

benefit the rest of mankind as well as China. Why, for instance, should it all go towards establishing educational institutions and libraries, the benefit of which is only to the Chinese student classes?

As already indicated, one of the objects in view was the development of scientific research, and, of course, its application to problems of the country, and, presumably, of the world at large, and in what better way can this be accomplished than the establishment of up-to-date museums and research stations under the control and supervision of thoroughly competent foreign and foreign-trained scientists?

There is a vast amount of research work to be done in China, which cannot be done until there are such institutions as mentioned above in the country, owing to the lack of necessary literature, apparatus, appliances and material too expensive for individual workers to acquire, or too bulky to be housed in private libraries, laboratories or museums.

Such institutions are almost more important to China than those of a purely educational nature, for so much of the country's future development and prosperity depends upon the work that would be carried out in them. In any case educational institutions have been given a try, while libraries are in the process of being established. There remain large sums of money to be disbursed, and we can think of no better way of doing so than the one here proposed.

There are institutions in China which are thoroughly capable of handling funds for such a purpose to the best possible advantage. The China Society of Science and Arts is one, and there are few ways in which the objects for which the Boxer Indemnities are being remitted could better be fulfilled than by the establishment in the International Settlement of Shanghai of a Museum of Science and Arts, where research work of all kinds might be carried out, where the necessary literature would be available, and where students from all over China might come to further and complete the education that they have got in their colleges and universities.

There are sufficient funds to place and keep such an institution on a level with the big museums of Europe and America, the enormous value of which to those countries and the world at large has become so abundantly evident in the last decade or so.

The suggestion that this money should be thus expended is no idle one, and we sincerely trust that those who have the decision as to the disposal of these funds will give it the serious consideration it deserves.

LITERATURE & ART

THE CIVILIZATION AND RELIGION OF THE SHANG DYNASTY

BY

J. H. INGRAM.

Before entering upon the subject of this paper it will be well to recall that the Shang Dynasty was established about the time that Jacob received his blessing, and our records end when Samuel was ministering to the Lord before Eli. In other words we have to go back 3690 years and behold conditions which obtained when this country was new, when the population was not crowded into every nook and corner, when wild animals roamed over these mountains and plains, and when great stretches of territory were covered with primeval forest.

INSCRIBED BONES

I have been interested in the civilization of the Shang Dynasty for some time, and seven years ago procured a book called "The Waste of the Past" which contained 2369 facsimile reproductions of records or fragments of the Imperial diviners of the Shang Dynasty. These were inscribed on bone or tortoise shell. They had been buried for 3000 years, and were only brought to light twenty-five years ago. Mr. J. M. Menzies made the drawings and published the book. The antiquity of the records and their strange and unintelligible characters added to their interest. Mr. Menzies asserts that he has 50,000 pieces of these bones, and several other sinologists have them in great numbers. The bone on which they were unearthed was whitened with disintegrated bone. It is asserted that the records were not all destroyed after being buried for thousands of years. It is because some of the bones were petrified, and a film of silicate had been deposited, owing to the nature of the soil in which they were buried. This rendered them impervious to the roots of plants. This film of silicate is easily removed, and the writing in many cases is in perfect condition. Recently a much

of several years cotton has been growing on the site where these bones were found and I am told that not a trace remains of the Yin Dynasty records.

larger work has appeared. This is put out by the Chinese scholars Chen Yü. It gives photographic reproductions of many thousands of these records. When we consider that the capital was removed at least seven times and that these records had to be moved with every removal of the government, it is not strange that some of the records are missing, and when we know that the delicate, friable bone relics were handled by coolies, in the first place, instead of archaeologists, we cannot but express surprise at the results which have attended their study. I have been informed that some tons of these records were purchased by the Japanese and shipped to their country.

It was Wu I, the twenty-fifth ruler of the Shang Dynasty, 1188 B.C., who removed his capital to the vicinity of Chang-te Fu, where these relics have been unearthed.

Before the discovery of the Honan Relics there was no proof that the Shang Dynasty used official recorders. James Legge says in the preface of his *Shu Ching*: "When we ascend from the Chou Dynasty to those of the Shang and Hsia, we do not have the same amount of evidence for the existence of the class of officers styled Recorders. My own opinion is that the institution was in active operation during the dynasties just named: but the proofs are inadequate." May Dr. Legge's predictions be proved true with reference to the Hsia Dynasty as they have been recently with the Shang.

Only a limited number of the characters found on these bones correspond to those of the *Ku Wen*. They are primitive forms which preceded the *Ku Wen* style. The neatness of the writing indicates that it was no new accomplishment, and that the scribes had acquired a high degree of proficiency in calligraphy. Needless to say the finding of these records has shed much light on the written language and corrected many errors.

The nearest approach to any mention of the use of bone for recording are the *Hsiang Chien*, or Ivory Tablets. It is probable that formerly ivory was used, but the supply being exhausted, they turned to the material which most nearly resembled ivory. If the above deduction is correct, we may hope to find the ivory records of the Hsia Dynasty sometime in the future. Let us hope that they are protected by silicates, and are only awaiting discovery to enlighten the world as to the religion and customs of that dim and distant dynasty.

The study of the Honan relics is interesting, but also most discouraging, as there is evidence that there was no definite form decided upon for the character, and the recorders wrote as seemed best unto themselves. Thus although scholars have been working on these relics for a quarter of a century there are still nearly one-half of the characters which baffle all attempts at deciphering.

Another difficulty which confronts a beginner is the fewness of characters in each record, in other words, the elisions. This was owing to the tediousness of engraving on bone, the limited size of the tablets and a tendency to use the characters as mnemonics. In many cases the characters are so few that the interpretation is more or less questionable. If one will look over these records and consider the great mass of entries

made, he will recognize that the elisions facilitated expedition and that this writing is the foundation on which *Wen Li* was afterwards developed.

The next observation of a beginner, in studying these records, is that there is a trend toward a phonetic script. A character of a certain sound may be used for three or four words of the same sound. The Sumerian language, which is closely allied to the Chinese, developed the cuneiform writing which is a phonetic script of the second order, that is, each syllable had a phonetic symbol. Why did this tendency meet with such success in China?

It will be seen that the elision of characters and the drift toward a phonetic script were mutually antagonistic, as a phonetic script depends on context to show the meaning. If one was held to, the other had to be abandoned. The abbreviated style had more attractions for the scribes than the phonetic script. The human being derives satisfaction from writing that which cannot be read by another, and this tendency has been greatly fostered in China; it is not only gratifying to the writer himself, but the ignorant man feels confidence in one possessed of such a skill. However, it is not the Chinese alone who have indulged in this satisfaction; there is a certain flavour of the above two varieties of writing when a Latin prescription passes from physician to patient.

PHONETIC SCRIPT AND THE USE OF TONES

Now let us turn to the tendency which the scribes probably adopted from the Sumerians, that is, the drift toward the phonetic script. One character is sometimes used for five different words, and, as the present characters which stand for these four words are not all in the same tone, it is probable that tones were not then in vogue. This feature of having no tones is not confined to the Honan relics.

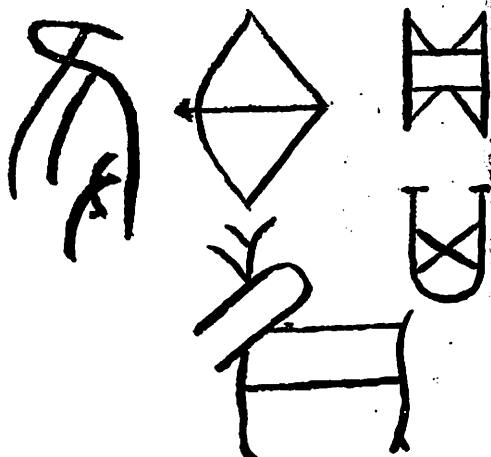
How were tones introduced into the Chinese spoken language? We have advanced the theory that tones were introduced when, through phonetic decay, two words had practically become homonyms, and thus a tone was invented to keep their meanings distinct. The main reason for questioning the above explanation is that primitive languages have not followed preconceived plans in their development. There is no history of their introduction and therefore we are forced to improvise a working hypothesis.

The Chinese probably commenced using tones without being aware that they were doing so. This seems like a preposterous statement until one which deserves explanation. The above statement that primitive languages have not been developed upon preconceived lines, makes the assumption that tones were deliberately adopted, and those who have tried to learn tones after attaining to the age of manhood are convinced that the Chinese did not commence their use in adult life. When the Chinese entered China it is generally believed that they came down the valley of the Yellow River. It has been pointed out that the name for China was the "Flowery Kingdom," a name suggested to them on account of the contrast between it and the more arid regions to the north-west, through which they must have sojourned or journeyed.

HUNTING.

The Emperors frequently went on hunting and fishing expeditions. It has been suggested that the Emperors went hunting, not only to secure victims for sacrifice but also in order to rid the country of animals which might prey on the people or destroy their crops. There is no evidence that they seriously endeavoured to rid the country of these savage and destructive animals. It may be that this statement that they frequently

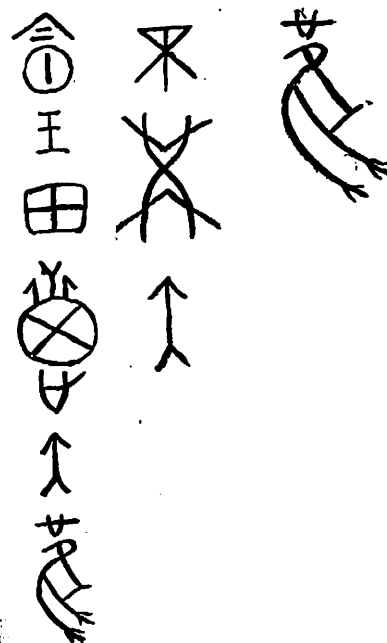
貞問
畋獵
時用
箭射
鹿能
得獲
否



Inquiry is made as to whether hunting deer with bow and arrow will result in success.

FIG. 3

went hunting does them an injustice as we are studying the records of over five hundred years, and if one emperor went only ten times, it would make quite a showing when all the expeditions were gathered together. Their routine work of attending to the matters of state are not recorded, but it seems that they never went on these excursions without consulting the magician, and the magician was required to make a record of every divination. The hunting expeditions were entered into for the purpose of obtaining materials for sacrifice, as stated above, thus there was a combination of business and pleasure. (See Fig. 8). Small game is not frequently mentioned. Hares and grouse were taken in nets. Reeves pheasants are noted, their long tails made them conspicuous. Other pheasants and partridges are referred to as chickens.



乙卯日
畋獵
遇見
大風
否
不遇
見大
風

On the day I Mao, inquiry was made if the Emperor should go hunting in the region known as Chih, would he encounter heavy wind.

He would not encounter heavy wind.

FIG. 4

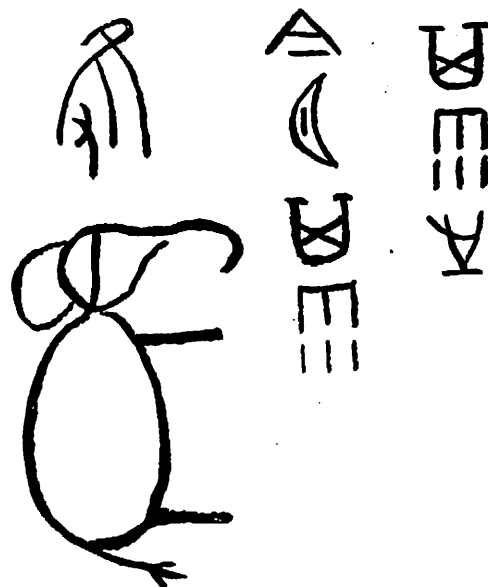
A hunting trip recorded stated that neither going nor returning did an accident happen to His Majesty. Their bag was as follows: 41 fawns, eight fawns and one horse. This indicates that at that time wild animals roamed about this region. The number of wolves must have been life precarious for other game. On another occasion the hunting was as follows: "One deer was caught in a net and 209 were captured in pitfalls." Certain of their sacrifices, perhaps because they were not obtained when game was not easily obtained, necessitated taking game and keeping it until such time as it was needed. Wild boars are spoken of as being hunted in the 10th month. No numbers are recorded as captured. Two terms are used for the

wild boar, 豕, "*shih*", which might be used equally well for the domestic pig, and 鹿, "*chih*," this last character represents a dart transfixing a body, the idea being that the animal had to be thus transfixed before it could be captured. Mencius uses this character for a certain kind of hog, but at the present time the character is not in use. It may be that the species has become extinct.

Antelopes are referred to, but the numbers taken are not large. They are spoken of as "*yang*" (sheep). Bows and arrows are not suited to the hunting of antelopes. On two occasions the goral, "*ling yang*," or mountain goat, is mentioned.

There are seven records in which rhinoceroses are mentioned, but there is no statement as to how they were captured. *Lacunae* are responsible for this. They, too, were used for sacrifices.

In thirteen records tigers are referred to, but there is no mention of tiger hunting. It seems probable that they did not molest such savage animals. They were dreaded, and ways and means were devised for keeping out of their way.



"Last month the rain stopped. This month it rained again and we captured an elephant."

FIG. 5

Elephants are referred to five times and in two cases it is stated that they were captured or killed, the same verb being used that is used for killing or capturing of other game.*

The animals referred to on these records which are not now found in China are the wild horse, the rhinoceros and the elephant.

I am inclined to believe that some of the entries which are supposed to be tigers are really panthers, those which are depicted as having round heads, this being certainly characteristic of the leopard and not of the tiger.

It is also probable that some of the entries which are put down as horses are intended for wild donkeys or asses. It is the pictograph which shows no mane and unusually long ears which raises this question.

The character for bear occurs once, but it is used for a man's name. It indicates that the bear was an animal which was known in this region.

(To be continued.)

The question has been raised as to whether elephants could live in the province of Honan. There is no statement as to where they were found; consequently they may have even gone south of the Yangtze. The pictograph is a good picture of an elephant.

CANTON MEDLEY

The groaning poles of chairs, that, swinging,
Pass my window in the dark;
And the soft plod of bare-foot coolies on the stones;
The beat of distant drums, that sound monotonously
From some slim dragon-boat, far down the river;
Or on still evenings in the Spring, the ugly croak
Of bull-frogs in some out-lying paddy field;
Haw-bells, jangling on the Bund, the chant,
Rhythmic, antiphonal, of sweating burden bearers;
Small flutes of olive-sellers; and the tuneless pipes,
Or orchestras in flower-boats and tea houses;
And through and over all, the constant creak
Of heavy oars, where the dim river craft,
Sampans, and junks, and pleasure boats,
Move past in slow procession. . . .
Strange sounds to Occidental ears,
Like the music made by tapering yellow fingers,
Plucking at the strings of life,
To a shrill refrain, repeating,
Canton! Canton!

By MAUDE HUBBARD BROWN.