

SCIENCE

Vol. 89

FRIDAY, MARCH 24, 1939

No. 2308

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SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. MCKEEN CATTELL and published every Friday by

THE SCIENCE PRESS

New York City: Grand Central Terminal
Lancaster, Pa. Garrison, N. Y.
Annual Subscription, \$6.00 Single Copies, 15 Cts.

SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the Association may be secured from the office of the permanent secretary in the Smithsonian Institution Building, Washington, D. C.

SOME THOUGHTS ON THE PROBLEM OF PROGRESS AND DECLINE¹

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THE privilege of delivering this address comes to me in the midst of intensive work in fields somewhat removed from the ordinary domain of anthropology, and that is why I have to offer you merely "some thoughts" on a great subject instead of the carefully formulated presentation which it should properly demand. Much of what I have to say will fall in the realm of general theory rather than that of science proper, and this must be my excuse for seeming to intrude into the territories of other disciplines. It would be more than presumptuous in me to do this if the question at issue concerned matters of fact, but it is otherwise when deductions are made from facts which transcend the boundaries

¹Address of the Vice-president and Chairman for Anthropology, American Association for the Advancement of Science, Richmond, December 29, 1938.

of science as ordinarily conceived, and may become bases for attitudes in the world at large affecting the lives of thousands of human beings.

First, I wish to say a word about that naive materialism which was more in vogue perhaps before the birth of the new physics than it is to-day. There is still a popular illusion that because science teaches that a physico-chemical world was necessary before organisms could exist upon it, and because paleontology has demonstrated that organisms have appeared successively in more and more complicated forms, therefore the organic came *in toto* out of the inorganic, and each succeeding level of organic life *in toto* out of the preceding one. Now, the observations of succession and relation are scientific; the deductions as to origin are philosophic. Yet superficial thinkers shift from one

Science

89 (2308)

Science **89** (2308), 253-274.

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