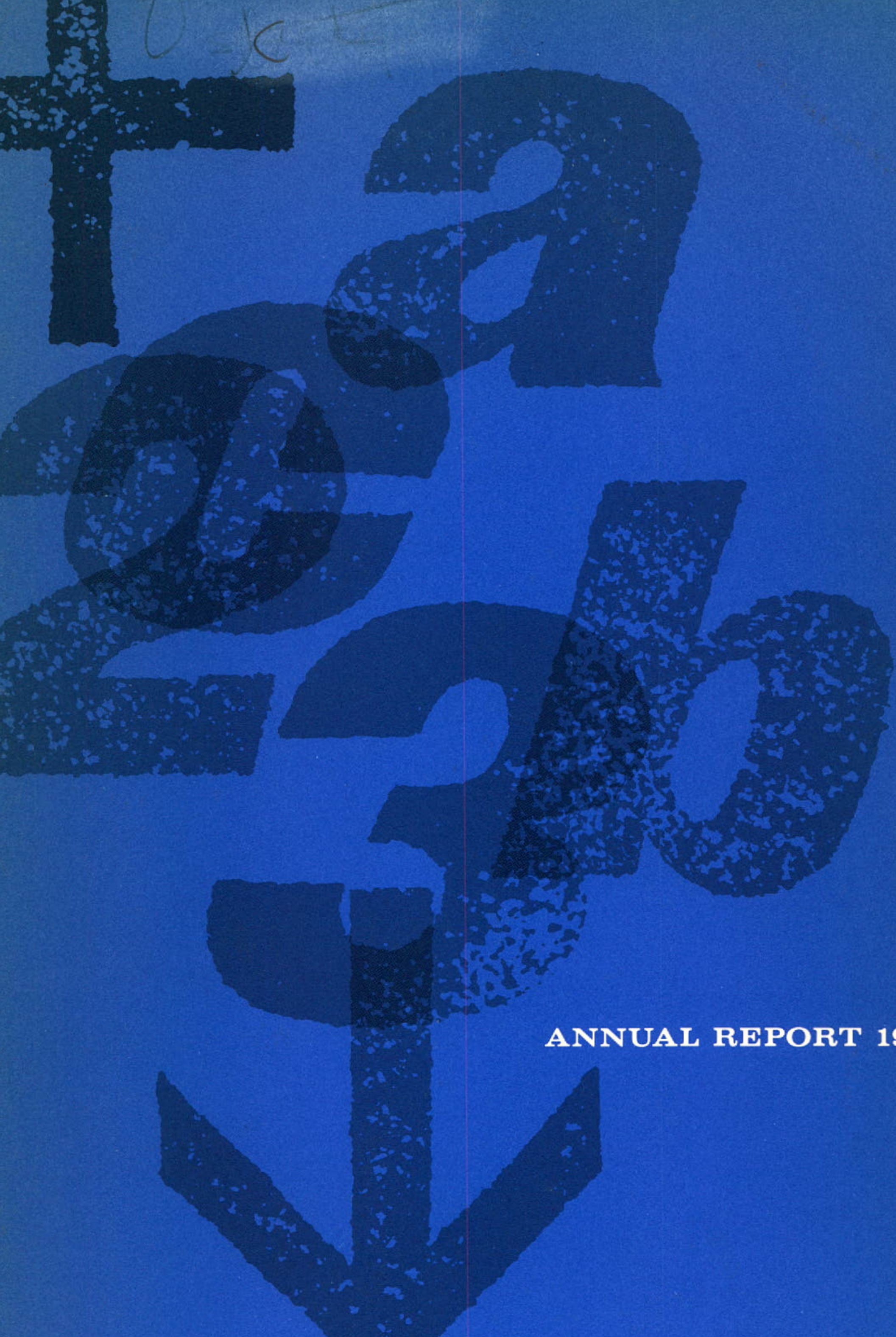
# THE TWENTIETH CENTURY FUND



## ANNUAL REPORT 1963

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# THE TWENTIETH CENTURY FUND

THE TWENTIETH CENTURY FUND
41 EAST SEVENTIETH STREET
NEW YORK · NEW YORK 10021

WASHINGTON OFFICE:
1755 MASSACHUSETTS AVENUE, N. W.
WASHINGTON · D. C. 20036

The Twentieth Century Fund is a nonprofit foundation specializing in research and public education on the vital issues of the day, with an emphasis on economic and social questions and international affairs.

Nonpartisan and objective in its approach, the Fund publishes the results of its researches in book form and further disseminates the research findings through a wide variety of public education activities. On occasion the Fund holds conferences to obtain the advice of experts in particular fields on new lines of research or on research already under way.

The Fund was founded in 1919 by Edward A. Filene, Boston merchant and civic leader, who made a series of gifts that now constitute the Fund's capital assets. Income from this endowment is used solely to support the activities of the Twentieth Century Fund.

# *Table of Contents*

# *Trustees and Officers* FEBRUARY · 1964

## *Studies Published in 1963*

CIVILIAN NUCLEAR POWER

JOURNEYS TOWARD PROGRESS

FARMS AND FARMERS IN AN URBAN AGE

NORTH ATLANTIC POLICY—
THE AGRICULTURAL GAP

AMERICAN CIVIL-MILITARY DECISIONS

# CIVILIAN NUCLEAR POWER

*Author:* PHILIP MULLENBACH
*President, Growth Industry Shares, Inc.; formerly Economist, U. S. Atomic Energy Commission*

THE ATOMS-FOR-PEACE program forwarded by the United States at the United Nations in 1953 held a promise which was never achieved. The disparity between promise and achievement is the subject of research embodied in a Twentieth Century Fund survey issued this year.

In *Civilian Nuclear Power*, Philip Mullenbach sees the gap as having resulted from excessive hopes, from the push and pull of recurrent struggles between advocates of "public" and "private" power, and from the government's avoiding primary initiative for developing competitive nuclear power.

Out of this period of disappointment and frustration, however, important truths have become evident and Mr. Mullenbach sees new vistas of hope. He is optimistic because he believes that all parties concerned are more realistic than they were a decade ago and are ready to move forward — together.

"This 'new reality,' " Mr. Mullenbach says, "is evidenced throughout the national program for nuclear power. Industry and government have together accepted the need for a long, costly ten-year development program requiring federal expenditures of more than $200 million annually. . . . Measures to force private development have given way to greater use of public investment and assistance in reactor research and prototype plant construction."

Mr. Mullenbach maintains that nuclear power can be brought into competitive range and that a vigorous development program should be sustained. "Through its recognized advantage in resources and diversified reactor technology, the United States possesses an unequaled opportunity to provide effective world leadership in both the control and promotion of nuclear power development. The nation, therefore, should look forward to a large, sustained 'public-private' program — at substantial cost, to be sure — as a necessity in meeting U. S. responsibilities in the current world situation and in achieving the long-term economic benefits of nuclear energy."

The study of economic issues and public policy is comprehensive in scope. Mr. Mullenbach deals with the disparity between the domestic needs for atomic energy in our fuel-rich country and the demands of our foreign policy; with the present state of nuclear technology, including basic types of reactors; and the place of nuclear fuels in our total natural resources.

## JOURNEYS TOWARD PROGRESS

*Author:* **ALBERT O. HIRSCHMAN**
*Professor of International Economic Relations, Columbia University; author,* The Strategy of Economic Development; *editor and contributor,* Latin American Issues

*Special Consultant:* **CHARLES E. LINDBLOM**
*Professor of Economics, Yale University*

EXTENDING ITS INTEREST in the processes of economic development which was expressed in such earlier works as *Approaches to Economic Development, Shaping the World Economy* and *Economic*

*Development in Burma*, the Twentieth Century Fund published in 1963 the report of a study by Albert O. Hirschman under the title *Journeys Toward Progress.*

In this imaginative study of Latin America much of today's "gospel" of economic development is questioned. Mr. Hirschman challenges, for instance, the "prerequisites" of change or development. A society, he holds, must move forward because of what it is and in spite of what it is. He believes in the value of the adviser from abroad, but sees a danger of his trying to impose unsuitable changes —"prerequisites"— which the adviser could not, for instance, persuade his own countrymen to adopt.

Above all, Mr. Hirschman sees the whole spectrum of change in new lights. In his view, change comes about neither through many of the conventionally prescribed methods, nor through revolution, but through a process which he describes as "reformmongering."

"Reformmongering" means taking advantage of various devices and possibilities for change, keeping the initiative lest the extremists take over. He warns the United States to accept the inevitability of backing these new patterns of social change in Latin America, which will involve the forging of new kinds of alliances among diverse social groups. He finds too many "halfway measures" which result only in illusory reforms, and warns that unless alternative way-stations beyond this kind of painless and frequently illusory reform can be found, total revolution will be the outcome.

The three economic policy problems which Mr. Hirschman has studied in this work are land reform in Colombia, the manifold attempts to improve conditions of life in Brazil's drought-ridden Northeast, and inflation in Chile. Although each experience is explored with an eye to more general applications, each is presented in such detail and with so much new information that it stands independently as a unique case study in the field.

# FARMS AND FARMERS IN AN URBAN AGE

*Author:* **EDWARD HIGBEE**
*Professor of Land Utilization, University of Rhode Island; formerly Senior Agronomist, U. S. Department of Agriculture; author of* The Squeeze: Cities Without Space *and other works*

A TWENTIETH CENTURY FUND STUDY places farm policies in a new perspective by examining agriculture in the context of an urban age. The author, Edward Higbee, calls for a thorough rethinking of the farm problem now that nine tenths of all Americans live in cities, towns and suburbs.

Taking a sharp look at farm policy, *Farms and Farmers in an Urban Age* says that federal price support programs are excessive in cost, do not accomplish their intended purpose and should be abandoned in favor of the free market. Mr. Higbee finds that government subsidies go overwhelmingly to the already strong and prosperous upper crust of American agriculture that doesn't need them, and almost totally fail to reach the small and marginal farms at the bottom that may be in real distress.

But Mr. Higbee says that there are large numbers of farmers who should not be in agriculture at all. "No reasonable headway can be made in reshaping national policy toward agriculture until it is recognized that the players at the top and the players at the bottom are not in the same league, and the spread between them is getting wider. Eighty-seven per cent of the value of all farm products sold in 1959 was accounted for by 1.4 million farms, or 39 per cent of the total. If the other 2.2 million farmers were to go out of business, by 1969 their output would not be missed."

The big question then, he points out, is how will all these people who are not needed in agriculture find ways to make a living elsewhere?

Already city slums harbor hundreds of thousands of rural refugees, many on welfare rolls, he acknowledges. "The only real solution to agriculture's major social problem is more city jobs for people who would gladly give up farm pursuits if there were a decent alternative. As it is, federal money poured into agriculture does not keep farm and farm family together as press releases say it is intended to do."

Mr. Higbee also calls attention to some of the offsetting factors of our present system. He notes that nobody in the world is fed for a smaller part of his take-home pay than the American grocery buyer. "Most people elsewhere in the world spend at least half of their disposable incomes for food. . . . In the United States only 8 per cent of the population lives on the farm and food costs are less than 20 per cent of the average family budget." He points out, too, that only a minor part of the country's total agricultural production receives the benefit of price supports. He holds, therefore, that abandonment of such supports would not raise consumer prices.

## NORTH ATLANTIC POLICY— THE AGRICULTURAL GAP

*Author:* **JOHN O. COPPOCK**
*Member of research staff, Food Research Institute, Stanford University; formerly Deputy Chief, Central European division, Economic Cooperation Administration; co-author,* Europe's Needs and Resources

IN A TWENTIETH CENTURY FUND STUDY issued in 1963, *North Atlantic Policy — The Agricultural Gap*, John O. Coppock surveys agricultural policies and practices in the nations of the North

Atlantic region. He warns that agricultural nationalism seriously endangers progress toward European unity and greater Atlantic integration.

To jeopardize European unity and integration, even to slow its arrival, is in Mr. Coppock's opinion "an act of political irresponsibility."

A particular irony, Mr. Coppock points out, is that the half billion people concerned are the best fed in the world and yet they stand in danger of being deprived of the benefits of economic integration because their governments cannot reach agreement on how to meet the diverse points of view of legislators and organizations speaking for 15 million farmers and their families.

A critic of much of the legislation which has made possible the accumulation of great surpluses, Mr. Coppock sees a serious error in thinking that these surpluses can be justified as providing food for poor countries. He considers this form of aid for the underdeveloped nations misdirected in the long run. "It is the duty of the West to proffer its assistance to a hungry underdeveloped world in a manner which will promote, not stultify, the most important existing industry — agriculture — in nearly every one of the underdeveloped areas. It is not surplus foods grown in the West under economically dubious farm policies that the industrialized countries — if they are truly interested in the hungry people of the world—must send, but rather some 'surplus' science... techniques ... knowledge ... and equipment."

Mr. Coppock stresses the need to strengthen by government action some of the self-correcting forces which are at work. Chief among these trends, he finds, is a progressive reduction in the number of farms, with consequent consolidation of farms and employment of better farming methods. With larger holdings, he claims, the operators remaining on the land will be in a position to make adequate incomes without depending on very high prices for their produce. Mr. Coppock also suggests that cereals would be an excellent starting place for lessening protection by governments and bringing about more reasonable marketing conditions.

# AMERICAN CIVIL-MILITARY DECISIONS

*Edited by* **HAROLD STEIN**
*Professor of Public and International Affairs,*
*Woodrow Wilson School of Princeton University;*
*Staff Director, Inter-University Case Program, 1948–1953*

WITH THIS WORK the Twentieth Century Fund completed the second of its studies exploring the range and depth of changes in civil-military relations in the United States during the past three decades. In 1958 the Fund published *Arms and the State* by Walter Millis with Harvey C. Mansfield and Harold Stein. The Fund's interest in the field continues with a study on civil-military affairs in France which is described in a later section of this report.

The proliferation of policy decisions in which both civil and military decisions must play a part is implicit in the diversity of case studies in the recently issued book. There are, for example, studies of the organization for economic mobilization prior to World War II; of decisions on the negotiation and content of the Italian armistice in the middle of the war; of the determination of a policy for our occupation of Germany after V-E Day; and of Congressional intervention in our diplomatic and military relations with Spain in more recent years.

Looking to the future, Mr. Stein sees a continuing emphasis on the meshing of civil and military policy with accompanying frustration in the making of choices in national policy. As he says in his introduction to the volume: "Basically, foreign policy which ignores military power cannot be effective; equally, foreign policy that is constricted by military preferences for ideal combat conditions is fruitless and defeatist.

"Korea was a bad place to fight, but without our willingness to risk defeat there, not only would the Republic of Korea have been absorbed by the Communist imperium, but our role as leader of a great alliance would have been seriously damaged. This necessity for a never-ceasing series of choices that are never optimal from any single standpoint is now widely recognized by both military and civilian officers, especially those who have had the sobering experience of working together in Washington where neat, final, total solutions prove evanescent."

The case studies in *American Civil-Military Decisions* are: "The Far Eastern Crisis of 1931–1932: Stimson, Hoover and the Armed Services," by Michael D. Reagan; "The Helium Controversy," also by Mr. Reagan; "Birth and Death of the M-Day Plan," by Albert A. Blum; "Aid to Russia: The First Year," by Marvin D. Bernstein and Francis L. Loewenheim; "The United States Fleet: Diplomacy, Strategy and the Allocation of Ships (1940–1941)," by Robert J. Quinlan; "The Italian Armistice," also by Mr. Quinlan; "Directives for the Occupation of Germany: The Washington Controversy," by Paul Y. Hammond; "Super Carriers and B-36 Bombers: Appropriations, Strategy and Politics," also by Mr. Hammond; "To the Yalu and Back," by Martin Lichterman; "The American Decision to Rearm Germany," by Laurence W. Martin; and "Bases in Spain," by Theodore J. Lowi.

This study was published in 1963 by the University of Alabama Press in cooperation with the Inter-University Case Program.

# *Research Projects in Progress*

A GEOGRAPHY OF THE UNITED STATES

THE INDUSTRIALIZED URBAN ENVIRONMENT

POVERTY IN AN AFFLUENT SOCIETY

SOUTHERN ECONOMIC DEVELOPMENT AND MANPOWER

LEGAL RESTRAINTS ON RACIAL DISCRIMINATION IN EMPLOYMENT

POWER, OWNERSHIP AND PROPERTY

PERFORMING ARTS

LEGISLATIVE APPORTIONMENT

PENSION PLANS AND LABOR MOBILITY IN THE PUBLIC SERVICE

CANADA'S NEEDS AND RESOURCES

ECONOMIC GROWTH IN THE WEST

FRENCH CIVIL-MILITARY RELATIONS

ITALIAN POLITICAL PARTICIPATION

SOUTH ASIA

# A GEOGRAPHY OF THE UNITED STATES

### *. . . the living tether by which men, earth and society are irrevocably bound*

*Research Director:* GEORGE H. T. KIMBLE
*Professor of Geography, Indiana University;*
*formerly Director, American Geographical Society*

A GEOGRAPHY for the layman, one specifically directed to him rather than to the textbook market, is being undertaken by the Twentieth Century Fund. It will be a wide-ranging study of the United States which takes as its focal point "the living tether by which men, earth and society are irrevocably bound." George H. T. Kimble is the research director.

Since many — perhaps most, Mr. Kimble suggests — of the pressing problems of our time have their roots in the unequal distribution of people, space and opportunity, this study will be designed to illuminate the human as well as the physical geography of the nation. "Thus it will give attention not only to the geography of electricity and petroleum and aridity or arable land, but also to the geography of obsolescence — of farms that are too small, cities that are too cluttered and people who cannot be budged from either — and to the geography of affluence — of Miami's Golden Mile and Manhattan's high-soaring apartments," Mr. Kimble says. "It will consider too the geography of puritanism and the geography of segregation. Are these not more important than the geography of snow lines, soil creep and slip-off slopes?"

Mr. Kimble feels that the United States is "a country hard to examine — harder still to 'see,' as it is still riding 'the ever-whirling wheele of Change.' " In his opinion, moreover, no geography can be more than an incomplete statement. It must also be a personal statement. Just as each man's America is his own, so each geographer's interpretation must be his own.

Still and all, Mr. Kimble believes that a geography with a solid underpinning of fact and with the aid of imaginative maps —"those space-saving ciphers"— can go far toward getting the layman to "see" America. An atlas, novel in style and content, is being prepared to accompany the geography. The atlas will be produced in Sweden in collaboration with W. William-Olsson, a leading cartographer and Director of the Geographical Institute of the Stockholm School of Economics.

Mr. Kimble is working with a number of consultants and with a small central staff at Indiana University. His study is to be completed in 1966.

## THE INDUSTRIALIZED URBAN ENVIRONMENT

***Anarchic urban expansion across the nation . . . an exploration into the ways of mobilizing our resources to re-order the disarray of our planning***

*Research Director:* **ALLAN TEMKO**
*Research Associate, University of California Center for Planning and Development Research, Berkeley; formerly Associate Editor,* Architectural Forum *and urban critic, San Francisco* Chronicle

It is the thesis of Allan Temko, research director of a new Twentieth Century Fund study, that the environmental crisis in the United States brought on by anarchic urban expansion is neither tolerable nor beyond solution. Mr. Temko is confident that the United States has ample resources to re-order the disarray of its way of living. It will be the purpose of his research to explore the ways in which these resources may be mobilized.

Describing the crisis, and his response to it, Mr. Temko says: "Gigantic agglomerations spread unchecked over thousands of square miles of once rural countryside, leaving a wake of environmental wreckage at their historic cores. . . . Little wonder that our piecemeal efforts to solve 'urban' problems have been singularly unavailing, for it is apparent that nothing less than a full marshalling of our national energies, on a continental scale, will enable us to create a machine-served, rather than a machine-mastered community of man. Indeed, this is the true scope of the new architecture of the industrial age."

In Mr. Temko's opinion, this is not the time to despair, but to search for and scrutinize possible alternatives, and then to act. "If an environmental breakthrough can be made anywhere it can be achieved — more quickly than is generally thought possible today — in a nation which spends upwards of fifty billions of dollars annually for defense, yet finds this sum less than one tenth of the gross national product. To achieve such a breakthrough, we must mount an effort comparable to the space program, as ambitiously conceived, as abundantly financed, as carefully researched, as deeply sustained throughout the national fabric by government, industry, the educational system, the press and other communications media, and ultimately most important, an enlightened citizenry."

Mr. Temko comes to this study with a long background as a leading commentator on architecture. He is the author of *Notre-Dame de Paris*, in which he relates architectural design and urban development to broad political, social, economic and — in a pre-industrial age — technological considerations.

A study in the same general area, but focused on the community and the public environment, will be undertaken in the near future by Edward Higbee. An earlier study by Mr. Higbee for the Twentieth Century Fund is described on page 14.

# POVERTY IN AN AFFLUENT SOCIETY

***. . . no single cause . . . but a series of poverty-linked characteristics is the essence of today's crisis of need***

*A project carried out at the New School for Social Research, New York, by* Oscar Ornati, *Professor of Economics, and* Henry David, *formerly President of the New School*

PERHAPS at no time in our history has the existence of dark pockets of poverty been more of an anachronism, or more perplexing. Amid the wealth of the 1960s, the intransigence of the problem of poverty has more clearly than ever exposed the depth of its roots, the complexity and subtlety of its nature.

It is evident that the causes are not alone in a lack of education, low levels of economic activity or inadequate expenditure for health or housing. "The essence of contemporary poverty is found in a series of poverty-linked characteristics." Thus Oscar Ornati, discussing a Twentieth Century Fund exploration of poverty in America, describes the starting point of the investigation.

"Phrases such as 'bad housing breeds disease and poverty' or 'the education of the father makes for the poverty of the child' point to the common-sense recognition of how poverty is transmitted from generation to generation," says Mr. Ornati. "Surveys of the socio-demographic characteristics of the poor also show how, in the great majority of cases, they are afflicted by several traits, each of which links them to poverty. . . .

"The data for the United States reveal clearly that of the 20 million abject poor more than two thirds, or somewhere between 12 and 14 million, are deficient in either health, mental and physical, or in education. This in addition to the fact that the group of abject poor is made up mainly of non-whites, persons over 65, rural farm residents and families headed by women. They are thus afflicted simultaneously by several disadvantages. . . . To develop efficient policies to combat poverty we should know how much each of these characteristics contributes to contemporary poverty."

Towards this end the research has been moving ahead under Fund auspices at the New School for Social Research in New York City. The work has been largely carried on by Mr. Ornati. Some of the conclusions have already been utilized, for example, in a report by Mr. Ornati in Washington in late 1963 before the National Policy Committee on Pockets of Poverty. A summary of the findings of this project will be made in a working paper to be issued by the Fund. This will set forth such basic concepts of the study as the poverty band, the anti-poverty dollar, and poverty-linked characteristics, and will include supporting material.

# SOUTHERN ECONOMIC DEVELOPMENT AND MANPOWER

*To study the changing economy of the South . . . is to study a ferment of social, political and moral changes*

*Research Director:* JAMES G. MADDOX
*Professor of Agricultural Economics, Department of Agricultural Economics, North Carolina State College*

AT ITS START two years ago Twentieth Century Fund research on the economy of the South centered largely on such questions as rates of growth, levels of output and of personal and family income, and present and future manpower needs, both white and Negro. But events have moved swiftly and shaped new needs for this study. It is increasingly clear that the research is animated by a recognition that the whole of southern society is in a period of great transition.

In describing the study and the currents which are affecting it, James G. Maddox, director of the research, says: "The changes which the region is experiencing are numerous and complex. Among the most important of them are: a rapid movement of the southern population to urban areas which results from a pronounced decline of employment opportunities in agriculture coupled with an expansion in manufacturing, trade and service industries; a greatly accelerated movement for equality of opportunities among the Negroes of the region; a growing emphasis on improving educational standards and opportunities; increasing evidence of the growth of a two-party political system; and slow but perceptible shifts away from traditional views which have tended to idealize agrarian ways of life and to dominate the region's attitude toward race relations.

"These many different facets of economic, social, political and moral change which are under way in the South are interlocking and mutually reinforcing. Although the central focus of our study has been on economic growth and future employment opportunities in the South, we have been forced to give serious consideration to virtually all aspects of the great transition through which southern society is now passing. The future level of employment, the industrial and occupational distribution of jobs, and the kinds of people who will be employed will be intimately connected with the total pattern of change in southern society."

The statistical analysis of trends in employment in the most important industries of the South is now virtually complete. Basic information has also been assembled on population, income and education. Major remaining tasks include examination of employment prospects in the light of non-economic forces; the drawing together of data in a framework which will depict the totality of changes that are reshaping southern society; and study in depth of the specific prospects for Negro employment. The work is scheduled for completion in 1965.

# LEGAL RESTRAINTS ON RACIAL DISCRIMINATION IN EMPLOYMENT

***The law offers a rich source of restraints on racial discrimination in employment . . . but ignorance of the law often prevents its use***

*Research Director:* **MICHAEL I. SOVERN**
*Professor of Law, Columbia University School of Law*

DENIAL of equal employment opportunity ranks high on the list of grievances of almost every civil rights group, says Michael Sovern, research director of a Twentieth Century Fund study on the law as it applies to discriminatory practices. "Indeed, when Negroes have taken to the streets in the North, it has been this complaint, more than any other, that has led them there. The streets are likely to remain a major forum for the resolution of racial controversies throughout the foreseeable future. In states that provide no legal remedies, this is hardly surprising, but the prospects for disorder are also substantial in states with near-perfect civil rights legislation. In the forward-looking states, demonstrations will be made to do the work of lawsuits in part because of ignorance of the law, in part because of impatience with it."

One of the objects of the Fund study on the law and discrimination is to attempt to dispel some of that ignorance. The law — local, state and federal — offers a rich source of restraints on racial discrimination in employment. Unfortunately the literature contains no comprehensive guide to what the law in all its forms can contribute to the struggle against employment discrimination. The results of the study are intended to help fill that gap. The study is expected also to suggest how existing legal remedies can be improved.

"At the federal level, the study's initial inquiries focused mainly on executive and judicial action, this on the seemingly indisputable premise that national legislation to promote equal employment opportunity was a remote dream," Mr. Sovern says. "Recent events have forced a re-examination. Congressional enactment of national fair employment practice legislation of some sort is now a serious possibility.

"The project has, accordingly, expanded its initial emphasis on state legislation and federal executive and judicial action to cover federal legislation. The prospect of a national statute has not, however, diminished our interest in other forms of anti-discrimination activity, for we remain convinced that employment discrimination is not likely to yield to anything less than a multi-front assault."

The study is planned for completion in 1964.

## POWER, OWNERSHIP AND PROPERTY

### *The transformation of modern American capitalism*

*Research Director:* **PAUL P. HARBRECHT, S.J.**
*Co-director, Institute for International and Foreign Trade Law, Georgetown University; author,* Pension Funds and Economic Power

*Associate Research Director:* **LOUISE FIELD**
*Research Associate, Twentieth Century Fund*

EVERY SOCIETY, after a sufficient period of development, becomes a structure of institutions which are its means for action. If a society is alive and dynamic its old institutions will continue to evolve new forms and, at maturity, the new organism may bear little resemblance to the mold from which it emerged.

The changes that have occurred in modern "capitalism" force us to re-examine its organization, its mechanisms and its rationale. This study of the forms of control of productive property is an attempt to understand more clearly the distribution of wealth and the sources of economic power emerging in the United States today. It is nearing completion under the direction of Paul P. Harbrecht, S.J., who is delving further into the thesis he advanced in an earlier Fund report — *Pension Funds and Economic Power* — that property ownership is no longer the dominant or organizing force in the diffusion and control of wealth. Ownership is now a different phenomenon in that it is separated from property itself. Elements of the private property system remain, especially in the legal infrastructure that supports our new institutions, but the American economic system is now largely organized through the medium of public or quasi-public institutions.

In the new study particular attention is being given to the major centers of economic power such as the corporations, the credit institutions, the labor unions and the philanthropic foundations. In the analysis of the role of the financial institutions, for example, a chart is being prepared to show their power to create and direct credit. One of the questions the study will attempt to answer is whether or not the financial institutions are the holders of a new power affecting the distribution of income.

In investigating the phenomena that occur in a society in transition away from a system centered on the direct ownership of private property, the research director and staff hope that it will be possible at the end of the study both to understand the direction of the development of American capitalism more clearly and to test in some measure the social value of its new and changing institutions. The study is scheduled for completion in 1964.

# PERFORMING ARTS

*. . . Economic factors affecting the promise of attaining a heightened ground of artistic achievement, a wider audience participation*

*Research Directors:*

WILLIAM J. BAUMOL
*Professor of Economics, Princeton University*

WILLIAM G. BOWEN
*Associate Professor of Economics, Princeton University*

INTEREST IN the performing arts has been quickening across the nation but their economic foundations continue unstable. The promise of attaining a heightened ground of artistic achievement and wider audiences is thus seriously, if not critically, endangered.

A fundamental difficulty in considering how to build a firmer foundation has been a dearth of facts about the performing arts — the theatre, opera, ballet and music. It will be the purpose of a Twentieth Century Fund study now under way to provide some of the necessary information and to analyze economic factors so far as they are applicable to the performing arts.

In seeking these new data and making such analyses, the research directors, William J. Baumol and William G. Bowen, are convinced that fresh perspectives and original evaluations are essential. "We cannot obtain our answers simply by aggregating the opinions of the professional persons, however qualified they may be in their own circumscribed area," Mr. Baumol says. "Rather we must assemble for the first time a really comprehensive set of data from which we can draw our own conclusions, turning to the professional for help only in interpretation."

In the initial stages of the research, heavy emphasis has been placed on gathering a wide range of data, largely through audience questionnaires and personal interviews. Close to fifty organizations, distributed throughout the United States, have been reached.

The three primary objectives of the study are: an exploration of the underlying causes of the financial difficulties of the performing arts in order to determine whether these problems are basic to their structure and therefore unavoidable, or whether means for increasing "efficiency" might ameliorate them for any substantial period; determination and explanation of the pertinent economic trends in order that they may be better coped with as they manifest themselves; and, finally, an analysis of the relationship between scale of operations (total numbers of performances) and operating deficits in order to study the financial implication of increasing the scale of operations.

The Twentieth Century Fund study will complement a panel report on the performing arts which is being sponsored by the Rockefeller Brothers Fund Special Studies Project. The chief focus of the panel's interest will be the development and support of performing arts institutions. The studies of the two foundations are separate but have been planned so as to avoid duplication of research and to work toward related objectives.

# LEGISLATIVE APPORTIONMENT

*. . . an analysis of a legislative revolution and its implications for the future life of the nation*

*Research Director:* **ROBERT B. McKAY**
*Associate Dean and Professor of Law, New York University*

IN THE SPRING of 1962 the Twentieth Century Fund held a conference on legislative apportionment. It considered the efforts being waged at that time in nearly a score of states from New York to California to bring about more equitable systems of legislative apportionment, particularly as between urban and rural areas. A majority of the conferees strongly supported a system of apportioning seats in state legislatures on the basis of population. The Fund issued their report in a pamphlet, "One Man — One Vote."

It was apparent at the time that the question would be of increasing concern to state governments, courts, civic bodies and individual citizens, and the Fund more recently has undertaken a research project in this area. Focusing closely on apportionment for the state legislatures, the study, under the direction of Robert B. McKay, will explore many facets of the questions involved. It will provide a historical summary of apportionment patterns and an examination of constitutional questions in the light of the pace-setting *Baker v. Carr*, a case which opened the doors of the federal courts to lawsuits challenging the fairness of systems of apportionment in individual states. In going on to study the experiences since *Baker v. Carr* in state legislatures, in federal courts and in state courts, Mr. McKay will make an inquiry into what would be a proper meaning of equal protection in the context of apportionment.

He will proceed to an analysis of the various difficulties, real and fancied, of judicial enforcement of equal protection standards. Finally, taking a long view of the implications of reapportionment, Mr. McKay will consider its potential consequences for state, city and county governments, for political parties and pressure groups and for racial, religious and ethnic minorities in the United States. The study will be completed in 1964.

# PENSION PLANS AND LABOR MOBILITY IN THE PUBLIC SERVICE

***An exploration of the possibly negative aspects of pension plans which restrict the movement of labor***

*Research Director:* **HAROLD RUBIN**
*Associate Research Analyst, New York State Division of the Budget*

It is generally held that the national interest is best served when there is a free mobility of skilled employees so that maximum use is made of the country's human resources. Yet there has been a decline in labor turnover rates in past decades, and there is evidence that this is, at least in part, a result of restrictive pension plans which make a change in jobs impractical.

Industry and government have frequently found themselves stymied in getting the right man for the right job because of these restrictions, just as employees themselves have been frequently frustrated in making a move. The over-all cost of this to the economy could be substantial.

In research now under way it is the hope of the Twentieth Century Fund to illuminate the extent of labor immobility due to pension considerations, and if that is found to be considerable, to suggest methods of eliminating or reducing these negative aspects of pension plans.

The Fund research will be restricted to the public service. Pension plans in the public service have a long history, with coverage much more widespread than in private industry. The great majority of public employees have pension coverage compared with less than one half of employees in private industry. Since about one out of eight employees in the United States is employed by government, such employees constitute an important segment of the nation's labor force. Accordingly, a study of pension plans and their effect on mobility in this sector should provide insights into the whole question. The exploratory study being undertaken by the Fund will also indicate whether or not further work should be done in the entire area, specifically including private industry.

The research director, Harold Rubin, started his explorations with a review of work already done in this field and has gone on to analyze data collected from selected departments and agencies in the five largest states, the five largest cities and the federal government.

# CANADA'S NEEDS AND RESOURCES

## *Third work in the Fund's economic profile of the North Atlantic area*

*Research Director:* **GEORGE W. WILSON**
*Professor, School of Business, Indiana University (on leave of absence, February 1–July 31, 1964); Director of Latin American Case Studies Program, The Brookings Institution; formerly Economist, Department of Labour and Board of Transport Commissioners, Government of Canada*

In *America's Needs and Resources* the Twentieth Century Fund explored in depth the past achievement, present status and future possibilities of the American economic system. Later, the Fund issued a report on *Europe's Needs and Resources*, prepared, as was the American study, under the direction of J. Frederic Dewhurst. This analyzed the trends and economic prospects in eighteen countries. Now the Fund has embarked on a study of the Canadian economy. Together these three works will provide a unique economic profile of the North Atlantic nations.

The project on Canada is being carried out under the direction of George W. Wilson, a Canadian economist, now on the faculty of Indiana University. It concerns itself both with a view of the Canadian economy at the present time and with projections to 1970 and 1975.

Completion of the recently launched study is expected in 1964, a short time schedule having been set because of its heavy reliance on the studies prepared for the Royal Commission on Canada's Economic Prospects (Gordon Commission). The Commission's material will be updated and supplemented.

Going beyond statistical and factual estimates of every facet of the economy, the new Fund project will consider its geographical, political and social setting, taking into account many of the problems peculiar to Canada, both within the country and in its relations with the United States and other nations.

The work will go forward in three main units, the first spanning the years 1945–1962 and devoted to past trends, the second centered on resources and production, and the third on projections. A report of the study is expected to be published in the United States and in Canada in both English and French editions.

## ECONOMIC GROWTH IN THE WEST

***. . . to distill a strategy for a high rate of economic growth for the future***

*Research Director:* ANGUS MADDISON
*Director, Development Department, Organization for Economic Cooperation and Development, Paris; contributor to* Europe's Needs and Resources

ANOTHER STUDY which will add perspectives to the Fund's work on the economic life of the Atlantic community is one seeking the underlying reasons for economic growth in the advanced industrial countries of Western Europe and North America. Angus Maddison, director of the research, will aim to compare the growth rates, recent and long term, of the various countries and to discover whether the striking economic development of the 1950s in Western Europe represented a new trend or a passing phase of recovery.

The study arises, not from any desire to theorize about growth, but out of a practical interest in forecasting what the future development of the Western industrial economies may be. Thus it is Mr. Maddison's intention "to investigate why some countries did better than others, to examine the role which economic policy played and to see whether we can distill a strategy for high growth in the future." "Our basic concern," Mr. Maddison says, "is to explain why accelerated growth occurred in mature economies that had been relatively stagnant for several decades in order to see whether the forces making for acceleration are likely to continue."

The nations of the Atlantic community, with their differences and their similarities, offer an unusual opportunity for analysis. "We are fortunate to have twelve countries which have similar social and economic institutions and policy objectives, but enough diversity of experience, size, temperament, history and politics to ensure that among them they have tried out most of the feasible policy weapons in some way or other. It is also helpful that the close economic cooperation between these countries in O.E.E.C. and O.E.C.D. has produced a fund of comparative statistics which makes possible a serious quantitative study of the growth record."

It is unlikely, Mr. Maddison feels, that the explanation of accelerated growth or the policy lessons derived for developed countries will be applicable to the less developed ones. But, he points out, the world economy must look to a continuing rate of development among the richer nations for the benefit of all.

A report of Mr. Maddison's work is scheduled for publication in 1964, in both England and the United States. It will be divided into five sections: The Record of Western Growth; The Reasons for Accelerated Growth; Investment and Growth; The Role of Government in Promoting Growth; and The International Environment. The countries concerned are Belgium, Denmark, France, Germany, Italy, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom, Canada and the United States.

# FRENCH CIVIL-MILITARY RELATIONS

***A political attempt by the military to do nothing less than reconstruct French society and government . . .***

*Research Director:* **EDGAR S. FURNISS, JR.**
*Director, Social Science Program of The Mershon Center for Education in National Security, Ohio State University;*
*Author of* France, Troubled Ally *and other works*

EXTENDING ITS WORK in the field of civil-military relations, the Twentieth Century Fund has undertaken an exploration, by Edgar S. Furniss, Jr., of the recent crisis in French civil-military relations. This crisis arose when the army discovered President Charles de Gaulle's intentions concerning Algeria and determined to thwart his plan in apparent disregard of the costs.

A central theme of Mr. Furniss' study will be the extent and depth of the military threat to civilian authority in France as a result of Algeria. Much more was involved in the French army's challenge to the Fifth Republic than forceful expression of political preferences, according to Mr. Furniss. "By seeking to impose on constitutional authorities a decision as to what France should do with almost all its military force — specifically, to continue indefinitely the envelopment of Algeria — the army sought, in effect, to define the type of political system for the country, to revise its social and economic foundations, and to regulate its foreign relations," Mr. Furniss says. "Defiant military leaders and their civilian supporters proclaimed and believed that their objective was legitimate. Only when the threat had progressed to its logical extreme of attempted assassination of the man who dominated the political structure did increasing numbers of officers, still without expressing any sense of outrage or humiliation over past military behavior, begin to accept as inevitable the end of an era for their foreign-based army and for France."

In pursuing their revolutionary goals, Mr. Furniss points out that "officers involved the army in all parts of the policy-making process, in all ranges of force, from suggestion to overt revolt, with all sorts of civilian sympathizers, from deputies to bomb-throwing thugs." In short, he says, "It is difficult to imagine a more thoroughly politicalized army, even though military activists, as in most insurrectionary movements, comprised a minority of the total officer corps."

Following a detailed examination of the "politicalization of the army" and of the revolt itself, Mr. Furniss will analyze the political situation which followed in the wake of the army's rebellion. It is his contention that much of De Gaulle's domestic and foreign strategy has been based on rehabilitating the army and on re-creating the mystique of the Nation in Arms. He believes that in shaping its foreign policy, the United States must see De Gaulle's actions in this light and, accordingly, Mr. Furniss will make his own recommendations for U. S. policy toward France.

Publication of this appraisal of the French civil-military crisis is set for February 1964.

# ITALIAN POLITICAL PARTICIPATION

*. . . an attempt to plot the currents that shape the democratic process, currents sometimes evident, sometimes mysterious*

*Research Directors:*

GIORGIO GALLI *and* ALFONSO PRANDI

*Members of the research staff, Associazione di Cultura e Politica Carlo Cattaneo*

THE PHRASE "democratic process" as a description of how free governments are placed or maintained in office can become elusive if it is asked to carry a burden of explicit meaning. Whatever the "process" may be, it is less a process — with the order or logic that word connotes — than a combination of tensions and forces, often conflicting, which animate men in choosing their government.

In order to understand more fully the animating forces in a democracy, the Twentieth Century Fund is cooperating in a study on political participation in Italy. Italy provides a unique laboratory for such a study. For it has long been experiencing a dramatic confrontation of two highly divergent political forces — the Communist Party and the Christian Democratic Party. Together they control about two thirds of the local vote. And as they have struggled for power, Italy has been undergoing significant social change.

The work will concentrate on three main topics: electoral behavior in Italy since World War II; the leadership of the Communist and Christian Democratic parties and their organization and methods of operation; the parties' policies and activities both at the national and at the local level. The unions, the cooperative movement, the Church and other voluntary organizations will also be touched upon insomuch as they influence the parties' structure and policies. It is an underlying aim of the research to ascertain the prevailing patterns of political participation in the country and the extent to which the two major parties have encouraged involvement at the grass roots.

The research will focus on the years 1945 to 1962, a period marked by great political and economic transformations. This period of Italian history encompasses a series of momentous events, including the end of the second world war and the fall of the Fascist regime, the creation of the Republic in 1946, the adoption of a new constitution in 1948, the reconstruction that absorbed the energies of the nation up to 1952, and the years of rapid economic development, the so-called "economic miracle."

The Associazione Carlo Cattaneo, with which the Fund is cooperating, is a nonprofit organization for political, social and economic research. Writing from Bologna where the study is in its final year, the directors, Giorgio Galli and Alfonso Prandi, express their hope that the collaborative effort will be "significant not only because it will throw light on the conditions of democratic order in a traditional society under the stress of rapid industrialization and dramatic social change, but also because it will serve as an important example of research in political science."

# SOUTH ASIA

***Economic development of a region so filled with challenge – and problems – as to require new dimensions of economic theory***

*Research Director:* **GUNNAR MYRDAL**
*Professor of International Economics, University of Stockholm; Director of the Institute for International Economic Studies, Stockholm*

As THE NATIONS of South Asia struggle toward new political and social forms they suffer the pressures and frustrations of being thrust from the era of the oxcart into the jet age.

Beneath the ferment lies the fundamental need for economic development. It is to the problems of achieving such development that Gunnar Myrdal addresses himself in a study he is carrying out for the Twentieth Century Fund.

One of the world's most distinguished economists, Mr. Myrdal acknowledges that in approaching his task he has found an economic landscape so different from that of other parts of the world, so challenging in its possibilities — and problems — as to require new dimensions of economic theory. Aside from the paucity of facts, the guideposts themselves seem reversed. For instance, where urbanization has traditionally been associated with economic advance, in South Asia the very opposite appears to be true. "Urbanization," Mr. Myrdal says, "is more a reaction *against* the lack of vigorous economic growth than a response to rising levels of income per head. Indeed, in South Asia much of it is due to factors that inhibit economic development, such as civil wars, crop failures and excessive rates of population growth. Thus, instead of standing as a symptom of growth, as it was in the West, urbanization in South Asia is an aspect of continued poverty."

Focused on the economic problems of underdevelopment, development and planning for development, the study will reach deeply into the diversified conditions of the countries concerned. It will gain in originality less from the elements on which it is built than from its analysis and viewpoint. Among the countries receiving greatest attention are India, Pakistan, Burma, Ceylon and Thailand.

Mr. Myrdal's report will deal with the following main topics: how independence came to the countries of South Asia and what political forces have been at work; the "economic realities," including population and land, structure of the economies, levels of living and inequality, foreign trade; differences in initial situation; the ideological and institutional background of planning for development; the economic aspects of planning; the population problem; and international implications of the policies and activities of the nations of South Asia.

The study, which has been in progress for several years, was reaching the stage of final manuscript at the close of 1963.

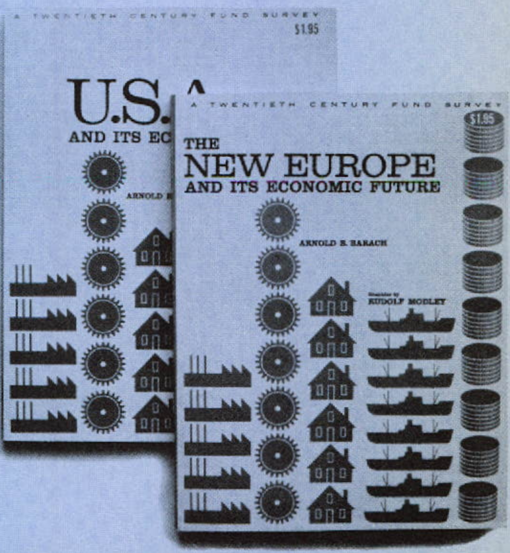
# graphic symbols

*New Dimensions for Mass Communications*

*by* RUDOLF MODLEY

Scheduled for publication in the spring of 1964 are three books presenting graphically, with new texts and updated statistics, findings of earlier Twentieth Century Fund studies. They will further a tradition of bringing the essence of major Fund reports to a wider audience in popular paperback editions making generous use of graphic symbols. The books are *U.S.A. and Its Economic Future* and *The New Europe and Its Economic Future*, based respectively on *America's Needs and Resources* and *Europe's Needs and Resources*. The third volume will be *The Challenge of Megalopolis*, derived from *Megalopolis*. Each book is described elsewhere in this report.

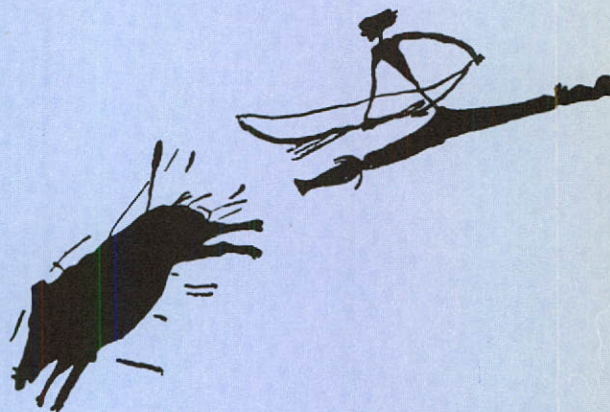
Rudolf Modley, a long-time student and practitioner of graphic presentations, designed the graphics for the U.S.A. and European books, as well as earlier Fund works. In these pages, Mr. Modley discusses the theory and development of symbology, showing their application to the Twentieth Century Fund studies.

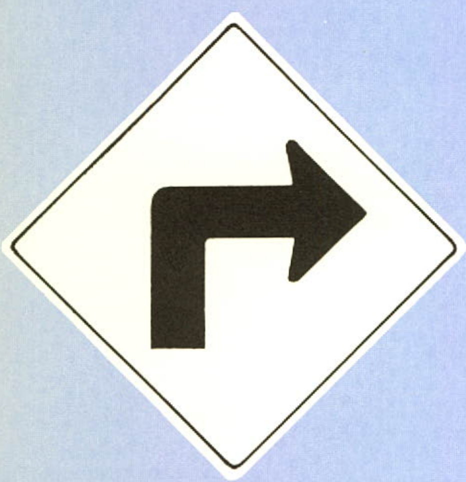


All written communication is based on graphic symbols. We may take the meaning of some graphic symbols for granted and consider them as self-explanatory. In fact, all graphic symbols have to be learned. As Lawrence K. Frank has said, they are of use only if their meaning is known and has been agreed upon and accepted. We may divide graphic symbols into three different classes:

- Symbols which are an image of a visual experience;
- Symbols which are related to such an image; and
- Symbols to which a meaning has been assigned arbitrarily.

Graphic symbols *based on an image* are the most easily recognized, the most easily agreed upon, and the most easily accepted. Most of the prehistoric rock paintings of cavemen are as recognizable today as they were thousands of years ago. They remain recognizable as long as the object they depict remains familiar. Changes in customs and in products may make what was once an "image-symbol" unrecognizable. The symbol then may become an "arbitrary" symbol or it may lose acceptance altogether.





A graphic symbol which is *related to an image* of an experience or a process must be learned. Some traffic devices, many geographical symbols, and the roman numerals I, II, and III are such image-related symbols.
Because of their closeness to an actual experience or process, these symbols are generally easy to learn for people who live in a culture where the experience is frequent. Image symbols and image-related symbols will often be the most effective devices to reach audiences that are unwilling or unable to accept messages expressed in arbitrary symbols.

N

In an *arbitrary graphic symbol,* the symbol itself gives no clue to what it might mean. Its meaning is arbitrarily assigned. It has to be taught by parents, schools and practice; it has to be learned, agreed upon and accepted by the student. Many of today's arbitrary symbols are completely arbitrary. Examples are the "plus" symbol and the question mark. Others may once have been based on an image. The roman letter N, for instance, may have developed from the Egyptian hieroglyphic for snake. It lost its image-relation as hieroglyphics developed into sound symbols.

Graphic symbols can be combined into symbol systems. The most important graphic symbol system man has created is the written language. Through it, man can pass on the achievements of one generation to future generations. Written languages began to develop probably 3,000 years ago. Today, there are several thousand languages using different words and syntax. Some even use different alphabets.

The lack of a universal auxiliary language is costly in lost time, lack of understanding and expenditure for translation.

IN THE BEGINNING WAS THE WORD

$$2+2=4$$

The symbol system which comes closest to universal acceptance is a fairly recent one. It is our system of mathematical notations, which is based on a limited number of arbitrary graphic symbols. The so-called Hindu-Arabic numerals appeared in Europe only about a thousand years ago. They have been in general use in the Western world for about 500 years. The "plus" symbol is even more recent. And the "equal" symbol was generally accepted only after 1630. Before then, there were many competing meanings for the same symbol. There also was Descartes' competing symbol for "equal."

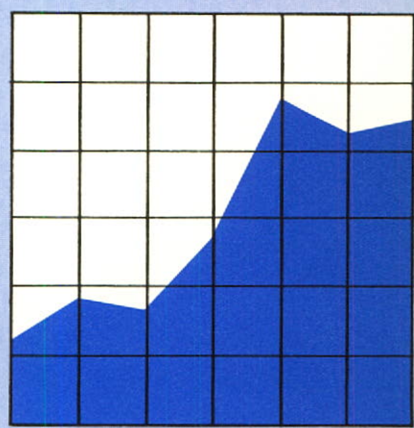
Words and numbers alone are often found ineffective for communication by scientists and professional groups. The geographer, the chemist and others have found it necessary to look for more precise and more direct communication through other graphic symbols. Without such symbols or symbol systems there would be confusion, if not chaos.

The topographic map symbols of the U. S. Geological Survey, for instance, are image-related. The road, the railroad, the river, the bridges, the mine, the church and the swamp are expressed by graphic symbols which have been abstracted from the image of the geographical feature presented.

Many sciences and professions use graphic presentations of statistical data. In a time-series chart, the symbol system is based on mostly arbitrary but widely accepted practice. The "preferred practice" is laid down in a publication of the American Society of Mechanical Engineers.

Map symbols and chart symbols are widely "read" by the public. The average reader encounters maps, line charts and bar charts in his newspapers and magazines, and in his business and private life.

Maps and charts condense into visual, simple and clear form entire series of geographical or statistical data.

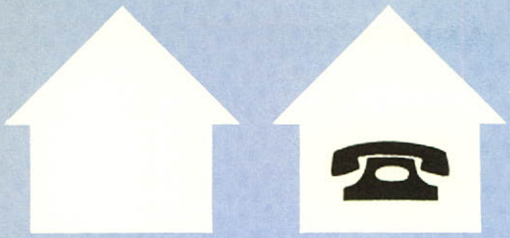


$$\cos\theta = \frac{\left(\frac{u_0 V_0}{k^2} + u\right.}{\sqrt{\left(\frac{u_0^2}{k^2}\right.}}$$

Not many symbol systems are as widely "read" as geographical and statistical presentations. Many professionals and scientists are developing and expanding language systems which are largely unique to their specific fields. If a scientist wants to communicate with his fellow scientists, he is expected to do so in the verbal and nonverbal graphic languages of his discipline.

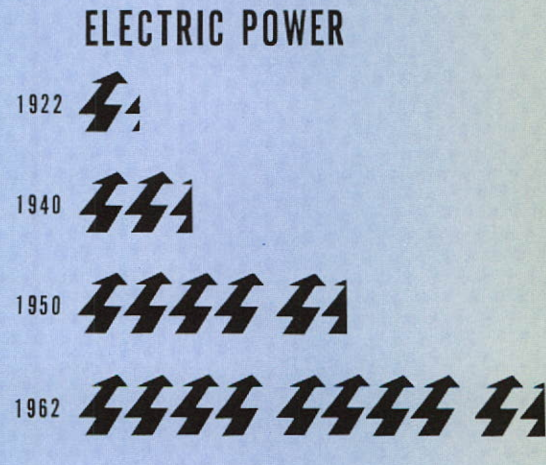
Scientists in each field are members of a small and compact community, isolated to a considerable extent from scientists in other fields and to an often deplorable extent from the general public.

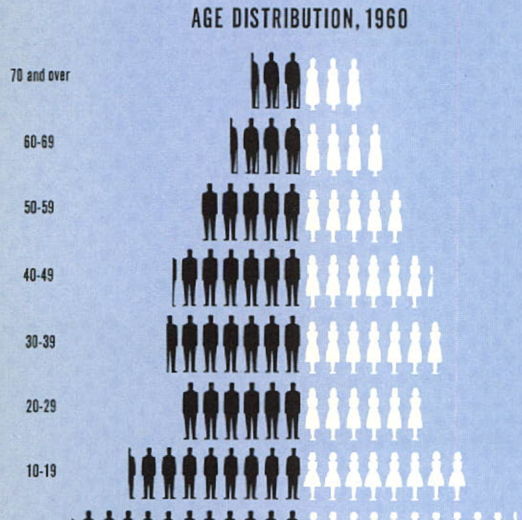
Their language is often incomprehensible to the public.



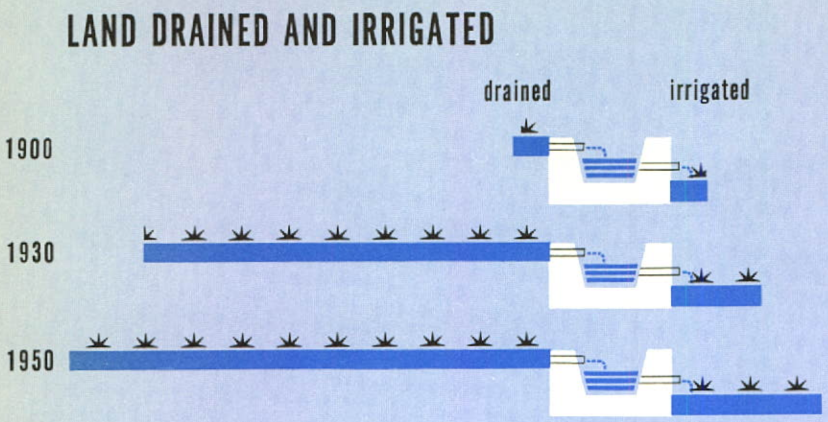
In the 1920's Otto Neurath of Vienna started a renaissance of the ancient image-symbols. His pictograph or isotype method soon spread to the United States.
The pictograph method is an analogical method of communication. The pictograph symbol is a stylized image of the subject matter. Stylization makes a symbol serve primarily as a statistical counting unit, not as an artistic creation deserving individual attention.
Pictograph symbols can often be combined. Thus a house symbol can be combined with a telephone symbol to make a "house with phone."

A symbol system of pictography was developed. It, too, is based on analogy. Quantitative changes are shown in a way analogous to the actual change, by an increase or decrease in the number of symbols.
The symbol for electric power chosen for the chart from *U.S.A. and Its Economic Future* is image-related, based on the lightning bolt. This symbol has been widely accepted as meaning electricity.
The potential "reader" of a pictograph message requires little training. He will be attracted by the symbol—and although the symbol may be newly created, he can hardly fail to recognize it and accept it.

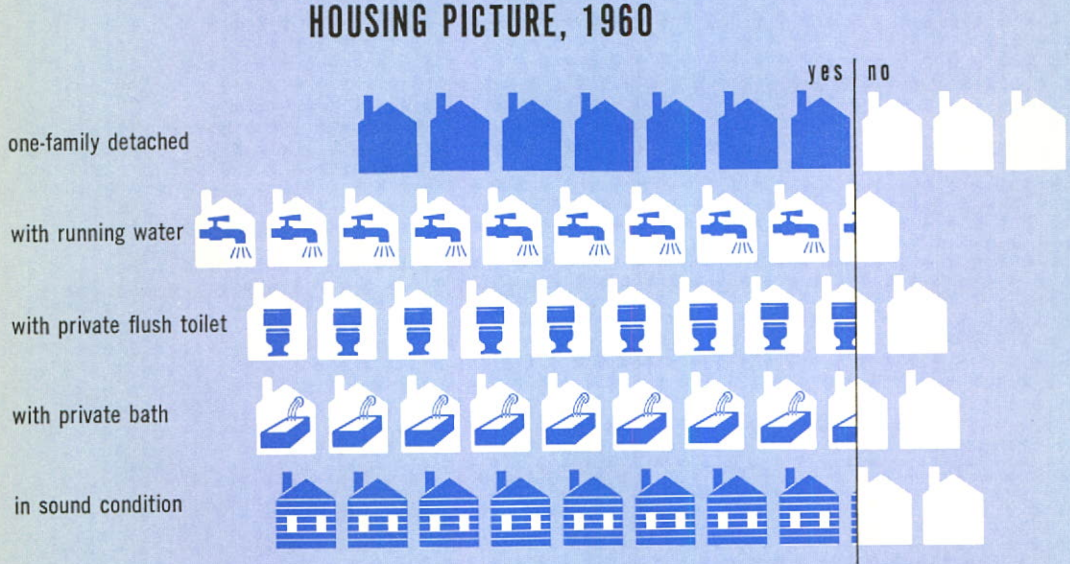



In the pictograph on electric power, the symbols in each line started from an imaginary vertical axis at the left.
By changing the location of the axis and arranging symbols to the left and the right of this axis, visual emphasis can be placed on those factors which are called especially to the attention of the reader.
Thus in the age distribution chart the emphasis is placed on the surplus of women (in the highest age groups) and on the shortage of 20-29 year olds, contrary to the normal "population pyramid" pattern.

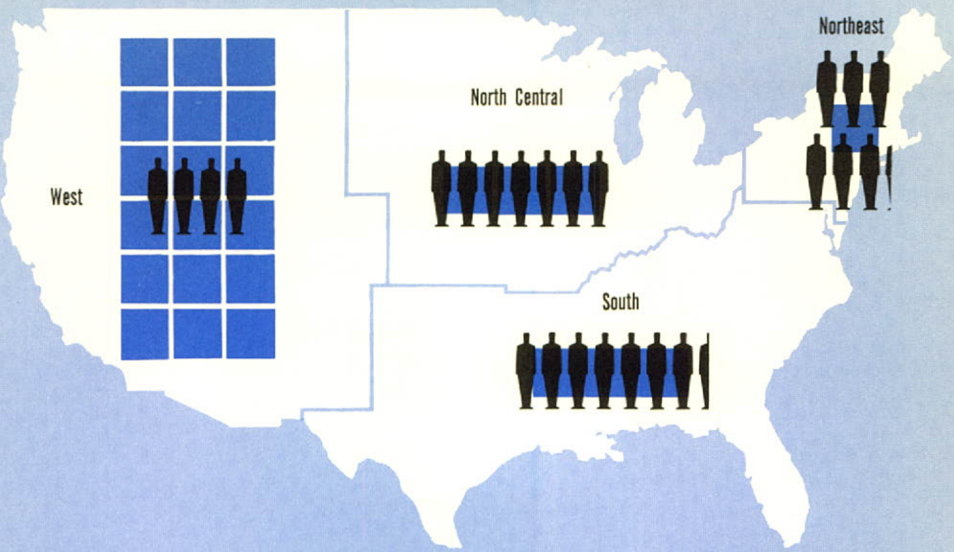



The pictograph on drainage and irrigation leans heavily on the analogous method. It uses a ditch filled with water as the "axis." The ditch is used to present an image of both drainage (to the left of the axis) and irrigation (to the right of the axis). At the same time, the pictograph carries its statistical message.



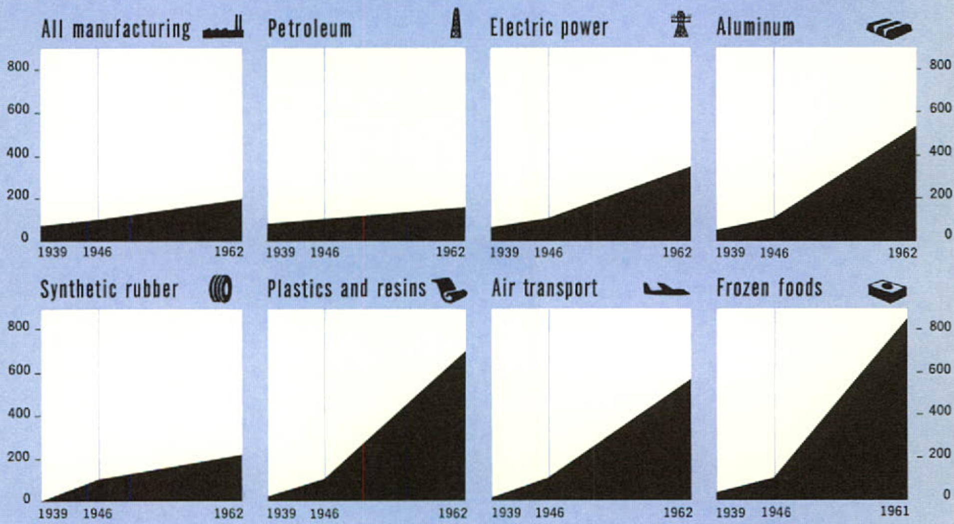

In the pictograph called "Housing Picture, 1960" the axial arrangement serves to emphasize the "yes" and "no" situation in respect to the equipment and condition of American homes.
The pictograph is on a percentage basis to simplify verbal description of the situation ("of every 10 dwelling units, 8½ have a private bath").

## RECREATION AREAS AND POPULATION, 1960




Maps, which are in a sense image-related symbols, can be combined effectively with pictograph symbols to show economic facts. The map on "Recreation Areas and Population, 1960" shows the abundance and the shortage of recreational areas for people in four different regions of the country.

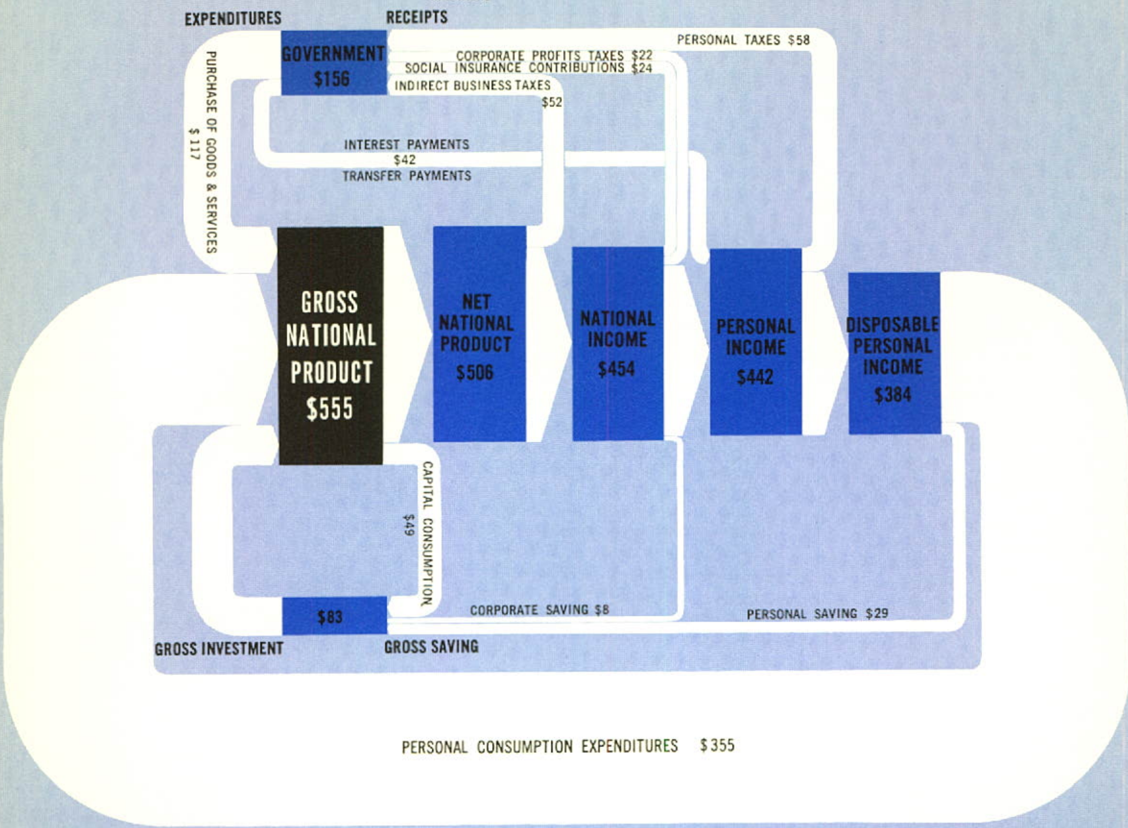
## EXPANDING PRODUCTION




In the eight charts on "Expanding Production," emphasis is placed on a comparison of statistical trends. Here we can fall back on the simplest time-series charts. To identify the subject matter pictorially, each chart carries a small pictograph symbol, making these borderline cases between pictographs and conventional time-series charts.

## FLOW OF INCOME AND EXPENDITURES, 1962

in billions




Finally, the dynamics of a process such as money flow can be shown in a diagram. This is an analogy to the idea of "flow," with quantities indicated by varying widths.

Nonverbal graphic communication offers a great potential for communicating more precisely and for reaching wider audiences.
Yet, further chaotic growth of graphic symbols in specialized fields presents dangers which we would do well to recognize and to stop. Identical symbols are used to mean different things by different groups, and different symbols to mean the same thing. The time has come to direct more scientific attention to the theory and practice of graphic symbols.

# *Other Projects*

## POPULAR PAPERBACKS ON THE UNITED STATES AND EUROPE

POPULAR PAPERBACK summaries of the Fund's *America's Needs and Resources* (1947 and 1955) and *Europe's Needs and Resources* (1961), by J. Frederic Dewhurst and associates, are being readied for 1964 publication. New statistics are being compiled to bring all information up to date.

The factual findings in each will be accompanied by extensive graphic representations. These are being designed by Rudolf Modley and the drawings made by Stephen Kraft. The texts are being written by Arnold B. Barach.

In *U.S.A. and Its Economic Future,* a condensed, graphic picture of the American economic system in action will be presented. This summary volume will portray the nation's steadily increasing gross national output, gains in productivity, or rate of output per man per hour, along with such basic facts as population growth, size of work force, average personal and family income, industrial capacity, natural resources and agricultural production. It will measure what we spend for government, public health, education and social welfare, and what households spend for food, clothing, housing, personal care, recreation, etc. An annotated statistical appendix, giving precise figures over a number of years, is being prepared.

*The New Europe and Its Economic Future* will provide a comparable range of information for eighteen countries of Western Europe. These two books are similar in organization of subject matter. They are a natural pairing, because the spectacular economic growth of most of the countries of Western Europe since the end of World War II has led to an increasing realization of the need to work out meaningful economic relationships between Western Europe and the United States, the two major units in the North Atlantic region. Both paperback summaries will be brought out by the Macmillan Company.

## STATISTICAL ABSTRACT OF THE ATLANTIC NATIONS

UTILIZING AND EXTENDING the factual material to be included in the works on the United States and Europe will be another Fund work, a statistical abstract of the Atlantic nations. It will include information on Canada and will be designed to give a quick economic profile of the entire North Atlantic region. Over one hundred economic indexes will be included, ranging from private consumption expenditures to government expenditures, from land utilization to energy resources, from number of passenger cars in use to consumption of fibers. Education, transportation, communications media, population, production — are among the areas of economic life which will be statistically presented for Canada, the United States and eighteen countries of Western Europe. In addition there will be special breakdowns for the European Economic Community and the European Free Trade Association. The work will be carried out by Bernard Mueller, a European statistician and a member of the research staff for the Fund's *Europe's Needs and Resources*. This work is expected to appear in 1965.

## MEGALOPOLIS

ANOTHER FUND STUDY being put into a popular paperback format, with emphasis on graphic presentation of many of the findings, is *Megalopolis* by Jean Gottmann, which the Fund published in 1961. The new version is being written and designed by Wolf Von Eckardt, with illustrations by Stephen Kraft. Titled *The Challenge of Megalopolis*, the work describes the huge band of cities and suburbs that stretches along the Atlantic coast from north of Boston to south of Washington. This is the largest, wealthiest and most productive urbanized region on earth. The graphics volume will present central facts about the structure and quality of life in Megalopolis, analyze the economic, cultural and other activities that go on there and point out the significance of the region for the whole of mankind. The book is hopeful in its outlook, although the challenge of this region to human ingenuity and energy is never underestimated. The Fund has supervised all the details of producing the volume; the Macmillan Company will act as publisher.

## EARLY SCIENTIFIC LANGUAGE

As a means of furthering research by Giorgio de Santillana, Professor of the History and Philosophy of Science at the Massachusetts Institute of Technology, the Twentieth Century Fund is making a grant for research assistance. Mr. de Santillana is studying scientific concepts in preliterate cultures.

Much of Mr. de Santillana's research centers on the existence of "a highly sophisticated (if unfamiliar) level of ideas in the archaic or proto-historic period, hitherto unsuspected because it had never been expressed in the conventional idioms later provided by written records and by mathematical notation," but rather entrusted to myth and memory. These ideas appear to have originated in the Near East around 6000–4000 B.C. Describing the significance of his work, Mr. de Santillana says, "In our work, we have now the impression of a lost continent of millennia emerging from the sea of oblivion (or our ignorance), with its structure still visible. In the words of Jean-Sylvain Bailly, the

French historian of astronomy, we are trying to meet 'those ancestors who have given us all that we are except a knowledge of their name and their being.' "

## PROSPECTIVE:
## A FRENCH-AMERICAN DIALOGUE

IN THE SPRING OF 1963 a two-day conference was held at Princeton, New Jersey, with the participants drawn principally from members of the French intellectual group of scholars, government officials and businessmen known as Prospective (Centre d'Etudes Prospectives) and members of the Board of the Twentieth Century Fund. To these were added a few guests especially competent in some phase of the discussions.

Prospective, founded by the late Gaston Berger, concerns itself with planning and action carried out with awareness of the future. The Twentieth Century Fund, too, has traditionally looked ahead. The discussions, besides being part of the constant exchange by which Frenchmen and Americans are reminded of their common heritage and common hopes, aimed to see a few particular subjects brought under the discipline provided by an orientation toward the future. Major topics dealt with were: economic planning, the new forms of business enterprise, continuing education, and the urban scene. Edward Higbee, author of the Fund study *Farms and Farmers in an Urban Age*, wrote a brief summary of the conference deliberations for the Newsletter of the Fund. Mr. Higbee had addressed the group on the subject of urbanization.

* * *

A study on distribution by Reavis Cox was completed in 1963. Plans for its publication in whole or in part will be made by the author.

# *Educational Activities*

A MAJOR AIM of the Twentieth Century Fund is to call its studies to the attention of those who can make direct use of them, and also to disseminate the main findings to a broader public than usually has access to the full studies themselves. In order to reach most effectively the widest audience which may be interested in the findings of Fund research, special presentations based on the original work may be prepared from time to time for students, civic organizations or perhaps the readers of the scholarly publications, the particular presentation depending on the needs of the various groups. The Fund carries on an active program of dissemination through the press, radio and television, movies, the Fund's own Newsletter and other channels of communication.

## MOTION PICTURES AND TELEVISION

OVER the years the Fund has found that films are useful in presenting some central findings or in outlining the nature and dimensions of a problem being studied. Usually a film is not designed primarily to convey detailed information (in most cases the printed page offers a better medium for this purpose), but it can have value in catching attention, arousing interest in a given subject and implanting in the viewer a desire to know more about it. Thus films have helped the Fund to reach a wider audience with findings of its scholarly research.

A new dimension for the filmed presentation has opened with the steady growth in the number of educational television stations, which now have reached a total of more than ninety in the nation as a whole. After experimenting over the years with a variety of formats and innovations designed to be most effective on educational television, the

Fund has concluded that for its purposes and within its budget the most effective way is probably the simplest — direct interviews.

Working with National Educational Television, and writer-producer Ralph Tangney, the Fund has in the past couple of years produced several new television programs along these lines which have won wide interest. In one of the half-hour programs Thomas C. Schelling, co-author with Morton H. Halperin of the Fund study *Strategy and Arms Control*, was interviewed by Hedley Bull of the London School of Economics. In another Albert O. Hirschman, author of the Fund's *Journeys Toward Progress*, was interviewed by August Heckscher, Director of the Twentieth Century Fund.

*Strategy and Arms Control* explores the extent to which arms control can be effective in the area of modern weapons. *Journeys Toward Progress* analyzes, from case-history examples, some of the diverse ways in which change comes about in Latin America and relates these experiences to a general theory of economic development. Videotapes of these two Fund programs are available to educational television stations from National Educational Television, 10 Columbus Circle, New York, N. Y.

Another television program is based on the Fund study *Of Time, Work, and Leisure*, by Sebastian de Grazia. This program explores what Mr. de Grazia considers the myth that in industrial society the machine has freed man, dramatically shortened his working time and vastly increased his "free" time. Mr. de Grazia goes on to a philosophical evaluation of work, of time, of leisure to provide new perspectives on the meaning of contemporary life. This program, directed by Ralph Tangney, is available for educational television stations and has also been put on film for direct projection. It is available from the National Educational Television Film Service in Bloomington, Indiana.

Among the most popular of the Fund's motion pictures is "Megalopolis: Cradle of the Future," a two-reel color film released in 1962.

This picture is based on the Jean Gottmann study of the urbanized area stretching from north of Boston to south of Washington, a region which is the most active crossroads on earth for people, ideas and goods. The picture was jointly produced by the Fund and Encyclopaedia Britannica Films, which acts as distributor for this and six earlier Fund films. Among the earlier titles, "Productivity: Key to Plenty," "Inflation" and "Round Trip" (1952) continue to attract audiences.

"Tropical Africa," a film issued in conjunction with the Fund's study of that name, and produced by Julien Bryan, has had wide sales and is in the collection of some 300 major film libraries throughout the country. This is a half-hour color film.

## NEWSLETTER

An illustrated newsletter with articles about Fund studies and activities is issued three times a year. The Newsletter provides forecasts of Fund plans and gives main findings from recently published Fund studies along with excerpts from them. It regularly goes to about twenty thousand individuals, groups, schools and colleges and to leaders in industry, education and government. It is sent on request, without charge.

## OTHER ACTIVITIES

Illuminating in a dramatic and pictorial format some of the chief findings of the Fund's study of *Tropical Africa* by George H. T. Kimble is an exhibition based on the work. Two units of this exhibition have been circulated under the auspices of the Smithsonian Institution in Washington. Bookings have been made mostly by colleges and universities, museums, libraries and municipal centers.

Arrangements have been completed to make available on microfilm or by one of the new reproduction processes Fund books that are out of print. The Fund also occasionally issues pamphlets by Fund authors highlighting some facet of their research. Recent pamphlets include *Economics, Esthetics, and Ethics in Modern Urbanization* by Jean Gottmann, author of *Megalopolis*, and *Toward the Paraproprietal Society* by Paul P. Harbrecht, S.J., author of *Pension Funds and Economic Power*. Another pamphlet, *One Man — One Vote*, is a statement of principles on legislative apportionment based on a conference of research scholars and political scientists held at the Twentieth Century Fund.

# *Publishing Activities*

Twentieth century fund studies are initially made available to the public in book form under the Fund's own imprint. In 1963 book sales were 34,039, with four new titles. Cumulative sales of all Fund works exceeded 725,000 copies at the end of the year. Fund books are priced in relation to their manufacturing and distribution costs alone; expenses of research are covered by income from the Fund's endowment. Books are sold in the United States and Canada through regular book channels and through direct mail by the Fund itself. Foreign sales are handled by W. S. Hall & Co. for Europe and the British Isles, and by Feffer and Simons, Inc., for other parts of the world outside the United States and Canada. Publications of the Fund were included in book exhibits in Frankfurt and Leipzig in 1963.

Fund works have been translated into a number of languages and in 1963 *Approaches to Economic Development* and *Latin American Issues* were brought out in Spanish, *Shaping the World Economy* and *Arms Reduction* in Japanese. An Italian edition of *Arms Reduction* was also published.

Paperback editions of Fund works are published from time to time, either under the Fund's imprint or by other publishers. Doubleday and Company will publish early in 1964 in its Anchor series a paperback edition of *Of Time, Work, and Leisure* by Sebastian de Grazia and The M.I.T. Press is scheduling a paperback version of *Megalopolis* by Jean Gottmann, for March.

The Fund maintains a Standing Order Plan through which interested persons and organizations have the privilege of examining each new publication as it is issued and are allowed a substantial discount on copies purchased. Details of the plan, as well as a general catalogue of all Fund publications, are available on request.

Fund books in print in 1963 and their cumulative sales are listed in the table following.

## *Sales of Current Publications*

| TITLE | YEAR PUBLISHED | 1963 SALES | TOTAL SALES TO END OF 1963 |
|---|---|---|---|
| The Power Industry and the Public Interest | 1944 | 11 | 2,697 |
| Financing American Prosperity | 1945 | 7 | 7,090 |
| Tomorrow's Trade | 1945 | 11 | 21,083 |
| Trends in Collective Bargaining | 1945 | 19 | 14,517 |
| For This We Fought | 1946 | 1 | 19,655 |
| Electric Power and Government Policy | 1948 | 6 | 1,719 |
| Report on the Greeks | 1948 | 15 | 4,923 |
| Partners in Production | 1949 | 21 | 10,060 |
| Defense without Inflation | 1951 | 35 | 7,367 |
| Financing Defense | 1951 | 13 | 4,429 |
| The Federal Debt | 1953 | 29 | 2,630 |
| Defense and the Dollar | 1953 | 19 | 3,831 |
| Economic Controls and Defense | 1953 | 37 | 4,011 |
| Foreign Exchange in the Postwar World | 1954 | 65* | 4,234 |
| Approaches to Economic Development | 1955 | 351 | 11,053 |
| America's Needs and Resources: A New Survey | 1955 | 192 | 10,534 |
| American Imports | 1955 | 55 | 2,931 |
| Can We Solve the Farm Problem? | 1955 | 98 | 3,665 |
| World Commerce and Governments | 1955 | 278 | 4,026 |
| Economic Needs of Older People | 1956 | 83 | 5,278 |
| The Agricultural Commodity Programs | 1956 | 36 | 1,880 |
| U.S.A. in New Dimensions | 1957 | 10[a] | 71,289 |
| Greece: American Aid in Action | 1957 | 52 | 2,938 |
| Antitrust Policies | 1958 | 131 | 3,699 |
| Arms and the State | 1958 | 396 | 6,748 |

* Out of print.

[a] 3,405 copies were sold by Macmillan and royalties have been received.

*Sales of Current Publications* (continued)

| TITLE | YEAR PUBLISHED | 1963 SALES | TOTAL SALES TO END OF 1963 |
|---|---|---|---|
| Honduras | 1959 | 230 | 1,522 |
| The Economy, Liberty and the State | 1959 | 303 | 6,466 |
| Pension Funds and Economic Power | 1959 | 127 | 4,981 |
| Europe's Coal and Steel Community | 1960 | 99 | 1,955 |
| Tropical Africa | 1960 | 604 | 9,307 |
| Strategy and Arms Control (cloth edition) | 1961 | 68 | 2,908 |
| Strategy and Arms Control (paperback) | 1961 | 1,380 | 6,893 |
| Arms Reduction | 1961 | 129 | 4,237 |
| Latin American Issues | 1961 | 3,423 | 10,772 |
| Europe's Needs and Resources | 1961 | 522 | 5,569 |
| Megalopolis | 1961 | 907 | 6,256 |
| Yugoslavia and the New Communism | 1962 | 606 | 2,732 |
| Of Time, Work, and Leisure | 1962 | 2,233 | 7,924 |
| Economic Development in Burma, 1951–1960 | 1962 | 492 | 1,789 |
| Shaping the World Economy (cloth edition) | 1962 | 5* | 1,123 |
| Shaping the World Economy (paperback) | 1962 | 3,754 | 7,204 |
| Civilian Nuclear Power | 1963 | 1,998 | 1,998 |
| Journeys Toward Progress | 1963 | 4,719 | 4,719 |
| Farms and Farmers in an Urban Age (cloth edition) | 1963 | 2,359 | 2,359 |
| Farms and Farmers in an Urban Age (paperback) | 1963 | 5,903 | 5,903 |
| North Atlantic Policy — The Agricultural Gap (cloth edition) | 1963 | 1,103 | 1,103 |
| North Atlantic Policy — The Agricultural Gap (paperback) | 1963 | 1,105 | 1,105 |

* Out of print.

# *Administration*

HEADQUARTERS STAFF

FINANCIAL STATEMENTS

DETAILED STATEMENT OF ASSETS

# *Headquarters Staff* FEBRUARY · 1964

**AUGUST HECKSCHER**, Director

**THOMAS R. CARSKADON**, Associate Director

**BEN T. MOORE**, Associate Director

**ISADOR LUBIN**, Economic Consultant

**ELIZABETH BLACKERT**, Editorial Planning and Assistant to the Director

**LOUISE FIELD**, Research Associate

**JOHN E. BOOTH**, Education Associate

**CAROL KIER**, Book Manufacturing and Sales

**BETTY R. HIRSCH**, Bursar

**HELEN M. DOYLE**, Office Manager

**FRANCES KLAFTER**, Research Assistant

**RUTH ROCKER**, Copy Editor

**AUDREY BRENTLINGER**, Secretary to the Director

**ALICE MENTEL**, Secretary to the Associate Director and Assistant in Dissemination

**BETTE M. TARAN**, Secretary to the Associate Director

## *Secretarial and Clerical*

**IDA CARLOMAGNE, HUGO FOSCO, NETTIE M. GERDUK, SYLVIA GLONSTEIN, RITA LONG, LOUISE McKEEVER, MYRNA MOCK, EILEEN REGELMANN, SADIE ROSENFELD, BERTHA SANDLER, JOAN TISCHFELD**

*Finances*

## FINANCIAL STATEMENTS

### STATEMENT OF ASSETS

DECEMBER 31, 1963
WITH COMPARATIVE FIGURES
AT DECEMBER 31, 1962

| | 1963 | 1962 |
|---|---|---|
| CASH | $ 319,259 | $ 576,066 |
| INVESTMENTS, AT QUOTED MARKET PRICES: | | |
| United States Government bonds | $ 3,856,749 | $ 4,175,517 |
| Promissory note and bankers' acceptances | 1,271,844 | 963,925 |
| Industrial bonds | 50,000 | 51,000 |
| Public utility bonds | 584,000 | 589,025 |
| Railroad bonds | 50,104 | 50,265 |
| Preferred stocks | 1,556,536 | 1,883,070 |
| Common stocks | 16,535,992 | 13,727,019 |
| Total investments | $23,905,225 | $21,439,821 |
| HEADQUARTERS PROPERTY, AT COST | 495,000 | 495,000 |
| Total assets | $24,719,484 | $22,510,887 |

### STATEMENT OF CHANGES IN PRINCIPAL

YEAR ENDED DECEMBER 31, 1963
WITH COMPARATIVE FIGURES FOR 1962

| | 1963 | 1962 |
|---|---|---|
| OPERATING RECEIPTS AND DISBURSEMENTS: | | |
| Operating receipts: | | |
| Interest and dividends on investments | $ 856,446 | $ 815,277 |
| Sales of publications | 107,873 | 136,174 |
| Other | 3,463 | 1,413 |
| Total operating receipts | $ 967,782 | $ 952,864 |
| Operating disbursements | 1,156,048 | 945,781 |
| Excess of operating receipts (disbursements) | $ (188,266) | $ 7,083 |
| CHANGES IN INVESTMENT HOLDINGS: | | |
| Increase (decrease) in quoted market prices of investments held throughout the year | $ 2,254,359 | $(1,752,869) |
| Increase in quoted market prices over purchase cost of investments purchased during the year | 81,449 | 25,789 |
| Gain (loss) on sales of investments based on quoted market prices at beginning of year or purchase price during year | 61,055 | (385,282) |
| Increase (decrease) in principal resulting from changes in investment holdings | $ 2,396,863 | $(2,112,362) |
| Net increase (decrease) in principal | $ 2,208,597 | $(2,105,279) |
| BALANCE OF PRINCIPAL: | | |
| Beginning of year | 22,510,887 | 24,616,166 |
| End of year | $24,719,484 | $22,510,887 |

# *Accountants' Report*

The Board of Trustees

Twentieth Century Fund, Inc.:

We have examined the statement of assets of Twentieth Century Fund, Inc. as of December 31, 1963 and the related statement of changes in principal for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

The accounts of Twentieth Century Fund, Inc. are maintained on a cash basis and securities are reported at quoted market prices.

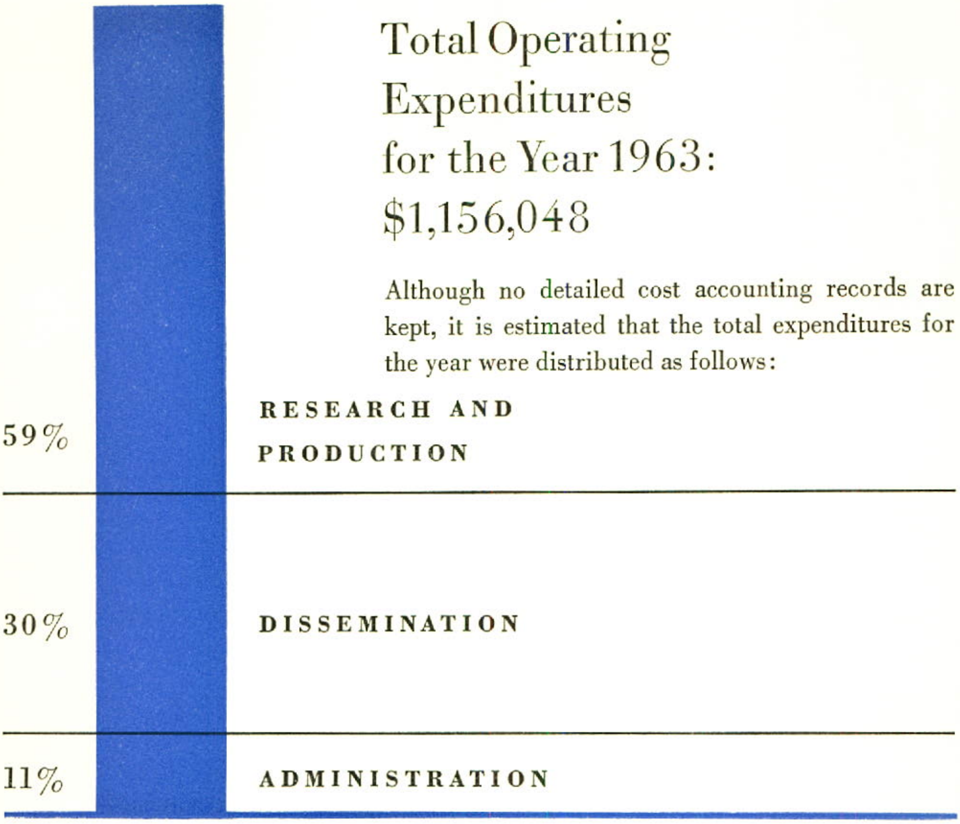
In our opinion, the accompanying financial statements present fairly the assets of Twentieth Century Fund, Inc. at December 31, 1963 and the changes in principal during the year then ended, on the basis indicated in the preceding paragraph and on a basis consistent with that of the preceding year.

PEAT, MARWICK, MITCHELL & CO.

New York, N. Y., January 23, 1964

# Total Operating Expenditures for the Year 1963: $1,156,048

Although no detailed cost accounting records are kept, it is estimated that the total expenditures for the year were distributed as follows:




**PRODUCTION OF RESEARCH FINDINGS:** 59%

Production of research findings: research, writing, revision and editing of studies and reports; publication in book and pamphlet form.

**DISSEMINATION OF RESEARCH FINDINGS TO THE PUBLIC:** 30%

Dissemination of research findings to the public through: distribution and promotion of publications; releases and articles for newspapers and magazines; radio and television programs; educational films and filmstrips; the Newsletter and Clipsheet; personal contact with key organizations and individuals.

**ADMINISTRATION:** 11%

General administration.

# *Cash Transactions, 1963*

## SUMMARY

| | |
|---|---|
| Cash Balance January 1, 1963 | $ 576,066 |
| Total Receipts | 5,119,187 |
| Total Receipts and Cash Balance | $5,695,253 |
| Total Disbursements | 5,375,994 |
| Cash Balance December 31, 1963 | $ 319,259 |

## RECEIPTS

| | |
|---|---|
| Interest and Dividends from Investments | $ 856,446 |
| Sales of Publications | 107,873 |
| Sales and Rentals of Films | 1,875 |
| Royalties on Subsidiary Publications | 1,588 |
| Proceeds from Sale of Investments | 4,151,405 |
| Total Receipts | $5,119,187 |

## DISBURSEMENTS

| | | |
|---|---|---|
| HEADQUARTERS ACTIVITIES | | $ 366,444 |
| RESEARCH PROJECTS | | 439,691 |
| Explorations | $ 12,308 | |
| Terminal Account | 840 | |
| South Asia | 3,988 | |
| Latin America | 5,931 | |
| Agricultural Revolution | 11,105 | |
| Southern Economic Development and Manpower | 100,604 | |
| Law and Discrimination | 2,615 | |
| Poverty amid Affluence | 26,666 | |
| Power, Ownership and Property | 28,427 | |
| United States Geography | 41,276 | |
| French Civil-Military Relations | 10,535 | |
| Italian Political Participation | 72,089 | |
| Communist Party in Mexico | 9,580 | |
| Needs and Resources, updating | 40,585 | |
| Growth of Western Industrial Economies | 9,239 | |
| Performing Arts | 40,060 | |
| Canada's Needs & Resources | 16,880 | |
| Legislative Apportionment | 6,963 | |
| SPECIAL PROJECTS | | 150,020 |
| Jacques Maritain Grant | $ 1,275 | |
| Loewenstein Grant: A History of Government | 3,750 | |
| Station WGBH-Educational TV | 125,000 | |
| Geneva Conference on Science and Technology | 9,995 | |
| Giorgio de Santillana Grant | 10,000 | |

## *Cash Transactions, 1963* (continued)

| | | | |
|---|---|---|---|
| PUBLISHING SUBSIDIES | | | $ 17,119 |
| Europe's Needs and Resources Monograph | | $ 2,110 | |
| Alabama Press: Civil-Military | | 15,009 | |
| PUBLISHING OF SURVEY REPORTS | | | 101,571 |
| EDUCATION AND DISSEMINATION | | | 81,203 |
| Motion Pictures and Television | | $ 26,345 | |
| Subsidiary Publications: | | 16,417 | |
| Translations | $ 4,646 | | |
| Popular Volumes | 11,771 | | |
| Special Dissemination | | 9,234 | |
| Working Papers | | 1,212 | |
| Institutional Literature | | 27,995 | |
| TOTAL OPERATING EXPENSES | | | $1,156,048 |
| PURCHASES OF INVESTMENTS | | | 4,219,946 |
| TOTAL DISBURSEMENTS | | | $5,375,994 |

# *Detailed Statement of Assets*

## DECEMBER 31, 1963 AND DECEMBER 31, 1962

| | AS OF DECEMBER 31, 1963 | | AS OF DECEMBER 31, 1962 | |
|---|---|---|---|---|
| **BONDS** | *par value* | *market value* | *par value* | *market value* |
| United States Government Obligations: | | | | |
| Treasury Notes | | | | |
| 4¾% Series A, May 15, 1964 | $ 100,000 | $ 100,469 | $ 100,000 | $ 102,094 |
| 5% Series B, Aug. 15, 1964 | 1,360,000 | 1,370,625 | 1,360,000 | 1,398,250 |
| 4⅞% Series C, Nov. 15, 1964 | 960,000 | 968,700 | 960,000 | 987,900 |
| 4⅝% Series A, May 15, 1965 | 882,000 | 889,993 | 882,000 | 907,908 |
| Treasury Bills | | | | |
| 2.91% disc. March 21, 1963 | | | 240,000 | 238,500 |
| Treasury Bonds | | | | |
| 3⅞% May 15, 1968 | 100,000 | 99,281 | 100,000 | 101,500 |
| 4% Oct. 1, 1969 | 55,000 | 54,931 | 55,000 | 55,928 |
| 2¾% Series B, Apr. 1, 1980–1975 | 100,000 | 100,000 | 100,000 | 100,000 |
| 4% Feb. 15, 1980 | 100,000 | 98,250 | 100,000 | 100,937 |
| 3¼% Feb. 15, 1985 | 200,000 | 174,500 | 200,000 | 182,500 |
| Total Government Obligations | | $3,856,749<br>15.8% | | $4,175,517<br>19.0% |
| Corporate: | | | | |
| Industrials | | | | |
| Youngstown Sheet & Tube | | | | |
| 1st 4½% Oct. 1, 1990 | $ 50,000 | $ 50,000<br>0.2% | $ 50,000 | $ 51,000<br>0.2% |
| Railroads | | | | |
| Virginian Railway | | | | |
| 6% deb. Aug. 1, 2008 | $ 43,100 | $ 50,104<br>0.2% | $ 43,100 | $ 50,265<br>0.2% |
| Utilities | | | | |
| American Telephone & Telegraph | | | | |
| 4¾% deb. Nov. 1, 1992 | $ 200,000 | $ 207,500 | $ 200,000 | $ 210,000 |
| El Paso Natural Gas | | | | |
| 5¼% cv. deb. Sept. 1, 1977 | 115,000 | 120,750 | 115,000 | 119,025 |
| Louisville Gas & Electric | | | | |
| 4⅞% first mtge. Sept. 1, 1987 | 50,000 | 52,125 | 50,000 | 52,000 |
| Public Service Electric & Gas | | | | |
| 4¾% first ref. mtge. Sept. 1, 1990 | 50,000 | 51,500 | 50,000 | 52,750 |
| Rochester Telephone | | | | |
| 4¾% first mtge. Series E Sept. 1, 1993 | 50,000 | 51,000 | 50,000 | 52,000 |
| Southern California Edison | | | | |
| 4⅜% first and ref. mtge. Sept. 1, 1985 | 50,000 | 49,625 | 50,000 | 50,750 |
| Union Electric | | | | |
| 4¾% first mtge. Sept. 1, 1990 | 50,000 | 51,500 | 50,000 | 52,500 |
| Total Utilities | | $ 584,000<br>2.4% | | $ 589,025<br>2.7% |

## *Detailed Statement of Assets* (continued)

| | AS OF DECEMBER 31, 1963 | | AS OF DECEMBER 31, 1962 | |
|---|---|---|---|---|
| | *par value* | *market value* | *par value* | *market value* |
| Time Certificate and Promissory Note: | | | | |
| Morgan Guaranty Trust — Time Certificate 3¼% March 18, 1963 | | | $ 500,000 | $ 500,000 2.3% |
| Morgan Guaranty Trust — Promissory Note 3⅞% April 13, 1964 | $ 500,000 | $ 490,205 2.0% | | |
| Bankers' Acceptances: | | | | |
| Bankers' Acceptances 3% Jan. 24, 1963 | | | $ 114,131 | $ 113,868 |
| Bankers' Acceptances 3¼% Jan. 1, 1963 | | | 85,651 | 84,263 |
| Bankers' Acceptances 3% Feb. 28, 1963 | | | 240,154 | 238,569 |
| Bankers' Acceptances 3% March 5, 1963 | | | 27,417 | 27,225 |
| Bankers' Acceptances 3⅞% Feb. 17, 1964 | $ 16,740 | $ 16,479 | | |
| Bankers' Acceptances 3⅞% Feb. 19, 1964 | 13,920 | 13,659 | | |
| Bankers' Acceptances 3⅞% Feb. 24, 1964 | 19,869 | 19,487 | | |
| Bankers' Acceptances 3⅞% March 16, 1964 | 207,372 | 203,511 | | |
| Bankers' Acceptances 3⅞% March 17, 1964 | 45,210 | 44,363 | | |
| Bankers' Acceptances 3⅞% May 5, 1964 | 39,020 | 38,482 | | |
| Bankers' Acceptances 3⅞% May 7, 1964 | 26,973 | 26,599 | | |
| Bankers' Acceptances 3⅞% May 11, 1964 | 5,747 | 5,665 | | |
| Bankers' Acceptances 3⅞% May 18, 1964 | 24,609 | 24,238 | | |
| Bankers' Acceptances 3⅞% May 20, 1964 | 54,205 | 53,377 | | |
| Bankers' Acceptances 3⅞% May 25, 1964 | 11,095 | 10,920 | | |
| Bankers' Acceptances 3⅞% May 28, 1964 | 16,713 | 16,443 | | |
| Bankers' Acceptances 3⅞% June 1, 1964 | 24,770 | 24,359 | | |
| Bankers' Acceptances 3⅞% June 3, 1964 | 250,402 | 246,197 | | |
| Bankers' Acceptances 3⅞% June 5, 1964 | 36,526 | 35,905 | | |
| Bankers' Acceptances 3⅞% June 8, 1964 | 1,990 | 1,955 | | |
| Total Bankers' Acceptances | | $ 781,639 3.2% | | $ 463,925 2.1% |

| PREFERRED STOCKS | *shares* | *market value* | *shares* | *market value* |
|---|---|---|---|---|
| Atchison, Topeka & Santa Fe Railway 5% | 5,000 | $ 51,875 | 5,000 | $ 52,500 |
| Celotex 5% | 2,000 | 35,500 | 2,000 | 31,500 |
| Central Maine Power 3.50% | 1,000 | 76,000 | 1,000 | 72,750 |
| Consolidated Edison of N. Y. 4.12% | 250 | 27,250 | 250 | 27,500 |
| El Paso Natural Gas 5.65% | 600 | 61,800 | 700 | 69,125 |
| Empire District Electric 5% | 500 | 51,500 | 500 | 51,000 |
| Gulf States Utilities $4.44 | 650 | 64,025 | 650 | 63,375 |
| Helme (George W.) 7% n-c | 1,000 | 38,000 | 1,000 | 37,250 |
| Interchemical 4½% | 1,000 | 99,375 | 1,000 | 97,250 |

**PREFERRED STOCKS** (continued)

| | AS OF DECEMBER 31, 1963 | | AS OF DECEMBER 31, 1962 | |
|---|---|---|---|---|
| | *shares* | *market value* | *shares* | *market value* |
| Jersey Central Power & Light 4% | 860 | $ 73,530 | 860 | $ 72,670 |
| Monongahela Power 4.40% | 1,000 | 94,500 | 1,000 | 93,000 |
| Pacific Gas & Electric 5% 1st | 1,500 | 40,125 | 1,500 | 40,875 |
| Reynolds Metals 4¾% "A" | 1,900 | 97,375 | 2,000 | 100,000 |
| South Carolina Electric & Gas 5% | 1,400 | 71,050 | 1,400 | 72,800 |
| Tennessee Gas Transmission 5.25% | 900 | 92,700 | 900 | 89,550 |
| Tennessee Gas Transmission 4.90% | 1,200 | 118,800 | 1,200 | 117,000 |
| Toledo Edison 4.25% | 925 | 83,944 | 925 | 84,175 |
| Tri-Continental $2.70 | | | 6,000 | 340,500 |
| United States Rubber 8% n-c | 1,000 | 164,750 | 1,000 | 162,500 |
| United States Steel 7% | 1,000 | 152,000 | 1,000 | 150,000 |
| United States Tobacco 7% n-c | 1,500 | 62,437 | 1,500 | 57,750 |
| Total Preferred Stocks | | $ 1,556,536<br>6.4% | | $ 1,883,070<br>8.6% |

**COMMON STOCKS**

| | | | | |
|---|---|---|---|---|
| American Can | 3,000 | $ 130,875 | 3,000 | $ 137,250 |
| American Telephone & Telegraph | 5,250 | 731,062 | 5,250 | 612,937 |
| American Tobacco | | | 6,000 | 176,250 |
| Armco Steel | 900 | 59,287 | 900 | 46,687 |
| Atchison, Topeka & Santa Fe Railway | 10,000 | 287,500 | 7,500 | 189,375 |
| Bank of New York | 833 | 115,370 | 300 | 107,400 |
| Boston Edison | 11,000 | 462,000 | 11,000 | 398,750 |
| Brooklyn Union Gas | 4,400 | 179,850 | 4,400 | 159,500 |
| Canadian Pacific Railway | | | 3,000 | 69,750 |
| Central Illinois Light | 4,400 | 206,800 | 4,400 | 206,800 |
| Chase Manhattan Bank | 1,040 | 96,720 | 1,040 | 83,070 |
| Chemical Bank New York Trust | 750 | 62,062 | 750 | 62,812 |
| Christiana Securities | 1,000 | 219,000 | 800 | 168,000 |
| Cities Service | 4,000 | 249,000 | 1,400 | 79,625 |
| Coca-Cola Bottling (N.Y.) | 3,000 | 66,750 | 3,000 | 60,375 |
| Consolidated Edison of New York | 4,333 | 363,972 | 4,000 | 335,000 |
| Consolidated Natural Gas | 3,000 | 190,500 | 3,000 | 170,625 |
| Consumers Power | 7,760 | 352,110 | 7,760 | 328,830 |
| Continental Insurance | 2,000 | 110,500 | 1,050 | 62,344 |
| Equitable Gas | 3,000 | 126,000 | | |
| Federated Department Stores | 108,600 | 5,905,125 | 116,500 | 5,024,062 |
| First National Bank of Boston | 1,200 | 107,250 | 1,200 | 100,200 |
| Ford Motor | | | 2,000 | 90,250 |
| General Mills | 2,000 | 78,250 | 2,000 | 63,250 |
| General Motors | 8,000 | 629,000 | 4,400 | 271,211 |

## *Detailed Statement of Assets* (continued)

| COMMON STOCKS (continued) | AS OF DECEMBER 31, 1963 shares | market value | AS OF DECEMBER 31, 1962 shares | market value |
|---|---|---|---|---|
| Inland Steel | 3,000 | $ 132,750 | 3,000 | $ 113,250 |
| Iowa-Illinois Gas & Electric | 1,050 | 59,850 | 1,050 | 51,712 |
| International Harvester | 2,500 | 150,000 | | |
| Manufacturers Hanover Trust | 2,000 | 109,500 | 2,000 | 108,250 |
| Mississippi River Fuel | | | 4,000 | 153,500 |
| National Biscuit | 3,000 | 172,125 | 3,000 | 129,750 |
| Niagara Mohawk Power | 7,000 | 371,000 | 6,000 | 276,750 |
| Northern Natural Gas | 3,150 | 158,681 | 3,150 | 136,631 |
| Ohio Edison | 7,262 | 358,561 | 7,262 | 341,314 |
| Pacific Lighting | 5,000 | 298,750 | 3,500 | 212,188 |
| Phillips Petroleum | 2,000 | 97,750 | 900 | 43,762 |
| Public Service Electric & Gas | 3,000 | 222,000 | 3,000 | 207,000 |
| Public Service of Indiana | 10,000 | 390,000 | 10,000 | 331,250 |
| Puget Sound Power & Light | 5,000 | 176,875 | 4,400 | 175,450 |
| Socony Mobil Oil | 2,750 | 199,031 | 2,750 | 161,562 |
| Southern Natural Gas | 2,000 | 103,750 | 2,000 | 86,750 |
| Southern Pacific | 6,000 | 220,500 | 6,000 | 176,250 |
| Southern Railway | 2,500 | 155,000 | 2,500 | 141,250 |
| Standard Oil of California | 5,248 | 312,256 | 5,000 | 315,000 |
| Standard Oil of Indiana | 5,000 | 319,375 | 5,000 | 238,750 |
| Standard Oil of New Jersey | 43 | 3,268 | 43 | 2,559 |
| Standard Oil of Ohio | 5,500 | 379,500 | 5,000 | 264,375 |
| Texaco | 6,000 | 420,000 | 6,000 | 371,250 |
| Union Electric | 13,200 | 349,800 | 6,600 | 316,800 |
| Union Pacific Railroad | 2,500 | 100,000 | 2,500 | 84,375 |
| Union Oil of California | 2,000 | 164,000 | | |
| Wrigley (Wm.) Jr. | 2,000 | 193,500 | 1,500 | 156,000 |
| Youngstown Sheet & Tube | 1,500 | 189,187 | 1,500 | 126,938 |
| Total Common Stocks | | $16,535,992<br>67.8% | | $13,727,019<br>62.6% |
| HEADQUARTERS PROPERTY — at cost | | 495,000<br>2.0% | | 495,000<br>2.3% |
| TOTAL OF ALL INVESTMENTS | | $24,400,225<br>100% | | $21,934,821<br>100% |
| CASH | | 319,259 | | 576,066 |
| GRAND TOTAL OF ASSETS | | $24,719,484 | | $22,510,887 |

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