

PSYCHIATRY

Studious Laboratory Cat Breaks Down Emotionally

IT MAY seem a long step, psychologically, from a cat whimpering in a box to a young student who throws down his books and bursts into an emotional storm.

But is it?

Let us look further into the story of Tom the cat as told by Dr. Harry W. Karn, of the University of Pittsburgh, in the *Journal of Experimental Psychology*.

Tom was a willing, docile cat. Being a laboratory cat, he had lessons to learn, but he undertook them readily. The task, suited to his feline powers, was this: He must run down a center alley of a maze box, turn right around a hollow square to his starting point, repeat this maneuver a second time, and then follow a similar course to the left twice—twice right and then twice left. A reward awaited after each correct turn.

The second turn to the right was always the hardest for Tom. At one time during the early stages of his education, he fell into the way of turning right, left, left, right, and he persisted in this wrong habit for about 75 trials. Gradually he learned the correct pattern of right, right, left, left, however, and in 230 trials he built up an accuracy of 90 per cent. He was a grade B pupil.

But his teachers wanted to see whether he couldn't earn an A. So they persisted. At the second turn in the 232nd trial a radical change came over Tom. He hesitated much longer than usual at the turn and then jumped and raced around. After that he refused to enter the box. He scratched and clawed at experimenter and maze. He would not work. And he howled.

Only twice in 32 trials did he make the right turns. He went back to that old wrong pattern of right, left, left, right.

What had got into Tom? Whatever it is, psychologists would like to know, because we have seen the same thing happen to many a human Thomas. Will-

ing, docile and reasonably successful, up to a certain point, they suddenly fly off the handle; they go back to childish ways of behaving; they strike out at those around them; or, like the cat, they cry.

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PHYSIOLOGY

Symmetry of Human Body Is Varied in Fingerprints

MOTHER Nature in a gracious mood has provided her human sons and daughters with a pleasant symmetry. We expect right eyes to be like left eyes in color, shape, and movement. The right side of the mouth is like the left, the right ear like the left and the hands and feet like each other anatomically.

Yet every once in a while, the general pattern of symmetry breaks down in some detail. Occasionally we see a girl with a beautiful blue eye on one side of her face, but when she turns we find the second eye of an entirely different hue, perhaps hazel or even brown.

Shoe salesmen report that the two feet of the same person are likely to differ somewhat in size, so that they recommend that a purchaser try on both shoes before buying.

Study of fingerprints has revealed an interesting variation of symmetry among the fingers. In the more general anatomical features, one hand is a sort of mirror image of other. The two thumbs are alike and then each finger is like the corresponding finger of the other hand.

Not so with the fingerprints, however. In most races so far studied, the fingerprints of the thumb are more like the fingerprints of the ring finger on the same hand than they are like those of the opposing thumb, Dr. Heinrich Poll, fingerprint expert of Berlin, reports in the scientific journal, *Human Biology*. European peoples have this pattern of fingerprint symmetry and so do the Mongolian races. For certain races of Africa, however, and for the Negroes of Jamaica and Cuba, this rule breaks down. In these peoples, each digit tends to be more like the corresponding one on the other hand.

Such findings have practical implications for identification officials.

Science News Letter, March 18, 1939

Important New Blakiston Book

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This is a timely book which will appeal to all who look with interest upon the manifestation of life in animals and in man. The author presents, from a purely biological point of view, a thesis which sets a new goal for biology, the science of life. He unravels the problems of animal development, exposes them singly, defines them and relates them to the activity of the cell surface and to the general questions: What is life and how does life reveal itself?

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CONTENTS: Introduction; Life and Experiment; Protoplasmic System; ctoplasm; General Properties of the Ectoplasm; Water; Fertilization Process; Fertilization Reaction; Parthenogenesis; Cell-Division; Cleavage and Differentiation; Chromosomes and Ectoplasm; Ectoplasm and Evolution; Conclusion; Bibliography; Indexes.

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