

volume xxxvii • number two • winter 1971-1972

## PHI BETA KAPPA PRESENTS 1971 BOOK AWARDS

The Phi Beta Kappa Book Awards of \$2,500 each were presented to the prizewinning authors during the December meeting of the Phi Beta Kappa Senate in Washington, D.C. The books chosen represent significant contributions to learning which go beyond narrow interpretations of scholarly disciplines.

The Christian Gauss Award in literary scholarship and criticism was awarded to Carl Woodring for Politics in English Romantic Poetry, published by the Harvard University Press. Winner of the Phi Beta Kappa Award in Science was Linus Pauling for his Vitamin C and the Common Cold, published by W. H. Freeman. The award is offered for outstanding contributions by scientists to the literature of science. Charles A. Barker received the Ralph Waldo Emerson Award for American Conviction: Cycles of Public Thought 1600-1850, published by J. B. Lippincott. The award is made for interdisciplinary overarching studies of the intellectual and cultural condition of man

In discussing Carl Woodring's *Politics in English Romantic Poetry*, a member of the award committee commented that the book was "an especially impressive work — full, knowing, historically and philosophically rich, and balanced in judgment. Instead of treating the political beliefs of the Romantic poets, the author has set himself the task of revealing the different guises of politics in the poetry itself, relying on the configurations of diction and metaphor."

Another commented: "Professor Woodring's thesis — that even the poems least obviously political cannot be intelligently read without keen awareness of the political issues and stances that haunted the minds of the romantics is admirably defended throughout. Were that all, the book would be less than it is: the genius of it lies in the author's clear understanding and appreciation of the aesthetic and philosophical transformations these poets, as well as their immediate fore-runners and their less able contemporaries, brought to the literature of their time." Carl Woodring is professor of English at Columbia University. He is the author of earlier works on Wordsworth and Coleridge.

In giving the award for contributions to the literature of science to Linus Pauling's book, committee members noted that it deals with considerably more than its title, *Vitamin C and the Common Cold*, would indicate.

"Pauling discusses Vitamin C in relation to its chemistry, nutrition, evolution, human variability in requirements, medicine, the medical profession, the economics of the pharmaceutical industry, and governmental concerns. Pauling's skill in explaining difficult biological concepts in simple language is remarkable."

Another wrote: "Having read it, I share the Initial Reader's respect for this lucid, informative, and timely little book. Surely it falls within the nearest approach we have to a mandate: . . . 'to stress the need for more literate and scholarly in-

(continued on back cover)



Carl Woodring, winner of the Gauss Award, autographs his book for S. Palmer Bovie, Gauss Award committee chairman.

### AWARD WINNERS AT THE FESTIVITIES



Science Award winner Linus Pauling and Mrs. Pauling (right), chat with  $\Phi BK$  President Rosemary Park while awaiting the arrival of committee chairman, Edward U. Condon.



Photos by MICHAEL PERLBERG

Charles A. Barker (right), winner of the Ralph Waldo Emerson Award, meets John Edwin Smith, chairman of the Emerson Award Committee.



# SIGNS OF THE TIMES

### An Interview with Henry Dreyfuss

Henry Dreyfuss, the noted industrial designer, devoted several of his lectures as a Phi Beta Kappa Visiting Scholar last year to his interest in developing an authoritative guide to graphic symbols. He has been collecting symbols for almost twenty years and has shown that symbols promote safety through quicker comprehension and faster reaction; that they convey their message independently across language barriers; and that they achieve greater efficiency, communicating more rapidly while requiring less space.

His Symbol Sourcebook, the culmination of his work in this field, is being published in February by McGraw-Hill. Mr. Dreyfuss discussed the nature and significance of the book in a recent interview.

The Key Reporter: Mr. Dreyfuss, would you explain just what you mean by a symbol sourcebook?

Mr. Dreyfuss: The Sourcebook is a collection of approximately 8,000 graphic symbols gathered over the past two decades. They were chosen from those assembled in a Data Bank which now contains over 30,000 symbols from all over the world. Though the book is by no means all-inclusive, it will serve as a guide and a first step, I hope, toward international, universally understandable graphic symbols.

TKR: How have you worked out the arrangement of the book to make the material readily accessible?

Dreyfuss: From the design of the end papers to the very full index, we've tried to make the Sourcebook as easily understood and useful as possible. The table of contents appears in seventeen languages in addition to English. It is followed by introductory material — the foreword by Buckminster Fuller; my introduction; and two historical articles, one dealing with the pioneering work of Otto Neurath (1882-1945).

There's also a preliminary collection of basic symbols such as arrows for *right* and *left* and *plus* and *minus* signs. They constitute the A-B-C that one has to know to read any symbol system. And we also indicate how these are often combined to develop more complex meanings and instructions. A kind of grammar of symbols is evolving.



TKR: I note that the *hare* and the *tortoise* are included in this basic group.

Dreyfuss: Yes, we've found that they are universally recognized symbols for *fast* and *slow*.

TKR: What about attempts to visualize push and pull?

Dreyfuss: There is a whole article on the problem of trying to find a successful delineation of *push* and *pull*. We've never gotten really good symbols for these concepts, but we include various suggestions that people have sent us.

TKR: Is the book then a "dictionary" of symbols?

Dreyfuss: In a sense, yes. The main body of the book consists of symbols arranged by DISCIPLINES — accommodation and travel, agriculture, business, communication,

medicine, various sciences, recreation and safety, among others. All are in contemporary use.

TKR: How are your sources acknowledged?

Dreyfuss: We do this in a detailed bibliography to avoid cluttering the rest of the book.

There is also some space for material that we call "asides." In one, we explain the origins of the peace sign from the international semaphore alphabet. Another describes an evolving system of ecology symbols, and there are other interesting bits of information such as the derivation of Hex and hobo signs.

TKR: And the second section?

Dreyfuss: It deals with symbols by their SHAPE. Margaret Mead is responsible for this work. She said, "If I were walking along the street and I saw a symbol out of context, how



could I look it up in your book? I wouldn't know the name of it; I couldn't check it by discipline or alphabetically." So in this part of the book we have all the symbols using circles, for example — or parts of circles, or T shapes, and we refer back to the Discipline section. This arrangement is a unique graphic index.

Another part of this section has to do with COLOR. Included are shapes that the painter Kandinsky assigned to colors.

TKR: Was that arbitrary on his part?

Dreyfuss: Yes, and we have added six more to his original group of six. They too are arbitrary, though it is interesting that other people have agreed on assigning some of the same shapes and colors. Then we've taken each color and told what it means to people in different cultures. As far as we can discover, no one has ever done this before.

TKR: And the final section?

Dreyfuss: At the back there is a map showing all the countries which have contributed to the book. Included is every country except Mainland China and some parts of Africa. The bibliography and a very complete alphabetical index complete the volume.

TKR: It must have been an extremely difficult task to assemble this material for publication.

*Dreyfuss*: A staff of eleven people worked for three years on it since many symbols we were given had to be redrawn to be reproduced successfully.

TKR: How did you decide on the kinds of symbols to include in the book?

Dreyfuss: We say that symbols may be divided into three types. There is the *representational* or pictorial symbol, such as the *hare*, meaning *fast*, and the *tortoise*, meaning *slow*. That is a representation that almost anyone can grasp, but realistic symbols become obsolete most easily.

Then there is the *abstract* symbol, which usually derives from the representational. The biological signs for male and female are among these. The male symbol is derived from the shield and spear of Mars.



The last kind are arbitrary symbols; these, like the clef in music or the sign for a fallout shelter, have to be learned. Such symbols are now being invented constantly.

TKR: Haven't you invented many of them?

Dreyfuss: I've invented some, but that was not the purpose of the book. I don't even say which ones I have done for that reason.

TKR: Who primarily will benefit from the book?

Dreyfuss: I think it will enable professional designers and business people to break language barriers. People can now put symbols on a product and ship it all over the world. Formerly, the language on the dashboard of an automobile or tractor or on a camera or sewing machine had to be changed every time it was exported. Today, this is unnecessary. Another purpose of the book is as an aid to travellers. When I went to Moscow — and I can't read Russian — I could nevertheless find my way around the airport; they use our symbols.

One of the things I'm most anxious to do is to encourage this international standardization process. I hope that graphic designers in every country will consult this book when they are asked to design a new symbol or even a new trademark. They would learn what it means in other countries and whether others have used it.

TKR: While I know that you've been accumulating symbols for many years, I wonder how you were able to get people in other countries to know that you were collecting them?

Drevfuss: About three years ago, after we had signed a contract with the publisher, we sent out questionnaires to every possible source. I also wrote magazine articles that were published abroad. And material poured in.

We once received a candy box from Russia full of little pieces of paper with symbols and their meanings written in Russian. I haven't the slightest idea who sent them to me. The box came after I had lectured in the Soviet Union and had mentioned the project.



Oil

Pressure

TKR: Would you say then that the primary value of the Sourcebook will be in encouraging the development of communication free of language and cultural barriers?

Dreyfuss: I believe this is of major importance especially for reasons of safety. In the past, we, the British and the Israelis, for example, have all used different Stop signs. But recently several European countries have adopted the red octagon used in the United States.

TKR: Then symbols are becoming a kind of language?

Dreyfuss: I don't use the word "language." I call symbols an adjunct to language. You can't speak with them. The best term is "non-verbal communication."

TKR: Do you feel that sufficient progress is being made in standardizing symbols?

Dreyfuss: In recent years there has been significant progress. Several international commissions are working in the field. I chaired a meeting of one not long ago in West Berlin which was attended by representatives from every European country except the Soviet Union. But much remains to be done; that is why the umbrella standards organizations are very enthusiastic about this book. Since it is the first authoritative work on the subject, it should promote much wider use of symbols.

### THE KEY REPORTER

TKR: And in the United States?

Dreyfuss: In this country, the Department of Transportation is helping to standardize all aviation symbols; and the U.N. driving symbols, which one sees everywhere in Europe, are now coming into use in various parts of the United States.



TKR: Do the international agencies have any control over the design of symbols?

Dreyfuss: Problems of aesthetics are very much my concern because even when different countries accept a standard symbol, they are free to draw it in various ways. In the Sourcebook, we've made a great effort to have well-drawn, aesthetically pleasing symbols which we hope will influence other designers. But I don't want to trust only my judgment. Where several symbols exist for the same concept - and they are important enough, like the Stop sign or the No Smoking signwe put them all in.

TKR: Does the issue of national pride enter into designing decisions?

Dreyfuss: Fortunately not. As you know, decisions involving language are very much tied up with national feeling. That is one reason why international languages like Esperanto have always failed. But a sign, once adopted, has no national significance and is readily accepted. After all, a symbol has no accent. I've always made the point that you can play Beethoven in any language once you've learned the symbolic musical notes.

TKR: Since symbols are relatively free of cultural limitations, do you think they could be adapted in new ways to improve intelligence testing?

Dreyfuss: I don't know enough to discuss that question. But we have devised a series of symbols to be taught to children three to six years of age for their protection. I tested these myself at several schools. We have one sign that says, "Don't touch; it will burn you." Another says, "Don't touch; it will cut you." Also in this group are traffic signs that we feel are important for youngsters to learn. I discovered that the children laughed and shouted "Pirates" when shown a skull and crossbones. But when I drew an outline of a bottle around the symbol, they recognized it immediately as poison.

This experience emphasizes the importance of placing symbols in the right context. The symbol of an escalator or staircase means much more when seen out of the corner of your eye in a building than on a printed page.



TKR: What aspect of symbols especially interested your other student-age group - those at your Phi Beta Kappa Lectures?

Dreyfuss: There were all kinds of questions, many relating to traffic and safety. (Students, you know, use symbols all the time, especially in the sciences.) I would say that increased speed of comprehension and safety are the factors that make symbols so valuable for everyone from young children to highly literate  $\Phi BK$  members.



The very great benefits that symbols can bring to intelligent but illiterate people should also be mentioned. Several manufacturers of machinery and equipment have begun to replace written operating instructions and guage readings with graphic representations and symbols on levers and knobs. This makes it possible for illiterate farm laborers, for example, to become machine operators, at a considerable increase in their productivity and standard of living. And, according to UNESCO, there are over eight hundred million illiterate people in the world.



TKR: How do you go about inventing such symbols?

Dreyfuss: We have to consider both the content, the "thing" the symbol represents, and the form, the symbol's appearance. The final choice reflects information from many disciplines — economics, social and cultural anthropology, psychology, semantics, the arts, and the technology of the particular field. But most crucial is the need to test and retest the symbol by trying it out on many people. We test to see how easily the "message" is understood once it is explained. Then we return to check on how well it is remembered. And we keep revising to get the best possible graphic representation.

*TKR*: Since everyone is interested in ecology and pollution control, I wonder how this present concern is reflected in the *Sourcebook*?

Dreyfuss: Well-designed symbols can greatly reduce the visual pollution of our cities and highways. Some lamp-posts in New York City have as many as sixteen confusing signs attached to them. By combining several elements, it is possible to convey their messages with a few harmonious symbols. This is already being done in the state of Vermont. And the National Park Service has just developed beautiful symbols for their park signs in Washington, D.C.

TKR: I wonder if you are involved in planning for the Bicentennial celebration in 1976, as you were with the World's Fair in 1939? That will be an important year for Phi Beta Kappa too since it is also the bicentennial year of the Society.

Dreyfuss: I am working with my clients on Bicentennial projects, but not with the government. And I will give Phi Beta Kappa the same advice I've given them. Have your own celebration; don't connect it with the national observance.

TKR: What do you think of the Phi Beta Kappa key as a symbol? We are sometimes told that there is but a limited understanding of its significance.

*Dreyfuss*: Not at all. I think it is a very widely recognized symbol. Though practically unknown abroad, here in the United States I'd say that very many non-college people as well as college graduates recognize its meaning.

TKR: That's an encouraging opinion to hear. Before we close, I'd like to ask about your other interests.

Dreyfuss: Now that the Sourcebook is available, I expect to

be very busy with communications from people and groups asking for additional information. At the moment I'm helping the Smithsonian Institution and the Vienna subway system. And, of course, I have my clients too.

TKR: How do you envisage new ways that symbols will be used in the future?

Dreyfuss: We are really only at the beginning of work in this area. Have you ever seen the messages that we beam to Outer Space? This symbolic language is also in the book. The United States government sends out such messages all the time. I had some part in designing them since the telephone company, one of my clients, is involved. Perhaps the day will come when we shall find that symbols not only enable people to communicate across language and cultural barriers on earth, but also between the planets and the galaxies.

### Subscribe for one year at the regular rate of \$5... receive an extra issue **FREE**

Published since 1932 by Phi Beta Kappa, The American Scholar has become one of the most distinguished, influential journals of our time. The Scholar is written and edited for thoughtful readers ... people who demand the best contemporary thinking and writing, who demand a degree of intellectual challenge seldom found in other publications. Issued quarterly, the Scholar features articles of significance and enduring interest on the cultural scene, politics, philosophy, history, the arts, the sciences, education, religion, the environment, current affairs ... original poetry and prose, critical reviews of books, films, the arts, the theater ... plus many regular columns and departments.

You may subscribe to *The American Scholar* for one yearfour quarterly issues-for just \$5. We'll add an extra issue *free*. To enroll under the terms of this introductory offer, just return the coupon below.

Please enter my subscription for the term checked below and send me a free copy of the current issue.

One year, \$5.00 Two years, \$9.00
Three years, \$11.00 Bill me Payment enclosed
NAME\_\_\_\_\_\_\_\_\_
ADDRESS\_\_\_\_\_\_\_\_\_\_
CITY\_\_\_\_\_\_STATE\_\_\_\_\_\_ZIP\_\_\_\_\_
The American Scholar,

1811 Q Street Northwest, Washington, D.C. 20009.



# **recommended** by the book committee

humanities GUY A. CARDWELL, RICHARD HARTER FOGLE, ROBERT B. HEILMAN, FREDERICK J. CROSSON LEONARD W. DOOB, FREDERICK B. ARTZ, LAWRENCE H. CHAMBERLAIN, EARL W. COUNT, ANDREW GYORGY, ANDREAS M. KAZAMIAS, LOUIS C. HUNTER, RICHARD BEALE DAVIS J. T. BALDWIN, JR., KIRTLEY F. MATHER

### **GUY A. CARDWELL**

An Introduction to American Archaeology. Gordon R. Willey. Prentice-Hall. 2 vols. \$19.95; \$24.

History of the pre-Columbian New World through archaeology. For the non-specialist, this is an indispensably, masterfully synthetic treatment. Copiously illustrated.

The British Academics. A. H. Halsey and M. A. Trow. Harvard. \$12.

A detailed, scholarly examination of the past and present goals and practices of British universities accompanied by helpful speculations as to future possibilities. Significant for anyone interested in higher education in America.

In Red and Black: Marxian Explorations in Southern and Afro-American History. Eugene D. Genovese. Pantheon. \$10.

American Counterpoint: Slavery and Racism in the North-South Dialogue. C. Van Woodward. Little, Brown. \$7.95.

Genovese and Woodward are scrupulous, imaginative historians of the South. Woodward collects ten essays that help place the South vis-a-vis the North. Genovese's work ranges more widely; his introductory essay should interest anyone concerned with the question of the politicization of academic persons and academic institutions.

The Ringers in the Tower: Studies in Romantic Tradition. Harold Bloom. Chicago. \$12. Solzhenitsyn. Georg Lukacs. Translated from the German by William David Graf. M.I.T. p. \$1.45.

Literature as System: Essays toward the Theory of Literary History. Claudio Guillen. Princeton. \$15.

Selected Essays of Delmore Schwartz. Editors, Donald A. Dile and David H. Zucker. An Appreciation by Dwight MacDonald. Chicago. \$14.50.

The Collected Essays of Leslie Fiedler. 2 vols. Stein and Day. \$25.

Bloom's essays throw light on the theory of Romanticism and contain treatments of several important American figures. Lukacs, a flexible, widely respected European Marxist critic, defends and praises the work of Solzhenitsvn, who refused a Nobel award so that he would not have to face exile from Russia. Guillen collects eleven substantial essays that are especially important to comparatists; he proposes a structural approach to literature as a system. The best of the fifty pieces by the late Delmore Schwartz that are gathered here reflect philosophical training and a discriminating intelligence. The reputation of Fiedler as a critic is one of the most controverted of our time. Many

of the essays in these volumes evidence energy and inventiveness; some leave the impression of haste.

Crossing the Water: Transitional Poems. Sylvia Plath. Harper & Row. \$5.95.

Passions and Ancient Days. C. P. Cavafy. Translated and Introduced by Edmund Keeley and George Savidis. Dial. \$5.

The Poems of Dylan Thomas. Edited by Daniel Jones. New Directions. \$6.

Augila o Sol? Eagle or Sun? Octavio Paz. Translated by Eliot Weinberger. Bilingual edition. October House. \$6.50.

The Collected Poetry of Aldous Huxley. Edited by Donald Watt. Introduction by Richard Church. Harper & Row. \$7.50. Chinese Lyricism: Shih Poetry from the Second to the Twelfth Century, with Translations. Burton Watson. Columbia. \$9.

Poetry in East Germany: Adjustments, Visions, and Provocations, 1945-70. John Flores, Yale, \$12.50.

The Plath volume is a final thin sheaf of magical poems previously uncollected or printed in limited editions. The small gathering from the previously uncollected verses of Cavafy, the late Greek master, may also be final; facing Greek and English texts. The new collection of Thomas's poems adds 102 pieces to the 90 printed in the Collected Poems of 1952. The prose poems by Paz offered here were written during 1949-50, when he was close to the surrealists. Huxlev was better known, and properly so, for his prose than for his verse. His poems have dated badly. Watson's is one of an extremely useful series of translations from Oriental classics intended for use as undergraduate textbooks. Flores marks off the phases through which East German literature has passed and emphasizes the opposition of poets to regulatory measures. His analyses are accompanied by generous quotations.

Flannery O'Connor: The Complete Stories. Farrar, Straus & Giroux. \$10.

Maurice. E. M. Forster. Norton. \$6.95.

Love in the Ruins: The Adventures of a Bad Catholic at a Time Near the End of the World. Walker Percy. Farrar, Straus & Giroux. \$7.95.

Birds of America. Mary McCarthy. Harcourt Brace Jovanovich. \$6.95.

The thirty-one stories by the late Flannery O'Connor represent her complete output in the form, including apprentice work. Most of the stories are superb. Forster's novel was written in 1913-14 and remained unpublished until now because it treated the theme of homosexuality. The story meant more to its distinguished author than it will to many critics, but it is a remarkable book. Percy burdens his artfully written moral

satire with a heavy load of science-fiction materials. Miss McCarthy, like Percy, tends to a cataclysmic view of the world in her international novel of ideas that is also a *Bildungsroman*.

### LAWRENCE H. CHAMBERLAIN

The Vantage Point. Lyndon Baines Johnson. Holt, Rinehart, Winston. \$15.

For a complete or balanced account of the Johnson presidency this weighty tome is not the answer. Important items are missing; others are inadequately treated. Overall, the presentation is an *ex parte*, disingenuous rationalization of the period. Nevertheless, the book is an important, revealing source for those who wish to obtain a full picture of what occurred in the White House during LBJ's incumbency. Not least among the book's assets are the maps, tables, charts and the seventy-two pages of photographs.

McNamara. Henry L. Trewhitt. Harper & Row. \$7.95.

This careful, perceptive report on Defense Secretary McNamara embraces weapon technology, interservice rivalries, Mc-Namara's behavior toward both the military and the Congress. The Secretary comes through as a brilliant, dedicated man, expert in systems analysis, supremely confident of its validity in national defense planning. His performance at the top level of authority, wielding awesome power in an area of maximum impact, raises profound questions concerning acceptable standards or criteria of decision making.

The Military Establishment. Adam Yarmolinsky. Harper & Row. \$10.

This Twentieth Century Fund study of the impacts of the military establishment on American society, the product of systematic investigation and research conducted by a distinguished group, is encyclopedic; no aspect of the subject is neglected. The purpose of the book — to lay bare the relevant facts, not to plead a cause or present a case — has been admirably achieved.

What Price Vigilance? Bruce M. Russett. Yale. \$7.50.

American defense expenditures consistently absorb an increasing proportion of our national income. Bruce Russett asks why this is so. By analyzing voting records of senators he shows a striking absence of either civilian executive (president, defense secretary) or military dominance in areas of defense spending. Instead, senators, responding to pressures or obligations unrelated to or independent of such influences as party discipline or presidential leadership, but bearing directly upon their particular constituency and their own political survival, find ample reasons for supporting ever increasing defense appropriations.

The Foreign Affairs Fudge Factory. John Franklin Campbell. Basic Books. \$6.95.

The author's thesis is that American foreign policy is no longer viable because it is unrealistic, impossible of attainment, selfdefeating. The basic reason, he avers, is the failure of recent presidents to comprehend the essential character of diplomacy. The result has been a dilution of the role of the State Department and a concomitant emphasis upon such agencies as AID, USIA, CIA and the armed services, stressing the

ł.



military and ideological aspects of world affairs in lieu of the traditional concern with politics and diplomacy.

Bring Us Together. Leon E. Panetta and Peter Gall. Lippincott. \$6.95.

An important segment of the Nixon record on school desegregation is here recounted in graphic detail by the man who served briefly as director of the Office of Civil Rights in HEW. The personal account — high expectations followed by frustration, disillusionment, defeat — is poignant. The record of events is not inspiring or reassuring but it does provide useful insights into some realities of the current political scene.

The Politics of Fear. Robert Griffith. Kentucky. \$8.50.

This detailed narrative of Joseph McCarthy's senatorial career is an absorbing complement to the theoretical analysis found in Michael Rogin's *The Intellectuals and Mc*-*Carthy.* As the title suggests, Griffith's thesis is that fear of damage to their own political careers on the part of fellow senators, Rcpublicans and Democrats alike, operated to impose such restraints that McCarthy was left free to pursue his violent course.

The Politics of Disorder. Theodore J. Lowi. Basic Books. \$6.95.

According to Mr. Lowi this book is an extension of *The End of Liberalism*. In that work he advocated "juridical democracy" as the true guarantor of "democratic liberty." Here he reaffirms that concept and adds another: "law and disorder." In two separate sets of essays he comments upon certain aspects of government and higher education, but he really does not develop his argument. Mr. Lowi may have important things to say; the suspicion here is that he does. The question is whether he will take the time and trouble to do so.

### FREDERICK B. ARTZ

France: An Interpretive History. E. J. Knapton. Scribner's. \$15.

A very successful survey of the whole course of French history.

The Spaniards. A. Castro. University of California. \$15.

A valuable introduction to the history of Spanish civilization.

The Habsburgs. Edward Crankshaw. Viking. \$16.95.

In interesting popular account of a great dynasty; beautifully illustrated.

Henry VIII. Lacey Baldwin Smith. Houghton Mifflin. \$8.95.

The best life of Henry VIII ever written.

Victor Hugo. Samuel Edwards. McKay. \$8.95.

An engrossing portrait that touches on many aspects of the 19th century France.

History of the Second World War. Liddell Hart. Putnam. \$12.50.

The best account to date.

A Broken World, 1919-1939. Raymond J. Sontag. Harper & Row. \$8.95. The best treatment of the period available.

Germany in Our Time. Alfred Grosser. Praeger. \$12.50.

A masterful history of Germany since 1945.

The 12-Year Reich. R. Grunberger. Holt, Rinehart & Winston. \$10.

A vivid picture of German life under Hitler.

From Columbus to Castro: History of the Caribbean. Eric Williams. Harper & Row. \$10.95.

The first complete history of the area.

### **KIRTLEY F. MATHER**

Invitation to Geology. William H. Matthews III. Natural History. \$5.95.

Understanding the Earth. I. G. Gass, Peter J. Smith, and R. C. L. Wilson. M.I.T. p. \$7.95.

Subtitled "The earth through time and space," the first of these two is superb reading matter for anyone (especially youngsters) who wants to find out what geology is all about and how that science has developed a new thrust in recent years. Those new developments are experily elucidated in the collection of 25 essays assembled by three members of the faculty of The Open University in Buckinghamshire, England. Among these are expositions of "The Earth's Magnetic Field and its Origin" by E. C. Bullard, "Sea-Floor Spreading" by F. J. Vine, and "Plate Tectonics" by E. R. Oxburgh.

Inadvertent Climate Modification. Report of the Study of Man's Impact on Climate. Carrol L. Wilson, Director, and William H. Matthews, Associate Director. M.I.T. p. \$2.95.

During the three-week period ending on 16 July 1971, thirty scientists from fourteen countries worked together at a conference center near Stockholm, Sweden, to prepare this timely report. It presents their scientific and technical judgments on the present status of understanding of man's impact on climate, with recommendations for further observation and experimentation and in some cases for immediate action to prevent further atmospheric pollution and deterioration of environmental conditions.

The Space-Age Photographic Atlas. Ken Fitzgerald. Crown. \$7.95.

The Earth and its Satellite. John Gust. Mc-Kay. \$15.

The View from Space. Merton E. Davies and Bruce C. Murray. Columbia. \$14.95. Three large-page, lavishly illustrated books, not only to be displayed proudly on a coffee-table, but to be used by close inspection of photographs and reading of texts for rewarding study and frequent reference. The first is subtitled "A photographic atlas of the earth" and includes 409 photos from Gemini and Apollo spacecraft, weather satellites, and airplanes, most of them accompanied by explanatory maps or diagrams, and all by analytical textual material. Together they cover the entire globe. Many of the pictures in the second book are in color and some of them were taken by photographers with their feet on the ground rather than by astronauts or by cameras in unmanned spacecraft. The central theme that integrates the several chapters, written by eminent British scientists, is the comparison of the geological features and processes of earth and moon.

The subtitle of the third book is "Photographic exploration of the planets." It was "sponsored" by The Rand Corporation, contains a section on arms-control inspection from spacecraft, and includes much more of the technical aspects of space flight and photography than the other books listed here. Its information about exploration of Mars, Venus, Mercury, and Jupiter is especially relevant at this moment when Mariner 9 is beginning to radio its pictures back to earth.

A Peril and a Hope: The Scientists' Movement in America, 1945-47. Alice Kimball Smith. M.I.T. p. \$3.95.

Science, Scientists, and Public Policy. Dean Schooler, Jr. Free Press. \$6.95.

Science and Society. Hilary Rose and Steven Rose. Penguin-Pelican. p. \$1.65.

Three books dealing with the behavior of scientists as citizens in the complex and troubled political world of recent years. The first is a reprint, condensed in certain places. of a book first published by the University of Chicago Press in 1965. It is by far the most authoritative, comprehensive, and perceptive account of the early reaction of American scientists to the discovery of useful nuclear energy and the dropping of atomic bombs on Hiroshima and Nagasaki. The second is a scholarly, somewhat textbook-style analysis of the efforts - good, bad, and indifferent --- of scientists to participate in policy-making at various governmental levels in the United States since 1945 and a challenging forecast concerning the ideas, tensions, and prospects for such activities in the three decades that will end in the year 2000. The authors of the third book are founder-members of the British Society for Social Responsibility in Science. Their purpose here is to explore the interrelationships between science, technology, and society; their remarks about the current trend toward internationalization of research and the rapidly evolving role of science within society are especially noteworthy.

### EARL W. COUNT

Communication and Culture in Ancient India and China. Robert T. Oliver. Syracuse. \$12.

- A culture's values frame its rhetoric. India and China never fostered a Western kind of oratory, which attempts to debate public issues or to persuade. They have had their rhetorically powerful minds none the less — Hindu, Buddhist, Taoist; Confucius, Mencius, Laocius, et al. A broad and profoundly seminal treatise, from a widely-known professor of speech art and well versed in the culture traditions he considers.

Indian Oratory: Famous Speeches by Noted Indian Chieftains. W. C. Vanderworth, compiler. Oklahoma. \$8.95.

They were powerful personalities and speakers. The pity of it is, that a collation from 36 of them, spanning together 150 years and the country's width, should have to speak only from occasions when perforce these men addressed themselves to the white man's obdurate inattention.

The Four Suns, Recollections and Reflections of an Ethnologist in Mexico. Jacques Soustelle. Translated from the French by E. Ross. Grossman. \$10.

The recollections are of a life spent among the lives of Mexican folk, from Zapotec to Lacandon, and the stone shadows of their vanished and lingering heritage. Reflections do indeed follow . . . There is the Aztec stone calendar-round, a history and philosophy of cosmos-with-man. Four "suns" have risen successively and passed away — each for its own fatal reasons. Ours is now the fifth; for the Aztec, this too has passed, abruptly; for the rest of us — the author joins neither a Teilhard, a Kroeber, a Toynbee, nor a Spengler; none the less — the Four Suns of the Aztec have not yet done with their mantology.

### The Four Worlds of the Hopis. Harold Courlander. Crown. \$6.95.

The Four Worlds are a space-and-time architecture; created successively, tierwise. By the Third, man was fully human; then came the evil ways that destroyed goodness. So there was the escape-hatch to the Fourth; there came the migrations and the story of the Hopi way. The tales are all authentic, told with the understanding gentleness they merit; the orderliness of epic is the compiler's, but apparently with the *nihil obstat* of his Hopi friends.

The First American: A Story of North American Archaeology. C. W. Ceram. Harcourt Brace Jovanovich. \$9.95.

The skill of *Gods*, *Graves*, and *Scholars* continues here, for the profit of the same readership. Genuine problems and their solving eventually dissipated the often preposterous and not always honest fancies . . . the author, heeding archaeologist Wheeler's admonition, seeks not the tub but Diogenes; finally comes the brief epilogue of a *last* American: Ishi.

The Roots of Ancient India: The Archaeology of Early Indian Civilization. Walter A. Fairservis, Jr. Macmillan, \$17.50.

The archaeology of India has grown and matured rapidly in the late decades; this tremendous essay is offered to layman and scholar. The now-known extends back 250 millennia and over most of the subcontinent. Harappa waxes and wanes. The Aryans by no means are slighted --- yet they came late and eventually joined in the urbanization process. And "if the Buddha represents the fulfillment of a pattern already ancient, he is also symbolic of a uniqueness which is subcontinental, which is India. Whatever the diversity of her genesis, India is more than the sum of her parts, and this marvelous truth must always haunt those who would interpret her most ancient story." (p. 381)

### ANDREAS M. KAZAMIAS

The Scottish Enlightenment and the American College Ideal. Douglas Sloan. Teachers College. \$10.

Parsons & Pedagogues: The S.P.G. Adventure in American Education. John Calam. Columbia, \$10.

Two well-researched and well-written books on "transatlantic culture." Sloan provides an important chapter on the Log College and the Presbyterian academies in America, emphasizing that New Light Presbyterians, like the Old Lights, fostered scholarship. He follows this by four intellectual sketches of Americans of the Revolutionary era, who exemplify Scottish influences, including Princeton's famous President, John Witherspoon, and the physician and educator, Benjamin Rush. In contrast to the diffuse and informal Scottish influences described by Sloan, John Calam's book is about an explicit, organized effort to influence religion and education in eighteenth century British America: the work of the Society for the Propagation of the Gospel in Foreign Parts, the missionary arm of the Anglican church in colonial America. Calam's main theme is the ultimate defeat of S.P.G. purposes because of communication problems, colonial hardships, insensitivity to a developing American culture, resentment by dissenting denominations, and the lack of an American bishop.

#### Class, Bureaucracy, & Schools: The Illusion of Educational Change in America. Michael B. Katz. Praeger. \$5.95.

A provocative interpretation of urban education reform movements in America, since the middle of the nineteenth century. Combining history with sociology, the author argues that by about 1880 the American educational system had developed to be bureaucratic, free, universal, class-oriented and racialist. These structural characteristics have remained the same since and have prevented any radical changes in pedagogy, purposes and curriculum. Against the historical perspective, Katz assesses current movements aiming at decentralization, integration, community control and "incipient technocracy," and concludes that they too are beset by paradoxes and inconsistencies.

#### Letter to a Teacher by the Schoolboys of Barbiana, translated by Nora Rossi and Tom Cole, Vintage, \$1.95.

Written in plain but biting language, this is a scathing exposé of the injustices of middle-class oriented schools, delightfully told by a group of poor peasant Italian schoolboys. Discrimination against the poor, preferential treatment of the rich, racism, use of schools to perpetuate the status quo, these are characteristics of most school systems, including that of the U.S. They have been told by many school critics but by none as movingly and stingingly as the schoolboys of Barbiana.

#### Crisis in the Classroom: The Remaking of American Education. Charles E. Silberman. Random House. \$10. p. \$1.95.

Although much of it is anecdotal and impressionistic, this is still one of the more sober of the recent appraisals of American education. The public schools, according to the author, are "grim, joyless places." Their atmosphere is "intellectually sterile and esthetically barren." Instead of providing a "liberal, humanizing education" schools provide an education for docility and conformity. Instead of being "the great equalizers of the conditions of men" schools help perpetuate differences and they fail to educate the children of minority groups and the lower classes. The entire educational system is diffused with "mindlessness." There is no serious thinking about the purposes of education, pedagogy, classroom organization, what kinds of human beings and what kind of society we want to produce, and what knowledge is of most worth. Silberman is impressed by the "open school" or "informal education" approach of the English primary schools and advocates its adoption in the United States with the necessary re-education of teachers.

### LOUIS C. HUNTER

The Widening Gap: Development in the 1970s. Edited by Barbara Ward, Lenore D'Anjou, and J. D. Runnals. Columbia. \$3.9 An admirably edited and arranged selective record of the Columbia Conference on International Development, February, 1970, a week-long debate-discussion of the effectiveness of the aid programs of the 1960s to the developing countries, taking as its point of departure the World Bank-initiated commission's report, Partners in Development (1969). More than one hundred individuals from many countries, agencies and institutions concerned with the aid programs as well as from the academic community participated. The body of the volume consists of numerous extracts from conference papers together with introductory statements of issues and brief summaries of the typically frank and forthright discussions. The Widening Gap illuminates both the crucial issues and the present insecure status of the aid program and high-lights the opposed 'conservative' and 'radical' positions as to what can and should be done.

The New Industrial State. John Kenneth Galbraith. Second Edition, revised. Houghton Mifflin. \$8.95.

Between Capitalism and Socialism: Essays in Political Economics. Robert L. Heilbroner. Random House. \$7.95.

America Inc.: Who Owns and Operates the United States. Morton Mintz and Jerry S. Cohen. Dial. \$10.

These three volumes in their several ways share a common viewpoint which economists as a profession have generally avoided: a concern with the social and moral consequences of the functioning of economic institutions. The New Industrial State is, in the words of its author, 'on the whole . . . a light revision' of the edition appearing in 1967. While this may not have "revolutionized thinking about American Capitalism," in the phrase of the cover jacket, it has flood-lighted certain aspects of the business scene and offers explanations of business behaviour in many ways persuasive and convincing. The collection of essays, articles and reviews brought together in Professor Heilbroner's volume is concerned with "the insights and deficiencies, of economics: conventional, Marxian and political." As a 'political economist,' Heilbroner does not share the prevailing view that the discipline "should stay clear of questions that require for their answers a statement of political or moral values." By the avoidance of entanglement in the complexities of social behaviour "conventional economics has ensured its technical virtuosity and its internal consistency, but at the cost of its social relevance." America, Inc. has been variously termed a polemic and an exposé but there is no question of its social relevance; this an introduction by Ralph Nader virtually guarantees. The authors bring together an extensive body of material on corporate practices in recent years, drawn largely from the press and from the hearings of various Congressional committees, especially the Senate Subcommittee on Antitrust and Monopoly.

Toward a Rational Power Policy: Energy, Politics and Pollution. Neil Fabricant and Robert M. Hallman. Braziller. \$8.95.

### **BOOK REVIEWS** (continued)

The Social Organization of Electric Power Supply in Modern Societies. Philip Sporn. M.I.T. \$6.95.

The first volume, a report by the New York City Environmental Protection Administration, is a critical appraisal of the expansionist policies of the electric utility industry and of the basic assumptions on which these policies rest, with primary reference to conditions in New York City and State. Drawing its own data largely from the reports and promotional literature of the electric utilities, the report challenges the fundamental premise of the industry and associated regulatory agencies: that more is good and ever more still better. Emphasis is placed upon the environmental and other social costs of an indefinite increase of per capita energy consumption from electric lighting to the electric kitchen to the electric climate: "Live better electrically/move toward a better world."

The Sporn volume is a series of lectures by one of the leading figures and elder statesmen of the power industry. The author's concern is primarily with the private versus public ownership issue of the past generation, drawing upon the record of performance of the two systems in different countries in recent years in support of his conviction that the American choice of "investor-owned utilities" was the right one. In the perspective of his experience the author dismisses the social issues raised by the environmentalists and envisages the continued triumphal progress of the electric power industry in meeting all demands.

The Economic Development of Modern Europe. Robert-Henri Bautier. History of Civilization Library. Harcourt Brace Jovanovich. \$7.95.

A scholarly and well written if conventional account of a millenium in the history of Europe in less than 300 pages is a notable achievement. Over 150 excellent illustrations, a large proportion full or half page, give strength and vitality to the treatment.

### AWARD WINNERS (continued)

terpretations of the physical and biological sciences."

Dr. Linus Pauling is the world-famous holder of two Nobel Prizes (Chemistry, 1954; Peace, 1962) and many other awards, honors, and degrees. He is professor of chemistry at Stanford University and his current research deals with the molecular basis of disease, including mental illness.

When recommending American Convictions, members of the Emerson Award Committee felt that Dr. Barker, in exploring and ordering the development of American "public thought" to 1850, had achieved uncommon clarity, balance, and consistency.

The committee chairman's citation to the winner read: "Charles Barker's book, *American Convictions: Cycles of Public Thought 1600-1850*, is a distinguished

interpretation of the American mind stretching from its Puritan origins to its manifestation in the period of Emerson and Thoreau. The work not only satisfies the highest standards of scholarship, but it is written with a grace and understanding which will make it available to the general reader. The author is not content merely to expound, although he does that very well; he is, in addition, a genuine interpreter who seeks to provide us with self-understanding by holding before us the beliefs that have served to define an American character. The book provides, on the current scene, a most significant occasion for self-examination."

Charles A. Barker has been professor of American history at The John Hopkins University since 1945 and former chairman of the department of history. In 1941 he was awarded the Beveridge Prize of the American Historical Association.

### NOTICE

Embarking on a program of growth which will involve working in many more schools each year, the National Humanities Faculty, sponsored by Phi Beta Kappa, announces that henceforth it will consider school applications three times a year. Deadlines will fall on March 15, June 15, and November 1.

NHF programs are aimed at helping schools improve their teaching in the Humanities. Further information can be obtained by writing to:

Dr. Arleigh D. Richardson, III Director, National Humanities Faculty, 91 Main Street, Concord, Massachusetts 01742.

1811 Q Street, N. W. Washington, D. C. 20009
Please send me copies of <i>The Insignia of Phi Beta Kappa</i> at 50 cents each. I am enclosing \$
Name
City State Zip Check or coin only. No stamps, please.



volume xxxvii • number two • winter 1971-1972

### Editor: Evelyn Greenberg

Consulting Editor: Carl Billman

Editorial Committee: Irving Dilliard, William F. Hahnert, Robert H. Irrmann, Raymer McQuiston, Mary F. Williams.

Published quarterly (Autumn, Winter, Spring, and Summer) by the United Chapters of Phi Beta Kappa at the Garamond/Pridemark Press, Baltimore, Maryland. Send all change-of-address notices to *The Key Reporter*, Phi Beta Kappa, Editorial and Executive offices, 1811 Q Street, N. W., Washington, D. C. 20009. No responsibility is assumed for views expressed in articles published.

Advertising rates upon application. Single copies  $20\phi$ , ten or more copies  $10\phi$  each. Subscription \$1.00 for one year, \$2.00 for two years, \$3.00 for five years. Second class postage paid at Washington, D. C.

Copyright () 1972 by the United Chapters of Phi Beta Kappa. All rights reserved.



www.pbk.org 🛓

Second class postage paid at Washington, D. C.