

that to some vast Intellect, which saw through the desperate complexity of our nature, responsibility and freedom would be replaced by deterministic concepts, intricate beyond our very imagining. But there is every reason to suppose that personality and consciousness would also be replaced by similar unimaginables. To such an Intellect men might not appear to be persons either. Least of all would they be conscious automata.

The answer to the question, Which is the reality and which the illusion?—or, better, Which seems to be the illusion, and which the reality?—depends on the direction from which the problem is approached. To our hypothetical Intellect, the underlying complex would be the more real; but we, who approach things from the surface, see reality in the concepts that lie nearest us. These have value and importance to us, not because they are ultimate—if there be any ultimates—but because they are proximate. We needs must act as if they were real, and we are justified in doing so. Do you remember Kim and the Red Lama in the Himalayas? “Look and know illusion, *chela!* These are the true Hills!”

It is, of course, still hypothetical that such an interpretation of humanity is possible at all. But we know that there is a maze of subordinate levels—atomic, molecular, colloidal, cellular, physiological, psychical, and perhaps more—through which the way would be exceedingly difficult to follow, even if it were communicated to us.

Why, then, should we vex ourselves with such fine-drawn speculations? There are two strong reasons. First, the evidence in favor of statistical determinism in physical phenomena is overwhelming; and there is a great weight of physiological and psychological data which support the belief that we ourselves are not exempt.

The effects of certain drugs, and of some diseases, upon the higher aspects of personality provide the most appalling evidence. In a lighter vein, but pro-

vocative of earnest thought, is an old quip, from the days of Lister's medical teaching at Edinburgh: “No one ever died a triumphant death of trouble below the diaphragm.”

These are but glimpses of a mass of evidence which puts the mechanistic hypothesis very seriously in court.

But the insistent problem, in times like these, is religious. There is no scientific difficulty in the belief that God, if He exists, controls the universe completely. Postulates of impotence need not be made concerning the Deity. It is hard to believe that a morally perfect God controls the world in which we struggle. But if we deny this—if God is not all-powerful—if the evil wills of “the rulers of the darkness of this world” are outside His control, then the victims of oppression are indeed of all men most miserable, and there is no ultimate security anywhere. If we have any religion at all, we will pray in these days—and it is to God Almighty that we must pray.

This faith—that God knows why He made the world this way, though we do not—has supported those who “subdued kingdoms, wrought righteousness . . . turned to flight the armies of the aliens.” We need it desperately to-day, and we need equally faith in freedom.

May we not have both, and be spared one more chapter of the weary history of the warfare of science and theology, if we accept, tentatively at least, a mechanistic but statistical hypothesis of our own nature? I have tried to show that this involves no abandonment of belief in responsibility or freedom, and in another place<sup>4</sup> and at length, I have argued that it is fully consistent with belief in personal immortality. So far as I can see, the validity of intellectual and moral values is not impaired.

We have indeed to make one sacrifice; we will no longer be inclined to think of ourselves as irreducible spiritual units possessing some sort of ultimate reality independent of all else but God. But this hurts only our pride—and is likely to be good for us.

## THE NEW YORK ZOOLOGICAL SOCIETY<sup>1</sup>

By Dr. HENRY FAIRFIELD OSBORN

### *Members and Friends of the Zoological Society:*

You come here each year for better reasons than hearing a long formal, detailed summary of the past year's activities. This will find its proper place in the printed Annual Report to be submitted to you at a later date.

The past year, however, has been an extraordinary year—a year of war. I feel therefore that comments

should be made to you as to the situation of the Society in wartimes; that I should touch upon two or three of the major highlights of the year just ended—also speak briefly of the future.

The outstanding fact is that the activities for which this institution is responsible appear to mean as much to the public in days of war as they do in days of peace. Consequently, we have undertaken to maintain all our normal activities throughout the past year not

<sup>1</sup> Address at the Annual Members' Meeting of the New York Zoological Society, on January 12, 1943.

<sup>4</sup> “Fate and Freedom,” Yale University Press.

only in the operation of the Zoological Park but in the fields of education and research. Naturally, many obstacles have had to be overcome and many more await us, but we are determined to do everything in our power to continue to maintain these activities for the duration. Our endorsement and encouragement comes from the public itself—a visible and powerful growing public interest, the limits of which, I believe, we do not ourselves begin to measure.

Our scientific staff has been able to assist directly in a number of ways in the war effort, especially in the fields of marine intelligence and in medical problems. Forty-three members of our organization, including eleven trustees, are absent on military duty.

I will touch briefly on two or three of the highlights of the past year. The new farm exhibit has proved even more popular than we could have anticipated. More animals were taken out from behind the bars this last summer (the elephants and rhinoceroses) and interior improvements, notably those to the Bird House, were completed in December. It will of course not be possible to make improvements of any importance during this year, although a large number of minor betterments will be carried out.

In passing—we will open in April an event of an entirely new type. Mr. Liers is on our program to-night and he and his friends, the otters, will be with us for the season, giving a number of public showings every day. We believe that through these the public will gain a better understanding of the minds and manners of animals. Mr. Liers is not an animal trainer. He reasons with animals and lets them reason with him.

One field expedition was carried out—that under Dr. Beebe to Venezuela. We feel a debt of gratitude for the financial support given to this work by the Committee for Inter-American Cultural Relations, and also the generous arrangements made for Dr. Beebe and his staff at Caripito by the officials and organization of the Standard Oil Companies here and in Venezuela.

As to finances, we have no major complaint. We ended the year within our earned income. Somewhat surprisingly, considering war demands, the Society has received cash donations during the past year slightly in excess of \$50,000. We have not thought it timely to enter into a general campaign for capital funds. Allow me, nevertheless, to remind you that this institution greatly needs funds for the fulfillment of its

ultimate destinies in education, in research and in public service. It is not my business to suggest to you when and how to give!

As to the future, the Zoological Society is scheduled to receive a fund in excess of \$3,000,000 under the terms of the Post War Program, as publicly announced by the Mayor on April 24, 1942. This will provide for the further modernization and development of the Zoological Park—the initial steps for such a program having been taken, you will recall, in 1939 with the drawing of plans for the African Plains Exhibit—and the building of a new Aquarium. In regard to the latter, we now have the opportunity of planning for an institution that will really do justice to the miracle of the life of the rivers, the lakes and the great oceans of this world. There is now available a plan and design fund of \$60,000, of which the City has provided \$40,000 and the Society \$20,000. This year it is expected that an equivalent fund will become available from the same sources. Plans for both institutions are therefore now being put into the blueprint stage. (You can see, after this meeting in the exhibit corridor, projections of both of these major projects.)

What other destinies are there? Certainly the realization, we hope, of that most compelling and important idea—the establishment of a research center in the Zoological Park for the study of animal diseases in their relation to human disease problems. Sometime, somehow this must be accomplished. We further aim to create a dynamic and expressive conservation exhibit—an exhibit so designed that it will vividly carry to the public at large the message of the conservation of our natural resources. Our objectives include also the further extension of our educational work and of the research work which leads so definitely to the advancement of human knowledge.

I must not overstay my time. The other day, our guest speaker to-night sent me a quotation from a chemist—none other than Dr. Eliot, that great educational leader, late president of Harvard University. It runs as follows:

The human race has more and greater benefits to expect from the successful cultivation of the sciences which deal with living things than from all the other sciences put together.

It is with such thoughts, such potentialities, such objectives in mind that this institution calls upon us for the best of our thoughts and of our energies.

## OBITUARY

**STEPHEN WALTER RANSON**  
1880-1942

Two days after he had reached his sixty-second birthday, Stephen Walter Ranson, professor of neu-

rology and director of the Neurological Institute at the Northwestern University Medical School, died of coronary thrombosis on August 30, 1942. His wife, Tessie, and three children, Captain Stephen W. Ran-