

May 1955. It is possible for the activity to travel from Nevada across the Atlantic Ocean to Tokyo in about 10 days if the dust is carried by the jet stream with a speed of about 55 to 70 kilometers per hour.

The meteorological phenomena that might have a correlation with the daily change of the activity of the fission products are shown in Fig. 1 and Fig. 3. Although the reason is not clear, the average temperature seems to show a good correlation during April, but not in May. Rainfall might be expected to clean up the radioactive dust in the air; however, it shows only a slight correlation,

which implies that rainfall does not completely clean up the contaminated air. The location of high pressure areas shows better correlation insofar as our present observation is concerned. Figure 3 shows the trajectories of high atmospheric pressure centers during the period studied. When the activity shows a maximum on the curve in Fig. 1, the trajectories passed through the neighborhood of Japan. On the other hand, when the activity was at a minimum, the trajectories diverged away from Japan without exception. The radioactive dust might have been carried by the jet stream 7 to 10 kilometers above the ground, and the

dust might have fallen to the ground along the trajectories of high atmospheric pressure.

References and Notes

1. M. Eisenbud and J. H. Harley, *Science* 117, 141 (1953).
2. ———, *ibid.* 121, 677 (1955).
3. We wish to express our thanks to J. Nemoto and N. Arizumi for many helpful discussions. We also wish to acknowledge the extensive aid of M. Tsukuda and A. Sasaki.
4. E. C. Tsvoglou, H. E. Ayer, D. A. Holaday, *Nucleonics* 11, No. 9, 40 (1953).
5. J. H. Harley, *ibid.* 11, No. 7, 12 (1953).
6. M. H. Wilkening, *ibid.* 10, No. 6, 36 (1952).
7. J. Fresco, E. Jetter, J. H. Harley, *ibid.* 10, No. 3, 60 (1952).
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W. L. Bryan, Scientist, Philosopher, Educator

On 8 July 1892, Clark University was the scene of an important scientific event. On that date the American Psychological Association was founded. Of the 31 original members of this new organization, not all were professional psychologists; among them were several psychiatrists and a number of philosophers. Even those who could technically be called psychologists were not far removed from theological, philosophic, and academic-administration interests.

Yet this organization signalizes for American psychology the establishment and growth of the laboratory tradition. This institutionalizing of experimental study has proved to be a powerful factor in the evolution of psychology toward a high peak of proficiency and performance within the great family of sciences. Since the scientific enterprise is above all a persistent search for the nature of things, it may well be, and often is, carried out under widely different auspices. An organization, therefore, that fostered an accumulation of facts and techniques could not fail to produce a beneficial impact upon science in general.

William Lowe Bryan was an effective participant both in the establishment of the American Psychological Association and in the direct development of scien-

tific psychology. He was a charter member of this association and in 1903 was its president. But this is only a symbol of his psychological interests. His more intimate concern for psychology is to be found in his unique *curriculum vitae*.

When psychology was first being developed as a science in Germany, Dr. Bryan was among the early American students to study there. Later he became a pioneer in the experimental investigation of the development of voluntary motor ability and the learning processes that are involved in attaining skill in telegraphic transmission and reception. In connection with his researches on telegraphic language he worked out some of the earliest learning curves, which still find a large place in textbook literature. Dr. Bryan's investigations became a model for a number of human-learning experiments. Even after retiring, at an advanced age, from his prolonged and successful administrative duties, he resumed work on the psychology of learning a life occupation and published a monograph on this subject as recently as 1941.

In addition to his own studies, Dr. Bryan, throughout his long life, actively supported psychology, as well as other scientific work. As founder of the psy-

chological laboratory at Indiana University, as head of the philosophy and psychology department, and later as president of Indiana University, he constantly demonstrated his eagerness to promote psychological research, both morally and financially.

Dr. Bryan, however, was by no means narrow in his interests. For example, he never relinquished his study of philosophy and published several volumes on Plato in collaboration with his wife, Charlotte Lowe Bryan. He also found time to add the promotion of education on a national scope to his program of university, local community, and state activities. For many years he acted as a trustee of the Carnegie Foundation for the Advancement of Teaching.

As an administrator, Dr. Bryan was a living refutation of the frequently made statement that to become an administrator is to withdraw personally from science and scholarship. What he was unable himself to perform he compensated for by making it possible for his colleagues to achieve. He accomplished this, not only by personal encouragement and monetary aid, but by defending scientists and scholars from the attacks launched by vociferous bigots who presumed to dictate that their form of orthodoxy should be taught in institutions of higher learning.

If the esteem a man commands in his community is any measure of greatness, Dr. Bryan achieved that distinction. By his gentle and frank manner, by his loyalty to his principles, his duties and his vocation, and by his valued public orations, William Lowe Bryan endeared himself deeply to many people. His death at the age of 95 is felt as a personal loss by a host of friends and admirers.

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