

THE ARTS AND SCIENCES

Anthropology

ANTHROPOLOGY IN THE UNITED STATES TODAY

BY PLINY E. GODDARD

ANTHROPOLOGY has been taught in America for more than a generation and the word has now appeared in print frequently enough to be somewhat familiar. There was a time when to confess a connection with the subject almost invariably called for an explanation of what it meant. These questions were embarrassing because a definition was not easy to give. The word, indeed, still has meanings abroad different from those current in America. On the continent *Anthropologie* is used for the science which deals with the physical characters of the various races of men; the study of their customs and habits is known as *Ethnologie*. But in England *ethnology* is used for physical man and *anthropology* in a wider sense. The custom in America is to use *physical anthropology* to specify the biological study of man.

In part, the confusion in terminology arose out of a supposition that man's general behavior was purely biological and that therefore there was no need for a separate study of it. It is still true that certain eminent scientists still think that it is biologically conditioned, but the main contention of the American school of anthropology is to the contrary. That school contends that a large part of human activity is not the direct and traceable result of biological inheritance, but the accumulation of habits and customs through countless generations. These habits and customs are acquired by imitation, often unconscious, but sometimes striven for with purpose and intention. The unconscious acquirements begin in infancy; the

purposeful ones we know as education.

The distinction between them may be illustrated in the field of language. Man has organs homologous with those of other animals, but sufficiently different to make articulate speech possible. He has, beside, a brain center which controls the process. But a child with perfectly normal organs of speech and a perfectly normal brain will not speak unless and until it hears and sees others speaking and imitates them. The fluid we call *water* is called by as many different words as there are languages, and in many cases there is not the faintest resemblance between them. The organs of speech are, of course, biologically inherited, but the reason why a Navajo Indian says *to* and an American *water* has not the slightest biological significance.

The same dualism is found everywhere in the scope of man's activity. He needs shelter from cold, rain, and the sun. In Nova Scotia the Micmac Indians provide it with a conical frame of poles covered with birch bark. But the Indians of Arizona build terraced houses of stone, several stories high, in which many families live. Environment, the geographically-minded man says. Yes, environment—partly. There are no large birches in Arizona. There are, however, stones in plenty in Nova Scotia. Environment—but mainly, almost solely, in fact, cultural and social environment. The Arizona Indians raise corn and like to live in close contact with each other. The Micmacs hunt and fish, and do not let others poach on their streams and hunting-grounds.

When it comes to "moral" activities, especially those involving sex relations, the biologist of the more unenlightened

type commonly says that instinct alone controls—and instincts are biologically inherited. But the well-informed ethnologist replies: yes, all people mate, beginning at a certain stage of maturity, but the person with whom an individual mates, the permanency of his mating, the number of times he mates, and many other of his sex activities are conditioned not by instinct, but by the *social* customs of his group.

The field of anthropology consists of those activities of mankind which are socially, not biologically conditioned. What does the anthropologist try to do? In the first place, he tries to find out just what man's activities and habits are. American anthropologists have been busy for nearly a century in trying to record exactly and fully what our Indians do and believe. Others have given us records of the natives of Africa, Asia and the islands of the sea. The earlier literature describing these rude peoples was full of errors, mostly unintentional, due to misunderstandings of what was seen or said, or to reading into the acts of others the motives of the observers. There now is a great deal of sound observation on record—so much, in fact, that it is almost impossible for any individual student to get a view of all of it.

When the material has been recorded, the next thing to do is to analyze it and plot its distribution. Many attempts of this sort have been made. In North America, we have laid out culture areas which are useful in the arrangement of museum material and in teaching. The South Seas have been plotted as Polynesia, Melanesia, and Micronesia. Here, however, the work has been done without a critical segregation of biological and social facts. Melanesia consists of the islands inhabited by black people, and it happens that this division to some extent coincides with cultural habits as well. But culture may be carried by a migrating race, or it may spread in other ways.

Anthropologists are now tempted to begin interpreting the ascertained distri-

bution of cultural habits. Here the American school is in opposition to a German school best known by its chief exponent, Graebner. The former says that wherever two or more traits are found associated in separate parts of the globe, there is certain evidence of a historical connection between the two areas. Elliot Smith and his followers have carried this theory to an extreme and absurd conclusion. They hold many of the cultural habits now universal in the world radiated from Egypt, and at a relatively recent date. The American school believes in this dispersion of culture, but it holds that the American continent was isolated from the Old World milleniums ago, and that American native institutions have thus grown up on a foundation common to the whole world but uninfluenced by any recent contact. They hold this, not because geographical contacts are unlikely or impossible, but because the facts indicate isolation. America has its own domestic plants and not one of Old World origin. The dog is the only domestic animal common to both worlds. Even objects like pan-pipes and practices like the *couvade*, occurring both in America and in parts of the Old World, are not accepted as convincing evidences of contact. In order to explain such resemblances, the American anthropologists resort to the possibility of independent origin. This is imaginable, however, only when the object invented or the custom observed is simple in character. One would be slow to grant that such things as the bow and the arrow had been twice and independently invented.

In one other respect the American school of anthropology has taken a stand in opposition to the earlier English school. Evolution in biology was early seen to be paralleled in the growth of human society. Marriage, it was believed, began with promiscuity and passed through successive stages to monogamy. Religion began with fetishism and developed to monotheism. Reported facts were collected from all sources and made to prove these and

similar theories. In America it has long been held that, when critically sifted and arranged, these facts do not show that there is a regular and necessary path which social change has followed. Indeed, if one consider the writings of Robert H. Lowie as representative of the American opinion, there are no evident laws controlling society, and no certainty that there is any

movement upward or toward an apparent end.

The present impression is that the facts themselves are so complicated, and the period over which customs and habits have been developing is so long and shows such extremely complicated movements in every direction, that it may never be possible to establish the underlying laws.

Medicine

THE LEPROSY PROBLEM

BY H. W. WADE

LEPROSY is peculiar among diseases in many respects—most strikingly in its localization in the skin and nerves. Its effects on the skin are the most generally known: patches, often pale—whitish in light-skinned peoples, but not with the poetic “silvery scales”—but more commonly reddish or brownish; areas of diffuse infiltration or nodular localizations, often most marked on the face, where they culminate in the repulsive “leonine” countenance. Its other major expression, involvement of the main peripheral nerves, takes place early, but for long is evidenced, when at all, chiefly by sensory disturbances. It is usually years later that the nerve is rendered functionless by destruction of the fibers, after which there occurs the atrophy of bones and soft tissues that results in the fingerless stumps which Philippine lepers, from contact with American sports, call “Spaldings.” The fingers and toes are absorbed; they do not drop off, but distorted nails continue to mark their sites.

The inner organs, of course, are also affected. Certain lymph node groups are perhaps the most important, not so much because of interference with their function as because they perhaps constitute the site of latent infection in cases that have not yet developed clinical signs, and are reservoirs of the *materies morbi* for recrudescence in “negative” cases—that is, those in which

the accessible lesions have subsided and are free from the bacilli. The testicles are quite regularly affected, so that males are apt to become sterile, as females do not. Ulcers of the nasal septum and the larynx are important primarily as sources of the material of contagion.

The bacillus of leprosy, the *Mycobacterium leprae*, is very similar to that of tuberculosis in staining characteristics and morphology, but is peculiar in its extreme adaptation to man. Though it is claimed that leprotic lesions have been produced in experimental animals, nothing approaching a reproduction of the human disease has been obtained. Another outstanding peculiarity of the organism is its comparative lack of toxicity. In no other bacterial disease are such incalculable numbers of bacteria present with so little general disturbance. Even after the disease is well established the leper may for years carry on fairly normal activities. No specific diagnostic test has been developed. One handicap is the non-cultivability of the organism. Another is the chemical relationship of all the organisms of the acid-fast group to which this one belongs; for an immunological test to be practical, tuberculosis would have to be eliminated or at least differentiated.

There is no doubt that leprosy is a contagious disease. The organism is discharged chiefly from ulcers of the skin and the respiratory mucous membranes. It is probably transmitted from man to man directly, or indirectly by means of infected clothing,