The Toyota Foundation Report for Fiscal 1981

The Toyota Foundation is a private, nonprofit, grant-making organization established by the Toyota Motor Company and the Toyota Motor Sales Company (which merged to form the Toyota Motor Corporation on July 1, 1982) and chartered by the Prime Minister's Office on October 15, 1974.

Annual Japanese and English reports on the Foundation's activities have been prepared and distributed widely since fiscal 1975 from the standpoint of the

nonprofit foundation's social duty to make this information public.

This annual report was compiled on the basis of the "Report of Activities for Fiscal 1981" (in Japanese), covering the Foundation's programs during fiscal 1981 (April 1, 1981, to March 31, 1982) and approved at the twenty-seventh meeting of the Board of Directors, held June 16, 1982.

The information on individual grants is current as of the date the grants were approved. Subsequent adjustments are not reflected; however, changes

made in grant budgets are listed separately in this report.

The descriptions of grant projects are not reports of project results but summaries of the project proposals submitted to the Foundation by the grantees and edited by the Foundation staff. The Foundation is responsible for the content of the summaries; however, project results do not necessarily reflect the Foundation's opinions or thinking.

The Japanese edition of this annual report and our quarterly *The Toyota Foundation Report* (also in Japanese) are available on request, as is our English-

language Occasional Report series.

Report for Fiscal 1981

April 1, 1981, to March 31, 1982

The Toyota Foundation Tokyo, Japan

Board of Directors

(as of March 31, 1982)

Board of Trustees

(as of March 31, 1982)

Eiji Toyoda, Chairman

President, Toyota Motor Co., Ltd.

Hidetaro Mori, Vice-Chairman

Yujiro Hayashi, Executive Director

Takashi Asada, Director

President, Research Center for Environmental Development and Design

Isao Amagi, Director

Special Advisor to the Minister of Education, Science, and Culture

Hanji Umehara, Director Advisor, Toyota Central Research & Development Laboratories, Inc.

Masamitsu Oshima, Director

Chairman, Board of Directors, The Medical Information System Development Center

Seishi Kato, Director

Chairman, Board of Directors, Toyota Motor Sales Co., Led.

Minoru Segawa, Director

Senior Advisor, Board of Directors, Nomura Securities Co.,

Seimi Tominaga, Director

Counsellor, All Nippon Airways Co., Ltd.

Sadazo Yamamoto, Director

Senior Advisor to the Board, Toyota Motor Sales Co., Ltd.

Minoru Kikuchi, Auditor

Counsellor, Tokio Marine & Fire Insurance Co., Ltd.

Susumu Nakagawa, Auditor Certified Public Accountant

Nobuji Araki

Senior Advisor to the Board, Toyota Motor Sales Co., Ltd.

Naotaka Ishizuka

Former President, Nagoya University

Nobuhiko Ushiba

Advisor to the Minister of Foreign Affairs

Michio Okamoto

Professor Emeritus, Kyoto University

Chairman, Board of Directors, Toyota Motor Sales Co.

Ltd.; Director. The Toyota Foundation

Goro Koyama

Director and Counsellor, Mitsui Bank, Ltd.

Kiichi Saeki

Chairman, Nomura Research Institute

Binsuke Sugiura

Chairman of the Board, Long-Term Credit Bank of Japan,

Eiii Toyoda

President, Toyota Motor Co., Ltd; Chairman, The Toyota

Shoichiro Toyoda

President. Toyota Motor Sales Co., Ltd.

Michio Nagai

Editorial Writer, Asahi Shimbun Sha

Masaya Hanai

Chairman, Board of Directors, Toyota Motor Co., Ltd.

Kentaro Hayashi

President, Japan Foundation

Yujiro Hayashi

Executive Director, The Toyota Foundation

Susumu Hibino

Professor Emeritus, Nagoya University

Osamu Hirao

Professor Emeritus, University of Tokyo

Shigeharu Matsumoto

Chairman, Board of Directors, International House of Japan,

Hidetaro Mori

Vice-Chairman, The Toyota Foundation

Akio Morita

Chairman. Board of Directors, Sony Corporation

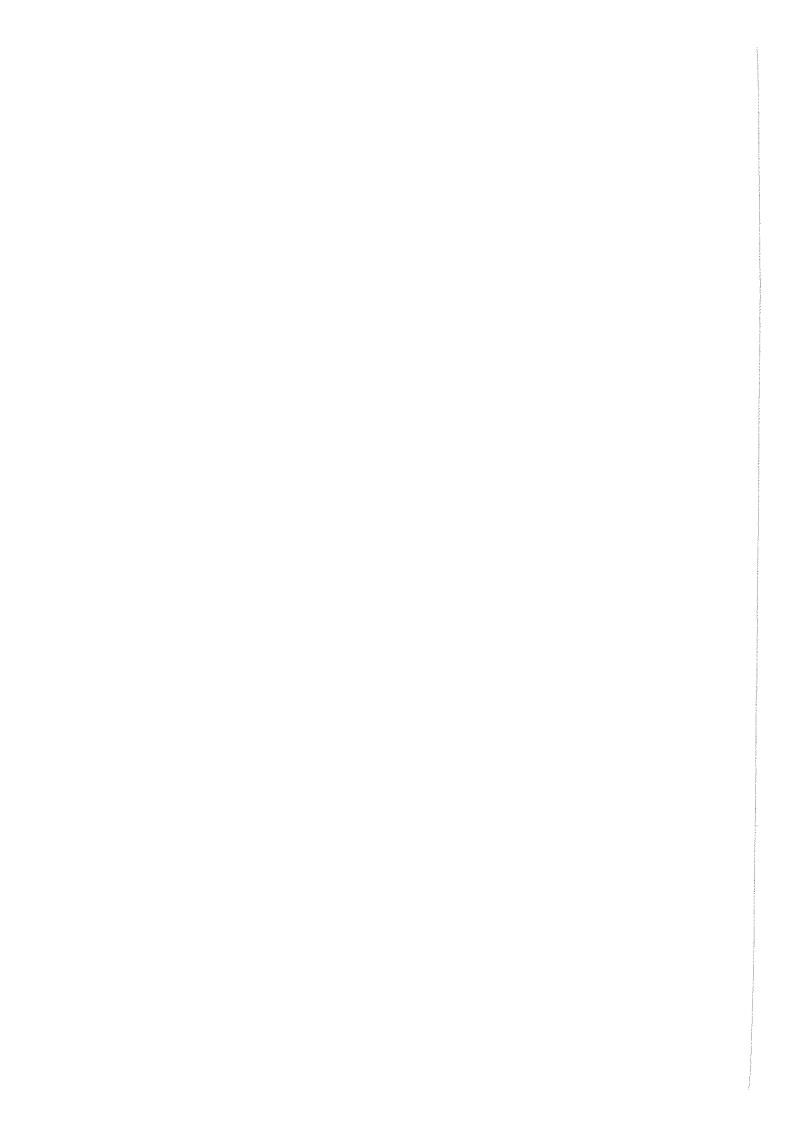
Sadazo Yamamoto

Senior Advisor to the Board, Toyota Motor Sales Co., Ltd.;

Director. The Toyota Foundation

Contents

The Executive Director's Report 5	
Research Grant Division Program Officer's Report 13	
International Division Program Officer's Report 20	
	45
Research Grant Division Communications Supplements 48	;
Research Contest on the Theme "Observing the Community Environment" 51	
International Grant Program 54	
Communications Grant Progam 60 "Know Our Neighbors" Translation-Publication Program 6 Dictionary Compilation-Publication Program 63 Fellowship Program 63	51
Financial Report for Fiscal 1981 64	
Adjustments to Grant Budgets 66	
Chronological Data 67	



The Executive Director's Report

In Search of a Standard for Third-Sector Activities

·

"For centuries we have been isolated from the rest of the world, have produced all that was wanted for our own use, but no more. Now, suddenly, we have entered into foreign relations with five European Powers; a large demand has sprung up for certain articles of home consumption. . . . Thus we . . . find it is impossible we can by any effort meet at once this demand by increased production. What is the result? Everything is becoming dearer. . . . We know very well that in time—even in a small country like this—an increased demand will act as a stimulus on production, and lead to an increased supply. . . . We do not wish to be faithless to treaties, but neither can we calmly look on, and see our country menaced with a general impoverishment. What is evidently wanted is time. You have come upon us with these large demands, and this alldevouring western trade, too suddenly; and you press us too vehemently and too far. We are urged to concede everything, remove all restrictions, and, in a word, to accomplish in your favour, and in a moment, what, after all, should be the work of a century; and this is an impossibility! For no effort or abstinence from action on our part, can suddenly double or triple the supply of the articles you want to buy. . . . We say, then, time is wanted to prevent great calamities resulting—which, after all, must tend to defeat your object of extended commerce, even if you were deaf to all considerations connected with our welfare as a nation.

This was the viewpoint of the senior minister of foreign affairs in the shogunate's Council of Elders during the closing days of the Edo period (1603—1868). The passage is reproduced from *The Capital of the Tycoon* (London: Longman, Green, Longman, Roberts, and Green, 1863, Vol. I, pp. 286—87), an account of a three-year stay in Japan by Sir Rutherford Alcock, Great Britain's envoy extraordinary and minister plenipotentiary in Japan. Alcock was one of the first foreigners to arrive after Townsend Harris, emissary of the United States, and others negotiated the 1858 treaties that formally ended Japan's long period of seclusion.

Evidently Alcock sympathized with this analysis. He followed it up with

these words: "Now it must be admitted, allowing for some little colouring or dressing in the passage of the ideas through European brains, that the argument is a very telling one, and neither devoid of truth nor logic" (p. 287). Having spent much of his time in Japan energetically traveling about the countryside, Alcock knew of the advanced development of Japanese agriculture and its ability to outproduce that of England. This knowledge lay behind his reaction to the minister's views.

A most intriguing aspect of this exchange, I believe, concerns the assumptions of the two men about the fundamentals of productivity. My suspicion is that Alcock, representative of the advancing British, and the minister, charged with the protection of Japan, had totally different ideas about productivity. This difference, one that people in those days may not have been fully aware of, also accounted for the differences in the British and Japanese value systems.

The principle of productivity in manufacturing stands opposed to that in agriculture. With the Industrial Revolution more than a century behind it, Great Britain in Alcock's time was leading the world in industrial development. To the British, therefore, productivity was understood in terms of manufacturing productivity. This productivity is enhanced by minimizing costs at all stages of the production process from the input of raw materials to the output of finished products; shortening the production process is one of the keys to higher productivity. Japan, by contrast, was still an agricultural country. The most fundamental characteristic distinguishing agriculture from manufacturing is the inseparable bond between agriculture and nature. Seeds planted in spring become crops harvested in autumn. The timing of material input and product output must be synchronized with the seasons. Shortening of the production process is out of the question. In Japan in those days, the principle behind increased productivity was instead to minimize waste in the course of the agricultural process. To be sure, terms like productivity or productivity principle were not established concepts in the latter half of the nineteenth century, especially in Japan. But with the opening of Japan as a backdrop, the disparity between the two productivity principles unexpectedly springs into plain view. To my mind, herein lies the significance of the foregoing passages from The Capital of the Tycoon.

 Π

Japanese agriculture in the Edo period was naturally not the industrialized agriculture of today. It was an agriculture geared to the cycle of nature's four seasons. When the Japanese minister repeatedly emphasized that "time is wanted," he was therefore expressing a sound conviction. Without waiting from the spring planting until autumn, no crop could be harvested. In

1. Frank W. Eastlake's 1888 English-Japanese dictionary gives various words for production: shozuru koto, sansuru koto, seisan, sanshutsu (all implying "creating" or "giving birth to"); seisaku (manufacture); chosaku (literary production); kosaku (handicraft production); shiso (thought production): kekka (outcome, product); encho (elongation); and endai (enlargement). For productivity, however, the term given is shoji uru koto (the outcome of creation). The 1887 edition of James Curtis Hepburn's Japanese-English and English-Japanese dictionary translates seisan, the term normally used for production today, as "production" or "products." Under the entry for production, however, seisan does not appear. The only terms given are sakumotsu (crop), sambutsu, and tsukurimono (both "product"). Therefore, until the middle of the Meiji era (1868—1912), the term seisan was in existence but not yet in common use. The term seisansei (productivity), of course, had not yet come into being.

manufacturing industry, however, no need exists to proceed in conformity with nature. The process moves in linear fashion from the input of materials to the output of products; it does not move in the nature-governed cycles of agriculture. Soaring prices mean merely that supply is insufficient to meet demand, and supply can easily be expanded without asking for more time. The principle of manufacturing productivity guarantees the possibility of a supply increase in virtually no time at all. While presenting demands that the Japanese saw as pressing them "too vehemently and too far," the British thus remained confident that they were not being too vehement or pushing Japan too far.

They, too, had a sound conviction supporting their position.

A dispassionate appraisal of this confrontation of convictions will lead us to conclude that Alcock enjoyed the upper hand. Whereas the shogunate's senior foreign minister could only lament over the suddenness and extensiveness of the foreign demands, Alcock, while convinced that the British position was reasonable, could also perceive a kernel of truth in the Japanese position. No doubt this ability to see both sides stemmed from his firsthand observations of Japanese agriculture. But what had been responsible for the advanced development of this agriculture? Although Alcock may not have had a conscious understanding of the basic differences between the principle of productivity in the manufacturing industry in Great Britain and that of productivity in agriculture in Japan, he is likely to have at least sensed that the two principles were different.

Prior to World War II, frugality was considered to be one of the most important attitudes to instill in Japanese children. As summed up in the popular expression *mottainai* (What a waste!), a "waste not" outlook existed as a vestige of the rules of production in the former agricultural society. As I mentioned, the way to increase farm output is to reduce waste, recycling all possible wastage back into agriculture. To discard anything that can be put to use amounts to lowering farm productivity. In time this "waste not" attitude became a social norm and even a core virtue of all Japanese. Thus for more than half a century after the Meiji Restoration of 1868, when Japan's shift to industrial society commenced, the proscription of all excesses survived as an important code of conduct.

In the postwar period the old value system quickly collapsed. As the roots of the so-called throwaway society spread, the productivity principle of manufacturing industry was put to increasing use. But even in Japan's throwaway society, the attitude of eliminating waste has remained a fundamental requirement of production.²

Today the process of industrialization is becoming universal in scope, especially when we consider that agriculture and commerce are being

2. Although the "waste not" attitude has been replaced by the opposite "throwaway" attitude since World War II, confusion may arise over the apparent contradiction between this change and the success scored by Japanese manufacturing industry in strengthening its competitive power. Without doubt the strength of Japanese manufacturers stems from their efforts to raise productivity, especially by thoroughgoing application of the "waste not" value in all production processes. In fact, without sustained adherence to the value of conservation on the part of everyone involved in production, modern Japanese industry would not have come into being. As a consequence of productivity gains, output expanded remarkably and the market absorbing this output had to grow at the same pace. New and improved products were marketed in steady succession to encourage consumers to replace old items, and throwaway products proliferated. As these and related phenomena spread, the "waste not" value of the overall society collapsed. If culture is defined as the way people live in a given society, then what we have here, to borrow from Daniel Bell, is a "cultural contradiction of capitalism."

transformed into what can be called industrialized agriculture and industrialized commerce. This implies that the principle of productivity in manufacturing is becoming the sole relevant principle throughout the world. We must note that in the process, however, a new contradiction is rapidly moving to the fore. This contradiction arises from the diversification of values brought about by the spread of industrialization on the one hand and the normalization of processes generating social castoffs and failures, a consequence of

making increased efficiency the supreme goal, on the other.

Allow me to explain this in greater detail. Because of its fundamental orientation toward mass production, industry constantly seeks to expand the market. As an inevitable result, in all quarters a multitude of values come into conflict. With the advent of today's highly developed mass-consumption societies, the opportunities for conflicts of interest have proliferated. These conflicts of interest come about whether the product is a conventional one and vertical market expansion is involved or the product is a new one seeking horizontal expansion throughout the world's markets. In this way industrial development necessarily engenders societies in which values of various dimensions contend with each other, as modern societies amply demonstrate. But in the meantime, industrial development also involves the permeation of manufacturing's productivity principle throughout every corner of society. This means that great emphasis comes to be placed on efficiency in the industrial sense of the term, while the "waste not" principle of the former agricultural society is correspondingly deemphasized. This sets in train a vicious battle of survival of the fittest, normalizing the processes that turn out social castoffs and failures.

Both the foregoing phenomena are inevitable results of industrialization; clearly they are mutually contradictory. Today, with the growing maturity of industrial society, the issue of resolving this contradiction has at long last come to assume critical importance.

N V

A resolution of this contradiction demands a host of social measures, most of which are planned and conducted by the "first sector" (the government or taxsupported sector in the broad sense, including state-run enterprises and public or semipublic organizations in addition to central and local governments). Without doubt such measures provide the most fundamental response to the contradiction, but first-sector activities, because they are financed by taxes, must be implemented so as to be universal in application. Although eminently suited to some objectives, such as succoring the weak, they are prone to perverting equality and draining society of its vigor. Thus while resolving one contradiction, they create yet another. First-sector activities, in short, do not promise a radical solution. Nor can we look to the activities of the "second sector" (the private, profit-making sector) for a solution to the contradiction, especially since this sector is industrial society's most single-minded proponent of the productivity principle. Herein lies the raison d'être of the "third sector" (the private, nonprofit sector, encompassing the activities of grant-making foundations). It is fair to say that this sector's activities are in general designed to promote a welfare society, but their financing, unlike the first sector's, is insufficient to adopt a universal approach. The goals of the activities must

therefore be limited in one way or another. Still, the third sector should be able to breathe vitality into society if programs are skillfully designed within the given limits.

The grant-making activities of private foundations within the third sector must be conducted on precisely this basis of a limited goal orientation. This requirement is one that we at the Toyota Foundation have always tried to keep foremost in mind, while realizing that the translation of the ideal into practice is no easy task.

As noted earlier, ours is a society in which values of many dimensions come into conflict. Modern society, we might say, is one composed of multitudinous units. In other words, the masses of undifferentiated individuals who form society also join together in various groups, and these individuals and groups, each possessing its own needs and goals, are the units of which society is composed.³ Although we often speak quite simply about *society's needs*, in fact this is a collective term for the needs of all of society's units and has an extreme diversity of content.

With the worldwide spread of industrialization, diversification of the units composing society is a phenomenon common to all nations, the developing countries included. This diversification, I would like to emphasize, is one of the most important points to be taken into consideration by anyone engaged in an international endeavor. The clamor for internationalization today is almost deafening. But as the very term inter-national-ization should warn us, in the conduct of activities reaching across national boundaries we are all too apt to dismiss unconsciously the great diversity of the units that collectively form each nation.⁴ Of course the first sector, when working in the international sphere, must behave perforce as if only governments count as units regardless of whether the many other units in existence are recognized as well.

Each nation naturally has a number of official organs representing it, through which it interacts with the outside world. For the grant-making foundations of the third sector, however, the adoption of a similar mode of conduct in international affairs would be fatal. To be sure, a foundation must engage in active exchange of information with embassies and other diplomatic offices whether they are run by its own country in a partner country or by a partner country in its own country, but this does not imply that diplomatic of-

- 3. This usage of *unit* perhaps deserves explanation, since the term is not often employed in this sense. As noted, society is composed of a great number of undifferentiated individuals. Each individual has assorted needs not only as an individual but also as a group member. Ordinarily, each individual is a member not of just one or two groups but of many groups. These groups, moreover, have their own group goals. Thus both individuals and groups constitute the units of which society is composed.
- 4. Just as the term internationalization has been formed from the root nation, so kokusaika, the Japanese word for internationalization, uses nation (koku) as one of its three ideograms. Hence when speaking either language, people may be inclined to use the term in a way that disregards all units except the nation. It seems, however, that the Japanese are far more prone than others to this simplistic thought tendency. This may be because whereas most countries have a multiethnic composition and the citizens take this diversity of the nation for granted, the Japanese are strongly conscious of themselves as a single people, a consciousness reinforced by their education since the Meiji era. A nation-oriented thought framework becomes especially conspicuous when the Japanese relate to other peoples. Phrases like "Americans are this kind of people" or "the French have that kind of character" slip easily from their lips. What is worse, many Japanese go much further when referring to the peoples of Southeast Asia and the member states of the Association of Southeast Asian Nations. Even in public pronouncements one comes across phrases like "the people of Southeast Asia think thus" or "the ASEAN situation is such and such." This manner of conception betrays a dim consciousness of the multitude of units present everywhere.

fices should have a say in the foundation's activities. On the contrary, the foundation must itself search among the many units of the partner country to find those that have needs matching the qualifications it has drawn up, and then extend assistance satisfying those needs. This means that first a foundation must clearly define its objectives; then it must seek out individuals or groups with the corresponding needs.⁵

The same comments apply to a foundation's domestic grant-making position. When screening research projects, a careful examination must be made of the purpose of the research and of the people who will conduct the research. Here as well, the foundation must first make its objectives clear and then seek out researchers whose orientation matches its own. In the case of Japan the universities and institutes where research is conducted are numerous, the fields of study are wide ranging, and the specialists who conduct the research are innumerable. In order to ensure that the research projects that receive our grants make the greatest possible contribution to the vitalization of society, we are constantly striving to improve our definition of what research deserves assistance from our particular foundation.

IV

Above, I said that third-sector activities, in contrast to those of the first sector, must be limited in some manner instead of being universally applied and should, as a result, be capable of lending vitality to society. With this aim has the Toyota Foundation now been operating for seven years. Looking back over our experiences, I am made painfully aware that Japan, now entering its maturity as an industrial society, needs more than anything else a far greater third-sector input, especially programs orchestrated by foundations like ours,

5. In the case of grants extended by the Toyota Foundation; the Articles of Endowment specify the objective and the programs that qualify for assistance. Article 3, on the objective, states: "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." Programs are specified in Article 4 as follows: "In order to achieve its objective, this Foundation shall conduct the following programs: (I) Provide grants for research and projects related to transport safety; (2) provide grants for research related to the human and natural environments, education, culture, and other fields; (3) provide grants for projects related to the human and natural environments, social welfare, education, culture, wholesome education of youth, and other projects; (4) provide grants for research projects in foreign countries, especially in developing countries, in the fields outlined in 1, 2, and 3 above: and (5) provide grants for other programs as required in order to achieve this Foundation's objective."

Our international grant program, in keeping with these provisions, is devoted mainly to research and projects in the Southeast Asian region. The characteristics of the projects awarded grants, as explained in the introduction to the international grant program section of the Report for Fiscal 1980, are as follows: (1) Projects conceived and conducted by indigenous scholars and professionals. (2) Projects conducted by researchers at universities and private organizations, especially independent projects at local universities, rather than projects conducted by governments or international or regional organizations. (3) Research for the sake of research has a low priority. Projects must be expected to produce concrete results and to have a discernible social impact. (4) Projects that go beyond the academic sphere and reach as broad a sector of the general public as possible.

6. In the application literature for the 1981 national grant program, we made a general appeal for "many applications for research projects of an independent nature uninfluenced by conventional ways of thought." Specifying the content of the desired research, we stated that "emphasis will be placed on research that can contribute to a resolution of the many problems confronted by contemporary society and that can respond to the needs of the times." Any person can make an application, we pointed out, whether as the chief researcher or as a research associate, "provided that the applicant is in a position to participate meaningfully in the research." We noted, however, that we do not

for the activities actually in progress are woefully insufficient and feeble. The silence that greets our earnest entreaties for more action is most frustrating.

Given this situation, in the Report for Fiscal 1980 I suggested that we use our resources to sow seeds from which new third-sector flowers can sprout and bloom, that we cultivate small-scale funds supporting nonprofit activities on the grass-roots level. My thinking was that by fostering a multitude of miniature third-sector entities, we would be able to acquaint an ever increasing circle of people with the third sector and help them awaken to its essence, which tends to be lost from sight in this day of nonprofit activities organized on a gigantic scale. By returning to this essence, I felt, we should be able to discern ways to promote the third sector's development.

At this time I would like to put forward another suggestion. It is that we construct a third-sector standard. What I have in mind is not a set of prosaic measurement criteria but a practical standard for activity evaluation.

At the outset of this report, while quoting from an exchange between Sir Rutherford Alcock, British emissary to Japan, and a minister representing the shogunate, I attempted to sketch the differences between the productivity principle of Japan as an agricultural society during its period of seclusion and that of Great Britain, which had already evolved into an industrial society. Subsequent to Japan's embarkation on industrialization the country quickly grasped the concept of productivity in manufacturing, leading to rapid development from the Meiji era onward. As is well known, the fruition of this process was the high-growth decade of the 1960s. Now that the country is entering maturity as an industrial society, however, an inability to proceed further by merely continuing past practices has become evident. I take this to mean that a new principle of guidance must be found to replace our guiding light of former years—the principle of productivity in the manufacturing industry.⁷

The creation of a base for the implementation of third-sector activities will be of service, I believe, in the formulation of this new guiding principle. Although third-sector programs are undertaken to satisfy social needs, they

welcome applications endorsed by various prominent personages as a tactic to gain approval, a practice unfortunately common in Japan. Extensive revisions were incorporated in our application literature for 1982 to clarify this basic stance on grant extension further.

Also in 1981, with the objective of enhancing research activities that involve the participation of ordinary citizens, an area that tends to be overlooked, we solicited applications for a second research contest. (The first contest, titled "Observing the Community Environment," was inaugurated in 1979 on the occasion of the Foundation's fifth anniversary.) The application literature for the contest explains why the cooperation of nonspecialists is desired: "Research activities concerned with a community's living conditions and necessitating intensive observation over the long term are best not left entirely to specialists. Preferably, active participation should be sought among residents who know the community well."

7. It has been explained that gains in productivity in the manufacturing industry are realized by minimizing costs throughout the production process, from the input of materials to the output of products, and that the essence of increased productivity lies in the shortening of production processes. Japan's biggest productivity gains were realized throughout industry in the 1960s, which coincided with the arrival of the age of throwaways. But for manufacturing's productivity principle to rule unchallenged, two open-ended conditions are necessary: an inexhaustible supply of resources and unlimited potential for market expansion. In Japan during the 1960s, a situation essentially satisfying both these conditions prevailed, and the country became conspicuous among the industrial nations for its astonishing gains in productivity, laying the foundation for the recent flare-up of trade friction. Even presuming that this friction can somehow be eliminated, widespread environmental destruction is now creating problems on a global scale. This has signaled the need for a reexamination of industrial society's productivity principle.

cannot, unlike the activities of the first sector, be responsive to all of society's units. And although their objective is to overcome social contradictions, they cannot attempt coverage of all contradictions. Thus a standard can assist third-sector organizations in setting their sights. Projects that third-sector organizations implement themselves admittedly differ from projects that they merely support with grants, but both have a common goal of meeting a certain social need and a common nonprofit strategy for goal achievement. Since a third-sector standard would provide guidance in determining how society can best be served, such a standard should be able to outline a common set of guidelines for the sector's overall policy orientation.

At the very least, a third-sector standard would provide private foundations with criteria for more proper implementation of their grant-making activities. We believe that the activities of Japanese foundations must flourish in all quarters. Although the fundamental precondition for this third-sector takeoff is undoubtedly ceaseless investigations on the part of program staff members, such a standard would give a more effective underpinning to all of a foundation's programs. Thus as a means to attain our objective of a flourishing Japanese third sector, apart from setting up the aforementioned small-scale funds, we have inaugurated our own attempt to formulate a third-sector standard.

Yujiro Hayashi Executive Director

Research Grant Division Program Officer's Report

Citizen Participation in Research Activities and the Role of Private Foundations

Introduction

"The Toyota Foundation awards grants for such a variety of research projects. In a word, though, how would you describe your grants?" Newspaper and magazine reporters often ask me this question when grant recipients are announced. "Can you give us a brief description? What's your slogan? We need it for our article." Unfortunately I cannot give a brief answer. "Well," I begin, "a private grant-making foundation is . . ." and go on to describe this Foundation's way of thinking and our application and screening procedures. I illustrate the Foundation's character with a series of examples, but I cannot do this concisely.

In a sense, a comprehensive explanation is easier to understand, aside from whether or not it is convincing, and many people show interest when I discuss specific research projects. However, it is hard to link a comprehensive explanation with a series of specific examples to form a clear line of logic. Rather, even though I think I am linking everything logically, I find that people have difficulty in understanding the link. The fault lies on both sides. On the one hand, those who ask for information lack a basic understanding of private foundations' research grant activities because such foundations have rarely been a target of social interest. On the other hand, the foundations either are ill-prepared to theorize about their activities or have neglected to keep the public informed of their activities in a systematic fashion.

In recent years opportunities for public discussion by concerned parties of private foundations' grant-making activities have been gradually increasing, and these activities are now gaining some degree of social recognition. Still, much more effort is required on the part of the foundations. For one thing, all

The Research Grant Division is the former National Division, which was renamed at the beginning of this fiscal year.

^{1.} To date, there has been very little discussion of private foundation research grants and the kinds of grants that should be awarded. Recently, however, these issues were discussed in feature sections

foundations should disclose the purpose of their grants, as well as the themes of the projects. Motivated by such considerations, we are including program officers' reports in the Foundation's annual report on a regular basis beginning this fiscal year. We hope this will further understanding of the aims of the Toyota Foundation's activities and also open them up to criticism and discussion.

In fiscal 1981 the Foundation's Research Grant Division conducted its seventh Research Grant Program and second Research Contest. These programs are summarized later in this report; here I would like to discuss an idea that both programs have inspired—citizen participation in research.

The Meaning of Citizen Participation in Research

The Toyota Foundation is chiefly a foundation that makes grants for research; in that sense it is a so-called research grant foundation. However, this does not mean that our objective is the promotion of pure academic research. As stipulated in Article 3 of the Articles of Endowment, the Foundation's objective 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." We are not concerned with pure, basic research in search of truth or with the development of new technology to promote new industries. Our concern is problem-solving research in the broadest sense, research aimed at solving social problems. (By "problem-solving . . . in the broadest sense" we mean more than just detecting and eliminating a particular problem; we also envisage the creative construction of new alternatives.) Naturally this sometimes requires basic research or the development of new technology, and consequently many grants are made for this kind of research, but our fundamental objective remains the solution of social problems.

How are social problems actually solved? We can point to two methods. One can be called the top-down method, by which problems are analyzed by specialists from a bird's-eye view and solved through policies laid down from above. The other is the bottom-up method, by which specific problems are detected on the spot from below, as it were, and solved through the continued application of independent remedies. We can see many examples of the first method in Japan today—in fact we are rather adept at it—but we are inept at solving problems by the second, bottom-up method.

Yujiro Hayashi, the Executive Director of the Toyota Foundation, has termed the period from the 1868 Meiji Restoration up to the rapid-growth years of the 1960s as the growth period, and the period from the 1970s to around the beginning of the twenty-first century as the mature period, of Japan's industrial society. He writes: "A mature society is a society with a high level of choice. In place of the control-dominated systems of the past, such a

in two magazines: Koeki Hojin, Vol. 11, No. 2 (February 1982), and Gijutsu to Keizai, No. 182 (May 1982).

In addition, the reports collected in Yamada Kagaku Shinko Zaidan no Go Nen (Five Years of the Yamada Science Foundation), published in February 1982, consider the future of grant-making activities and contain many useful suggestions. The analyses and essays in Nihon no Minkan Koeki Katsudo (Private-Sector Charity Activities in Japan), published by the Japan Association of Charitable Corporations in May 1982, are also useful for an understanding of the overall background and general problem points.

society must make more use of participatory systems."² Adopting this concept, we can say that the top-down style of problem solving functioned effectively during the growth period but that it is inadequate for the mature period. In the mature period, society as a whole needs to learn to solve problems by the bottom-up method so that both methods can be used in tandem.

As explained below, our Research Grant and Research Contest programs were developed with the promotion of citizen-participation research in mind. Realizing that the seeds of this kind of research are being nurtured in many areas of Japanese society today, we made grants available as a kind of experiment because we thought that furthering such research was fundamental to Japanese society's acquisition of skill in solving problems by the bottom-up method.

At this stage I do not wish to define the meaning of citizen-participation research too narrowly. On a purely phenomenal level, it is research other than that conducted by specialists in language that only other specialists in the same field can understand. It ranges from ordinary citizens' passive cooperation and participation in the activities of specialists to ordinary citizens' active attempts at original research. It also includes research by specialists conducted as a free exercise from a citizen's standpoint instead of from the standpoint of their specialized fields.³

Citizen-Participation Research in Our Research Grant Program

This fiscal year is the seventh year of our Research Grant Program. Particulars of the first five years are included in the Foundation's *Report for Fiscal 1979*. The sixth and seventh years are basically an extension of the preceding years; there has been little change. The same three established fields—human and natural environments, social welfare, and education and culture—and the same special-subject research on changes in local communities are covered.

In this program we have not always given special priority to citizenparticipation research, and such grant recipients are not especially numerous. However, in awarding grants we have taken this kind of research into consideration in three ways.

The first concerns public solicitation of applications. No restrictions are placed on researchers' eligibility to apply for grants, and no recommendations from academic societies are required. One reason for this policy is to open the door to various research activities other than specialized academic research. As a result we receive a number of applications for citizen-participation research every year.

The second concerns selection. Priority is given to on-site research that includes local thinking on the subject. By "on-site" I mean the following three things: close collaboration with the country's own researchers in the case of

^{2. &}quot;Seijuku Shakai to Daisan Sekuta no Yakuwari" (A Mature Society and the Role of the Third Sector), Gijutsu to Keizai, No. 182 (May 1982).

^{3.} The historian of science Shigeru Nakayama divides traditional science into what he terms "academistic science" and "industrializing science" and suggests that in the future another kind of science, "service science," will become important. The aim of service science will be to contribute to society, and it will be evaluated by society in general (*Tenkan Ki no Kagaku Kan* [A Turning Point in Science], Tokyo, Nihon Keizai Shimbun, Inc., 1980). His concept is rich in implication. Perhaps it is the same thing as the 'citizen-participation research" I am talking about, or at least its seeds; but I have not examined the scientific implications well enough to be sure.

research into the problems of a developing country, the active participation and cooperation of directly involved parties in the case of research into welfare and educational problems, and the participation and cooperation of local residents and people who have some connection with the area in the case of research on a local community. The stronger the researcher's connection with the locality, the more difficult it is for the researcher to present the problem in abstract, theoretical terms, and this impairs the scholarly presentation of the research results; but joint research with local residents is very important when it comes to actual feedback to the area. Emphasizing on-site research has created an opportunity for encouraging citizen participation in research.

Third is the establishment in fiscal 1979 of special-subject research on the theme "Changes in Local Communities." Research in the three established fields had expanded the framework of our themes considerably, and it was felt that the Foundation's distinctive approach should be defined more clearly. On the basis of several years' experience, we explored topics that were both common to our three established fields and of current significance. This led to an empirical review of ways in which the rapid postwar dissemination of material culture in various parts of Japan had affected local communities. Because priority was given to research conducted, as far as possible, from the viewpoint of local residents, more grants were awarded for citizen-participation research in the special subject than in the three established fields.

In the above three ways, the Foundation has actively involved itself in grant-making activities in connection with citizen-participation research. Following are some examples from this year's research grants (for details see the research grant summaries):

- Treatment of Drainage and Waste and Utilization of Byproducts from the Marine Product Processing Industry in Eastern Shizuoka Prefecture
- A Preliminary Study of Desirable Patterns of Road Construction in Historical Areas and of Residents' Efforts to Reach Agreement on the Construction of Houses Along Those Roads
- A Study on Urbanization in the Mamagawa River Basin and Its Effects on the Structure of Local Life
- A Study on Postwar Changes in Nishijin, a Local Community in Kyoto A Study on the Reproduction Structure of Depopulated Areas

Citizen-Participation Research in Our Research Contests

In the autumn of 1979 we inaugurated the Research Contest on the Theme "Observing the Community Environment" to mark the fifth anniversary of the Toyota Foundation. The contest was a new type of program based on the realization that it was difficult to seek out and develop citizen-participation research projects adequately through our established Research Grant Program. At the time we were not sure if the research contest would be a meaningful innovation. But as it turned out, we received a large number of applications outlining enthusiastic research plans from all over the country, and the winning teams' research projects were highly original.

The final results of this contest will be announced in the autumn of 1982, when the recipient of the ¥10,000,000 special research grant will be selected.

Meanwhile, the Foundation decided to run the contest every other year without waiting for the results of the first contest and began publicly soliciting applications for the second Research Contest in the autumn of 1981. Response to the second contest and the research projects proposed by the twenty applicants selected as award candidates are detailed on pages 51–53. Here I would like to discuss some points that I have noticed concerning the development of citizen posticipation research and its attached at the contest of the

ment of citizen-participation research and its attendant problems.

The first point is that the people chiefly responsible are neither specialized researchers nor ordinary citizens but, as people in regionally based specialist occupations, fall somewhere in between: schoolteachers, doctors at local clinics, public-health nurses, local-government employees, architects, and city-planning consultants. Quite independently of their occupations, these people voluntarily contribute their professional expertise to help create new conditions. We tend to perceive citizens' activities in terms of a dualistic framework of specialist or nonspecialist, work or home, producer or consumer, but I have been made aware that the energy involved is actually more diffuse. The functions of specialist and nonspecialist, work and home, producer and consumer overlap and contain the potential for new activity.

The second point is the difficulty of discovering activities with real growth potential as long as we apply the abstract concept of so-called pure research. This is because research activities and practical activities are inseparable. Many projects appear simplistic or irrelevant if they have been evaluated according to the research methods and the publication and evaluation format that are established practice in the academic world. The primary aim of citizen-participation research projects is not the completion of independent research for its own sake but the conduct of research closely related to everyday life and so-called practical activities. The selection committee has devoted a great deal of discussion to the criteria for evaluating citizen-participation research. Many difficult questions have been put to the program staff, and we have frequently found ourselves put on the spot. Though I still have not sorted out my ideas on the subject, I keep reminding myself that it is foolish to put new wine in old bottles.

The third point concerns a more fundamental doubt as to whether this kind of activity can really provide new prospects and perspectives. It is a doubt that has plagued me from the start of the contest planning, a doubt that I cannot shake off even though I have been in contact with so many enthusiastic and unusual research teams. Granted the significance of observing the community environment, will researchers' vision not be restricted the deeper their involvement; or even if that does not happen, will they find in such activities true creative power, the power to change society? I realize that the activities of the prize-winning teams in the Research Contest are citizenbased activities carried out on a different level from transient protest movements prompted by personal interest and ideology, and yet my misgivings remain. Even though I have been in close contact with a variety of activities, I have given barely a thought to formulating this doubt and according it thorough consideration, or rather I have dared to ignore it and push on with the program. However, Takashi Asada, one of the Foundation's directors, provided me some important food for thought in his closing speech at the autumn 1981 conference at which the winning teams in the first Research Contest presented their interim reports. This is the gist of what he said. "Fabre

observed insects. I don't think he just observed insects, though; I think he saw the whole universe in those insects. I can picture Fabre's shining eyes. I hope every member of our research teams will taste the delight of seeing the whole universe in observing the community environment." This is a point we cannot ignore in our future conduct of citizen research.

The fourth point is the lack of organized financial assistance for informal, unsystematized research activities, unspectacular research activities that promise no immediate benefit. At the same time, ill-considered organized financial assistance might spoil such research activities, and for this reason we must exercise self-discipline in planning the development of our programs. Here I would like to touch briefly on something I have been thinking about in this connection. The current plan is that after two years the results of the award-winning teams will be compared and one team will be chosen to receive a special grant of ¥10,000,000 for subsequent long-term research. However, instead of using up this sum on one specific objective to be achieved over several years, could we not use the money to set up a fund to cultivate independent research by the people living in the area studied by the winning team? In practice this would entail all kinds of problems, but we are investigating the possibility of providing this form of organized financial assistance on a trial basis.

As can be seen from the above, our attempt to promote citizenparticipation research by means of the Research Contest is a social experiment, conceived and conducted in the spirit of giving something a try, rather than the realization of objectives based on a particular set of convictions.

The Importance of Local Funds

As I have explained, the Toyota Foundation Research Grant and Research Contest programs are attempts to discover and promote, if only modestly, research activities that are rooted in the imperatives of everyday life. Through these programs we have discovered a strong latent desire throughout Japan to participate in such activities. At the same time, we have realized that despite this latent energy, the pipeline of financial assistance is very narrow.

If citizen-participation research is to become firmly rooted in society and not wind up as a temporary phenomenon, each participant's enthusiasm is the most important factor, but some sort of financial base is necessary too. Apart from relying on personal expenditures, it is possible to apply for government assistance or solicit donations from corporations. However, I think a third source of funds, namely, private foundations, is more appropriate for allowing independent ideas to grow and develop freely. This is the basic idea behind our own grant-making activities, but Japanese foundations are still inadequate in this respect. Building up foundations and funds to support such activities will become a major task. In particular, I would like to draw attention to the following point. If the tiny seeds of this kind of research activity are to develop to maturity, it is important that there be many small local foundations and funds, as well as foundations on a national scale. Based on this thinking, we have conducted various investigations of local funds this fiscal year. While we

^{4.} There has been almost no discussion of the social significance and future of local funds.

Our Executive Director, Yujiro Hayashi, opened last year's Foundation Report with a discussion of the importance of the third sector on the level of daily life, arguing that we need to cultivate the seeds of third-sector activity. This fiscal year's attention to local funds is related to that proposal.

cannot offer any conclusions at this stage, we can say that the creation and fostering of such local funds will lead to Japanese society's acquisition of skill in solving problems by the bottom-up method, and we will take this into account in future program development. One possibility is the idea described above of using the Research Contest special research grant to establish a local citizens' research fund, and we will investigate a variety of other possibilities as well.

Yoshinori Yamaoka Program Officer, Research Grant Division

International Division Program Officer's Report When the Third Sector Crosses National Bounds

The Public Good and Cooperation with the People of Developing Nations

On learning that we are cooperating in research and practical projects overseas in the form of grant-making activities, many people wonder what our underlying purpose is. This question does not bother them in the case of cooperation with a developed or newly industrializing country—possibly because such activities are automatically assumed to be desirable in fostering friendly relations between Japan and those countries. However, when the recipients are the people of a developing country, many people are convinced from the start, without waiting for an explanation of our activities, that there must be some sinister ulterior motive—a suspicion that is only heightened by the fact that we are a private grant-making foundation.

The reasons for this built-in difficulty in cooperating with the people of developing countries are understandable. Cooperation may be meaningful to both sides or it may be harmful to the people of the recipient country depending on one's reason for engaging in cooperation, on the particular people in the other society with whom one is cooperating (this corresponds with the question of the "unit" to which cooperation is applied, as discussed in the Executive Director's Report), and on the methods of cooperation.

If an organization belongs to the first sector, people assume that the first priority in extending cooperation is the national interest. If an organization belongs to the second sector, they imagine that the priority lies in the profits of the organization—the firm—concerned. When an organization belongs to the third sector, in theory people ought to assume that the first priority goes to the "public good"—but this does not happen. Why not? The answer seems to lie in the difficulty people have in visualizing the nature of the public good in the case of cooperation with developing countries.

^{1.} The term public good is usually used to designate that which benefits society as a whole as distinct from that which benefits only the individual, but here it is used somewhat differently to signify the public interest as distinct from both national and private interests.

The vagueness concerning the public good in this case tells us a great deal, I feel, about the state of cooperation between the developing countries and Japan so far. The trouble seems to be that although there has been cooperation in the first and second sectors, cooperation in the third sector has been so meager that the need to define the public good more precisely in relation to this sector has scarcely arisen. At the same time, cooperation with the people of developed countries rarely harms the recipient, so it has not been necessary to clarify the meaning of the public good in the context of cooperation with developed countries.

There are a variety of reasons for the dearth of third-sector cooperation with the people of developing nations. First, there is a shortage of organizations and personnel to carry it out. Second, there is a shortage of funds in the third sector, a factor that bears a kind of chicken-and-egg relationship to the first shortage. Third, there is the fact—which is a causal factor in these two shortages—that people have developed no clear awareness of the significance of the third sector's existence or of the meaning of the public good in relation to

third-sector cooperation with developing countries.

Cooperation via the third sector covers an astonishingly wide range, from relief for the victims of natural disasters and war to medical care and training in agricultural techniques in remote areas, the improvement of living conditions in slum districts, the rearing of orphans, the training of social welfare workers, the education of consumers, and education in environmental issues, as well as the preservation and encouragement of threatened indigenous cultures, youth exchange, and cultural exchange. This list includes, it will be noted, everything that has hitherto been classified as cooperation for humanitarian reasons; but it does not stop there.

In considering the concept of the public good in relation to third-sector cooperation with the people of developing countries, it is necessary today to extend our vision beyond mere humanitarian considerations. Both the first and the second sectors have rapidly expanded their range of contact, with the result that it has become necessary to consider policies and plans in global terms, since human activities as a whole have become interrelated on a global scale. It seems natural, then, that in the third sector, too, the concept of cooperation should have expanded from its former humanitarian preoccupations to an allembracing concern, first with the nature amid which we live and ultimately with the globe itself, and that the public good should come to mean what is good considered in these terms.

The first, second, and third sectors have all, to some extent, adopted a global viewpoint in their activities, and each in its own way is discharging its social obligations to society. Where cooperation with the people of developing countries is concerned, however, it is difficult for the first two sectors, obliged as they are to safeguard the interests of the nation and the firm, respectively, to act in a totally disinterested fashion. Moreover, in responding to the needs of a developing country's society as distinct from national interest in the narrow sense or from corporate profit, the task tends to be undertaken by huge organizations, which makes it difficult to see things from the ordinary citizen's viewpoint and blunts the sensitivity of the approach.

In this respect the third sector, since it takes individual people² as its point 2. I have italicized the word people here to signify persons equipped to act as individuals rather than as members of a nation, an organization, or a family—that is, a collection of self-aware individuals.

of reference, is not obliged to act on the basis of special interests. Furthermore, despite numerous difficulties, such as shortages of funds and personnel to carry out its work, the third sector is able to achieve a more sensitive response to needs and a willingness to teach and be taught on an equal footing. In cases where, for example, the third sector in Japan cooperates with the third sector in a developing country, there should be many instances where each side can find in the accumulated experience of the other hints to the solution of problems that it is facing itself.

An Expanded View of the Public Good

By taking individual *people* as a point of reference, I mean taking as one's starting point the sphere routinely covered by the ordinary individual's awareness. In our daily lives, we do everything—feeling, thinking, encountering problems, and devising appropriate solutions—within a personal world of our own, evolving a way of life best suited to that privately apprehended world; it is, as it were, a process of optimization. This world to which one privately assigns oneself may be the family, the neighborhood where one lives, the organization to which one belongs, a city, or a country, and the results of the optimization will differ depending on the physical extent of that world. Thus the answer to any given problem will almost certainly differ depending on whether the way of life chosen as most suitable takes into account only one family or organization, or whether it is based on a consideration of, say, the inhabitants of an entire city. And where the aim is optimization in a personal world expanded to include a country or the whole world, the answer will be different again.

This becomes clear if we consider the varying scope of optimization that lies behind the "waste not" attitude discussed in the Executive Director's Report and the way in which the meaning (or concept) of waste changes when the area of concern-that is, the private view of the world-is expanded. The "waste not" attitude that evolved in the agricultural society of the past as a means of minimizing unprofitable use in the recycling process referred to the extravagant use of resources. Later, with the postwar advance of industrialization in Japan, this attitude came to condemn the extravagant use not of resources but of time. But as the personal apprehension of the world expands from a national to a global scale, the earlier idea of the preciousness of resources is reinstated. What happens, then, to the idea of not wasting time? Since it is obviously a waste when time, in which the individual should be able to lead a meaningful existence, is used carelessly, the "waste not" attitude in the expanded, global view comes to embrace the question of the quality of time—the question of ways of life—with the result that the world's nature and resources, its flora and fauna, the cultures of its varied human societies, and the ways of life of individual human beings all come to be felt as precious and their misuse as a waste.

Once the routine world view of individual *people* is extended in this way to embrace the macrocosm of the earth and everything upon it, the same view-point applies in the everyday microcosmic world as well. If we take this same view as a starting point, the nature of the public good can, I believe, be classified into three major categories: (1) safeguarding the lives of human beings and of flora and fauna, nature, and the earth itself, (2) ensuring that

people can lead meaningful lives, and (3) the techniques (both software and hardware) for creating the objects and systems needed to to make (1) and (2) possible. These categories correspond to the fields of (1) life, (2) human ways of life, and (3) politics, economics, industry, technology, and so on, respectively.

Here I have assumed that the true viewpoint of the third sector is that which is achieved when the everyday world view of the individual is expanded to a global scale, so that the world as a whole is given the same consideration as an individual human being. Both the first and the second sectors are, in their own ways, very much involved in the three major fields cited above. Yet insofar as their standpoints differ from that of the third sector, the ways in which they are involved differ from that of the third sector. And in regard to these three fields, the three sectors also differ in viewpoint, in the "units" with which they are concerned, and in the methods they use in cooperating with the people of developing countries. It is in this difference, I feel, that the raison d'être of the third sector lies.

Above I have offered a tentative, highly personal view of what constitutes the public good where third-sector cooperation with the people of developing countries is concerned. I hope to elaborate this schema in the future, incorporating the criticism and advice of as many people as possible.

Toyota Foundation Cooperation with the People of Developing Countries

The Toyota Foundation's Articles of Endowment stipulate that cooperation with other countries through grant-making activities shall be directed chiefly toward developing countries. At present the Foundation is cooperating with the people of Southeast Asia, in particular, through a number of grant programs. These can be divided roughly into two categories: the International Grant Program and the "Know Our Neighbors" Translation-Publication Program.

The International Grant Program consists of grants to projects carried out in Southeast Asia by indigenous researchers ("project" here refers to research and experimental undertakings of a researchlike nature). The "Know Our Neighbors" Translation-Publication Program currently consists of a program

- 3. The field relating to human ways of life covers a variety of considerations. Here I mention a few of them by way of example. First, once one's ordinary view of the world is expanded to a global scale, the way of life of each individual becomes something precious. Without a knowledge of and willingness to learn from the ways others live and the kinds of cultures and societies in which they live, it is difficult to have respect for one's own way of life while also respecting those of others. To know others accurately -- this is the basis of everything. Second, it is also important to work for the preservation of cultures and cultural heritages to ensure that the individual culture determined by geographical and historical factors and fashioned by the activities of the people of a particular locality or race does not fade into oblivion, since this culture is not only a source of spiritual pride and identity but a treasure house of practical wisdom. The particular culture and cultural heritage of one people is also the culture and cultural heritage of all people on earth; when we are pressed for an answer to some problem we are facing, or are seeking to give our lives greater richness, the wisdom derived from another culture can often provide a suggestion making a new endeavor possible. A third point no less important than the first two is to ensure that all individuals can think for themselves about the way they live their lives—to see, in short, that they are able to act as independent human beings in choosing the ways they will live henceforth.
- 4. In other cases, for example, where Japanese alone engage in a project overseas or where Japanese and non-Japanese together carry out a project in Japan or another country, it is possible to apply to the Foundation's Research Grant Division for research grants. Non-Japanese, provided that they can

to promote the translation and publication of books on society and culture, as well as literary works, by both Southeast Asian and Japanese writers as a

means of fostering more accurate mutual perceptions.

The fields eligible for international grants are the human and natural environments, social welfare, and education and culture. Taking care to avoid as far as possible fields that the governments of the countries concerned have earmarked for budgetary allocations and duplication of efforts in fields where foreign governments, international organizations, and other foundations are already extending cooperation, we have concentrated on achieving not so much the kind of material affluence symbolized by an increase in gross national product as spiritual affluence. We have shown most interest in projects in such fields as the nurturing of an indigenous cultural identity in the society concerned, the maintenance and improvement of the quality of life, and the expansion of opportunities for self-realization as human beings. We have learned a great deal from the international grant activities we have carried out during the past five years and as a result are concentrating for the time being on the following two fields:

- 1. Projects aimed at preserving and encouraging the indigenous culture of the area concerned.
- 2. Projects aimed at nurturing healthy and self-reliant young people.

Our methods of cooperation differ from those of the first and second sectors. At present we are emphasizing the following points, which will serve to show the kinds of people (units) we deal with and the approach we adopt in cooperating with the people of developing countries:

1. Projects initiated and carried out by indigenous researchers.

2. Projects initiated not by the governments of Southeast Asian countries or by international organizations but by universities and nongovernmental (nonprofit) organizations, especially independent projects undertaken at local universities.

3. Projects that do not represent research for research's sake but offer the

prospect of practical results with a discernible social impact.

4. Projects that go beyond the academic sphere and have as much relevance as possible for the general public.

As this makes clear, we award grants not so much to projects that are generally considered "worthy" as to projects that are appropriate for thirdsector cooperation.

The "Know Our Neighbors" Translation-Publication Program works in two directions. It is both a program aimed at the Japanese public, in which literary works and general works dealing with the societies, cultures, and other aspects of Southeast Asian countries and written by people of those countries are translated into Japanese and published by Japanese publishers, and a pro-

fill out the application forms in Japanese, may also apply for Research Grant Division grants. Non-Japanese from developed or newly industrializing countries who cannot fill out the forms in Japanese should be able to apply to foundations in their own countries. For the time being, unfortunately, applications from people from developing countries other than those of Southeast Asia cannot in principle be accepted, since the limits of Foundation funds and personnel, together with the need to render the Foundation's grant-making activities as effective as possible, necessitate geographically restricting the region in which projects eligible for Foundation grants are carried out.

gram aimed at the people of Southeast Asia, in which works by Japanese writers are translated into Southeast Asian languages and published by publishers in the countries concerned.

The program aimed at the Japanese, now entering its fourth year, at present involves cooperation with the people of six countries: Burma, Indonesia, Malaysia, the Philippines, Singapore, and Thailand. This is, literally, a cooperative venture between people in these six nations and Japanese people, since it grew out of the strong desire of both Southeast Asians and Japanese. People in the third sector in each country concerned have rendered invaluable cooperation in recommending and purchasing books suitable for publication in Japan.

The program aimed at Southeast Asia, for which we have been making preparations and preliminary arrangements in fiscal 1980 and 1981, with an eye to starting in earnest in fiscal 1982, currently provides for the translation and publication of books by Japanese writers in Indonesia, Malaysia, and Thailand. This program, too, is a genuinely cooperative affair, having been initiated at the wish of people in the third sector in both the Southeast Asian countries concerned and Japan and brought to the point of implementation by cooperation between the two sides.

The "Know Our Neighbors" Program is designed, first, to afford an opportunity to correct the stereotyped images of each other harbored by Southeast Asians and Japanese alike. The second purpose is to provide opportunities for the two sides to learn about each other's societies—the way people live, their feelings, their practical wisdom, their social dynamism, and the problems they face. Moreover, the program is directed at ordinary people. Historically viewed, Japan's past connections with Southeast Asia chiefly involved the emigration of Japanese workers in search of employment, military aggression, and economic advance into Southeast Asian markets. In none of these cases were ordinary Japanese people armed with a correct appreciation of the peoples of the region or their societies and cultures, since the Japanese had almost no chance to create sounder, less stereotyped images. The people of Southeast Asia, meanwhile, though well informed about the West, had almost no correct knowledge of the Japanese or their society and culture, nor any opportunity to obtain such knowledge. This program is designed to accord this opportunity to both sides.

Such basic attempts are necessary if the two sides are to coexist with respect for each other's ways of life, though it may be too much to expect immediate results. The program aimed at Japanese readers has involved decisions to translate and publish a total of forty-four works over the past four years (three works from Burma, twelve from Indonesia, three from Malaysia, three from the Philippines, four from Singapore, and nineteen from Thailand): a small beginning, but "mighty oaks from little acorns grow." Conditions in the Japanese publishing world and problems inherent in the distribution system make it extremely difficult to bring these books to the attention of the general public, yet even so their existence is, little by little, making itself felt in society at large. Small reading groups and groups devoted to the study of Asian literature have formed, and people engaged in volunteer activities in Southeast Asia, as well as those whose work takes them to the region, are reading these books before taking up their posts. It seems likely that in a few years' time we

will begin to hear general readers' reactions to and positive criticism of the literature of Southeast Asia. Once this happens, the day of a more mature relationship between Japan and the countries of Southeast Asia will not be far away.

Kazue Iwamoto Program Officer, International Division

Research Grant Program

This fiscal year we awarded grants in the three established fields—human and natural environments, social welfare, and education and culture—and in one special-subject area, "changes in local communities."

Applications were publicly solicited during April and May, as usual, and a total of 778 applications were received. Screening by the selection committees took place from the end of June through September. At the twenty-fifth Board of Directors meeting held on September 29, it was decided to award 88 grants.

This year's grants can be characterized as follows:

1. In the field of the human and natural environments, grants were awarded to twenty-six projects (six of which were preliminary studies). This was fewer projects than last year. Although most projects were headed by researchers affiliated with colleges and universities, there were also a number of projects led by members of private-sector organizations and by ordinary citizens interested in improving their community environments. Four projects consisted of joint research with people in Southeast Asian countries (Chemical Studies on the Biologically Active Components of Tropical Plants and Animals in Indonesia, Appropriate Technologies for Housing Construction by Communities in the Philippines, Research on the Ecological Succession and Formation of Volcanic Soils on the Krakatau Islands, and A Preliminary Study on the Adaptation of Rice to Drought-Prone Areas).

2. In the field of social welfare, grants were awarded to a total of twenty-one projects (six of which were preliminary studies). This too was a decline from last year. Although most project heads were affiliated with colleges or universities, in many cases their research associates included people directly involved in social welfare work in the area under study. The wide variety of subject areas included welfare for the disabled, issues of social unadaptability at the stages of human growth and aging, and social problems in developing countries.

3. Unlike the above fields, the twenty-six projects (seven of which were preliminary studies) awarded grants in the field of education and culture represented an increase over last year. Subjects of research included elucidation of Japan's cultural characteristics, international cultural exchange, overseas cultural anthropological surveys, and the Japanese educational system. A number of dictionary compilation projects—including a Japanese-English ideogram

dictionary, a Japanese-Portuguese dictionary, and a Japanese-German dictionary—will serve to disseminate knowledge of Japanese culture abroad.

- 4. Fifteen projects were awarded grants in our special-subject research program, now in its third year. Seven of these were continuations from last year, while five were preliminary studies conducted by young, energetic researchers. In this field more emphasis is being placed on research conducted by local residents than on so-called academic studies. The research of the past three years seems to have touched on nearly all the major aspects of the theme.
- 5. For fiscal 1981 the number of research grant recipients totaled eighty-eight, while the total grant amount reached almost ¥277 million, with the amount per grant averaging ¥3.14 million. While the majority of grants were awarded to team projects conducted within Japan, about ten highly original projects were conducted by individuals and roughly ten others were conducted by international research teams. Grants were also awarded to non-Japanese researchers and to Japanese researchers living abroad.

Two symposiums on grant-supported research were held during fiscal 1981:

Child-Rearing Practices of Overseas Japanese: Life Styles of Japanese Living in the United States and Southeast Asia (June 27, 1981, Kobe)

Overcoming Disabilities: Exploring Local Welfare Issues (January 22, 1982, Nagoya) and What Are the Daily Necessities of the Disabled?: The Experience of Kasugai City (January 23, 1982, Kasugai)

This was the first year such symposiums were held outside Tokyo, and we were glad to receive the cooperation of local residents in the cities where they were held.

Also, this year for the first time we held symposiums at which all those who received grants presented interim reports on their projects. Each symposium was devoted to one of the four major fields and took place over a two-day period sometime during April or May 1981. (Last year a similar symposium was held for recipients of special-subject area research grants only.) The symposiums proved significant in providing a forum for the exchange of ideas among researchers.

Human and Natural Environments

Treatment of Drainage and Waste and Utilization of Byproducts from the Marine Product Processing Industry in Eastern Shizuoka Prefecture Yoshikazu Sei, Teacher (and six associates)

Nihon University Mishima High School

¥3.0 million

The marine product processing industry in the area under study, which is based mainly on mackerel and other fish caught locally, has grown to account for a forty percent share of Japan's overall production. In the past, over one hundred factories of various sizes operated in the area. However, it has become virtually impossible to cope with the large volumes of highly concentrated drainage and waste associated with this industry, and the pollution affecting local communities and the marine environment has reached major proportions. This has

been detrimental to the operations of local businesses. Local governments, academic circles, and industry have united to study means of dealing with this problem, and the project team has laid the groundwork for a provisional system for treating drainage by biological means. The aim of the present project is to develop this technology further and to establish low-cost, reliable, and energy-efficient treatment methods, including tertiary treatment. The ultimate goal is to construct a model plant based on this technology. There are also plans to study ways of utilizing such drainage and waste as byproducts, since these substances contain large amounts of valuable materials.

Selective Determination of Polyaromatic Hydrocarbons Based on Time-Resolved Fluorometry Nobuhiko Ishibashi, Professor (and one associate) Faculty of Engineering, Kyushu University ¥3.2 million Recently, controversy has arisen regarding the carci-

nogenecity of polyaromatic hydrocarbons emitted into the atmosphere through the combustion of hydrocarbons by automobiles and in factories or homes. With the ongoing conversion in fuel use from oil to coal, polyaromatic hydrocarbons are likely to play an increasing role as a cause of pollution in the future.

Most polyaromatic hydrocarbons exhibit strong fluorescence under ultraviolet light, and fluorometry is widely used today as one of the most effective methods for detecting these substances. The aim of this study is to construct and develop a miniaturized subnanosecond-pulsed dye laser and a microcomputerized high-speed liquid chromatograph. Combining these instruments, it is hoped, will serve to establish a selective, sensitive method for the analysis of polyaromatic fluorocarbons.

Individual Exposure to Nitrogen Dioxide and Its Effect on Human Health

Hajime Nishimura, Professor (and five associates) Faculty of Engineering, University of Tokyo ¥7.88 million

In the past, epidemiological studies on the atmospheric pollutant nitrogen dioxide (NO_2) have typically represented the level, or dose, of individual exposure to NO_2 in terms of atmospheric concentrations measured at regular intervals by monitoring stations. However, with a pollutant like NO_2 , which is also emitted from indoor sources, it is not possible to gauge dosages accurately from outdoor atmospheric concentrations. The prevalence rate of symptoms—that is, the ratio of individuals in a particular group exhibiting certain biological reactions—as measured through responses to questionnaires like that drawn up by the British Medical Research Council has been used as an indicator of the effect of NO_2 on health.

The aim of the present study, a continuation from last year, is to clarify the dose-effect relationship of NO_2 on the inhabitants of an area. In addition to measuring the dose directly by the filter-badge method and monitoring responses using a standardized questionnaire, the project will express the dose-effect relationship in terms of the strength of a particular biological reaction—the urinary hydroxyproline-creatinine ratio. Since some two thousand sets of data will be available for analysis, it should be possible for the researchers to obtain statistically valid results.

Physical and Chemical Studies on Environmental Indicator Organisms Using Laser-Induced Photoacoustic Spectroscopy

Hitoshi Kamada, Professor (and seven associates) Faculty of Engineering, Yamagata University ¥9.0 million

Biological organisms change in various ways at the physical and chemical levels in response to noncontinuous changes resulting from pollution and natural environmental factors. These changes are "recorded" within the organism for long periods of time.

The present study involves physical and chemical research on biological indicators that are highly sensitive to changes in the external environment. A newly developed tuned-wavelength laser capable of high-sensi-

tivity trace analysis, as well as a photoacoustic spectroscopy technique based on microbeam light from this laser, will be employed. The main subjects of the study will be plant species found throughout Japan and plants and animals existing in conditions of environmental pollution caused by humans. The subjects will be studied in vivo, and the cause and effect relationships between pollutants and the reactive substances will be clarified both qualitatively and quantitatively by means of spectroscopy. The results obtained from these studies of biological indices at the physical and chemical levels should lead to new knowledge and the development of a new technique of environmental monitoring that differs from the traditional method of direct measurement of pollutants.

Land-Use Changes in Suburban Areas Resulting from the Construction of New Railways Hideo Nakamura, Professor (and three associates) Faculty of Engineering, University of Tokyo ¥3.74 million

In addition to satisfying the increasing demand for transportation services, the construction of new railway lines in the growing suburbs of large cities can also improve the accessibility of these areas, thereby opening up new supplies of land for housing and other urban uses. In practical terms, however, such factors as rising land prices and inappropriate zoning regulations mean that the benefits of new railroad construction often do not match the enormous investment involved. Therefore, it is essential that the construction or improvement of railroads be accompanied by the implementation of policies that encourage desirable patterns of land utilization.

The purpose of this study, a continuation from last year, is to conduct an empirical analysis of the effects of railway development on land prices and land utilization in surrounding areas and to develop a structural model based on the findings, thereby establishing a method of predicting the effects of various measures on zoning. This method of prediction will make it possible to project the types of measures that will encourage appropriate land utilization.

Taxonomical and Biological Studies on the Effectiveness of Japanese Chironomid Midges (*Diptera, Chironomidae*) in the Elimination of Lake and River Pollution and as Indicators of Water Quality

Manabu Sasa, Professor (and eight associates) School of Medicine. Teikyo University

¥4.4 million

Water pollution in Japan's lakes and rivers has reached serious proportions in recent years. However, recent studies have shown that vast numbers of chironomid midges are thriving on the bottom sediments before emerging as winged adults and that these insects play an important role in the natural purification of water through the fixation and removal of large quantities of nutrients. On the other hand, the hordes of chironomid midges that breed in rivers and lakes at an advanced stage of eutrophication also constitute a nuisance to local residents.

The species of midges living in a particular area

vary with the degree of river and lake pollution and could therefore be used as sensitive indicators of water quality. However, little is known about the distribution of chironomid midges in Japan, and many new species have been discovered in the course of recent surveys of lakes and rivers. The objective of the present study is to identify chironomid species and study their ecology. This information will be used to lay the groundwork for the effective utilization of these midges in the improvement of the environment.

Chemical Studies on the Biologically Active Components of Tropical Plants and Animals in Indonesia Yuji Hayashi, Professor (and foor associates) Faculty of Science, Osaka City University ¥6.8 million

Although the abundance of plant and animal resources in the tropical rain forests of Asia has been known since ancient times, virtually nothing is known about the chemical constituents of these resources. However, recent advances in natural organic chemistry have led to the clarification of the chemical structures of many of the biologically active substances that exist in minute quantities in the natural environment, and research on the composition of these substances has led to the development of many new techniques for organic synthesis. Interest in these advances is not limited to chemists, but also extends to the related areas of biology, pharmacology, and agriculture.

The present research project will be conducted jointly with Indonesian scientists. Objectives include the detection and classification of toxic and antitumor substances and plant growth regulators in tropical plants and animals, the determination of the chemical structures of these substances by means of new spectroscopic techniques and other methods, the establishment of synthesis techniques, and the clarification of relationships between the chemical structures and physiological functions of these substances.

The Conversion of Solar Energy to Chemical Energy by Means of Photocatalytic Reactions

Toshihiro Yamase, Associate Professor (and one associate) Research Laboratory of Resources Utilization, Tokyo Institute of Technology

¥6.12 million

Today we depend primarily on limited resources of fossil fuels for the energy that forms the basis of all human activities. One possible means of ensuring that a supply of energy will be available for the activities of future generations is to convert the abundant resource of solar energy into forms that are more convenient to use. The raw material for hydrogen energy is water, which exists in vast quantities, and upon combustion the hydrogen once again turns into water. Moreover, the reductive fixation of carbon dioxide in industrial wastes into such substances as methanol can add energy value to waste products while at the same time helping to cleanse the environment.

The objective of this project is to develop an efficient photocatalytic system based on such light-sensitive materials as semiconductors or metal complexes and to utilize this system in the conversion of solar energy into chemical energy through hydrogen production, carbon dioxide fixation, and other methods. Photoelectrochemical experiments will be conducted as part of a detailed investigation of charge transfer reactions in photoexcited semiconductors and metal complexes.

Research for the Production of a Manual to Be Used by Local Residents in Drawing Community Maps and Preparing Community Cards

Motoo Yoshimura, President (and five associates) Institute of Environmental Planning and Programming ¥3.85 million

Recent years have seen a rapid upsurge in people's interest in their living environment and local community. The factors behind this trend include the desire to protect their surroundings from environmental destruction, changes in people's attitudes toward the places where they were born and raised, and rising interest in cultural and recreational activities. One way of responding to this interest is through the provision of guidelines for activities designed to improve the quality of life. Such activities would include assessment of the local environment by the residents themselves and efforts to improve or develop the community.

The aim of the present study, a continuation from last year, is to develop a well-structured manual featuring an organized presentation of the indices used to evaluate the local environment and guidelines for specific activities, including advice on procedures for writing up field notes and obtaining and filling out blank maps and instructions on methods of analysis and the tabular or graphic presentation of data. In addition, the manual will list the names and addresses of scholars and specialists, advice on how to obtain relevant information and material, and brief explanations of public hearings and similar systems and the workings of government departments and other official organs that deal with such matters. It is also hoped that the manual will serve as a household reference book.

Long-Term Monitoring of the Human Environment by Means of Biological Analyses Masayuki Ikeda, Professor (and five associates)

Faculty of Medicine, Tohoku University

¥3.89 millior

The objective of this study is to monitor the physiological effects of environmental pollution in Japan from the long-term perspective and on a nationwide scale. Last year's grant enabled the researchers to collect food and venous blood samples and other organic materials in some forty districts in twenty-four prefectures ranging from Hokkaido to Okinawa. Analysis of some of the samples was begun, while the rest were frozen and stored.

This year the samples will be subjected to the following analyses. (1) The cadmium content of 2,100 blood samples collected in the summer and 600 samples collected in the winter will be analyzed to determine whether seasonal variations exist. The possible relevance of age will also be studied. (2) Similar analyses will be conducted for manganese and lead to determine the normal ranges for these two metals and to clarify possible regional or seasonal variations. (3) The block

digestion—autosampler—flameless atomic absorption spectrometer system used to analyze blood samples will be improved to permit the analysis of food samples as well. The system will then be used to correlate the metal load originating in food with the metal content of the blood.

A Comparative Study of Aryl Hydrocarbon Hydroxylase Activity Among the Residents of Fukuoka City and of a Remote Island in Fukuoka Prefecture Masanori Kuratsune, Professor (and four associates) Faculty of Medicine, Kyushu University ¥6.85 million

Aryl hydrocarbon hydroxylase (AHH) is an enzyme system that metabolizes various carcinogenic polycyclic aromatic hydrocarbons (PAH) present in our environment. After entering the body, PAHs are either metabolically inactivated or converted into more carcinogenically potent forms by this enzyme system. For this reason the relationship between AHH and carcinogenesis is being studied by researchers in a number of countries. In addition, AHH induction is an extremely sensitive biochemical reaction, and AHH has been reported to be a useful biochemical index for determining the degree of environmental pollution in living organisms.

The objectives of this study are to clarify the basic distribution of this enzyme system among Japanese and to determine variations in distribution due to environmental factors. AHH activity will be measured in cultured lymphocytes obtained from residents of a remote island community and from people dwelling in an urbanarea. In both cases the subjects will be people who are not habitual smokers or consumers of alcohol. The results of this study will be used as the basis for studies on the relationships between fluctuations in AHH activity and carcinogenesis.

The Environmental Effects of Waste Water from Household Washing Machines

Michiko Katayama, Associate Professor (and two associates) Department of Home Economics, Tokyo College of Domestic Science

¥4.56 million

The purpose of this project is to clarify by means of the soil perfusion method whether surfactants and fluorescent whitening agents (FWAs) in household waste water are completely biodegradable in the soil. The project is now in its second year.

The surfactants tested will be linear sodium alkyl benzene sulfonate, branched sodium alkyl benzene sulfonate, sodium dodecyl sulfate, an alkyl-ether nonionized surfactant, an alkyl-aryl non-ionized surfactant, and an alkyl-ether-aryl non-ionized surfactant. The FWAs will be triazinyl stilbene and bis(styryl) biphenyl types. The depletion of the surfactants and FWAs in the perfused solution will be traced by means of chromatography, ultraviolet-spectrum analysis, and observations of changes in such factors as fluorescent intensity and total organic carbon. The processes whereby the surfactants and FWAs in the perfused solution are biodegraded will also be studied by measuring increases in the bacteria count and changes in the types of bacteria

present. Intermediates resulting from the biodegradation process will be detected by means of high-speed liquid chromatography.

Appropriate Technologies for Housing Construction by Communities in the Philippines Kunihiro Ando, Assistant (and five associates) Faculty of Engineering, University of Tokyo ¥4.5 million

An essential goal in ensuring the future quality of the living environment is the development of new housing systems based on locally obtainable materials, of energy sources, and of building and maintenance techniques that do not destroy the environment. The aim of this study is to find a possible means of achieving this goal.

This project will be conducted jointly with faculty members of the University of the Philippines, Building and maintenance activities among traditional groups in rural Philippine communities will be surveyed and analyzed, as will also urban housing projects built through mutual cooperation and houses constructed by the residents themselves. An attempt will be made to define those techniques that can be used in the above activities. In addition, a traditional home will be constructed according to local techniques in a village in northern Luzon. Problems that exist in the actual production methods will be evaluated through comparisons with urban building activities involving the participation of residents. The results will be used as the basis for theoretical studies of construction in small communities and in the development of design systems.

Proposals for Local Government Systems in an Age of Urbanization

Keüchi Matsushita, Professor (and four associates) Faculty of Law, Hosei University

¥4.3 million

The present system of local government dates back more than thirty years, and numerous inconsistencies have emerged as a result of its inability to adapt to the needs and conditions experienced in local communities today. This has led to much discussion of the need to reform various aspects of the existing system. The purpose of the present study is to develop from a long-term perspective a system of local government appropriate to an age of urbanization. This would include concrete and comprehensive ideas for the reform of basic governmental organization and administrative methods. Reforms are to be oriented toward (1) the development of a system suitable for urbanized communities, (2) the rearrangement of the present system into one that is less centralized, and (3) the facilitation of citizen participation in local government.

The results of last year's preliminary study will form the basis for this year's work, which will involve wide-ranging, in-depth discussions (particularly with experts in various fields), the collection of relevant literature and materials, the examination of existing theories and research findings, and the drawing up of a list of areas in which reforms are needed. Basic research will be completed with the drafting of a fundamental proposal for the overall reform of the existing system of local government.

Research on Biological Control Through Insect Viruses of Mosquitoes That Act as Vectors for Tropical Diseases

Akira Igarashi, Associate Professor (and six associates) Institute for Tropical Medicine, Nagasaki University ¥3.16 million

The transmission of disease through pathogens carried by vector mosquitoes constitutes a serious public health problem in tropical areas, and the eradication of these mosquitoes is a major goal. Chemical insecticides have traditionally been used for this purpose. However, the use of these substances has led to environmental pollution and other problems, and it has become a matter of extreme urgency to develop biological methods of eradication that do not affect the environment.

The project's chief researcher has already succeeded in isolating a virus from field-caught Culex tritaenio-rhynchus mosquitoes using clone C6/36 from Aedes albopictus cell cultures. During last year's preliminary study the researchers infected laboratory-cultured mosquito larvae with this virus and observed the resultant mortality rate. This year these preliminary findings will be used as the basis for further experiments and to accumulate data to be used in developing a method for the biological eradication of vector mosquitoes using viruses.

The Importance of Bacterial Plasmids to the Decomposition of Halogenated Substances and Their Role in Cleansing the Environment

Kenzo Tonomura, Professor (and one associate) College of Agriculture, University of Osaka Prefecture ¥3.7 million

Though many chlorinated organic substances are useful, most tend to pollute the environment because of their resistance to bacterial decomposition. The project's researchers have isolated a strain of Moraxella capable of dehalogenating fluoro- and chloroacetates and investigated the dehalogenases, as well as the plasmids, found in this bacteria. It was found that the organism contained a plasmid, pU01, which determined both the dehalogenases and mercury reductase. This represents the first discovery of a plasmid with encoded dehalogenation functions.

The aim of the present project is to investigate, using genetic engineering techniques, the molecular characteristics of this plasmid, its transferability to other bacterial genera, and its transposition to other replicons. An attempt will be made to breed a bacterial strain with powerful dehalogenation characteristics by combining the pU01 plasmid with other genes. This work on the utilization of genetic engineering in the elimination of environmental pollutants represents a new field of research.

Systematic Research on the Effects of the Physical and Spatial Environment on the Behavior of Infants in Urban Residential Areas

Hirokuni Taniguchi, Associate Professor (and five associates) Department of Architecture, Tokyo Institute of Technology ¥4.98 million

People's reactions to various environmental factors are formed almost completely during infancy and emerge in their final form after subsequent refinement. Mental environmental factors, particularly stimuli from the mother, are extremely important during infancy, and isolation from these factors has been blamed for instability and abnormality in adulthood. Relationships with the physical environment can be expected to produce the same type of phenomena, and research in this area will play an essential role in determining the most desirable pattern for the future living environment.

Last year the researchers showed that the physical environment, particularly housing conditions and the mother's reaction to her living environment, exerts a major influence on the spontaneity of an infant's behavior. This year the project will survey infants and small children living in multifamily dwellings in large cities and combine the data obtained with the findings of past surveys to analyze the characteristics of their reactions to the physical environment. The objective is to clarify the mechanisms governing the boundaries of living spaces for infants during their formative period and the conditions that determine their adaptation to these spaces. In addition, a basic reference guide will be drawn up for use in devising planning requirements for future housing developments.

Research on the Ecological Succession and Formation of Volcanic Soils on the Krakatau Islands
Hideo Tagawa, Professor (and six associates)
Institute of Biology, Kagoshima University
¥6.5 million

The Krakatau Islands are a group of small volcanic projections in the Sunda Strait. They are the remnants of the historic eruption of Krakatau in August 1883, which blew away half the original peak. To mark the one hundredth anniversary of the eruption, the Indonesian Institute of Sciences (LIPI) has invited an international research team to study the islands, and it is planned to announce the results of this work at an international symposium in Bogor.

The present research project will be carried out as part of the above project. Its objective is to clarify the process of ecological succession in vegetation through comparisons of the natural flora of Rakata, Rakataketjil, and Sertung (the three islands that remained after the eruption) and of Anak-Krakatau (an island that appeared in 1928) and neighboring islets. Research on ecological succession in volcanic regions has hitherto taken place mainly in the temperate zones. By clarifying the conditions that exist in a tropical volcanic region, it will be possible to discover any similarities or differences that may exist. The Krakatau Islands are ideally suited for this type of study, since they are uninhabited and the flora has remained undisturbed down to the present day.

The Development of a High-Efficiency Capillary Liquid Chromatography System and Its Application in Environmental Sampling

Takao Tsuda, Associate Professor Laboratory of Analytical Chemistry, Nagoya Institute of Technology ¥1.75 million

The successful development of a high-efficiency cap-

illary liquid chromatography system would permit the detection and discovery of nonvolatile or unstable substances and represent an important contribution to the solution of environmental problems. As yet, there is no high-efficiency capillary liquid chromatography system that offers performance comparable with that of capillary gas chromatography.

The aim of this project is to develop liquid chromategraphy columns composed of microcapillary glass columns, which would be ten times more efficient than conventional columns. Data has already been gathered on open-tubular glass capillary columns with inner diameters ranging from 20 to 60 microns, and the results were slightly superior to those from ready-made packed columns. The ultimate objective is to create a capillary column with the theoretically ideal inner diameter of 10 microns and to use this as the basis for developing a high-efficiency capillary liquid chromatography system. In addition, research will be conducted on the development of a packed microcapillary column with an inner diameter of 30 microns.

Research on the Role of Housing and Land Policies in Fashioning a Living Environment Kazuo Hayakawa, Professor (and five associates) Faculty of Engineering, Kobe University ¥1.87 million

Housing and land policies play an essential and fundamental role in the development of the living environment through such factors as the supply of housing and land, the improvement and restoration of housing, the regulation of land ownership and utilization, systematic land-use planning, and the expansion and management of public lands. The advanced countries of the West have used policies of this type as the basis for creating housing and urban spaces tailored for humans. But despite its advanced industries and economy, Japan still lags behind the Western countries in terms of urban living environment, particularly housing, and this situation is having a detrimental effect on city dwellers' lives.

This project, now in its second year, will study housing and land policies as they developed in the advanced Western nations and attempt to clarify the role played by these policies in the formation of living environments. It is hoped that the results of this study will contribute to the future development of environmental planning and housing and land policies in Japan.

A Preliminary Study on the Microanalysis of Road Dust Caused by Studded Snow Tires and the Formulation of Measures to Deal with This Problem Toshio Yamashina, Professor (and five associates) Faculty of Engineering, Hokkaido University ¥1.5 million

Roads in Hokkaido and the Tohoku district of northern Japan are covered with snow and ice throughout the winter months, necessitating the use of studded snow tires to shorten the braking distance of automobiles. Use of these tires has caused damage to the asphalt surfaces of busy roads. In Sapporo, for example, the surfaces of national highways with heavy traffic volumes have been abraded as much as five centimeters, and even on roads that carry less traffic, the pavement has been abraded

one or two centimeters. The dust produced by this abrasion, easily caught up by the wind especially in early spring, has emerged as a major pollution problem for people living in the affected cities. Since the asphalt contains oil, cars become extremely dirty, and clouds of dust produced by moving cars are the cause of a high incidence of eye and respiratory complaints each spring.

The objective of this preliminary research project is to clarify the nature of this problem through systematic microanalyses of the constituents of the road dust using the latest surface analysis equipment, as well as analyses of the states and forms in which it appears. The data obtained will be made available to researchers in such fields as medicine, transportation, and civil engineering. Basic problem areas to be covered in future research will also be examined.

A Preliminary Study on Agricultural Innovation in Japan: The Case of Ogata Village in the Hachiro Land Reclamation Area

Kunitaro Takeda, President (and seven associates) Research Laboratory on Agricultural Economy ¥1.5 million

After a long period as a protected industry, Japanese agriculture is today faced with a number of demands centering on land conservation and the achievement of food security. It is the wish of the entire nation to see the establishment of an independent and internationally competitive Japanese agricultural industry and the development of a healthy rural society by the end of this century. Japan has traditionally followed the examples set by Europe and the United States in determining the direction of its agricultural modernization, which means the introduction of heavy machinery, especially large tractors. But when such factors as precision of operation and the need for energy efficiency are taken into account, it appears unlikely that further expansion along these lines will hold the key to the future of Japanese

This preliminary study will focus on the development of energy-saving, robotized farming methods that can be operated round-the-clock. The technological and social problems involved will be defined through research carried out in the village of Ogata, and a basic inquiry will be made. Ogata is a planned community established over a decade ago on the Hachiro Land Reclamation Area for the purpose of establishing a modern agricultural industry in Japan. Problems relating to both agriculture and rural society thus exist here in concentrated form.

A Preliminary Study on the Management of Remodeled Buildings

Kuniaki Fujita, President (and four associates) Research Institute of Urban Renewal and Management

Over a decade has passed since the enactment of Japan's Urban Renewal Law in 1969. More than 60 urban renewal projects have since been implemented, and the inclusion of projects still in the planning stages brings the total to over 170. These projects have brought or are expected to bring important benefits in the form of improvements to the residential and commercial environments and the establishment of public facilities. However, some problems have arisen in relation to the management of redeveloped properties following the completion of such projects. These have concerned such aspects as changes in occupancy, facility repairs, and increased maintenance costs. These issues are currently being dealt with on a trial-and-error basis at the individual project level.

This preliminary study will examine projects carried out so far. The objective is to respond to the need for consideration of these problems at the initial stages of such projects and arrive at the most appropriate way of dealing with these problems.

A Preliminary Study on Alternative Housing Systems in Urban Areas of Papua New Guinea

Isao Kobayashi, President (and three associates) Environ Planners Cooperation Ltd.

¥L5 million

The concentration of population in urban areas has proceeded at a rapid pace in Papua New Guinea, and housing construction has emerged as a major policy issue. Housing must meet the needs of residents under the natural and social conditions that prevail in the area in question. In developing regions it is particularly important that the housing construction techniques and materials chosen are appropriate to the existing economic and technological conditions.

The aim of this study is to establish a system whereby houses built with indigenous techniques and materials and that offer functions and forms suited to the local life style are supplied. In the preliminary part of this study a survey of local materials and building methods will be conducted to enable documentation and ordering of indigenous techniques and materials. In addition, there will be clarification of the conditions necessary to improving and utilizing these methods and materials and studies regarding the possibility of deriving construction techniques based on the results of this work.

A Preliminary Study of Desirable Patterns of Road Construction in Historical Areas and of Residents' Efforts to Reach Agreement on the Construction of Houses Along Such Roads

Katsuakira Kihara, Representative (and eight associates) Nara Area Study Group

¥1.5 million

The area under study, located in the center of the old city area of Nara, is extremely historical. The streets and residential lots still conform to the grid pattern laid down when Nara was Japan's capital in the eighth century, harmonizing with merchants' houses built during the eighteenth century. However, work is now under way on a sixteen-meter road being built as part of an urban planning project. Scheduled for completion in March 1984, the road will bisect the district. If completed according to the present plans, the road will destroy the historical integrity of the area and probably cause the living standards of local residents to fall.

The purpose of this research project is to have the residents themselves study the new road and its adjoining land area and participate in fashioning them into

elements that will help to preserve and revitalize the district. This year's work will constitute preliminary research toward this objective. The Nara Area Study Group is a local citizens' organization established to study ways for citizens to participate in community development. The group has a special interest in participation in city planning in the area around Gango-ji temple, which is the target of the present study.

A Preliminary Study on the Adaptability of Rice to Drought-Prone Areas

Shin'ichi Takami, Instructor (and three associates) Faculty of Agriculture, Kyoto University

¥1.5 million

In Southeast and South Asia, Africa, and other regions of the world made up predominantly of developing countries, food production is severely restricted by water shortages resulting from irregular rainfall and the lack of irrigation facilities. The establishment of policies suited to local ecological conditions is regarded as a vital priority in achieving stability and expansion of food production in these drought-prone areas.

This study, a joint project with the International Rice Research Institute, will attempt to evaluate the adaptability of rice, the most important crop in these regions, to existing moisture conditions. This will lay the ecophysiological groundwork for the selection and breeding of those strains of rice best suited to the regions concerned. This year, preliminary studies will be conducted comparing several lowland and upland rice cultivars. Attention will be focused on two aspects—turgor maintenance and the translocation of preanthesis carbohydrate reserves—and the contribution of these mechanisms to rice seedling survival and grain production under drought conditions will be determined.

Social Welfare

A Comparative Study of Neighborhood Organizations in Urban Asia

Go Nakagawa, Professor (and two associates) Faculty of Law, Hiroshima University

¥2.89 million

Little attention has been paid to the fact that local government in Asia, particularly on the grass-roots level, is based on principles different from those in Western countries. The basic units of local government in Asian countries are not the city, the town, and the village as defined in the modern sense but neighborhood organizations formed on the basis of face-to-face contact.

This study, now in its third year, will continue collecting data and carrying out field surveys to clarify the historical background of neighborhood organizations in urban Asia. Based on a comparison with neighborhood associations and self-governing bodies in Japan, this year's research will collect firsthand examples of

residents' arbitration activities in the balangai (village) system of the Philippines; it will also examine the historical background and feedback functions of the pan (block) system of South Korea. To broaden the comparative base of the findings, the research will also investigate rukun tetangga (neighborhood associations) in Indonesia and resident committees in China.

A Follow-up Study on the Social Adaptability of Patients with Cleft Lip and Palate Nobuhiko Isshiki, Professor (and seven associates) School of Medicine, Kyoto University ¥2.75 million

Cleft lip and palate is one of the most frequently observed congenital abnormalities. Despite advances in its treatment, such complications as facial deformities, speech impediments, and maxillary underdevelopment still occur after primary surgery, resulting in psychological and emotional problems as well as social inadaptability.

On the basis of the findings of last year's follow-up study, the project this year will continue searching for comprehensive treatment methods that can satisfy the needs of the patient more effectively and completely than the local treatment method normally applied. In addition to improving the outpatient clinic that has been established for counseling purposes, conducting intensive speech therapy, and studying facial expression by use of a video system, the research will use fiber-optic and videoradiographic analyses to investigate nose and throat functions and articulation difficulties. A brochure demonstrating practical treatment methods for cleft lip and palate at each stage of a child's development will be prepared, and ties with local health centers will be developed.

A Comparative Japan-U.S. Study on Role Achievement, Satisfaction, Productivity, and Optimum Size of Organization

Gen'ichi Hagino, Professor (and seventeen associates) College of Humanities and Sciences, Nihon University ¥6.4 million

Conflicts of interest between Japan and the United States as reflected in the growing economic friction between the two countries constitute a major problem. Part of this problem stems from the way Japanese management systems are organized. Although Japanese organizational concepts are now attracting worldwide attention, few systematic analyses have been made from a business management or sociopsychological perspective of how Japanese organizations differ from the Western models after which they were initially patterned.

With the cooperation of specialists from various disciplines, this study will conduct field surveys of a variety of organizations (schools, companies, welfare organizations, and communities) in Japan and the United States, focusing on such factors influencing productivity as members' roles, their sense of responsibility in these roles, and their sense of belonging to the organization. The results will be used to determine how differences in culture and education affect the character and functions of organizations. It is hoped that this will clarify the features of productivity that distinguish groups representative of Japanese and American culture.

Research on the Consistency Between the Ideals of Distributive Justice and the Institutions of the Welfare State

Yuichi Shinoya, Professor Faculty of Economics, Hitotsubashi University ¥1.2 million

One of the most serious problems facing today's advanced capitalist economies is the institutional development of social security and other welfare systems without the concomitant development of a consistent value system, which is needed to underpin the welfare state. This lack of a value system results in various excesses and arbitrary swings between small and big government. In order to reexamine the essence of the welfare state, it is necessary to seek consistency between its values and institutions.

The present research will reexamine (1) the structure of today's dominant values, such as liberty, justice, and efficiency, and their interrelations. (2) the types of welfare state and their underlying ideals, and (3) the sociological models of human beings that can link the value system of the welfare state to its institutions. The results will be used to consider theoretically the best institutions for capitalist economies.

Evaluation and Improvement of the Health Examination System for Indochinese Refugees Seeking Residence in Japan

Keizo Asami, Professor (and four associates) School of Medicine, Keio University ¥3.82 million

Subsequent to the Japanese government's establishment of refugee centers in 1980, more than 600 refugees from Indochina have entered this country and applied for permission to resettle here. To help these refugees adapt to life in Japan, it is essential that their health be examined and that whatever treatment they may require be provided.

The primary purpose of this study is to evaluate the adequacy of the existing system of medical examination and treatment for Indochinese refugees and to analyze and record data on their health condition, especially since more immigrants to Japan are expected in the future. The hope is to construct a more efficient system of medical examination and treatment. In addition, since data are not available on the health of those immigrants who have already left the refugee centers to settle throughout Japan, follow-up health examinations will be conducted as part of this study.

Basic Research on the Rehabilitation of the Mentally Retarded: Analysis of Jobs and the Skills They Demand for Occupational Success

Takekatsu Kikuchi, Associate Professor (and five associates) Department of Industrial Arts Education. Kyoto University of Education

¥3.03 million

Employment of mentally retarded adults enables them to make a living and to maintain and improve their physical and mental functioning. Employment thus holds the key to their rehabilitation. However, the abilities of the mentally retarded must match the skills demanded in the jobs at which they work.

This project, a continuation from last year, seeks to analyze the abilities the mentally retarded possess, identify the skills employers desire and expect of the mentally retarded, and assess in actual work situations how individuals' abilities match job requirements. The results will be used to formulate policies for occupational training of the mentally retarded at employment centers and other welfare facilities. A manual for those guiding the mentally retarded to achieve occupational success will also be prepared.

Research on Art Education for and Creation of Art Works by the Severely Retarded Takeo Kanetsuki, President (and five associates) Shokaen (a social welfare foundation) ¥2.67 million

Although various measures are in force to rehabilitate the retarded in general, those who are severely retarded, and who therefore have the greatest need for education, tend to be given up as hopeless.

The present project is attempting to determine the extent to which the severely retarded can participate in society. The method used is the creation of art objects, which allows the pure feelings of the severely retarded to be expressed most effectively. Last year the subjects were trained in watercolor, oil, and acrylic painting and charcoal drawing, with emphasis on abstract expression; this year they will be trained to sharpen their powers of expression and create art objects of finer quality. The fruits of their efforts will be presented to the general public by holding an exhibition and publishing an illustrated book of their works. On the basis of the project experience, a proposal will be made for the establishment of an art education center.

A Comprehensive Area Study on the Functional Relationship Between the Faith Healing Inherent in Shamanism and Modern Medicine Hideshi Ohashi, Associate Professor (and five associates) Faculty of Arts and Letters, Tohoku University ¥3.4 million

In the Tohoku district of northeastern Honshu and in Okinawa, shamanism still flourishes in its original form, sometimes in opposition to and sometimes in harmony with ideologies and technologies regarded as rational and scientific. Yuta, the Okinawan shamans, command special respect in their communities for their maintenance of traditional culture and performance of a counselorlike role, but they also cause anxieties and conflicts among their clients and prevent the spread of modern medicine, especially psychiatry.

The present study, now in its second year, seeks to elucidate the functional relationship of the faith healing inherent in shamanism and of community medical care to modern medicine in Okinawa. The project team is attempting to ascertain the conditions under which harmonious interactions of the new and old cultures occur, as well as those under which conflicts occur. The research this year will again include (1) study of the faithhealing system, (2) analysis of interaction between yuta and their clients, (3) field research on the degree of reliance of residents on yuta, and (4) case studies of patients in mental hospitals. In addition, the changes that

have taken place in the way the mentally retarded are treated in local communities will be surveyed.

A Comprehensive Study on Middle-Aged Men's Attitudes Toward Life and Old Age, with Special Reference to Adaptation to Family and Work

Noriaki Kato, Associate Professor (and eight associates) Faculty of Social Sciences and Humanities, Tokyo Metropolitan University

¥4.5 million

Traditionally it has been presumed that people have fewer psychological problems in their prime of life than at any other time. This presumption is now being challenged, however, by reports on increasing absenteeism, divorce, depression, and suicide among the middle aged.

This study seeks to identify the developmental problems faced by middle-aged men, the group least studied up to now, by clarifying their experiences and attitudes, including their views on old age. An analysis of the factors that determine their ability to cope with family and work situations will be made in order to isolate those factors important to adaptability. With extreme aging of Japanese society in the offing, attitudes of middle-aged people are being shaped by their expectations of the society to come. Thus data on predicted changes in society will also be studied.

Research on Household Behavior in Asian Countries: Establishing a Theoretical Model of Labor Supply, Consumption, and Saving

Yasuhiko Torii, Professor (and four associates) Faculty of Economics, Keio University

¥7.0 million

When researching theories of economic development, it is just as important to study the laws governing changes in developing countries' employment, consumption, and saving structures as it is to study the laws governing changes in these countries' industrial structures. Hard data on these aspects of development are meager, however, and research on the mutual dependence among such factors as labor supply, consumption, saving, and ownership has been generally neglected.

The present study seeks to analyze in terms of an integrated framework the patterns of household behavior (labor supply and mobility, consumption, saving, and ownership) in the rural, urban-traditional (the urban poor), and urban-modern sectors of various Asian countries. On the basis of the data collected in last year's preliminary study, the project this year will carry out a large-scale survey in South Korea. Plans are also being made to begin data collection in Hong Kong, Indonesia, Malaysia, the Philippines, Taiwan, and Thailand

Basic Research on Disaster-Prevention and Evacuation Planning for Welfare Facilities
Kazumasa Otaki, Lecturer (and two associates)

Faculty of Technology, Yokohama National University ¥2.68 million

In Japan, where earthquakes occur frequently, disasterprevention plans and evacuation procedures are needed for welfare facilities, especially those accommodating elderly or handicapped people. Despite this need, however, little research has been conducted on how architectural design should incorporate evacuation features, and even countermeasures for ordinary fires have not been thoroughly studied.

This study seeks to provide blueprints for emergency evacuation of residents of homes for the elderly and mentally retarded. Basic data will be obtained by conducting studies of facilities actually damaged by earthquake or fire and by assessing the residents' ability to evacuate the facilities and to look after themselves in daily life. This data will be compared with data already available on evacuation from hospitals. The results will then be used to examine how the planning of daily living space should take evacuation needs into account.

Research to Develop a Training System for Improving Human Functions in a Highly Technotronic Society Yoshio Hayashi, Professor (and six associates) Faculty of Engineering, Keio University ¥3.9 million

An increasing number of occupations today are using computers in the conversational mode. Formerly only specialists were required to know how to use computers, but with the progress of today's technotronic society, ordinary men and women of all ages must become proficient in computer use if their skills as individuals are to be employed to their fullest potential. It is particularly important that middle-aged and older persons, whose relative number will increase in the future, be properly trained in computer use to increase their employment opportunities. Such people often find it difficult to adapt to computers, however, because of their age and occupational background.

Now in its second year, this project will open an experimental office equipped with a training unit (prototype completed) and a visual function recovery unit. Based on the training provided at this office, ways will be sought to develop the abilities of middle-aged and older workers whose jobs necessitate use of computers in the conversational mode. A training manual will also be prepared, and proposals will be formulated for improving human functions in an information-oriented society.

A Study on the Roles and Responsibilities of Volunteers: Applying the Judicial Ruling in a Trial on Accidental Homicide

Miyoko Ogi, Associate Professor (and ten associates) Women's Junior College, Japan University of Social Welfare ¥2.5 million

Although more volunteer workers are now taking part in social and educational activities in Japan, the roles and responsibilities of these volunteers have yet to be clearly defined. Above all, their legal responsibility for accidents that occur while they are on duty remains, unclear. A court case involving a charge of accidental homicide brought against a volunteer worker should shed light on this issue. The case, now being heard by a district court in Mie Prefecture, involves the drowning of a member of a children's club during a hike in 1977.

This study will begin with an analysis of the case,

the first of its kind in Japan. By means of a multidisciplinary approach, an attempt will be made to state in general terms the roles and responsibilities of volunteers.

Research on Changes in Medical Expenses for the Elderly

Akiko Ito, Professor (and nine associates)
Faculty of Home Economics, Ochanomizu University
¥2.5 million

Medical expenses for the elderly are on the rise. If Japan is to continue paying its national medical bill, which is now mounting rapidly, ways must be found to keep down the expenses of medical care for the elderly. Based on their studies since 1978 on the relationship between health insurance premiums and medical costs, the project's researchers have found that in at least one locality, Kakegawa City in Shizuoka Prefecture, medical costs for the elderly are not growing as rapidly as before.

The present study seeks to ascertain the trends in the rate of medical treatment for Kakegawa residents aged sixty-five and over in the 1978—80 period. Separating selected subjects into two groups depending on whether they have or have not been seeking medical treatment with a lower frequency, the researchers will seek the causative differences in health maintenance activities, focusing on the family environment and the role of public health programs. The results will be used to explore ways to reduce medical expenses for the elderly.

A Study on Ways to Aid Mentally Retarded Children in Their Social Development
Jiro Mishima, Professor (and three associates)
School of Education, Waseda University
¥3.69 million

Over the years various techniques have been devised to aid mentally retarded children in overcoming their social handicaps. Integration of these techniques into a systematic whole, however, has not made sufficient progress.

The ultimate goal of this study is to devise a coherent method of determining the state of development of retarded children and providing them with developmental assistance matching that state. First, a comprehensive search will be made for data on the various aspects of retarded infants' and children's motor and language development, the most important areas of early development. Next, a set of basic hypotheses on how to faciliate the development of retarded children will be postulated. This should make it possible to design a diagnostic method for determining the state of each child's developmental retardation, which could serve as an indispensable tool in programs to aid the retarded.

A Preliminary Study on the Living Environment of Truant Children

Katsumi Mitani, Secretary-general (and six associates) Institute of Statistical Research

¥1.5 million

Juvenile delinquency, truancy, and violence in the home are on the increase. In the case of teen-agers who refuse

to attend school, there are many reports dealing with individual examples, but few have focused on common points in the living environments of these troubled youths, resulting in a shortage of pertinent data.

The purpose of this preliminary study is to analyze the living environment of truant children of all ages by means of a questionnaire survey and interviews with several hundred families with children who used to refuse or are now refusing to go to school. Data will be collected not merely to shed light on the individuals concerned and their families but also to clarify in broad perspective the proper way of educating youths and of carrying out regional development projects, including the construction of housing. It is hoped that the data will help prevent truancy and provide assistance for families whose children refuse to go to school.

A Preliminary Study on Sociopsychological Factors Determining Attitudes Toward the Medical System Sadao Sugiyama, Professor (and three associates) Faculty of Sociology, Kwansei Gakuin University ¥1.46 million

The social goal of preventing illness and maintaining health cannot be achieved solely by means of a well-functioning medical system. Individuals must also be properly informed about their health condition and act to improve their health. The responsibility for guiding people's behavior in regard to health lies nonetheless with the medical profession. The members of this profession must therefore develop lines of communication with normal, healthy people in addition to treating ailing patients.

This preliminary study will explore means of facilitating communication between the medical profession and society in general. It will attempt to clarify the structure of awareness and expectations regarding the medical system among people in good health, as well as among the ill and those who must take special health precautions. An attempt will be made to identify psychological conditions necessary for the formation of appropriate attitudes toward medical care.

A Preliminary Study on Adolescent Sexual Behavior and Prevention of Juvenile Delinquency Gen'ichi Nozue, Director (and eight associates) Department of Gynecology, Japan Red Cross Medical Center ¥1.2 million

"Playful" delinquency has become a main type of juvenile delinquency in recent years, and the age of the offenders is decreasing, with youths aged 15–17 responsible for the highest proportion of delinquent acts.

This study hypothesizes that the development of adolescent sexual awareness and sexual behavior are closely related to juvenile delinquency. It will attempt to explore this hypothesis by looking for correlations between delinquency and the sexual identity of the delinquent's mother and father. This year's preliminary study will feature interviews with about forty Tokyo students in middle school or the first two years of high school who are thought to be undergoing significant changes in their sexual awareness and behavior. The subjects will be selected from among youths presumed to be most susceptible to delinquency, including those who refuse

to go to school, have caused violence at home, or belong to faddish groups. A control sample of about two hundred Tokyo students of the same age group will be selected and surveyed by questionnaire.

A Preliminary Study on the Structure and Functions of Community Welfare Agencies: Building a Model to Evaluate In-Service Training

Takeo Watanabe, Associate Professor (and seven associates) Faculty of Letters, Doshisha University ¥1.5 million

One of the most urgent tasks facing Japan as its population rapidly ages is the provision of expanded welfare services for the elderly on the community level. The welfare needs of the disabled, children, and others are also becoming more diversified, necessitating acrossthe-board development of community welfare services.

This study is based on the assumption that development of human resources can play a vital role in improving the quality of welfare services offered in communities. The objective is to examine the in-service training programs for staff members of community welfare agencies, both public and private, offered at some twenty institutions across the country. The results will be used to formulate a model for evaluating the effectiveness of training. The work of the preliminary study this year is to draw up a draft of the model.

A Preliminary Study on the Causes of Murder-Suicides: Preparing a Typology of Murder-Suicide Cases Jushito Koshinaga, Chief Medical Examiner (and four associates)

Medical Examiner's Office, Tokyo Metropolitan Government ¥1.0 million

It has long been recognized that the phenomenon of the "murder-suicide," often involving the killing of other family members by one member who then takes his or her own life, occurs more frequently in Japan than elsewhere due to the country's cultural background. Because of a lack of reliable data, studies on murder-suicides so far have tended to focus on causative external factors, such as the age of those involved and the type of household. Few investigations have been conducted on the internal factors that are directly responsible for murder-suicides.

This preliminary study will prepare a typology of murder-suicides based on data on mother-child, father-child, husband-wife, and whole-family cases. A systematic analysis will then be made of the factors responsible for their occurrence. Along with age, household type, method and place of death, and other external factors, the study will focus on family relationships, psychological motives, and other internal factors that triggered the incidents.

A Preliminary Study on Environmental and Subjective Factors Influencing the Progression of Senile Dementia Shun'ichi Yamamoto, Professor (and seven associates) Faculty of Medicine, University of Tokyo ¥1.5 million

The size of the elderly population in Japan is growing faster than in any other country. The old-aged popula-

tion (sixty-five and over), which numbers ten million today, is expected to more than double by the early part of the twenty-first century. One problem this trend will cause is an increase in the number of people affected by senile dementia, which is estimated to afflict one out of every twenty elderly persons.

This study is concerned with the pathogenesis of senile dementia, a disease whose causes are still being debated. The research will attempt to supply data on the unproven but widely held view that regular physical and mental exercise effectively prevents, or at least delays, the progression of dementia. The ultimate objective is to discover an effective means of preventing dementia. This year's preliminary study will be devoted to determining the extent to which environmental and subjective factors, such as occupation, family composition, hobbies, and exercise, affect the development and progression of the disease.

Education and Culture

Compilation of a Saurashtra-English Dictionary Northiko Uchida, Senior Fellow International School of Dravidian Linguistics ¥0.53 million

Saurashtra, one of the Indo-Aryan languages, is spoken mainly by Saurashtrans, who belong to a weaving caste in the state of Tamil Nadu in southernmost India. It is believed that the Saurashtrans left Gujarat, their original home, around the thirteenth century and finally settled in what is now Tamil Nadu a few centuries ago. As a result of entering the Tamil language sphere, the Saurashtrans are rapidly losing elements of their Saurashtra vocabulary and replacing them with words borrowed from Tamil.

The present study seeks to compile a Saurashtra-English dictionary using the vocabulary cards the researcher has been collecting since 1972 as the basis of work on the historical grammar of Saurashtra. The completion of this dictionary is expected to provide valuable data not only for ethnohistorical research but also for historical research on linguistic contact.

Compilation of a New Direct-Reading Japanese-English Character Dictionary Jack Halpern, Research Fellow Institute for the Study of Modern Culture, Showa Women's College

Since Japan now plays an important role in the world, the need for a comprehensive Japanese-English character dictionary is being felt overseas.

The principal aim of this project is to compile a truly modern Japanese-English character dictionary capable of meeting this need, based on the latest research data and linguistic theories. The dictionary in-

troduces an instant indexing system based on a direct presentation of visual patterns and offers a systematic, logical presentation of character definitions, a comprehensive treatment of correlated characters (kanji synonyms), a guide to the proper use of homonyms, and other unique features. The function of each character on four levels—on word-building, on independent, kun word-building, and kun independent—is thoroughly analyzed and differentiated. By assigning an English word that most clearly reflects the central concept, or core meaning, of each character and linking the various meanings of that character into an organic whole, the researcher has clarified their logical interrelationship. This reduces the load on the student's memory and allows students to study each character logically and systematically. The dictionary should contribute significantly to kanji education not only for foreign students but also for Japanese schoolchildren.

Compilation of a Modern Japanese-Portuguese Dictionary Yasuhiko Sano, Professor (and four associates) Faculty of Foreign Languages, Sophia University

¥3.0 million

Portuguese is the language of a cultural sphere that includes Portugal, Angola, Mozambique, and Brazil (where some 800,000 people of Japanese descent live). Japan's ties with these countries are becoming increasingly close, but up-to-date dictionaries, especially Japanese-Portuguese dictionaries, are nonexistent. Those that do exist, such as the Nippo Jisho published in the sixteenth century, are either too old or too limited in vocabulary items. This situation must be rectified, for dictionaries are the basic tools of language communication.

In this project the researchers will prepare translations of Japanese vocabulary cards as the first step toward compiling an up-to-date, comprehensive Japanese-Portuguese dictionary. The results will not only help Japanese and people of Japanese descent learn Portuguese but also contribute toward the spread of the Japanese language and culture abroad. The collaboration of such foreign institutions as the Center of Japanese Language and Culture at the University of São Paulo's Oriental Institute indicates how eagerly the world is awaiting the completion of this work.

A Comprehensive Survey of Straw Culture in Japan Katsuhiko Sakamoto, Professor (and nine associates) Faculty of Engineering, University of Chiba ¥4.5 million

Considering the extensive use of straw in Japan, it is no exaggeration to characterize Japan's traditional material culture as a straw culture. Straw culture has deeply penetrated every aspect of the life of the Japanese.

The present research, a continuation from last year, seeks, through field studies and examination of documents, to (1) elucidate comprehensively and systematically the straw culture that has affected every aspect of Japanese life, (2) investigate the origin and characteristics of straw culture in Japan through a comparison with straw cultures in other countries, and (3) explore the possible future uses of straw in Japanese life. Systematic study of straw culture as reflected in the life styles

found in various parts of Japan and comparison with straw cultures found in foreign countries will not only provide a concrete and comprehensive record of this important culture but also clarify Japan's characteristics as a rice culture.

Visual Documentation of Basic Conditions for the Formation of a Mountain Village and Its Culture: The Case of Miomote, Asahi Village, Niigata Prefecture Tadayoshi Himeda, Executive Director (and thirteen associates)

Center for Ethnological Visual Documentation \$8.87 million

In Japan, where seventy percent of the land is mountainous, mountain districts and mountain villages cannot be ignored in any examination of the past, present, or future life and culture of the Japanese people, for they are the foundation of Japanese life and culture. How, then, did the Japanese utilize mountain villages in building their distinctive way of life?

The present study seeks to elucidate the basic conditions necessary for the formation of a mountain village by documenting on film the life and culture of one such village soon to be submerged upon the completion of a nearby dam. The village was selected as a typical mountain community where various nenagricultural means of subsistence—including hunting, fishing, and wild-plant gathering—and cultural patterns have grown up. This project is significant not only because it deals with an area of research that has hardly begun to be explored, and is thus in need of immediate attention, but also because it will contribute toward the development of film making as an important tool of scholarly research.

A Cross-national Study on Socialization in Infancy Kazuo Miyake, Professor (and nine associates) Faculty of Education, Hokkaido University ¥4.7 million

Researchers in the field of developmental psychology believe that the interaction between mother and child during the child's first years of life influences subsequent social and emotional development and that this is reflected in the cultural differences between Japan and the United States.

The purpose of this research, a continuation from last year, is to clarify the validity of these assumptions empirically by conducting a series of follow-up surveys on ten mother-and-child pairs beginning during the mother's pregnancy. Last year the researchers collected data on the infant's temperamental traits, the mother's mode of interaction with the infant, and the infant's attachment to the mother during the first thirteen months of life. This year the project will survey the same pairs up to the child's twenty-fourth month of life, focusing on the changes in the child's attachment to the mother. the child's cognitive development, and the way the child responds to the mother's efforts at instruction. The data will be analyzed and compared with the data collected last year. In addition, data on the mother-child relationship during the first eleven, twelve, thirteen, fifteen, nineteen, and twenty-four months of the child's life will be compared with similar data from the United States.

A Joint Japan-U.S. Study on the Origins and Reality of "Group-Orientedness" in Japan's *Ie* Society Kozo Yamamura, Professor (and thirteen associates) Japanese Studies Program, University of Washington ¥4.0 million

The need for accurate understanding of the economy, business management, politics, and social life of contemporary Japan is acknowledged throughout the world. But Japan is often understood in terms of emphasis on only one aspect of its culture rather than multidimensional analysis of its history and society as a whole, actually increasing misunderstanding in the long run. Particularly disheartening is the fact that recent studies by Japanese scholars have not yet been subjected to wide and serious discussion and criticism by foreign researchers.

The project team, consisting of Japanese and American researchers, will critically examine Bunnei to Shite no Ie Shakai (The Civilization of the Ie Society) by Yasusuke Murakami, Shumpei Kumon, and Seizaburo Sato and present papers reflecting each member's field of expertise. The results will be discussed from a wide range of perspectives, particularly from a historical perspective, in the hope of ascertaining the origins of group-orientedness in Japanese society. The ultimate goal of this study is to analyze the ways in which this characteristic has been incorporated into Japan's politics, economy, business management, and social life in general.

A Study on Women and Employment: Female Executives of Small Companies in Tokyo Hiroko Hara, Associate Professor (and eight associates) Faculty of Home Economics, Ochanomizu University ¥3.1 million

Despite the fact that small companies employ sixty percent of working women in Japan, most studies on working women have focused on women who are employed as marginal workers and therefore are inadequate for projecting the immediate future of female employment.

The present project, a continuation of last year's research on female executives of small companies in Tokyo, will seek to clarify the current conditions and future prospects of women in middle and top management in such enterprises. Using the hypotheses derived from last year's research, this year the researchers will distribute questionnaires to ten young women company executives, forty women supervisors, and ten men in middle management working under women executives. In addition, plans are being made to conduct interviews with ten female and five male executives of small companies in prefectures near Tokyo. In analyzing these case studies, emphasis will be placed on establishing a sound methodology for international comparisons of female job participation.

Research on the Dynamics of Cultural Contact in Southern East Asia Komei Sasaki, Director (and five associates) Second Research Department, National Museum of Ethnology ¥5.5 million The southern part of East Asia centered on the Yunnan

area of Southwest China has been since ancient times a crossroads where various ethnic cultures have come into contact with one another. The influence of Indian civilization, the migration of various ethnic groups from Tibet and central and southern China, the close ties with Southeast Asian cultures, and other complex and dynamic interrelationships among ethnic cultures can be most clearly detected in this area. The researchers believe that it is through such cultural contact that various types of farming cultures (including rice culture), dietary cultures (including glutinous-rice and tea cultures), and other distinctive folkways were established in the Yunnan area, from which they spread to other areas. These cultural elements, which together constitute the so-called temperate evergreen forest culture, have played a vital role in the formation of Japan's basic culture.

The present study aims to elucidate the origins of Japanese culture, particularly in relation to its southern elements, by investigating the complexity and the dynamics of ethnic cultures in the Yunnan area. This goal will be attained through interdisciplinary research involving ethnology and agronomy in close cooperation with Chinese researchers.

A Study on the Formation of Scientific Disciplines Akira Tezuka, Professor (and nine associates) Graduate School for Policy Science, Saitama University ¥1.8 million

A discipline is basically a system that serves as an institution for the reproduction of learning, for it systematizes the knowledge and skills that researchers in an academic field must acquire before they can perform independent study in that field.

The present study seeks to clarify, from the standpoint of the sociology of science, the role of scientific disciplines, including their relationship to paradigms. The study will also attempt to formulate through individual interviews a theoretical model on the genesis and development of certain specialized disciplines in Japan, as well as to clarify the various conditions that determined the actual process by which these disciplines developed. In the 1979 preliminary study, case studies on nuclear fusion and space science were conducted. This year's project will focus on space science, nuclear fusion, aeronautical engineering, and other missionoriented, big-budget sciences that develop through close cooperation between science and engineering. Plans are being made to carry out a detailed analysis of the roles played by external conditions, such as science policies, missions, and related technologies.

A Study on the Function of Career Differentiation in Japanese High Schools

Ikuo Amano, Associate Professor (and six associates)
Faculty of Education, University of Tokyo
¥3.0 million

As a result of the universalization of upper secondary education, high schools now play a central role in the process of the social selection and differentiation of adolescents. Most studies on high schools until now have focused more on students who plan to go on to col-

lege or university than on those who plan to find

employment after graduating from high school. However, since the majority of high school graduates fall into the latter category, it cannot be denied that the most important function of high schools is that of occupational allocation.

This study will attempt to clarify the career differentiation function of high schools by focusing on their occupational allocation function, which so far has received little consideration, in conjunction with their educational allocation function. Specifically, the study will analyze the changes that have occurred over time and the regional diversity in the career differentiation function of high schools in connection with socioeconomic conditions, educational policy, labor-market factors, and counseling systems within schools. The results will be used to discover ways to optimize career differentiation in high schools.

Research on the Significance of Introducing a System of Cooperative Education into Japan's Higher Education in Engineering

Masamitsu Kawakami, President (and seven associates) Nagaoka University of Technology

¥3.57 million

In this time of fierce competition in technological innovation, training practical-minded engineers capable of meeting the industrial needs of the nation is a task of national and social urgency. Although the system of cooperative education, whereby students are given practical training in production and in research and development in private industry, government offices, and public agencies, is an effective educational method, its importance is still not fully recognized in Japan. However, in recent years a number of universities have incorporated this system into their curricula as a form of internship.

This project seeks to study and evaluate, from an educational standpoint, the effectiveness of internship and the best way to set up a system of cooperative education. Questionnaires will be distributed to universities that have adopted some form of internship, students, and companies that accept interns, and interviews will be held. The results are expected to help improve undergraduate engineering programs as well as on-the-job training programs in private industry.

Career Advancement for Women: Administrative Officials

Michiko Kanda, Associate Professor (and five associates) Faculty of Letters, Toyo University

¥2.2 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 seeks to clarify advancement for women in one of these professions, government administration, in terms of sex roles. In 1979 the researchers, funded by the Toyota Foundation, carried out a survey of women in university teaching and corporate management, which revealed that sex roles clearly affected their career advancement. This survey was carried out in accordance with the hypotheses derived from an earlier

research project in which 120 women in four occupational categories were interviewed.

The purpose of this year's project is to test those hypotheses by clarifying the conditions under which women administrative officials currently work. The method that will be used involves conducting a survey of one thousand women administrative officials by means of questionnaires and interviews.

Interdisciplinary Research on the Ishiguro Collection and Related Materials in the Koju Library: The Sociocultural Significance of Academic and Technical Studies Pursued by the Country Gentry in the Late Edo Period

Masaru Kusunose, Professor (and eight associates) Faculty of Humanities, Toyama University ¥4.85 million

To demonstrate how the intellectual pursuits of the country gentry in the late Edo period laid the foundation for the acceptance and remarkable diffusion of Western science and technology in Japan after the Meiji Restoration of 1868 is, in effect, to present a new perspective and new data on the modernization of Japan.

The present project, a continuation from last year, aims to elucidate, through an interdisciplinary examination of the source materials on the mathematician Nobuyoshi Ishiguro (1760-1836) and three generations of his descendants in the Koju Library, that the studies of the Ishiguro family, including wasan (Japanese mathematics), calendar making, astronomy, land surveying, and navigation, were not pursued independently of one another but were integrated practically and rationally for use in irrigation planning, river improvement, land reclamation, land surveying, and cartography. In addition to continuing last year's examination of (1) the Ishigure family as country gentry and the family's pursuits and (2) the level of the family's scholastic achievements, particularly in wasan and calendar making, and their practical applications, this year's project will examine (1) the way in which the Ishiguro family actually pursued its land-surveying and cartographic activities and (2) the teacher-student relationships of Nobuyoshi Ishiguro and three generations of his descendants, as well as their interchange with other intellectuals both within and outside their han, or province.

An Anthropological Study on the Perception of Cleanness and Uncleanness in Rural Japan Kiyotomo Mikame, Lecturer Faculty of Letters, Tamagawa University ¥1.1 million

The perception of cleanness and uncleanness refers to the value system that determines why people perceive certain things to be either clean or unclean. It is believed that this value system is strictly governed by the interrelations of a wide variety of behavior and thought patterns in regard to such areas as excretion, cooking, washing, eating, the organization of domestic space, rituals, human relations, and social structure. The perception of cleanness and uncleanness differs considerably from one society to another, for example, from Japan to Nepal, and since people seldom notice

this difference, it is thought that the perception of clean and unclean occurs largely on the unconscious level.

This study seeks to examine comprehensively, through a case study based on participant observation of a mountain village in Niigata Prefecture, the various aspects of human activities that reflect the perception of cleanness and uncleanness and thereby to gain an understanding of the Japanese value system centered on the concept of cleanness.

A Preliminary Study on the Relationship Between Culture and the Formation of the Japanese National Character

Ryoen Minamoto, Professor Faculty of Arts and Letters, Tohoku University ¥1.45 million

One of the most serious problems currently confronting Japan is the loss of harmony and equilibrium between school education and culture's function of character formation. To solve this problem it is necessary to reexamine the formation of the Japanese national character in the context of the Japanese environment, society, and culture, including the role of school education considered in historical perspective.

The purpose of this study is to examine the problem of the formation of the Japanese national character in terms of Japanese culture and society. A full-scale study of such a sweeping subject will require joint research in the future. At this point, it is necessary to formulate a methodological framework and gain an overall grasp of the problem. This preliminary study will examine (1) the methodological framework for studying national character and (2) the formation of the Japanese national character in the context of the Japanese environment, society, and culture.

A Preliminary Study on the Narrative Tradition of Blind Monks

Sadakazu Fujii, Associate Professor (and seven associates) Faculty of Education, Tokyo Gakugei University ¥1.5 million

Oral narrative occupies an important place in the history of Japanese literature and performing arts. One such oral tradition is the remarkable genre known as sekkyo or saimon, which is still performed by jishin moso, or blind monks, in Yamaguchi Prefecture and Kyushu. These blind monks, who still engage in such religious functions as performing the ritual of kamadogami harai (the purification ceremony for the god of the kitchen fire), recite not only Buddhist sutras but also mythological epics. This narrative tradition should be studied by researchers in not only the field of Japanese literature but various other fields. Since most of the jishin moso are aged, it is important that their art be studied before it becomes extinct.

The present project will conduct field studies in Kyushu to collect basic data on the ritual performances of jishin moso. The data thus obtained will be analyzed in cooperation with researchers in Japanese literature, the history of the blind, ethnomusicology, ethnology, and other fields. It is hoped that this interdisciplinary analysis will enable the researchers to gain a clear grasp of the narrative tradition of blind monks as a living art.

A Study on Western Science in Southwestern Japan in the Late Edo Period

Isac Sugimoto, Lecturer (and sixteen associates) Musashi Institute of Technology

¥4.8 million

There is substantial evidence indicating that the introduction of Western science to Japan in the late Edo period, which ended in 1868, played a decisive role in Japan's modernization. But studies on the subject up to now have emphasized the activities of the Tokugawa government while virtually ignoring those of the various provinces, or han.

In this project researchers specializing in Japanese history will work in close cooperation with those specializing in the history of science and technology to carry out an empirical study on Western science in Japan in the late Edo period, focusing on the southwestern han of Saga, Kagoshima, and Hagi, which were relatively advanced in this regard. In addition to studying historical materials recently made available to the public on Fukuoka, Kumamoto, and other areas in southwestern Japan, efforts will be made to investigate and gather both materials that are not yet open to public inspection and new materials. These materials will be carefully examined and catalogued on microfilm. This year, historical materials of particular importance will be selected from various fields and compiled into annotated monographs. A meeting will be held each month to discuss and analyze the materials selected. This preliminary work will be carried out as efficiently as possible so that the monographs can eventually be compiled into a well organized and comprehensive reference book.

Research on Educational Clinical Psychology in Therapeutic Education for Handicapped Children Teruhisa Yoshida, Associate Professor (and four associates) School of Education, Ibaraki University ¥1.0 million

Just as studies conducted in Western countries point out the importance of therapeutic education for handicapped children, studies in Japan also stress the importance of dealing with the problem of educating handicapped children from the standpoint of therapeutic education. In particular, these studies suggest that quantitative and qualitative contact between normal and handicapped children has a therapeutic effect on handicapped children.

Last year and the year before, this project focused on autistic, emotionally handicapped, and mentally retarded children. It compared and analyzed 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 regular schools in terms of content, method, and form. This year, as a summation of the past two years' research, the researchers will carry out a final examination of (1) the index of effectiveness and standard of evaluation used to design individual- and group-therapy programs for special schools that provide therapeutic education to mentally handicapped children and (2) the effectiveness of contact between children at regular schools and those at special schools for the mentally handicapped.

A Study on the Relationship Between Universal High School Education and Higher Education Tadashi Hidano, Director (and six associates) Research Division, National Center for University Entrance Examinations

§3.0 million

In Japan, as a result of the postwar educational system, high school education has expanded rapidly, with ninety-four percent of middle school graduates going on to high school. Consequently, it has become increasingly difficult to reconcile the two goals of high school education: preparing students to enter colleges or universities and preparing students to join the work force as adult citizens. The difficulty of relating high school education to higher education, particularly university education, has given rise to various social problems, including that of entrance examinations. However, research in this area so far has been carried out exclusively in terms of the educational system, ignoring the question of the curriculum, or course of study.

The present study will attempt to trace the changes that took place in the curriculum in the thirty years after World War II during which high school education became universal and to clarify the educational and social context in which these changes occurred. This objective will be achieved by collecting and analyzing pertinent documents and data and by interviewing people directly involved with Japan's educational system. In addition, the study will analyze the relationship between the high school curriculum and the university curriculum and compare the results with the situation in other countries.

A Preliminary Study on Reconsidering Home Economics Education

Michinori Hirata, Teaching Assistant (and three associates) Faculty of Engineering, Tokyo Institute of Technology ¥1.28 million

In this time of declining economic growth rates compared with previous years, such activities as household maintenance and management will come to play a more significant role in daily life than production activities. With regard to education, it will become increasingly important to train individuals capable of monitoring the various aspects of consumer life—food, clothing, and shelter—and solving problems that may arise. University and college home economics departments are meant specifically to tackle these problems. But unfortunately these departments are not performing their functions adequately, and therefore few students are attracted to them.

The purpose of this study is to examine the environment surrounding home economics departments in terms of the educational environment within the college or university and the social environment of the larger community. The results will be used to explore new directions for home economics education that will make it more responsive to social change. These new directions will be sought within the entire range of daily life, not only the family but also the local community, which will enable the researchers to quantify the gap between the home economics education currently offered and the needs of society. The researchers will examine, from the standpoint of social engineering, the most desirable way to narrow this gap.

A Preliminary Study on the Form and Content of a New Japanese-German Dictionary

Kennosuke Ezawa, Associate Professor (and two associates) Tübingen University

¥1.43 million

Until now Japan has concentrated nearly all its energy on absorbing elements from abroad, but considering its role in the international community today, Japan must now make active efforts to transmit knowledge of its culture, thought, and technology to other countries.

Recognizing the key role that language plays in this undertaking, the researchers have embarked on a thorough examination of the theoretical defects in the Japanese-German dictionaries currently available. In this preliminary study, an attempt will be made to present practical solutions to the various problems encountered in compiling dictionaries. Specifically, this will entail grouping words into (1) technical terms, (2) everyday words, and (3) expressions peculiar to things and events Japanese. With regard to the first category, a systematic comparison of Japanese and German textbooks currently in use and of technical publications will be carried out; with regard to the second category, words appearing in newspaper headlines, synonyms, antonyms, and other related words will be presented, together with as many concrete examples as possible; and with regard to the third category, a Japanese cultural dictionary is being planned in which things and events peculiar to Japan will be explained. The feasibility of developing a database system, which will make it possible to expand and correct the contents of the above three categories and make selective samples whenever the need arises, will be examined.

A Preliminary Study on the Ethnic Composition and Migratory History of Indigenous Groups in the Upper Rejang Region of the State of Sarawak, Malaysia Motomitsu Uchibori, Associate Professor School of General Education, Gifu University ¥1.42 million

The upper region of the Rejang River, which flows through the central part of the state of Sarawak in Malaysia, is inhabited by various ethnic groups, including the Iban, the Kayan, and the Kenyah. Most of these groups migrated from other areas of Borneo in search of arable land during the last two hundred years.

This project seeks to elucidate the ethnic composition of the region in question by tracing the migratory history of the various ethnic groups that now live there. The migratory process, involving the conquest and absorption of indigenous groups of hunters and gatherers, has led to fierce conflicts over land resources among the incoming groups of cultivators. This is a phenomenon frequently observed in the mountainous areas of Southeast Asia. The migration in question is relatively recent, so the upper Rejang region offers one of the few cases in the world where the migratory process and the dynamics of interethnic conflicts and their solution can be analyzed and reconstructed. Since construction of a large dam is planned for the region, the researcher will attempt to carry out the urgent anthropological task of surveying and recording this rare ethnological experiment before the region is submerged.

A Preliminary Study on the Development of Japanese-Language Newspapers in the United States
Norio Tamura, Associate Professor (and seven associates)
Faculty of Business Administration, Tokyo College of
Economics

₹1.38 million

Beginning with Shino no Me in San Francisco in 1886 and Shin Nihon in Oakland in 1887, Japanese-language newspapers have existed in the United States for nearly a hundred years. These newspapers not only have served as an important medium of communication for the Japanese-American community but have provided a link with Japan and have played a part in various negotiations between Japan and the United States, with their differing cultures. In addition, in one way or another they have played a role in helping Americans understand Japanese culture.

This project will trace, through a survey of source materials and interviews, the historical development of Japanese-language newspapers in the United States. As first-generation Japanese residents (issei) fade from the scene, giving way to second- and third-generation Japanese-Americans (nisei and sansei), Japanese-language newspapers face a difficult period. Nevertheless, more than ten Japanese-language newspapers are still published in North America alone. The most urgent task is to collect as much information as possible while issei are still living and before historical source materials become scattered.

A Preliminary Study on the Present Conditions and Future Problems of Chinese Management in Connection with the Promotion of Technology Transfers Jingai Cho, Leader (and thirteen associates) China Project, Society of Systems Analysts ¥1.46 million

Since the normalization of diplomatic relations between Japan and China, economic exchange between the two countries has expanded rapidly, and many technology transfer projects have been undertaken. But these projects have not always proceeded smoothly, and many problems have emerged, as evidenced by cancellations by China of plant-export contracts with Japanese corporations.

This study aims to examine the conditions necessary for technology transfers from Japan to China, focusing on China's system of corporate management. The main task of this study is to examine the actual conditions of business management in China and pinpoint weaknesses. Specifically, the study will (1) survey documents and published works on the Chinese management system and (2) conduct interviews with business people and technical experts directly involved in Japan-China technology transfer projects.

A Traditional Tribal Society's Response to Sudden Social Change: A Case Study in the Northwest Frontier Province, Pakistan Takeshi Matsui, Research Associate Research Institute for Humanistic Studies, Kyoto University

The Northwest Frontier Province of Pakistan, bordering

Afghanistan, is currently undergoing the most sudden social change to be seen anywhere in the world. In the past this area maintained close ties with Afghanistan through the seasonal migration of nomadic tribes and the flow of traders. However, the border is now closed, and over one million refugees have flowed into the area from Afghanistan. Despite such large-scale, abrupt changes, the traditional tribal society continues to function independently without serious disruption.

The present study will attempt to clarify the mechanism by which traditional societies respond to sudden social change by conducting a socio-anthropological survey of four tribes—the Baluchis, the Pathans, the Brahuis, and the Jats—in the vicinity of Peshawar and Quetta in the Northwest Frontier Province. Ultimately, on the basis of this case study an attempt will be made to present a general model of the ways in which traditional tribal societies respond to social change.

Special-Subject Research: Changes in Local Communities

A Study of the Process of Change in the Life Style of Farm Households in the Rural Industrial Region of Kami-ina

Eiichi Eguchi, Professor (and seven associates) Faculty of Economics, Chuo University ¥3.08 million

Since 1977 the researchers have been studying changes in the structure of regional society caused by the development of industry in rural areas. In 1982 the results were published by Chuo University's Institute of Economic Research under the title The Labor, Life, and Social Security Situations of Part-Time Farm Households.

Based on these results, the present study aims to elucidate more concretely and substantively the structure of the proliferation of part-time farm households and to clarify the instability of farm life. At the same time, it will attempt to illustrate the present nature of part-time farmers and their families in terms of social class and hierarchy. Most past studies on part-time farm households have analyzed farm management and the structure of the farming population. Through joint research by specialists in labor problems, business, and rural economic problems, however, this study plans to grasp in a more dynamic manner the changes and increasing instability in the life of farm households.

A Follow-up Survey on Occupational Socialization of Natives of the Shimokita Peninsula Tatsuro Hosoe, Associate Professor (and five associates)

Department of Behavioral Sciences, Iwate University

¥3.43 million

The researchers have been periodically surveying the oc-

cupational socialization of 908 subjects who graduated from middle school on the Shimokita Peninsula in 1963. At present, their research focuses on the process of the subjects' adjustment to adulthood, with a career-pattern classification having been carried out in 1979 and a study of the functional relationship between their occupational socialization and changes in local society in 1980.

This year's research will wrap up the three-year study, with the focus on the following four areas: (1) increasing the number of subjects interviewed and qualitative improvement of case records, (2) ascertaining the whereabouts of subjects whose location has been unknown since 1979 and tracing their career patterns, (3) preparing and organizing data on each individual and maintaining objectivity in using this data, and (4) systematizing a theory of occupational socialization and developing a theory of practical application. Not only are these four areas meaningful in summarizing the socialization process of the subjects from their mid-teens to their thirties, they are also indispensable to future follow-up surveys.

Research on Changes in the Residential Environment of Modern-day Japanese Villages: The Case of Kutsukimura, Shiga Prefecture

Atsushi Ueda, Professor (and thirteen associates) Faculty of Engineering Science, Osaka University ¥2.5 million

Village society in Japan changed greatly after World War II, particularly during the period of rapid economic growth. Creating a new awareness of the value structure of Japan's village societies and adopting this in a modern form is an important task. Kutsuki-mura, a diversified agricultural village situated in the mountains of Shiga Prefecture more than two hours from the Kyoto-Osaka-Kobe metropolitan area, is rapidly losing its population. Since last year the researchers have been surveying traditional and regional customs regarding living space and life style, using this village for their field study.

While continuing last year's research into the framework of spatial and social conditions, this year the study will move forward by focusing on changes in the life and culture of the residents. In addition to clarifying changes in the community's productive structure and examining the relation between residents' productive activities and changes in the form of maintaining, administering, and operating the community, it is also planned to clarify the city-village relationship formed by the migration of people, as well as the life and way of thinking of the younger generation.

A Study on the Changes Brought About by the Conversion of Swamp Land into Well-drained Rice Fields and the Construction of a New Port in the Imizu Area of Toyama Prefecture

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

¥2.5 million

The development of the Toyama-Takaoka District New Industrial City Plan, which focuses on the large-scale

conversion of swamp land into rice fields and the construction of a new port in Toyama by opening up Hoshozu-gata lagoon, has caused major changes in the wide-area utilization of land in the Imizu area as well as in the daily lives of local citizens.

Through cooperation with people involved in formulating the New Industrial City Plan and people who actually witnessed the changes that took place in the area's communities, this study aims to examine, evaluate, and analyze the role played by various national. prefectural, and other plans for the area, as well as the way local communities reacted. A preliminary study was conducted in 1979, and the research is now in its third and final year. The intention is to use the data obtained so far to delve into the discrepancy between 'concept" and "result" in the process of planning, altering the main project, and developing various related operations. At the same time, it is planned to depict the changes in the lives of residents by means of "evidence" from witnesses and to offer suggestions on the assessment of planning for large-scale regional development and urbanization policies.

A Study on Urbanization in the Mama-gawa River Basin and Its Effects on the Structure of Local Life Kimio Takano, Director (and nine associates) MANU—Laboratory of Urban Design and Architectural Planning

¥4.71 million

This study seeks to clarify the problems that crop up when river improvement plans conflict with conservation, to investigate ways of solving these problems through consensus and mutual understanding, and to create an appropriate river environment. To achieve this goal, the researchers will deal comprehensively with the subjects of riverside environment, the safety and risks of flood control, and the involvement of local citizens. Based on the results of last year's preliminary study, which investigated the progress of urbanization in the Mama-gawa river basin, this year the researchers will expand the survey both qualitatively and quantitatively to study the ways in which urbanization and changes in the living environment have influenced residents' attitudes toward the Mama-gawa river and life along the river. They will also investigate changes in the flood risk with the advance of urbanization.

From its preliminary stages this study has been carried out in cooperation with local residents from various walks of life. Through these research activities the researchers also plan to find solutions to future urban flood-control problems and useful pointers on ways that citizens can participate in creating a residential environment.

A Study on Postwar Changes in Nishijin, a Local Community in Kyoto Akira Nonaka, President (and twelve associates) Nonaka Weaving Co., Ltd.

¥1.5 million

Nishijin, the weaving district of Kyoto, is a local community supported by traditional handicraft skills and possessing a unique division of labor. Within Nishijin

are various public and private organizations unique to the area. Still active today, these organizations have provided energetic backing for the postwar development of this community.

This study, conducted mainly by residents of Nishijin, aims to clarify the postwar history of this complex community and also to contribute to the development of Japan's traditional industries and the next generation's creative activities. Working with the community informants developed through the preliminary study conducted two years ago and the field study conducted last year, this year the researchers plan to continue interviews and evening discussion meetings with local residents and to inaugurate table talks for the discussion of specific themes among specific participants. These will serve as the main supports in a more introspective, subjective analysis. At the same time, existing documents and other materials will be used to expand the postwar history of the Nishijin weaving industry compiled last year into a postwar history of the entire community,

A Study on the Proliferation of Depopulation Naoei Takahashi, Teacher (and five associates) Yasuzuka High School, Niigata Frefecture ¥1.78 million

Since the Emergency Measures for Depopulated Areas Law went into effect in 1970, designated areas have been receiving far more financial and administrative aid than normal areas. Over the past decade almost ¥8 trillion of concentrated public investment has been made throughout the country (excluding Okinawa) in 1,093 municipalities (34 percent of the total number of municipalities) covering 44 percent of Japan's land area and accounting for 7.6 percent of the total population. Despite this, in many cases the gap between living standards in designated and normal areas has widened even further. To clarify the causes of this, the preliminary study surveyed and analyzed conditions in Higashi Kubiki County in Niigata Prefecture, revealing several features of the proliferation of depopulation.

Based on the results obtained so far on the replacement of the labor force in local communities, the researchers are currently focusing on a follow-up study of cases in which entire families have left their villages for the city. The project also intends to clarify the mechanisms of depopulation—that is, proliferation of the phenomenon of whole families leaving villages—by observing in particular the way in which farmers find work in the city as a preparatory stage for the whole family to leave the village, as well as their children's occupational choices upon graduation from school.

A Field Study on How People in Snowy Districts Feel Toward Snow in Terms of Their Daily Life and Living Space and on Changes in These Attitudes Yoshihiko Sasaki, Professor (and four associates) Department of Architectural Engineering, Hachinohe Institute of Technology ¥3.0 million

into a huge capitalistic market mechanism. Even areas with a heavy snowfall in winter experienced remarkable changes in their production methods and life style. These changes also altered people's attitudes toward snow, so that now the view of snow as an impediment to regional development is dominant. From the view-point of Japan's economic structure and concepts regarding development, heavy snowfall in the winter months clearly interferes with regional industrialization and the growth of markets. It is equally obvious that the technical means of overcoming this impediment are limited

This study aims to clarify the traditional attitudes toward snow through a fact-finding survey conducted in Kuroishi City, Aomori Prefecture. It is the researchers' hypothesis that traditional attitudes toward snow existed within a framework encompassing the whole of industry, life, and space, thus fostering regional culture, and that snow-removal methods were not given primary consideration.

An Empirical Study of Biological, Medical, and Social Changes in the Environment of the Shiranui-kai Area Masazumi Harada, Associate Professor (and fourteen associates)

Institute of Constitutional Medicine, Kumamoto University ¥4.8 million

Twenty-five years ago Shiranui-kai, a typical inland bay, was extensively polluted by such heavy metals as mercury. The high biological concentration of organic mercury in the bay engendered a new disease, known as Minamata disease. As a result, the marine life that constitutes the major part of Shiranui-kai's ecosystem was seriously disturbed, the health of many area residents was damaged, and the fishing grounds that serve as the area's production base were destroyed, depriving residents of their means of livelihood. A breakdown in human relations and the traditional culture of the community was inevitable. Today, chronic Minamata disease remains widespread, and a sludge reclamation project in Minamata Bay at the southern end of Shiranui-kai is threatening to cause major changes in the area's marine ecosystem and local communities.

This study is an attempt to trace in a comprehensive and empirical manner both the past and ongoing changes in the natural, social, and cultural environments of Shiranui-kai. Emphasis is being placed on the relation between the bay-bottom environment and the organisms that live there, the status of Minamata disease and problems in providing relief for disease victims, and problems of change in communities with an urban structure.

A Study on Changes in the Development and Use of Water Power in Osaka Prefecture, with Special Reference to the Water-Mill Industry of the Old Naka-Kawachi District

Tsutomu Demizu, Teacher (and seven associates) Joto Technical School, Osaka ¥2.2 million

Of the approximately three hundred Japanese-style water mills estimated to have been operating in the Osaka area prior to World War II, only about ten still exist today. Use of many water mills was discontinued with the rapid technological innovations that took place after the war. With last year's grant, the researchers examined the changes wrought on the living environment and local industries by the shift to electricity as the source of power, taking the old Minami-Kawachi district as a case study.

This year the connection between water-power resources and the community in the case of the water-mill industry in the old Naka-Kawachi district (located at the foot of Mount Ikoma in present-day Higashi Osaka City) will be investigated using the methodology formulated in last year's preliminary study. It is planned to clarify the effect that urbanization of the surrounding area had on the water-mill industry and how the labor configuration of the area changed with the modernization of local industries that had used water-mill power. In addition, case studies of the wire-drawing and herbal medicine industries will be carried out to aid in developing a research methodology based on "industrial archaeology."

A Preliminary Study on the Interaction Between Community Changes and the Wasteful Use of Regional Resources in Amagasaki City

Masaki Kusaka, Assistant (and two associates) Faculty of Engineering Science, Osaka University ¥1.28 million

In recent years the phenomenon of counterurbanization, in which existing industrial cities experience an exodus of businesses and people, has been threatening to destroy the entire urban structure. In fact, this phenomenon may epitomize the norm for Japanese cities in the future. Still, no intraurban development plans integrating industry, technology, labor, and society have been formulated on the basis of long-range industrial structure forecasts.

The aim of this study is to determine, in the light of this situation, the relation between the community and the pattern of change in existing regional resources. While doing this, the researchers intend to pick out and reevaluate existing regional resources and to seek a direction for urban growth and regeneration. In this year's preliminary study it is planned to clarify the mechanism behind the various forms and changes in existing regional resources, from their acquisition to regional stockpiling and abandonment. A methodology for understanding community structures through regional resources will also be established.

A Preliminary Study on Changes in "Productive Power" in Local Communities

Satoshi Morito, Director (and five associates) Institute for Town and Country Planning ¥1.48 million

While Japan's modernization led to remarkable economic development on a national scale, at the same time it caused a decline in local communities' "productive power." The term "productive power" is a concept that covers not only locally based industries but various talents based on "indigenous skills" accumulated in the

community and family and contributing to the quality of life. The skills that were a natural part of the life of individuals, families, and the community began to decline, and specific enterprises and administrative bodies took their place. As a result, it has become difficult for communities to retain satisfying, active life styles on their own. In order to maintain the quality of life in the future despite low economic growth, it will therefore be important to reevaluate productive power in local communities and to rebuild and improve it.

This study, which focuses on 'indigenous technology' in the small Tohoku-district castle town of Miharu-cho in Fukushima Prefecture, will examine the concrete modes of existence and process of change of such technology.

A Preliminary Study on Changes in the Central Role of Women in Childbirth Noriko Yoshimura, Homemaker ¥0.74 million

Advances in the medical system and medical technology have greatly altered the mode of childbirth over the past several decades. Compared with modern childbirth procedures conducted in fully equipped medical facilities, in the past childbirth was an unimaginably painful experience for the mother. However, the researcher questions whether today's methods are really better. In the past the mother, assisted by female relatives, was an active participant in the childbirth process. Modern childbirth methods, however, seem to have turned women who give birth into obstetrical patients in return for safety in the event of an emergency. In the past women played the central role in childbirth and took a relaxed attitude toward the procedure, whereas nowadays the ideas and attitudes of those delivering the baby take precedence.

This study will probe into how the standard of "happiness" for women giving birth has changed over the years. This will be accomplished through interviews in which women in various age brackets living on a remote island in the Inland Sea will tell of their child-bearing experiences.

A Preliminary Study and Reassessment of the Present State of Traditional Home Education in Communities Yoichi Nakata, Lecturer (and six associates) Faculty of Education, Kumamoto University ¥0.95 million

The rapid changes that have occurred in modern Japanese communities have had a tremendous impact, much of which has been negative, on children's development and home education. It is important that the extent to which communities and homes are maintaining or losing their function of training children to perform the tasks of daily life be clarified against the background of these changing social conditions.

By collecting the traditional sayings of each community, this study aims to determine the educational function that was fulfilled by communities and the home in the past and to examine how this function is being carried out nowadays and reevaluate it. In this year's preliminary study three representative mountain village communities (Taraki, Nishiki, and Suè) in Kuma

County in Kumamoto Prefecture will be surveyed and the results will be used as the first step in formulating a picture of the ideal format of home education.

A Preliminary Study on the Systematization of Regional Forestry in Old Hongawa-go (Source of the Yoshino River)

Fumibiko Matsuura, Chief Researcher (and three associates) Regional Planning Department, Nishi-Nihon Technology Institute Co., Ltd.

¥1.32 million

Old Hongawa-go (now divided into the two villages of Hongawa and Okawa) is located at the source of the Yoshino River and is one of the most severely depopulated mountain villages in Kochi Prefecture. With four dams, of which one, the Sameura Dam, is the largest in Shikoku, the region is known as a source of

water supply.

The objective of this preliminary study is to investigate the possibility of developing a local forestry industry in these villages and to formulate measures toward this end. Such efforts will ultimately contribute to the improvement of conditions for settling in mountain villages, the prevention of mountain disasters, and the maintenance of the efficiency of dams and the safety of downstream areas. In concrete terms, it is planned to trace and clarify the process of change and present condition of local communities, forestry production and management, and ownership and administration of mountain forests, as well as to investigate the problems involved in organizing a regional forestry industry. At the same time, a comprehensive investigation will be made from the point of view of industrial, environmental, disaster prevention, and civilization theories of the impact (both positive and negative) that past resources development in the mountain villages has had on the area. This investigation will incorporate the results of related research being carried out separately.

Research Grant Division Communications Supplements

In fiscal 1977 the Toyota Foundation established a communications-supplement grant program for the purpose of assisting Foundation grant recipients in making the results of their research public. Communications supplements help cover the costs of printing and publishing research reports, convening symposiums for the presentation of research results, attending international symposiums to present papers on research results, and miscellaneous expenses. This year, twenty-six projects were awarded communications-supplement grants.

There is no fixed deadline for submitting communications-supplement grant applications. All applications are reviewed by a selection committee, which decides which projects will receive grants. A Study of Transport and Removal Mechanisms of Chemical Substances in the Atmosphere (presentation of paper) Shizuo Tsunogai, Associate Professor Faculty of Fisheries, Hokkaido University ¥970,000

Basic Research on Biological Hazards and Pathogenetic Mechanisms of Environmental Chemicals [printing costs]
Kengo Nakai, Professor
Department of Pharmacology, School of Medicine, Akita University
¥1,100,000

Individual and Social Reactions to a Mandatory Retirement Age [presentation of paper] Kazuo Aoi, Professor Faculty of Letters, University of Tokyo ¥1,770,000

An International Comparative Study of Citizen Awareness of Forest Environment [printing costs]
Tsunahide Shidei, Leader
Working Group on the Forest Environment
¥2,730,000

A Comprehensive Study on the Utilization of Water and Land in Postwar Okinawa [symposium] Yoshiro Tamanoi, Professor College of Commerce and Economics, Okinawa Kokusai University ¥3,150,000

Analysis of Trace Halocarbons in the Atmosphere and Their Geochemical Behavior [presentation of paper] Takeshi Tominaga, Professor Faculty of Science, University of Tokyo ¥550,000

An International Study of Trade Ceramics in Premodern Asia [printing costs]
Tsugio Mikami, President
Trade Ceramics Study Group
¥1,350,000

Study of the Clean-Energy Process by Means of the Conversion of Light Energy [presentation of paper] Kerticht Honda, Professor Department of Synthetic Chemistry, University of Tokyo ¥550,000

A Preliminary Study on Changes in Asahi-mura, Yamagata Prefecture [printing costs] Seigo Yuki, Professor Tsuruoka Technical College ¥700,000 Toward a Quantitative Understanding of the Change in the Natural Environment Using Moths as a Bioindicator [symposium]
Aktra Miyata, Research Associate
Department of Biology, Medical College of Oita
¥440,000

Field Research on Community Care for the Mentally and Physically Handicapped [presentation of paper] Uichi Furukawa, Senior Researcher Institute for Developmental Research, Aichi Prefectural Colony ¥900,000

A Preliminary Study on Women and Employment [printing costs] Hiroko Hara, Associate Professor Faculty of Home Economics, Ochanomizu University ¥700,000

Postwar Economic Growth and Political Administration in Japan and West Germany [symposium] Haruhiko Fukui, Professor Department of Political Science, University of California at Santa Barbara ¥1,410,000

Urban Community Development in Developing Countries [publishing costs]
Tetsuro Sasaki, Professor
Department of Education, Tohoku University
¥2,980,000

A Basic Study of the Relations Between Japan and Eastern Europe [printing costs] Shigeru Kido, Professor Faculty of Law, Kobe University ¥1,590,000

Cooperation Among Medical Professionals in the British Health-Care System [printing costs]
Shintaro Asakura, Professor
Department of Public Health, Osaka University Medical School
¥513,000

A Comparative Study of Social Structures of Japanese and Korean Villages [publishing costs] Itsuo Emori, Professor Department of Humanities, Chiba University ¥3,220,000

Research on Developing System Models for Integrated Pest Control (printing costs)

Eiji Hisano, Professor

Faculty of Agriculture, Kyoto University

¥490,000

Mutual Understanding Between the Japanese and the Arabs [printing costs]
Shinji Maejima, Chairman
Japan National Committee for the Study of Arab-Japanese Relations
¥780,000

A Follow-up Study on Changes in Village Life Caused by Changes in the Structure of Agricultural Production [printing costs] Kazuto Matsunaga, Professor Faculty of Humanities, Fukuoka University ¥600,000

Bibliographical and Linguistic Investigations of Ancient Korean Books in Japanese Collections [miscellaneous costs] Yukio Fujimoto, Associate Professor Faculty of Humanities, Toyama University ¥600,000

An Experimental Statistical Analysis of the Physiological Effects of Multiple Environmental Risk Factors [presentation of paper]
Junko Matsubara, Lecturer
Faculty of Medicine, University of Tokyo
¥970,000

A Case Study on the Introduction of Off-Season Craft Work to Revive and Strengthen the Village as a Community [symposium]
Yoshio Akioka, Professor
Department of Industrial Design, Tohoku Institute of Technology
¥500,000

A Comparative Study of Japanese and American Value Systems [presentation of paper] Chikio Hayashi, Director General Institute of Statistical Mathematics ¥780,000

Basic Research on the Rehabilitation of the Mentally Retarded [printing costs]
Takekatsu Kikuchi, Associate Professor
Department of Industrial Arts Education, Kyoto University
¥300,000

A Survey on the Development of Community Health Care [printing costs]
Kyoichi Sonoda, Associate Professor
Faculty of Medicine, University of Tokyo
¥600,000

Research Contest on the Theme "Observing the Community Environment"

This year the Toyota Foundation inaugurated its second Research Contest on the Theme "Observing the Community Environment." This contest was originally established as one of the Foundation's special fifth-anniversary programs implemented in fiscal 1979. Its objective is to encourage specialists and local residents to cooperate in conducting research that requires intensive observation of the community environment. The Foundation has decided to make this contest a regular biennial program. The schedule for the second contest is given below.

October 15, 1981 January 15, 1982

Late March 1982 April – September 1982

October 1982 October 1982 – September 1984 August – October 1984 October 1984 Acceptance of research contest applications. Deadline for acceptance of research contest applications.

Selection of candidates for research awards. Preliminary studies and preparation of research proposals by award candidates. Selection of award recipients. Implementation of research projects.

Screening of research reports.

Decision on special research award recipient.

This year, research award candidates were selected and preparatory grant assistance extended. The Foundation received 108 applications by the deadline for acceptance of contest applications. Twenty applicants were chosen as award candidates by the Selection Committee. Each candidate received a preparatory grant of ¥500,000 with which to conduct preliminary studies and draw up a proposal for a research project to be carried out over the next two years.

The twelve-member Selection Committee is chaired by Makoto Numata.

On November 14 and 15, 1981, an interim research report conference for award recipients in the first Research Contest was held in Tokyo. One of those projects will be chosen to receive the contest's ¥10,000,000 special research grant in fiscal 1982.

Projects Selected as Candidates for Awards in the Second Research Contest

Research on the Availability of Information to Aid in Observing the Community Environment Tsuyoshi Sasada Hyogo Regional Data Study Group Hyogo Prefecture

in Search of a Pleasing Natural Community Environment, with Special Reference to the Growth Conditions of Shrubs and Small Plants
Toru Iwase
Yachiyo Nature Study Group
Chiba Prefecture

A Survey on the Prevalence of Influenza in Maebashi City and Research on the Effect of the Influenza Vaccine Shuzo Yukami Study Group on the Effect of the Influenza Vaccine Gumma Prefecture

An Analysis of Places Named Koaza to Determine the Use of Space in Farm Villages, with Special Reference to the Rokugo District of Yonezawa City Toru Iwao Environmental Agriculture Study Group Yamagata Prefecture

The Role of Marine and Shore Pollution in Altering the Sound of the Ringing Sand on Oshima Kugunari-hama Beach in Kesennuma City Hideo Araki Kugunari-hama Study Group Miyagi Prefecture

Research on Old People's Living Environment and the Promotion of Home Nursing Care for Bedridden Old People by an Old People's Self-help Group in the Kawachi Yao Area Yoshitaro Tsujimurz Yao Old People's Nursing Care Study Group Osaka Prefecture

An Empirical Study on How Children Assess the Scenery in the Shuri District of Okinawa Takayuki Ikeda Shuri Neighborhood Study Group Okinawa Prefecture

A Comparison of Snowfall Accumulation on Horizontal Roofs and the Ground Hideliro Nagai Snow Damage Prevention Study Group Yamagata Prefecture An Attempt to Assess the Impact of Empty Bottles and Cans on the Environment and to Formulate Appropriate Countermeaures for Three Cities in the Semboku District of Osaka Prefecture

Kazumi Akasaka
Society for a Beautiful Izumi
Osaka Prefecture

A Study of the Formation and Actual State of a Nature-Oriented Residential Environment on Atsumi Peninsula Hirobumi Ito Atsumi Coconut Club Aichi Prefecture

An Examination and Re-creation of Living Space by Drawing Maps of Three Generations of Play Areas in Sangenjaya: Collecting Data on the Past and Surveying the Present Situation
Yukio Ishikawa
Sangenjaya Branch, Study Group on Children's Play and the Neighborhood
Tokyo Metropolis

A Survey on the Development of Community Housing and Local Culture by Local Builders in Kumagaya Yoshifumi Tokita
Kumagaya Study Group on Local Housing and Community Development
Saitama Prefecture

A Study on Community Development in the Temple Area of Karasuyama Based on an Environmental Agreement: Looking Back on Fifty Years of Community Development and Ahead to the Future Ichiro Kawahara Society to Study the Environment in the Temple Area of Karasuyama Tokyo Metropolis

Research on the Ecology of and Measures to Protect the Toyohinakomori Bat (Vespertilio orientalis) of Aomori Prefecture, with a View to Studying Mating Colonies in Temmabayashi-mura and Aiming at the Establishment of Artificial Nesting Facilities Noriaki Nara Bat Study and Protection Group, Aomori Prefectural Environmental Protection Society Aomori Prefecture

Research on the Hilly Urban Environment of Nagasaki and a Comprehensive Reconstruction Plan Toshibide Katayose 'Rediscover Nagasaki' Research Group Nagasaki Prefecture A Study of Citizen Participation in the Creation of Obihiro Forest Park and the Possibility of Developing Awareness on the Part of Citizens Telsu Yamada Study Group on Urban Problems in the North Hokkaido

A Study of Citizen-Participation Activities in Community Development and of the Educational Qualities of the Environment, with Special Reference to Otaru's Historical Environment Kyojiro Sasaki Society for Community Development in Otaru Hokkaido

A Study of Nonvolcanic Terrestrial Heat in the Northern Kanto Plain
Fumio Kobayashi
Study Group on Nonvolcanic Terrestrial Heat in the Northern Kanto Plain
Gumma, Tochigi, and Saitama Prefectures

An Empirical Study of Plans for the Establishment of the Kamakura Trust, a Citizens' Community Development Fund in Kamakura Takayoshi Suge Kamakura Trust Research Group Kanagawa Prefecture

A Study of Cultural Individuality and Uniformity in Architecture, with Special Reference to the Inland Sea Cultural Sphere
Tadashi Yamamoto
Inland Sea Architectural Study Group
Kagawa Prefecture

International Grant Program

In fiscal 1981 the Toyota Foundation received 110 applications for its International Grant Program. Twenty grants were approved—thirteen from Thailand, three from Malaysia, two from Indonesia, one from Singapore, and one from Fiji.

As stated in the Foundation's Articles of Endowment, the priority fields of the Foundation's grant-making activities are the human and natural environments, social welfare, education, and culture. However, to complement the activities of other organizations and foundations and to reflect local needs, the Foundation's international grants are currently concentrated in the field of culture. Most of the grants are being awarded to projects that try to establish the identity of and help develop Southeast Asian cultures. Specifically, these include projects that aim to preserve and revitalize indigenous cultures, to publish educational and cultural magazines for young people, to promote reading, and so forth. In the fields of environment, social welfare, and education, grants have been awarded to those projects expected to have a social impact and that attempt to solve problems by grasping the situation objectively, formulating proposals for possible solutions, and implementing these proposals on an experimental basis.

The application procedure for international grants is as follows: The International Division is presently focusing on Southeast Asian countries. If people in Southeast Asia wish to apply for an international grant, they should submit directly to the Foundation's International Division a brief letter in English describing the proposed project and its goals. (The Foundation has its only office in Tokyo and does not maintain field offices abroad.) If the proposed project falls within the scope of the Foundation's grant-making activities, the Foundation will send a grant application form to the applicant(s).

In general, the Foundation does not approve grants for endowment; capital investment, plants, or equipment; museum or library acquisitions; annual budgets of institutions or established programs; propaganda or lobbying activities; religious activities; research for the sake of research; or salaries of project leaders or researchers.

There are no fixed deadlines for submitting applications. The time required for the review procedure varies from six to eight months depending on the nature of the project's proposals and the amount of information provided by the applicant(s). In most cases, the Foundation's professional staff will visit the applicant(s) to gather necessary information

before and during the review period. For projects conducted over a period of more than a year, applications must be submitted each year. Grants are approved at the Board of Directors' meetings, which are held three times a year.

Implementing an Appropriate Preschool Educational System for Children in Impoverished and Rural Areas Professor Kawee Tungsubutra, Rector Khon Kaen University

¥6.48 million

An appropriate educational system and orderly environment are crucial to the development of preschool children (ages three to six). A community that wants all its members to be highly productive and industrious, to respect that which is just and right, and to act charitably and peacefully toward each other must provide its preschool children with an educational system that fills these needs. This is especially true today in impoverished rural areas, where education is unavailable and crime is a problem.

This project will be conducted in villages located in northeastern Thailand, the country's most impoverished region. It aims, with the cooperation of village priests and residents, to establish and develop day-care centers based on the Montessori method. The centers will be located at village temples, and priests and villagers will be encouraged to eventually take full responsibility for their staffing and financing. It is hoped that those facilities that are successful will serve as models for villages in surrounding areas and generate the further establishment of similar facilities.

An Investigation of the Reading Habits and Interests of Malaysian People

Professor Atan bin Long, Chairman (and four associates) Research Committee for the Readership Promotion Campaign

¥17.71 million

The present project, initially awarded a grant in June 1980, is in its second year. Conducted by a team of researchers from five national universities, the project is surveying the current status of Malaysian people's reading habits and the interest taken in and importance attached to reading. A multifaceted survey was necessary to compensate for certain characteristics of Malaysian society—heterogeneity, vast differences between urban and rural areas, and differences in intellectual environment due to economic disparities.

The results of a preliminary survey conducted in the project's first year have helped improve the content and method of the main survey. The survey polled one percent of the population (forty thousand people) between the ages of sixteen and fifty living in the northern, eastern, central, and southern districts of West Malaysia. Items investigated included time spent reading, type of materials read, reading facilities, factors conducive to reading, attitudes and importance attached to reading, and opinions on reading. The results of this project are expected to supply basic objective data for the Malay-

sian Language and Literacy Agency's long-term reading promotion campaign begun in 1980, as well as to generate suggestions for campaign activities.

Translation from Thai into English and Malay of the Research Report "The Traditions Influencing Social Integration Between Thai Buddhists and Thai Muslims" Dr. Prachitr Mahahing

Center for Southern Thailand Studies, Prince of Songkla University

Mr. Vae-U-Seng Madaehoh

Center for Islamic Studies, Prince of Songkla University

¥1.56 millior

More than eighty percent of the population of southern Thailand, particularly in the provinces that border on Malaysia, is Muslim. Misunderstandings and administrative problems often arise from cultural differences between Buddhists, who are the ruling minority, and Muslims, who constitute the majority.

The purpose of this project is to publish an anthropological research report on southern Thai villages in English and Malay. The report, originally written in Thai, surveys villages where Thais of both Buddhist and Muslim faiths coexist peacefully, investigates the factors enabling these two religious groups to integrate socially, and proposes means by which Buddhists and Muslims in other areas can achieve better communication. The purpose of translating the report is to inform overseas audiences of the existence of such villages and to generate domestic and overseas interest in and understanding of southern Thailand.

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

Dr. Kasem Burakasikorn, Director

Social Research Institute, Chiangmai University

¥3.65 million

Initially awarded a grant in June 1979, this project is now in its third year. The objective of the project is to compile basic records of the ancient palm-leaf manuscripts written in Lanna Thai, a northern Thai dialect, and to put the important manuscripts on microfilm for long-term storage. The palm-leaf manuscripts include valuable information on history, traditional law, Buddhist and folk beliefs, rituals, ceremonies, astrology, and traditional medicine—materials indispensable to the ethnological and historical study of the region's traditional society and culture.

During the first two years of the project, temples in the Chiangmai, Lamphoon, and Lampang districts were surveyed, basic records of over seventy thousand manuscripts were compiled, and over one thousand manuscripts of particular importance were microfilmed. The project's third year will be devoted to investigating the Tak, Nan, and Chiangrai districts.

An Inventory of Ancient Settlements in Thailand Using Aerial Photography

Mr. Thiva Supajanya, Assistant Professor Department of Geology, Chulalongkorn University ¥6.48 million

Much of Thai history before the establishment of the Sukhothai kingdom is still unknown. The aim of this project is to classify and supplement the results of more than ten years of research by the project leader in identifying ancient settlements throughout Thailand and to arrange the information in a form accessible to the public. An inventory of aerial photographs identifying the ancient settlements of northeastern, northern, and southern Thailand, the Chao Phraya plain, and other areas will be compiled. In doing this, documents and records will be checked to confirm the location of each site, and site surveys will be conducted to verify any cases that are questionable.

The inventory will serve as a valuable source of information for the Thai government's future development plans and for archaeological excavations conducted by the Fine Arts Department in that it will help prevent the unwitting destruction of historical ruins by the rapid advance of development. The project is also expected to throw light on the missing link between Thailand's prehistoric and early historic periods.

Production of the Film "Thai Muslim Culture in the Southern Border Provinces of Thailand" Mrs. Chavewan Wannaprasert, Associate Professor Center for Southern Thailand Studies, Prince of Songkla University

¥5.55 million

More than eighty percent of the people in Thailand's southern border provinces are Muslim. Their life style and culture, however, remain virtually unknown to the Buddhists who form the majority of Thailand's population. Furthermore, communication problems exist between the two religious groups.

The present project involves the production of a sixteen-millimeter film on the life style, rituals, ceremonies, and customs of Thai Muslims living in the southern border provinces of Pattani, Yala, Narathiwat, and Satun. The Muslim culture in this area comprises distinct subcultures, formed through the influence of the Islam, Hindu, and Buddhist faiths and the Malay and Indonesian cultures. The aim of this project is to make a film depicting these subcultures to be shown to teachers and public officials posted to southern Thailand and to students at the region's middle and high schools and universities, thus broadening understanding of Thai Muslim culture.

Southern Thai Dictionary Compilation
Mr. Sudhiwong Pongpaiboon, Director
Institute for Southern Thai Studies, Sri Nakharinwirot
University
¥1.15 million
This project, first awarded a grant in March 1981 and

now in its second year, aims to compile and publish a comprehensive dictionary of the dialect spoken in southern Thailand. The original southern Thai dictionary published about ten years ago has been found to contain a number of deficiencies. Native speakers of southern Thai and scholars with a special interest in dialectology began compiling a new dictionary four years ago. By thoroughly reviewing the original edition and adding new vocabulary, they aim to create a comprehensive work of southern Thai words and idioms. Thai and foreign scholars alike are eagerly awaiting the dictionary's publication, for such a work will serve as a basic reference for those researching the dialect, literature, and ethnic culture of southern Thailand.

During the first year, compilation was finished earlier than expected, and some 230 illustrations were completed. In the second year the grant will be used to cover publishing costs.

Analysis of Research Findings of Foreign Scholars in Indonesia

Mrs. Meutia Farida Swasono, Lecturer Department of Anthropology, University of Indonesia ¥2.37 million

For years the Indonesian government has helped facilitate the means for foreign scholars to conduct research in Indonesia. Individual foreign scholars wishing to study in Indonesia apply to the Indonesian Institute of Sciences (LIPI) to obtain permission for their research—some may be assigned Indonesian research partners—and report their findings to LIPI upon completing their work. According to the institute's files, seventy-five percent of all research by foreign scholars is conducted in the social sciences, of which anthropology is the most popular field.

Although 450 foreign scholars conducted research in Indonesia between 1972 and 1977, their findings have yet to be analyzed. The present project was established on the premise that the research of foreign scholars of Indonesia should contribute to the country's development. The aim of the project is to classify the research findings into three categories—those that propose full solutions to Indonesia's problems, those that propose partial solutions to Indonesia's problems, and those that outline the structure of Indonesia's problems—and analyze them from the Indonesian point of view.

Ecology of Causative Agents in Marine Food Poisoning in Fiji

Dr. Uday Raj, Director

Institute of Marine Resources, University of the South Pacific ¥2.85 million

Poisonous fish and shellfish have become a pronounced social problem in Fiji, threatening public hygiene and impeding the development of coastal fishing. The goal of the present project is to analyze the poisonous microorganisms populating the seas around Fiji (that is, the causative agents of ciguatera, clupeotoxism, and paralytic shellfish poisoning) and investigate their concentrations. In addition, a testing procedure for toxic species will be developed to enable the ready identification of poisons. Professor Takeshi Yasumoto of Tohoku University will advise the principal investigator and

oversee the introduction of any necessary technology. The project results are expected to prove valuable in enabling Fiji's Ministry of Health to warn people of toxic fish and shellfish species.

In the past the Toyota Foundation has awarded grants for similar projects in Tahiti and Papua New Guinea. It is hoped that the establishment of this third research site will encourage the transfer of the investigative techniques used to other areas of the South Pacific.

Survey and Photographic Recording of Northeastern Thai Mural Paintings

Dr. Vanchai Vatanasapt, Chairman

Esarn Cultural Center, Khon Kaen University

¥6.22 million

The mural paintings found in the temples of Northeast Thailand are unique cultural legacies that depict the rural life of the region. However, until now little research has been done on these paintings. Murals adorn at least forty of the temples located in Thailand's sixteen northeastern provinces, yet because of ignorance of their value as cultural relics, they have been neglected during temple restoration and are in danger of disintegrating from the effects of rain, humidity, and weathering. The disappearance of these works of art would be a great loss to Thai culture. Therefore, they should be surveyed and recorded on film as quickly as possible.

The objective of the present project is to survey and record the location of temple murals in Thailand's sixteen northeastern provinces, to analyze the paintings' styles, to photograph the murals for both documentation and exhibition purposes, and to display the photographs in traveling exhibitions. Exhibitions of northeastern Thai mural paintings, it is hoped, will increase social awareness of the value of Thailand's unique artistic traditions and the importance of preserving local culture.

Compilation of a Southern Thai Cultural Encyclopedia Mr. Sudhiwong Pongpaiboon, Director Institute for Southern Thai Studies, Sri Nakharinwirot University

¥3.9 million

Southern Thailand, long a flourishing Southeast Asian commercial, religious, and cultural center, traces its culture back as far as the seventh century, when Buddhist influence prevailed. The cultural traditions are predominantly oral, however, and have been poorly documented. The information that exists is hardly sufficient to satisfy the recently growing interest in the area.

The present project aims to fill this information gap by compiling a cultural encyclopedia on southern Thailand based on data on the region's customs and oral traditions gathered from field investigations and interviews with local inhabitants. The encyclopedia will include entries on history, legends, biographies, religion, customs, art, entertainment, occupations, language, and literature and will be amply illustrated. The project will be implemented by researchers from a number of academic and research institutions in southern Thailand, including the Institute for Southern Thai Studies, which has come to play a central role in study of the region.

The project leader is also in charge of another Foundation-financed project to compile a southern Thai dictionary.

Workshop on and Promotion of Television Programs for Children

Ms. Ubonrat Siriyuvasak, Secretary

Mass Communications for Children Promotion Group ¥1.92 million

Children's television programs in Thailand are plagued with a number of problems. Broadcasting time is inadequate. Most programs are foreign productions. Programs tend to be lacking in creativity and filled with violence, horror, and superstition. Children watch more TV than does any other age group, and it is feared that the medium is having a negative effect on their socialization.

The goal of this project is to raise the standard of children's television programs. Conducted by the Mass Communications for Children Promotion Group, the project is also receiving cooperation from Chulalong-korn University, Thammasat University, Sukhothai Thammathirat University, and the Office of Educational Technology. Television program content will be analyzed for its reflection of Thai cultural values and life style. In addition, a children's club will be established to research the pastimes and games that contribute to the socialization process, seminars and workshops on program improvement will be held for TV program producers, and twenty pilot programs will be produced.

Historical and Textual Studies of Old Northern Thai Palm-Leaf Manuscripts, with Emphasis on Legal and Muang-History Texts

Mr. Anan Ganjanapan, Lecturer Faculty of Social Sciences, Chiangmai University Mrs. Aroonrut Wichienkeeo, Lecturer Lan Na Thai Folklore Studies Center. Chiangmai Teacher College

¥1.94 million

The present project, initially awarded a grant in March 1981, is now in its second year. The project's objective is to select and transliterate into modern Thai fifteen palmleaf manuscripts dealing with the laws and history of ancient Thai society in northern Thailand, to preface each transliterated manuscript with information obtained from historical and philological studies, and to publish these manuscripts together with a glossary, thus providing other researchers with useful reference material.

During the first year, fourteen manuscripts were selected. Priority was given to works that (1) had not yet been transliterated, (2) had been overlooked despite their particular historical value and importance to the study of ancient Thai society in northern Thailand, and (3) were interrelated in some way. The manuscripts were obtained from Chiangmai University's Social Research Institute, the National Library, and temples in northern Thailand. Transliteration of one local history text has already been completed. In the second year all selected manuscripts will transliterated and studied from the historical and philological viewpoints, leading to the eventual compilation of guidelines for other researchers.

Study and Survey of Palm-Leaf Manuscripts in Phitsanulok, Sukhothai, and Kamphaengphet Provinces Mr. Supot Pruksawan, Lecturer Cultural Center, Pibulsongkram Teachers College ¥3.72 million

The southern part of northern Thailand, which includes the provinces of Phitsanulok, Sukhothai, and Kamphaengphet, contains the site of one of Thailand's former capitals and abounds with historical and cultural relics. Many temples and private dwellings in the region possess palm-leaf manuscripts that date as far back as one hundred to five hundred years. The manuscripts, written in Lanna Thai, ancient Thai, and ancient Khmer, document various elements—traditional law, religious beliefs, herbal medicine, astrology, superstitions, rituals, the arts—that helped shape the historical development of traditional society in the region.

This project will survey and compile records of the extant palm-leaf manuscripts, then microfilm and transliterate those of particular importance. Full use will be made of the facilities and know-how of another Foundation-financed project, Survey and Microfilming of the Lanna Thai Palm-Leaf Manuscripts in Northern Thailand, which is being conducted by Chiangmai University's Social Research Institute and is now nearing the end of its three-year duration.

Publications on Mon and Nyah Kur Linguistics Ur. Theraphan Luang Thongkum, Assistant Professor Department of Linguistics, Chulalongkorn University ¥1.18 million

The present project, initially awarded a grant in 1980, is in its second year. In the first year, sixteen field surveys were conducted among the Nyah Kur tribe of northeastern Thailand. X-ray photographs, oscillograms, and spectrographs were taken to aid study of the pronunciation of the Nyah Kur dialect. Analysis of most of this data has now been completed, and the research results have uncovered several valuable facts shedding light on the history of Southeast Asian languages.

In the second year, research results will be published in three separate volumes: a reconstruction of the ancient Mon language of Dvaravati, a Nyah Kur—Thai—English dictionary, and a linguistic study on the Nyah Kur and Mon languages. These publications are expected to prove highly valuable from a scientific, cultural, and educational viewpoint. This project is being conducted in conjunction with Bangkok's bicentenary celebration.

The History of Southeast Asian Architecture: Developments in Thailand from the Sixth Through the Thirteenth Century

Mr. Anuvit Charernsupkul, Associate Professor Faculty of Architecture, Silpakorn University ¥1.74 million

Initially awarded a grant in late fiscal 1980, this project is in its second year. Its objective is to research the development of architecture in Thailand during the period of Indianized states from the sixth century up to the thirteenth century and publish a report on its findings. Focusing on the Dvaravati, Southern Province, Khmer, and Lopburi architectural styles, research will consist of

(1) investigating the development of each style, its sphere of influence, and its cultural implications; (2) appraising the strength of design and architectural worth of each style; and (3) considering each style's technical and architectural methodology and its disappearance or subsequent role in modern-day architecture.

The first year of the project was spent enlarging photographic data, compiling catalogues, drawing floor plans and sectional and overall diagrams of Southeast Asian dwellings, conducting field surveys to supplement insufficient data, and gathering relevant documents. During the second year, surveys will be conducted in Burma, Indonesia, and Malaysia, as the architectural styles of these countries all influenced Thai architecture. A broad-based explanation of the survey data will be compiled and a cross-check conducted.

Publication of the Youth Magazine Pengetahuan (Knowledge)
Dr. Lim Teck Ghee, Chairman
Institut Masyarakat
¥8.52 million

The present project, initially awarded a grant in March 1979, is now in its second year after a two-year post-ponement. Its objective is to publish a responsible, educational magazine for Malaysian youths between the ages of fourteen and eighteen. The magazine will contain information about development and the changes that accompany it, examples of responses to change, and information on the traditions and culture of Malaysia and its neighbors. It is hoped that youths will be motivated to put this knowledge to use in evolving a mode of national development that is suited to the Malaysian people's needs and that they will participate constructively in bringing about such development.

During the first year of the project, which actually commenced in May 1981, the magazine was published as planned, and regular subscriptions reached the one thousand mark, with six thousand additional copies sold through schools and newspaper stands. Unlike other magazines, whose main function is to entertain, Pengetahuan encourages youths to develop an awareness of the environment, culture, and personal development. The magazine has been favorably received by serious readers.

Research on Traditional Southeast Asian Architecture Datuk Lim Chong Keat Southeast Asian Cultural Research Program (SEACURP), Institute of Southeast Asian Studies ¥9.48 million

The present project, initially awarded a grant in March 1981, is in its second year. Its objective is to preserve and expand the Pelzer collection (slides and photographs of traditional Southeast Asian dwellings collected by the late American architect Dorothy Pelzer) and to establish an informal organization of Southeast Asian researchers and specialists with a special interest in the preservation and use of traditional Southeast Asian dwellings. The ultimate goal is to heighten social awareness of the meaning and value of the structure of traditional dwellings, as well as traditional life styles.

During the first year of the project, the Pelzer col-

lection was placed in the custody of the Institute of Southeast Asian Studies and an index of the collection was drawn up. A meeting of Southeast Asian scholars and architects with whom SEACURP had made contact was held in November, at which discussion focused on establishing a regional network of institutions and specialists, organizing resource materials, and expanding SEACURP's archives. These activities will be continued in the second year.

Inventory and Recording of Sundanese Manuscripts Dr. Edi S. Ekadjati, Assistant to the Director of Research Institute of Culture, Padjadjaran University ¥1.45 million

Initially awarded a grant in March 1981, this project is in its second year. The goal of the project is to assemble an inventory of Sundanese manuscripts from West Java, recording their form and content, and to compile an outline of the research conducted on Sundanese manuscripts up to the present.

In the first year, surveys of Sundanese manuscripts were conducted at the National Museum in Jakarta, the National Library of Australia in Canberra, and the Library of the State University of Leyden, the Netherlands. Also, a number of manuscripts were discovered in surveys of collections owned by villages and individuals in Jakarta, Yogyakarta, Surakarta, Banten, Priangan, Purwakarta, Cirebon, Banyumas, and Lampung. In the second year, discussions and seminars will be held to analyze the nature and value of the data collected.

Third Asian-American Conference on Environmental Protection
Professor Ariffin Suhaimi, Dean
Faculty of Science and Environmental Studies, Universiti Pertanian Malaysia

¥1.34 million

Professionals dealing with problems of environmental protection from the five ASEAN nations, Japan, and the United States have been meeting every two years to discuss the particular problems facing their countries. The third of these conferences, to be held in Malaysia, will focus on the environmental management of coastal zones. The conference aims to (1) promote regional and international cooperation in protection of the environment, (2) strengthen regional, intra-ASEAN, and international links among specialists in environmental management, and (3) upgrade knowledge and expertise in environmental management among member countries by promoting the exchange of information and experiences and facilitating the transfer of technology.

The first conference, held in August 1978 in Sapporo, Japan, under the sponsorship of the Japan Center for Human Environmental Problems, received a Foundation grant for international conferences convened in Japan. The second, held in August 1980 in Jakarta, was supported by a Foundation international grant.

Communications Grant Program

The "Know Our Neighbors" Translation-Publication Program, now in its fourth year, aims to better acquaint the Japanese with the culture, society, history, and other aspects of their Southeast Asian neighbors and to facilitate a deeper awareness of the ways of thinking and social trends in those countries. To this end, the program selects from among Burmese, Indonesian, Malaysian, Philippine, Singaporean, and Thai literary works and books dealing with culture, society, history, and other topics those deemed by people from Southeast Asian nations to be suitable for introduction to the Japanese public. The Toyota Foundation awards grants to assist with the translation of these books into Japanese. The Foundation's 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. Since the program's establishment in fiscal 1978 grants have been awarded to forty-four works: three from Burma, twelve from Indonesia, three from Malaysia, three from the Philippines, four from Singapore, and nineteen from Thailand.

The "Know Our Neighbors" Translation-Publication Program gave impetus to the development of the Dictionary Compilation-Publication Program, which was inaugurated in fiscal 1981. This program supports the compilation and publication of medium-sized bilingual (Southeast Asian languages into Japanese) dictionaries. Each dictionary is to contain 30,000 to 50,000 entries reaching to the level found in novels, newspapers, and scholarly works.

The Fellowship Program for Japanese Social Scientists administered by the International House of Japan is now in its seventh year. The Toyota Foundation has provided grant aid to the program since its inception, bringing to ¥175 million the total amount awarded so far.

"Know Our Neighbors" Translation-Publication Program

fitie	Author	Translator	Publisher	Grant Amount
Ayahku	Hanika	Mitsuo Naksraura	Imura Cultural Enter- prise Co., Ltd.	¥ 3,360,000
The Kampung Boy	Lat	Sanae Ogishima and Micko Sueyoshi	Shobun-sha Publishers	¥ 370,000
Renungan tentang Pertundjukan Wajang Kulit	Seno Satroamidjojo	Ryo Matsumoto, Hiromichi Takeuchi, and Hiroko Hikita	Mekong Publishing Co., Ltd.	¥ 2,250,000
Kactini Selmah Buografi	Sitiscemandari Sceroto	Megumi Funachi and Mayumi Matsuda	Isuura Cudtural Enter- prise, Co., Ltd.	¥ 3,150.000
Nai Puey Ungpakern: Phu Yu: Mai Kalon	Sulak Sivaraksa	Osamu Akagi	Imura Cultural Enter- prise: Co., Ltd.	¥ 2,190,600
Salah Asuhan	Abdoef Moeis	Kenji Matsuura	imera Cultural Enter- prise, Co., Ltd.	¥ 1,770,000
Dee Taing Than!	Khin Swe U	Hisao Tanabe	Imura Cultural Enter- prise, Co., Ltd.	¥ 1.266,000
Thai fu Si Khram	Si Fa	ikuo Sakurada	Imura Cultural Enter- prise, Co., Ltd.	¥ 2,490,000
Ni Kawit Cesi Peripal Orang	Apak Agung Pandii Tisna	Toshiki Kasuya	lmura Cultural Enter- prise: Co., Ltd.	¥ 1,380,000
Mettat yat lo lan Inne Ngo	Maung Thaya	Midori Minamida	Imusa Cultural Enter- prise, Co., Ltd.	¥ 1.440,600
Antologi Cerpen Indonesia	Ignas Klenden, ed.	Shigetsugu Sasaki and ten others	Imura Cultural Enter- prise, Co., Ltd.	¥ 2,040,000
Hma deba Acha Mashibi and Pyauk thaw lon hma Sandawar	Moe Moe Inya	Yasuko Dobashi	linuca Cultural Enter- prise, Co., Ltd.	¥ 2,040,000
Anatologi Ekonom: Indovesia	Thee Kian Wie, ed.	Hiroyoshi Kano, Yoshinori Murai, and Hiroyoshi Mizuno	Mekong Publishing Co., Ltd.	¥ 3,300,000
Ulamah dan Madrasah di Aceh, Islam di Sulawesi Selantan, and The Fesan- tren Tradition	Baihaqi AK, Mattaulada, and Zamakhsyari Dhofier	Saya Shiraishi	Mekong Publishing Co., Ltd.	¥ 2,160,000
Singapore Short Stories	Robert Yeo, ed.	Miyuki Kosetsu	Gensosha Publishers Co., Ltd.	¥ 1,000,000
Total				¥30,200,000

Ayahku [My Father]

This biography of Dr. Haji Abdul Karim Amrullah, who was a well-known Islamic leader in Indonesia, is written by his son, himself a leader in Indonesian Islamic circles. During his career in the late nineteenth and early twentieth centuries, Dr. Amrullah witnessed the development of a nationalistic movement in Indonesia and a sudden powerful shift toward Islamic reformism. Hamka's thorough and detailed portrait of his father's lite and philosophy is skillfully framed in the context of these developments and of social conditions in West Sumatra. The translator, a scholar of Indonesian Islam, has appended detailed background information for Japanese readers.

The Kampung Boy

Lat's original and humorous cartoons are popular both

in his native land of Malaysia and abroad. This amusing autobiographical work, the first cartoon collection to be translated under the "Know Our Neighbors" Translation-Publication Program, contains Lat's humorous, bittersweet recollections of his childhood in a kempung (village). It also gives quite detailed descriptions of traditional Malaysian country life and customs, which have gradually vanished as modernization has swept across the country.

Renungan tentang Pertundjukan Wajang Kulit [Comments on the Presentation of Wayang Kulit]

This book provides a thorough explanation of one form of Indonesian folk entertainment—the shadow pupper theater known as wayang kulit. Presenting several wayang kulit selections, the author explains various Javanese rites and observances, talismans to ward off evil,

prayers, and philosophies and outlooks of the people often depicted in these plays. As is apparent in the puppeteer's narration, and as the author frequently notes, wayang kulit has strong mystical connotations.

Kartini Sebuah Biografi [Biography of Kartini]

Raden Ajeng Kartini (1879 – 1904) was a Javanese poet and a pioneer in the struggle for women's rights in Indonesia. This biography expands on an earlier work, Door Duisternis tot Licht (Through Darkness into Light), a famous collection of letters she wrote in Dutch. The biographer describes the raising of Kartini's political consciousness as she was drawn toward nationalism and her subsequent dedication to bringing about sexual equality in her country. Noting her contributions to Indonesian society, this work gives an apt portrayal of the life and times of this woman who died at the young age of 25.

Nai Puey Ungpakorn: Phu Yai Mai Kalon [The Anguish of Thai Intellectuals: The Case of Puey]

Drawing on his association with the leading Thai intellectual Puey, the author, a well known Thai writer and critic, recounts several incidents as he examines the relationship between Thai intellectuals and Thai society in general. With the author's assistance, the translator has added copious notes and explanations to facilitate understanding by Japanese readers who are unfamiliar with Thailand.

Salah Asuhan [Influenced by the West: Misguided Education]

This novel tells of the forbidden love between Corrie, the daughter of a French father and an Indonesian mother, and Hanafi, a westernized Minangkabau youth who was educated under the Dutch system. As various social pressures work against their love. Corrie and Hanafi, who are ostracized by both the native Indonesian and colonial communities, become frustrated and discouraged, and their love is eventually destroyed. With its candid portrayal of a young couple's struggle with society and conflicts between tradition and modernization. Asia and the West, the colonizers and the colonized, this work marks the emergence of modern Indonesian literature.

Doe Taing Thani [My Native Land]

During the author's youth, Burma was constantly in a state of flux, beginning with the independence movement against the British colonial regime, then changing to World War II, invasion by the Japanese army, and eventual postwar independence. The author, who closely observed the heroes, dreams, struggles, and loves of young Burmese nationalists during her childhood, traces contemporary Burmese history, describing the formation of a volunteer army for independence, the shift from an anti-British to an anti-Japanese stance during World War II, the return of the British administration after the war, the long-awaited independence in 1948, and uprisings by Burmese communists and the Karen tribe in subsequent years.

Thai Fa Si Khram [Under Blue Skies]

Despite the objections of her upper-class family, Matri marries a youth from Thailand's Meo hill tribe and goes to his village to live. She and her husband set up a school and attempt to teach the villagers about hygiene and to persuade them to make their living by means other than cultivating opium. But their efforts are in vain, for the villagers stubbornly cling to their established customs and life style. When Matri becomes pregnant, she returns to her parents' home to give birth. Despite repeated pleas from her husband, she hesitates to go back to the village. This work is an excellent portrayal of the relationship between Thai hill tribes and the rest of Thailand's population.

Ni Rawit Ceti Penjual Orang [A Slave Dealer on Bali] Set in Bali, this novel depicts the life of the Balinese with its evil characters, sorcery, and superstitions—elements that clash with this famous tourist spot's description as the "last paradise on earth." A compulsive gambler, Ni Rawit uses her beauty and powers of persuasion to support herself with the commissions men pay her to procure women for them. After an unsuccessful attempt to prostitute a younger cousin to a middle-aged aristocrat, Ni Rawit disappears. She later returns as a slave dealer and tries to kidnap the cousin who humiliated her so that she can sell her to a slave ship.

Mattat vat Io Jan hma Ngo [Standing in the Road Sobbing]

This novel, which won the 1969 Burmese national literary award, takes readers through a day in the life of Soe Kyaw, a Rangoon taxi driver. Focusing on the life and feelings of this cabdriver who exists at the bottom of Burmese society and on the personalities of his passengers, this work realistically describes everyday life in Burma. To create an accurate portrait, the author concealed his identity and drove a taxi for three weeks, gathering experiences that he later wove into this award-winning novel.

Antologi Cerpen Indonesia [Anthology of Indonesian Short Stories]

The ten short stories in this anthology were published after Indonesia gained independence in 1945. The authors include Idrus, Pramoedya Anata Toer, and other representative writers of the early days of independence, as well as Motinggo Boesje, Umar Kayam, and other leading contemporary writers. Representing a wide range of authors and works, this collection is a valuable aid in assessing trends in contemporary Indonesian literature.

Hma daba Acha Mashibi and Pyauk thaw Ian hma Sandawar [Nothing Can Replace It and Groping the Roadless Road]

Both of these works by one of Burma's leading female writers are detailed portraits of Burmese society focusing on the lives of women. *Hma daba Acha Mashibi*, set in a farming village outside Rangoon, is the story of a widow who brings up her five children single-handedly.

Pyauk thaw lan hma Sandawar examines family relations, particularly the psychological dilemmas that arise when a housing shortage leaves a young couple with no choice but to live with their in-laws in Rangoon.

Antologi Ekonomi Indonesia [Anthology of Indonesian Economics]

This collection of papers by Indonesian economists examines both the present status and future prospects of Indonesia's economy. Many of these papers first appeared in Indonesian-language publications, while others were originally written in English. Exploring a variety of themes, the anthology presents a wide spectrum of opinions, ranging from those of bureaucrats and scholars actively involved in the planning of economic policy to those of intellectuals critical of the status quo. These glimpses of Indonesia's economy through the eyes of Indonesians themselves provide an excellent, well-balanced overview.

Ulamah dan Madrasah di Aceh, Islam di Sulawesi Selatan, and The Pesantren Tradition [Islam in Indonesia] This volume, which comprises three papers, discusses Islam in three regions of Indonesia—Aceh (north Sumatra), Java, and southern Sulawesi—and examines the historical and social functions of ulamah (Islamic teachers), madrasah (Islamic institutions of higher education), and pesantren (Islamic schools). Not only does this collection present a general overview of Islam in Indonesia, it is also the first comprehensive look at the regional characteristics of Indonesian Islam.

Singapore Short Stories

This anthology consists of three short stories each by eight leading Singaporean writers, as well as works by other writers. In many stories realism is employed to create accurate, detailed depictions of various aspects of life in Singapore. For example, some stories poignantly indicate the serious problems facing this multiracial nation that has been swept by rapid modernization. Readers are afforded a glimpse of the lives of Singaporeans, whose society is far more complex than Singapore's nickname, "the Switzerland of the East," suggests.

newspapers, and scholarly works and to obtain an understanding of Vietnamese culture. So far, the only dictionaries available have been little more than vocabulary lists or translations from a third language. Compilation of this dictionary began more than ten years ago, and more than 70,000 vocabulary cards have been gathered. The published dictionary, which will aid language study, will meet high academic standards.

Fellowship Program

Fellowship Program for Japanese Social Scientists Yoichi Maeda, Managing Director International House of Japan \$20.0 million

This program, first awarded a grant in October 1975, is now in its seventh year. The purpose of the program is to train young Japanese social scientists to serve as a bridge between Japan and the rest of the world by granting them fellowships to conduct research of their choosing for a fixed period (generally two years) in universities and other academic research institutions abroad. To date, forty-four fellowships have been awarded: six in the first year of the program, nine in the second, six in the third, eight in the fourth, six in the fifth, and nine in the sixth. Eight fellowships are to be awarded in the seventh year. Fellowship recipients conduct their research in many parts of the world, including the United States, Eastern and Western Europe, and Asia.

The program is jointly supported by the Ford Foundation, the Japan Foundation, the Japan-U.S. Friendship Commission, Mobil Sekiyu K.K., and the Toyota Foundation.

Dictionary Compilation-Publication Program

Modern Vietnamese-Japanese Dictionary Kunie Kawamoto, Professor Keio Institute of Cultural and Linguistic Studies, Keio University

¥5.0 million

A Vietnamese-Japanese dictionary is necessary for Japanese people to be able to read Vietnamese literature,

Financial Report for Fiscal 1981

Settlement of Accounts (April 1, 1981 – March 31, 1982)

				Unit: Yen
	Fiscal 1981	Fiscal 1980	Fiscal 1979	Fiscal 1978
INCOME				
Balance brought forward from the previous year	9,047,135	16,373,039	1,892,028	40,669.467
Endowment income	827,736,957	829,629,066	712,011,139	871.684,223
Miscellaneous income	3.278,031	7,391.305	3.088,720	2,287,324
Donations			400,000,000	1,800,000,000
Total Income	840,062,123	853,393,410	1.116.991.887	2,714,641,014
EXPENDITURES				,
Grants and program expenses	585.610,054	526,973,945	519,346,710	490,769.708
Expenses for special fifth- annivecsary programs		81.035,385	55,798,591	
Administrative expenses	93.352,814	80,943,584	73,073,547	67,900,978
Purchase of fixed assets	#:	2.193,361	1177	3,078,300
Income transferred to reserve for retirement allowance	5,200.000	3,200,000	1,500,000	1,000,000
Income transferred to working endowment			400,000,000	1,800,000,000
Total Expenditures	684, 162,868	694.346,275	1,050.618,848	2,362.748,986
Excess of Income over Expenditures	155,899,255	159.047.135	66.373,039	351,892,028

Note: Of the surplus funds for the corrent fiscal year ¥50,000,000 has been transferred to the working endowment and ¥60.000,000 to a reserve for special tenth-anniversary programs: the balance has been carried over to the income budget of the next fiscal year. Since 1974 a total of ¥1 billion of surplus funds has been transferred to the working endowment.

Balance Sheet (as of March 31, 1982)

				Unit: Yen
	Fiscal 1981	Fiscal 1980	Fiscal 1979	Fiscal 1978
ASSETS				
Cash	30,125	35,146	86,691	140,672
Bank deposits	24,093,441	47,488,729	9,786,769	3,623,643
Negotiable securities	11,320,777,225	11,164,306,655	11,011,238,039	10,520,448,364
Prepaid expenses	1,933,966	1,933,966	1,790,378	1,790,378
Advances (disbursements)	6,368,543	4,421,083	937,016	288,767
Suspense payments	ob co.	104,922		
Fixed assets	43,165,262	44,574,265	44,912,719	47,155,697
Total Assets	11,396,368,562	11,262,864,766	11,068,751,612	10,573,447,521
LIABILITIES				
Accounts payable	166,026,955	193,740,974	153,502.712	132,222,314
Deposits received	2,402,388	1.827,690	1,670,440	1,177,482
Reserve for Toyota Foundation prizes	70,000,000	60,000,000	50,000,000	40,000,000
Reserve for retirement allowances	8,874,702	3.674,702	2,292,702	1,000,000
NET ENDOWMENT				
Principal endowment	7,000,000,000	7,000,000,000	3,000,000,000	3,000,000.000
Working endowment	3,950,000,000	3,800,000,000	7,750,000,000	7,399,047.725
Surplus fund	199.064.517	203,621,400	111,285,758	
Total Liabilities	11,396,368,562	11,262,864,766	11,068,751,612	10,573,447,521

Endowment Status

Unit: Yen

	End Fiscal 1981	End Fiscal 1980	End Fiscal 1979	End Fiscal 1978	End Fiscal 1977
Principal endowment	7,000,000,000	7.000,000,000	3,000,000,000	3,000,000.000	3.000,000,000
Working endowment	4,149.064,517	4.003.621,400	7,861,285,758	7,399,047,725	5,287,322,930
Total	11.149.064,517	11,003,621,400	10,861,285,758	10,399,047,725	8,287,322,930

Note: The working endowment at the end of fiscal 1981 includes ¥43,165,262 of fixed assets.

Adjustments to Grant Budgets

(April 1, 1981 - March 31, 1982)

Period	Grantee Type of Grant	Organization	Date Greut Approved	Amount Approved Amount Returned Final Amount
Fiscal 1979	E. L. Wijemanne International Division Grant	Marga Institute	October 3, 1979	¥1,200,000 411,088
1980	Mekong Publishing Co., Ltd. 'Know Our Neighbors' Translation- Publication Program		June 19. 1980	¥ 788,912 ¥3,750,000 744,000 ¥3,006,000
	Híroshi Kída Research Grant Division Grant	National Federation of Educa- tional Research Institutes in Japan	October 1, 1980	¥8,960,000 264 ¥8,959,736
	Noboru Ota Grants for International Conferences Convened in Japan (grant returned)	Association of Earth Scientists, Kagoshima University	October 1, 1980	¥ 879,000 879,000 ¥ 0
	Rosa C. P. Tenazas International Division Grant	SEAMEO Project in Archae- ology and Fine Arts	October 1, 1980	¥1,650,000 47,179
	Imura Cultural Enterprise Co., Ltd. "Know Our Neighbors" Translation- Publication Program		March 18, 1981	¥1,602,821 ¥2,850,000 180,000 ¥2,670,000
	Imura Cultural Enterprise Co., Ltd. "Know Our Neighbors" Translation- Publication Program		March 18, 1981	¥2,010,000 ¥2,010,000 72,000 ¥1,938,000
	Imura Cultural Enterprise Co., Ltd. "Know Our Neighbors" Translation- Publication Program		March 18, 1981	¥4,410,000 510,000
Fiscal 1981	Ichiro Kato Research Grant Division Communi- cations Supplement	Japan Center for Human Envi- ronmental Problems	May 21, 1981	¥3,900,000 ¥2,314,500 434,500 ¥1,880,000

Note: Adjustments to the grant amounts determined by the Board of Directors and carried in the annual reports are due to subsequent changes in project plans made by the grantees, such as a reduction in the number of participants at conferences.

Chronological Data

1981 Apr. 1: Acceptance of grant applications for fiscal 1981 Research Grant Program, "Know Our Neighbors" Translation-Publication Program, and Dictionary Compilation-Publication Program

Apr. 3: Second meeting of International

Division Advisory Board

May 31: Deadline for acceptance of Research Grant Division grant applications (778 applications received)

June 15: Deadline for acceptance of Dictionary Compilation-Publication Program grant applications (3 applications received)

June 17: Twenty-fourth meeting of Board of Directors; approval of fiscal 1980 activity program report and financial report; fiscal 1981 grants decided: for "Know Our Neighbors" Translation-Publication Program, 3 recipients; for International Division Grants, 4 recipients; sixth meeting of Board of Trustees; explanation of status of Foundation activities

June 27: Twelfth Research Grant Division

Symposium

June 30: Publication of Toyota Foundation Report No. 14 (Japanese)

Aug. 30: Publication of Occasional Report

No. 1 (English)

Sept. 29: Twenty-fifth meeting of Board of Directors; fiscal 1981 grants decided: for Research Grant Division Grants, 88 recipients; for "Know Our Neighbors" Translation-Publication Program, 7 recipients; for Dictionary Compilation-Publication Program, 1 recipient; for International Division Grants, 6 recipients; approval of appointment of Selection Committee for Second Research Contest on the Theme "Observing the Community Environment"

Oct. 15: Fiscal 1981 grant award ceremony; publication of Toyota Foundation Report No. 15 (Japanese); acceptance of applications for Second Research Contest

Oct. 31: Deadline for acceptance of fiscal 1981 "Know Our Neighbors" Translation-Publication Program (20 applications received)

1982 Jan. 15: Deadline for acceptance of applications for Second Research Contest (108 applications received); publication of "Know Our Neighbors" Translation-Publication Program Report No. 2 (Japanese)

Jan. 20: Publication of Toyota Foundation

Report No. 16 (Japanese)

Jan. 22-23: Thirteenth Research Grant Division Symposium

Feb. 2: Third meeting of International Di-

vision Advisory Board

Mar. 24: Twenty-sixth meeting of Board of Directors; fiscal 1981 grants decided: for "Know Our Neighbors" Translation-Publication Program, 5 recipients; for International Division Grants, 10 recipients; for Second Research Contest, 20 award candidates; approval of fiscal 1981 financial statement estimate and decision on disposal of estimated surplus funds; approval of fiscal 1982 activity program and budget

Mar. 29: Publication of Toyota Foundation

Report No. 17 (Japanese)

The Staff of the Foundation

Executive Director Yujiro Hayashi

Secretary of the Foundation Hideo Yamaguchi

General Affairs and Accounting Division

Division Manager Naomichi Kamezawa Assistants Katsuyoshi Ito Motoko Takeda Yoshiko Mimura

Research Grant Division

Program Officer Yoshinori Yamaoka Program Assistants Masaaki Kusumi Gen Watanabe

International Division

Program Officer Kazue Iwamoto Assistant Program Officer Yoshiko Wakayama Program Assistant Toichi Makita Administrative Assistant Noriko Kawashima