Melanesia to Formosa. It was also used in Scotland and in Germany, but its best known use was among the Incas in Peru. As a memory device it has never had an equal.[22, 23] To assume that the quipus was a primitive step preceding the invention of writing is only conjecture. There is nothing primitive about the quipus and its use was deliberate to keep sacred wisdom and privileged information away from the wrong eyes and ears.

More than 2000 years ago the Greeks and Romans considered five different possible inventors of the alphabet—Phoenicians, Egyptians, Assyrians, Cretans, and Hebrews. Two millennia of further consideration have clouded the matter further. Every country in the eastern Mediterranean region has been nominated, including Egypt, the cuneiform-writing countries of Sumer, Babylonia, and Assyria, Crete, the Hittites, Cyprus, and others. Others believe the Philistines brought the alphabet from Crete to Palestine, or that the alphabet was developed at Ugarit in Syria. The astonishing finds at Ebla in Syria since 1974 may influence further theoretical work on the origin of the alphabet. Most scholars simply assume an evolutionary model developing from prehistoric geometric symbols used throughout the ancient world.[24]

For generations we have been lulled with the story that writing began with pictograms in Mesopotamia and Egypt. Much later the Phoenicians somehow came up with an alphabet which was very widely spread and copied. Yet contrary to popular and scholarly views and assumptions, there is good evidence that most of the alphabetic signs are older than hieroglyphs. The alphabet was not derived from hieroglyphs or pictograms.[25]

There are false trails in the study of origins. After enormous amounts of futile discussion, linguists conclude that their studies have yielded little or no evidence about the origin of human speech. Assumptions have not been supported. Long ago acrimony reached the point where La Societe de Linguistique de Paris made a standing rule that no papers on this subject may be presented at its sessions. Another vain effort has been the study of the speech of primitive peoples in order to shed light on the origin of speech. As far as we know there is no sign that any language spoken today has had a shorter history or a slower development than any other. Another lead has been the study of the speech of young children, but this too has yielded no significant results on origins. Hope springs eternal in the linguist's breast, however, and the focus now is on patterns of communication in the animal world in comparison with that of man.[26]

It is certainly relevant to this discussion to note that no society is known at any point in history which did not have a fully developed language.[27] Neither in language nor in the alphabet are there any reasons to believe in any sequence of simple to complex as required

by an evolutionary model. Certainly there has been much change, but not in a simple to complex sequence, and this is a very significant observation.

When we go back farther in time, we find the unexpected. In various cave sites in France and Spain, conventionally dated about 8,000-10,000 years ago, letters, writing, and symbols preliminary to a form of written script have been found.

M. Ed. Piette found at Mas d'Azil about 1896 a large number of pebbles in a stratum between the last Reindeer age and the first Neolithic period, in the so-called Magdalenian age. The layer was more than two feet thick of red and black color and with the pebbles were cinders, perforated deer teeth, harpoons, wheat, nuts and fruit seeds. The marks on the painted pebbles are not accidental. A great number closely resemble symbols of the alphabet. Nine agree with inscriptions found in Cyprus. Eleven correspond closely with Phoenician letters.[28]

At Glozel another mystery was found. Among axes and pottery was found an incised tablet with signs and letters similar to Phoenician or Greek signs. Again the tablet was dated long before such writing is thought to have been developed.[29]

The mystery of writing deepens with a report from the Prehistoric Laboratory of Bordeaux University in 1972. An engraved beef bone found at Pech Laze, France, one of the earliest samples of written communication, was hailed as one of the greatest scientific discoveries of our time. The bone was dated at 135,000 years old.[30] There is ample reason not to take such conjectural dating seriously, but the find nevertheless raises puzzling questions about the origin of writing.

Another complicating factor is the recent discovery in Bulgaria of baked clay disks or seals on which incisions are present. Scientists are agreed that the seals, dated no later than 4000 B.C. contain ideograms or pictographs. This is many centuries earlier than the oldest writing found in Sumer or Egypt. The situation is so chaotic that articles begin with the familiar refrain: "Until recently it was supposed that . . ." One can well understand that scholars are reluctant to have this aspect of civilization begin in Bulgaria and spread from there to Egypt and Mesopotamia.[31]

All in all, it seems fair to say that some important ingredients seem to be missing in the current attempts to explain the origin of modern writing.

The Alphabet as a Sign of Sophistication

The study of the alphabet shows us something of man's great sophistication in very early times, widespread travel, and interaction with distant lands and peoples.

After much study, Gordon concluded that the original alphabet served three functions simultaneously: arithmetic, calendric, and phonetic. Thus, depending on the context, the letter "a" stood for the number value of "1," the first day of a month, or the phonetic sound we associate with it. Only the last function has survived to the present day in our culture. This three-way use of each letter in ancient times provided an infinite store of possibilities for memory devices to remember and transmit the culture orally. Such memory devices were used in navigation, world-wide travel, science, technology, mathematics, astronomy, time reckoning, land and marine architecture, cartography, principles of economics, law and religion, agriculture, animal husbandry, weaving, ceramics, metallurgy, and writing. We can assume that little rhymes or sayings could be accurately and quickly coded and decoded into formulas, procedures, laws, and the like. Illiterate Mayan peasants still retain the amazing skill and speed of their ancestors in making calendrical calculations. This skill deserves study which may reveal to us something of the sophistication of the ancients. The ancient Sea People had to have an alphabet for direction finding and time reckoning. They had to have a calendar for the solar year and for the seasons. They needed a system for calculating the lunar cycles, for their records, and for bookkeeping. The astonishing thing is that they only needed from twenty to thirty symbols for accomplishing all these tasks.

Our present alphabet, which retains only the sound values, is a shadow of the real miracle of this invention.[32] (It is true that we do make some use of the alphabet in ordering things, e.g. from A to Z; but note that we use a different set of symbols from our numerical ones.)

Vere Gordon Childe notes that the hieroglyphic script comes from elements whose origin is clearly derived from the plants and animals of the Nile region animals. Yet its curious combination of phonetic signs with ideographs and determinants agrees so strikingly with the Babylonian that the two systems must be interrelated.[33]

One dialect of Indo-European Hittite was printed with movable stamps or type. The example found in Crete was the mysterious Phaistos disc, which must have been carried there from Asia Minor. The disc has not been deciphered. As one intriguing possibility, the Phaistos disc could be a highly sophisticated device to lead the mariner to a distant port, each symbol of the spiral being a significant astronomical or land checkpoint on the way. It is more likely that all the symbols are astral due to the spiral design of the disc. The ancients associated the spiral with the movements of the constellations in the heavens.

Carvings said to be Phoenician, other Mediterranean languages, or unknown scripts have been reported in many parts of the world. Such carvings have been reported in large numbers in the Amazon and Orinoco River tributary systems. More evaluation is needed of these reports. Many inscriptions have been found in past years in the Andean Plateau which cannot yet be translated and which are thus far unidentified as to origin. Among other mysteries reported having to do with language is a recent find in the Well of the Virgins at Chichen-Itza. Associated with 13th century artifacts was a doll crudely made of wood and wax. A few Latin letters were carved on it. The Spanish did not arrive there until the 16th century.[34, 35] The mystery, however, fades when one reads Fell,[36] where he has made an interesting but controversial beginning in deciphering many old inscriptions found in America which were long written off as frauds or which were simply ignored.

Is There an Ideal Alphabet?

All would agree that the ideal alphabet would have one and only one letter for each speech sound, with perhaps a few concessions made for common compound sounds to be represented by a single symbol. For example, the long "i" sound in English is clearly a combination of two separate vowel sounds, and we would find it awkward to use two symbols to represent that sound today. Accepting the genius of the invention of the alphabet, it is more than a little strange that no alphabet in common use in the world has ever reached this goal.[37] It is of course somewhat arbitrary which sounds uttered by the human voice are to be recognized and dignified with a symbol. Yet strangely, all alphabets omit symbols for some common vocal sounds, and all contain redundant letters, that is, letters that represent sounds already provided for by other symbols. We can illustrate the idea of redundant letters by looking at ways one might spell out the sound of -ks as in "marks." One might spell it -CS as in lilacs, or -X as in box or -Q's, -CKS, -KES, or -CHS. On the surface this may appear simply as another case of human stupidity or as a consequence of borrowing from different languages. Those who have attempted to reform the alphabet for the best of reasons have all failed. Our alphabet seems to be tamper-proof. We know that ancient Egypt had an alphabet of 24 symbols and chose not to develop its communication system by this means. The Chinese also in the most ancient times had an alphabet but elected to develop its present complex system instead. From these odd facts one can only conclude that some other very compelling factor entered into the formation of the ancient alphabet.[38]

According to Moran,[39] religion is the only imaginable organizing principle behind the alphabet. Although some kinds of worship may well have sprung up independently, e.g., sun worship, the slaughter of a bull at the time of the spring equinox on both the altars of Ur and in the Valley of the Han in China shows common roots in a common culture. The 12 signs of the zodiac (the twelve constellations), the 12 months known throughout the ancient world of Europe, Asia, and North Africa point to a common source. The 52-year cycle was used both in the Orient and in pre-Columbian American cultures with 13 days of houses in a quarter. Lunar and solar calendars were brought into correspondence by the cycle of 52. The 52-card deck with 13 cards to a suit faithfully reproduces ancient calendrical knowledge. Even the Joker serves a calendrical function for leap years. The twelve signs of the solar zodiac may be in some way derived from the lunar zodiac of 27-28 signs. The relationship of the two is very unclear, but many of the same stars are involved in both sets of signs. From this well of astronomical/astrological knowledge, the alphabet was drawn. To establish the source for the alphabet, one must show its great antiquity, wide diffusion, and some powerful cohesive principle outside itself in order to hold the signs in established order despite time, geography, and circumstances.

Gustavus Seyffarth, a 19th century scholar and rival of Champollion on the decipherment of Egyptian hieroglyphics, served for a time in the 1850's on the faculty of Concordia Theological Seminary, St. Louis, Missouri. He understood two things clearly in our context which he expressed in his many writings. He was one of the first to grasp the idea that much actual history was concealed in myth and legend. Further, he realized the overwhelming importance of the heavens in the life and culture of ancient man. Although Seyffarth is wrong in some of his conclusions, and though some of his work is necessarily conjectural, his voluminous works deserve careful study and reworking. He saw the connection between the alphabet and the skies about 150 years before this principle was rediscovered by Moran and Kelley.[40]. Seyffarth states:

> It is said and believed that our alphabet was invented by Cadmus in 1500 B.C., but this cannot be considered a historical fact. In the New Testament we read of a book that was written by Enoch 900 years prior to the Deluge. Pliny said that man always had literature. The Vedas and Avesta tell us that prior to the Deluge sacred books existed and that, in consequence of their loss, the human race became so wicked that the Creator resolved to destroy it.
>
> The Koran (Sura 57) mentions that Noah was the author of a book. . . . It is true that Cadmus invented the alphabet, but Cadmus means "ancestor," i.e., Noah. Cadmus was, like the latter, the first planter of the vineyard.
>
> All these and similar traditions concur in demonstrating that the alphabet existed prior to the Deluge. . . . The Noachian alphabet was a representation of the zodiac.[41]

Seyffarth held that our alphabet is a reproduction of the zodiac with the constellation of the planets at a point in time of 3446 B.C., Septuagint chronology, apparently at the end of the Flood, probably according to the observation of Noah himself. Seyffarth translates Phoenician, Chinese, Chaldean, Greek, and Roman myths which clearly relate the formulation of the alphabet to the zodiac.[42]

An idea explored by both Seyffarth and Wadler focuses on the peculiar placement of the vowels in the alphabet. There is no logical sense in their location in our present alphabet, nor in any other alphabet: A*b*cd*E*fgh*I*jklmn*O*pqrst*U*v(*W*)x(*Y*)z. Wadler noted that the ancients associated the vowels as follows with the "7" planets: ao-Sun, i-Moon, e-Mercury, o-Jupiter, aw-Venus, oo-Saturn.[43] Thus the intriguing notion has arisen that vowels in some ancient alphabets represent the position of the planets among the houses of the lunar zodiac, that is, the consonants, at a critical point in human history. Perhaps one reason Seyffarth's discussions have not been studied seriously is the common belief that any use of the concept of the zodiac involves astrology. In the ancient world there was no necessary connection. The above discussion is in no way connected with astrology. It must be said, moreover, that Seyffarth seems to have been less than clear as to just which alphabet he had in mind, which in ancient times included the vowels and perhaps other apparently "useless" letters to indicate the locations of the planets within the lunar zodiac at a crucial moment in history.

Similarly, Moran's theory is that the alphabet was derived from 28-30 lunar signs, and that some of the

signs are the actual appearance of the constellation. Moran argues that the lunar zodiac is older than the solar zodiac. In support of his theory, there are startling correspondences between the lunar and the alphabetical signs.[44]

Regarding the ancient lunar zodiac, its sidereal revolution laid down the lines of the lunar zodiac. The daily stages of the lunar progress round the sky during the space of a month were carefully noted. The moon was the earliest measurer both of time and space. Ancient Hindus used a series of 28 divisions of the lunar track, while the ecliptical arcs were invariably 27 in number. The notion of a 27-fold division of the zodiac was deeply rooted in Hindu tradition. Each letter of the alphabet then represents one of the mansions of the moon: the daily halting place of the moon in relation to a nearby constellation.[45]

One example will illustrate the idea. Our 13th letter, m, comes from mem, a pictorial representation of waters. It probably represented a constellation at the edge of the Milky Way, which was the river of heaven. Many constellations, e.g., the Great Bear, the Little Bear, Pleiades, Draco the Dragon, and others, are the same in name, meaning, and form in China as in the West. Moran concludes that astronomy originated in Mesopotamia (Chaldea), and the Chinese carried it or received it intact.[46, 47]

At one stroke the rediscovery by Moran explains the peculiar order of the letters in our modern alphabets. The calendar signs and hence ancient alphabets, served one function to designate the days of the month. The length of the month, however, differed in various cultures, apparently in conscious disregard of the actual appearance of the moon. The most perfect lunar alphabet, the oldest form known of the alphabet arranged by scribes in a fixed sequence, was that of the Ugaritic ascribed to Late Bronze Age. It consisted of 29 letters plus one phonetically superfluous letter, giving a total of 30. It is no coincidence that the cycle of the moon falls between 29-30 days. Depending on the tradition, the number of symbols for a month varied greatly. The Malayans used 30 signs, the Chinese 28, some Greek, Tamil and Cambodian lists consist of 27 signs, and the Mayas and Aztecs used 20 signs. Egypt observed a year of 12 months of 30 signs each, while the Maya observed 18 months of 20 signs, plus five days.

The standard Greek alphabet of 24 letters consists of 20 symbols retained in the same order as the ancient Ugaritic. The last four letters, phi, chi, psi, and omega, were added by the Greeks. The last three letters of the 20-letter Ugaritic alphabet were added to an older alphabet of 27 characters, corresponding to the length of the day-name sequences found among the Greeks, the Tamils, and the Cambodians. At one time in both Egypt and Greece we find a week of nine days. The 28 letters of the Arabic alphabet correspond in number to that of the Chinese. Gordon concludes that related lunar lists in both hemispheres reflect an ancient global network of mariners. Gordon also demonstrates a clear relationship between the Phoenician alphabet and the zodiac signs and lunar lists. He further shows the common source of 20 alphabetic signs used by the Phoenicians, the Greeks, and the Mayas.[48]

It is remarkable that the Chinese ideographic system preserves intact the ancient calendar signs. Thus Moran demonstrates a one-to-one relationship between 22 Chinese ideographs and the 22 letters of the Hebrew alphabet.[49]

Kelley collated and compared on both sides of the Pacific the day-names and animals used to represent the days of the lunar month, or the lunar zodiac. His results show no possibility of separate inventions but point to the lunar zodiac as the common source of the more than 200 similiar phonetic alphabets, with due allowance for considerable borrowing of the forms and values of the letters.[50]

An Afterword

In taking a preliminary survey of language, speech, and the alphabet, we have made some interesting discoveries. The study of words and symbols tell us of ancient sites, culture, geographic setting, and level of sophistication. They tell us of ancient travel patterns and show that ancient travelers left their calling cards all over the world in the form of place names which can be traced back to their sources in the Old World. We see indications of deterioration after a previous higher level which hints at catastrophic events. We find no support at all for any kind of evolutionary development of language. If anything, the evidence clearly shows that languages have become simplified out of a more complex past. The development of English is a good example of this. In all of our exploration we find that the characteristics and events in language and the alphabet fit very comfortably within a framework of history as described in Genesis. Perhaps our greatest surprise is the unmistakable evidence in support of linking the alphabet with star formations. But as we have stressed, such an origin has no relationship at all with astrology. It seems reasonable to say that linguistic studies will continue to be immensely useful and will continue to illuminate the ancient past.

There are many complicating factors. We have noted more than once that deliberate attempts were made in many cultures to keep a knowledge of writing away from all except a small elite group in the society. Writing was sacred, and thus it is no surprise to see civilizations moving from alphabetical systems to more complicated ways. Another factor which must not be overlooked is the tabu. There is the odd Inca legend, for example, that writing was once known but abolished by an ancient ruler in the belief that writing had caused a plague. It seems reasonable to say that cultures changed radically overnight as the result of a tabu imposed by the person or group in power. The tabu may help to explain the curious absence of important inventions in cultures at later stages of development. We know, for example, that the wheel was well known in the Middle American cultures and was used for toys. Yet by the time of the Spanish explorers the wheel was unknown.[51]

The sacredness of writing and the tabu may be better explanations for the peculiar development of writing than any theory of gradual development from primitive to modern forms.

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THE WORD

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This article gives a summary of completed research into some of the logical processes required to accept and investigate such concepts as Divine creation, the miraculous and continual sustaining of our present developing universe. These logical concepts are directly related to Scriptural quotations. By applying new and powerful tools from applied mathematical logic it is established that all such concepts are absolutey rational and follow describable rational patterns.

1. The Word: *Logos* and *Rhema*

On the back cover of each issue of the *Journal ASA* appears the following quotation taken from Hebrews 1:3, "Upholding the Universe by His Word of Power." Our major interest is to gain some understanding of the meaning of the symbol string "Word" as it appears in this quotation. Does this symbol string denote a literal written or spoken word as it might appear in some humanly established language? Is it a literal word in some language that is beyond human readability? Indeed, what possible meaning can this apparently mysterious quotation have for humanity with its limited comprehension? Non-supernaturalists would probably consider this quotation to have no rational meaning and, thus, to be devoid of any comprehensible content. For them, these questions would also appear to be meaningless combinations of symbols. For a Christian, such questions as these have comprehensible answers.

The translations from the Greek that yield this phrase do have slight variations. The *King James* translation is ". . . and upholding all things by the word of his power." The *NIV* states it as ". . . sustaining all things by his powerful word." The *Living Bible* translation is ". . . He regulates the universe by the mighty power of his command." The *Concordant Literal New Testament* has it as ". . . carrying on all by His powerful declaration." Of the 13 New Testament translations in my personal library all, with the exception of *Phillips Modern English*, translate this Greek phrase in a manner that seems to force one to believe that it refers to a literal word. We minimally define a "literal word" as a sequential set of symbols

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