

ANTHROPOLOGY

Discuss Race, Evolution

Russian delegation, for the first time, attends the International Congress of Anthropological and Ethnological Sciences, reporting discovery of very ancient teeth.

► RUSSIAN and American physical anthropologists sat down together in Philadelphia for the first time in many years to discuss questions of race and evolution.

They met at the International Congress of Anthropological and Ethnological Sciences. It is the first time that a Russian delegation has attended in the 22-year history of the Congress.

Anthropologists from seven nations agreed on the mechanisms that make race. A Russian physical anthropologist, Prof. G. F. Debets of Russia's Institute of Ethnography, reported recent studies of peoples in Russia. The simpler characteristics, such as blood groups and hair color, differ greatly from village to village, he said, but more complicated characteristics, such as various body measurements, are more likely to be the same.

The extent to which genetic changes, taking place in small, isolated groups, can influence the characteristics of larger groups if the small groups increase rapidly in population size was pointed out by Dr. Gabriel W. Lasker of Wayne State University College of Medicine.

Race in man is not a fixed, static thing; a race may change markedly in the course of only a few score generations, Dr. Stanley M. Garn of the Fels Research Institute, Yellow Springs, Ohio, reported.

He cited the example of the small size of desert people, and the plump but compact build of Eskimos. Since these body builds have a distinct advantage, one in throwing off heat and the other in conserving it, they give a better chance for survival. More individuals of the appropriate build will live to reproduce themselves.

It is in this indirect way that environment affects heredity and race differences, Dr. Garn concluded.

Recent discoveries indicate, he said, that genetic changes are now taking place within populations, showing that some races, at least, are now in a process of evolution.

Find Teeth of Ape-Man

► TEETH of one of man's most ancient ancestors have been uncovered in Russia, a Soviet scientist reported.

The find consisted of two upper premolars similar to those of a chimpanzee but having specific peculiarities like those of man.

The teeth's human characteristics are shown by the fact they were worn on the cheek side and not on the tongue side, as were teeth of the chimpanzee and his ancestor, the preconsul.

The discovery does not show that Russia was the cradle of mankind. The question of where man first appeared cannot be settled definitely today, Prof. G. F. Debets said.

The molars were discovered in Georgia, U.S.S.R., in 1939. However, the report made in French by Prof. Debets at the International Congress of Anthropological and Ethnological Sciences held in Philadelphia was the first time the Russians had let the Western world in on recent archaeological finds in the U.S.S.R.

Prof. Debets calls this ancient ape-man "Udabnopitheque." He lived in early Pliocene or late Miocene times.

Modern man did appear on Russian soil in ancient time, Prof. Debets said. Chellean hand axes have been found in Armenia, and Acheulean implements, differing from Chellean flints in that they are chipped on all surfaces, have been unearthed in southern White Russia, on the Black Sea and in the Ukraine.

Dr. Debets said the Russians also have found remains of two children. A Neanderthal skull was discovered in 1938 in a cave called Techik-Tache in Ouzbekistan, Prof. Debets reported. This skull has only recently been examined.

The skeleton of another baby, about a year and a half old, adds a further chapter to the story of man's development. It was found in a cave in the Crimea and dates back to Neanderthal times.

Despite big teeth and other primitive characteristics, this baby is "inconceivably" a representative of Homo sapiens.

Three theories have been proposed to account for these two discoveries:

1. The skull is dated incorrectly. Prof. Debets does not believe this.

2. The baby from the Crimean cave is a representative of Homo sapiens who lived in the same geological age as Neanderthal man. Prof. Debets does not accept this idea either.

3. Prof. Debets suggests that the Crimean cave baby might have lived at a transition time slightly before the New Stone Age.

Living Stone Age Tribe

► PYGMIES who still live and practice the customs of a Stone Age people were described by the first outsider to make friends with them and live to tell it.

The living Stone Age people are the Onges, Prof. Lidio Cipriani, retired from the University of Florence, Italy, told the Congress.

They live on the strategic Andaman Islands in the Bay of Bengal between Singapore, Calcutta and Ceylon. Until 1952, when Prof. Cipriani made friends with the small inhabitants of the Islands after four years of effort, no white man had been able to explore the interior of the Islands and come away alive.

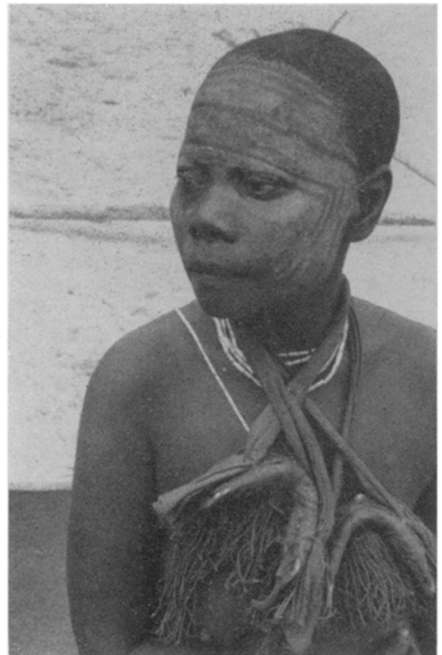
The Onge people have never learned to make fire. They have and use fire, however, but it is hoarded fire set by nature. It is the solemn duty of the women of the tribe to keep these fires eternally burning.

Prof. Cipriani's research has enabled anthropologists for the first time to observe the making of a "kitchen midden," a heap of household rubbish. It is from the "kitchen midden" that scientists have gleaned much of the information about our ancestors.

On the Andamans the Onge people are piling up broken shells, bones from their dinners, human bones from their dead and other household refuse on the same old middens. Prof. Cipriani has calculated the heaps on the Andamans have been building for between 4,000 and 5,000 years.

The Onges wear no clothing and live on a diet of hog, honey and fish. The pigs on the Islands swam ashore from a wrecked boat and have gone wild. They are the only mammals on the islands.

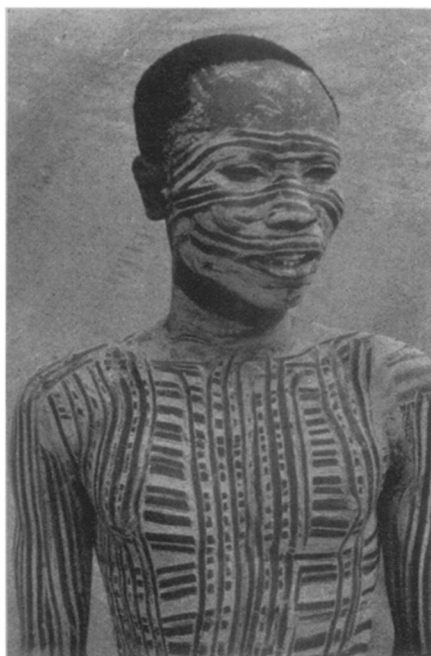
Although naked, the Onge people ap-



LOVING MEMORY—When a man dies in the Andaman islands, his wife removes his jaw bone, decorates it with loving care and wears it around her neck for the rest of her life. The customary decorations of shredded leaves have been removed in this case for the sake of the photograph. This widow has had two husbands although only one at a time.

PSYCHOLOGY

Reaction to Brainwashing



PRIMITIVE DRESS — *This naked Onge man appears to be elaborately dressed because of his covering of geometric painted designs applied by his wife.*

appear to be clothed because their bodies are covered in painted geometric designs applied by the women of the tribe. Pipes made from claws of crabs are smoked.

When a man dies, the widow removes his jaw bone, decorates it and wears it around her neck for the rest of her life.

The body of the dead man is buried under his bed.

Scientists Study Indians

► **THE AUTOMOBILE** is replacing the traditional horse among the Navajo Indians in the American Southwest, Dr. Evon Z. Vogt of Harvard University's Peabody Museum reported.

Increased travel from Navajo country into white towns and cities has tended to break down the isolation of the Indians. At the same time, the automobile is serving to hold the tribe together.

The new mode of transportation has made it possible for more Navajos to attend the large ceremonials of the tribe, such as the Night Chant and the Mountain-Top Way. Cars have also made it much easier for a Navajo family to import a singer who knows the traditional songs to take part in local community ceremonials.

During the last ten years, Dr. Vogt said, the number of automobiles owned by the Navajos has increased at least fourfold. The horse and wagon are becoming a thing of the past.

It is not just the "modernized" Indian who is driving a car but the "backwoods" Navajos, Dr. Vogt noted.

Science News Letter, September 15, 1956

► **THE REACTION** of the American public to Communist brainwashing of American war prisoners is in some ways as disturbing as the brainwashing itself, according to Dr. Raymond A. Bauer of the Massachusetts Institute of Technology, who has been co-director of research of the Harvard Project on the Soviet Social System.

The violent reaction of Americans may indicate, Dr. Bauer told the American Psychological Association meeting in Chicago, that "we share in common with the Communists a lack of security in our own ideological beliefs, even though we both proclaim our confidence that we have the true way of life."

Actually, the record of the American POW is remarkably good in resisting Communist brainwashing tactics, Dr. Bauer said.

Yet a sizeable proportion of the American public has taken the position that it is unthinkable for even a single American to fall for Communist propaganda or to collaborate with the enemy unless he has been subject to unnatural influences.

Americans feel it would take a combination of the theories of the Russian physiologist Pavlov and the wiles of Fu Manchu (fictional villain of Sax Rohmer's hair-raising movies) to cause a single American soldier to collaborate.

The wonder actually is, Dr. Bauer believes, that the Communists should have gone to such a great amount of trouble to produce collaboration, confession or change

of ideology; that they should be willing to devote so much energy to the conversion of persons who disagreed with them, rather than that they should have succeeded in the case of such an exceedingly small fraction of American POW's.

However, a single American soldier converted to Communism, he said, could arouse our feelings of anxiety and guilt over our own repressed ideological doubts. Hence, our eagerness to attribute such conversions to demonic machinations.

Dr. Bauer discounts the influence of Pavlov's theories in brainwashing tactics. The influence of Pavlov in Russian political and military affairs went out when Stalin came into power, he has found.

The effect of semistarvation on making men docile and willing to accept the will and judgment of others was reported to the same meeting by Dr. Josef Brozek of the Laboratory of Physiological Hygiene at the University of Minnesota.

Stresses, he said, even though they cannot strictly be classified as "torture" or even "maltreatment," may result in severe personality deterioration.

He reported very dramatic results obtained in a matter of only days when he kept subjects on a diet totally deficient in thiamine, or vitamin B1. Depression rose to frightening extents and the subjects also showed a substantial rise in hysteria and hypochondriasis.

Science News Letter, September 15, 1956

BIOCHEMISTRY

Fish Test Mental Drugs

► **GUPPIES** swimming in their fishbowls are likely to help the chemical attack on mental disease.

Studies showing that these little fish are a good tool for this purpose are reported by Drs. Doris L. Keller and Wayne W. Umbreit of the Merck Institute for Therapeutic Research, Rahway, N. J., in *Science* (Aug. 31).

The abnormal behavior can be permanently induced in the guppies by treating them with indole and LSD, the latter a chemical that induces hallucinations in humans. The guppies return to normal when given reserpine, tranquilizing drug widely used in treating human mental patients.

When guppies are put for one hour in a solution containing LSD and then transferred to water, they develop a characteristic vibrating behavior. They swim rapidly until they reach the wall of the bowl and then continue to swim, apparently unaware that they are not making any progress.

Goldfish under the influence of LSD tend to swim backward. Cave-fish do not move at all. All kinds of fish respond to other hallucinating drugs, such as mescaline and

yohimbine, but in a different and often less characteristic way than to LSD.

Serotonin, antagonistic to LSD in humans, had no effect on the guppy's response to LSD. The related chemicals, indole and tryptamine, however, had a marked effect. One hour's exposure to either of these, followed by one hour of LSD, markedly prolonged the LSD effect.

Abnormal behavior persisted as long as a week, sometimes for months, when the guppies were treated first with indole and then with LSD.

The abnormal behavior would alternate with periods of normal behavior, and consisted of normal behavior conducted in an exaggerated and abnormal manner. The courtship pattern of the guppies, however, was not disturbed.

Although reserpine made the guppies behave normally and remain so, chlorpromazine, another tranquilizing drug widely used for human mental patients, was very toxic to the fish. It did not make their behavior normal, perhaps because it had to be used in such small doses.

Science News Letter, September 15, 1956