absolute reality? Ask yourself what conception you would have of reality and science if you had been born with a continuous supply of lysergic acid diethylamide.

Scientists are likely to forget that they operate on faith exactly as do religions. Particularly relevant is the fact that the acceptance of any system of logic for thinking about our own sensory experiences is an act of faith. As Vannevar Bush (*34*) puts it, "Our reasoning appears sound to us only because we believe it is and because we have freed it from inconsistencies in its main structure; for it is built on premises which we accept without proof or the possibility of proof."

Pure determinism leaves no place for chance. The configuration of the present moment uniquely and completely determines all the future. My thoughts and actions tomorrow are completely specified by nothing more than the present instant positions and velocities of a myriad of particles of matter and of energy.

I conclude with the hope that, for the small part we play in the shaping of things to come, the neurochemist will pursue his science to its utmost but will never forget that the problem of dualism of body and soul may not be solved in material terms only, and that on its solution hangs the fate of society. The problem must be approached humbly and with care lest ineptitude lead us into the greatest of human tragedies—a philosophy of nothingness; a philosophy without beauty; a philosophy without God. I personally see nothing to persuade me that the functions of the brain are not the functions of protoplasm and that these functions encompass both the material and the transcendant; that there is the necessity to include in the philosophy of biology both those material attributes which are our science and those immaterial attributes which are our values. It is the amalgamation of the two that will close the abyss, which has so destructively separated science from humanity as to make it appear the enemy of man and the enemy of God. In our hearts we know it is neither.

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W. Kaempffert, Science Popularizer

The death of Waldemar Kaempffert, on 27 November 1956, at the age of 79, brought to an end a distinguished career dedicated to the popularization of science. This included 26 years as science editor for the *New York Times,* preceded by a period of equal length as editor and free lance writer of popular science articles. He was one of the first, if not the very first, who made the whole field of science his domain, and one of the very few, and for a considerable time the only one, who could write with authority on developments in all major fields of science, from astronomy to zoology, with clarity and simplicity yet without sensationalism or distortion.

In this respect he set the standards for the modern art of science writing, of which he was for many years the recognized dean. He was the first of the science popularizers who succeeded in making the ever-increasing flow of new-found facts of nature interesting to the lay reader, setting an example on how to steer a clear course between technicality and vulgarization, never bewildering his reader by talking over his head or patronizing him by talking down.

"It is the business of the journalist," he wrote in 1935, "to present the discoveries of the laboratory so that the many will understand. But Heaven forbid that the popularizer should rely too much on emotion. We have passed the stage when gaping wonder can pass for popularization. The facts, simply, humanly and interestingly presented, are what the public wants."

Waldemar Kaempffert was born in New York on 23 September 1877. His parents, Bernhard and Juliette, were of German descent. He graduated at the age of 20 from City College, where he majored in science and was elected to Phi Beta Kappa.

Upon graduation in 1897 he obtained a job as an assistant editor of the *Scientific American,* while at the same time he studied law at New York University. He won his law degree in 1903 and was admitted to the bar, but he never practiced. In 1911 he was named managing editor of the *Scientific American,* and after 4 years at that post he joined the *Popular Science Monthly* as editor, holding that position until 1920.

For some years after 1920 Kaempffert was a free lance writer on popular science. In 1927 he joined the staff of the *New York Times,* for which he wrote a weekly column on current research, occasional editorials on scientific subjects, and sometimes covered scientific conventions and other news events in the field of science.

In 1928 he left New York to become the first director of the new Museum of Science and Industry in Chicago, where he remained until 1931. As director, his ideal was for visitors to leave the museum convinced that scientists did more to "transform the earth and mold institutions than Alexander, Caesar and Napoleon, and that history is made in the laboratory and workshop as well as on the battlefield."

In 1931, Kaempffert rejoined the *New York Times* as science editor, a post he occupied with high distinction until 12 days before his death. His subject matter was properly described to be "as wide as nature itself." It included discussions on the latest concepts of the origin of life, atomic energy, relativity, evolution, nutrition, antibiotics, industrial management, and the effect of dictatorship on scientific progress. He was a strong advocate for the mobilization of scientific research for peacetime, as well as military, goals and was one of the first to champion the organization of cancer research along the same lines as the research laboratories in our great industries.

In 1954, Kaempffert became the first newspaper science writer to receive the Kalinga prize, worth $2800, for which he was nominated by the British Association of Science Writers. A few weeks earlier, he had accepted for the *Times* a special award of the Albert and Mary Lasker Foundation, which credited him with having "shaped profoundly his newspaper's contribution to medical reporting in the public interest." In June 1956, he was named a fellow in the American Society of Mechanical Engineers. Clarkson Polytechnic Institute conferred on him the honorary degree of doctor of science in 1939. He was the author of six books on various aspects of science and served as editor of half a dozen other volumes of popular science, including some for children.

Kaempffert enjoyed telling groups of scientists that the chief function of the science writer was to "make science so clear that the scientists could understand it." He felt that science was "not the property of a learned class but the common possession of mankind." In the words of an editorial in his newspaper, "he had a curiosity that roamed the whole field of human knowledge. A man of strong opinions, he was nevertheless tolerant of all but quackery. His writing, direct and purposeful, was informative and influential. . . . His advice and views were widely sought by educators, by men of the laboratory and of industry."

Those of us who were his colleagues on the *Times* will remember him, as the *Times* editorial states, as a man "who was unpretentious despite his great talents and learning, who could listen well just as he could talk well . . . who worked to the age of seventy-nine with the same zest in search of truth as when he began his career of distinguished specialization more than half a century ago."

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New York Times, New York, N.Y.

George Gomori, Leading Histochemist

On 28 February 1957, in Palo Alto, California, George Gomori died suddenly, with symptoms suggestive of coronary thrombosis. Only last October he had moved from the University of Chicago to the Palo Alto Clinic, in order to be nearer to his daughter and grandchildren, and was still in the process of organizing his schedule to resume his investigative work.

Born in 1904 and educated in pathology and surgery at the University of Budapest, Gomori was regarded as being primarily a pathologist, but the bulk of his published works were in histochemistry and histologic staining procedures. His work on the demonstration of the activity of the phosphatases in tissue sections literally initiated a new epoch in morphologic investigation. He and others have extended the basic principles of this work to localize various specific alkaline and acid phosphatases, phosphamidases, lipases, and esterases. He even, on at least one occasion, left the hydrolytic enzymes to extend his investigations to the leucocyte oxidases.

His histochemical work was by no means limited to enzyme localization. His work on enterochromaffin helped to break down the long-held doctrine that this substance was a catechol derivative, and he indicated in his last paper that his own resorcinol hypothesis is perhaps equally tenable with the presently popular serotonin theory, or that perhaps it represents a still unknown substance which differs from both.

Among his more strictly histologic methods, his aldehyde fuchsin procedure has achieved wide usage empirically, and many have attempted to use it as a histochemical procedure. He himself stated that he did not understand its mode of action. This method and his chrome alum hematoxylin method have proved widely useful in identification of pancreatic islet cells in the study of diabetes.

His work on the hydrolytic enzymes has gained world-wide recognition, and he is at this time regarded as having been one of the leading histochemists of the world.

He participated in 1950 in the organization of the Histochemical Society, served on its first council, was its vice president in 1956, and had been elected its president for 1957. He served as associate editor of the *Journal of Histochemistry and Cytochemistry* and of the *American Journal of Clinical Pathology.*

His book, *Microscopic Histochemistry,* though less extensive than its contemporaries, is a model of conciseness and accuracy and has achieved a wide usage.

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