

The Toyota Foundation  
Report for Fiscal 1979

The Toyota Foundation is a private, nonprofit, grant-making organization established in 1974 by the Toyota Motor Company and the Toyota Motor Sales Company.

This annual report was compiled on the basis of the "Report of Activities for Fiscal 1979," which was approved at the twentieth meeting of the Board of Directors, held June 19, 1980.

The information on the grants is current as of the date they were approved. Subsequent adjustments are not reflected; however, changes made in grant budgets are included separately in this report.

The descriptions of the grant projects are not reports of the project results but summaries of the project proposals submitted to the Foundation by the grantees, as edited by the Foundation staff for inclusion here. The Foundation is responsible for the content of the summaries.

The Japanese-language edition of the *Report for Fiscal 1979* is also available on request.

# Report for Fiscal 1979

April 1, 1979 to March 31, 1980

The Toyota Foundation  
Tokyo, Japan

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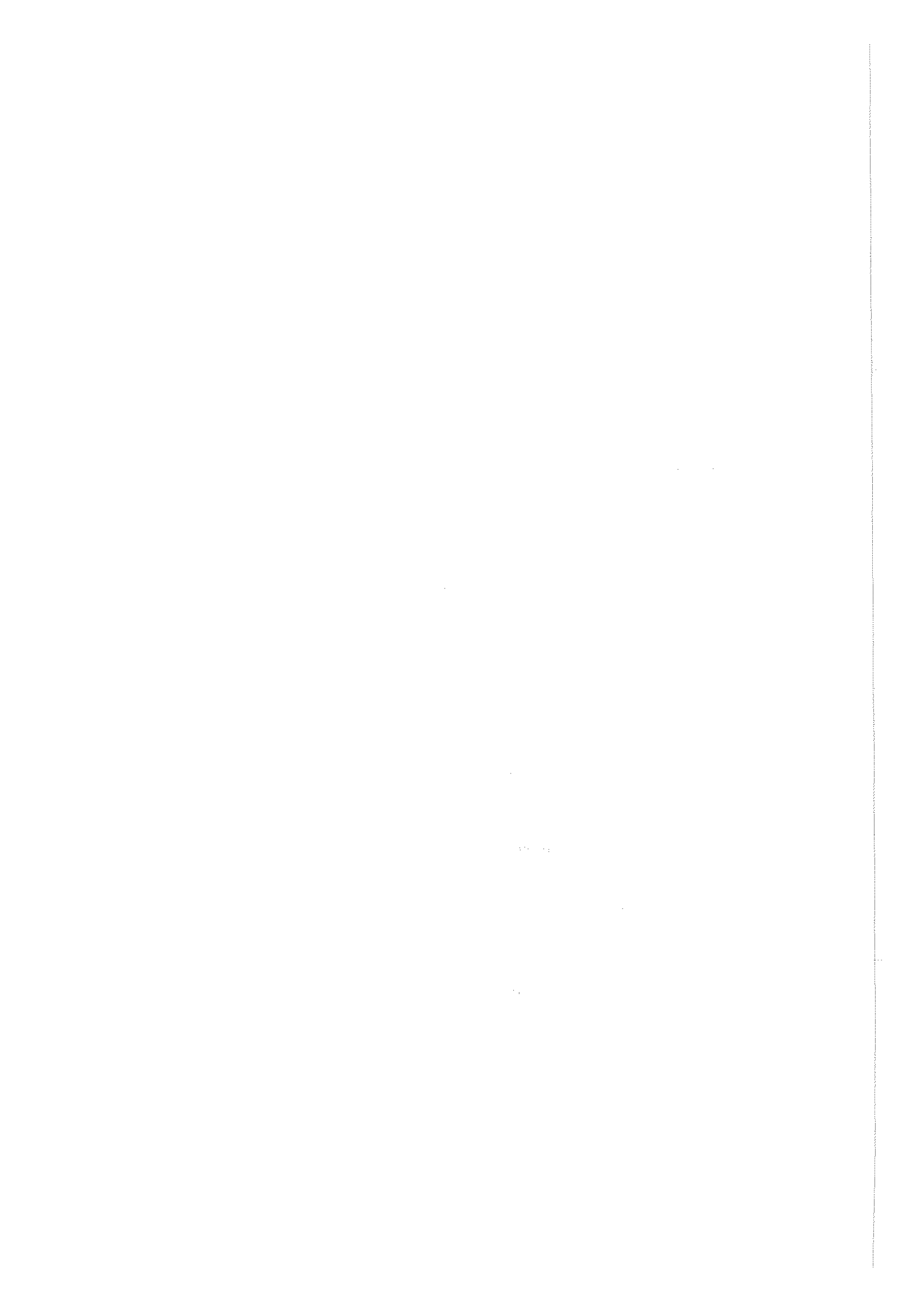
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# The Executive Director's Report

## A Step Toward Creating a New Culture

### I

As I noted in the *Report for Fiscal 1978*, "in anthropology, culture is defined as all the ways in which individuals relate with one another within the human group." This view directs our attention to the following two major points about culture.

First, a new culture must be created whenever the human environment undergoes change as a result of advances in civilization.

Second, culture must always be individualistic; that is, it must always be a symbol of identity.

With regard to the first point, no civilization in history has changed our way of life as radically as today's industrial civilization. This has been particularly true in Japan. However, we have not responded adequately to these changes in our way of life; that is, we have not created a culture to suit these changes. With industrial society about to attain full maturity, we must strive to build a new culture.

Culture, as the above definition makes clear, should never be the concern of merely a handful of people; it should be something in which every member of society can take part. Although industrial civilization has given birth to all kinds of material goods, to all kinds of hardware that affects our daily lives, we have not yet created the software that should go with it. Surely culture should be understood precisely as software.

Let us now consider the idea of culture as a symbol of identity. It is well known that a person who is suddenly thrown from his familiar society into a strange milieu will suffer from a sense of isolation and alienation at not being able to communicate adequately or adapt to the customs of the new community, and may well become neurotic. We normally refer to such a situation as culture shock. The most fundamental condition for achieving a sense of identity is the ability to respond appropriately to others; that is, identity is based on the clear realization

of responding adequately to one another. No two people, however, have the same identity or respond to other people in exactly the same way; every person's individuality differs. Thus culture is, essentially, extremely individualistic in nature.

The growth of industrial civilization has contributed greatly to the popularization of culture. The spread of television enables us to enjoy music and drama in our living rooms, and the development of stereophonic sound enables us to listen to the world's greatest musicians just as if we were attending a live concert. The progress in copying techniques makes it possible to reproduce with remarkable fidelity historical masterpieces for everyone's enjoyment. Such popularization of culture is one of the truly wonderful fruits of our industrial civilization. I have called this process the transformation of culture into civilization. But no matter how far this process is carried, or rather, the further it is carried, the greater will be the likelihood of running up against an insurmountable barrier. Observe, for instance, the long line of eager fans that appears when a famous musician comes to town, or the endless crowds that line up to gain a glimpse of the *Mona Lisa*. People rush to these events probably because the more culture is transformed into civilization, the more people learn about great musicians and great works of art, which has the effect of increasing interest in them.

People also behave this way because instead of enabling them to achieve true identity, the transformation of culture into civilization merely serves to deepen their frustration. That is, although people are exposed to first-rate culture through the medium of television or stereo, these provide only pseudoexperiences; and ironically, the more exposure people receive, the more they come to desire the genuine experience. In other words, no matter how much culture is popularized, the more will people desire to achieve identity. Thus we see that popularization of culture only increases to a hopeless degree the gap between people's desire for identity and their ability to attain it.

Consequently, what is needed now is not the transformation of culture into civilization, as before, but the opposite process—the transformation of civilization into culture. What does this imply?

Earlier I explained why we must create a new culture. To recapitulate, culture here refers to the process through which members of a society develop a particular way of responding to one another as they adapt themselves to actual environmental conditions. It goes without saying, therefore, that culture must not be something that evades actual environmental conditions but rather something that presupposes their existence.

Put differently, culture must develop software that recognizes and presupposes the existence of the hardware from which the actual environment is formed. Culture must enable people to develop, through the intermediary of the hardware that industrial civilization has produced, a way of life that can help them achieve identity as they respond appropriately to one another in the environment consisting of such hardware. This is what I mean by the transformation of civilization into culture. This process does not reject our civilization but acknowledges it and creates a new culture by utilizing it. The transformation of civilization



into culture is the most important first step toward the creation of a new culture.

## II

The most pressing problem we now face is working out a way for different values to coexist harmoniously. This problem has arisen because of the development of our industrial civilization, which on the one hand enables us to come into daily contact with many different peoples and societies while on the other hand making it difficult for us to continue our former way of life.

To enable us to work out a way to allow different values to coexist in harmony, there must first be interaction between these values, and such interaction must promote people's awareness of one another. In other words, we must strive to increase our awareness of the existence of different values among different peoples, and at the same time strive to achieve a similar awareness of multiple values within our own society.

Today terms like "cultural exchange" and "promotion of culture" have become clichés. Yet the cultural exchange now being carried out has not always remained faithful to its original intent of increasing international understanding. In fact, at times it has actually caused misunderstanding. For example, according to our definition of culture it may not be wrong to focus exclusively on traditional culture, but to do so unduly narrows the concept of culture. Furthermore, since culture is essentially a highly individual and independent concept, it would be a great mistake to base our ideas of cultural exchange on the assumption of the existence of a cultural hierarchy, with some cultures regarded as advanced and others as backward. Again, to strive only to publicize our own culture in the name of cultural exchange would lay us open to charges of narrowness and bias.

At this point we must do the following:

(1) We must faithfully transmit to our descendants the various elements of our culture that we have inherited from our ancestors. At the same time, we must try to educate other peoples to our culture.

(2) We must also strive to understand the cultures of other peoples. Furthermore, we should make some sort of contribution toward mutual understanding and awareness among other peoples.

(3) Within our own society, we should try to create occasions and conditions that can foster mutual awareness and understanding among people with different values.

I believe that the accumulation of these efforts will eventually constitute the foundation for the creation of a new culture. Today, thanks to the growth of our industrial civilization, we have all the necessary means of creating incentives for taking the first step in this direction. All depends on whether or not we resolve to work actively toward this goal.

Although Japan lags far behind other countries, its government has finally begun to direct its attention to cultural matters. But the government has only begun to deal with the first of the three points noted above, and it is most unlikely that this situation will change much in the

future. A private foundation's *raison d'être* lies in its ability to impart added vitality to society by taking chances in pioneering projects that governments would normally reject.

I am convinced that a private foundation's most important social mission is to focus its activities mainly on the second and third of the above-mentioned three points. This is why I titled my essay in last year's annual report "Philanthropy as a Cultural Activity." There I confirmed our determination to clarify further our basic posture by planning several new programs to commemorate the Toyota Foundation's fifth anniversary, October 15, 1979.

### III

In commemoration of the Foundation's fifth anniversary we decided to carry out the following three special projects:

(1) The International Workshop on Living Children's Theater in Asia

(2) A research contest on the theme "Looking at the Immediate Environment"

(3) A traveling symposium on the theme "Cities and Architecture: Western-Style Architecture in Japan During the Meiji, Taisho, and Early Showa Eras (1868–1941)"

Since the reports that follow will provide the particulars and discuss how these projects were effected, here I will only explain briefly why they fall into the category of what I have called cultural activities. First, in regard to the International Workshop on Living Children's Theater in Asia, in 1979 (which was also the International Year of the Child) the Foundation invited people engaged in children's theater and other volunteer activities with children from five Asian countries—Indonesia, Malaysia, the Philippines, Singapore, and Thailand—to join their Japanese counterparts for performances in Japan. In addition to performances, we held a workshop in which the participants exchanged ideas and experiences.

The thing I want to emphasize here is that all the participants were people with regular jobs who for many years had devoted their spare time to these volunteer activities. Perhaps for this reason they did not know that there were people engaged in similar activities in other countries. There were even people from the same country who did not know about one another. The participants all agreed that the greatest benefit of this project was the realization that there were people in neighboring Asian countries burning with similar ideals and doing similar work. The International Workshop on Living Children's Theater in Asia also enabled the participants to enlarge their sphere of activities through their regular occupations.

Interaction both between Japanese representatives and those from the five other Asian countries and among the representatives of those countries was expanded. Through this program we were able to further awareness and understanding not only between Japan and the five other countries but also among the other countries themselves beyond our greatest expectations. The International Workshop on Living Children's

Theater in Asia succeeded in providing the forum necessary for such mutual understanding, which was, in fact, what we had hoped the project would achieve.

As for the research contest on the theme "Looking at the Immediate Environment," from the time of its establishment the Toyota Foundation has consistently provided grants for environmental studies. Most, however, have been awarded for studies by professional researchers, and while these are important and should be continued, we decided to sponsor a research contest as a separate project.

Environmental problems are by nature problems that affect us directly. Nonetheless—or rather therefore—up to now the Japanese people have tended to regard problems caused by environmental changes in terms of the conflict between the victims and the agents of environmental change. One reason the Japanese tend to think this way is that environmental changes have been much more noticeable in Japan than in any other country in the world. Another is the inability of the Japanese to fathom a society formed by an undifferentiated mass of people. With regard to the first reason, there is no need to elaborate other than to mention that industrialization took place in Japan at an unprecedented rate and that Japan is one of the most densely populated societies in the world.

As for the second reason, while the Japanese are generally able to see themselves clearly in terms of a group, that is, a specific mass of people, they have a hard time seeing themselves in terms of an undifferentiated mass. They have no trouble, for instance, determining how they should behave as employees of Company X or what their position as members of Union Y ought to be. Society, however, does not comprise only employees of Company X or members of Union Y; it is made up of an endless variety of people. In other words, society consists of an undifferentiated mass of people. But the Japanese have always had great difficulty in locating themselves within an undifferentiated mass and so find it hard to develop norms by which to order their behavior in such a context.

Consequently, even with regard to changes in their immediate surroundings, the Japanese have tended to consider themselves as victims of environmental destruction brought about by the government or corporations. In short, a characteristic feature of the Japanese is that while most are keenly aware of their status as victims of environmental destruction, only a few realize that they have done very little to protect the environment.

I stated earlier that it is important to develop a way of life that allows various differing standpoints and values to coexist harmoniously in our immediate environment as the first step toward creating a new culture. In accordance with this view, we at the Foundation reasoned that if we all reassessed our immediate environment calmly, and if people from all walks of life, not only specialists and scholars, joined us, we should be able to identify and discover ways to solve the problems we would be facing in our efforts to create a new culture. For one thing, the participation of a large number of people in this effort would have the effect of creating a research setting that would lend itself to studies

that are somewhat different from the purely academic ones that specialists and scholars normally produce, and such a setting would help pave the way for the creation of a new culture. Moreover, such a setting might help the Japanese people acquire a social concept hitherto unknown to them. This would indeed constitute "philanthropy as a cultural activity."

Third, the traveling symposium on the theme "Cities and Architecture: Western-Style Architecture in Japan During the Meiji, Taisho, and Early Showa Eras (1868-1941)" would provide an opportunity for those people in major cities across the nation charged with the task of supervising the use of buildings constructed during the period between the Meiji era (1868-1912) and the prewar (1926-41) Showa era to report on their activities and exchange ideas on such topics as the value of these old buildings in terms of their significance in today's modern cities and the problems of preserving and utilizing such buildings.

At the outdoor museum called Meiji-mura (Meiji Village) in Inuyama near Nagoya, as the name implies, there are several dozen buildings of the Meiji era that were collected from all over the country and reassembled there. The verdant hills of Meiji-mura are dotted with brick, wood, and other types of buildings whose unique character gives visitors the illusion of having been transported back through time to the Meiji era.

The function of any museum is to collect and exhibit cultural objects of superior quality. In this sense, I do not doubt that Meiji-mura, as a museum, is performing a valuable cultural service. But the Japanese, I think, have tended to overemphasize the significance of museum building and other static activities, believing these to be the most important form of cultural activity. If we understand the word culture in the way defined earlier, however, true cultural activities must be more dynamic and closer to our daily lives.

Preserving the architectural works of our forebears and exhibiting them in their original form is an admirable way of transmitting culture. Meiji-mura is an outstanding example of this kind of endeavor. But utilizing such buildings in the living context of our cities is also an important way of transmitting culture. Though old buildings may at times be diverted to purposes quite different from those originally intended, and though utilization may present various problems inherently different from those involved in preservation, utilization in itself should serve as an important way of transmitting culture. Utilization is a cultural activity in no way inferior to museum building. With this in mind, the Foundation decided to hold symposiums around the country on the theme "Cities and Architecture: Western-Style Architecture in Japan During the Meiji, Taisho, and Early Showa Eras (1868-1941)" as one of the projects commemorating the fifth anniversary of the Foundation.

#### IV

The basic stance described above, of course, is reflected not only in the projects commemorating our fifth anniversary but in our regular grant programs as well.

For example, this year we have started offering grants for research on special subjects within Japan. This year, as in previous years, we are providing grants in three regular fields—human and natural environments, social welfare, and education and culture. Past experience, however, has shown that there are many important areas that do not fall neatly into any of these three fields. The more realistically we tried to carry out area research, the more we realized this, which prompted us to remove the boundaries separating the three fields of research and establish a fourth, the special-subject field, which allows applicants to freely designate their field of study. The motivation for setting up this fourth field is the same as that for holding the previously discussed research contest on the theme “Looking at the Immediate Environment.”

As for research carried out abroad, we have continued to encourage the preservation and development of the indigenous cultures of Southeast Asia and to further the Japanese people’s understanding of these cultures. This year we have tried especially hard to clarify our basic posture in this area of research.

The figures below indicate the total number and value of the grants that the Toyota Foundation has awarded over the past five years.

The total number of grants is 455 (¥1,791 million), which breaks down as follows: 308 grants (¥1,320 million) in the National Division, 52 grants (¥218 million) in the International Division, 20 grants (¥50 million) for International Conferences Convened in Japan, 19 grants (¥43 million) for the “Know Our Neighbors” Translation-Publication Program, Fellowships (¥130 million), 31 grants (¥37 million) for National Division Communication Supplements, and 20 grants (¥10 million) for contestants’ preparatory work for the research contest on the theme “Looking at the Immediate Environment.”

**Yujiro Hayashi**  
Executive Director



## National Division Program Officer's Report

### Five Years of National Division Grant-Making Activities

The Toyota Foundation has been providing research grants since 1975, with 1979 the fifth year of such activities. Although there have been a number of changes during this period, the framework of the program has finally taken shape, and the duties of the Foundation's staff have also become more clearly defined.

Yet grant activities must never be allowed to degenerate into mere routine. If grant programs administered by private foundations are to be meaningful, it is essential that such foundations maintain their flexibility and continue to search for the role in which they can best serve the needs of society. We must not neglect this task in developing future grant programs for the Toyota Foundation.

For this reason it is highly significant to look back over our record of trial and error during the past five years and to subject our policies and actions during that period to objective study and scrutiny. Detailed analysis of a number of points must be deferred to the future; at this stage we will simply attempt a general summary of the program's development.

#### Three Program Fields

Since its first year, Toyota Foundation research grants have been offered in three fields. This is a fundamental feature of the program, based on objectives laid down at the Foundation's inception and defined in Article 3 of its Articles of Endowment,<sup>1</sup> and no major change in this policy is likely in the foreseeable future. The three fields are human and natural

1. Article 3 of the Toyota Foundation's Articles of Endowment defines the Foundation's objectives as follows:

"The objective of this Foundation is to contribute toward the realization of a human-oriented society by providing grants for research and projects related to the human and natural environments, social welfare, education and culture, and other fields."

environments, social welfare, and education and culture. Obviously, the defining of these fields signifies that only those areas of research falling within these fields are eligible for Foundation grants. It does not mean that all types of research will be classified into one or another of these three fields.

The establishment of these fields was based not on differences in specialized disciplines or methodologies but on various indirect factors governed by current social issues. None of the three fields, therefore, corresponds to a particular specialized discipline. This is one distinctive characteristic of the program.

However, the concepts of the three fields are not necessarily restrictive, nor have they remained exactly the same over the past five years. They took shape, albeit vaguely, in the repeated process of the submission of applications for grants and the selection committees' discussions of and decisions on these applications.

The three fields are explained as follows in the 1979 application literature:

Human and natural environments: Research necessary for the achievement of a safe and pleasant traffic environment, the maintenance of a livable human environment, and the long-range preservation and utilization of the natural environment.

Social welfare: Research necessary for the elimination of factors contributing to social problems, the achievement of a suitable social-welfare system, and the creation of a high quality of life.

Education and culture: Research necessary for the solution of problems relating to contemporary education and culture, and research that deepens understanding and awareness of the diverse aspects of culture and can provide basic information on future cultural developments.

More rigid definitions may be needed in the future, but at this stage we believe that a certain amount of vagueness is appropriate.

#### **Direct Public Solicitation of Applications**

Another practice that has characterized the Foundation's research grants since the beginning is the system of publicly soliciting applications. The process of providing research grants commences in April or May with the public solicitation of applications. Applicants write directly to the Foundation for the necessary forms.

Sometimes the organizations or institutions to which applicants belong send in forms for several applicants at the same time. However, this is simply a matter of procedural convenience. The Foundation does not impose any quota on applications from universities, research institutes, academic societies, associations, and other organizations, and the submission of applications in this way does not imply recommendations on the part of the institutions concerned.

Obvious though it may seem, the reason we call our system "direct public solicitation" is that in most cases applications for grants from



foundations in Japan must be accompanied by recommendations from a relevant academic society, association, or research institute, such recommendations forming the first step in the selection process.

There are a number of reasons for the Toyota Foundation's use of the system of direct public solicitation of applications. Basically, however, it results from the recognition of differences between the objectives and functions of scholarly groups and those of the Toyota Foundation. The aim of scholarly groups is the pursuit of truth through scholarly advances in their respective fields. Their attitude to research is naturally based on this perspective. The Toyota Foundation, however, is concerned first and foremost with the social significance and importance of the research funded.

As mentioned above, research grants are available in three fields. These fields are not related to specialized scholarly fields but are determined according to the issues facing contemporary society. The divisions between the fields, therefore, do not correspond to divisions between different academic fields. Research under the Foundation's system should go beyond the confines of existing academic groups, proceeding in a context of indirect links with a wide range of disciplines. In certain cases we believe that research should be carried out with the participation of people working on a level completely different from the activities of academic groups.

We cannot state confidently that the research projects funded by Foundation grants to date have always reflected the aims of our system of direct solicitation. The Foundation has not yet been able to fully clarify its own point of view; this is a major task for the future.

### Methods and Standards of Selection

After the deadline for applications at the end of May, the Foundation staff carries out routine processing. The selection committee<sup>2</sup> for each field chooses the grantees, and the grants are presented on or around October 15, the anniversary of the Foundation's inauguration, following approval by the Board of Directors. The period of research is one year from that date.

In an average year, there are more than ten times as many applications as the total budget available for grants. This means that about one application in ten is selected.

Selection is no easy matter. We have not adhered to the same method of selection since the start but have instead tried out various new ideas and methods each year. At first all members of the selection committee for the particular field perused all applications for that field. Recently, however, the practice has been for three committee members to be assigned to examine each application. This reduces the number of

2. Each of the three fields has its own independent selection committee. The members of a committee number between five and nine depending on the field. In 1979 the total for all three fields was twenty members. Committee members are appointed for two years. It is our practice to announce only the chair's name in each case. This policy was intended to allow selection to be carried out with scrupulous fairness, free of the pressure of outside demands. Should this cease to be necessary in the future, we would like to announce all committee members' names. At present the chair of each committee is also a member of the Board of Directors.

forms read by each committee member from around two hundred to between eighty and one hundred. At this level the task begins to be humanly possible.

Even so, substantial time and effort are required to study and evaluate each application carefully, and the Foundation is extremely grateful to the many committee members who have sacrificed their summer vacations to devote their energies to this task. We have experimented with having the staff eliminate applications that are obviously unsuitable in terms of the purposes for which the grants were intended. This was found to be impracticable, however, and has been discontinued.

The present method of selection is as follows: each committee member selects approximately one-tenth of the applications assigned for evaluation as recommended candidates. The entire committee thoroughly discusses the applications recommended by each member and then determines which candidates should receive grants. Applications that receive no recommendations are sometimes brought up for reconsideration in the course of the committee's deliberations.

The selection committees meet three times a year. The first meeting of the year, however, is devoted to discussion and confirmation of the methods and standards of selection. Actual selection, therefore, takes place at the two subsequent meetings. In the period between these two meetings the staff carries out such inquiries as the committees direct. The candidates for grants in each field are selected by the end of September. The Board of Directors meets to consider these candidates early in October and makes the final decisions as to the grantees. Over the past five years, no candidate recommended by the selection committees has ever been rejected by the Board.<sup>3</sup>

The standards used for selection are of vital importance to the selection process. These selection standards, comprising a list of specifications that the Foundation presents to the selection committees when entrusting them with the task of choosing the candidates, indicate in concrete form the basic policy governing the Foundation's grant-making activities.

The selection criteria were reformulated in 1979 on the basis of past experience and specified in the application literature. They are quoted in part below:

From among the applicants qualified according to the conditions stipulated in the section entitled "Grant Eligibility" the selection committees will choose applicants who are evaluated highly on several of the points described below:

- (1) Fields of research for which it is difficult to obtain government commissions or grants or funding from other sources, but which have a significance making them suitable for grants from a private foundation.
- (2) Research whose objectives are in keeping with the needs of the times and which will have, over the long term, substantial

3. There is one case of a candidate recommended by a selection committee that did not receive a Foundation grant. The suspicion emerged following final selection that the candidate had also applied to another foundation, and the recommendation was therefore withdrawn on the authority of the selection committee chair.

social significance either in terms of the conduct of the research itself or through the results achieved.

(3) Original and experimental research plans and systems that promise revolutionary results.

(4) Research with clearly defined objectives and well thought out planning and systems that promises to yield results that will contribute in a basic way to the advance of learning.

(5) Researchers or research organizations that evince superior motivation and ability and whose research promises to yield overall results of a high level.

When set down in this way, these standards seem to state the obvious, yet each word and phrase is the product of the various impressions built up over the previous four years of awarding grants. It goes without saying that before reaching this form the selection standards underwent a number of formulations and alterations. We are also aware of the need for further refinement, based on future experience, to give the standards even greater clarity and aptness.

#### **An Experiment with a Common Theme, "Urbanization"**

One experiment aimed at giving clearer expression to the unique nature of Toyota Foundation research grants was the establishment of the common theme of "urbanization" in all three fields in 1975, 1976, and 1977. This policy called for the awarding of grants for research projects in all three fields based on the theme of urbanization. The objective, as described in the application literature for 1975, was to attempt in all three fields to solve this most contemporary of problems while at the same time fulfilling the objectives of the Foundation's grants, clarifying their special characteristics, and enhancing their results by creating an organic relationship among the three fields.

"Urbanization" was chosen as the theme because it was regarded as being a basic social trend illustrating most comprehensively and intensively the problems confronting contemporary society.

Although we did not call directly for research on the subject of urbanization, the word elicited a keen response. Approximately one-third of the research proposals received in 1975 contained the term "urbanization," and it seemed that the subject was beginning to develop into a prestigious field of study. The awarding of grants reflected this tendency, with about one-third of the research topics chosen containing the term "urbanization" in their titles.

Yet when we studied the content of the proposals in detail and examined the course of the various research projects, we found that the relevance to urbanization was not always clear. In view of the actual content of the research projects, the theme of urbanization seemed like an artificial veneer. Whenever research was influenced by this word, it seemed to lack logical order, and we found that the presence of this word resulted in an unnecessary bias in almost all research projects.

This led us to abolish the common-theme framework in 1978. We are still convinced, however, of the importance of the problems that we

attempted for three years to approach symbolically using the term "urbanization."

The theme remained, though in somewhat diffuse form, in the objectives expressed in the application literature for 1979: "Research that can contribute to the solution of the various problems facing contemporary society and that is in keeping with the needs of the times." Indeed, the special research topic introduced in 1979, "Special-Subject Research: Changes in Local Communities," represents an attempt to investigate a particular aspect of the problem of urbanization. The theme of the research contest "Looking at the Immediate Environment," organized as one of the activities marking the Foundation's fifth anniversary, was also based on an appreciation of this problem.

Nevertheless, while having established an original perspective for our grant activities, we have found it extremely difficult to express this perspective symbolically in words.

#### Grants for Publication of Research Results

Our policy is to allow researchers receiving grants a free hand in publishing the results of their work, whether they do so at conferences or in periodicals or newspapers. Some funding may be necessary, however, to ensure wide and effective coverage. This would include, for example, the cost of drawing up, printing, and distributing reports, of holding symposiums to discuss the research, or of traveling to international conferences for the purpose of presenting the results of the research.

At first funds for this purpose were included rather vaguely with general grants. Unfortunately, the fact that the purpose for which these funds were intended was not made clear meant that researchers were not motivated to try to publish their work in ways that required extra expenditures.

It was finally decided to set aside ¥20 million of the 1977 grant budget for use in assisting the publication of research results. This move was aimed at separating research activities from activities connected with the publication of the results thereof, and to actively encourage researchers to publish their work.

Researchers who have received Foundation grants can apply to the Foundation whenever necessary for assistance in publishing their work. Decisions on such funding are made following deliberations by the Chairmen's Committee, which comprises the chairs of the selection committees for the three fields.<sup>4</sup> Naturally the results of the research must be of a certain standard.

At present, grants for the publication of results are made available for the following five purposes:

- (1) The cost of printing research reports
- (2) The cost of publishing material whose main purpose is the announcement of the results of research

4. It is essential that the provision of grants for the publication of results be prompt and timely. With the approval of the Chairmen's Committee, the decision to provide grants within the limits of the budget determined by the Board can be made at any time. This is vital in cases where urgent assistance is needed.

- (3) The cost of holding symposiums or other meetings whose main purpose is the announcement of the results of research
- (4) Funds required for announcement of the results of research at international conferences
- (5) Other necessary expenditures relating to the above categories

There are many other methods of making the results of research known to society. We intend to take a broad perspective in developing these grants to include a wide variety of categories so that researchers can use the method of announcement most appropriate to the content of their research.

### Symposiums on Grant-Supported Research

Apart from independent publication by researchers with the help of Foundation grants, there is also a need, from the Foundation's point of view, for opportunities to take the lead in presenting the results of research for general appraisal.

Every effort is made to describe the Foundation's activities as fully as possible in the annual report and the Japanese-language newsletter *The Toyota Foundation Report*. These publications alone are not enough, however, and we have come to realize that sponsoring symposiums to discuss research is vitally important in promoting a direct and basic understanding of research. The first such symposium was held in the fall of 1977 and covered research that was nearing completion at that time.

The policies governing the conduct of these symposiums are as follows:

- (1) Symposiums will be held three times a year, with one symposium for each field of research.
- (2) Each symposium will be concerned with several research projects linked by a common theme though pertaining to differing specialized fields. Ample time will be allowed for the presentation of research.
- (3) The symposiums will not be devoted to the presentation solely of reports on grant-supported research but will also be opportunities for candid discussion among people in various walks of life on matters relating to the content of the research.
- (4) The symposiums will be open to people working in various fields closely affected by the content of the reports. It is not our intention to attract large numbers of people by making the symposiums interesting in a journalistic sense.
- (5) The symposiums will be planned and conducted entirely by the Foundation staff and will not be entrusted to outside concerns.

Eight symposiums have been held over the past three years.<sup>5</sup> The

5. Only two symposiums were held in 1979. The reason for holding one fewer symposium than usual was that a special symposium with the theme "Cities and Architecture: Western-Style Architecture in Japan During the Meiji, Taisho, and Early Showa Eras (1868-1941)," which traveled throughout Japan as one of the special programs marking the Foundation's fifth anni-

Foundation staff was totally without experience in organizing functions of this type, and no doubt many mistakes were made at first. Our experience has grown with each occasion, however, and we believe that we have developed the ability to organize symposiums that are useful and informative.

Those responsible for planning a particular symposium share in every stage of the process—determining and researching the theme, and verifying the content of the relevant research; selecting, approaching, and making prior arrangements with those who are to participate; arranging for the printing of invitations and programs; drawing up the list of recipients of this material; and even addressing envelopes. We believe that this is a most valuable training opportunity for our program staff.

People from varied fields have participated enthusiastically in each symposium so far, providing the Foundation with much valuable comment on its grant-making activities. We hope that by gradually and steadily accumulating experience we can establish these symposiums as a unique feature of Toyota Foundation activities, providing an excellent opportunity for the presentation and discussion of research reports. At present such symposiums are held only in Tokyo, but we hope to take future symposiums to the city most appropriate to the particular theme.

### Grants for Preliminary Research

Grants for preliminary research were added to our grant-making activities in 1978. These grants are for preliminary work, including feasibility studies, and are made available when new projects call for experimental or comprehensive research. The limit for such a grant has been set at ¥1.5 million for the time being.

It has been our intention from the outset to give priority to research that is adventurous in nature. Applications amount to ten times the number of grants available, however, and research programs are subjected to careful scrutiny from every angle as the number is pared. The projects that survive this process, therefore, are inevitably those reflecting long and careful thought and refinement. Even exciting and original projects that challenge difficult problems are not likely to receive grants if preparation is insufficient.

At times we support bold and experimental research, but the results are often disappointing. Adventurous research challenging new fields

versary, was similar in nature to the regular symposiums. The themes of symposiums held to date are as follows (in chronological order):

1. Environmental Monitoring Methods
2. Regional Social-Welfare Problems: Okinawa
3. Scholarly Exchange Between Japan and Asian Nations Through Three International Joint Research Projects
4. Solar Energy and Photochemistry
5. Awareness and Behavior of Youth with Special Emphasis on the Contemporary State of Adolescent Social Deviancy
6. Toward the Establishment of a New Educational System: Reviewing Postcompulsory Education
7. The Japanese and the Americans: Significance, Methodology, and Possibilities of International Comparative Studies
8. Coping with the Problems of Aging: Exploring the Long-Term Issues

must be based on ample preparation over a considerable period of time. The idea of grants for preliminary research was the product of long deliberations on the question of whether or not we should provide grants, fully prepared for the possibility of failure, for concepts that may not succeed but which possess the potential of yielding extremely significant research in the event that they do succeed.

The call for applications for grants for preliminary research was not entirely successful in 1978. Apparently the application literature did not express our aims clearly enough, as from the applications that resulted "preliminary research" seems to have been regarded as synonymous with "shallow research." Most of the preliminary research projects funded that year were actually submitted as fully developed projects but were selected for preliminary grants instead on the recommendation of the respective selection committees.

A year of careful and steady preparation seems to control the researcher's tendency toward excessive haste. In some cases the researcher's enthusiasm may have cooled by the end of the year, and we are not insensitive to such feelings. As a provider of research grants, however, we believe that the greatest promise is held by research that has been enriched by a year of theoretical work, thought, and preliminary investigation and experimentation.

A number of applications received in 1979 for preliminary research projects seemed to come close to our aims for this type of grant. There are many issues, however, that require further study by the Foundation. There is the question of whether the figure of ¥1.5 million is appropriate for this type of grant, and the question of when researchers should be allowed to proceed with their full projects. And we must also consider whether or not it is really necessary to establish the concept of preliminary research. For the time being, however, we feel that the use of the term "preliminary research" will in fact attract more aggressive researchers to meet the challenge. We look forward to revolutionary results from the work of such people.

#### Introduction of Special-Subject Research

An idea that emerged at Board meetings early in the Foundation's history was that in addition to our existing grant-making activities, which are based on widespread public solicitation of research projects in three loosely defined fields, there was also a need for the Foundation itself to select special themes for concentrated research. This idea has also been the subject of various studies carried out by the staff.

There are two methods of carrying out this type of research. The first method might be termed the "commission method," by which the Foundation would set forth a detailed program and implement comprehensively coordinated research, assigning various portions of the work to selected researchers.

Under the second method, the Foundation would specify the content and significance of the research in concrete terms and publicly solicit research programs. Suitable projects would be selected and provided with grants.

The former method is probably superior in terms of investment efficiency, but there is also a strong risk that the research will remain limited in perspective if carried out imprudently. A certain level of capability and preparation on the part of the staff is needed, and while the Foundation would like to carry out this type of research at some time in the future, we feel that the time is not yet ripe. At this stage, in fact, it is probably more useful to proceed with research under the second system, publicly soliciting research projects on special themes, in preparation for activities of the first type.

Thus, in 1979 we selected a special research topic in addition to the usual three fields and solicited research applications. This topic, which encompassed all three regular fields, was "Special-Subject Research: Changes in Local Communities." Its objective was to trace and document the ways in which the development and spread of material civilization resulting from postwar economic growth have changed the environment, life style, and culture of a specific region. The selection of this theme was the result of long deliberation, based on discussions with experts in a variety of fields.

Our basic aim, however, was the intensive involvement of a class of researchers that had been difficult to contact in the past. At the same time we sought a theme that would link all three regular research fields and would also be highly significant in terms of contemporary social and cultural conditions. Another prerequisite was that the subject be one of sufficient interest and importance to warrant continued work on it by the Foundation staff. As it turned out, this research project also represented a new approach, though in a different form, to the concept of providing grants for research projects linked by the common theme of urbanization—a concept we had experimented with in 1975, 1976, and 1977, as described earlier.

We received 108 applications regarding the special topic, and 16 were selected for grants. A symposium for interim reports on these projects was scheduled to be held in Tokyo in May, 1980. It will be extremely interesting to see how people differing in outlook and specialization approach a single unified theme.

It is too early to comment on the outcome and import of this research, but we are confident that it will have a significance different from that of research in the three established fields.

### Views of Applicants

In 1977 we began to carry out systematic interviews of teams of researchers selected to receive grants. The purpose was to obtain an accurate picture of how the research was proceeding and to gauge the attitudes of researchers toward the Foundation. Each year we visit research teams working in a wide range of disciplines throughout Japan, and the knowledge and suggestions we have obtained in this way have been extremely valuable. These interviews have also been a major factor in the development of the various programs described here.

Data obtained only from those receiving our grants would be biased, however; it is necessary to obtain the opinions of a wider sample.



We have endeavored to interview people other than grantees, including those who have applied unsuccessfully.

At this stage, however, it is not possible for us to conduct systematic interviews. It was decided, therefore, to obtain the views of applicants in written form. A survey was carried out using a questionnaire, including a section for free comments, which was appended to the 1979 application form for research grants. Almost all applicants responded.

The results varied widely: some respondents offered harsh criticisms of the Foundation's grant-making system, while others expressed deep appreciation and admiration for our policies. In both cases, the answers revealed deep-felt opinions, and we intend to study these views thoroughly and take them into account in planning future grant-making activities.<sup>6</sup>

There are two points, however, on which the Foundation cannot fully accommodate the wishes of applicants.

The first point concerns the sincere opinion, expressed by many, that the Foundation should increase its award ratio and provide grants to a larger number of researchers, even at the cost of reducing the amount of each grant.

The Foundation considers the size of the grant applied for in each case very carefully and does make reductions in an effort to increase the number of applications that can be approved. A glance at trends in grants provided over the past five years shows that the amount per project has been gradually shrinking. Of course, there are cases in which a small amount of aid can be very significant, and it is often more useful to provide small amounts continuously over a number of years than to provide a large sum for one year. We are apprehensive, however, that any breakdown into still smaller sums will create problems in the broader perspective.

It would be disastrous to lose the courage to give priority to assisting substantial projects because of an excessive preoccupation with pleasing as many people as possible. We feel that to boldly select projects we really believe in and provide grants sufficient to give the researchers full scope to carry out their work should be the nature and function of the Toyota Foundation.

The second point concerns the view that the bounds of our grant fields should be extended. Many researchers want more aid for their particular field. Some have called for grants for basic research or for applied research in fields outside the three regular fields or in various specialized fields, depending on their own positions.

From the point of view of the researchers, this is natural. But if current trends in the total grant budget continue, we believe that it may actually be necessary to limit the fields even further and to focus our grants still more narrowly.

6. The comments received from applicants have been printed in Japanese without addition or alteration in *Research Grant Study Materials 1*. Copies will be forwarded to interested people upon application to the Foundation. Where the staff's resources permit, we endeavor to put any useful suggestions contained in these comments into practice. A list of research topics for which applications have been received to date is contained in *Research Grant Study Materials 2*, while grantees to date are listed in *Research Grant Study Materials 3*. These Japanese-language lists are also available to those interested.

The two issues have much in common. It is very difficult to satisfy the wishes of a large number of people with a limited amount of money. Surely it is better for a private foundation to avoid concerning itself unduly with this question, and instead establish firm priorities on which to base its grant-making activities. We believe that the ability to make courageous decisions will be of vital importance in the years ahead, even if such decisions mean that we have to display a certain amount of indifference toward public opinion.

In the preceding pages we have traced the evolution of our role in providing research grants over the past five years, touching at the same time on matters currently under consideration. Yet this has been only the barest description of the Foundation's activities and the policies on which they have been based, simply outlining the development of our program. We have not attempted to cover such questions as the types and number of applications received and approved, the results obtained, and whether the various projects funded turned out to be suitable for grants from a private foundation. It is necessary to analyze such questions as these in order to evaluate our activities to date, and we intend to carry out such studies in gradual stages from now on.

**Yoshinori Yamaoka**  
Program Officer, National Division

## International Division Program Officer's Report

### Five Years of International Division Grant-Making Activities

The five years since the Toyota Foundation was established have been years of trial and error as well as years during which we have met with and learned from many people. The international grant program that was launched five years ago is now in full operation. Since Japan has had little experience with international grant making, the cooperation and encouragement we have received during this time from people around the world have provided great moral support.

In addition to the international grant program, which focuses primarily on research, several related programs are presently in operation. The Foundation staff tries to maintain a constant watch over the various programs and the research projects that are under way to see how they are meeting the needs of the countries concerned and to gauge local response. Each one of us at the Foundation is constantly on the alert for new programs to implement.

Before the traces of the Foundation's work over the past five years are obliterated by the bustle of day-to-day activities, I would like to set down an account of the development of the International Division's programs and a record of the preparatory work necessitated by these activities. I hope that this account will help people to better understand the Foundation's activities. We also welcome comments and advice from readers.

#### **The Toyota Foundation's Basic Outlook and Character**

The Toyota Foundation's Articles of Endowment stipulate that international grants are intended for "research and projects in foreign countries, especially in developing countries, in the human and natural environments, social welfare, education and culture, and other fields." The Foundation was established for the purpose of contributing to the realization of a human-oriented society in order to further human happiness

and to contribute to social activities on a wide-ranging and long-term basis from a global perspective. In other words, the Foundation's goal is to contribute to a solution to the various problems that confront modern society, meeting the needs of the age.

In order to understand the needs of an age, the age itself must be defined. As mentioned in the Executive Director's Report in the *Report for 1975*, at the time of the Foundation's establishment Japan was facing a historical turning point as it rapidly diversified externally, domestically, politically, socially, and economically. Japanese society, hitherto dominated by uniform values, was beginning to develop into a society of multiple values.

Meanwhile, the developing countries were beginning to realize that rapid modernization and industrialization were visiting various effects on both the natural and human environments. A review of development methods became necessary as it gradually became apparent that in terms of effectiveness the methods of the advanced countries were not necessarily those best suited to the developing nations. There was also a rapid awakening to the idea that the concept of development should provide not only for the growth of GNP but for the maintenance and improvement of the quality of life, as well as for the maintenance and increase of opportunities for self-realization as human beings.

In addition to economic independence, the developing countries began to aspire toward cultural independence. Thus attention was focused on the technologies and development methods appropriate to each country, and the importance of originality in cultures and value systems was reassessed. This was a time when the establishment of cultural identity in each country and society was becoming an important task.

It was at such a time that the Toyota Foundation was established. What is the mission of a private foundation today? We feel that our role is to act as an agent in preserving the spirit of youthfulness in society. Our role is to search actively for the seeds of ideas that will help prevent society from aging and, through the process of constant trial and error and fully aware of the risks entailed, to help these seeds germinate.

It is with this understanding that the Toyota Foundation's International Division has been conducting its activities. During the past five years we have had the opportunity to explain the Foundation's aims and activities to many people overseas. While the majority of people have come to understand the nature of the Foundation, some have not fully understood us, so here I will touch on the major misconception.

The Toyota Foundation is a private, nonprofit, grant-making foundation. Some people mistake us for a profit-making organization, confusing us with our donor companies. This is a total misunderstanding. The Toyota Foundation is an independent, nonprofit organization under the supervision of the Prime Minister's Office, with aims quite different from those of our subscribing companies.

The following account relates the International Division's activities in chronological order. As of fiscal 1979, four programs were in effect: International Grants, the International Fellowship Program for Japanese Social Scientists, Grants for International Conferences Convened in Japan, and the "Know Our Neighbors" Translation-Publication Program.

## The Preparatory Period: Fiscal 1975

Before the International Division can inaugurate any activity, it must examine matters from three points of view: (1) What future activities are considered necessary in Japan's exchange with other countries? (2) In practical terms, what method of providing grants is the most suitable, and on what points should the Foundation exercise care? (3) What are the problems in the fields of environment, social welfare, and culture and education in the developing countries, and what forms of response are feasible? The Foundation decided to focus on the first two points in fiscal 1975.

In regard to the first point, we began by trying to grasp the state of Japan's exchange with other countries. With the cooperation of the Japan Center for International Exchange we conducted surveys on (1) the activities being carried out by various overseas foundations in the developing countries, (2) the state of Japan's exchange with the developing countries, (3) the state of Japan's cooperation and exchange with the advanced countries, and (4) the state of Japanese studies abroad. With regard to the first of these four points, we investigated the activities of foundations and research organizations, mostly American, which extend aid and cooperation in Southeast Asia. With regard to the second point, we investigated Japanese foundations and organizations extending aid and cooperation to developing Asian countries. With regard to the third point, we investigated Japanese organizations as well as foreign organizations in Japan that promote Japanese exchange with the United States and Europe. And with regard to the fourth point, we investigated recent activities of Japanese and foreign foundations and government-related organizations that aid in the promotion of Japanese studies; we also investigated the state of Japanese studies abroad.

This investigation clearly revealed the factors that needed to be stressed in Japan's cooperation with and aid to developing countries.<sup>1</sup> First was the need to respect the independence of the developing countries. Second was the need to carry on a wide-ranging dialogue with the developing countries on an equal footing. Third was the need to establish contact with the appropriate people, not on a short-term but on a continuous basis, and not only with a limited sector of people but with people in a variety of fields. In other words, we recognized the extreme importance in exchange activities of building up relationships based on personal trust. Fourth was the need to bear in mind multilateral cooperation.

As stated above, the second major point was: In practical terms, what method of providing grants is the most suitable, and on what points should the Foundation exercise care? Research on this point was conducted within the Foundation. First we made a study of foundations on the basis of relevant literature published in the United States, Eu-

1. The following activities were pointed out as being necessary in future cooperation and exchange between Japan and developing countries: to foster within Japan an understanding of developing countries, to promote the spread of information about Japan in developing countries, to train personnel in developing countries, to train Japanese specialists in matters concerning developing countries, and to broaden and deepen contact with developing countries.

rope, and Japan, as well as annual reports and other materials obtained from approximately 120 foundations overseas. A study was made of the entire scope of activities carried out by foundations:<sup>2</sup> the definition of a foundation, examples of foundation work that are highly regarded, the realities of foundation activities, problems faced by foundations, the role of foundations, the salient points of an outstanding foundation, the history of and changes in foundations, and the geographical distribution of foundations and their fields of activity.

Having gained this basic knowledge, we made two visits to foundations in the United States and Europe. Our aim in personally visiting large, medium-sized, and small foundations was to see for ourselves the living presence of these foundations and to interview foundation officers. These officers were highly cooperative in response to our requests for interviews, replying honestly even to difficult, delicate questions. Through these visits we were able to learn much from the wealth of experience of European and American foundation officers.<sup>3</sup>

Our investigation revealed the factors that should be stressed in foundation activities today. A foundation's mission is to provide the initial costs necessary to pave the way for a solution of modern society's varied problems, to attempt to prepare people for perceiving phenomena that can be expected to become social problems in the future, and to tackle areas in which it is difficult for the government to involve itself, thus providing the government with an opening through which to become involved.

As for suitable methods of conducting international grant-making activities, the importance of the following points became clear. (1) The importance of establishing priorities: this includes deciding what not to embark on for the time being, as well as exploring fields in which effective work is possible, by extending small-scale grants in various fields until priorities are determined. (2) The importance of establishing selection criteria, that is, criteria by which to select candidates eligible for grants. (3) The importance of having the Foundation's professional staff go out to meet people, making as wide a range of contacts as possible, and discover problems and explore ways to cope with them. (4) The importance of bringing the Foundation's activities to the attention of the public and of gaining the understanding of the public. (5) The importance of raising the quality of grants by evaluating the results of projects for which grants have been provided for reference in making future selections. (6) The importance of not straining to achieve the impossible, that is to say, the importance of awarding grants only in countries where the environment and conditions have become favorable for grant-making activities. Being a private foundation, the Toyota Foundation is not obliged to provide grants uniformly to all countries.

With the results of the investigation on these two major questions in hand, the International Division was more or less ready to commence its activities. And so at the Board of Directors' meeting held at the end of fiscal 1975, it was decided to establish an International Division Selec-

2. This has been compiled in a Japanese-language report, *Guide to Foundations*.

3. The interview results have been compiled in a Japanese-language report, *Foundations Today*.

tion Committee in the following fiscal year to consider the implementation of International Division grant-making activities on an experimental basis. It was also decided that the Foundation staff would continue investigation of the activities of foundations in Japan and overseas as well as basic studies needed to gain the information necessary for planning grant programs.

#### **The Trial Period: Fiscal 1976 and 1977**

The first task to be tackled in fiscal 1976 was providing the International Division Selection Committee with material for discussion. After blind spots in previous international exchange undertakings were noted and the results of further studies by the staff were added to the results of the fiscal 1975 investigation of Japanese exchange with other countries, a list was drawn up of matters to be given consideration in Foundation activities. Still to be considered at this time was the previously mentioned third major point: What are the problems in the fields of environment, social welfare, and culture and education in the developing countries, and what forms of response are feasible? The International Division Selection Committee discussed all these matters, concluding that before the projects under consideration could actually be implemented in the form of international grant-making activities, on-site research (limited to Asia for the time being) would be necessary. It was also felt that it would take about five years of trial and error and on-site study before the Foundation could establish a set of firm priorities for international grants that would bear the Foundation's distinctive stamp.

Between its establishment in the fall of 1974 and the end of 1975, the Foundation received 35 inquiries from around the world regarding grants. It received 28 more inquiries by the end of 1976. Although the international grant program had not yet been implemented, the Foundation had to respond somehow to these inquiries. In addition to inquiries regarding grants, there were 136 letters on other matters in 1975, and 196 in 1976.

Since English was not our mother tongue, we needed to build up a staff infrastructure to handle such international communications. We also needed to establish an overall mode of operation for the Foundation's normal overseas activities based on our detailed observations of the day-to-day activities of overseas foundations. We therefore analyzed materials on American and European foundations active in Asia and the Pacific region, studying their funding policies, fields of grant activities, examples of grants, clerical procedures, and general organization. Next we visited about ten U.S. foundations, making a thorough study of their operations. In doing so, we were given great cooperation by the Americans. On the basis of our research, we embarked on the creation of a staff infrastructure for the Toyota Foundation, giving due consideration to Japanese organizational practices.

The infrastructure gradually took shape over two years as through our first grants we gained the opportunity of actually handling grant procedures, handling foreign-currency transfers, and so on. By that time, we were also ready to cope with the letters written in English that were

reaching us from all over the world. In 1977 there were 530 such letters.

The International Division Selection Committee carefully considered the 63 inquiries regarding grants received in 1975 and 1976, searching for projects suitable for the first experimental grants. The committee finally recommended two projects that it believed would benefit greatly from grants and at the same time would not involve much risk, and these were approved by the Board of Directors (the total value of the grants was over ¥15 million). Both were projects being undertaken by international organizations based in Europe, and thus were considered to be secure. Moreover, most of our personal contacts at that time were in the United States and Europe, since we had conducted on-site study of American and European foundations. We had no contacts in the developing countries, and without personal contacts it was difficult to obtain accurate information.

In the processing of applications and the actual disbursing of grant funds the Foundation staff experienced firsthand the cultural friction that develops in negotiating with those from different cultural backgrounds. However, we managed to avoid being thrown into total confusion by cultural friction because there were only two trial cases to be handled. Since cultural friction is inevitable for Japanese organizations undertaking international grant-making activities, we can say from our own experience that it is better to experience some friction at the very start. In that way, the organization's staff will develop a certain sense of balance that will enable it to gain an understanding of differing value systems and behavioral patterns without having to reject the Japanese value system.

In addition to the international grant program, the International Division was to handle one more program. From fiscal 1976 on, the International Division was to take over responsibility for the Fellowship Program for Japanese Social Scientists (commonly known as the Nitobe Fellowships, administered by the International House of Japan) from the National Division, which had handled the program in fiscal 1975, when the International Division had not yet commenced grant-making activities. The aim of these fellowships is to train Japanese social scientists in order to promote exchange in the social sciences between Japan and other countries. These fellowships are made possible through funding from the Ford Foundation and the Toyota Foundation.

A third International Division program was to start the following year, fiscal 1977, so preparations had to begin in fiscal 1976. This was the planning of a grant program to promote international exchange. Various plans were drawn up. After their feasibility had been explored and the Board of Directors had considered them, it was decided to establish a program of grants for international conferences convened in Japan. Under this program grants for travel and accommodation expenses were to be offered to researchers coming to Japan from developing countries to attend international conferences, with applications being submitted by the organizing committees of international conferences in Japan. The aim of this program was to increase opportunities for researchers from developing countries to meet with their Japanese counterparts. There had been few such opportunities in the past. Since this was



to be the Foundation's first attempt at such a grant program, it also needed to be a sound program to begin with.

Fiscal 1976 was therefore spent in making the first international grants, providing grants for the Fellowship Program for Japanese Social Scientists for the second year, and carrying out the planning and preparatory work for awarding grants for international conferences convened in Japan.

Fiscal 1977 opened with a trip to Southeast Asia and Sri Lanka, the aim of which was to interview candidates whose applications were under review by the International Division Selection Committee, to establish personal contacts in the region, as these had been almost nonexistent, and to listen directly to the views of people in Southeast Asia. Since the Toyota Foundation has no overseas offices, prior to our departure from Japan we made arrangements for meetings through correspondence with people in the various countries. In order to accustom ourselves to conditions in the various countries, and to avoid misunderstandings, we asked neither Japanese nor Westerners living in these countries to make arrangements on our behalf. We have adhered ever since to this system of making direct arrangements and have had the cooperation of the people of the various countries.

A second visit to Southeast Asia was made half a year later. More or less as expected, we heard harsh criticisms of Japan both times. We were accused of being tools of Japanese imperialism. We felt for ourselves the apprehension and resentment of the people of Southeast Asia at the overseas advance of Japanese enterprises, Japanese economic domination, and the conduct of Japanese tourists overseas. Every Japanese should reflect objectively on the reasons for such harsh criticism and strive for better relations in the future. The Foundation was grateful for such frank and honest opinions and for the opportunity to hear the thoughts of Southeast Asians.

We were able to establish a number of reliable personal contacts through these two visits, and the views expressed by people of Southeast Asia during these visits gave us valuable ideas for new programs of cultural exchange. Especially useful were comments to the effect that while Japan, to its credit, had recently begun taking exchange with Southeast Asia seriously, it should make an effort not only to introduce Japanese culture to Southeast Asia but also to introduce the cultures of Southeast Asia to Japan. While the novels of Yasunari Kawabata and Yukio Mishima are being published in some Southeast Asian languages, we were asked, are any Southeast Asian novels being published in Japanese?

On our return to Japan we decided to tackle this issue immediately. We looked into the feasibility of publishing Japanese editions of both books written by the people of Indonesia, Malaysia, the Philippines, Singapore, and Thailand about their culture, society, and history and works of literature from these countries. The accepted view in Japanese publishing circles is that books on Asia do not sell in Japan. We checked first to see whether there were any Japanese publishers willing to publish such books, and to see how many Southeast Asian books might be suitable for translation into Japanese for general readers.

With regard to the first question, we found a few publishers that had been making efforts to bring out such books and wanted financial assistance in order to promote their publication programs. A fairly satisfactory answer to the second question was gained by sending questionnaires to about one hundred of the people with whom we had made contact in our two visits to Southeast Asia. As the International Division's fourth program, therefore, plans were drawn up for the "Know Our Neighbors" Translation-Publication Program. After thorough consideration, it was decided to implement this program the following fiscal year.

Meanwhile, the international grant program had entered its second trial year. We were beginning to obtain accurate information on projects for which grant applications had been made because we had been able to establish personal contacts in Southeast Asia through our visits and also because we had been able to interview applicants. As a result, it was decided to provide seven grants to researchers in Southeast Asia on an experimental basis. Major projects included a survey of rural-urban relationships, a project for a history of Southeast Asia to be written by Southeast Asians, and a project for a Thai textbook on demography. The number of inquiries on grants (67), the number of grants provided (12), and the total value of grants (over ¥60 million) all increased over the preceding fiscal year.

The *modus operandi* for the administration of international grants gradually took shape in the course of implementing the various programs. As part of this process we drew up an information leaflet for prospective applicants after studying the materials issued by numerous foreign foundations. Materials of this sort must be constantly revised and improved over a period of years, as their shortcomings only become apparent once they are actually in use. The guide *Information on International Grants*<sup>4</sup> drawn up by the International Division included an explanation of the Foundation's aims and activities, as well as information on application procedures and the review process. Being a guide to the grant-making activities of a newly established foundation, it also listed the fields for which grants are not given. At the Board of Directors' meeting at the end of fiscal 1977 it was decided that international grant-making activities would go into full-scale operation the following fiscal year, making full use of the information leaflet.

In fiscal 1977 there were also thirty-four applications for grants for international conferences convened in Japan. Nine applications were approved, and sixty-five specialists from developing countries received grants totaling just under ¥20 million for travel and accommodation expenses.

4. It was suggested that selection criteria for international grants should also be specified in the information leaflet. After two meetings of the International Division Selection Committee to consider the matter, however, it was decided not to include selection criteria in the leaflet. Since the social and educational environments vary from country to country in Southeast Asia, the nature of the projects suitable for funding by the Foundation would also differ from country to country, necessitating variable selection criteria. It was concluded that it was too soon to include selection criteria; more information was needed on Southeast Asia. Up to the present, however, the actual criteria for selection for international grants have differed little from those used by the National Division.

## International Activities in Fiscal 1978

In order to launch the International Division's fourth program, grants for the "Know Our Neighbors" Translation-Publication Program, we had to begin by building the framework for the program. A coordinating committee of experts on Southeast Asia was set up in Japan, and contact was also made with experts in Indonesia, Malaysia, the Philippines, Singapore, and Thailand who were likely to be interested in the program and cooperate. In April we visited these five countries and organized advisory groups made up of scholars and journalists in each country. The members were all busy people. Their cooperation indicates their generosity and their interest in the program, as well as their recognition of its need.

The advisory group in each country then began the task of selecting books suitable for publication in Japanese. Members of one group reported that the group sometimes discussed the kinds of books that might appeal to Japanese readers till late at night. Another advisory group volunteered to edit a book themselves in a certain field, since they could not find anything suitable in the range of books already published.

We were greatly encouraged by the eager cooperation of these advisory groups. They compiled lists of recommended books and explained their choices to us when we visited Southeast Asia again in July. The books on the lists were purchased at that time. After our return, the books recommended by the advisory groups were compared with those recommended by the coordinating committee in Japan. Applications for grants to support the translation and publication of the approximately fifty books that were approved by both the advisory groups and the Japanese committee were then solicited from small and medium-sized publishing firms.

We were worried whether we would receive any applications at all, but when the period for applications ended, we found that thirteen had been submitted. Since we intended to award grants only to publishers that would try to make their translations as close to perfect as possible, we carefully compared the sample translations submitted with the originals in making our selection. In the end, it was decided to award seven grants, with a total value of over ¥15 million. The works to be translated included a Thai novel and Thai ethnological essays, as well as a history of the Philippines.

More and more applications for the international grant program, which was to be implemented in full beginning in fiscal 1978, were arriving from Southeast Asia. Of the seventeen grants awarded that year, thirteen were for projects in Southeast Asia. Among them were a study of temple murals in northern Thailand, a study of the role of children's theater in the education and development of Asian children, a study of Indian communities in Southeast Asia, and a study of the treatment and utilization of effluents from palm-oil processing mills.

In fiscal 1978 the International Division also began holding seminars as a new public-information activity. The aim of these seminars, which were held when recipients of international grants happened to visit Japan, was to provide a chance for the grantees to exchange views

with Japanese people. At these seminars grantees report on the course of their research, current problems, and the outlook for the future. They also exchange views with those concerned on the Japanese side and with other interested Japanese. Three seminars were held in fiscal 1978: "Development of Plant Resources and International Joint Research," "Uneven Development and Rural-Urban Transformation in Asia," and "Efforts in Environmental Protection in Japan and Thailand."

In the first half of fiscal 1978 we concentrated on devising a framework for the "Know Our Neighbors" Translation-Publication Program in addition to our other regular activities: International Grants, the Fellowship Program for Japanese Social Scientists, and Grants for International Conferences Convened in Japan. In the latter half of the fiscal year we began planning special programs for the following fiscal year.

Fiscal 1979 being the fifth anniversary of the Toyota Foundation's establishment, it was decided that the Foundation would organize and sponsor special commemorative programs in addition to its regular activities. Naturally, any special programs planned by the International Division had to be in keeping with the spirit of the division's activities to date. We looked back over our activities: in the preceding two years, we had met many people in Southeast Asia, had heard a wide variety of views, and had conducted international grant-making activities. Through our contacts, little by little we had been learning about Southeast Asia, including the activities of children's theater there.<sup>5</sup>

Since 1979 was the International Year of the Child, we made plans to hold an International Workshop on Living Children's Theater in Asia. This decision was made because up to then there had been almost no exchange among the Southeast Asian countries themselves or between these countries and Japan in regard to children's theater, nor had Japanese children had much chance to encounter the children's theater of Southeast Asia. That we had made contact with a number of people involved in children's theater in Southeast Asia was another major factor in our decision.

#### **International Activities in the Fifth-Anniversary Year: Fiscal 1979**

Early in fiscal 1979 we began making detailed plans for the Asian children's theater workshop. This workshop, to be attended by participants from Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Japan, was to include both performances and conferences. We hoped for the participants to learn from one another's performances and to be able to exchange views while living together.

The Japanese government was planning to sponsor a festival, "Children in Japan and Around the World," at Aichi Youth Park in August to commemorate the International Year of the Child. We decided that the workshop would participate in this children's festival and give performances there as well as in the nearby cities of Nagoya and Toyota. The workshop would then move to the National Women's Education

5. By "children's theater" we refer to a wide range of theatrical, educational, and entertainment activities for children, including drama, pantomime, puppet theater, dance, music, and storytelling.

Center in Ranzan, Saitama Prefecture, where conferences as well as performances were scheduled.

As workshop participants we sought those who fulfilled the following three conditions: (1) people involved with children's theater not on a commercial but on a volunteer basis; (2) young people with a promising future rather than those of established fame; and (3) members of groups trying to blend traditional and modern aspects of culture rather than merely imitating Western children's theater or trying only to preserve their own traditional arts.

In April we visited the five Asian countries mentioned above to make arrangements for the workshop, which was to begin in August. In Japan, meanwhile, we asked for the support of prefectural and municipal boards of education in gathering Japanese children. We also arranged theater space and accommodations, printed programs for the performances and conferences, and planned the transport from one site to another of the workshop participants and stage sets. For the Toyota Foundation staff members, who seldom have a chance to undertake such tasks, this workshop and the preparations it entailed were excellent training. The children's theater workshop, which lasted two weeks, with thirty-four youthful participants from Southeast Asia, turned out to be a most valuable experience for everyone involved.<sup>6</sup>

As for the International Division's grant activities in the Foundation's fifth-anniversary year, the second year since the international grant program had got under way in earnest, twenty grants amounting to almost ¥80 million were awarded. Fifteen grants went to researchers in Southeast Asia, including a grant for the drafting of a proposal for a counseling and welfare organization for female factory workers in Malaysia (the HAWA Project); the survey and microfilming of the Lanna Thai palm-leaf manuscripts in northern Thailand; a study of problems of the urban ecosystem of Jakarta in the areas of development, industry, and traffic; and research on methods of preserving Thai temple murals.

As of fiscal 1979, we are still going through the process of trial and error in establishing our international grant priorities. Our basic course for the future, however, is beginning to take form. First, there is our basic policy of awarding grants within the limits of the Articles of Endowment and the guide *Information on International Grants*. Second, we are concentrating on Southeast Asia for the time being, though our grants are not intended for countries that are already in an intermediate stage of development. Furthermore, we recommend the appropriate redirection of applications for projects in fields that fall within the special priority areas of other foundations or funding organizations. As a rule, we also recommend that international organizations apply to other funding sources. We do not give grants for personnel costs unless this is deemed absolutely necessary. The types of projects eligible for Toyota Foundation International Division grants include research, translation, and international conferences convened in Southeast Asia.

In order to formulate a perspective on international grants unique

6. A record of the entire workshop was compiled in the report on events commemorating the fifth anniversary of the Toyota Foundation's establishment under the title "International Workshop on Living Children's Theater in Asia." The performances were recorded on 8 mm. film.

to the Toyota Foundation, we must further expand our network of personal contacts in Southeast Asia to include people in provincial cities, and we must also evaluate the projects that the Foundation has funded to date. Application procedures are basically as follows. All inquiries regarding applications are to be addressed directly to the Toyota Foundation. The review of applications normally takes between six months and one year. Applications are accepted all year round.

The international Fellowship Program for Japanese Social Scientists has entered its fifth year. Grants awarded now total ¥130 million. This program, which as of 1979 is jointly funded by the Toyota Foundation, Ford Foundation, and Japan Foundation, has created thirty-five fellows so far. These young scholars have all been highly active in their fields both overseas and at home. A review of this program seems called for at this time, however, because it has continued uninterrupted for five years now and has produced more than one-third of the targeted one hundred fellows, and also because of overlapping areas with the Fulbright and other fellowship programs.

In fiscal 1979 three grants were awarded for international conferences convened in Japan. During the past few years opportunities for specialists from developing countries to obtain funding for travel to Japan have increased through various programs sponsored by the Japan Society for the Promotion of Science, the Japan International Cooperation Agency, the Japan Foundation, and the Commemorative Association for the Japan World Exposition (1970), as well as private foundations. Taking these developments into consideration, it was decided at the meeting of the Board of Directors at the end of fiscal 1979 to terminate this program after the next fiscal year.

In the two years since the "Know Our Neighbors" Translation-Publication Program was inaugurated, a total of nineteen books have been selected: nine from Thailand, four from Indonesia, three from the Philippines, two from Malaysia, and one from Singapore. Nine books have already been published in Japanese. Since we hope to interest the general reading public, many of the works chosen are fiction. The nineteen books selected include twelve works of fiction, three ethnological studies, two histories, and two collections of poetry. Now, at the end of fiscal 1979, this program finally seems to be running smoothly. Our next task is to find a way of making the Japanese public aware of these books.

The theme of the International Division seminar in fiscal 1979 was "Japanese Villages from Southeast Asian Perspectives."

The above account of the course of International Division activities over the past five years has focused on an exposition of the development of the various activities, which has entailed considerable explanation of various matters, so that the account may have been somewhat difficult to follow in places. But in reality there always were a number of tasks in hand at once, each presenting its own problems. Our tasks for the future have also been touched on above.

**Kazue Iwamoto**

Program Officer, International Division

## Grant Program

### National Division Grants

This fiscal year, in addition to the three established fields—human and natural environments, social welfare, and education and culture—we selected a special theme, “Special-Subject Research: Changes in Local Communities,” which links all three fields, and publicly solicited applications during April and May, as usual. We received 682 applications requesting a total of over ¥2.9 billion. The selection committees met during June and July, and it was decided to provide grants totaling ¥270 million to 87 applicants. This year’s grants can be characterized as follows:

1. The average age of applicants was somewhat lower. We stated our selection criteria clearly in the application literature and endeavored to provide grants for research that was both original and appropriate for funding by a private foundation. To achieve this we also gave some thought to indirect ways of attracting younger researchers, and the lower average age apparently resulted from these efforts.

2. The total number of projects for which grants were awarded was higher, with smaller grants being awarded in each case, than in previous years. This seems to be the result of the introduction of a special research theme, which had a smaller budget than the three regular fields, and the increased proportion of preliminary research projects funded (at a maximum of ¥1.5 million per project).

3. There were no major changes in the three regular fields. It is probably fair to say that our objectives as a private foundation were made clearer than in the past and that the research projects selected for grants showed a great deal of variety because of such factors as the institution to which the researcher belonged and the researchers’ systems and methods.

4. Our special-subject research on changes in local communities was intended to develop research activities deeply rooted in regional society. This was our first attempt at such a project, and the results were in keeping with our initial aims.

Two symposiums on grant-supported research were held during fiscal 1979:

The Japanese and the Americans: Significance, Methodology, and Possibilities of International Comparative Studies (February 14, 1980)

Coping with the Problems of Aging: Exploring the Long-Term Issues (March 22, 1980)

## Human and Natural Environments

### Basic Research for Development and Utilization of Gas Sensors Using Metal Oxides

Tetsuro Seiyama, Professor (and two associates)  
Kyushu University

¥3.7 million

Gas sensors are noted as simple devices for detecting flammable gases, oxygen, and moisture. Their discriminatory ability, however, leaves much room for improvement.

The present research seeks to clarify the surface phenomena by which gas sensors using metal oxides identify gases and to systematically evaluate various metal oxides for their gas-detecting properties. This project will undertake, in particular, to study the adsorption, desorption, and surface reactions of metal oxides in the presence of flammable gases, oxygen, and moisture by means of thermal desorption and other techniques; to examine mixed oxide materials, such as perovskite oxide, for possible use in moisture and oxygen sensors; and to improve the discriminatory ability of flammable-gas sensors by adding catalysts.

### Basic Research on Biological Hazards and Pathogenetic Mechanisms of Environmental Chemicals

Kengo Nakai, Professor (and ten associates)  
Department of Pharmacology, School of Medicine, Akita University

¥5 million

Most research on the harmful effects of heavy metals, agricultural chemicals, and other environmental chemicals has just identified harmful phenomena without investigating the underlying mechanisms.

This project, a continuation from last year, will quantitatively study the absorption, distribution, and effects of environmental chemicals on laboratory animals at the molecular, cellular, and organic levels. Last year, using experimental animals, the relationship between the experimental animals' nutritional state and the ingestion of heavy metals and organic pollutants by the epithelial cells of small-intestine mucosa was clarified. This year a research team consisting of morphologists, biochemists, and biophysicists will carry out similar research on the visual, renal and urinary, reproductive (especially testicular), endocrine, and gastrointestinal systems in order to elucidate the general principles of the pathogenetic mechanisms whereby environmental chemicals harm organisms.

### The Psychosomatic Effects of Infrasonic Noise in an Urban Environment

Osamu Okai, Associate Professor (and six associates)  
School of Medicine, Kyorin University

¥3.5 million

Infrasonic noise is inaudible and does not directly cause pain. As a result, people exposed to even a high level of infrasonic noise remain unaware of its existence, and symptoms and functional disorders pro-

duced by infrasonic noise are often treated as internal disorders of unknown cause.

This research seeks to elucidate the psychosomatic effects of infrasonic noise, measure the extent to which urban residents are exposed to infrasonic noise, and devise measures to reduce the level of environmental infrasonic noise. In particular, researchers will analyze ultrasensitive subjects' bodily reactions to infrasonic noise by testing them in terms of electrocardiograms, sphygmograms, respiratory waves, and blinking response. This will enable the discovery of the ways in which infrasonic noise affects body functions and the symptoms to which it gives rise. The researchers will then devise medical methods for evaluating the influence of infrasonic noise and acoustical methods for reducing it.

### A Preliminary Study of the Drop in Peripheral Vision During High-Speed Night Driving

Naoyuki Osaka, Associate Professor (and one associate)  
Department of Psychology, Otemon Gakuin University

¥1.04 million

Safe driving depends heavily on the ability to decipher visual information cues. While driving, a subject obtains much visual information from the central field of vision. Peripheral vision, however, also plays an important role in safe driving. The visual field during daytime driving is wide, and over ninety percent consists of the peripheral field of vision. During nighttime driving, visual cues diminish, and peripheral vision becomes very poor, often leading to accidents.

This project will study the psychophysical and psychophysiological effects that flash blindness has on visibility during nighttime driving and will carry out preliminary studies aimed at developing methods for measuring the subjective estimation of speed under conditions of limited effective peripheral vision.

### Studies for Practical Application of a Model for Estimating Road-Network Demand from Observed Traffic Flows

Yasunori Iida, Associate Professor (and two associates)  
Department of Construction Engineering, Kanazawa University

¥4 million

For the most effective use of road networks, roads should be differentiated by function and used accordingly. For this purpose it is necessary to accurately estimate traffic demand on a given road network and adapt traffic regulations and traffic control to this demand. However, present methods of estimating traffic demand are inadequate for existing road networks.

The present research will study the applicability of a model developed by this researcher for estimating road-network demand from observed traffic flows. The researcher will devise methods for determining values of four predetermined variables of the model and their variations, calculate the extent to which variations in the values influence estimate error, and devise corrections for variations to ensure greater estimate accuracy. This model will enable researchers to determine more accurately the origin, routes, destina-



tion, and points of concentration of traffic on a given road network.

#### Cytological Studies on Fishes

**Makoto Murofushi, Associate Professor**

Biology Laboratory, Mishima Junior College, Nihon University

¥1.17 million

Practical and basic karyological research on fishes has made considerable progress recently, partly because visible hereditary traits can be studied and analyzed. However, only four percent of all fish species have been studied karyologically, and most of these are fresh water species. Most migratory salt water species, including some that are important commercial marine products, have not been studied at all, either because experimental specimens are difficult to obtain or because of technical problems.

This project will use a newly developed method to examine the chromosomes of various migratory salt water fishes, especially the commercially important carangids (horse mackerel) found off the coast of Japan, with a view to better understanding the carangids' reproduction and cytogenetic mechanisms. It is hoped that this will lead to a better grasp of the genetic makeup and evolution of fishes off the coast of Japan and provide clues as to how coastal pollution affects fishes living in these waters.

#### The Effect of Human Activities on the Concentration of Heavy Metals in the Global Environment

**Masayo Murozumi, Professor (and seven associates)**

Muroran Institute of Technology

¥7.2 million

Human activities cause changes in the concentration of heavy metals in the global environment. For example, the concentration of lead in the snow of northern Greenland has been increasing since the dawn of history. The concentrations of other heavy metals as well are no doubt increasing.

This project, carried out in cooperation with U.S. and Canadian researchers, will measure the ocean concentrations of copper, cadmium, thallium, silver, and lead as ions and atoms, in particulate matter, and in plankton at depths of 0 to 6,000 meters. The research team is already experienced in the measurement of minute quantities of heavy metals using special analytical methods, equipment, and facilities. Future research will focus on comparing analytic methods and evaluating data analyzed by different methods. This research will yield valuable data for understanding global pollution mechanisms and will give young researchers of different nationalities an opportunity to learn from one another.

#### Sensitive Measurement of Atmospheric Pollutants Using a Raman Scattering Apparatus

**Masanori Jumonji, Associate Professor (and three associates)**

Hachinohe Institute of Technology

¥2 million

Atmospheric pollution is usually measured by chemical sampling, but this method is complicated and not

very accurate. In contrast with "wet" chemical measurement, "dry" laser measurement is quick and can be performed at a distance. Laser measurement has already been conducted in the laboratory using a Raman scattering apparatus, but this apparatus is not widely used because of its complexity, low sensitivity, and high cost.

This project will build and test a new Raman scattering apparatus using a narrow-band interference filter and a high-energy, multiple-emission dye laser to try to improve sensitivity, increase the signal-to-noise ratio, and greatly reduce cost. Such an apparatus could be used to analyze auto emissions and improve air-quality control.

#### Developing System Models for Integrated Pest Control

**Shun'ichi Iwao, Professor (and four associates)**

College of Agriculture, Kyoto University

¥3.11 million

After World War II Japanese farmers began to use synthetic organic pesticides to control pests. Excessive use, however, gave rise to pest resistance, environmental pollution, and other problems. Meanwhile, entomologists have come to accept the idea of integrated pest control. This method seeks to establish various factors that affect pest populations and to make maximal use of natural control mechanisms to maintain the pest population below a level where it causes commercial damage. Control measures include the development of pest-resistant crop varieties, the use of sex pheromones, and sterilization.

The present research seeks to develop a model that enables quantitative evaluation of the relationship between pest population density and dynamics on the one hand and crop damage on the other, as well as quantitative evaluation of the effectiveness and secondary results of control measures. The project also seeks to develop simulation techniques using a large amount of field data.

#### A Preliminary Study on the Optimal Means for Evacuating a Civil Population from a Large-Scale Fire

**Fumio Hara, Associate Professor**

Tokyo University of Science

¥1.5 million

A major earthquake in the Kanto-Tokai region of eastern Honshu is expected in the near future. Devising safety measures is an urgent matter. As shown by the great Kanto earthquake of 1923, large earthquakes cause injury and loss of life mainly through the large-scale fires that break out after the quake rather than through collapsing buildings during the quake. A system and facilities for evacuating large areas besieged by fire need to be established.

This project will introduce a mathematical model of fire-evacuation psychology into a model of evacuation flow dynamics during a large-scale fire, quantitatively evaluate hypothetical evacuation by computer simulation, and verify the model by comparing simulation results with records of the great Kanto earthquake. A fuzzy control technique will also be intro-

duced into the program. The model will then be used to discover the best evacuation plan and best urban layout for evacuation.

**An International Comparative Study of Citizen Awareness of Forest Environment**

Tsunahide Shidei, Leader (and eleven associates)  
The Working Group on the Forest Environment  
¥8 million

There are considerable differences in various countries' forest-environment conservation systems. These differences are due more to differences in each country's citizens' awareness of forest environment than to differences in natural conditions. Introducing other countries' conservation systems without considering such differences in citizen awareness amounts to little more than blind imitation.

With this in mind, this study, a continuation from last year, will seek to clarify awareness of the forest environment in Japan, West Germany, and France by means of questionnaires and use this data to study the relation between citizen awareness and (1) natural conditions and (2) forest-environment conservation measures in the three countries. This year researchers will use the results of last year's preliminary research to perfect survey content and methods. A larger sample covering a greater area in all three countries will be surveyed.

**A Study of the Ecology of Indicator Animal Species (Especially Benthic Species) in Organically Polluted Sea Water**

Gotaro Yamamoto, Professor (and five associates)  
Faculty of Marine Science and Technology, Tokai University  
¥3.33 million

Japan's coastal waters are becoming eutrophic, and organic pollution is particularly bad in some areas. The prevalence of certain bottom-dwelling (benthic) animal species can be used to indicate the extent of organic pollution in these waters. Plankton and other water organisms that are sensitive to changes in water quality are often used as indicators of pollution. Bottom-dwelling animals, however, might serve as better indicators of the long-term cumulative effects of pollution.

This project will investigate the local distribution of bottom-dwelling animals that can serve as indicators of organic pollution and establish the relationship of their distribution to that of standard indicator water organisms. The distribution of bottom-dwelling animals in relation to distance from pollution sources and currents in the Tagonoura and Mochimune harbors has already been studied. In the coming year the environmental tolerance and life cycle of important indicator animals will be studied.

**A Study of Transport and Removal Mechanisms of Chemical Substances in the Atmosphere**

Shizuo Tsunogai, Associate Professor (and four associates)  
Faculty of Fisheries, Hokkaido University  
¥4.1 million

Basic to preserving the earth's atmosphere is an un-

derstanding of the behavior of chemical substances released into it, the processes by which these substances give rise to aerosols, and the transportation of these aerosols in the atmosphere.

This project, a continuation from last year, seeks to clarify the above phenomena by measuring the precipitation rates of and changes in various atmospheric pollutants and lead-210 from monitoring stations in Nagoya and near Hakodate. The rare gas radon-222, naturally released from the earth, decays with a half-life of 3.8 days into lead-210, which then precipitates. By measuring and comparing the precipitation rates of various pollutants and lead-210, the pollutants' stability in the atmosphere can be ascertained. Moreover, by measuring the radioactivity of the aerosol components bismuth-210 and polonium-210 and comparing each with the radioactivity of lead-210, the average residence time of aerosols in the atmosphere can be ascertained, since the ratio of these elements to lead-210 increases with time.

Last year was spent developing the research methods. This year further data will be collected and a model of the transport and removal of various substances transported on a large scale in the atmosphere will be constructed.

**A Comparative Study of the Causes and Control of Cardiovascular Diseases in Japanese, South Korean, and Philippine Rural Communities**

Shuichi Hatano, Head of the Department of Epidemiology (and three associates)  
Tokyo Metropolitan Institute of Gerontology  
¥5.89 million

Apoplexy (stroke) causes a high portion of deaths among East Asians. A leading cause of apoplexy is high blood pressure, which is affected by diet and environment.

Researchers in the Philippines, South Korea, and Japan will cooperate to assess the prevalence of cardiovascular risk factors in the three countries and the causes of this prevalence or the lack thereof. The researchers will measure the blood pressure, weight, skin thickness, and various biochemical factors of 1,000 male and female subjects between 40 and 64 years of age in each country. Consideration is being given to assuring a common level of technology in all three countries. The project will also compare medical-examination and blood-pressure-control methods. Finally, a plan for controlling high blood pressure will be devised with the hope that it will contribute to controlling apoplexy.

**Land Evaluation for Multiple Cropping of Paddy Lands in Tropical Asia**

Hayao Fukui, Associate Professor (and three associates)  
Center for Southeast Asian Studies, Kyoto University  
¥4.65 million

More intensive land use by multiple cropping with different or multiseasonal crops is one of the few possibilities for increasing food production in tropical Asia, where it is difficult to expand arable land. But to introduce multiple cropping it is necessary to locally test crops and crop varieties to be introduced,

elucidate local planting conditions, survey and evaluate local land conditions, and extend arable land. The last two objectives can be accomplished only with an understanding of local water conditions. However, Western methods of classifying and evaluating land use, developed for dry-land cultivation, cannot be applied unchanged to paddy lands.

In this project, a continuation from last year, researchers are seeking to devise methods for classifying and evaluating the land use of rice-producing areas with cooperation from the International Rice Research Institute in the Philippines. Last year the researchers established the possibility of using photographs from LANDSAT, an earth observation satellite, for such classification and evaluation. This year they will further refine techniques by applying them to areas in Thailand.

Toward a Quantitative Understanding of Change in the Natural Environment Using Moths as a Bioindicator

**Akira Miyata, Associate Professor**  
Department of Biology, Medical College of Oita  
¥3.15 million

Human activities exert many and varied influences on the natural environment. Urbanization, in particular, has resulted in dramatic changes in the natural environment. It is difficult to assess quantitatively the changes in an area that once was natural and now is not. Developing such a yardstick will provide a useful tool for development planners.

This research, a continuation from last year, seeks to establish the number of moths and moth species in an area as such a yardstick. For this purpose it is necessary to ascertain the original natural environment's moth fauna, the moth species that disappear with the destruction of the natural environment, and the moth species that appear only in human environments. Last year an attempt was made to revive the moth faunas of lowland forests in Kyushu. This year the moth faunas of various environments in Oita Prefecture will be investigated, past and present moth faunas will be compared to discover how environment-specific species have fared, and a general environmental index based upon moth faunas will be established.

Measuring Driver-Vehicle System Performance and Devising Traffic-Management Standards for Safe Driving

**Takayuki Funatsu, Professor (and seven associates)**  
Faculty of Literature, Kyushu University  
¥4.03 million

In the past, controlling the driver has been the focus of traffic safety efforts. Because traffic accidents occur at the interface between the vehicle and the road environment, however, to establish traffic safety one should rather seek to control the driver-vehicle system.

The research, a continuation from last year, will work toward establishing standards for safe driving by measuring the frequency of rapid acceleration, rapid deceleration, and sharp cornering. The research-

ers have developed a meter for measuring such frequencies, and last year they used the device to gather data from three hundred taxis. This year they will continue to gather data and work to develop a safe-driving control system. This research is being carried out with the cooperation of the Taxi Service Association. It is hoped that the results will lead to a greater degree of traffic safety.

A Study of Organic Polymers in the Urban Aquatic Environment and Their Significance in Environmental Change

**Ryoshi Ishiwatari, Associate Professor (and four associates)**  
Faculty of Science, Tokyo Metropolitan University  
¥6.3 million

Organic compounds dumped into lakes and rivers form dark-brown, nonbiodegradable polymers called kerogens, which gradually accumulate. In urban areas human activities cause a large volume of various organic compounds to collect in bodies of water, and it is thought that the kerogens formed in urban waters differ from those formed in non-urban waters.

This study, a continuation from last year, will compare kerogens found in polluted bodies of water with those in nonpolluted bodies of water in terms of chemical properties and reactions with other organic compounds to see what effect nonnatural kerogens have on an aquatic environment. Last year, laboratory experiments revealed that kerogens are highly reactive with other organic compounds, uniting readily with organic matter. This year the behavior of kerogens will be studied using radioactively labeled compounds as tracers.

Basic Research on Controlling Wild Pigeons Habituated to Human Environments

**Fumio Sugimori, Chief Researcher (and three associates)**  
Yamashina Institute for Ornithology  
¥5.5 million

Wild pigeons habituated to human environments have recently been rapidly increasing in number. Wild pigeons in Japan used to be found only in the precincts of shrines and temples, where people would feed them. Now, however, they are a common sight in cities, towns, and villages. Pigeon populations present various hazards to human health, daily life, and industries. Japan now shares an ecological problem common in other industrial countries.

This research seeks to develop methods for controlling the number of pigeons and preventing "pigeon pollution." The researcher will investigate the number, distribution, and breeding habits of pigeons and will experiment with various methods of capturing them and otherwise controlling their population density.

Analysis of Trace Halocarbons in the Atmosphere and Their Geochemical Behavior

**Takeshi Tominaga, Professor (and three associates)**  
Faculty of Science, University of Tokyo  
¥6.3 million

Long-lived halocarbons are believed to reduce the

amount of ozone in the stratosphere. To accurately assess their effect, global monitoring of their atmospheric concentrations is needed. Yet at present precise data exist only for the atmosphere above the United States; no reliable data exist for the Eastern Hemisphere.

This research, a continuation from last year, seeks to discover the average atmospheric concentration of halocarbons in the Eastern Hemisphere and the polluting impact of short-lived halocarbons in urban areas. Last year a device for precisely measuring halocarbons was built, calibrated, and used for test measurements. This year atmospheric concentrations of halocarbons will be monitored from the earth's surface and from aircraft. This year's research will involve interlaboratory calibration and a comparison of pollution profiles in Japan and the United States in cooperation with Professor F. S. Rowland of the University of California, who first noted halocarbons' effect on stratospheric ozone. This research, it is hoped, will enable an evaluation of halocarbons' effect on the global environment.

A Study of the Ecology and Nutritional Requirements of Dinoflagellates That Induce Ciguatera  
**Takeshi Yasumoto, Professor (and four associates)**  
Faculty of Agriculture, Tohoku University  
¥7.09 million

The fishes of tropical and subtropical coral reefs sometimes become poisonous and cause a type of food poisoning called ciguatera. Such poisoning not only poses a public health problem but also hinders the development of coastal fisheries and deprives local inhabitants of a valuable source of protein. Since construction work near coral reefs often induces the fishes in these waters to become poisonous, such economic development is undertaken with reserve. The research team has already discovered that fishes become poisonous by eating seaweed to which toxic dinoflagellates have attached themselves. The researchers have also devised a method for determining the distribution of dinoflagellates. However, what causes dinoflagellates to proliferate suddenly and how to prevent this sudden increase are still unknown.

With cooperation from local researchers this study will undertake, through ecological surveys and laboratory experiments on dinoflagellate nutrition, to discover the mechanism whereby development-related environmental changes induce fishes to become poisonous. The researchers will investigate the distribution of toxic dinoflagellates in areas where ciguatera often occurs, indicators of poisoned waters, and the causes of sudden increases in dinoflagellates.

A Study of Human Reaction to a High-Rise-Dwelling Environment  
**Toshikazu Yukawa, Professor (and five associates)**  
Faculty of Home Economics, Nara Women's University  
¥3.46 million

High-rise dwellings began appearing in Japan only ten years ago, yet the proportion of Japanese living in such dwellings has been increasing considerably in recent years. Many Japanese have difficulty in adjust-

ing to life in these dwellings. Such difficulties are neither sufficiently understood nor compensated for in the planning and management of such high-rise dwellings.

This study will attempt to clarify the influence that life in high-rise dwellings has on residents. This will involve questionnaire and interview surveys designed to reveal such factors as the leisure activities, time spent away from home, fear of crime, and incidence of neurosis of residents. Researchers experienced in this field will collect ample data on a large sample with the aim of acquiring knowledge that will contribute to urban planning and the planning and management of high-rise dwellings.

Fundamental Biology of Red-Tide Microflagellates in Japan, with Special Reference to Their Fine Structure and Taxonomy

**Terumitsu Hori, Associate Professor (and four associates)**  
Institute of Biological Sciences, University of Tsukuba  
¥3.5 million

Many Japanese studies of red-tide blooms have focused on nonbiological, environmental factors. Basic biological research on red-tide organisms themselves is backward, and knowledge in this area is scanty. As a result, major red-tide organisms are often taxonomically misidentified.

This study, a continuation of last year's research, will thoroughly survey Tokyo Bay and Kesennuma Bay for red tides, investigate the morphology and fine structure of red-tide organisms using scanning and transmission electron microscopy, and study the physiology and life cycles of these organisms in culture. The knowledge gained will serve as a guide for taxonomic identification of red-tide organisms, enabling a better understanding of their presence in Japanese coastal waters.

Environmental Pollution of the Japan Alps Due to Mountain Climbers

**Setsuji Nishizawa, Technical Research Supervisor (and nine associates)**  
Nagano Research Institute for Health and Pollution  
¥2 million

The recent increase in the number of climbers in the Japan Alps has brought about a situation in which drainage from lodges threatens to pollute nearby rivers and springs. Most of the Japan Alps, one of Japan's most noted mountain areas, is within a national park. Avoiding human-induced pollution is thus most desirable, but little has been done so far.

This research will investigate human-caused pollution in the Japan Alps with the aim of preserving the water quality of streams and springs. The project will involve measuring ammonia nitrogen and chloride ions, taking coliform counts, and so on to clarify the extent of pollution due to excreta and kitchen drainage. Tests will be run on three mountains, Yari, Hotaka, and Kamikochi, from April to November, spanning the climbing season. The results will then be used to devise measures for controlling pollution. One feature of this research is its emphasis on bacteriological testing.

## Social Welfare

### A Preliminary Study on the Relation Between the Genesis of Schizophrenia and Contact with European Culture

Masaaki Noda, Psychiatrist

Red Cross Hospital, Nagahama, Shiga Prefecture

¥1.17 million

Until now it has been assumed that psychoses, and in particular schizophrenia, were somatogenic disorders shared by all races alike. Yet psychotic patients manifest considerably different psychiatric symptoms depending on the culture or society in which they live. The change that emerges in people's life styles as they shift from communal village life to urban life, when viewed from a different historical perspective, parallels the change that occurs in non-European countries when people come in contact with European culture for the first time. Through this contact, the relationship between individual and society is rigorously called into question.

The present study proposes two hypotheses. The first is that a close link exists between contact with European culture at the character-forming stages of puberty and adolescence and the onset of schizophrenia. Second, the switch from traditional values to modern rationalism generates a psychic crisis in the individual, involving an initial response of confusion, followed by delusions of grandeur, in response to the alien culture. A survey based on these two hypotheses will be conducted in Papua New Guinea this year, observing psychiatric patients in hospitals and in daily life.

### Physical Adaption to the Stresses of Urban Life

Eimatsu Takakuwa, Professor (and three associates)

School of Medicine, Hokkaido University

¥2.9 million

The growing complexity and diversification of the human environment in large cities give rise to various conditions to which it is difficult to adapt physically and which impose stresses on the human body. It is important to elucidate bodily adaption to these stresses in order to ensure a comfortable life for people in modern society.

The present study, a continuation of work done in fiscal 1977, aims to clarify various factors relating to physical adaption by determining the physiological and biochemical adaption of Hokkaido inhabitants to various changes in their living environment, and to compare the impact of urbanization on people living on Honshu and those living in colder regions. Physiological appraisals will include using the TAF apparatus, devised by this researcher, for measuring concentration span and conducting flicker tests. Biochemical tests will measure levels of dopamine- $\beta$ -hydroxylase, corticosteroids, lipid peroxide, and lipids. After the relationships among these various factors have been clarified, it is planned to compile basic data on the requisite conditions for a comfortable human environment.

### Preliminary Research on Municipal Associations in Asia

Go Nakagawa, Professor (and one associate)

Faculty of Law, Hiroshima University

¥1.4 million

Japan's municipal block associations were abolished at the request of GHQ in 1946. They have now been restored throughout Japan as voluntary groups that include about ninety percent of Japanese households. Municipal associations in Britain and the United States are formed with the consent of the community's members and are set up on the basis of a social contract. Japan's municipal block associations are composed of people who live within a short distance of one another, and are not incorporated. Are municipal block associations of the Japanese type an isolated phenomenon? Are they a sign of backwardness?

In the present study surveys will be conducted in South Korea and the Philippines, where similar organizations exist. On the basis of local surveys and data gathered in these countries, the organizational principles underlying municipal associations in Asia and Europe will be compared. This year preliminary studies will be carried out to establish research methods and a tight-knit cooperative setup with researchers in the countries concerned.

### Development of a Device to Record the Environmental and Physiological Conditions of Ambulatory Patients

Tatsuo Togawa, Professor (and five associates)

Institute for Medical and Dental Engineering, Tokyo Medical and Dental University

¥3.8 million

Diagnostic and therapeutic techniques in hospitals and other medical facilities are highly advanced, but techniques to monitor the physical condition of people at home or at work are still inadequate. Yet many diseases or accidents could be prevented if the circumstances surrounding their occurrence were analyzed. Ascertaining the physiological condition and environmental situation of individuals in everyday life is a major technological task for future medicine, welfare, and public safety.

This study attempts the development of a very small measuring and recording device that can be attached to the body and can measure and record the subject's physiological and environmental conditions during normal activities over an extended period. The use of semiconductors and microcomputers will enable instantaneous data readout and processing. The device will be tested on outpatients, discharged patients, workers in special jobs, elderly people, and athletes, automatically recording data regarding their physiological state and environmental situation.

### A Comparative Study of Social Anxiety in Japan and Australia with Special Reference to Crime and Traffic Accidents

Kanehiro Hoshino, Chief Researcher (and seven associates)

Environment Section, National Research Institute of Police Science

¥5.31 million

Today the problems of energy, population, food supply, and environmental pollution are regarded as social problems affecting the whole world. Until now, however, there have been few corroborative studies investigating the extent to which people feel social anxiety over these problems.

The present study aims to clarify the patterns of social anxiety in Japan and Australia by measuring the degree of social anxiety people in these two countries feel regarding worldwide problems, such as population, natural resources, industrial structure, and crime; economic problems, such as rising prices and recession; and problems of personal security, such as crime and traffic accidents, which affect both life and property. An analysis will then be made of the level of social concern in relation to the social and economic conditions of each country. In addition, the study proposes to investigate indicators of social anxiety, the way public information is manipulated to reduce social anxiety, the relation between anxiety over crime and traffic accidents and anxiety in other areas, and measures taken to reduce social anxiety over crime and accidents.

**A Study of Problems of an Aging Society, Focusing on the Life Plans and Values of the Middle-aged and Elderly**

**Sachiko Kikuchi, Professor (and seven associates)**  
Department of Human Science, Bunkyo University  
¥3.01 million

In today's society middle-aged and older workers are threatened by employment insecurity. In dealing with this problem, such measures as deferring mandatory retirement and amending the pension system to ensure financial security in old age are important issues. Equally important, however, is the individual's establishment of an overall plan for life after middle age.

In the present study, middle-aged and older workers and their spouses will be interviewed regarding the extent of their plans for old age. Interviewees will be asked to provide such details as their plans for health care, financial security, housing, and family relationships. At the same time, the amount of time allotted to work and to leisure will be ascertained, and the degree of self-realization and participation in society will be investigated. Armed with this information, the study will attempt finally to discover what makes life worth living in old age for the so-called work-loving Japanese. Married couples and their children in Yokohama and Toyota cities will be interviewed in order to ascertain generational differences in attitudes toward life planning.

**A Preliminary Study on Social Welfare Education in Southeast Asian Countries**

**Chiaki Ueda, Dean (and two associates)**  
Faculty of Sociology, Bukkyo University  
¥1.42 million

After World War II Japan's universities began offering courses in social welfare. Today, finally, they have formulated special curricula that no longer merely imitate the social work education systems of the West but respond to the welfare needs peculiar to Japan. In

disengaging itself from the system of social welfare education in the West, Japan is seeking to base its own education system on Asian principles. Universities in Southeast Asia involved in social welfare studies hold similar ideals and have shown increasing interest in learning from social welfare education in Japan. At present, however, social welfare education circles in Japan are largely uninformed about social welfare, and particularly education in this field, in Southeast Asia.

The present study will attempt to survey social welfare education in Southeast Asian universities. Eventually, it is hoped, these survey results will be utilized to realize the desire of social welfare researchers in Southeast Asia for a single institute where researchers and students from all countries in the region can study.

**Social Equality and Political Systems: A Comparison of Highly Industrialized Countries**

**Ichiro Miyake, Professor (and four associates)**  
Department of Political Science, Doshisha University  
¥6.3 million

An important topic of debate in advanced industrial nations today concerns the meaning of social equality and justice. The advent of low economic growth has deepened the urgency of the issue. What are the points of agreement and contention on this topic, and how is each country approaching a solution?

In the present research, a continuation from last year, opinion leaders in Japan will be surveyed as to their attitudes on the merits of egalitarian and just policies in view of the policy options presently open to Japan. Comparative analyses will then be made with data from similar surveys conducted in the United States, Sweden, West Germany, Canada, France, Britain, and Italy. Survey content and samples were determined in a preliminary study carried out last year, the results of which will be used in conducting a full-scale survey. The survey in Japan, part of a large-scale joint international research project to be coordinated by the Center for International Affairs of Harvard University, will be of significance in providing an objective assessment of Japanese attitudes toward the concepts of equality and justice.

**Research on Job Systems for Older Workers in an Aging Society**

**Mitsuo Nagamachi, Professor (and seven associates)**  
Faculty of Engineering, Hiroshima University  
¥2.72 million

Japanese society is aging at an unexpectedly rapid rate. A natural result is the increasing number of middle-aged and older workers, which companies fear may lead to the lessening of production efficiency and the hindering of corporate profitability. Thus corporations are trying to exclude older workers.

The present research will elucidate the abilities and special traits of older workers and propose the formation of a job system whereby older workers can contribute in their own way to production and corporate activities. Such a system will be made feasible through introducing automation and improved sys-

tems to compensate for any lessening of ability or function in older workers while making full use of those abilities heightened by experience. A manufacturer of household electrical appliances has already successfully implemented such a job system. The present research proposes to develop a similar job system for older workers in a steel company after conducting a human-engineering survey in the company.

#### A Survey on Development of Community Health Care

**Kyoichi Sonoda, Associate Professor (and twelve associates)**  
Faculty of Medicine, University of Tokyo  
¥2.5 million

Since 1955 the primary causes of death in Japan have shifted from infectious diseases, such as tuberculosis, to geriatric diseases, such as cerebrovascular and cardiac disorders and cancer. The treatment of these diseases has become a major issue in public health administration. Geriatric diseases have a profound effect on patients' everyday life and activities at all stages of the illness—onset, treatment, convalescence, and rehabilitation. Thus such diseases should be treated from a comprehensive approach that includes not only clinical medicine but also sociopsychological care.

The present study will be conducted in the town of Aikawa, Akita Prefecture. The aim is, from the viewpoint of health sociology, to ascertain and make projections of the health activities and medical care of the citizens of this town, to undertake field studies to determine the type and degree of education and encouragement being offered to stimulate people's awareness of and activity in health care, and to establish the extent to which citizens take advantage of community health-care facilities as well as the ideal form of community health participation. The long-term plan is to draw up a health-care system for the community.

#### Illustrated Japanese-Language Texts for Non-Japanese-Speaking People with Limited Education

**Hideaki Murata, Teacher**  
Shinsei Middle School, Tokyo  
¥1.6 million

Japan's inadequate provision for World War II orphans repatriated from China, Indochinese refugees settling in Japan, and children of impoverished Japanese returning from South Korea and South America has become a major social problem. Most of these children speak neither English nor Japanese, have little schooling, are unskilled, and have no financial means. Finding it difficult to support themselves, they often end up relying on social welfare. The barrier to their becoming self-supporting in Japan is their inability to speak Japanese. Japanese-language instruction presently caters to foreign students with high academic backgrounds and is thus unsuitable for insufficiently educated people who do not understand English.

The present research involves the development of elementary illustrated Japanese-language texts for

non-Japanese-speaking people that can be easily understood even by children and that will instruct people in everyday aspects of Japanese life. On the basis of educational methods used over the past five years, a program for teaching basic practical conversation, making use of photos, drawings, and cartoons, will be prepared. It is hoped that the resulting materials will be of use in the Japanese-language instruction of children and foreigners with limited educational backgrounds.

#### Research on Increasing the Reliability of New Medical-Care Systems

**Masao Saito, Professor (and four associates)**  
Institute of Medical Electronics, University of Tokyo  
¥2.5 million

Recent advances in medical care have prompted the increased introduction of new medical-care equipment and systems. However, their safety and reliability have not yet been adequately tested. The safety of medical-care equipment and systems involves not only the prevention of accidents but also the development of systems to ensure the correct and safe operation of equipment. Thus a comprehensive investigation should include a study of equipment operation from the standpoint of human engineering and systems.

In a continuation of last year's research, the present survey will study and provide the conceptual framework for accident-prevention systems. First, with regard to ensuring technological safety, fixed equipment will be studied for reliability and safety. Second, safety will be studied from the viewpoint of human engineering by analyzing thought experiments based on examples of human error in medical treatment. And third, a survey will be made of the legal safety regulations in Western countries, especially the United States. On the basis of these surveys, practical proposals concerning safety systems in Japan will be drawn up.

#### A Follow-up Study of the Long-term Prognosis for Mentally and Physically Handicapped Children

**Teiju Kobayashi, Adviser (and eight associates)**  
All Japan Association of Parents of Severely Handicapped Children  
¥3.03 million

The problem of mentally retarded and physically handicapped children has finally become an important issue in Japan's welfare policy. Policy planners, however, are preoccupied with measures dealing with present problems, as it is difficult to work out long-range policies for lifetime care of handicapped children. Until now, in Japan and many other countries there have been many static research projects on the situation existing at a given time; but very few dynamic studies, following the progress of individuals over time, have been made. The scarcity of such studies may be cited as one of the causes thwarting the establishment of long-range studies.

The present study, a continuation from last year, will investigate the current situation of mentally and physically handicapped children first treated ten or

more years ago. It attempts to discover their physical and mental development and measure any changes in their handicaps in the intervening period. This year's study will concentrate on a comprehensive survey and analysis of those subjects for whom records were compiled and classified last year. It is hoped that the results of the survey will clarify the effect of mental and physical handicaps on personal development.

**A Case Study on the Introduction of Off-Season Craft Work to Revive and Strengthen the Village as a Community**

**Yoshio Akioka, Professor (and thirteen associates)**  
Department of Industrial Design, Tohoku Institute of Technology

¥3.8 million

Japan's farm and mountain villages used to provide people with a place both to live and to work. However, today's trend toward industrialization has hastened the division of villagers' lives between home and work, with the result that the village itself is disintegrating as an entity supporting the villagers' overall activities. This trend has also caused rural life to become gradually more standardized. It is believed that the remedy to these problems lies in the establishment of a production system that includes industry, farming, and craft work as a community activity, none of which can take the place of the others. A major problem lies in reviving and strengthening the slowly disappearing function of the village as a communal production unit, to which the solution is considered to be the introduction of off-season craft work.

The present study, a continuation from last year, will use the results of last year's preliminary research to select a village in the Tohoku district of northern Honshu that appears a likely candidate for the introduction of off-season craft work, and use it as the basis of a practical case study. The data gathered from this study will serve as practical reference material for the introduction of off-season craft work into villages and will clarify the conditions required for this to be successful, thus contributing to reviving and strengthening the village community.

**Preliminary Research on the Determinants of Comfortable Living from the Standpoint of Environmental Psychology**

**Kimiyoshi Hirota, Professor (and eight associates)**  
Department of Sociology, Kansai University

¥1.2 million

Past research into the determinants of comfortable living has concentrated mainly on physical, physiological, and functional factors, such as the roominess of one's car, size of home, quality of household furnishings and fittings, and general convenience of daily life. Psychological factors have largely been neglected.

The present study will examine the psychological factors determining comfortable living and use the results to establish a "comfort index," using this to make a comparative study of the degree of comfort of different communities. A comparison will also be made of people living in single-family dwellings in res-

idential areas on the one hand and in large apartment complexes on the other. This will be used to analyze the relationship between comfortable living by measuring differences in such factors as participation in community activities, mutual and reciprocal behavior, and community solidarity. The results will clarify the factors that constitute comfortable living in such social environments as the family, the group, and the community. This year a preliminary study will be carried out.

**A Comparative Study of Decision-Making Processes in the Welfare Policies of Industrial States**

**Masataka Kosaka, Professor (and eleven associates)**  
Faculty of Law, Kyoto University

¥6.3 million

In the past, research on welfare policies has been relegated mainly to sociologists specializing in social welfare and economists interested in welfare administration. However, as the ratio of welfare expenditures to total public expenditures has increased, welfare has attracted the attention of political scientists on two counts. The first is the interpretation and explanation in terms of political science of the reasons for the expansion of welfare programs. The second is the question of whether the policy-making process in welfare policies has characteristics that differ from the policy-making process in other fields.

To clarify the characteristics of the formative processes of social welfare policies in advanced industrial countries, this research, a continuation from last year, focuses primarily on the second point. Based on information gained from last year's survey on the activities of Japan's political elite (mainly Diet members and bureaucrats), this year's study will conduct a survey, using as reference a similar survey conducted in the United States, to determine the activities of national-level pressure groups, and in particular, groups affected by welfare policies.

**A Preliminary Study on the Welfare Needs of the Mentally Ill**

**Takehisa Takizawa, Investigator**  
National Federation of the Families of Mentally Disturbed People

¥1.2 million

A positive welfare policy is required to meet present inadequacies in the rehabilitation of the mentally ill, including those recovering from mental disorders. The present social welfare policy aims at facilitating the rehabilitation of the mentally ill into normal community life. In reality, however, an increasing number of patients remain hospitalized for extensive periods, not for medical but for socioeconomic reasons. This is raising serious problems in terms of both the patients' human rights and the overall increase in medical costs.

Upon clarifying the conditions that the mentally ill and their families regard as necessary for rehabilitation into community life, the present study aims to contribute to the establishment of a social welfare system for the mentally ill. This year's preliminary study will gather and analyze data gained through personal



interviews with mentally ill patients, including those on the way to recovery, and with their families.

#### A Comparative Study of Socioeconomic Development in Japan and Poland

**Kiyoshi Takeuchi, Professor (and one associate)**

Faculty of Economics, Tohoku University

¥2.2 million

In East European countries national income is not made public, so that direct comparisons with the West cannot be made. And although these countries' currencies have official fixed exchange rates in relation to Western currencies, the rates do not reflect the Eastern countries' true social and economic circumstances. Moreover, few systematic comparative studies of social and economic problems in the two systems have been made because of differences in national concepts and statistical methods.

The present research attempts a quantitative comparison of the problems of social and economic development in Japan and Poland. This will be achieved by (1) conducting a quantitative evaluation of the levels of social and economic development in both countries, (2) estimating a real exchange rate for East European currencies in relation to Western currencies, and (3) deriving a common statistical standard by which to measure the levels of social welfare in Poland and Japan.

#### A Comprehensive Study on Child Rearing and Welfare Needs in Relation to the Changing Function of the Family

**Juichiro Naito, Vice-Superintendent (and six associates)**

Nippon Aikyo Research Institute for the Care of Mothers and Children

¥4.3 million

The function of the family is undergoing drastic changes due to the nuclearization of the family brought about by urbanization, the increase in working mothers, and the diversification of values. Children live in strained home environments and suffer warped personality formation as the family gradually relinquishes its nurturing function, families break up, and parent-child relations deteriorate. These problems are being aggravated by today's excessively competitive society and the isolation of the family from community life. As a result, the age of juvenile delinquents and child suicides is becoming lower. Children are increasingly prone to emotional disturbances, are physically and mentally frail, and are overloaded with knowledge while lacking in independence. These problems should not be interpreted simply as family matters but should be studied from the wider perspective of their relation to social policies.

The present study attempts to promote the healthy growth of children by scientifically elucidating the actual state of child rearing from the comprehensive standpoint of welfare, health, education, and psychology and clarifying the problems in these areas. In addition, the study will elucidate child rearing methods that can cope successfully with social change and investigate specific measures necessary to achieve this goal.

#### Comprehensive Research on the Retarding of Aging Through Physical Exercise

**Haruo Ikegami, Professor (and seven associates)**

Institute of Health and Sport Science, University of Tsukuba

¥3.7 million

Insufficient physical exercise, a consequence of modern living, threatens the health of people today. A positive approach to health promotion is called for in order to maintain basic health, retard aging, and prevent sickness. The benefits of physical activity in daily life are indispensable for this purpose.

Last year's research isolated the four parameters that best reflect functional age—pulse velocity of the aorta, flow volume (forced expiratory volume per second), maximal oxygen consumption, and an index of physical strength (the vertical-jump test). This year these parameters will be used to survey people of different ages and environments. The physical activity of each subject during the period between tests will also be taken into consideration. It is hoped that data gathered from the survey will elucidate the effect of physical exercise on retarding aging and will help in the formulation of an effective and suitable regimen to retard aging.

#### A Clinical Psychological Study of the Behavior Patterns and Sense of Identity of Young Japanese Living Overseas

**Katsuyuki Ogawa, Associate Professor**

Department of Psychology, Yokohama National University

¥1.5 million

Recently an increasing number of young Japanese have been traveling overseas, and many have settled abroad without any fixed goal in mind. These young people's inner uncertainty, or identity diffusion, is believed to stem from the way in which former Japanese values concerning personal relations have changed on the subconscious level.

The present study attempts to discover the source of the identity diffusion problem facing today's youth by means of a comparative study of the psychological and social conditions of young people living overseas and those living in Japan. In this year's preliminary study, subjects chosen from among Japanese youths residing in Los Angeles will be interviewed as to their motives for going abroad, their reasons for continuing to live abroad, their perception of life abroad and of human relationships, and their expectations in life. A psychoanalytic interpretation of the results will be made to delineate the problems of these young people.

#### Field Research on Community Care for the Mentally and Physically Handicapped

**Uichi Furukawa, Senior Researcher (and five associates)**

Institute for Developmental Research, Aichi Prefectural Colony

¥3.2 million

Welfare systems for mentally retarded and physically handicapped people should ultimately be established within the communities in which these people live. To this end the handicapped and their families, neighbors and community volunteers, professionals in the field of welfare administration, and welfare agencies must

collaborate in deepening their understanding and developing their ability to solve the problems facing handicapped people.

In a continuation of last year's study, the present research will conduct field surveys in the city of Kasugai, Aichi Prefecture. The study will (1) develop home-care programs for the severely handicapped and instruct family members and medical personnel in caring for the handicapped at home; (2) set up and manage a playground designed specifically for handicapped children; (3) offer lecture courses for parents of handicapped children and volunteer workers; (4) make 8 mm. films of the various welfare activities and use them to educate citizens concerning the handicapped; and (5) obtain evaluations of the above activities from handicapped people, volunteer workers, and professionals on the basis of a diagram of the relationships among the various people involved in welfare for the handicapped.

Research Into the Establishment of a Medical Information Network in Southeast Asia by Compiling a Comprehensive Catalogue of Medical Periodicals  
Toshinobu Suga, Librarian (and four associates)  
Tokyo Medical College Library  
¥2.1 million

Japanese scientists and researchers have always looked to the industrialized countries of the West for medical information while virtually ignoring exchange with Southeast Asia. In a reflection of recent international trends, however, Japan has begun to show a much greater interest in the countries of the Association of Southeast Asian Nations (ASEAN). In addition, the World Health Organization (WHO) has begun to show a strong interest in primary health care in Southeast Asia. Thus a pressing need exists for Japan and the Southeast Asian countries to form a medical information network.

This project aims to form an effective information network, beginning by assessing the medical periodicals available in these countries. In order to compile a comprehensive catalogue, the study will gather information on periodicals dealing with medicine and related fields that are published in Southeast Asian countries and available in medical university libraries.

The Effect of Newly Established Hospitals on Medical Services in Previously Doctorless Areas  
Seizo Sakihara, Associate Professor  
College of Health Sciences, University of the Ryukyus  
¥2.93 million

Until recently the southern region of Okinawa Island had few medical services. The 140,000 residents of the region's one city, two towns, and seven villages sought treatment mainly at hospitals in the capital city of Naha. Intermunicipal public transport in the region is also underdeveloped, with most transport systems running directly to Naha. Twenty-five percent of the region's population commutes to work or school in the capital. In June, 1979, a 300-bed hospital was built in Kochinda, a farming village of about 12,000 people located in the center of the re-

gion, which previously had had no medical facilities.

This project aims to ascertain the effect of the new hospital on the development of the region's medical network and to determine the extent to which citizens take advantage of the newly available medical services. It is hoped that the results of the project will provide significant suggestions for the planning of future medical services.

## Education and Culture

A Sociological Study of Festivals in Traditional Cities Focusing on Festival-Related Groups  
Makoto Matsudaira, Professor (and two associates)  
Faculty of Sociology, St. Paul's University  
¥3.73 million

By what means is local culture passed down in traditional urban communities in Japan? What is required to assure that the process will continue to function in the future?

This study, a continuation from last year, attempts to answer these questions through a sociological analysis of the fundamental relationship between the social structure of local urban groups and the shrine festivals that serve as expressions of the groups' community cultural heritage. Last year's preliminary study established the methodology: participant observation by the researchers. This year the researchers will conduct studies in four traditional cities in order to discover comparative patterns of relationships in urban communities in the region centering on Tokyo.

The project seeks to identify the distinctively Japanese qualities of local groups and to discover clues to the ways in which they preserve and hand down cultural traditions.

Counseling Programs in Senior High Schools: Establishing Individual-Oriented Student Guidance  
Goro Imai, Teacher (and ten associates)  
Sakuramachi Senior High School, Tokyo  
¥2.84 million

Apathy among senior high school students has become wide-spread recently, while the problems of continual absenteeism due to psychosomatic illness, suicide, and violence in the home have become serious social concerns. Most previous studies of these problems have focused either on the students themselves or on their parents; research on teachers' awareness of their role in guidance is almost non-existent.

This study is designed to elucidate the problems teachers experience in counseling students, focusing in particular on: (1) teacher awareness of the importance of counseling, (2) the teacher-student relationship, (3) the difficulties teachers experience in counseling

students, and (4) teacher training in counseling. The primary researchers are senior high school teachers who are themselves engaged in student guidance. Using the findings of the study, the researchers plan to present specific proposals for the improvement of student counseling in senior high schools.

**A Follow-up Study on the Influence of Contact with American Culture on the Wives and Children of Japanese Businessmen Living in the United States**

**Yasuko Minoura, Ph.D. Candidate**  
Department of Anthropology, UCLA

¥1.37 million

Growing Japanese economic activities overseas have sharply increased the number of Japanese businessmen's families who must live for extended periods in foreign cultures.

This study, a continuation from fiscal 1977, is part of a ten-year plan to explore the influence of living abroad on the personality development of children reared outside their native cultural milieu. Under the earlier grant, 86 Japanese families residing in the United States were interviewed. This year wives and children in 75 of these families in both Los Angeles and Japan will be interviewed to determine how they may have been affected by the experience of living abroad. The research will also focus on problems of cultural identity among children who decided to attend college in the United States rather than return to Japan.

Based on these interview results, which will yield the kind of qualitative data not obtainable through questionnaire surveys, the study will consider such factors as the age of subjects when leaving or returning to Japan in order to gauge the onset, duration, and intensity of psychological strain among Japanese living in America. Analysis of this information will reveal how and at what point in a child's life culture-specific patterns of interpersonal relations and behavior emerge.

**Japanese Art in Europe: Its Rediscovery and Implications**

**Jun Ebara, Member**  
Association of International Art Critics

¥3.6 million

The influence of *ukiyo-e* woodblock prints on Western art, particularly on the painting of the French Impressionists, is well known; but information concerning the large number of *ukiyo-e* prints taken out of Japan in the nineteenth century is difficult to obtain. Among the five thousand items from the collection of Prince Jansen now in Poland's National Museum of Art in Kraków are works by such *ukiyo-e* masters as Sharaku, Hokusai, Utamaro, and Hiroshige. These works, believed to have come originally from the salon of the Goncourt brothers, who first introduced *ukiyo-e* into France and established their worth, have yet to be catalogued and organized.

This project, with the cooperation of the Polish Academy of Sciences and the National Museum of Art in Kraków, will survey and catalogue these important works in order to facilitate their use in the

study of art history. The survey will enhance the usefulness of the Prince Jansen Collection and contribute to the study of *ukiyo-e* and to an understanding of one aspect of aesthetic taste in modern Western art.

**A Basic Study of Cultural Relations Between Japan and Eastern Europe**

**Shigeru Kido, Professor (and thirteen associates)**  
Faculty of Law, Kobe University

¥3 million

Japan's interest in the socialist countries of Eastern Europe has increased as liberalization and economic reforms in the region have accelerated. The amount of Japanese capital invested in Eastern Europe is gradually increasing and trade is steadily growing, and the progress of industrialization and urbanization in Eastern European countries has further stimulated interest in Japan. For these reasons, it is urgent to cultivate and strengthen mutual understanding between Japan and individual countries in Eastern Europe.

The present study, carried out by the Association for the Study of Japan's Cultural Relations with East-Central Europe, will examine the status and history of Japanese research and education on Eastern Europe and of Japan studies in each of the Eastern European countries and will attempt to identify problems on both sides. The immediate tasks of this basic study are to compile a bibliography of works on Eastern Europe available in Japan and to conduct a study of the history of cultural exchange between Japan and Eastern European countries.

**Career Advancement for Women: University Teaching and Corporate Management**

**Michiko Kanda, Associate Professor (and four associates)**  
Faculty of Literature, Toyo University

¥2 million

In Japan the number of women in prestigious professions requiring them to have the same qualifications and abilities as men is steadily growing, but opportunities are still limited.

This study examines the advance of women in two such professions, university teaching and corporate management, in terms of sex roles. Although these two professions are quite different from each other, they were selected because comparative data on them are readily available for other countries and the number of women in these fields in Japan is now sufficient for study. In a previous study the researchers interviewed 120 women, including medical doctors and government officials, in addition to university teachers and corporate managers. From those interviews investigators formulated several hypotheses on career advancement among women in these professions.

This year's project will test those hypotheses by means of written questionnaires surveying one thousand women in university teaching and business management. This work will be followed by analysis of the collected data and interviews. The study will provide valuable guidance for women planning careers as professionals.

An International Study of Trade Ceramics in Pre-modern Asia

Tsugio Mikami, President (and thirteen associates)  
Trade Ceramics Study Group

¥5.82 million

Since the Tang dynasty (618–907) trade ceramics had been exported from China, Vietnam, and Thailand, and from Imari and Karatsu in Japan, to Southeast Asia and to countries in greater Asia. Today, these ceramics are being excavated in great numbers throughout Asia. As research material for studying the history of commerce in Asia, silk has been best known, but silk trade goods have only rarely survived. Ceramics, however, are not materially changed even by lengthy burial and therefore are the best artifacts for the study of trade.

Using trade ceramics, the present study will attempt to clarify the history of commerce in Asia. The project will first prepare drawings and photographs of Chinese and other ceramics excavated in Japan. The drawings and photographs will be mounted on cards with annotations in both Japanese and English, which will be available to scholars of commercial history in Japan and abroad. Since study in this field is more advanced in Japan than in other parts of Asia, the project seeks to share information and promote international scholarly exchange by inviting research associates from abroad to share ideas.

Tokyo and the Townscape as Culture

Toru Haga, Professor (and two associates)  
College of General Education, University of Tokyo

¥3 million

Eighteenth-century Paris, nineteenth-century London, and twentieth-century New York gave birth to singular urban cultures that nonetheless shared common features. Within the urban cultures associated with these great cities, the townscape performed a vital function. This study is a reappraisal of the city in terms of the townscape as culture, directed toward an effort to promote distinctive and attractive qualities in Japanese cities.

The study focuses on Tokyo from the early Meiji era (1868–1912) until the end of World War II. It will identify the townscapes that were an integral part of urban culture during this period of rapid modernization, analyze the formative elements of these distinctive townscapes, and describe their significance. Documentary research, interviews, and field studies will be conducted in order to establish perspectives and methods for gaining a comprehensive grasp of urban culture and environment and to formulate practical suggestions for ways to improve the quality of Japan's townscapes.

The Japanese Bureaucracy: Institutions, Organization, and Personnel from 1868 to 1947

Junosuke Masumi, Professor (and four associates)  
Faculty of Law, Tokyo Metropolitan University

¥3.5 million

Relatively few studies of prewar history deal with the Japanese bureaucracy. The dearth of scholarly inquiry is in part due to the government policy until 1945

that prohibited disclosure of documents to those outside the government. It is also the result of the paucity of expert researchers with actual experience in bureaucratic positions, a problem that persists today.

This project aims to collect, organize, and publish basic source materials on the prewar bureaucratic system under Japan's first constitution (promulgated in 1889) up until 1947. The materials, which can serve as the basis for future substantive studies, will consist of: (1) official biographies of approximately 1,300 leading bureaucrats, (2) a list of appointees to about 300 major government positions, (3) a list and brief biographies of about 10,000 people who qualified in the higher civil-service examination between 1894 and 1947, and (4) a historical outline of the institutional framework and organization of the bureaucracy.

The project will bring together both previously published materials and unpublished documents from each ministry in a comprehensive reference collection.

A Preliminary Study on Human Development in the Twenty-first Century

Katsumi Mitani, Secretary-General (and eleven associates)  
The Institute of Statistical Research

¥1.5 million

In the coming century constraints imposed by population, depletion of resources, and technology will grow increasingly severe, and the role of education in responding to these new conditions will be important. In this context, concrete goals for education should be established, and the policies and administrative tasks that will be necessary to achieve these goals should be identified.

This study will examine both human development in the twenty-first century and education and its role in relation to a broad range of factors, such as population, resources, industry, and life styles. It will also present a proposal for education responsive to change in the decades ahead. The study will purposely avoid ill-considered speculation and will rely on scientific methods, including sociometric analysis, in identifying problems. The present focus of research activities includes the gathering of reference and documentary materials, construction of a basic model of educational society in the twenty-first century, and the selection of statistical indicators.

Mutual Understanding Between the Japanese and the Arabs

Shinji Maejima, Chairman (and eighteen associates)  
Japan National Committee for the Study of Arab-Japanese Relations

¥3.76 million

As ties between Japan and countries of the Arab world increase, mutual interest in scholarly exchange also expands. This study on mutual images is part of a joint-research project undertaken by the Japanese and Arabic National Committees for the Study of Arab-Japanese Relations.

This year the project, a continuation from last year, will survey relevant documents and published works and compile a bibliography of works in Japa-

nese on Arab-Japanese relations. At the same time work is proceeding on the preparation of cards in order to print a chronology of Arab-Japanese relations. These activities are supplemented by interviews with people involved in Arab-Japanese relations. The National Committees will also prepare for the Second International Symposium on Arab-Japanese Relations, which will provide an opportunity for research groups in both Japan and Arab countries to present and exchange the results of their work.

It is hoped that such scholarly exchange will be a vital first step in promoting mutual understanding between Japan and the Arab world.

Contemporary Topics for the Education of Urban Schoolchildren: Follow-up Research on the Educational Effect of Studying in Mountain Villages

Takayasu Aoki, Chairman (and five associates)  
Sodateru-kai (Society for Bringing Up Children)

¥0.5 million

Since 1976 the Sodateru-kai has sponsored a program to educate urban children at a Sodateru-mura Gakuen school in the mountains, where they can benefit from a rural environment more conducive to healthy mental and physical growth than the alienating atmosphere of the city.

This project, a continuation from last year, will investigate the children's physical, mental, and emotional changes attributable to (1) the experience of living with rural families, (2) collective outdoor activities, (3) the experience of studying in a village school, and (4) firsthand experience of nature. It will also study the children after they return to their homes in the city.

Last year physiological and psychological data on these children were gathered; this year specialists will interpret the data from various points of view. The data will be used to evaluate each child in the program, and the results are expected to provide valuable hints for coping with problems in contemporary education.

Compiling a General Bibliography of Old Japanese and Chinese Books: A Critical Bibliography of Specific Texts

Ryuichi Abe, Professor (and eighteen associates)  
Institute of Oriental Classics, Keio University

¥10.9 million

Most existing bibliographies of classical Japanese and Chinese literature have been compiled not on the basis of actual examination of texts but by simply listing information from library catalogues. The resulting bibliographic inaccuracies make these lists unreliable as scholarly reference works.

This project, a continuation from last year, will compile a complete general bibliography of ancient Japanese and Chinese texts extant in Japan. The bibliography will include dates of publication or transcription, the provenance of the texts, relationships to other versions, and current locations. Again this year research will focus on the following works:

I. Japanese Works

(1) Japanese Confucian studies: Writings by

Yamazaki Anzai and his followers and by Yamaga Soko; (2) Classical Japanese literature: Writings by Tachibana Moribe; (3) *Waka: Hachidai-shu* (the eight principal collections of *waka* poems compiled by imperial decree); (4) Medieval Japanese literature: Such works as *Ise Monogatari*, *Muromachi Monogatari*, and the *Taiheiki*; (5) Early Modern Japanese literature: *Ukiyo-zoshi*; (6) Topographies printed before 1715; and (7) The six classic Japanese histories.

II. Chinese Works (including Chinese-language works by Japanese authors written prior to the 1868 Meiji Restoration)

(1) Sung and Yuan editions; (2) *Ssu shu* (the Four Books of Confucianism) and *Hsiao ching* (Classic of Filial Piety); (3) Historical chronicles compiled by imperial decree; (4) Bibliographies and bibliographical catalogues; (5) Classified collections of T'ang authors' works; and (6) Novels and dramas.

Research on Educational Clinical Psychology in Therapeutic Education for Handicapped Children  
Teruhisa Yoshida, Associate Professor (and four associates)  
School of Education, Ibaraki University

¥2 million

Research suggests that a diverse therapeutic education is necessary for handicapped children and that extensive contact between normal and handicapped children is also beneficial.

This study aims to obtain basic information on therapeutic education. It will focus on autistic, emotionally handicapped, and mentally retarded children. It will compare the effects of individual and group therapeutic education in special schools for the mentally handicapped with the results of group psychotherapy for handicapped children at schools in the community.

Initially, the researchers will gather materials on individual- and group-therapy programs at special schools engaged in educating handicapped children. Researchers will conduct case studies using an educational clinical psychology approach, make filmed observational recordings of the behavior of handicapped children in and out of school, and use a motion analyzer to evaluate the visual data acquired.

A Basic Study of the High School Entrance Examination System, Scholastic Achievement, and Career Choice

Hiroshi Kida, President (and thirteen associates)  
National Federation of Educational Research Institutes in Japan

¥4.98 million

Until recently, data on the public senior high school entrance examinations conducted by local boards of education have remained unpublished in the files of the prefectural and metropolitan boards of education. The National Federation of Educational Research Institutes in Japan, a body organized chiefly through the efforts of the National Educational Research Institute and these prefectural and metropolitan education centers, will carry out a comparative study of available nationwide data on high school entrance examinations.

The information resulting from this survey will contribute to a qualitative assessment of academic achievement at the end of the nine years of compulsory education in Japan as well as of the relationship between the academic performance of students during their years of compulsory education and during senior high school. This study will be a valuable guide in planning improvements in academic guidance, in career guidance, and in the high school entrance-examination system itself.

**A Preliminary Study on Supplementary Educational Investment and Advancement to Higher Education**  
**Kazuo Seiyama, Associate Professor (and three associates)**  
Faculty of Letters, Hokkaido University  
¥0.81 million

The general equalization of educational opportunity in Japan has expanded the opportunities for higher education. However, the increasing investments in supplementary education for their children that wealthy parents have made in the past ten years threatens to reverse this trend. The researcher's hypothesis on supplementary educational investment sets forth two causal processes: (1) the wealthier the family, the greater the quality and quantity of supplementary education available to its children; and (2) the better and more abundant the supplementary education, the greater the educational achievement of the child. The hypothesis suggests that there is a trend toward higher academic achievement among the children of wealthier families.

This project will test the validity of this hypothesis through empirical verification of the hypothesis. This year's preliminary study focuses on a questionnaire survey of 450 senior high school students and their family backgrounds, including parental income and educational level. The study will then correlate the data on family background with information on students' academic performance.

**A Comparative Study of Japanese and American Value Systems**

**Chikio Hayashi, Director General (and two associates)**  
Institute of Statistical Mathematics  
¥4.12 million

During a twenty-five year period, the Institute of Statistical Mathematics of Japan's Ministry of Education has conducted six surveys on the Japanese national character. In 1977, a grant from the Toyota Foundation supported a similar survey of American values.

Drawing on the results of these questionnaire surveys, Japanese and American researchers will jointly undertake a comparative statistical analysis of the national character of both peoples, focusing on a time-series analysis of the Japanese survey data and a cross-sectional comparative analysis of the data from the Japanese surveys and from the 1977 surveys of Honolulu residents and American values.

Following discussion among Japanese and American scholars, interpretations of the results of the analysis will be published in both Japanese and English. This project, which will provide valuable material on differences in national character between the two

peoples, promises both to yield potentially useful information and to contribute to the refinement of a questionnaire-survey methodology for international comparative study.

**A Study of the Life Histories of Japanese-Americans in Hawaii**

**Takashi Nakano, Professor (and two associates)**  
Faculty of Humanities and Social Sciences, University of Chiba  
¥3 million

First-generation Japanese immigrants (Issei) in Hawaii are now advanced in age. As their numbers decline, personal histories that could illuminate an important chapter in the history of cultural exchange between Japan and the U. S. will be irretrievably lost.

This project, a continuation from last year, will interview individual Issei residing in Hawaii and record their oral life histories. In last year's preliminary study the researchers conducted several such interviews, confirming the value of oral histories in scholarly research. That survey also demonstrated the urgency of this work; since most subjects are elderly. This year's investigation extends the field research and expands the scope of the survey to include interviews with people residing on islands other than Oahu.

This project will facilitate an understanding and analysis of the beliefs and values of these people, which are inseparable from the course of their lives. The study seeks at the same time to clarify the nature of acculturation resulting from contact between American and Japanese culture, as well as the processes of adaptation and character development of the people interviewed. It will also shed further light on characteristics of the Japanese and of Japanese culture.

**A Preliminary Study on Postwar Language Standardization in Local Communities and the Formation of New Dialects**

**Takeshi Shibata, Professor (and twelve associates)**  
College of General Education, Saitama University  
¥1.5 million

Social changes that have occurred in Japan since the end of World War II have brought about changes in communication systems and in the use and awareness of dialects. With the spread of standardized national usage (so-called standard Japanese) after the war, there was a dramatic decrease in the use of dialects. The decline is most evident in the traditional regional dialects; but in their place new dialects have begun to emerge and be adopted by young people in various regions. This phenomenon cannot be explained by the past simplistic approach to language standardization: it requires the development of a new theoretical framework that takes into account neologisms, fad words, and the so-called degeneration of language.

In order to reappraise dialect changes since the war from a broad perspective, this study will review already available materials and conduct a study of the new dialects, giving consideration to social and psychological factors. This year's work will consist chiefly of a preparatory investigation devoted to dis-

discussion among the researchers and to a preliminary survey of a typical region of dialect change.

#### The Relation of Cultural Behavioral Patterns to Productivity in East and Southeast Asia

Jean Esmein, Executive in Residence (and one associate)  
INSEAD (European Institute of Business Administration)  
¥2 million

An increase in productivity for any one of the goods a society produces for itself cannot be explained in economic terms alone. In the belief that international differences in productivity reflect the influence of national life styles and customs, this project will correlate cultural background and productivity for agricultural and industrial goods in four countries: Japan, Korea, Thailand, and Indonesia. Productivity can be calculated from existing data; and for an understanding of cultural background, the study will analyze traditional literature, folk tales, taboos, and textbooks for religious instruction for children—materials that to an extent express the thinking of a people and govern their behavior.

The researcher, who has many years' practical experience in international business, conceived this project in the pragmatic belief that productivity cannot be increased effectively without improving education in consumer habits.

#### A Preliminary Study of the Developmental Process of Occupational Aspirations

Hidegori Fujita, Associate Professor (and one associate)  
Faculty of Education, Nagoya University  
¥1.48 million

Previous studies on the status-attainment process among youths relating their academic and occupational careers have generally focused on the roles of certain psychological traits of youths and of the expectation and attitudes of those with whom they come in contact. At a time when the harmful effects of Japan's preoccupation with academic "pedigree" are becoming increasingly apparent, it is important to examine the extent to which the nature of educational and employment systems affect young people's occupational perspectives and career choices.

This study will conduct a comparative analysis of the formation of occupational aspirations and career choice among young people through an examination of the educational and employment systems of three industrial societies: Japan, West Germany, and the United States. The preliminary study will focus on an analysis of the relationship between the educational and employment systems of these countries, mainly through document research and interviews.

#### A Linguistic Geographical Study of the Ryukyu Islands

Yukio Uemura, Professor (and thirteen associates)  
Faculty of Law and Letters, University of the Ryukyus  
¥3.7 million

The Ryukyu dialects constitute one of the two major dialect groups of the Japanese language, the other being the main-islands dialects. The Ryukyu dialects,

which are unintelligible to speakers of main-islands dialects, are distributed throughout the entire Ryukyu island chain. This linguistic survey is of great value to the study of the history of the Ryukyu Islands and of the history and genealogy of the Japanese language. Moreover, it comes at a critical time because the diffusion of standard Japanese threatens to displace the traditional vocabulary before a thorough record has been made.

This initial study is the nucleus of "Studies on the Language of the Ryukyu Islands," a ten-year project organized by the Okinawa Center for Language Studies in order to preserve and record linguistic material on the Ryukyus. During 1979 about twenty-five field workers will conduct an investigation of some two hundred lexical items of the basic vocabulary, recording phonetic, semantic, and usage information in about fifty localities. This information will be used to construct a linguistic atlas. The project aims to gather information on two to three thousand items from two hundred dialects over a ten-year period.

#### A Preliminary Study on the Formation of Scientific Disciplines

Akira Tezuka, Professor (and six associates)  
Graduate Institute for Policy Sciences, Saitama University  
¥1.5 million

In Japan, the academic environment has not always nurtured the originality that is necessary among researchers in order to encourage creative research.

Through an examination of researchers, organizations, and institutions, this project aims to show how and under what conditions new scientific disciplines are created and how they develop. The preliminary study will examine the actual process by which certain specialized disciplines developed, such as high-energy physics, animal ecology, and high-polymer chemistry. It will also attempt to analyze the characteristics of researchers and their patterns of choice in research theme. Finally, the study will seek to determine the types of researchers best suited to various stages in the genesis and development of a discipline.

As study progresses and more data are obtained, the results should contribute to the formulation of policy for scientific research and to decision-making related to research investment.

#### Special-Subject Research: Changes in Local Communities

An Empirical Study of Modernization, Social Change, and Acculturation in a Japanese Village  
Morimitsu Ushijima, Professor  
Kumamoto Junior College  
¥0.9 million

Sue-mura, in Kumamoto Prefecture, was the subject

of the late John F. Embree's classic study *Suyemura*, published in 1939. The present researcher has conducted two follow-up studies on the same village, the first between 1953 and 1956 and the second between 1968 and 1969.

This study, the fourth on the same village, attempts to analyze the modernization of agriculture and the changes in social structure and culture that have taken place in Sue-mura in the interim. In addition to identifying the basic changes that have taken place by studying the available literature and statistical data, the present study will examine by means of participant observation changes in the villagers' work habits (such as those related to the transplanting of rice shoots), the various public services, the local religious functions, and the traditional *ko* organization. In this way it will be possible to determine how employment opportunities for junior and senior high school graduates, commuting distances, the sphere of communal activities, and the sphere of travel have expanded. As an independent follow-up study spanning both the prewar and postwar periods and based on the researcher's long-term ties with the local community, the present study is expected to yield significant results.

A Preliminary Study on Changes in Asahi-mura,  
Yamagata Prefecture

Yuki Seigo, Professor (and nine associates)  
Tsuruoka Technical College  
¥1.3 million

Asahi-mura, a mountain village subject to heavy winter snows, is located in the southernmost part of the Shonai district of Yamagata Prefecture. Asahi-mura is a typical underpopulated mountain village, its population having dropped by half between 1955 and 1975. Several difficult problems—men leaving the village in winter to work in the cities, the elderly, the decline of agriculture and forestry, and the breakdown of the community—threaten the village's very existence.

The present study aims to discover ways to revitalize villages like Asahi-mura by working with people in the village office to trace the economic, social, and cultural changes that have taken place since World War II. The ultimate goal of this research is to discover policies that will help determine what industries to promote to protect the inhabitants' livelihood, how to improve the living environment, and how to bring about a shift in people's values away from concern with money toward concern with culture.

To carry out these programs successfully it will be necessary to gain a clear understanding of the present conditions in Asahi-mura and the nature of the changes that have shaped those conditions. This year's study will be a preliminary step toward such an understanding.

A Study on Life in Ouchi-mura, Fukushima Prefecture

Tsuguo Aizawa, Lecturer  
Musashino Art University  
¥4 million

Ouchi, a mountain village in Fukushima Prefecture, used to be a post town, and it still retains many traces of its original layout as a planned community. Ever since this researcher first surveyed the village in 1967, he has continued his investigation in various ways, including living in the village and sharing the life of the villagers. Even in a small mountain village like Ouchi, there have been striking changes during this period.

The present study attempts to analyze the villagers' lives within the natural environment and determine how it has changed, both by organizing the data collected in earlier surveys and by carrying out surveys of vegetation and other aspects of the natural sciences, which could not be done adequately until now. It is hoped that the present study will not be merely another academic survey but will furnish basic data that will enable the villagers and the researcher to map out the future course of Ouchi-mura together.

A Follow-up Study on Changes in Village Life  
Caused by Changes in the Structure of Agricultural  
Production: A Case Study of A Farming Village in  
Fukuoka Prefecture

Kazuto Matsunaga, Professor  
Faculty of Humanities, Fukuoka University  
¥0.75 million

A village near the city of Yame, Fukuoka Prefecture, in one of Japan's major rice-cultivating areas, switched from rice growing to chrysanthemum cultivation in 1950. It has since succeeded in organizing a floriculture cooperative and, under a system of cooperative selection and selling, markets its flowers throughout the country. The village's economy now depends almost entirely on chrysanthemums, and it has become a major chrysanthemum-producing center.

The purpose of the present study is to examine the changes in villages in general by tracing the changes in one village's social organizations—family and kinship organizations, territorial organizations, and various functional groups—as well as in religious practices—festivals and other traditional rituals—that have accompanied the kind of change in agricultural structure described above. Since the government's current policy of reducing rice acreage is rapidly changing the country's rural areas, a case study like the present one should help in ascertaining the trends in social and cultural change attendant on changes in agricultural structure.

A Study of Human Ecological Changes on Yonakuni-jima

Tomitaro Sueishi, Professor (and two associates)  
Faculty of Engineering, Osaka University  
¥1.5 million

Yonakuni-jima is an isolated island with an area of twenty-nine square kilometers located in the westernmost part of the Ryukyu Islands (Okinawa). The island had traditionally been self-sufficient, but since sugar-cane cultivation began in 1960 it has been shifting rapidly to a market economy.

This study will trace the human ecological changes accompanying this rapid economic change



from the perspective of the dynamic interaction between activities and environment, and will present an interaction model. The metabolic activities of a family unit (consumption of goods as a reflection of the quality of life, level of technology, culture, and the various aspects of the socioeconomic structure) act upon the environment in various ways, while the society as a whole influences the individual's daily activities through the environment. This study will attempt to elucidate these relationships quantitatively while emphasizing the time factor.

**A Comprehensive Study on the Utilization of Water and Land in Postwar Okinawa**

**Yoshiro Tamanoi, Professor (and nine associates)**  
College of Commerce and Economics, Okinawa Kokusai University

¥3 million

Okinawans are strongly attached to the land, and reflecting this, their industrial interests tend to center on agriculture. The future of agriculture in Okinawa, however, is being threatened by the spread of pineapple and sugar-cane monoculture, which began with Japan's postwar economic growth.

The purpose of this study is to identify the factors causing monoculture farming and search for ways to halt its spread. To achieve this, the study will select four areas—the islands of Okinawa, Kume-jima, Ishigaki-jima, and Miyako-jima—and inquire into the present state of water and land use as well as traditional institutions and practices, exploring the problems and potential of future agricultural development. This project, which will be carried out by an interdisciplinary team of researchers living on Okinawa, with some experts from the main islands, is expected not only to provide a long-term outlook but to yield results that can be use in coping with practical problems as well.

**Changes in the Way of Life of a Village Community and the Function of Its *Kyoaikai*: The Case of Nishi-Amuro, Amami Oshima**

**Shin Anzai, Professor (and nine associates)**  
Department of Sociology, Sophia University

¥3 million

Japan's high economic growth has caused a large number of young workers to move from less developed areas to the nation's industrial centers, resulting in both a drastic reduction in village population and the introduction of urban culture into the village through the intermediary of native sons and daughters returning home for visits. The introduction of urban culture has no doubt exerted considerable influence on the life style and mentality of those still living in the village. A considerable number of young people from Nishi-Amuro, a small village on the island of Amami Oshima, have migrated to cities, where they have formed Nishi-Amuro *Kyoaikai*, associations designed to promote cooperation and mutual help among natives of Nishi-Amuro. Through these associations they have in various ways affected the life style and mentality of those remaining in their hometown.

The present research will attempt to ascertain and substantiate the acculturation process of a depopulated area in terms of its relationship to its *kyoaikai*. The study will investigate the changes that have taken place in Nishi-Amuro and clarify the role that Nishi-Amuro *Kyoaikai* and their members have played in bringing about those changes, first by investigating the changes that have taken place in the life style and mentality of those remaining in Nishi-Amuro, and then by clarifying the formation and growth of Nishi-Amuro *Kyoaikai* as well as their structure and function.

**Geographical Research on Changes in Historical Cities: Two Temple Towns, Kaizuka and Yamatoimai**

**Yoshikazu Mizuta, Associate Professor**  
Faculty of Education, Wakayama University

¥0.8 million

Kaizuka-machi in the city of Kaizuka, Osaka Prefecture, and Imai-machi in the city of Kashihara, Nara Prefecture, are typical temple towns in the Kansai region of western Japan. Temple towns are planned cities that followers of Jodo Shinshu, a major sect of Pure Land Buddhism, built in the late medieval period, or around the sixteenth century. Such cities were surrounded by circular moats, and the area within was laid out in checkerboard fashion. Although this configuration was partially altered in the Edo period (1603–1868), these cities have retained their distinctive layout down to the present.

The present research takes Kaizuka-machi and Imai-machi, which differ in the extent of the impact they have received from large cities, as its subject and attempts to determine how community awareness in cities with such a historical background is transmitted and how it is changing in the context of today's urbanization. In addition to investigating the changes in population, land use, and appearance that have taken place since the Meiji era (1868–1912) as revealed by land ledgers and zone maps, the study will investigate changes in town organizations, religious attitudes, and participation in religious functions by interviewing local residents.

**Preliminary Research on the Ideas Behind Reconstruction Planning for War-Damaged Areas and Their Impact on City Formation**

**Norioki Ishimaru, Research Associate**  
Faculty of Engineering, Hiroshima University

¥0.8 million

It is no exaggeration to say that most large cities in Japan assumed their present urban layout in the process of their reconstruction after World War II. Reconstruction planning for war-damaged areas played a particularly important role in the rebuilding of Hiroshima, a city virtually destroyed by the atomic bomb.

The present research will explore the ideas behind Hiroshima's reconstruction planning, those responsible for putting these ideas into effect, and the conditions under which they were implemented. Moreover, it will clarify the functions these ideas fulfilled—or failed to fulfill—and study the impact they had on the

subsequent formation of Hiroshima. In addition to collecting basic literature on the subject, this year's preliminary research will focus on drawing up a list of those who drafted the plans, interviewing as many of these people as possible, and compiling the interviews in written form.

**Preliminary Research on How Changes in the Life Style of a Local Community Influence the Health of Its Residents**

**Hirotohi Iwata, Professor (and five associates)**  
Wakayama Medical College

¥1.2 million

It is believed that significant changes in health indicators, such as the increase in children's height and the lowering of the age of menarche, are closely related to changes in people's life style.

The present study attempts to show how changes in life style have affected the health of the inhabitants of Ryujin-mura, a typical mountain village in Wakayama Prefecture, where there is a relatively complete collection of past records. For health indicators this study will use the maximum growth age (MGA), population changes, mortality rate, and other indicators that researchers have used in the past; for social indicators, it will use data from two previous family-life surveys and data on the diffusion of television and roads. This year's preliminary research will trace the changes in these two sets of indicators, clarify their relationship, and select districts that show the greatest amount of change as the target districts for the main study. Beginning next year, a more detailed investigation of the target districts will be carried out.

**The History and Outlook of Rural Community Development: An Empirical Study of Changes in a Local Community**

**Tadao Kiyonari, Professor (and four associates)**  
Faculty of Business Administration, Hosei University

¥3.5 million

In promoting regional development while enhancing the quality of life of the local community, "development from within" that takes full advantage of the natural environment and local resources is indispensable. In carrying out such regional development, it is important to see that the local people are actively involved, to make sure development programs harmonize with the natural surroundings, and to integrate industries into the life and culture of the region.

This study takes as its subject of inquiry Yufuin, a town in Oita Prefecture that has devised and implemented its own programs to develop the primary, secondary, and tertiary industries of the local economy and revitalize craft skills. The purpose of this study is to investigate from numerous angles the principles of regional development, the people and organizations in charge of it, and the manner in which it is implemented. In addition, both theoretical and practical guidelines for other regions trying to develop from within will be suggested. Since the research team consists of people active in local affairs, experienced individuals who have taken part in previous surveys

of the same community, and people new to the area, the study is expected to provide valuable insights into the subject from various perspectives.

**A Preliminary Study on the Changes Brought About by the Conversion of Swamp Land Into Well-Drained Rice Fields and the Construction of the New Toyama Port in the Imizu Area of Toyama Prefecture**

**Toru Adachihara, Professor (and five associates)**  
Department of Agricultural Engineering, Toyama College of Technology

¥1.5 million

The Imizu area of central Toyama Prefecture, a single-crop rice-growing district adjoining the inlet of Hoshozugata, used to be covered with swampy paddy fields. Dramatic social changes, ranging from the general utilization of land to the everyday life of the local residents, were brought about by the large-scale conversion of swamp land into well-drained paddy fields and the construction of the New Toyama Port, both promoted and implemented as part of the Toyama-Takaoka District New Industrial City Planning project.

The present research will be carried out jointly by participants in the New Industrial City Planning project and people who actually witnessed the changes that took place in local communities. The aim of this research is to evaluate and analyze the roles that national and local (prefecture, city, town, and village) planning played and how the local communities reacted. This year's preliminary research will collect and organize basic data and try to bring the basic issues into focus. The present research ultimately aims to carry out a case study of a local community, use the findings to comment on the real meaning of city planning and the form it should take when applied to local areas, and also provide valuable data for the future planning of local communities.

**Preliminary Research on the Urbanization of the Osaka-Kobe Residential Belt**

**Eisuke Mizutani, Head (and three associates)**  
Institute for Social Systems

¥1.2 million

Amagasaki, Nishinomiya, Itami, Takarazuka, Kawanishi, and Ashiya, all situated between Osaka and Kobe, together form one of the best suburban residential areas in Japan. These residential cities grew up between the time when the historical cities (such as Kyoto and Osaka) and the new postwar cities (such as Senri New Town) were built.

This research attempts to analyze the process through which the Osaka-Kobe residential belt was formed, relating this to the natural conditions (mountains, sea, and rivers), the various public facilities operated by the individual local governments, the privately owned art and science museums and other cultural facilities, the universities and other educational facilities, and finally the advanced industrial activities that these natural conditions and facilities have made possible. This year's research will concentrate on

drawing up various chronological tables and historical maps, pinpointing the actual geographical positions of the facilities, and making concrete research plans for the following year and after.

#### Preliminary Research on the Proliferation of Depopulation in Rural Japan

**Naoei Takahashi, Teacher (and four associates)**

Yasuzuka Senior High School, Niigata Prefecture

¥1.16 million

Japan's high economic growth created both high concentrations of population along the Pacific coast and many underpopulated areas throughout the country. Matsunoyama-cho and Matsushiro-cho, in Niigata Prefecture, are typical mountain farming villages that experienced sharp decreases in population during the period of high economic growth and are facing various problems as a result of farmers switching to other occupations and of whole families leaving their villages.

The present research is a joint project undertaken by local high school teachers and staff members of the village offices, all of whom live in the area. The research will attempt to analyze, from the viewpoint of the local community, the proliferation of depopulation. In addition to historical analysis of depopulation and analysis of changes in economic structure and of administrative measures designed to cope with such changes, the research will investigate the kind of life children are leading and their educational and vocational plans, focusing on how these plans are made. The research will then clarify, from the perspective of replacement of the labor force, the proliferation of depopulation in rural areas, including factors that compel farmers to switch their occupation and whole families to desert their villages. The research will also investigate the problem of the elderly. This year's preliminary research will verify the feasibility of the research, collect basic data, and study the project's conceptual framework.

#### A Preliminary Study on Postwar Changes in a Local Community in Kyoto

**Akira Nonaka, President (and ten associates)**

Nonaka Textiles Co., Ltd.

¥1.5 million

Nishijin, a weaving district supported by a highly skilled handicraft technology, is a local community with a unique system of division of labor. The various local organizations, such as the textile union, political and religious groups, Shinto and Buddhist parishes, and neighborhood associations, are highly active, and it is their active support that has enabled Nishijin to develop during the years of social and economic change since the end of World War II.

The present research, undertaken principally by those connected with Nishijin, aims to investigate the changes that have taken place in this complex local community since the end of World War II and at the same time contribute to the development of Japan's traditional industries and the cultivation of the next generation's creative activities. This year's preliminary

study will compile bibliographies and chronological tables, seek the cooperation of groups important to the progress of the research, interview several informants, and devise an appropriate methodology for the main research. This research, which will provide an inside view of a traditional local community, is expected to yield useful results.

#### A Follow-up Study on Occupational Socialization of Natives of the Shimokita Peninsula

**Tatsuro Hosoe, Associate Professor (and four associates)**

Department of Behavioral Sciences, Iwate University

¥4.05 million

In 1963 this researcher participated in a comparative study on the socialization of adolescents in rural and urban regions. The study sampled 2,500 third-year junior high school students on the Shimokita Peninsula in Aomori Prefecture, at the base of Mount Kurikoma in Miyagi Prefecture, and along the upper reaches of the Agano River in Niigata Prefecture. For the Shimokita sample, which covered ten districts, the researchers made follow-up studies for nine years on the socialization of 875 junior high school graduates.

The present research will take these junior high school graduates as its subject and trace the course of their lives, in terms of occupation, from the time they were graduated from junior high school fifteen years ago up to the present, when they are entering their thirties. The study will attempt to elucidate the relationship between individual life histories and changes in local and industrial society by means of case studies, develop a typology of the occupational socialization patterns of rural adolescents, and clarify the basic conditions under which these patterns emerge, using an original social psychological methodology. This research is expected to contribute not only to science but to education and industry as well.

## National Division

### Communications Supplements

#### A Scientific Analysis of the Possibility of Introducing Compulsory Upper Secondary Education, Including Policy Proposals [printing costs]

**Morikazu Ushioji, Professor**

Department of Education, Nagoya University

¥840,000

#### A Study of Organic Polymers in the Urban Aquatic Environment and Their Significance in Environmental Change [presentation of papers]

**Ryoshi Ishiwatari, Associate Professor**

Faculty of Science, Tokyo Metropolitan University

¥717,000

Integrated Conservation: Recycling the Historical Environment [printing costs]  
**Sachio Otani, Professor**  
Department of Urban Engineering, University of Tokyo  
¥1,826,000

Survey Tour to Assemble Photographs of Chinese Paintings in European Collections [miscellaneous expenses]  
**Kei Suzuki, Professor**  
Institute of Oriental Culture, University of Tokyo  
¥1,530,000

The Effects of Urbanization on the Hydrological Cycle in Tsukuba Science City and Its Surroundings [presentation of papers]  
**Masami Ichikawa, Professor**  
Institute of Geoscience, University of Tsukuba  
¥588,950

Research on Changes in the Natural Environment Caused by Dam Construction, Including Methods of Predicting Such Changes [presentation of papers]  
**Saburo Komura, Professor**  
Department of Civil Engineering, Gifu University  
¥179,400

Contrastive Discourse Analysis of Japanese and English [symposium]  
**Seiichi Makino, Associate Professor**  
University of Illinois at Urbana-Champaign  
¥1,215,000

Changes in Living Structures and the Fostering of a Participatory Society [printing costs]  
**Mihoko Matsuyama, Head**  
Research Group on Living Structure  
¥989,000

Collection and Evaluation of Health and Medical Information on Residents of Isolated Islands in Okinawa Prefecture, with Related Administrative Policy [printing costs and symposium]  
**Masateru Sugiura, Professor and Dean**  
School of Health Sciences, University of the Ryukyus  
¥2,499,820

A Practical Study on the Formation of Concepts of Energy in High School Science Education [printing costs and miscellaneous expenses]  
**Hideo Uchikawa, Associate Professor**  
Faculty of Education, Tottori University  
¥863,000

Research on Structures Remaining from the Taisho and Prewar Showa Eras [publishing expenses]  
**Teijiro Muramatsu, Professor**  
Institute of Industrial Science, University of Tokyo  
¥6,500,600

Work Attitudes Among Female College Graduates [printing costs]  
**Atsuko Fujitani, Chairperson**  
Women's Studies Society of Japan  
¥1,925,000

Fermentation of Cassava Starch Without Steaming [presentation of papers]  
**Seinosuke Ueda, Professor**  
Faculty of Agriculture, Kyushu University  
¥485,400

## International Grant Program

The Toyota Foundation received roughly eighty applications for international grants during fiscal 1979, of which twenty were approved for grant awards by the Board of Directors. Listed below are some of the fields covered by the projects in the international grant program, which was conducted on an experimental basis in fiscal 1976 and 1977 and became an established program in 1978. It should be noted, however, that applications in other fields are also considered.

1. The environment (environmental protection, legal aspects of environmental problems, environmental-quality indices, waste disposal, and so forth).
2. Education and culture (textbook preparation, youth education, research on and preservation of cultural heritage, historical research, and so forth).
3. Social welfare (factory-worker welfare, theories of optimum development, and so forth).

Geographically, Southeast Asia will continue to be the priority area for some time to come, although applications from semideveloped countries in the area that are already successfully industrializing will not be favored. For applications in fields given priority by other funding sources, and for applications from international organizations, the prospective applicants would be best advised to seek assistance from sources other than this Foundation.

In 1979 the Foundation had not yet developed a standard application form but asked that all prospective applicants address their inquiries directly to the Foundation and be prepared to submit all materials necessary for a decision by the Foundation. The review process normally takes six months to a year. Applications are accepted and reviewed throughout the year.

Another seminar (described below) was held in the International Division seminar series initiated in fiscal 1978. This series is intended to provide a forum for interchange between interested Japanese and the recipients of International Division grants on the occasion of visits to Japan by the grantees. The grantees are asked to give a brief presentation on the research work for which the grant has been given and to share their perception of the problems and their thoughts on the future of the project, after which views are exchanged.

#### Seminar 4: "Japanese Villages from Southeast Asian Perspectives" (May, 1979)

This seminar featured reports on two team projects: "Comparative Fieldwork on Rice-Farming Villages in Southeast Asia," awarded a grant in 1977 and being carried out by researchers from four Southeast Asian countries; and "A Comparative Study of Paddy-Growing Communities in Southeast Asia: A Basic Study of Modernization in Paddy-Growing Societies," awarded National Division grants in 1976 and 1977 and being conducted by Japanese researchers.

The Jakarta Urban Ecosystem and Some Problems of Settlement, Industry, and Transportation

Dr. M. Soerjani, Head  
Regional Biology, Faculty of Science and Mathematics,  
University of Indonesia

¥5 million

The increasing quantities of waste accompanying its urbanization have aggravated environmental pollution in Jakarta. The most urgent task in studying the urban ecosystem is to monitor environmental changes resulting from the influence of all the development of the area. There are some simple methods of determining damage to the environment; but in gauging the changes in the complex urban ecosystem, the flora and fauna represent the most important indices for monitoring pollution.

This project will identify plants and animals that are sensitive to changes in the environmental conditions in Jakarta and can serve as effective indices of environmental pollution. A secondary purpose of the project is to organize a research network for long-term joint research.

Basic Research for Formulating a Micropolitan Model

Dr. Warin Wonghanchao, Dean  
Faculty of Economics, Chulalongkorn University

¥10.9 million

The present project continues work begun under "A New Approach to Regional Planning: Application of 'Micropolis' to the Eastern Region of Thailand," a preliminary study for which a grant was awarded in 1978. Proceeding from the hypothesis that the construction of a cluster of small cities is a feasible development technique for the rapidly urbanizing eastern region of Thailand, this basic study is aimed at formulating a micropolitan model (small-city-complex model). This project will assess present circumstances and desirable future conditions in terms of re-establishing a sense of belonging among residents and of the distribution of income and wealth and the promotion of social interaction.

The primary researchers, scholars at Chulalongkorn University, are joined by scholars from other universities, including Chiangmai, Sonkhla, and Khon Kaen universities.

The project is significant in two ways: first, it represents the initiative of Thai scholars in formulating a development model specifically suited to Thai-

land; and second, it provides a rare opportunity for young Thai scholars to undertake a serious joint endeavor in inter-university research.

Development in the Third World: Issues and Problems

Dr. H. M. Dahlan, Chairperson  
International Conference on Development in the Third World: Issues and Problems

¥0.48 million

Under the auspices of Universiti Kebangsaan Malaysia this conference will conduct discussions on the feasibility of development theory, the evaluation of actual conditions, and the contradictions between theoretical concepts and practical realities in the development of Southeast Asian countries, focusing on the stagnation of development in the region. Proposals will also be presented on areas to be emphasized in future development policy.

The conference seeks to articulate the interdependent relationships and the contradictions that, in the context of world politics, exist among Third World countries, specifically in the cases of Indonesia, Thailand, the Philippines, and Malaysia. Scholars from these Southeast Asian countries and from Europe and the United States will participate in this conference, making it an important forum for academic exchange. The proceedings of the conference will be edited for publication as a university textbook.

Survey and Microfilming of the Lanna-Thai Palm-Leaf Manuscripts of Northern Thailand

Dr. Kasem Burakasikorn, Head  
Project for Establishing The Social Research Institute,  
Chiangmai University

¥3.59 million

Five years ago, a large quantity of palm-leaf manuscripts written in Lanna Thai, a northern Thai dialect, were discovered in the keeping of temples in the north of Thailand. Those palm-leaf manuscripts include valuable materials on the history, traditional law, Buddhist and folk beliefs, rituals, ceremonies, astrology, and traditional medicine of the area where Lanna Thai is spoken—materials indispensable to the ethnological and historical study of traditional society and culture in that region.

At the temples the manuscripts are being stored under extremely poor conditions, and they are in

danger of being fragmented and lost. This project will survey the extant palm-leaf manuscripts in northern Thai temples and microfilm those of particular importance. The organization of such basic research materials will contribute much to future research, but the task must be accomplished quickly and deserves attention because of the condition of the documents.

Meeting of the Coordinating Committee for the Guide to the Sources of the History of Nations  
Mrs. Zakiah Hanum Nor, Acting Director General  
National Archives of Malaysia

¥1.31 million

Sponsored by the National Archives of Malaysia and cosponsored by UNESCO, this meeting aims at refining plans for a project to compile a guide to historical source materials on Asia preserved at archives and libraries in the region. This project is a part of the "Compilation of Guides to the Sources of the History of Nations" project being conducted by the International Council on Archives with the support of UNESCO. The guides to historical sources for Latin America and Africa have already been published. The Asian work will be based on a methodology, framework, and organization to be discussed at this meeting.

Archivists from South, West, and Southeast Asian countries will be invited to participate. This meeting represents the first step in an important project to save documents on Asian history from obscurity and make them available to the public.

A Study of Current Efforts for the Development of the Social Sciences in Indonesia: From the Viewpoint of International Scientific Exchange and Technical Assistance

Dr. James Fox, Professional Fellow

Department of Anthropology, The Research School of Pacific Studies, The Institute of Advanced Studies, The Australian National University

¥1.96 million

The present project, awarded grants in 1977 and 1978, is in its third year. The research focuses (1) on the preparation of a detailed ethnographic record of the experiences of Japanese researcher Mitsuo Nakamura in a training program carried out under the auspices of the Indonesian Social Science Foundation and (2) on the comparison and evaluation of this and other programs assisted by foreign aid (including Japanese aid) for the development of the social sciences in Indonesia.

The grant is awarded as supplementary assistance for expenses connected with special circumstances arising in the second year of the project.

HAWA Project: Drafting a Proposal for a Counseling and Welfare Organization for Female Factory Workers in Malaysia

Professor Ungku A. Aziz, Vice-Chancellor  
Universiti Malaya

¥10.22 million

The purpose of the present project is to draft a plan

for establishing a government agency responsible for the welfare of female factory workers: the agency will be known as HAWA, an acronym that spells "woman power" in Malaysian. A feasibility study will be conducted and a report compiled.

The influx of foreign corporations encouraged by the policies of Malaysia's second five-year plan has greatly increased the numbers of female factory workers migrating from rural villages. Poor working conditions, psychological isolation, insanitary living quarters, and inadequate facilities for leisure activities have produced many problems, culminating in a very serious situation for female factory workers. Thus far efforts to solve those problems have been unsuccessful, and there is still no comprehensive understanding of the women's actual situation. Through the present project, these problems will be addressed by a group of experts from Malaysia and abroad.

Treatment and Utilization of Effluents from Palm-Oil Processing Mills

Professor Augustine S. H. Ong, Dean

School of Chemical Sciences, Universiti Sains Malaysia

¥10.34 million

The present project, initially awarded a grant in 1978, is in its second year. The wastes produced in the course of processing palm oil, a basic ingredient of margarine and soap, are at present released into rivers. Since these wastes are flowing into rivers in greater quantity than the rivers can naturally decompose, they form into tarry substances and seriously damage fish and other aquatic life.

In order to resolve this problem, the project will develop both treatment techniques for the effluents and methods of recycling wastes practical for application even at small palm-oil processing mills. In its first year the project successfully completed laboratory research; this year pilot tests will be carried out in small-scale palm-oil processing mills.

Research on Alternative Methods for Preserving Thai Mural Paintings

H.S.H. Prince Subhadradis Diskul, President

Siam Society

¥2.08 million

Thailand's temple murals are not merely outstanding works of art but also invaluable records of its cultural heritage, depicting the life style and religious rituals of earlier times. Already seriously damaged by rain and humidity, if left unattended the murals will almost certainly disintegrate. Until now, however, no efforts have been made to chemically analyze the walls and the paintings; and very few scientific measures have yet been devised to protect them, making it difficult to plan their restoration. This project, launched at the request of the Siam Society, an organization devoted to the preservation of traditional Thai culture, will attempt to remedy the situation.

Ryuichiro Sugishita, associate professor at Tokyo University of Fine Arts and Music, will visit Thailand to examine the murals and take small samples for analysis (using X-ray fluorescence, X-ray diffraction, and differential thermal analysis). These tests will

reveal the nature of the pigments and other materials used in the murals and will provide clues to the techniques used in creating the wall paintings.

**Workshop on Research on Noncognitive Outcomes of Examination-Oriented Schooling**

**Dr. E. L. Wijemanne**

Marga Institute

¥1.2 million

This international scholarly research conference is sponsored by the Marga Institute of Sri Lanka. Since in many countries success in school-entrance examinations is the crucial factor determining an individual's future, preparing for entrance examinations often seems to be the sole pursuit of both students and teachers. At this meeting, in preparation for an international comparative study, plans will be made for a field survey on the effects of entrance-examination-oriented study on the minds of young people. Specialists in education, sociology, and psychology from Southeast Asia, Europe, the United States, Japan, and other countries will participate in this workshop.

**Education and Enculturation in the Republic of Korea: With Special Emphasis on Language and History**

**Professor Kihong Cho, President**

Sungshin Women's University

¥3.25 million

When Japan annexed Korea in 1910, the Korean people were denied education in their own cultural and ethnic traditions. It was not until 1945, when they regained independence, that they could develop autonomy in education. This project will trace the changes that have occurred in research on and the teaching of the history and language of Korea—the nucleus of education and enculturation—since 1910. Such a study will show the changes in South Korean attitudes toward Japan, shifting from hatred of their Japanese overlords to the drive to remove all traces of Japanese rule and then to the cultivation of close relations with Japan as a neighboring nation.

Professor Kihong Cho will cooperate with Yoshio Morita, a Japanese specialist on South Korea who has had the rare experience of living in South Korea for most of the seventy years since its annexation and has been active in promoting improved relations between Japan and South Korea. Studies on South Korean economics, politics, and international relations have begun to appear in South Korea in large numbers; however, few of them deal objectively with the process of change in ethnic and cultural education. Without the cooperation of such people as Mr. Morita a study of this kind would not be possible.

**European, British, and Japanese Perception of International Economic Developments in the 1980s: A Comparison of Policy Models**

**Dr. David Watt, Director**

The Royal Institute of International Affairs, London

¥5.75 million

This is the second year of a project initially awarded

a grant in 1978. Its objectives are: (1) to build a model of the international political and economic conditions that are likely to influence the thinking and the priorities of Japan's policy makers; (2) to clarify the existing and potential points of conflict between this model and similar models built for continental Europe and Britain; and (3) to formulate policy proposals designed to minimize points of conflict or, failing that, to prevent conflict from surfacing unexpectedly.

During the first year of this project, studies were conducted on differences in policy-making processes for energy, industry, trade, and currency in England, France, West Germany, and Japan. The second year will concentrate on constructing the models.

**Investigation on the Compared Biogenesis and Evolutionary Patterns of Ciguatera Fish Poisoning in New Caledonia and French Polynesia**

**Dr. Raymond Bagnis**

Louis Malarde Medical Research Institute, Tahiti

¥4.43 million

Each year, in tropical and subtropical oceanic areas several thousand people suffer the effects of eating fish and shellfish that, although generally considered safe for consumption, frequently become toxic through some as-yet-little-understood relation to the destruction of atolls and coral reefs.

Study on the causes of ciguatera poisoning has progressed considerably over the past several years as a result of research led by Professor Takeshi Yasumoto of Tohoku University, a Japanese authority in this field. The present researcher will conduct his work as a joint international project under the guidance of Professor Yasumoto. The goals of the project are: (1) to identify the types of toxic fish and shellfish and the areas and conditions in the South Pacific in which the fish become toxic, particularly in New Caledonia, the French-held Gambier Islands, and Tahiti; (2) through immunity tests, to explore the possibility of producing an antitoxin; and (3) to examine the ecology and distribution of the seaweeds that seem to be part of the chain that results in toxic fish. The Japanese team in this project is supported by a National Division grant.

**The Seventh FAROPH Congress**

**Mr. K. C. Leong, Secretary-General**

Eastern Regional Organization for Planning and Housing (EAROPH)

¥0.57 million

This international scientific research conference, sponsored jointly by EAROPH and the Malaysian Organization for Human Settlements, will examine various aspects of housing problems related to the process of development.

The participants will be development specialists from Southeast, South, and East Asia. The International Federation of Housing and Planning, the parent organization of EAROPH, will hold its secretariat meeting at the same time and place, making possible the exchange of opinions between European and Asian specialists.



**Asian Theater for Children: Its Role in the Education and Development of the Asian Child**

**Dr. Amelia Lapeña-Bonifacio, Professor and Artist-in-Residence**

University of the Philippines  
¥1.54 million

This is the second year of a project first awarded a grant in 1978. The project will survey theater activities for children in Asia, particularly Southeast Asia, and examine how best to use traditional and modern plays in educating children.

Although source materials in this field are very scarce in Southeast Asia, Professor Bonifacio, a playwright and the head of a volunteer children's theater troupe, has a broad knowledge of Asian performing arts. It is expected that this study will both stimulate interested people in Southeast Asia and provide a basis for future exchange activities and development of studies in the field. When completed, this survey will yield an important collection of widely useful materials.

**The Structure of Northern Thai Mural Paintings**

**Mr. Sone Simatrang, Lecturer**

Faculty of Decorative Arts, Silpakorn University  
¥1.41 million

The present project, initially awarded a grant in 1978, is in its second year. The objective is to photograph, survey, and reproduce the murals of nine temples in northern Thailand, which may be destroyed unless steps are taken to assure their preservation. Designs, styles, and painting techniques of the murals will also be analyzed, contributing substantially to research on this important legacy of Thai culture.

In fiscal 1979, most of the photography, drawing of temple plans; and the illustration and reproduction of the murals was completed. In fiscal 1980, the 1979 survey results will be supplemented and a written report will be compiled on the basis of analysis and interpretation of the data.

**Linguistic Variations in the Speech of the Chao Bon (Nyah Kur) and Mon Communities in Thailand**

**Dr. Theraphan L. Thongkum, Lecturer**

Department of Linguistics, Chulalongkorn University  
¥3.3 million

Linguistic study of the Chao Bon, a minority people of northeastern Thailand, lags behind that of other Thai minorities. Since a Thai-Chao Bon dictionary has never been compiled, it is very difficult to teach the standard Thai language to the children of the Chao Bon tribe.

In this project experienced specialists on minority-group languages will conduct on-site field surveys among the Chao Bon tribe. Through a comparison of the results of this survey and one on the Mon language, which belongs to the same linguistic family, the researchers will record the Chao Bon language in Thai orthography and compile a dictionary. This study is of further scholarly significance in its encouragement of research on the history of one of Thailand's aboriginal peoples, the Mon tribe, particularly its ancient kingdom of Dvaravati.

**Morphological Studies of Sumatran Primates**

**Dr. Amsir Bakar, Lecturer**

Faculty of Science, Andalas University  
¥10.03 million

The flora and fauna of Sumatra and its surrounding islands are abundant, and the area is especially important for the twenty-odd different species of primates that live there. However, as agricultural and forestry development, industrialization, and population migration increase, these plants and animals steadily decrease in number and they should be studied as soon as possible.

The objective of the present project is to identify the phylogenic relationships among the primates inhabiting Sumatra and surrounding islands. With emphasis on detailed study of morphology, this project will examine the social behavior and ecology of those primates. Fieldwork will consist of observation, record making, and the collecting of specimens and will be followed by morphological study.

**The Second Asian-American Conference on Environmental Protection**

**Dr. R. T. M. Sutarnahardja, Chairman**

Organizing Committee for the Second Asian-American Conference on Environmental Protection  
¥1.61 million

Specialists in problems of environmental protection from Southeast Asia, Japan, and the United States will participate in this international conference to be held in Jakarta. The first conference was held in August, 1978, in Sapporo under the sponsorship of the Japan Center for Human Environmental Problems, with the support of a Toyota Foundation Grant for International Conferences Convened in Japan.

In response to the growing seriousness of environmental problems in both Asia and America, this project seeks to promote cooperation among research institutions engaged in the study of environmental issues and to provide specialists with an opportunity to exchange information, opinions, and experiences with counterparts in other nations. It will also draft proposals for environmental protection.

**Eighth Conference of the International Association of Historians of Asia (IAHA)**

**Dr. Zainal Abidin bin Abdul Wahid, President**

International Association of Historians of Asia  
¥0.47 million

This international conference, convened under the sponsorship of the International Association of Historians of Asia with the cooperation of five universities in Malaysia, is held once every three years. The seventh conference, which met in Bangkok in August, 1977, received a grant from the Toyota Foundation's International Division.

The objective of the eighth conference is to facilitate scholarly discussion on deepening a historical understanding of Asian peoples and their cultures and civilizations. Participants will include scholars from throughout the world.



## Communications Grant Program

The "Know Our Neighbors" Translation-Publication Program, now in its second year, aims to better acquaint the Japanese with the culture, society, history, and other aspects of their neighbors in Southeast Asia and to facilitate a deeper awareness of the ways of thinking and social trends in neighboring countries. To this end, the program selected from among Indonesian, Malaysian, Philippine, Singaporean, and Thai books on culture, society, history, and other topics (including fiction) those deemed suitable for introduction to the Japanese public; and the Foundation awards grants to assist with the translation of these books into Japanese. This support is intended to promote the publication of books on Southeast Asia, encouraging both publishers who have already begun introducing books from Southeast Asia and those who are interested in doing so.

The selection of books suitable for publication is made through consultation with advisory groups of learned people from these Southeast Asian nations and a coordinating committee of Japanese experts on Southeast Asia. Of fourteen applications for translation funds this year, twelve were awarded a total of ¥28.2 million: five for works from Thailand, four from Indonesia, two from Malaysia, and one from Singapore.

The Grants for International Conferences Convened in Japan program is intended to increase opportunities for scholars and researchers in developing countries to participate in international academic conferences convened in Japan by providing funds for their travel and accommodation expenses. This year grants totaling ¥10.59 million were awarded to three of sixteen conferences for which applications were submitted. Of the thirty-three participants supported by grants, five were from India; four each from Indonesia and Malaysia; two each from Chile, Kenya, the Republic of Korea, the Philippines, and Thailand; and one each from Brazil, China, Egypt, Ghana, Hong Kong, Nepal, Nigeria, Singapore, Taiwan, and Uganda.

The Fellowship Program for Japanese Social Scientists administered by the International House of Japan is now in its fifth year. The Toyota Foundation has provided grant aid to the program since its inception, bringing to ¥130 million the total amount awarded so far.

## "Know Our Neighbors" Translation-Publication Program

Title	Author	Translator	Publisher	Grant Amount
<i>Deru Tjampurdebu and Kerikil Tadjam dan Jang Terampas dan Jangputus</i>	Chairil Anwar	Megumi Funachi	Yayoi Shobo	¥ 840,000
<i>Si Phan Din</i> , Vol. 1	M. R. Kukrit Framoj	Keiko Yoshikawa	Imura Cultural Enterprise Co., Ltd.	¥ 4,500,000
<i>Luk Isan</i>	Khumpoon Boentawee	Tatsuo Hoshino	Imura Cultural Enterprise Co., Ltd.	¥ 2,400,000
<i>Masyarakat Melayu: Antara Tradisi dan Perubahan</i>	Zainal Kling, ed.	Yuji Suzuki	Imura Cultural Enterprise Co., Ltd.	¥ 2,550,000
<i>Manusia dan Kebudayaan di Indonesia</i>	Koentjaraningrat, ed.	Tsuyoshi Kato, Kenji Tsuchiya, and Takashi Shiraishi	Mekong Publishing Co., Ltd.	¥ 2,850,000
<i>Jalan Tak Ada Ujung</i>	Mochtar Lubis	Noriaki Oshikawa	Mekong Publishing Co., Ltd.	¥ 900,000
<i>Khao Nok Na</i> , 2 Vols.	Si Fa	Koichi Nonaka	Imura Cultural Enterprise Co., Ltd.	¥ 4,200,000
<i>Pisat</i>	Seni Saowapheng	Yujiro Iwaki	Imura Cultural Enterprise Co., Ltd.	¥ 1,860,000
<i>Lae Pai Khang Na</i> , 2 Vols.	Sriburapa	Hiroshi Ando	Imura Cultural Enterprise Co., Ltd.	¥ 2,850,000
<i>The Second Tongue: An Anthology of Poetry from Malaysia and Singapore</i>	Edwin Thumboo, ed.	Miyuki Kosetsu	Gensosha Publishers Co., Ltd.	¥ 930,000
<i>Ranjuau Sepanjang Jalan</i>	Shahnon Ahmad	Jun Onozawa	Imura Cultural Enterprise Co., Ltd.	¥ 1,620,000
<i>Keluarga Gerila</i>	Pramoedya Ananta Toer	Noriaki Oshikawa	Mekong Publishing Co., Ltd.	¥ 2,700,000
Total				¥28,200,000

*Deru Tjampurdebu and Kerikil Tadjam dan Jang Terampas dan Jangputus* [Blossom of Fire: The Life and Works of Chairil Anwar]  
This book brings together two important collections of poetry by an author who inaugurated a new epoch in contemporary Indonesian poetry. Chairil Anwar depicts the invasion of Indonesia during World War II by the Japanese army with subtle irony, and glimpses of his cutting sarcasm are found in many of the poems in this book. The verses are occasionally very difficult, but the translator, also a poet, has rendered them into fluid Japanese, reflecting the nuances of the original with sensitivity. The book also includes a detailed analysis of Anwar's life and works.

*Si Phan Din* [A Chronicle of Four Kingdoms], Vol. 1  
This is an epic novel by M. R. Kukrit Framoj, former prime minister and a member of the royal family of Thailand, a well-known contemporary writer. Already regarded as a classic of modern Thai literature, this masterful story depicts the events of four successive reigns of Thai kings—beginning with King Chulalongkorn (Rama V)—as seen through the eyes of a woman who served all four rulers between 1892 and 1946. This work is an outstanding record of early modern Thai history and of traditional values and the process of value changes in the kingdom. The first volume deals with the reign of King Chulalongkorn (r. 1868–1910).

*Luk Isan* [Child of Northeastern Thailand]

This outstanding novel of peasant life was awarded the 1979 Southeast Asian Literary Prize for its vivid account of the life and thoughts of a farmer of northeastern Thailand. The book appeals especially to those interested in the thinking of Thai people of rural areas and in the conditions in northeast Thailand, the poorest region of the country and a fountainhead of political unrest. The translator is a scholar proficient in Thai and in Lao, the chief minority language of northeastern Thailand.

*Masyarakat Melayu: Antara Tradisi dan Perubahan* [Malaysian Society: Between Tradition and Change]

The first in a series of joint studies of Malaysian society by nine indigenous scholars, this work is unsurpassed as a source on Malaysian society through the pre- and postwar periods. It describes changes in Malaysian society during the years of British colonial rule and during the process of economic development since Malaysia gained independence. This book is particularly important because so few works on Malaysia have been translated into Japanese.

*Manusia dan Kebudayaan di Indonesia* [Ethnic Groups and Their Cultures in Indonesia]

A joint work by thirteen sociologists and anthropologists, this volume includes studies on fifteen of Indonesia's many ethnic groups, discussing the structure of their societies and cultures. Each study is written by a scholar who is a member of the ethnic group in question, an approach that offers a perceptive view. This introductory work will be helpful in fostering an understanding of the diversity of Indonesian culture. The Japanese translation is being prepared by three specialists on Indonesian sociology, history, and politics.

*Jalan Tak Ada Ujung* [Road Without End]

This novel describing the psychological struggle of an intellectual who was deeply involved in the resistance movement during Indonesia's revolutionary period has been highly praised in Indonesia and abroad for its realistic depiction of the often-conflicting relationship between individuals and revolution. The author, Mochtar Lubis, is a major novelist of the postwar period who himself participated in the Indonesian revolution.

*Khao Nok Na* [Unwanted Children], 2 vols.

The original title, meaning "rice from seeds fallen outside the rice fields," refers to unwanted children born to unwed women. The book, by a female Thai writer, describes the conflict between half sisters who share the same mother. The younger sister (the protagonist) suffers discrimination because her father was black, while the attractive elder sister, whose father was Caucasian, is untroubled. The work, a novel of genuine social concern, was awarded Thailand's 1973 Book Week Grand Prize.

*Pisat* [An Evil Spirit]

The protagonist of this novel, though born of a poor peasant family in northeastern Thailand, has the good fortune to receive a college education in Bangkok and later earn a high salary as legal counsel to a bank. Later, in connection with a dispute with farmers over land problems, he becomes distressed by the estrangement between legal and social justice. Ultimately, he leaves his high-paying job to devote himself to the relief of poor peasants. The book has been praised for its stinging portrayal of the contradictions in contemporary Thai society.

*Lae Pai Khang Na* [Looking into the Future], 2 vols. Sriburapa, a journalist and the author of a number of important works in modern Thai literature, died in 1974 in Beijing, where he had lived in self-imposed exile. This work, which takes the form of the reminiscences of a character called the Teacher, is outstanding for its critical depiction of Thai society undergoing profound change following the advent of the constitutional monarchy in 1932.

*The Second Tongue: An Anthology of Poetry from Malaysia and Singapore*

Malaysia and Singapore have been described as a cultural desert and as artistically barren, but this unique anthology suggests that beyond the indigenous literature written chiefly in Chinese there is an outstanding reservoir of literature in English. Writing in their second tongue, the poets in this anthology express with refined skill their mixed feelings of superiority and guilt as members of the elite, as well as the anxiety, contradictions, and conflicts of their lives in a developing and complex multi-ethnic nation hastening toward modernization.

*Ranjuau Sepanjang Jalan* [The Thorny Path]

Written by one of Malaysia's finest novelists, this is the story of a poor peasant family with a small plot of land living in a village in the heart of the rice-cultivating region of the Malay peninsula. Comforted by his firm belief in Allah, the protagonist meets a tragic death in his struggle against the destruction of his crops by blight, insects, and other natural disasters. Left behind, his wife becomes insane; the story ends foreshadowing the same tragic fate for their eldest daughter. It is a poignant testimony to the harsh lives of the rice-cultivating peasants of present-day Malaysia.

*Keluarga Gerila* [Guerrilla Family]

Among modern Indonesian writers, Pramoedya Ananta Toer is known for profundity and a sober style, and this book is considered his best work. Widely read and loved by Indonesians, this story, portrayed through the lives of a poor Indonesian family, vividly depicts the struggle against the Dutch who attempted to recolonize Indonesia after World War II.

## Grants for International Conferences Convened in Japan

Conference	Organizing Committee Coordinator	Grant Amount	Number of Participants Supported
The First Workshop on the Promotion of Limnology in Developing Countries	Research Group on the Promotion of Limnology in Developing Countries Shuichi Mori	¥ 6,810,000	20
Asian Seminar on Health and Medical Sociology	The Japanese Society of Health and Medical Sociology Mikio Yamamoto	¥ 2,190,000	9
Symposium on the Morphological and Ecological Study of the Dugong	Marine Mammal Research Group of the Mammalogical Society of Japan Masaharu Nishiwaki	¥ 1,080,000	2
Total		¥10,590,000	31

### First Workshop on the Promotion of Limnology in Developing Countries

Fresh water is a vital natural resource in development and in improvement of living standards. In developing countries, especially in urban areas, fresh water is rapidly becoming polluted, yet there is little understanding of this problem. It is urgent that awareness of the necessity of limnological research be increased in those countries in order to avoid the mistakes that advanced industrial countries have already made. This conference will provide an opportunity to discuss the concerns and importance of limnology from the standpoint both of pure science and of the applied and environmental sciences and to stimulate education and research in the field.

**Asian Seminar on Health and Medical Sociology**  
Problems of health and medical care cannot be solved by experts in medical care and science alone. Standards of health and the origins of diseases are closely related to the history, culture, and political and economic life of social groups. Broad interdisciplinary cooperation, particularly in the social sciences, is in-

dispensable to the effective solution of health and medical problems. This seminar will survey health and medical care in Asian countries and discuss and analyze specific measures for improving conditions from the standpoints of hygiene and medical sociology.

### Symposium on the Morphological and Ecological Study of the Dugong

The dugong, of the zoological order *sirenia*, is a sea mammal inhabiting coastal waters of the Indian Ocean and the western Pacific in the tropical and subtropical zones. Since ancient times, the dugong has been known and hunted by man for its fat and meat. Hunting has greatly reduced the dugong population in recent years, and since little reliable information is available, it is urgent that international morphological and ecological study of this mammal be conducted in order to prevent its extinction. This symposium will gather scientists from various countries and provide an opportunity for exchange of information on dugongs. The possibility of establishing an international organization for the study of dugongs will also be considered.

## Fellowship Program

**Fellowship Program for Japanese Social Scientists**  
Yoichi Maeda, Managing Director  
International House of Japan  
¥30 million

This program, first awarded a grant in October, 1975, the year of its inception, is now in its fifth year. The purpose of the program is to sponsor and support young Japanese social scientists through fellowships for research of their choosing for a fixed period (gen-

erally two years) in universities and other academic institutes abroad. To date twenty-nine fellowships have been awarded, six in the first year of the program, nine in the second, six in the third, and eight in the fourth. Six fellowships will be awarded in the fifth year. Fellows engage in research in many parts of the world, including the United States, Eastern and Western Europe, and Asia.

The program receives the cooperation of the Social Science Research Council of the United States and other organizations throughout the world and is jointly supported by the Toyota Foundation, the Ford Foundation, and the Japan Foundation.

## Special Fifth-Anniversary Programs

The Toyota Foundation celebrated the fifth anniversary of its founding on October 15, 1979. To commemorate the occasion the following programs were planned:

1. International Workshop on Living Children's Theater in Asia
2. Research Contest on the Theme "Looking at the Immediate Environment"
3. Traveling Symposium on the Theme "Cities and Architecture: Western-Style Architecture in Japan During the Meiji, Taisho, and Early Showa Eras (1868-1941)"

The first program was completed during fiscal 1979; the other two, begun in 1979, will continue into subsequent years. The philosophy on which these commemorative programs is based is described in the Executive Director's Report. The specific criteria used in developing the programs are as follows:

1. Potential for building on and making full use of the achievements of Toyota Foundation activities.
2. Experimental character: potential for exploring possible new focuses for Foundation activities.
3. Projects with long-term impact and significance, rather than short-range, isolated efforts.
4. Originality and suitability for support by a private grant-making foundation: the type of projects previously given little attention in Japan.
5. Regional focus: projects that actively promote Foundation activities in local cities to counterbalance the concentration of programs in Tokyo.

The commemorative programs were planned by the Committee for Fifth-Anniversary Programs, composed of Yujiro Hayashi (Chairman), Takashi Asada, Isao Amagi, and Masamitsu Oshima. The programs received the support and cooperation of local governments and boards of education and of civic organizations and the media. The Foundation is also grateful to many individuals, including those from Southeast Asia, for their efforts and cooperation during the many phases of planning and preparation.

A special fifth-anniversary celebration was held on October 17, 1979. The participation of the many people connected with the Foundation made it very memorable.

## International Workshop on Living Children's Theater in Asia

While engaging in grant-making activities in Southeast Asia during 1977 and 1978, the Toyota Foundation had increasing opportunities to become better acquainted with the region. One of those opportunities enabled the Foundation to learn about children's theater activities in Southeast Asian countries.

In 1979, to celebrate the fifth anniversary of the establishment of the Toyota Foundation, the International Division of the Foundation planned a special project: the International Workshop on Living Children's Theater in Asia. This Workshop was also organized in commemoration of the International Year of the Child and was given further impetus by the facts that there has been almost no exchange of children's theater specialists among Southeast Asian countries and Japan and that children's theater from Southeast Asia has almost never been introduced to Japanese children.

Children's theater specialists from six countries—Indonesia, Japan, Malaysia, the Philippines, Singapore, and Thailand—participated in this Workshop, which included both a conference and live performances for audiences in Japan. Through the combination of the conference and performances and through the experience of living and working together, the participants in the Workshop were able to learn more from one another and to more fruitfully exchange information and ideas.

In conjunction with the International Year of the Child, an International Children's Exposition was held at Aichi Youth Park, near Nagoya, during the month of August. One series of Workshop performances was offered at the park and in Nagoya and Toyota City. A second series of performances was presented at Ranzan, the site of the Workshop conference.

In the selection of participants, preference was given to young people who, on a volunteer basis and without a previously established reputation, are actively involved in nonprofit children's theater activities (such as drama, puppet shows, and pantomime). In addition, the groups selected share a common dedication to synthesizing modern and traditional theater forms and techniques, rather than simply imitating Western children's theater or merely preserving tradition.

These activities were cosponsored by the following organizations:

Ohanashi Caravan Center (for the entire program)

Nagoya Broadcasting Network (August 9)

Toyota City and the Toyota City Board of Education (August 9–10)

### Profiles of Participating Teams

Four of the six countries—Indonesia, Japan, the Philippines, and Thailand—participated in both the Workshop conference and the performances. The Indonesian team, with Mr. Suyadi (the author of illustrated books for children) as its coordinator, presented a *wayang golek* puppet show, *Antakusumah's Shirt*, performed by Mr. and Mrs. Tizar Purbaya; and Mr. Seto Mulyadi (principal of the "Children's Palace"), Mr. Hans-Hady Gandasaputra (a teacher), and Mr. Franki Raden (a composer) led the audience in performances of folk songs played on the traditional bamboo *angklung* and in musical experiments.

The Philippine team, under the leadership of Dr. Amelia Lapeña-Bonifacio (a professor at the University of the Philippines) and consisting mainly of students at the



University of the Philippines who are members of the Teatrong Mulat Ng Pilipinas troupe, presented *The Hen and the Hawk*, a play based on a Philippine folk tale, and *The Sixth Secret Weapon*, a puppet play.

Headed by Mr. Dhepsiri Sooksopa (a painter and author), the Thai team was composed of a young artist, a film maker, an actor, a landscape architect, a lawyer, university students, and others who have been involved in educational theater for children in rural areas for the past few years. The group performed a puppet show, *Smart Black Sheep*; a hand play, *Right Hand and Left Hand*; a mask play, *The Street Sweeper*; and three short pantomimes, *Fishing*, *A Cold Morning*, and *Jumping Rope*.

The Japanese team, represented by the Ohanashi Caravan Center under the leadership of Ms. Mitsue Ishitake (a former elementary-school teacher), presented the puppet show *Haru and Santa Conquer the Oni*.

In addition to the public performances described above, informal study sessions were held each evening both in Nagoya and in Ranzan. The team members shared their experiences in discussions that frequently lasted until late at night.

Teams from Malaysia and Singapore participated fully in the Workshop conference but did not offer performances. Children's theater is still relatively undeveloped in both these countries, but the team members who came to observe the Workshop were stimulated by the experience and plan to initiate efforts toward developing such activities in their own countries upon their return. The Singaporean team consisted of Mr. Tan Teck Hock, Chairman of the Kim Seng Educational Centre; Mr. Fok Fook Choon, Inspector of Schools for the Ministry of Education; and Mr. Peh Chon Seang, reporter for and editor of the magazine *Young Singaporeans*. Members of the Malaysian team included Ms. Alimah Salam, a children's librarian; Ms. Zaidah Hj. Othman, Curriculum Development Officer at the Ministry of Education; and Ms. Jamiah bte Abu Bakar, a librarian. They were all enthusiastic and active participants in the discussions and other programs of the Workshop.

The Workshop conference held at the National Women's Education Center in Ranzan was attended by the participating team members and by representatives of Japanese university and volunteer groups, including the Keio University Study Group for Children's Culture, the Hosengakuen Junior College Puppet Troupe "Hoppy," the Matsudo Ohanashi Caravan, the Iwate Prefecture Youth Council, the Musashino Children's Theater, and the Theater for Boys and Girls Centre, who all shared their own experiences in children's theater. In the evenings after the main conference events, informal study sessions gave participants the opportunity to share more individual experiences and ideas. During these sessions, the Ohanashi Caravan presented a demonstration performance of the finger-puppet play *My Red Umbrella*, a workshop was held on making finger puppets, and a film presentation on children's group activities and experimental music for children was offered by the Indonesian team.

The two-day Workshop conference, which was smoothly and effectively conducted, was chaired jointly by Dr. Bonifacio of the Philippines and Ms. Mitsue Ishitake of Japan. The participants benefited greatly by hearing one another's views, but perhaps the most satisfying aspect of the entire program was the opportunity it provided to get acquainted with a broad spectrum of other people devoted to children's theater. The value in this experience is reflected in the seven-point Resolution drawn up by the participants following the conference. In part, it reads: "[Resolved] that the participants of this Workshop exert efforts to orient their respective countries' children's theater toward the needs and aspirations of the communities being served" and "that the participants of this Workshop initiate a move toward a free exchange of

services and information on voluntary services, financial support, theater techniques, and all relevant information touching on various mediums of effective interaction with children." They also resolved to hold such international workshops at least once every three years.

In addition to the above activities, the team members were also welcomed to an informal luncheon prepared by members of the Toyota City Women's Volunteer Association. Later in their busy schedule they enjoyed a traditional folk-art performance by the Hachioji Kuruma Ningyo puppet troupe.

#### Schedule

- |                   |   |
|-------------------|---|
| August 6 (Mon)    | Thirty-four participants from five Southeast Asian countries arrive at Osaka International Airport.   |
| August 7 (Tues)   | Sightseeing in Kyoto and bus trip to Nagoya. Evening reception.   |
| August 8 (Wed)    | Rehearsals at the Toyota City Arts and Culture Center. Luncheon at Ikoi-no-Ie hall prepared by the Toyota City Women's Volunteer Association.   |
| August 9 (Thurs)  | Performances by the Japanese, Philippine, and Thai teams at Unryu Hall in Nagoya and by the Indonesian and Japanese teams at the Toyota City Arts and Culture Center.   |
| August 10 (Fri)   | The Indonesian, Japanese, Philippine, and Thai teams perform at the Toyota City Arts and Culture Center.  |
| August 11 (Sat)   | Performances by the Indonesian, Japanese, Philippine, and Thai teams at the International Children's Exposition site in Aichi Youth Park.   |
| August 12 (Sun)   | Arrival at the National Women's Education Center, Ranzan, Saitama Prefecture.   |
| August 13 (Mon)   | Performances by the Indonesian, Japanese, Philippine, and Thai teams at the National Women's Education Center auditorium. Evening reception.  |
| August 14 (Tues)  | Workshop conference: "Volunteer Training—Workshop on Promoting Children's Theater in Asia" in the National Women's Education Center Conference Hall.  |
| August 15 (Wed)   | Second day of the Workshop conference. Evening reception sponsored by the Ranzan Town Youth Council.  |
| August 16 (Thurs) | Arrival in Tokyo. Observation tours to Gakushukenkyusha (an educational publisher), the Museum of Japanese Folk Arts and Crafts, and other places.  |
| August 17 (Fri)   | Meeting with the staff of Fukuinkan Publishing Company, publishers of children's books. Tour of Tokyo.  |
| August 18 (Sat)   | <i>Kuruma ningyo</i> puppet performance. Farewell party given by the Ohanashi Caravan at their headquarters in Higashi-Kurume city. Tea at the home of Mr. Yujiro Hayashi, Executive Director of the Toyota Foundation. |
| August 19 (Sun)   | The five Southeast Asian teams depart from the New Tokyo International Airport (Narita).  |

## Research Contest on the Theme "Looking at the Immediate Environment" Summary of the Announcement

### Objectives

Changes are constantly taking place in our immediate surroundings; they may be the cyclic manifestations of nature's changes or they may be the result of the actions of man. While we are generally unaware of the changes going on around us, they may, when examined scientifically, reveal signs of much more momentous shifts.

The Japanese archipelago consists of a relatively small area of land upon which a dense population maintains a delicate balance with its environment. If the balance should be upset, it would be necessary to be able to detect signs of deterioration quickly and to initiate immediate responses to restore the equilibrium. A wide variety of highly specialized research activities have already been initiated toward those ends, although the need remains for further research projects closely associated with the daily lives of people in regional areas.

This is the heart of the necessary basic research. Since it is so closely tied to everyday local life and requires intensive, long-term observation, it cannot be properly carried out by specialists alone. Rather, it requires the active participation of local residents with sustained, close ties to particular areas. Such research is actually more than a purely academic exercise; it constitutes a significant activity in the practical interests of environmental education and study.

The *raison d'être* of this research contest is to promote long-term research activities carried out by specialists in close cooperation with local residents. Designed to contribute to the development of the applied study of the immediate environment, this project is an important part of the programs commemorating the fifth anniversary of the Toyota Foundation. Applications from people involved in original research projects from throughout the country are welcomed and anticipated.

### Research Themes

As shown in the schedule below, the contest will extend over a period of several years. To be considered for the competition, studies should focus on long-term observation of conditions and trends in the immediate environment and examination of the future prospects for problems in these areas as they relate to the practical aspects of everyday life.

The "immediate environment" refers to all phenomena directly surrounding us in our everyday lives. The environment should be understood not only as the natural and physical aspects of our surroundings but also as the social, institutional, cultural, and spiritual aspects. It is desirable that research be conducted even on humankind, since we ourselves constitute part of the environment.

### Selection Committee

Makoto Numata (Chairman), Masami Ichikawa, Jiro Kondo, Saeko Saegusa, Toshitaka Shibata, Ushio Takeuchi, Akira Tamura, Yujiro Nakajima, Keiko Nakamura, Yujiro Hayashi, and Hiroshi Yagyū.

## Schedule

1979 Oct. 15	Research applications accepted.
1980 Jan. 15	Deadline for receipt of research applications.
Mar. 30	Selection of candidates for research awards (selection of about twenty projects and presentation of ¥500,000 per project in preparatory grant assistance).
late Aug.	Submission and presentation of research proposals.
early Oct.	Decision on award recipients (selection of approximately ten projects to be awarded ¥5,000,000 each during a two-year period).
1981 late Aug.	Interim research report conference.
1982 late Aug.	Presentation of research reports—colloquium.
early Oct.	Decision on special research awards (selection of several projects; presentation of prizes and monetary awards to recipient research teams and of research funds needed for continuation of activities).

## Projects Selected as Candidates for Research Awards

Research on the Habitats of Mammals in Gifu Prefecture, the Condition of the Environment, and Environmental Education in the Area  
Tatsuo Kawasaki  
Gifu Prefecture Mammal Study Group  
Gifu Prefecture

A Hydrogeological Study of Ground Water on Miyako-jima and Appraisal of the Environmental Effects of the Use of Ground Water, Focusing on Water Use at Subsurface Dams  
Shizuo Shindo  
Research Group for Water Problems of Offshore Islands  
Okinawa Prefecture

Aquatic Plant Life Along the Lake Biwa Shore: In Search of a Methodology for Botanical Sociology and an Index of Water Pollution  
Keisuke Kobayashi  
Society for Study of the Natural Environment of Shiga Prefecture  
Shiga Prefecture

Research on Objects Installed in Public Spaces in the City: A Census of Street Corners in Musashino City, Tokyo Metropolis  
Keiji Yoshizaki  
Musashino Street Corner Study Group  
Tokyo Metropolis

A Comparative Study of the Environment, Life Styles, and Health of Residents of Agricultural, Mountain, and Fishing Villages and Urban Areas Surrounding Fukuoka and Yatsushiro Cities  
Michikatsu Konno  
Kyushu Health and Science Association  
Fukuoka Prefecture

A Survey of Seasonal Awareness in Urban Shopping Malls: Nagoya's Sakae-machi  
Yasuhiro Kawamoto  
Nagoya in Four Seasons  
Aichi Prefecture

The Relation of Changes in Water Temperature in Crater Lakes and Volcanic Activity of Mount Kusatsu Shirane, Gumma Prefecture  
Masayuki Shimoya  
Mount Shirane Volcano Study Group  
Gumma Prefecture

The Development of Shared Space in Areas of Rapid Population Increase: Self-reliance of Mothers and Children in Daily Life  
Tadayuki Hayasaka  
The Sakado Community Environment Study Group  
Saitama Prefecture

A Comprehensive Observation Study of a Local Natural Environment  
Kiyoshi Tsuchiya  
Society for Environmental Study of the Hiki Hills Region  
Saitama Prefecture

An Environmental Study of Change in the Left Bank Flat-Land Region of the Lower Shigenobu River and the Local Attitudes to Such Change  
Tamuro Hirai  
Association for Environmental Study of the Shigenobu River  
Ehime Prefecture

Study and Application of Regional Climate-Oriented Architecture in Okinawa

**Akio Hara**  
Okinawa Regional Architecture Study Group  
Okinawa Prefecture

A Comprehensive Study for Creating Environmental Education Areas in Okutama-machi, Tokyo Metropolis

**Nobuyuki Omori**  
Okutama Regional Environment Research Association  
Tokyo Metropolis

An Environmental Diagnostic Study Employing the Biota of Southern Sumida Ward, Tokyo

**Hisao Yamanoi**  
Urban Environment Study Group  
Tokyo Metropolis

Factors in the Development of Amenities in the Row Houses and Alleys of Tani-machi, Osaka

**Satoshi Togashi**  
Tani-machi Study Group  
Osaka

A Study of the Boso Peninsula: Its Insularity and Culture

**Akira Suzuki**  
The Study Group on the Insularity of the Boso Peninsula  
Chiba Prefecture

Studies on the Ecology and Environmental Preservation of *Itasempara* [Japanese Bitterling] in the Three Rivers of Kiso

**Shun'ichi Asano**  
Research Association for the Preservation of the *Itasempara* Ecosystem  
Aichi Prefecture

A Study for the Creation of an Improved Psychological Environment for Senior Citizens of the Koji-machi and Bancho Areas of Tokyo

**Takao Nishida**  
Society for Study of the Living Environment for Senior Citizens of Koji-machi and Bancho  
Tokyo Metropolis

Studies on Development by the Iwakura Method of Land-Use Planning Through Communal Agreement

**Fumio Okuyama**  
Iwakura Town Development Study Group  
Kyoto

A Study of Living Conditions in Ogi-machi: A Follow-up Survey of Changes in Home Design, Tools, and Environment

**Shigeru Kaneko**  
Committee for the Promotion of Popular Culture in Ogi-machi  
Niigata Prefecture

A Practical Study to Create Distinctive Municipal Areas by Utilizing Regional Cultural Landmarks in Omi Hachiman City

**Koji Nishida**  
Study Group on the Future of Omi Hachiman City  
Shiga Prefecture

## Traveling Symposium on the Theme "Cities and Architecture: Western-Style Architecture in Japan During the Meiji, Taisho, and Early Showa Eras (1868-1941)"

### Objectives

With recent urban development, the early Western-style architecture introduced into Japan between 1868 and World War II (during the Meiji, Taisho, and early Showa eras) is rapidly disappearing. Such buildings are very important both as historical materials that clearly explain the course of modernization in Japan and as elements that create individuality in the cities and towns where they are located.

For several years the Architectural Institute of Japan has been conducting a nationwide survey and has compiled a catalogue of extant early Western-style architecture.<sup>1</sup> This catalogue will be extremely useful both as basic data for further study

1. This survey was conducted by the Architectural Institute of Japan's Subcommittee for the Survey of Western-Style Architecture Built in Japan During the Taisho and Early Showa Eras (Prof. Teijiro Muramatsu, Tokyo Uni-

of the modern history of Japan and as material for considering the preservation and renovation of early Western-style architecture.

With the support of the compilers of this catalogue, a series of symposiums is being held in major cities in Japan in order to bring the results of the survey to the attention of interested people in various parts of the country.

### **Program Outline**

At each symposium a report on the special characteristics of the extant early Western-style structures in that area will be presented; their worth and their significance to present-day cities will be discussed; case studies on methods of preservation and renovation will be heard; and themes for further research and public administration will be identified. Following this series of symposiums in various parts of Japan, a general symposium will be held in Tokyo in order to consider various problems comprehensively from a wide range of viewpoints.

The schedule of symposiums is given below. Two symposiums, in Tokai and Kyushu, were held during fiscal 1979.

This series of symposiums is sponsored jointly by the Toyota Foundation and the Study Group for Early Western-Style Architecture,<sup>2</sup> with the support of the Architectural Institute of Japan, the Japan Federation of Architects and Building Engineers Associations, the Asahi Shimbun, and other organizations in various parts of Japan.

### **Tokai Symposium**

Reports were presented on early Western-style architecture in the Tokai area (which includes Shizuoka, Aichi, Gifu, and Mie prefectures and the city of Nagoya). Case studies were heard from the floor on current preservation work in Gamagori, Tajimi, and Ise Yamada. Those reports were followed by a special report on the campaign for the preservation of the former Nagoya High Court building and problems related to its future use and by a panel discussion among four specialists on the topic "What Are the Charms of a City?"

### **Kyushu Symposium**

Reports on the architecture of the Meiji, Taisho, and early Showa eras were followed by case studies and discussion by people involved in the preservation of public structures, including the Kumamoto District Court building, the Yamaguchi Prefectural Administration building, the former Nagoya High Court building, and the Sogakudo hall of the Tokyo University of Fine Arts and Music. In addition, Professor Senzo Hidemura of Kyushu University lectured on the meaning of cultural monuments from the standpoint of an economic historian, and his lecture was followed by a lively question-and-answer period.

versity, Chairman) funded by an Asahi Science Research Grant and the Toyota Foundation. The result of the survey, *Catalogue of Early Western-Style Architecture in Japan*, was published by Gihodo Publishing Company in March, 1980.

2. This study group, a voluntary organization, grew out of the Subcommittee for the Survey of Western-Style Architecture Built in Japan During the Taisho and Early Showa Eras.

## Schedule

1. Tokai Area Symposium	Nagoya	Feb. 23, 1980 (Sat)
2. Kyushu Area Symposium	Fukuoka	Mar. 29 (Sat)
3. Shikoku Area Symposium	Takamatsu	Apr. 26 (Sat)
4. Chugoku Area Symposium	Kurashiki	Apr. 27 (Sun)
5. Hokkaido Area Symposium	Hakodate	May 27 (Tue)
6. Kinki Area Symposium I	Kobe	June 14 (Sat)
7. Kinki Area Symposium II	Osaka	June 15 (Sun)
8. Kinki Area Symposium III	Kyoto	June 21 (Sat)
9. Tohoku Area Symposium	Morioka	July 26 (Sat)
10. Hokuriku Area Symposium	Kanazawa	Sept. 27 (Sat)
11. Tokyo Symposium	Tokyo	Nov. 28–30 (Fri–Sun)

# Total Grant Awards for the First Five Years

(as of March 31, 1980)

						No. of Grants Amt. Awarded
	1975	1976	1977	1978	1979	Total
<b>National Division Grants</b>						
Human and Natural Environments	14 ¥ 92,550,000	18 ¥124,050,000	22 ¥122,620,000	28 ¥115,730,000	24 ¥ 99,430,000	106 ¥ 554,380,000
Social Welfare	12 ¥ 61,900,000	14 ¥ 83,000,000	14 ¥ 74,510,000	22 ¥ 74,070,000	24 ¥ 70,090,000	86 ¥ 363,570,000
Education and Culture	12 ¥ 46,830,000	20 ¥ 84,500,000	22 ¥ 76,820,000	23 ¥ 75,360,000	23 ¥ 70,610,000	100 ¥ 354,120,000
Special-Subject Research	—	—	—	—	16 ¥ 30,160,000	16 ¥ 30,160,000
National Division Communications Supplements	—	—	3 ¥ 2,250,000	13 ¥ 14,795,900	15 ¥ 20,159,170	31 ¥ 37,205,070
International Grant Program	—	2 ¥ 15,183,000	12 ¥ 60,010,000	17 ¥ 63,430,000	21 ¥ 79,440,000	52 ¥ 218,063,000
<b>Communications Grant Program</b>						
"Know Our Neighbors" Translation-Publication Program	—	—	—	7 ¥ 15,280,000	12 ¥ 28,200,000	19 ¥ 43,480,000
Grants for International Conferences Convened in Japan	—	—	9 ¥ 19,960,000	8 ¥ 19,500,000	3 ¥ 10,590,000	20 ¥ 50,050,000
Fellowship Program	1 ¥ 15,000,000	1 ¥ 25,000,000	1 ¥ 30,000,000	1 ¥ 30,000,000	1 ¥ 30,000,000	5 ¥ 130,000,000
Research Contest on the Theme "Looking at Our Immediate Environment"	—	—	—	—	20 ¥ 10,000,000	20 ¥ 10,000,000
<b>Grand Total</b>	<b>39</b> ¥216,280,000	<b>55</b> ¥331,733,000	<b>83</b> ¥386,170,000	<b>119</b> ¥408,165,900	<b>159</b> ¥448,679,170	<b>455</b> ¥1,791,028,070

Note: Grant amounts here are as approved by the Board of Directors during each fiscal year. Adjustments to budgets made later are not reflected here.



# Adjustments to Grant Budgets

(April 1, 1979–March 31, 1980)

Period	Grantee Type of Grant	Organization	Date Grant Approved	Grant Amount Approved Grant Amount Returned Final Grant Amount
Fiscal 1976	Sachio Otani National Division Grant	University of Tokyo	October 4, 1976	¥6,700,000
				546,522
				¥6,153,478
Fiscal 1977	Keinosuke Ono National Division Grant	Keio University	October 5, 1977	¥1,700,000
				7,356
				¥1,692,644
	Yoshinobu Kumada National Division Grant	Tokyo Institute of Technology	October 5, 1977	¥4,970,000
				570,000
				¥4,400,000
	Saburo Kanno Grants for International Con- ferences Convened in Japan	University of Tsukuba	October 5, 1977	¥5,320,000
				1,165,600
				¥4,154,400
Fiscal 1978	Yoshio Akioka National Division Grant	Tohoku Institute of Technology	October 4, 1978	¥1,500,000
				3,344
				¥1,496,656
				Tsune Shirai Grants for International Con- ferences Convened in Japan
				288,600
				¥1,541,400
	Imura Cultural Enterprise Co., Ltd. "Know Our Neighbors" Transla- tion-Publication Program		March 15, 1979	¥1,500,000
				150,000
				¥1,350,000
	Imura Cultural Enterprise Co., Ltd. "Know Our Neighbors" Transla- tion-Publication Program		March 15, 1979	¥2,340,000
				150,000
				¥2,190,000
Fiscal 1979	Masaharu Nishiwaki Grants for International Con- ferences Convened in Japan	University of the Ryukyus	October 3, 1979	¥1,590,000
				510,000
				¥1,080,000

# Financial Report for Fiscal Year 1979

## Settlement of Accounts (April 1, 1979–March 31, 1980)

	Fiscal 1979	Fiscal 1978	Fiscal 1977	Unit: Yen Fiscal 1976
<b>INCOME</b>				
Balance brought forward from the previous year	1,892,028	40,669,467	138,095,340	108,153,416
Interest from the principal endowment	—	308,616,264	383,923,429	283,879,508
Interest on working endowment	712,011,139	563,067,959	437,914,676	189,253,000
Miscellaneous income	3,088,720	2,287,324	—	—
Donations	<u>400,000,000</u>	<u>1,800,000,000</u>	<u>1,800,000,000</u>	<u>1,000,000,000</u>
Total Income	<u>1,116,991,887</u>	<u>2,714,641,014</u>	<u>2,759,933,445</u>	<u>1,581,285,924</u>
<b>EXPENDITURES</b>				
Grants and program expenses	519,346,710	490,769,708	452,909,725	382,031,196
Expenses for special fifth-anniversary programs	55,798,591	—	—	—
Administrative expenses	73,973,547	67,900,978	65,452,653	59,132,308
Purchase of fixed assets	—	3,078,300	901,600	2,027,080
Income transferred to reserve for retirement allowance	1,500,000	1,000,000	—	—
Income transferred to working endowment	<u>400,000,000</u>	<u>1,800,000,000</u>	<u>1,800,000,000</u>	<u>1,000,000,000</u>
Total Expenditures	<u>1,050,618,848</u>	<u>2,362,748,986</u>	<u>2,319,263,978</u>	<u>1,443,190,584</u>
Excess of Income over Expenditures	<u>66,373,039</u>	<u>351,892,028</u>	<u>440,669,467</u>	<u>138,095,340</u>

Note: Of the surplus funds for the current fiscal year ¥50,000,000 has been transferred to the working endowment, and the balance has been carried over to the income budget of the following fiscal year.

## Balance Sheet (as of March 31, 1980)

	Fiscal 1979	Fiscal 1978	Fiscal 1977	Unit: Yen Fiscal 1976
<b>ASSETS</b>				
Cash	86,691	140,672	25,508	15,835
Bank accounts	9,786,769	3,623,643	26,575,755	36,845,358
Marketable securities	11,011,238,039	10,520,448,364	8,342,893,746	6,196,265,833
Prepaid expenses	1,790,378	1,790,378	1,622,828	1,622,828
Advance (disbursement)	937,016	288,767	4,832,436	9,340,600
Suspense payments	—	—	1,033,263	—
Fixed assets	44,912,719	47,155,697	46,653,463	48,422,407
Total Assets	<u>11,068,751,612</u>	<u>10,573,447,521</u>	<u>8,423,636,999</u>	<u>6,292,512,861</u>
<b>LIABILITIES</b>				
Accounts payable	153,502,712	132,222,314	105,328,936	85,168,744
Deposits received	1,670,440	1,177,482	985,133	826,370
Reserves	—	—	30,000,000	20,000,000
Reserve for Toyota Foundation prize	50,000,000	40,000,000	—	—
Reserve for retirement allowances	2,292,702	1,000,000	—	—
<b>NET ENDOWMENT</b>				
Principal endowment	3,000,000,000	3,000,000,000	3,000,000,000	3,000,000,000
Working endowment	7,750,000,000	7,399,047,725	5,287,322,930	3,186,517,747
Surplus fund	111,285,758	—	—	—
Total Liabilities	<u>11,068,751,612</u>	<u>10,573,447,521</u>	<u>8,423,636,999</u>	<u>6,292,512,861</u>

## Endowment Status

	End Fiscal 1979	End Fiscal 1978	End Fiscal 1977	End Fiscal 1976	Unit: Yen End Fiscal 1975
Principal endowment	3,000,000,000	3,000,000,000	3,000,000,000	3,000,000,000	3,000,000,000
Working endowment	<u>7,861,285,758</u>	<u>7,399,047,725</u>	<u>5,287,322,930</u>	<u>3,186,517,747</u>	<u>2,157,688,541</u>
Total	<u>10,861,285,758</u>	<u>10,399,047,725</u>	<u>8,287,322,930</u>	<u>6,186,517,747</u>	<u>5,157,688,541</u>

Note: The working endowment at the end of fiscal 1979 includes ¥44,912,719 of fixed assets.

## Chronological Data

1979 Apr. 2: Acceptance of grant applications for fiscal 1979 National Division Grant Program; acceptance of grant applications for fiscal 1979 Grants for International Conferences Convened in Japan

May 1: Acceptance of grant applications for fiscal 1979 "Know Our Neighbors" Translation-Publication Program

May 30: Fourth International Division Seminar

May 31: Final acceptance of grant applications; total: 221 for Human and Natural Environments; 155 for Social Welfare; 198 for Education and Culture; 108 for Special-Subject Research: Changes in Local Communities; final acceptance of grant applications for International Conferences Convened in Japan; total: 16

June 20: Seventeenth meeting of Board of Directors; fiscal 1979 grants decided: for International Division Grants, 9 recipients, ¥45,880,000; fourth meeting of Board of Trustees

July 20: Publication of *Toyota Foundation Report No. 6*

Aug. 6-19: Special Fifth-Anniversary Program: International Workshop on Living Children's Theater in Asia

Oct. 3: Eighteenth meeting of Board of Directors; fiscal 1979 grants decided; for National Division: Human and Natural Environments, 24 recipients, ¥99,430,000; for Social Welfare, 24 recipients, ¥70,090,000; for Education and Culture, 23 recipients, ¥70,610,000; for Special-Subject Research: Changes in Local Communities, 16 recipients, ¥30,160,000; for International Division Grants, 5 recipients, ¥15,200,000; for Grants for International Conferences Convened in Japan, 3 recipients, ¥10,590,000; for "Know Our Neighbors" Translation-Publication Program, 5 recipients, ¥13,200,000; approval of the appointment of members of the Selection Committee for the Research Contest

on the Theme "Looking at the Immediate Environment"

Oct. 15: Publication of *Toyota Foundation Report No. 7*

Oct. 17: Fiscal 1979 grants awarded; fifth-anniversary celebration

Oct. 31: Final acceptance of grant applications for "Know Our Neighbors" Translation-Publication Program; total: 15

1980 Jan. 31: Publication of *Toyota Foundation Report No. 8*

Feb. 14: Seventh National Division Symposium

Feb. 23: First Traveling Symposium

Mar. 18: Nineteenth meeting of Board of Directors; fiscal 1979 grants decided: for International Division Grants, 7 recipients, ¥18,360,000; for "Know Our Neighbors" Translation-Publication Program, 7 recipients, ¥15,000,000; for Research Contest on the Theme "Looking at the Immediate Environment," 20 recipients, ¥10,000,000; activity program and budget established for fiscal 1980

Mar. 22: Eighth National Division Symposium

Mar. 25: Publication of *Toyota Foundation Report No. 9*

Mar. 29: Second Traveling Symposium

## Highlights of Toyota-Foundation History

- 1973 *Sept. 10–11*: Boards of Directors of Toyota Motor Co. (Sept. 10) and Toyota Motor Sales Co. (Sept. 11) adopt resolutions to establish a foundation  
*Oct. 24*: First meeting of Organizing Committee
- 1974 *Sept. 19*: Submission to Prime Minister's Office of application to establish a foundation  
*Oct. 15*: Prime Minister's Office approves establishment of the Toyota Foundation; the Foundation is registered  
*Dec. 20*: First meeting of Board of Directors
- 1975 *Apr. 21*: First acceptance of grant applications for National Division Grants  
*Oct. 15*: First grants awarded
- 1976 *Apr. 1*: First acceptance of grant applications for International Division Grants  
*June 17*: First meeting of Board of Trustees  
*Sept. 30*: Publication of the Japanese-language edition of the *Toyota Foundation Report for Fiscal 1975*
- 1977 *Apr. 15*: First acceptance of grant applications for Grants for International Conferences Convened in Japan  
*Nov. 25*: Publication of *Toyota Foundation Report No. 1*  
*Dec. 4*: First National Division Symposium
- 1978 *May 23*: First International Division Seminar  
*Oct. 9*: First acceptance of grant applications for "Know Our Neighbors" Translation-Publication Program
- 1979 *Aug. 6–19*: International Workshop on Living Children's Theater in Asia  
*Oct. 15*: Acceptance of applications for Research Contest on the Theme "Looking at the Immediate Environment"
- 1980 *Feb. 23*: First Traveling Symposium "Cities and Architecture: Western-Style Architecture in Japan During the Meiji, Taisho, and Early Showa Eras (1868–1941)"

# The Staff of the Foundation

(as of March 31, 1980)

## **Executive Director**

Yujiro Hayashi

## **Secretary of the Foundation**

Iwao Aida

## **General Affairs and Accounting Division**

### *Division Manager*

Naomichi Kamezawa

### *Assistants*

Katsuyoshi Ito

Motoko Takeda

Yoshiko Mimura

## **National Division**

### *Program Officer*

Yoshinori Yamaoka

### *Program Assistants*

Masaaki Kusumi

Gen Watanabe

## **International Division**

### *Program Officer*

Kazue Iwamoto

### *Program Assistant*

Yoshiko Wakayama

### *Administrative Assistant*

Hiromi Fusegawa