



**A new  
achievement for  
STEREOMICROSCOPY**

The WILD® M5 STEREOMICROSCOPE presents, new, important advances in versatility, optics, mechanical conveniences and physical design.

This Swiss precision instrument is equipped with a main objective component followed by pairs of vertically mounted intermediate lenses with parallel axes. The result is increased, uniform sharpness throughout the field, with no need for any change in accommodation.

With a constant working distance of 96 mm., standard magnifications are 6X, 12X, 25X and 50X, conveniently selected on a horizontal drum.

Accessories include a base for transmitted light observation, various light sources, photographic and measuring attachments. A matching steel hood is provided for easy storage and portability.

For full details about this years-ahead stereomicroscope, write for Booklet M5.

\*The FIRST name in Surveying Instruments, Photogrammetric Equipment and Microscopes



Full Factory  
Services

INSTRUMENTS, INC.

Main at Covert Street • Port Washington, New York  
POrt Washington 7-4843

In Canada

Wild of Canada Ltd., 157 MacLaren St., Ottawa, Ontario

## Letters

### Applications of Social Science

I am concerned lest the points of view expressed by Ernest van den Haag ["Man as an object of science," *Science* 129, 243 (1959)] be taken by our physical and natural science colleagues as a measure of the current state of scientific studies of human behavior.

It is my belief that van den Haag's central thesis is irrelevant to the scientific study of man's behavior. His concern with use of social science generalizations for "the control of human behavior . . ." confuses a personal social philosophy with the process of acquiring and analyzing scientific data. Van den Haag's assertions that social scientists must be concerned with "application" of social science knowledge to the deliberate manipulation of human behavior are unfortunate, since they are shared by few scholars in the several social science disciplines. I am moved to voice my objections to the author's speculations, for they could lead a reader to conclude that contemporary social science research is no more than 19th-century social philosophism plus some scientifically rational and empirical procedures and conceptualizations.

Men in a free society seek scientific knowledge to understand the world of nature and man. I do not believe that many social scientists hold presently that such understanding as may be gained through the scientific study of human behavior must be used for "control" of human behavior. Who shall choose those who would control human behavior? Who may assume the right, in an open society, to assert that he can think for his fellows? Van den Haag reveals his fundamental doubt that men are capable of directing their own destinies, given an understanding of themselves through scientifically derived knowledge. Karl Popper, in his work *The Open Society and Its Enemies* (Princeton Univ. Press, Princeton, N.J., 1950), has traced a similar doubt through the course of Western history; in one guise or another, the assumption, by one person or a group, that he or they could think "better" for others has led to the tyrannies that have oppressed man and, for long periods, halted his quest for knowledge.

More accurate answers to van den Haag's article's subtitle—"To what extent can the social sciences be expected to explain and help solve the problems of man?"—are to be found in such works as Bernard Barber's *Science and the Social Order* (Free Press, Glencoe, Ill., 1952), Clyde Kluckhohn's *Mirror for Man* (Whittlesey, New York, 1949), or *For a Science of Social Man* [John Gil-

lin, Ed. (Macmillan, New York, 1954)]. I would concur with van den Haag on one point in his discussion; value judgments about the use of knowledge pose most difficult problems. Such problems become more acute when one confuses scientific studies of phenomena with one's particular views of the nature of man.

THOMAS RHYS WILLIAMS  
*Department of Anthropology,  
Sacramento State College*

I have been unable to discover any logical relation between my article and Williams' comments. The social sciences, like all empirical sciences, try to predict (sometimes retrodict) future (past) behavior by observing past (present) behavior. They succeed when they isolate recurrent correlations. They have to face special problems of verification, and the incidental effects, some of which I sketched. Further, they meet misunderstandings often due to confusion of description and prediction with advocacy. Williams displays this confusion.

My discussion of actual, of potential, and of frequently proposed applications of social science for the attainment of human ends persuaded Williams (i) that I advocate this application; (ii) that I reduce the social sciences to nothing but this application because, according to him, I hold that they "must" be used for the "deliberate manipulation of human behavior"; and (iii) that I advocate a particular type of control amounting to tyranny because, according to Williams, I "doubt that men are capable of directing their own destinies."

I do not hold any of these views and resent the use of my article as though it were a Rorschach test (I shudder to think what happens when Williams interprets the views of an inarticulate primitive tribe). Point (iii) is obviously a red herring. Williams might just as well have berated me for advocating nudism. I nowhere even discuss this point (and I happen to agree with many of Popper's systematic ideas, though I find the anachronistic garb in which he clothed them unbecoming).

As to points (i) and (ii), Williams confuses discussion with approval. I pointed out that the social sciences can—not that they must—be applied and that application of science (which is of course the same as "control" or "deliberate manipulation") requires value judgments concerned with ends rather than means; these fall outside the scope of science, natural or social, since observation can establish what is desired but not what is (ultimately) desirable. I discussed at some length proposed "scientific" foundations for value judgments, concluding regretfully that none have been found. Williams appears to agree,

(Continued on page 1444)

# Letters

(Continued from page 1398)

albeit obscurely, and thinking himself in opposition to my view.

Perhaps Williams thinks that application can be avoided altogether. I hesitate to presume that he is that naive. Legislators try to control human action by compulsion; political leaders (in a democracy), by persuasion; military leaders, by authority; educators, by logic and information; advertisers, by influence. By various combinations of means of differing legitimacy we control and manipu-

late each other. All societies—in how-ever different ways—must control their members to some degree.

The social sciences, among other things, explore these controls—causes, effects, and effectiveness—and the results may be used to improve the means used. In the 20th century, social scientists advise government, business, and private citizens on a host of problems, all of which involve the control of human behavior. (I shall not discuss Williams' confusion between "control" and compulsion and his idea that compulsion is always practiced by the few over the many). Now, my central thesis was that

social scientists cannot *as scientists* determine what ends are to be served, though they can indicate what means are required by each and what effects attainment of the end may have, and this may influence the selection of ends. The situation is not very different from that of the physicists, though the similarities are obscured by misunderstandings such as those displayed by Williams. I do not believe, however, that these need deprive the social sciences of the scientific character that they share with the natural sciences.

ERNEST VAN DEN HAAG

New York, New York

## PERSONNEL PLACEMENT

**CLASSIFIED: Positions Wanted**, 25¢ per word, minimum charge \$4. Use of box number counts as 10 additional words. Payment in advance is required. **Positions Open**, \$33 per inch or fraction thereof. No charge for box number.

**COPY** for classified ads must reach SCIENCE 2 weeks before date of issue (Friday of every week).

**DISPLAY:** Rates listed below—no charge for box number. Monthly invoices will be sent on a charge account basis—provided that satisfactory credit is established.

Single insertion	\$33.00 per inch
4 times in 1 year	30.00 per inch
7 times in 1 year	28.00 per inch
13 times in 1 year	27.00 per inch
26 times in 1 year	26.00 per inch
52 times in 1 year	25.00 per inch

**For PROOFS** on display ads, copy must reach SCIENCE 4 weeks before date of issue (Friday of every week).

**Replies to blind ads** should be addressed as follows:

Box (give number)  
Science  
1515 Massachusetts Ave., NW  
Washington 5, D.C.

### POSITIONS WANTED

**Biochemist, Ph.D.** Now assistant professor of pharmacology in large eastern medical college. Desires to return to department of biochemistry, academic or industrial. Considerable research and teaching experience. Box 121, SCIENCE. X

**Biologist, B.A.**, 1957, Reed College; background in physics, mathematics, chemistry; 2 years' museum experience as curator of science. Inventive; interested in doing original research in biology, evolution, biochemistry, astronomy, space medicine; field or laboratory work. Will train. Christopher Ray, Everhart Museum, Scranton, Pa. X

**Biologist, Ph.D.**, 10 years' teaching experience. Numerous publications. Box 113, SCIENCE. 5/29

**Biologist.** Young woman Ph.D., desires teaching or research position in plant pathology or botany. Box 117, SCIENCE. 5/29

**Botanist, Ph.D.** Genetics, biology, general zoology, plant anatomy, microtechnique, human anatomy; research in air pollution and teaching experience. 40 years old. Wants teaching or research, small college preferred. Box 115, SCIENCE. 5/29; 6/5

**Microbiologist, Ph.D.** Broad experience in bacteriology; also interested in biology. Box 119, SCIENCE. X

**Parasitologist, Ph.D.** June 1958. Desires teaching or research position. Box 114, SCIENCE. X

**Writer**, experienced researcher, medical, psychiatric, physiological, legal, general. Can rewrite, ghost. G. Marin, 402 85th Street, Brooklyn, New York. X

### POSITIONS OPEN

#### ADMINISTRATIVE ASSISTANT RESEARCH

A leading pharmaceutical firm requires an administrative man for research division. Job includes line and staff functions. Experience in research, industrial relations, budget, supplies, and services helpful. Job reports to manager of research administration. Must have at least a B.S. degree in physical or biological sciences. Send complete résumé, including salary requirements to

Box 108, SCIENCE

#### ASSISTANT DIRECTOR FOR FOODS AND DRUGS

A progressive midwestern pharmaceutical company is seeking a Ph.D. in chemistry, pharmacology, or related field, 30-40, for the scientific relations department. He should be able to write clearly and interestingly, to meet people easily and should have experience in the pharmaceutical industry. An excellent five-figure starting salary and liberal benefits are provided. We are an expanding company with sales in excess of 60 million dollars, and a strong research division. Reply with résumé, including present and past earning levels.

Dr. James A. Garrison  
Professional Employment Manager  
Mead Johnson & Company  
Evansville, Indiana

#### ATOMIC PERSONNEL, INC.

SEND YOUR  
RESUME OR  
PERSONNEL  
REQUIREMENTS  
Confidential  
Handling



A NATIONAL  
EMPLOYMENT AGENCY  
for the  
NUCLEAR FIELD  
•  
NO CHARGE TO  
INDIVIDUALS

1518 Walnut St. Phila. 2, Pa. • PE 5-4908

**Biochemist, Physiologist or Biologist** with strong biochemical interests, recent or 1959 Ph.D., desired to participate in basic research on cellular metabolism and renal transport mechanisms. May Institute for Medical Research, 421 Ridgeway Avenue, Cincinnati 29, Ohio. X

**Biochemist Physical, Ph.D.** To participate in USPHS research program (3-year grant) dealing with study of plasma proteins with physical-chemical techniques, for example, ultracentrifugation, chromatography, light scattering, and so forth. Salary, \$8000 plus annual \$500 increment. New York City area. Address replies to Box 118, SCIENCE. 6/5

### POSITIONS OPEN

**Biochemist, Ph.D. or M.D.**, for chief of the biochemistry division of the department of pathology at a large midwestern university and teaching hospital. Excellent opportunity for independent research. Salary over \$10,000 depending upon qualifications. Position available September-October, 1959. Curriculum vitae requested. Interview arranged. Box 97, SCIENCE. 5/15, 22

**Biochemist, Ph.D.**, to take charge of clinical chemistry department under direction of pathologist in acute general hospital, preferably one with previous hospital experience. Salary open. Write Robert C. Kniffen, Managing Director, New Britain General Hospital, New Britain, Connecticut. X

**Botanist:** For staff editorial position with Biological Abstracts. M.A. or Ph.D. in plant science required. Previous editorial experience not essential. Beginning salary \$5000-\$7500, depending upon training and experience. Opportunity for advancement unusually good with this rapidly expanding organization. Mail inquiry or application (including pertinent biographic data) to Mrs. H. Philson, 3815 Walnut Street, Philadelphia 4, Pa. 5/29

(a) **Chief**, pharmacology division, research department, one of country's leading industrial companies; Ph.D. or M.D. or combination of both, preferably the latter; administrative ability important; laboratories occupy newly constructed building designed for their purpose; business arrangements dependent upon qualifications. (b) **Physiologists, Pharmacologists, Biochemists;** scientists with Ph.D., M.S. and B.S.; although majority of appointments are at top level, additional training available; particularly interested in obtaining senior organic or pharmaceutical chemist who has had radioisotope experience and well qualified in research; organization specializing in research in nuclear sciences; East. (c) **Chemist**, preferably Ph.D., 300-bed general hospital; preferably man who will look upon association as career opportunity; college town, 100,000, near New York City; starting salary \$8000. S5-4 Medical Bureau, Burnside Larson, Director, 500 North Michigan Avenue, Chicago. X

**Endocrinologist, Research.** Challenging opportunity as independent investigator to conduct and supervise research in general endocrinology. Experience in biological aspects of reproduction helpful but not essential. Ph.D. in endocrinology or related fields required. Please send complete résumé to Dr. Dorsey E. Holtkamp, The Wm. S. Merrell Company, Cincinnati 15, Ohio. 5/22

Man wanted to cover selected and profitable territory for specialty firm in Midwest. Must have some laboratory background and desire to sell. Products now servicing more than 11,000 laboratories in the United States providing a positive labeling system for laboratories and institutions. Box 60, SCIENCE. 6/5; 6/19

**New World-Wide Graduate Award Directories** for American scientists, teachers, librarians to subsidize their education and research. Stipends \$200-\$10,000. Volume I (1957), \$3; volume II (just published, no duplication), \$3; both volumes, \$5. Limited editions. Complete, specific information on 400 awards in United States and overseas in each volume. CRUSADE, Sci., Box 99, Station G, Brooklyn 22, N.Y. eow