

GENERAL SCIENCE

Evolutionary Religion

Extract from an address by Dr. Robert A. Millikan, physicist, at the University of Colorado semi-centennial celebration.

Within the past half century as a direct result of the findings of modern science there has developed an evolutionary philosophy,—an evolutionary religion, too, if you will—which has given a new emotional basis to life, the most inspiring and most forward looking that the world has thus far seen. For, first the findings of physics, chemistry, and astronomy have brought to light a universe of extraordinary and unexpected orderliness, and of the wondrous beauty and harmony that go with order. It is the same story whether one looks out upon the island universes brought to light by modern astronomy, or whether he looks down into the molecular world of chemistry, or through it to the electronic world of physics. The sciences of geology, paleontology, and biology have brought to light even still more wonderfully an orderly development from lower to higher forms, from smaller up to large capacities.

And there is one further finding of modern science which has a tremendous
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ARCHAEOLOGY

Trojan War Again In Doubt

Helen of Troy wanders once more without a home in history.

The destruction of her city by the Homeric inhabitants of Greece and its islands, long thought well established by archaeological research, is now called in question by Dr. Erich Bethe, a professor at the University of Leipzig.

There is no question that there was a Troy, and that it was destroyed. As a matter of fact, there were nine Troys, and they were all destroyed. So much the earlier investigations showed. The ruins of nine successive cities, each built over the remains of its predecessors on the same site, were excavated by H. Schliemann, a German archaeologist, and of these the sixth was designated as the Troy of Helen and the great siege. The date of the destruction of this city was determined as about 1200 B. C.

But the recent excavations of Dr. Bethe have shown that though the destruction did take place, the destroyers were not Greeks or Mycenaean, but northern barbarians from Thrace, who wanted to cross the Hellespont and settle in Asia Minor.

This city on the straits barred their way, so they destroyed it, and for centuries it was not rebuilt. Only a succession of wretched villages stood amid the ruins. All this is indicated by the numbers and distribution of lost or broken weapons and household utensils dug up in the ancient mound.

The first evidences of the incoming Greeks, Dr. Bethe states, belong to about 700 B. C. He believes that the Iliad dates only from about 600 B. C., instead of from the much earlier date assigned by tradition, though it was assembled out of poetic materials already in existence.

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ASTRONOMY

Astronomy under Difficulties

Pray do not chide me, for that I,
Though of a studious age the scion,
In gazing at the summer sky
Cannot tell Vega from Orion.
I would be happy, if I knew
The names of all the constellations,
But when the firmament I view,
I yield to ancient incantations.

*Star light, star bright,
First star I've seen tonight,
Wish I may, wish I might
Have the wish I wish tonight.*

It is not that I underprize
Astronomy's sweet boon and blessing;
I wish I knew the teeming skies
By rote, for I am tired of guessing.
But always, when with chart and book
I sit, a truant from my bed,
After one sidereal look
Some strain starts running through
my head.

*Stars of the summer night,
Far in yon azure deeps,
Hide, hide your golden light;
She sleeps, my lady sleeps!*

I am a traitor to the times,
My science is in shreds and tatters,
Because a lot of scurvy rhymes
Have spoiled my mind for higher matters.
Poor mind! It struggles with the names
Of Cassiopeia and Mars,
But plays the silliest childish games
Whenever I observe the stars.

*Twinkle, twinkle, little star,
How I wonder what you are,
Up above the world so high,
Like a diamond in the sky!*
—S. K., in *Spokane Spokesman-Review*.

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HYGIENE

Patients Give Blood

Injections of immune blood from the convalescent youngster who has brought measles home from school has been utilized by Drs. Roy P. Forbes and Berryman Green of Denver, Colorado, to protect the younger brothers and sisters in the family.

When Junior in the second grade gets measles, four-year-old Sally and baby Charles of one and a half are at an age when the consequences of an attack are likely to be most serious. For it has been found that 90 per cent. of measles deaths occur under five years and 75 per cent. under two years of age.

Serum made from the blood of convalescing measles patients has been found very efficacious in conferring a temporary immunity on young children who have been exposed to the disease. Unfortunately there is never enough measles serum of this sort to meet the demand when an epidemic breaks out. Usually, says Dr. Forbes in a report of his work to the American Medical Association, parents of the convalescent child of school age
(Just turn the page)

EDUCATION

Greek Education

"Whom, then, do I call educated? First, those who manage well the circumstances which they encounter day by day and who possess a judgment which is accurate in meeting occasions as they arise and rarely misses the expedient course of action; next those who are decent and honorable in their intercourse with all men, bearing easily and good-naturedly what is unpleasant or offensive in others, and being themselves as agreeable and reasonable to their associates as it is humanly possible to be; furthermore, those who hold their pleasures always under control and are not unduly overcome by their misfortunes, bearing up under them bravely and in a manner worthy of our common nature; finally, and most important of all, those who are not spoiled by their successes and do not desert their true selves, but hold their ground steadfastly as wise and sober-minded men, rejoicing no more in the good things which have come to them through chance than in those which through their own nature and intelligence are theirs from birth. Those who have a character which is in accord, not with one of these things, but with all of them—these I maintain are educated and whole men, possessed of all the virtues of a man."

—Isocrates in *Panathenaicus*.

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Patients Give Blood

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are unwilling that the child should contribute his blood for the sake of others even when a fair compensation is offered. But when the patient's blood is needed to protect an exposed brother or sister no objections are raised because most parents now realize the seriousness of measles in very young children.

The immune blood is taken when the young patient's fever begins to go down, normally about three days after the rash has appeared, and roughly about six days after the contacts have been exposed. Almost invariably it is the oldest child in the family, usually in school, according to Dr. Forbes, who first brings measles into the home.

The injections of the immune blood produce a very mild form of modified measles without any unpleasant complications, the physician stated. This method will probably be most useful, he explained, in the early weeks of an epidemic or in small communities where convalescent serum is not readily available.

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MEMORANDUM

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Evolutionary Religion

(Continued from page 347)

dous inspirational appeal. It is the discovery of the vital part which we ourselves are playing in the evolutionary process. For man himself has within two hundred years discovered new forces with the aid of which he is now consciously and very rapidly making over both his physical and his biological environment. . . .

It follows that the progress which man has made since history began has been due not to the betterment of his stock but rather primarily to the passing on of the accumulated knowledge of the race to the generation following after. The great instruments of progress are then research, the discovery of new knowledge, and education. This puts the immediate destinies of the race or of our section of the race, largely in our hands. This spirit and this conviction is the gift of modern science to the world. Is it then too much to say that modern science has remade philosophy and revived religion?

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