

SSSS

Newsletter of the Society for Social Studies of Science

Winter 1976

Volume 1 Number 2

FIRST ANNUAL 4S MEETING: MORE DETAILS

The first annual meeting of the Society for Social Studies of Science will be held at Cornell University, Ithaca, NY, on 29-31 October 1976. The first two days of the meeting will be devoted to research reports and invited papers representing the several disciplines that constitute the Society. The third day will be given to a joint meeting with the International Sociological Association's Sociology of Science Research Committee, thereby enabling the entire meeting to include considerable international participation. Persons who wish to report briefly on research in progress or to offer fuller descriptions on research results or other scholarly contributions should send notice of them to the Referee Committee c/o Gerry Gaston, Department of Sociology, Southern Illinois University, Carbondale, IL 62901. It is hoped that a limited number of travel grants for foreign and domestic participants will be made available for the meeting.

NEWSLETTERS AND JOURNALS

Survey of Sources Newsletter. This newsletter is an occasional publication of the Survey of Sources for the History of Biochemistry and Molecular Biology of the American Academy of Arts and Sciences and the American Philosophical Society. The survey, which is funded for twelve months from 1 July 1975 by the two sponsoring societies, is charged by its supervisory committee of historians, scientists, and librarians with locating and documenting materials held by individuals and institutions which are relevant to the history of biochemistry, molecular biology, and related fields of science in the last hundred years. Volume 1, number 1 (November 1975) overviews Survey of Sources projects in four categories: biographical, archival, historiographic, and communication. The Newsletter, edited by David Bearman, is available gratis to interested persons from the survey offices (which are open to visitors by appointment): American Philosophical Society Library, 105 South Fifth Street, Philadelphia, PA 19106. Contributions, questions, and comments are all welcome.

Social Science History Association Newsletter. The Social Science History Association was created to perform integrative functions outside the charter and scope of existing disciplinary associations. SSHA will develop durable communication mechanisms to link scholars working on similar problems but located in different disciplines, institutions, and countries. The SSHA Newsletter is one such mechanism. The first issue (November 1975) presents basic information about SSHA activities, e.g., the creation of problem-oriented "networks" and the

NEWSLETTERS AND JOURNALS (continued)

organization and sponsorship of conferences and workshops. Subsequent issues will report on planned activities, e.g., the introduction and integration of social science history in undergraduate and graduate curricula and the development of data resources and archives needed for effective cross-disciplinary, cross-temporal, and cross-cultural research. The SSHA Newsletter is published at the Institute for Social Research, University of Michigan, P.O. Box 1248, Ann Arbor, MI 48106, and edited by John Shover. Information about membership should be solicited from Jerome M. Clubb at the above address. Material for the Newsletter should be submitted to the Managing Editor, Nancy Tones, History Department, College Hall, University of Pennsylvania, Philadelphia, PA 19174.

Personality and Social Psychology Bulletin. Clyde Hendrick (Department of Psychology, Kent State University, Kent, OH 44242), editor of this new journal, would be interested in receiving manuscripts within the sociology of science relating to personality and social psychology.

STPP News. Joseph Haberer is editing an interdisciplinary newsletter on science, technology, public policy, and society titled STPP News. Short articles, book-notes (50 words), poems on science and technology, and other relevant items will be considered for publication. For information, write to Haberer at the Program in Science, Technology, and Public Policy, Department of Political Science, Purdue University, West Lafayette, IN 47907.

Networking. Networking reports news of the science Resource Network, a project supported in part by NSF and designed to provide Massachusetts state legislators with access to information on science, technology, and public issues. This newsletter is available from Science Resource Network, Massachusetts Legislature, State House, Boston, MA 02133.

PROJECTS AND PROGRAMS

Englehardt and Hoffman. Michael von Englehardt and Rainer W. Hoffman have completed a project on scientists and engineers in big science institutions in the Federal Republic of Germany. The research, based on semi-structured interviews and other materials, focuses on research and development as a problem in the sociology of work, authority and hierarchy, professional aspirations and perspectives, and selected aspects of social consciousness. For details, write Hoffman at Der Georg-August-Universitat, 34 Gottingen, Nikolausberger Weg 5c, FRG.

Simulation of University Systems. C. van de Merwe (Department of Sociology, Erasmus University Rotterdam, Burg. Oudlaan 50, Rotterdam-3016, The Netherlands) reports that results of this USIM-Project are now available. For information about the subproject on "Research System and Grant Process," write to van de Merwe at the above address.

PROJECTS AND PROGRAMS (continued)

Research on Teaching of Science-Related Social Issues. A Special Interest Group of the Educational Research Association has been formed for Research on Teaching of Science-Related Social Issues. Contact Laura Trout, 202 Education Building, Indiana University, Bloomington, IN 47401 for the details.

RPI. The Center for the Study of the Human Dimensions of Science and Technology at Rensselaer Polytechnic Institute is accepting applications for admission to its new (Fall 1976) M.S. program in science, technology, and values. Areas of specialization within the program include the sociology of science, engineering, and technology. For information on the program, write to Sal P. Restivo, Department of Anthropology and Sociology, RPI, Troy, NY 12181.

STS. The Cornell University Program on Science, Technology, and Society (directed by Raymond Bowers) has undertaken a nationwide assessment of teaching and research activities in the general interdisciplinary area of science, technology, and society (STS). Teaching efforts are being investigated at both the individual course level and the formal program level. The objectives of the study include determination of the major subject areas that constitute the STS field, assessment of the needs of teachers for curriculum materials, identification of teaching resources, and prediction of future directions and trends for STS as a field of study.

The survey phase of the study is nearly complete, with information collected from approximately 400 colleges and universities in the United States. Respondents have described activities that range from random course offerings to formal degree programs. To date about 175 formal programs of various types have been identified that are fully or partially involved in some aspect of STS-related teaching and/or research.

Some preliminary findings will be reported in the next issue of the Newsletter, though in the interim additional information can be obtained from Ezra Heitowit, STS, Clark Hall, Cornell University, Ithaca, NY 14853.

CONFERENCES AND MEETINGS: Past and Prospective

University of Delaware. Paul Durbin and others associated with the July 1975 conference on "Scientists and Social Responsibility" (held at Delaware) are considering the possibility of organizing a professional society for philosophy and technology. A follow-up to the July conference will be the "Philosophy of Technology: Methodological Guidelines" session scheduled for 21 February at the AAAS meetings in Boston. Durbin is also editing a newsletter, Philosophy and Technology. For more information, write him at the Department of Philosophy, University of Delaware, Newark, DE 19711.

CONFERENCES AND MEETINGS (continued)

Miami University. A conference on "The Epistemological Relationship Between Science and the Humanities" is being organized for Spring, 1976 at Miami University, Oxford, Ohio. Among those scheduled to participate are Gerard Radnitzky and Robert Friedrichs. For information, write to R. J. Harwood, Conference Secretary, Upham Hall, Miami University, Oxford, OH 45056.

Rose-Hulman Institute of Technology. On 1-3 April 1976, the Rose-Hulman Institute will host "The Rose-Hulman Bicentennial Conference on American Technology--Past, Present, and Future." Participants will include Melvin Kranzberg and Victor Ferkiss. For additional information, contact William B. Pickett, Department of Humanities, Social and Life Sciences, Rose-Hulman Institute of Technology, Terre Haute, IN 47803.

SSHA. The first meeting of the Social Science History Association will be held 29-31 October 1976 at the University of Pennsylvania. To help develop a sense of community among SSHA members and provide them with an opportunity to shape the Association's work, two plenary afternoon sessions have been scheduled. At the Friday session, Paul Lazarsfeld will give the keynote address. At the Saturday session, reports will be presented on the state of the Association and plans for the future. For further information, see NEWSLETTERS AND JOURNALS: Social Science History Association Newsletter.

Sociology of Science Study Group. The next meeting of the British Sociological Association's Sociology of Science Study Group will be held on 14 February 1976 at the London School of Economics. Among the scheduled presentations are M. Hesse's "The Sociology of Scientific Knowledge," R. Harre's "Exploration of the Dramaturgical Model: Proposals for an Ethnomethodological Sociology of Science," and D. Bloor's "What Would Durkheim Say to Frege? An Heretical Reading of the Foundations of Arithmetic." For details, contact Richard D. Whitley, Manchester Business School, Manchester M13 9PL, England.

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* Secretary-Treasurer    Robert McGinnis
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* Sociology, Cornell University, Ithaca, NY 14853.
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CONFERENCES AND MEETINGS (continued)

York. The recent meeting (16-18 September 1975) of British sociologists of science at York, England, provided evidence of the considerable development the field has undergone. On theoretical and methodological issues there was a general consensus on the need to develop further a neo-Kuhnian sociology of scientific knowledge. The center of interest remained the social and cognitive processes involved in the institutionalization and differentiation of specialties but the wide range of issues treated gives some indication of the burgeoning fruitfulness of this program.

Barnes (Edinburgh), Collins and Cox (Bath), and Gilbert (York) explored the basis for and some of the consequences of the adoption of a relativistic stance in the study of the production of scientific knowledge. Wynne (Lancaster) and Bryant (Exeter), through detailed case histories of the N-ray controversy in physics and Victorian physiology, respectively, argued for the incorporation of sociological insights in the writing of histories of the sciences. Both Mulkay (York) in a study of the mediating role of the scientific elite in directing the progress and funding of research, and Johnston (Manchester), in an analysis of the roles and arguments of scientists in public controversies, urged that research into the scientific community be extended to include the relations with wider society. Other papers included Whitley's (Manchester) development of his model of institutionalization to consider how different types of discipline affect the organization of research, Law's (Keele) analysis of the development of a standard nomenclature in sedimentology, Harwood's (Manchester) application of Mannheim's styles of thought to an examination of the protagonists in the race/IQ debate, and Woolgar's (Brunel) careful appraisal of the diverse accounts of the discovery of pulsars provided by participants.

The forthcoming publication of this collection of papers in Social Studies of Science may provide a useful demonstration of the potency of this neo-Kuhnian sociology of scientific knowledge and assist in its diffusion beyond its predominantly European confines.

RESEARCH ASSISTANCE

Bernstein. Ilene Bernstein (Department of Sociology, Indiana University, Ballantine Hall, Bloomington, IN 47401) asks that 4S become a clearinghouse for data available for analysis. If you agree and would like to participate as a donor, please send the Newsletter editor a copy of the codebook and other relevant information. Like Bernstein, if you are more interested in consuming, please specify your interest and suggest some mode of exchange.

Brush. Stephen G. Brush (Institute for Fluid Dynamics & Applied Mathematics, University of Maryland, College Park, MD 20742) is participating in a campus task force to prepare a self-study of research activities for accreditation review, and is attempting to develop objective or semi-objective measures of the quality of various research programs at College Park compared to those at 34 other major state universities (selected from the 50 that grant the largest number of Ph.D.'s). He would like to correspond with people who have conducted

RESEARCH ASSISTANCE (continued)

or are conducting studies in this area to update or test the ratings of graduate programs published by the American Council on Education (Cartter and Roose-Andersen reports). Surveys of publication rates of departments in particular disciplines, like the survey of sociology departments of Knudsen and Vaughan [American Sociologist, 4:12-29 (1969)], would be of interest. Brush has prepared a compilation of research grants and memberships on NSF and other review panels over the last five years, by university and field, for this purpose. The results of the study may be useful to similar groups at other universities.

4S EDITORIAL STAFF

The editorial staff of the Newsletter now includes four "regional editors" who volunteered their services as channels in the network of science doers and watchers world-wide. Thus, there are five ways to communicate your news and needs to the members of 4S. Write the editor at SASS, Cornell University, or any of those listed below:

Eastern U.S.
and Canada

Sal P. Restivo
Department of Anthropology and Sociology
Rensselaer Polytechnic Institute
Troy, NY 12181

Western U.S.

Ronnal L. Lee
Department of Sociology/Anthropology
University of Idaho
Moscow, ID 83843

U.K. and
Western Europe

Ron Johnston
Department of Liberal Studies in Science
The University
Manchester M13 9PL
ENGLAND

Greater
Europe

Hermann Strasser
Institute for Advanced Studies
Stumpergasse 56
A-1060 Vienna
AUSTRIA

If you are an editor of a newsletter who would like to exchange news with 4S, please contact one of the above. Such an exchange has already been arranged with several newsletters.

PUBLICATIONS: ANNOTATED

- Dolby and Resnikoff. R & D Press (Los Altos, CA 94022) has just published The Information Access Series, edited by James L. Dolby and Howard L. Resnikoff:
- Volume 1. Dolby, J. L. and J. W. Tukey, The Statistics CumIndex.
 - Volume 2. Tukey, J. W., Index to Statistics and Probability: The Citation Index.
 - Volumes 3 and 4. Ross, I. C. and J. W. Tukey, Index to Statistics and Probability: Permuted Titles.
 - Volume 5. Ross, I. C. and J. W. Tukey, Index to Statistics and Probability: Locations and Authors.
 - Volume 6. Tukey, J. W., Index to Statistics and Probability: Permuted Index to Minimum Abbreviations.

These volumes constitute a comprehensive index to the literature of statistics and probability, the first volume indexing 113 major textbooks of statistics and the other volumes indexing the periodical literature through source citations and permuted titles. The source and citation indexes prepared by Tukey are particularly useful because they have been edited by hand, thereby reducing random noise and homonym problems.

Forman et al. Physics circa 1900 by Paul Forman, John L. Heilbron, and Spencer Weart has appeared as Volume 5 in Historical Studies in the Physical Sciences, edited by Russell McCormack and published by Princeton University Press, 1975. This elaborately detailed monograph sets out the parameters of manpower, productivity, and financial support for the entire world of academic physics in 1900 (and to some extent in 1910). It may serve as a benchmark to compare with the statistical demography of modern physics. An obvious volume for comparison would be Allan Bromley's Physics in Perspective, Physics Survey Committee, National Research Council-National Academy of Sciences, Washington, D.C., 1972, especially Volume 1.

Gillmor. In "Citation characteristics of the JATP literature" (Journal of Atmospheric and Terrestrial Physics 37, 1975: 1401-1404), C. Stewart Gillmor shows the year-to-year citation behavior for a population of papers in the JATP. In general, the mean number of citations received per paper rises to a maximum for the first year and a half after publication and then declines logarithmically with a halving in about four years.

ISI. A first draft bibliography of citation research has been prepared by Janice LaPorte for the office of Henry Small, Institute for Scientific Information, Philadelphia, PA 19106. The bibliography is currently being augmented and verified. Announcement of its availability to interested parties should be forthcoming very soon.

Knorr et al. Determinants and Controls of Scientific Development, edited by Karin D. Knorr, Hermann Strasser, and Hans Georg Zilian, is now available from D. Reidel Publishing, Boston (1975, 460 pp., \$58 US). The book is the outcome of an international conference held at Graz (Austria) from 16-22 June 1974. The main topics of the conference were stimulated by recent developments in the study of scientific change. An unprecedented attempt is made to bring together scholars from fields most relevant to the study of science development. This is reflected in the division of the book into sections on methodological, cognitional, and societal aspects of the development issue. Nevertheless, a strong interdisciplinary outlook characterizes most of the contributions.

PUBLICATIONS (continued)

Schatz. A Mathematics Citation Index was produced by Joseph A. Schatz of the Applied Mathematics Division, Sandia Laboratories, Albuquerque, NM, and is available as their publication SC-RR-70-910, December 1970. Unfortunately, the volume is difficult to use due to the truncation of all names to five letters.

PUBLICATIONS: SHORT NOTICES

Gustafson, Thane. "The controversy over peer review." Science 190 (12 December 1976): 1060-1066.

Lewis, Lionel S. Scaling the Ivory Tower. Merit and Its Limits in Academic Careers. Baltimore: Johns Hopkins University Press (1975, \$12.50).

Orlans, Harold. "Neutrality and advocacy in policy research." Policy Sciences 6 (June 1975): 107-119.

Phillips, Derek L. "Paradigms and incommensurability." Theory and Society 2 (Spring 1975): 37-61 (based on Phillips' Wittgenstein and Scientific Knowledge, Basic Books, 1975).

Restivo, Sal P. "Towards a sociology of objectivity." Sociological Analysis and Theory 5 (June 1975): 155-183.

Rifkin, Susan. "The Chinese model for science and technology: Its relevance for other developing countries." Development and Change 6 (January 1975): 23-40. Off-prints are available from the Christian Conference of Asia, Committee for Health Concerns, c/o Hong Kong Christian Council, 57 Peking Rd., 4/F, Kowloon, Hong Kong.

Strasser, Hermann. The Normative Structure of Sociology. Boston: Routledge & Kegan Paul (1975, paper \$11/cloth \$19.50).

Woolf, Patricia, K. "The second messenger: Informal communication in cyclic AMP research." Minerva 13 (Autumn 1975): 349-373.

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* - 4S COUNCIL REPORTS ON CURRENT AND PLANNED ACTIVITIES *
* - PRELIMINARY PROGRAM FOR 4S-ISA CONFERENCE *
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