THE DIFFUSION OF CULTURE

By G. Elliot Smith
Professor of Anatomy in the University of London

At the present time among students of mankind there are two conflicting views as to the process that has played the most essential part in the history of civilization. One, the theory maintained by the vast majority of anthropologists to-day, is that in any community civilization can and did grow up and develop quite independently of similar events happening elsewhere in the world. This involves a further consideration. For if any community can of its own initiative create a civilization, a more difficult problem has to be solved: why it acquires a multitude of features in its arts and crafts, customs, and beliefs that present a striking similarity to those of other com-

munities, when all considerations of contact or prompting directly or indirectly are excluded. The other group of anthropologists believes that civilization has been developing during the whole of its history in very much the same way that we know it to be doing at the present time, and in fact during the whole period of which we have any written record. We know in the case of every modern invention, that it was made in one definite place and became diffused over a wider and wider area until everyone in any part of the world who is making use of this particular invention is indebted directly or indirectly to one man in one particular place who was originally responsible for initiating the process.

Take, for example, the history of the wooden match. For countless thousands of years men have been devising and using different means of producing fire. During the latter part of the eighteenth and early part of the nine-

teenth centuries, a series of modifications and simplifications of one particular method developed, until eventually one man made the discovery that he could put upon the end of a strip of wood a chemical mixture that under the influence of friction would give rise to fire. Now although at the present day this seems to be a perfectly simple and obvious procedure, we know that it took countless centuries to arrive at the result, and that eventually one individual brought it to realization. We know, of course, as an historical fact that this invention has spread throughout the world from one particular spot. But if some European traveler who was unaware of this fact was roaming in a part of the world where no white man had ever been before, and found there a wooden match, he would inevitably conclude that the match afforded certain evidence of contact, direct or indirect, with someone who had benefited by the English in-

vention. If, however, he were not a mere man-in-the-street, but an ethnologist faithful to the orthodox theory of his creed, he would have to assume that so obvious a mechanism must have been invented independently by the uncultured people of the country where he had picked up the match.

If, on the other hand, he belonged to what our opponents call the "Diffusionist School" of anthropology, he would assume (as every intelligent man-in-the-street would unhesitatingly do, whether he was familiar with the history of the wooden match or not) that the match itself provided unequivocal evidence of diffusion of culture. He would not entertain any doubt that it had reached the place where it was found either directly from the home of its invention, or from some community that had learned the art of making matches directly or indirectly from it. Nor would this conclusion be affected even if the finder

of the match could tell at a glance whether the particular match was made in Sweden or Japan, for the match-makers of these two countries had had the art handed down to them from the original inventor who belonged to neither of these countries. What we of the Diffusionist School assume is that the processes of the origin, development, and spread of any invention in the time before written records were made, followed the same sort of course we know to have happened in the case of the match. These are recorded in the written histories of the various inventions and the struggles of the pioneers to get their achievements recognized and adopted. But anyone can see and study the same processes happening round him at the present time in the community in which he lives.

It is utterly unjustifiable to assume, as modern ethnological theories implicitly do, that human behaviour was

totally different before writing was devised. There is not a scrap of evidence to suggest that our unliterary predecessors had a remarkable aptitude for invention far transcending that of modern man. Nor again is there anything to justify the even more reckless assumption that this imaginary aptitude found expression in a stereotyped form in every place where ancient civilization developed.

For example, there is no natural reason for attaching the tremendous economic and religious significance to gold, which is an arbitrary enhancement of its real qualities. The fact that almost every early civilization did assign to this soft and relatively useless metal a fantastic and irrelevant value is surely the strongest possible evidence of the influence of Egypt, in which a peculiar set of fortuitous circumstances was responsible for creating the fictitious attributes assigned to the metal.

One might take up one after another of the thousands of ingredients that go to the making of civilization, ancient or modern, and show in each case the complexity of the set of circumstances, in which chance played an obstrusive part, involved in every invention. Each of them originated in one place and from there became diffused abroad, the complex tissue of civilization itself no less than the individual threads of which it is woven.

Turning to the consideration of the general question, no historian at the present day refuses to admit that Europe is indebted for the original inspiration of her civilization to Greece and to Rome, and that Rome in her turn derived much of her culture from Greece. Modern archaeological research has shown that Greece derived much of her own civilization from Crete and Asia Minor, and that both of these countries were in turn indebted to the older civilization of

Egypt for their cultural equipment. This much is admitted by the leading archaeologists who have been working in Crete. At the present time there is a difference of opinion as to whether Egypt or Mesopotamia was the pioneer in civilization; but among modern scholars the trend is strongly toward the view that whether Egypt was indebted to Mesopotamia, or Mesopotamia to Egypt, there was intimate contact between the two, and that one borrowed the essential elements of its civilization from the other.

This claim for diffusion is confidently made even by some of the most outspoken opponents of the theory of diffusion—a typical illustration of the inconsistency that runs through these discussions. The view is widely held amongst archaeologists that Babylonian civilization, or rather its predecessor, that of Sumer, is more ancient than that of Egypt. This is an amazing inference. For it is admitted, even

by those now excavating in Mesopotamia, that the earliest Sumerian remains cannot be proved to be older than 3000 B.C. Yet, even if we accept the minimum dating of Egyptian history, the First Dynasty was flourishing on the banks of the Nile three centuries before then, and even so it followed a predynastic phase of development of several—perhaps as many as ten—centuries, which affords a full and adequate explanation of the form that Egyptian civilization had assumed in 3300 B.C.

I need not discuss this matter further here. Professor George A. Reisner of Harvard University has demonstrated in the most conclusive manner that Egyptian civilization was actually fashioned in the Nile Valley. As there can be no doubt of the genetic connection between the earliest civilizations of Egypt, Sumer, and Elam, one must assume that these Asiatic centres must have derived their cultural capital

from Egypt, where civilization had been developing for five, or more probably ten, centuries before culture appeared suddenly and fully developed in Elam and Sumer. The evidence in substantiation of these claims I have set forth in the article "Anthropology" in the supplementary volumes of the *Encyclopaedia Britannica* (1922).

The excavations of Professor Pumpelly at Anau in Turkestan have revealed the influence of Sumer and Elam, in the country east of the Caspian, which represents a step in the diffusion right up into the heart of Siberia and into the Shensi Province in China. The recent discoveries by M. J. G. Andersson of early settlements in northern China (the Provinces of Honan and Fengtien) established even more exactly the affinities of the original culture of China to that of Anau, Elam, Sumer, and other centres in western Asia. These people in the Far East were making arrow-

heads of chalcedony and other flint-like stones, also other stone implements, rings of stone and shell, beads, pottery (both monochrome and painted), and even small figurines, all revealing clear and unmistakable indications of diffusion of culture from Mesopotamia.

The influence of Mesopotamia upon India in the third millennium is equally definite. There was a spread by land from Turkestan as well as from Persia, from the ancient civilization of Elam into the valley of the Indus. The recent discoveries announced by Sir John Marshall have established this fact beyond any doubt. At the same time or possibly at an even earlier period western culture was being brought into southern India by early mariners sailing in ships conforming in every respect to the peculiar type of vessel invented originally for navigation on the Nile in the Pyramid Age.

No one questions the dominant influence of India in inspiring the earliest civilization of Indo-China and of the islands of the Malay Archipelago. The early culture of the islands of the Pacific could have come only from the southeastern corner of Asia and the West. The debt of Africa to Egypt is beyond question. Hence one can demonstrate with an enormously rich mass of evidence the spread of civilization throughout the Old World from one centre, which must clearly have been in the valley of the Nile. The distinctive form and outlook of the world's civilization were determined by the methods of early agriculture, based upon the experience of a gentle and beneficent river like the Nile. The fact that so much of early belief was inspired by the essentially Egyptian practice of mummification would alone provide adequate proof that Egypt was the home of the earliest civilization. But

the whole body of evidence corroborates this view. Throughout the world the earliest types of sea-going ship provide unmistakable demonstration of the inspiration of Egyptian methods of shipbuilding, which is itself both a corroboration of the general inference and also a demonstration of the means by which this wide diffusion was brought about.

A very curious argument has repeatedly been put to me verbally. But fortunately Mr. Enthoven has recently used it in print (in the issue of *Folk-Lore* for September, 1925, p. 224). If, he argues, it be admitted that the Egyptians without any outside help invented irrigation, why couldn't the peoples of India have done the same thing? This plausible line of argument is purely scholastic. What we have to do is to find an explanation of the established facts rather than speculate on what could or ought to happen. The very peculiar methods of agricul-

ture used in the earliest times were determined by conditions peculiar to the Nile Valley, as Professor Cherry has made abundantly clear, and these methods were not adapted to Indian conditions until many centuries later.

There remains the problem of early American civilization. Did the Pre-Columbian civilization grow up in Mexico, Central America, and Peru, quite independently of what had happened during the preceding centuries in the Old World, or did diffusion of the arbitrary compound of customs and beliefs extend beyond the Old World to the New and provide the stimulus for the momentous events that began to take place there at about the beginning of the Christian Era? In Central America, Mexico, and Peru civilization made its appearance quite suddenly, and in a fully developed form. But there is another fact to be explained: it conformed in almost every respect to the distinctive type of

civilization (admittedly a very peculiar one) that was flourishing in the southeastern corner of Asia at the time when it made its appearance in Central America. The type of pyramid found in America was also the dominant feature of the architecture of Cambodia and Java during the same centuries. The same system of beliefs and customs, the same distinctive features of its architecture, in fact a whole series of arts and crafts, customs and beliefs, were suddenly introduced into the New World, which seem to bear unmistakable evidence of their Asiatic origin. Moreover, the only additions that were made to these customs in their transit across the Pacific were features distinctive of Melanesian and Polynesian practices. Instead of detracting from the cogency of the identity, these trivial additions afford striking corroboration, not only of the original source of the inspiration, but also of the road taken by the ancient

mariners who were responsible for the introduction into the New World of the germs of its distinctive civilization. It is an altogether incredible supposition that the Polynesian sailors who searched many thousands of miles in the Pacific with such thoroughness as not to miss even the minutest islets were not repeatedly landing on the shores of America for ten centuries and more. How could the people who found Hawaii, Easter Island, and New Zealand have failed to discover the vast continent stretching from pole to pole?

In his memoir on the *Copper and Bronze Ages in South America* Baron Nordenskiold has recently called attention to the similarities of metal-work in Peru and in the Old World. Copper axes similar to those found in Cambodia, Laos, Burma, the Malay Peninsula, the Malay Archipelago, Tonkin, Yunnan, and elsewhere in China have been found in Peru. The T-shaped

axes from Peru are said to be precisely similar to those made in Ancient Egypt. Many other copper objects, such as tweezers, barbless fish-hooks, needles, hoe-blades, and certain types of hoes, still further emphasize the significance of these similarities. But it is not merely the form, but also the technical procedures for making these metal utensils that establish the cultural connection. The method of casting known as *cire perdue* was common both to the Old and the New Worlds, as also the technique of gilding and silvering. The truth of any scientific theory that cannot be tested by direct experiment can be established only by examining newly discovered evidence and deciding whether or not it conforms to the principles laid down.

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CULTURE

The Diffusion Controversy

BY

G. ELLIOTT SMITH, D.Sc.
BRONISLAW MALINOWSKI, D.Sc.
HERBERT J. SPINDEN, PH.D.
ALEX. GOLDENWEISER, PH.D.

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