



Superstition, Science's Jackal

SUPERSTITION always shows a curious parasitic dependence on science, supposed to be its bitterest arch-enemy.

The current "silly season" of sea serpent stories affords an excellent case in point. The things which people have seen, or think they have seen, in Loch Ness, Puget Sound and other places, have been very commonly given the shapes, in their more or less excited descriptions, of the swimming saurians that dominated the seas of the Mesozoic era, which was the Middle Age of geology. Men still call the apparitions sea serpents, but they picture them as ichthyosaurs.

Before the rise of paleontology as a well-organized science, and especially before its popularization by such fascinating imaginative romancers as H. G. Wells, the strange wonders seen by them that go down to the sea in ships most often took the form of monstrous snakes. This was natural enough. Serpents were locally known as objects of fear, and there was good Scriptural warrant for regarding them as endowed with even supernatural powers of evil. Added thereto were the meager and hence often exaggerated descriptions that driftd back into Europe, of the huge constrictor-snakes of the tropics, seen by a few hardy travellers, or perhaps only described to them by tellers of tall tales in the bazaars who saw a chance to pull a greenhorn's leg.

Ancient superstition and modern superstition were thus alike, in that they fed on the best natural knowledge available at the time.

But it is not only in natural history that superstition has persistently dogged the heels of science, parasitically living on decayed scraps of more authentic knowledge. There is hardly a

field of science that does not have its left-handed image in the looking-glass world of superstition.

Anatomy had hardly got itself thoroughly established in modern times when phrenology fastened itself on the human skull, like a leech with an appetite for bone instead of blood. Phrenology has seen its best days; it is still practiced in the shabbier quarters of our cities along with palmistry and other cheap necromancies. Its vogue as a really fashionable superstition (and therefore as a racket fat in cash returns) has long since been hauled to the boneyard. Yet fragments of it persist, even at that, ranging from "character reading" from faces to the determination of political pogroms against people with 'wrong'' skull shapes.

Again, though early astronomers shamelessly practiced astrology, and some of them probably believed in it. the divorce between them has long since been complete, at least on the part of science. But astrologers were quick to seize on the discovery of the planet Pluto a few years ago; and there is a regular nest of astrologers' "studios" in Chicago, as near as they can get to the Adler Planetarium.

Thus is the lion of Science never without its following jackal of Superstition. The lion may at times turn and roar at the jackal, but he never gets rid of him.

Science News Letter, March 10, 1934

ORNITHOLOGY

Ambitious Woodpeckers Disrupt Electric Service

WOODPECKERS have long been notorious for drumming and drilling away at objects of no possible profit to them-tin roofs, for example-for no apparent reason other than sheer pride of artistry. But a South Carolina power company sends in a woodpecker story that tops them all.

The company had been using a type of outdoor cutout fuse installation in which the soft fuse wire was partly exposed. More of these cutouts were opening than it was reasonable to expect, but no solution to the mystery was forthcoming until one day one of the engineers happened to see a woodpecker at work on one of the soft-wire fuses. The company promptly substituted a fuse in which the exposed part was of copper, too tough for the birds' beaks. That put an end to the trouble.

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GENERAL SCIENCE

Science Seen as Aiding Totality of Human Advance

SCIENCE, under controversy in many quarters as a prime contributor to the present disturbed condition of the world, was pointed out as a possible and even necessary contributor to world recovery and further progress, by Dr. John C. Merriam, president of the Carnegie Institution of Washington, who addressed at Philadelphia the American Philosophical Society, America's oldest scientific organization. Like the long-discussed conflict of science and religion, the assumed clash between natural science and social science is possible only when there is interference with normal exchange of ideas, Dr. Merriam declared.

Much of Dr. Merriam's address was concerned with the problems of conservation, and the ways in which science can come to the aid of economic reconstruction and sound long-time planning for future generations. Natural resources of the irreplaceable type, like oil and minerals, hitherto recklessly and wastefully exploited as they have been discovered, largely by chance, can be much more wisely administered if the extent and availability of their deposits are mapped out by scientific surveys, and if science is further invoked in working out methods for their most efficient use. Resources that renew themselves in humanly measurable time, like timber and game animals, are even more susceptible to scientific management.

But conservation can serve more than man's bread-needs alone. Dr. Merriam pointed out the possible services of science in the preservation or restoration of natural areas fitted for esthetic enjoyment, educational development, and even religious contempla- (Turn page)

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ment or God — Loethe.

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tion. The national parks of America and the great temple groves of China were indicated as already existing examples.

Finally, science must contribute its share toward answering the difficult question of what things, both in the material world and in the domain of social relations, must be adhered to as that which is good, and therefore to be defended against tendencies of change, and what things are legitimately subject to further evolution, whether through the ordinary processes of nature or through the hastening aid of man.

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ETHNOLOGY

White Man Smokes Often, Red Man Smokes Hard

THE WHITE MAN'S way of smoking is funny, as California Indians look at it. No sense to it, in fact.

When a California Indian smokes his wild tobacco, he takes it in one knock-out dose.

The Indian smoker puts the "makings" into a hollow elder stick about eight inches long, from which the pith has been removed. Then he inhales a few long whiffs. A few are just enough to make him so dizzy that he cannot stand on his feet. When he can see straight again, he puts away the pipe and tobacco until tomorrow. He has had his smoke for the day.

Describing this procedure, which he has observed and discussed with the Indians, John P. Harrington of the Smithsonian Institution says that the Indian looks upon the white man's smoking all day as absurd, with no justification in common sense or tradition. When Mr. Harrington asked the Indians why their way of smoking was better, they gave the good old Indian answer, that their ancestors had always done it that way.

Physiologists have been working hard to explain why modern smokers do smoke through the day. Yale physiologists very recently reported that the sugar in the blood temporarily increases by the smoking process. That seems to promote a feeling of bodily wellbeing.

When they get round to it, the physiologists might look into the effect of the red man's heroic inhalation of tobacco. Perhaps there is some unknown physiological reason why the Indian smokers prefer their tobacco hard and straight.

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First Glances at New Books

Archaeology

ARCHAEOLOGICAL TOURS FROM MEXICO CITY—R. H. K. Marett—Oxford Univ. Press, 117 p., \$1. To visit Mexico City and not see and understand something of its prehistoric side is like visiting Athens and ignoring its antiquities. This pocket guide is excellently adapted to the tourist's needs. It is not only logically arranged, and supplemented by illustrations and directions for going and coming, but it has an attractive manner of telling about the ruins and the ancient Aztecs, Toltecs, and Archaics, who built them and lived in them.

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Education

THE EFFECTS OF THE ECONOMIC DEPRESSION ON EDUCATION IN OTHER COUNTRIES—James F. Abel—Govt. Print. Off., 37 p., 5c. Now that the support of schools has become such an acute problem in the United States, this view of matters in foreign lands is of great value.

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Philosophy

REALITY AND ILLUSION—Richard Rothschild—Harcourt, Brace, 432 p., \$3.50. A substantial addition to the philosophical literature of challenge that has followed the disillusionment of the War, with its battering away of the clay feet of the mechanistic idol behind which man's self-worship of a half-century ago naively hid itself. The scientist may not accept the author's thesis; nevertheless it puts him on his mettle to prove his own, instead of calmly assuming it to be an axiom, and to prove further that science performs in a world of human meanings, not in a vacuum.

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Chemistry

A TEXT-BOOK OF INORGANIC CHEMISTRY — J. R. Partington — Macmillan, 1062 p., \$4.25. The fourth edition of a comprehensive and detailed text for university use written by a University of London professor.

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Medicine

OBSERVATIONS OF A GENERAL PRACTITIONER—William N. Macartney—Badger, 478 p., \$3. Here is an informally written book for the general practitioner, particularly the young man entering general practice. The author is himself a country doctor. His book is a blend of philosophical comments and practical advice on the treatment of various diseases and the practice of medicine in general.

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Geography

SIXTH REPORT OF THE UNITED STATES GEOGRAPHIC BOARD, 1890 TO 1932—Govt. Print. Off., 834 p., 80c. If you want to know whether to write Pittsburgh or Pittsburg, and what is the officially correct name of some lake or mountain called by several names, this report may supply the answer. It contains practically all the decisions of the geographic board for the period named in the title, and these are arranged in dictionary form, hundreds of pages of them. The geographic nomenclature of the Eastern Hemisphere has changed so greatly since 1914 that the board has drawn up a new list of some 2,500 of the more important names and has included them in this reference work.

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Botany

FLORA OF THE KARTABO REGION, BRITISH GUIANA—Edward H. Graham Carnegie Museum (Pittsburgh), 275+xxiv p., 18 pl., \$2.50.

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Psychology

RESISTANT BEHAVIOR OF PRESCHOOL CHILDREN—Ruth Kennedy Caille—Teachers College, Columbia Univ., 142 p., \$1.50. One cannot predict from a child's resistance in one situation what his degree of resistance will be in another situation. Neither is it possible to divide children into types: resistant and non-resistant or aggressive and non-aggressive.

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