

ANATOMY

Heavy Brain of Baby Gorilla Is Surprise to Scientists

WHAT APPEARS to be in many respects the "best" animal brain ever studied has recently been given an exhaustive examination by Dr. C. J. Connolly, of the psychology department of the Catholic University of America in Washington.

The brain studied by Dr. Connolly is that of a three-year-old mountain gorilla, which died in the National Zoological Park a few months ago. It was turned over to the Catholic University psychologist because he has made a specialty of comparative cerebral anatomy.

The brain of this gorilla, who weighed only 40 pounds at his prime, was larger than the brains of many adult gorillas which have been studied, and indeed is one of the largest great-ape brains on record, in spite of its late owner's extreme youth. It is the first brain of a mountain gorilla ever studied in detail; all other gorilla brains which have been examined were those of the coast gorilla subspecies.

The baby gorilla's brain weighed 466.6 grams, a little over a pound. The average weight of the brains of six adult female coast gorillas reported by Dr. Connolly was 379.3 grams, about three-quarters of a pound. The average brain weight of three young male coast gorillas, comparable in age to this young mountain specimen, was only 318.3 grams.

If the gorilla's brain grows at the same rate as that of a human being, this baby mountain gorilla, had he lived, would eventually have had a brain weighing more than 600 grams. The lightest normal human brain weighs about 1,100 grams. If the assumption of an eventual 600-gram adult brain-weight for the male mountain gorilla is correct, this represents substantially more than half the human brain-weight; and hitherto apes have been allowed less than half. The mountain gorilla may therefore set a new record.

However, Dr. Connolly points out that this estimate may be upset by other factors; it is even possible, he says, that the little three-year-old gorilla may have had as heavy a brain as he would ever have possessed had he lived.

The baby gorilla's brain is described

as "typically anthropoid." The cerebellum, which is concerned with balance and muscular coordination in general, is relatively massive, as in all ape brains. The cerebrum, where the higher sense organs have their centers, and which seems to be the seat of consciousness and thinking, has a relatively high development, distinctly in advance of the coast gorilla brains examined. Dr. Connolly found a rich pattern of convolutions, especially in the frontal lobe, which some authorities believe most closely associated with intelligence.

In spite of his seemingly exceptional brain, however, the little gorilla was in life no ape genius. His movements were deliberate, and even clumsy. He always seemed, said Director William Mann of the National Zoological Park, "just a normal gorilla."

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MEDICINE

High Blood Pressure Runs in Families

HIGH BLOOD pressure, known to physicians as hypertension, runs in families, it appears from a study of statistics reported by Dr. William Allan of Charlotte, N. C., at the Congress of American Physicians and Surgeons.

In one series of cases, both parents of patients having high blood pressure also suffered from the condition. In 349 out of 480 cases, one of the patient's parents were sufferers.

In 121 families with both parents having high blood pressure more than three-fourths of the children suffered from it also. In 216 families with one parent having this condition, over two-thirds of the children also had it.

In 349 families, three-fifths of the brothers and sisters of high blood pressure patients were found also to have the condition.

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An explorer reports that, because head hunting is so prevalent among Jivaro Indians of South America, women greatly outnumber the men, and a Jivaro man may have as many as twelve wives.



BOTANY



Few Mushrooms Are Poisonous

UNDOUBTEDLY many of us deprive ourselves of many gustatory pleasures we might have, if we were not so timid of wild mushrooms. For after all, few of them are dangerous.

Only one common genus is really deadly, the Amanitas, and they are easy to identify. Look carefully at the stalk of any *white-gilled* mushroom you find growing in the woods, or on cut-over land. If it has a cup about the base and a loose ring about half-way up, then it is a member of this dangerous tribe, and should be let alone. If it has only the cup, or only the ring, it is not an Amanita. But better examine a number of specimens, to make sure.

The color of the top of the cap means nothing. Amanitas may be white, red or green on top; but so may other mushrooms that are quite good to eat. But there is one additional sign of the Amanita that you can find on the top: this genus frequently has loose white scales or scabs lying on its cap. But their absence should not be taken as final, for they may be washed off by a heavy rain.

The widely-used distinction between "mushrooms" and "toadstools", according as fungi are known to be good or suspected to be poisonous, has no real meaning. Both names are merely designations for this particular shape of fungus growth—an umbrella-shaped or rounded cap on top of a stalk. A mushroom is a toadstool and a toadstool is a mushroom.

Furthermore, there is no rule-of-thumb test for detecting poisonousness in mushrooms—the silver-spoon trick, the peeling of the cap, changing color in hot water: none of these is of any value whatsoever.

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