

GENETICS

Russian Fundamentalism

The new Soviet movement which rejects Mendelian genetics is marked by a form of dogmatic fundamentalism, in the opinion of an American researcher in genetics.

► RUSSIA'S new, officially proclaimed science of anti-Mendelian genetics was assailed as being essentially a form of dogmatic fundamentalism by Prof. Richard B. Goldschmidt, University of California zoologist, in his presidential address presented at the annual meeting in Albuquerque, N. Mex., of Phi Sigma, national honor society for biologists.

Trofim Lysenko, leader of the movement in the USSR, is not a cynical and conscious faker, in Prof. Goldschmidt's opinion:

"There does not seem any doubt that Lysenko, though a clever politician, is honest and that he believes in his queer ideas, believes in them so religiously that he is willing to impose them by the sword.

"First of all, he is a fundamentalist. Just as the Christian fundamentalist believes in the divine origin and truth of every word of the Bible, Lysenko believes in every word of his gods, Marx, Lenin, Stalin, and the Russian Burbank, Michurin. He can refute every argument finally by quoting from these sources . . .

"Being a fundamentalist, he simply decides what is right and what is wrong, and there is no appeal. There is also no need to study first what he condemns, because he knows a priori that it is wrong."

Lysenko has three other characteristics that have helped him in getting his views officially approved and enforced in Soviet circles, Prof. Goldschmidt said. He is an "extremely clever lawyer, almost a shyster," first misrepresenting an opposing case in order later to demolish the strawman he has built. He is also a chauvinist; "There is no page without Soviet science, Soviet Darwinism, progressive Soviet scientists. The ignorant reader must believe that what he does and says is one hundred percent Soviet Russian, while all his opponents are traitors, imitators of foreign ideas, even promoters of capitalism and similar crimes." Finally, Lysenko is "a very good politician who knows very well the rules of the game."

Prof. Goldschmidt also accused Lysenko of slipshod experimental methods, and of presenting what facts he does offer in "a vague, slippery way." His experiments, declared the speaker, are made without controls, and "loaded" to make them come out in such a way as to support conclusions arrived at in advance. If there is an alternative explanation for an ambiguous result it is simply ignored.

The seeds of the present split between Soviet and Western biology were sown at

least 20 years ago. The speaker told of seeing, when in Russia in 1929, a film called "Salamandra", which made a hero of the Austrian experimenter Kammerer, who claimed he had produced inherited variations by changes in the environment. Perhaps significantly, the villain in the piece

ENGINEERING

Mobile Telephone Service

► A PHONE in your car, from which you can make or receive calls while traveling anywhere in the nation, may be ready sooner than you think.

Telephone service to and from motor vehicles traveling city streets or country highways has greatly expanded since the first installation about 30 months ago and gives promise of greater expansion in the near future.

Urban mobile telephone service, as it is called, is available today in over 60 cities in the United States and Canada, and about 85 fixed transmitting stations serve highway traffic. These are the latest figures, revealed in the BELL LABORATORIES RECORD (Dec.), New York. First urban service was inaugurated in St. Louis on June 17, 1946, and the first highway service at Green Bay, Wis., about two months later. The urban systems in their first two years served some 4,000 vehicles, handling approximately 117,000 calls per month. Highway transmitting stations serve 1,900 mobile units and handle about 36,000 calls a month.

When highway service was first inaugurated, it was planned to operate all stations throughout the U. S. on a single channel of two radio frequencies, one for transmission to the motor vehicle and the other for transmission from the mobile unit. This was to have allowed a vehicle with the normal single-channel radio set to travel anywhere and make or receive calls. It was found, however, that skywave interference was experienced between stations separated by about 1,000 miles or more, and the plan was changed.

The country was divided into seven zones, and frequencies for use exclusively in each zone were adopted. With this plan, all stations within a zone operate on the same frequency. Vehicles traveling from one zone to another may be equipped with an additional oscillator unit with relay-switched crystals. The unit is con-

was a Catholic priest, whose machinations made it necessary for Kammerer to flee to "the land of liberty"—Russia.

In concluding his address, Prof. Goldschmidt warned the younger members of his audience against the possibility of officially controlled science in America. Such control would not take the forms we have seen in the totalitarian countries, he pointed out, but it might nevertheless have a smothering effect on the boldness and individuality of thought that lead to pioneering efforts and great discoveries, by the sheer mass effect of drumming all scientists into huge, tightly disciplined teams at work on "projects" of essentially routine nature.

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trolled by a manual selector switch mounted alongside the handset.

As the mobile unit moves into a different zone, the driver must manually switch the frequency of his equipment. Channel switching equipment is now available which is capable of being used with six different channels in the highway service band of frequencies.

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GIANT APE-MAN TEETH—Dr. Robert Broom, South African paleontologist with the University of California African Expedition, compares the new "Swartrkran Man" teeth he discovered with half of a human jaw on the table. The large tooth in front of the human jaw corresponds to the first tooth in the human jaw. (See SNL, Dec. 11)