ANTHROPOLOGY

How to Humanize Ape

To change an ape to a human, reshaping its hands, a developed pelvis bone, vocal organs and a different brain anatomy are included in the requirements.

➤ HERE IS how apes would have to change to make them human, as reported to the American Association for the Advancement of Science meeting in Boston:

1. Remake ape's hands to enable them to use tools and weapons.
2. Develop the pelvis, bone ring that supports spine, to allow them to walk upright.
3. Refine their vocal organs so they could talk.
4. Change the micro-anatomy of brain to produce man's ability for abstraction, symbolism and foresight.
5. Acquire new inborn tendencies toward various kinds of play, which is probably dependent on changes in the micro-anatomy of the nervous system, to improve the chances of developing skills basic to culture.

This idea of what evolution would need to accomplish to make an ape a man was presented by Dr. Keith J. Hayes and his wife, Cathy Hayes of the Yerkes Laboratories of Primate Biology, Orange Park, Fla. In evolving from our pre-human ancestors, humans have made such changes, they believe.

Dr. and Mrs. Hayes "adopted" a baby chimpanzee, Viki, and brought her up as a child in their own home. They taught her to wear clothes, build with blocks and even speak a few words. Viki got along all right even if she lacked the changes necessary to be human.

Advises Study of Apes

Go to the apes and not the human savage to understand man's social development, family and early community life, urged Prof. Earnest Hooton, anthropologist of Harvard University.

Apes living in their natural conditions will tell us more about man's beginning than can backward peoples of the present day, Prof. Hooton told the meeting.

Contemporary "savages" or "uncivilized" people are not primitive people on the evolutionary way up, he explained.

They are "cultural imbeciles or morons," he declared, if we believe our "civilizations" are superior to their rude ways of life. Even if we consider that they are really too smart to "fall for" our higher cultures, then they are that much further from our ancestral prototypes.

What scientists have learned about the family life of the gibbon, and the contrasts between the group and individual life of apes and different kinds of monkeys, he declared, is far more instructive for the history of the prehuman and early human social development than any of the "stuff on present-day savages written by anthropologists."

Primate Lineage Ancient

The primates, to which order man belongs, have one of the most ancient geological histories, the scientists learned from another report. Only three orders of living mammals are known to have lived longer —the marsupials, the insectivores and the carnivores.

Remains of the primates have been found in North America in rocks dating back to 65,000,000 years ago. These earliest primates were tree-living fruit eaters. Their relationships among themselves, and to the living prosimians of the Old World and the anthropoids of both hemispheres are obscure, Dr. G. L. Jepsen, Princeton University geologist, told the meeting.

Evidence from fossil plants indicates, Dr. Jepsen said, that the increase in numbers of these prosimians was related to an increase in the temperature in North America. Dwindling in their numbers might have resulted from competition in the great evolutionary upsurge of the rodents.

Science News Letter, January 9, 1954

NEUROLOGY

Nerve Makes Catfish Regrow Its Whisker

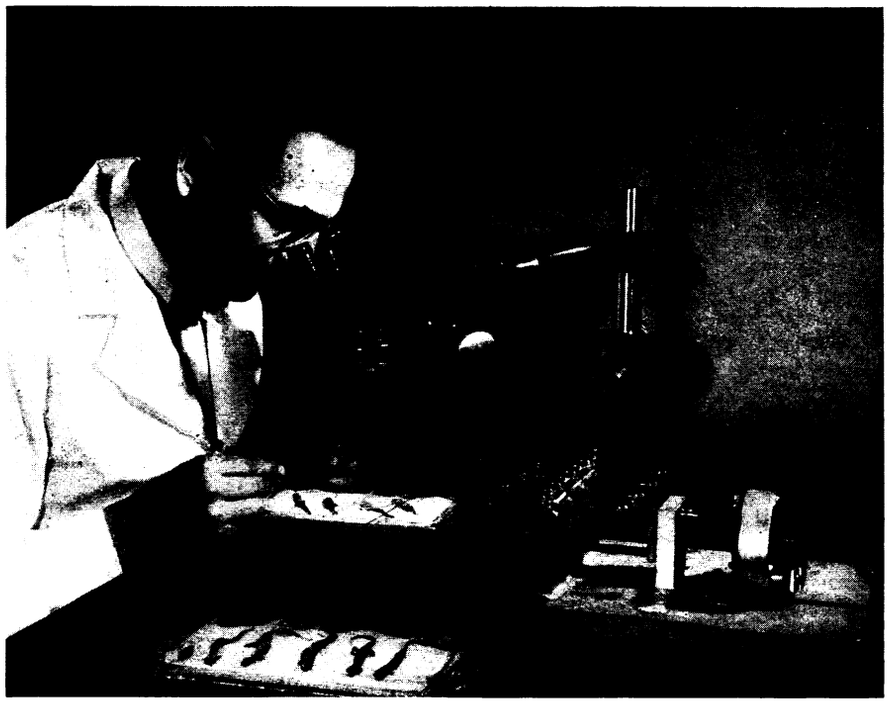
➤ THE CATFISH'S whisker grows on nerve control, experiments reported to the American Association for the Advancement of Science meeting in Boston show.

These experiments were performed by Robert P. Kamrin, student working with Prof. Marcus Singer of Cornell University.

Key to this and 2,000 other experiments on salamanders reported by Prof. Singer and his students is a delicate, motor-driven hypodermic apparatus designed by Prof. Singer for the work. With this, very small amounts of liquid, less than one-fiftieth of a drop per hour, can be infused into nerves.

The apparatus is used to study the effect of chemicals on growth, growth stoppage and regeneration of nerves. The research is sponsored by the American Cancer Society.

Science News Letter, January 9, 1954



SHOT IN THE ARM—Salamanders get a dose of the desired chemical at less than one-fiftieth of a drop per hour with the new motor-driven hypodermic apparatus shown here. Designed for research on growth activity by Prof. Marcus Singer of Cornell University, the machine infuses solutions directly into a growth, bypassing the animal's circulatory system. The effect of various chemicals on the salamanders' natural ability to grow new legs has been tested using the new device.