THE UNIVERSITIES OF THAILAND AS GRADUATE INSTITUTIONS

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I.

The University Situation in Thailand

Graduate education leading to the master's degree and ultimately the doctorate (characteristically the Ph. D.) represents the final stage in development and maturity in the degree-granting activities of the university today. The recent introduction of graduate degrees in Thailand must therefore be seen in the context of the total university capacity of the nation and its potential for growth. There are at present four institutions of higher learning which grant graduate degrees: Chulalongkorn University, Thammasat University, Kasetsart University, and the College of Education. Silpakorn University, Chiengmai University and Khon Kaen University do not grant graduate degrees.

The oldest, Chulalongkorn, was founded in 1916 and is the most comprehensive in encompassing the recognized essential disciplines as well as several professional faculties (or "schools"). The others are relatively young – Thammasat, which assumed its modern form only in 1932, and the others established in 1943 (Kasetsart) and 1952 (College of Education) respectively. Notice should be taken here of the University of Chiengmai, opened in 1964, which, though it has not yet granted any master's degrees, is a going concern of considerable promise, and of the new university at Khonkaen, the second in a general plan to establish regional universities outside of the Bangkok area. Enrollment in these institutions is full and has been increasing. Together, in 1965 they granted 5,605 Bachelor's degrees. The degrees granted in this

one year represent 16.2 % of all Bachelor's degrees granted since 1888, a total of 33,548 (statistics supplied by NEC). As young and growth institutions, most of these schools, though distinctive in character, are in a sense still finding themselves and, in the process, expanding to encompass a breadth of academic offerings. To illustrate, Kasetsart, oriented towards agriculture and veterinary science, has added faculties in arts and science and plans to extend its offerings in engineering; the College of Education, previously a teacher—training institution, has plans to offer bachelor's degrees in the faculties of the arts, social sciences, and sciences.

Admitting all the inevitable missteps and improvisation accompanying such a rapid development, the over-all accomplishment arouses genuine respect. Coupled with the effort to establish a system of universal education at the elementary level, it represents a dedication to education and a rapid rise to a level of achievement in a short time that are impressive indeed. To bring all this about, traditions have been shattered, great difficulties overcome, and expectations exceeded. In these circumstances the present limitations of those institutions of higher learning for providing graduate work of high quality are not to be wondered at, and the prospects for the future must be considered in the light of the extraordinary dynamism characteristic of the whole effort and on the assumption that as these institutions find themselves and achieve their proper strength the ultimate aim will be improvement in quality as well as increase in numbers.

Present Activity in Graduate Education

The extension of the educational effort to include graduate work is now an accomplished fact. Master's degrees have been awarded by Chulalongkorn, Thammasat, Kasetsart, the University of Medical Sciences, and the College of Education, and also by the affiliated SEATO Graduate School of Engineering. The numbers of graduate students registered and degrees granted reveals continued, and in some areas accelerated, growth. Already two doctorates have been granted, both of them by Thammasat. A total of 652 master's degrees had been awarded by all schools combined

up to 1965; of this number, 122, or nearly 19 %, were granted in 1965. The fields of study in which the largest number of degree were granted are Public Administration (19 in 1965; total of 102); Engineering (42 in 1965; total of 167); Education (22 in 1965; total of 88). This distribution indicates that the development of graduate study in Thailand is clearly responsive to the manpower needs of a developing nation. oldest of the universities, Chulalongkorn, awarded 162 master's degrees out of the total of 652 - nearly 19 %, and of the total of 122 in 1965 it awarded 42, or nearly 26 %. But a further analysis shows some unusual distributions. Thus, of the total of 261 degrees in the social sciences, only 14 were awarded by Chulalongkorn, 247 by Thammasat; of the 88 master's degrees in Education, 60 were awarded by the College of Education and 28 by Chulalongkorn, although in 1965 the former awarded 5 and the latter 17 All of the total of 23 master's degrees in science and mathematics master's degrees. (excluding such medically oriented sciences as micro-biology, etc.) were awarded by Chulalongkorn, 11 of them in 1965. All of the 7 master's degrees in Agriculture were awarded by Kasetsart. In Engineering, 111 master's degrees out of a total of 167. and 37 of the 42 in 1965, were awarded by SEATO Graduate School of Engineering, which was established in 1959. These admittedly inconclusive data lend themselves to a number of interesting interpretations, (for example, the special strengths and interests of particular universities), but their primary implication is that graduate education has become a serious commitment of the institutions of higher learning in Thailand.

The development of graduate work is not simply an extension or enlargement of the teaching efforts of an established undergraduate college or university. An institution that undertakes graduate work must be prepared to undergo changes that amount in some respects almost to mutations. In the present situation, with a number of closely associated institutions engaged in a common effort with no evidence of a common plan, this relatively new educational effort calls for careful review and projection for the future, and for some degree of overall planning. This conclusion is strengthened by a consideration of the character of the graduate activity as it appears at the moment.

Impressions of Present Graduate Activity

It comes as something of a surprise to the outsider to discover that master's degrees earned in Thai universities are held in lower esteem in their own land than those earned in the United States, Europe, Australia and New Zealand, and that this lower prestige is reflected in lower salaries paid to holders of Thai degrees. This double standard may work an injustice on at least some individual degree holders. There are highly trained specialists among teachers in Thai universities and there are also talented and able students, and occasionally the two get together on an appropriate research problem with good results. A random check of representative master's theses provides some support for this view. However, when one looks at the academic situation as a whole rather than at the special case, it becomes evident that graduate study does not rest on a solid base, and that academic conditions are not such as to give assurance of good quality throughout. It must be stated that, after making due allowances for exceptional cases, no single institution of higher learning is capable at the moment of offering graduate work of high quality in all the branches of learning in which it provides instruction. Moreover, though again exceptions can be cited, individual disciplines lack in general the necessary resources such as adequate libraries and laboratories, or sufficient numbers of qualified staff with doctoral training or its equivalent, to offer a strong graduate program of uniformly high quality.

The manpower situation in the universities does not lend itself readily to analysis. In the matter of faculty-student ratio, complete data were not immediately available to me, but compaints of inadequate numbers of staff are fairly general. The faculty-student ratio of approximately 11 to 1 reported by Chulalongkorn is a favarable one by usual standards, but it may not be typical, and there are, as will be pointed out, complicating factors. The number of faculty, moreover is only one consideration. Equally important for graduate education is the quality and also the level of training of the faculty. A simple, if admittedly imperfect, measure is the number of Ph. D's or their equivalent, and their distribution. On this matter, too, a valid assessment is not easy to arrive at because of certain special

circumstances in the way in which available manpower is used. For example, at Thammasat the relatively large number of part-time teachers, while it might satisfy the needs of the number of classes offered, does not provide the same kind of situation for the graduate student or for the building of a graduate curriculum as would a smaller number of full-time faculty. Moreover, the common practice of engaging teachers from other universities, or even from other faculties within the same university, makes the same teacher a full-time person in one situation and part-time in another and thus complicates the pattern of distribution of available talent. A fulltime teacher from one university who adds to his teaching responsibilities one or two assignments on a part-time basis at another cannot make a major contribution to the graduate effort of his part-time affiliation though he might be teaching an advanced course in his specialty, and he subtracts from his availability as a graduate thesis advisor at his home institution. Besides, his added teaching duties merely reduce the amount of time he could be spending on keeping abreast of the new developments in his subject, let alone making any contributions of his own. Moreover, there is some wastage in the kind of use to which a trained person is put, a particularly serious matter where such persons are not numerous. If a Ph. D. in science is primarily an administrator his doctorate cannot be considered an item of strength in a graduate program; and a Ph. D. in philosophy who teaches no advanced courses in his specially cannot be regarded as one additional increment in the total of doctorates available for Such factors, however intangible, must be given weight, and their advanced study. total effect is to introduce a reductive factor in any assessment of the potential strength available for graduate studies. If this strength is estimated on the basis of doctorates available within the universities, some subjects appear to be better off than others.* There are 27 Ph.D's and 7 D.Sc.'s on the faculty of the university of Medical Sciences. In Chemistry there are 32 Ph.D.'s in Thailand, of which 9 are in the University of Medical Sciences, 7 at Chulalongkorn, and 2 at Kasetsart. In

^{*}These figures are drawn from statistic recently compiled by the NEC. They do not take into account visiting Ph. D.'s, but only Thai holders of doctorates.

Political Science there are 5 Ph. D.'s in Chulalongkorn, and 7 at Thammasat. The Humanities are by this standard not as well off, there being only 5, all in the Faculty of Arts at Chulalongkorn. An additional point of interest is that the distribution of Ph.D's by disciplines does not appear to reflect the areas of great need or interest as represented by the statistics on master's degrees. There are more Ph.D's in Science than in Engineering, and relatively few in such subjects of major interest as Public Administration, Commerce and Accounting and the important related basic discipline of Economics, and in Education. Taking the entire educational establishment as a whole, the number of teachers who have earned the highest academic degree available in their field is with exception of clinical medicine, relatively small, and they are spread very thin among the existing schools and departments.

For this reason, the proliferation of graduate degee programs without primary attention to resources and their distribution results in diffusion of effort and weaking of possibilities. It does not appear that due attention is paid to these considerations, or to such related questions as the library holdings and laboratory facilities to offer a graduate program in a given field. The decision seems to be based largely on the need for trained persons and the existence of students able and willing to undertake advanced study. In a growing country, such considerations cannot easily be set aside for the sake of the highest standards of academic quality and sophistication, but for that very reason, more attention should be paid to husbanding of resources. There are any number of instances of what appear to be duplication of programs which is not justifiable on the basis of large numbers of students. For example, graduate programs in Commerce and Accountancy are available at Chulalongkorn and Thammasat. Up to 1965, 3 master's degrees were awarded, all at Thammasat; in 1965 there was one graduate student in this faculty at Chulalongkorn in his second year (I have no figures for registration at Thammasat). In Political Science, 100 master's degrees were awarded up to 1965, 86 at Thammasat and 14 at Chulalongkorn. Registration in 1965 at Chulalongkorn was 43 of which 27 were in their first year. The total number of master's degrees awarded in 1965, however, was 7, of which 3 were at Thammasat

and 4 at Chulalongkorn. It is possible that these programs are not strictly comparable, but there must be some educational duplication, and the total number of degrees completed in the last year for which statistics are available is very slight for the commitments made for this program.

An interesting case is that of Economics, a subject which will be of increasing importance to this country. All 46 of the master's degrees in Economics up to 1965 were awarded by Thammasat; 2 were awarded in 1965. There is an Economics department at Chulalongkorn, but it has not so far granted graduate degrees. At present, the Economics faculty at Thammasat is engaged in a program of modernizing the curriculum and upgrading the staff by providing for advanced study abroad and using visiting specialists from the United States. At this juncture, NIDA has been organized with the intention of offering graduate work in developmental economics, and Kasetsart in 1965 had registered 26 graduate students in Agricultural Economics and 46 in economic development. It is true that both NIDA and Kasetsart are emphasizing specialized aspects of economics, but it is not possible to teach these specialized branches without solid work in basic economics. It is safe to say that at the moment there is not in Thailand one really good economics department, a subject in which it is notoriously difficult to build up a strong academic group anywhere. What is the future of economics as a graduate academic discipline in Thailand? The question cannot be answered without considering how the resources in this field can be made to support one another. Competitive effort in academic development can be stimulating and productive in a situation where trained men are available, resources adequate, and well qualified students plentiful. In a situation where just the opposite is the case, such competitive and uncoordinated proliferation of effort can result in debilitating expenditure of materials and energy, creating a kind of institutional anemia.

The deficiencies in the graduate effort which have so far been noted are correctible, given time and planned effort. Two steps may be taken immediately to give direction to the effort and to maximize the effect of the available resources in the interest of the student. The expansionist tendencies, natural in the present situation,

should be channelled by some measure of control to insure that new programs are not launched without careful consideration of the number of trained staff that can be put to their disposal and of the kinds of material resources available, and also the possible effect of the new program on existing programs. At the same time, some measure of coordination and consolidation should be attempted of men and resources now available to existing programs irrespective of the institution or faculty in which they exist, so that they may be used to strengthen and enrich the education of the individual student.

At the same time, and looking ahead toward the future, a systematic program of improvement should be undertaken.

- 1. The policy of sending the best students and the most promising staff members abroad for the doctorate should be continued and in increasing numbers. As the master's program in Thailand improves, foreign study could be started after the first graduate had been earned at home, thus reducing the cost of the doctorate as well as the time the student must spend abroad.
- 2. Libraries should be improved, and laboratories which are not up to the standard required for advanced study should be appropriately equipped.
- 3. In putting into effect plans for improvement, certain priorities should be established. These should take into account the importance of a particular field of study for the national interest, the existence of centers of excellence which may be brought to a high level with relatively small effort, and the special competence of an institution in a particular area which may be improved without jeopardizing the essential needs or conflicting with the special virtues of some other institution.
- 4. In establishing new programs or accepting substantial outside aid, every precaution should be exercised to insure that they will strengthen existing educational institutions rather than depress their legitimate efforts.

During this period of improvement, graduate work should be confined to the master's degree. Institutions that undertake graduate study normally consider their

universities today, and eventually the universities of Thailand must look ahead to the time when they will provide for the complete education of their students. During the initial period of development, however, the first phase should be confined to improving the quality of the master's degree so that acquires the same respect and approval as are granted to degrees earned abroad.

II

Institutional Conditions Affecting Graduate Work

The prospects for the success of academic improvement must be seen in relation to the institutional structure within which it is expected to take place. Graduate study imposes new demands upon institutions which undertake it and therefore tests their capacity to grow and to adapt. From this point of view there are certain established features of the institutions of higher learning in Thailand which could impede efforts at systematic improvement of graduate education or render them only partly effective. These must now be considered.

Administration

It is in the nature of graduate study today that at its best it tends toward specilization yet flourishes best in a total university environment. One reason for this apparent paradox is to be found in the fact that at the more advanced levels learning the borders between separate disciplines, represented academically by separate departments, tend to disappear. The reciprocal relationship between technology and science is well recognized today, and, moreover, the distinction between research in science and engineering is in some cases difficult to establish. A good graduate school in engineering requires close relationship to good departments of science and mathematics and even economics. The social sciences have common methodological principles and require similar tools such as statistics. In the humanities

the interpenetration of the disciplines is commonplace; for example, esthetics ranges at will in music, plastic arts, and literature, and the study of letters cannot be isolated from history and philosophy, or for that matter from the history of science. The training of the advanced student today reflects this interpenetration of separate disciplines—the economist requiring mathematics, the social scientist statistics, the metallurgist atomic physics, and so on indefinitely. Another reason why graduate work develops effectively within a complex, all-university structure is that the proper resources in manpower and equipment are so costly that they must be shared. Good advanced statistical instruction and equipment cannot be provided by every discipline that requires them. A library that serves the needs of historians is also essential to a student of literature. The engineer often needs precisely the kinds of technical services that are required by the physicist. And if we consider such a common but costly facility as a computer, it is clear that it must serve all the faculties that need it in order to be economically feasible, and that its purchase and administration must be arranged for by some central administrative authority.

For such an approach to academic flexibility and over-all university planning the characteristic administrative structure of the universities of Thailand is not well suited. The most important administrative entities in a given university are the faculties, and the administrative officers who are in a position to exert the greatest influence are the deans of the faculties. One indication of their status is that the dean of a faculty has the privilege of presenting his budget directly to an officer of the Budget Bureau. In the establishment and administration of the curriculum, the faculties tend to function almost as independent institution. There is very little interchange or cross—registration of students among the various faculties within a university. Indeed, there is often little association among departments within a faculty. The administrative scheme of the universities does provide for officers and a council which are supposed to fulfil a coordinating role, but it is the general consensus among teaching staff and administrators that these instruments are not effective. The more complex the institution, the more conspicuous the independence of the faculties appears

administrative officers seem to be more effective in the institutions which are most specialized, for instance Kasetsart and the College of Education (which has an administrative structure somewhat different from the rest), but it is not clear whether this situation would continue as these schools add new faculties with degree granting programs and administrative deans. The University of Medical Sciences, which gives the impression of having an effective coordination of administrative authority is, of course, the most specialized in scope, but it may also owe some of its coherent character to the fact that it is unique among the universities in having as its top administrative officer a full-time rector who is a professional man and an educator. If the rector, as the final authority in a university, is a non-academic man of many affairs whose university appointment is part time, it is inherently less easy to bring the independent interests and activities of the deans of faculties into effective association for university-wide planning and discussion of over-all institutional policy.

There are numerous educational consequences of the characteristic faculty structure of university administration. For one thing, it discourages any universitywide review of the curriculum or the effectiveness of established methods of instruction The or a reconsideration of the total library situation in a particular institution. curriculum within a faculty tends to be fairly rigid and to be contained within the faculty. If it is necessary to provide instruction in a subject not offered by the faculty, it is more likely that some one will be engaged from another faculty to offer it rather than that students will be sent to another faculty to take the instruction in established course. The student in general finds himself isolated within his faculty. In the matter of English instruction, students, let us say from engineering, do not register in English classes with other students in accordance with their individual level of ability, but in a group as engineers irrespective of deficiency of ability within the group. At Thammasat, where an effort is being made to try new methods under the supervision of a trained linguist, the work thus offered ends in the first year. Beyond the first year the English instruction is arranged for by individual faculties, and the one professional group that is concerned with the problem cannot exert any influence. There are, of course, some advantages to the established system. Given an energetic and influential dean who has serious educational interests and a deep concern for the well being of his staff, much can be accomplished with a minimum of red-tape and debate, but in many cases these responsibilities are too much for one man, especially as some deans are part-time educators and all deans have multiple duties.

In consequence an educationally static situation can develop, since the characteristic scheme of organization does not provide for active, continuous participation of non-administrators and junior faculty members in the educational thinking and planning of the university. Again individual deans may encourage such participation, but there is nothing in the administrative organization of the universities that requires it, and this failure results in a serious loss. The ablest young staff are sent abroad at great expense to the country and at some cost of effort to themselves, and when they return they are assigned routine tasks and almost no use is made in educational planning of their new experience, their enthusiasm, and their dedication, and little encouragement is given them to engage in education experimentation. This represents a serious loss, which, if we wish to disregard its human cost, can at least be reckoned as the inefficient use of an economic investment.

Faculty Status

The place of the faculty leads inevitably into an important feature of the organization of universities in Thailand—the Civil Service status of the teaching staff. This is a matter that deeply concerns administrators as well as faculty, and it has been noted by all outside consultants. It has an important bearing on the development of graduate education.

One aspect of the Civil Service status of university teachers is that it fails to provide a special professional identity for them. The most frequently noticed consequence of this failure to provide a separate and unique service is the salary schedule for university teachers. The present scale, especially in the early and middle years of a teacher's career, is too low to permit a teacher to regard his university post as his primary and sole occupation. Nearly all teachers supplement their basic salary In many instances this take the form of by various kinds of outside employment. extra teaching assignments, sometimes for other faculties sometimes for lower schools or even private instruction. There can be no serious objection to a very small addition to the normal teaching assignment, especially for such socially useful purposes as "twilight" or adult education classes. But the amount of extra teaching is in many cases excessive. In some instances the extra work is something other than teaching. Whatever the case, these extra assignments deprive a teacher of the valuable time necessary to develop courses, confer with his students, keep abreast of the advances in his field, and contribute to knowledge and to the solution of problems of his country. A university professor's responsibility is not mearured by a set number of hours a day. It is continuous and unremitting. A typical university professor who properly fulfils his obligations has, in effect, no spare time. A university system that does not pay enough to permit a teacher to devote all his time to his university position is defeating its own ends.

Equally important in its effect on the universities is the civil service policy on promotion and salary increases. There are fixed starting salaries, depending on the degree and its origin (foreign degrees slightly higher than Thai degrees). From this point on, increases for most teaching staff are regular and predictable, up to the maximum. From one point of view, this scheme may be defended as rational, dependable, and human. Unfortunately, it does not encourage academic distinction. The teacher who works hard to improve his courses, who studies the new materials in the library, who does research in his laboratory, or who writes books fares no better than the one who does nothing. He may, in fact, fare worse, since by dedicating himself fully to the demands of teaching and study, he has little time to earn extra money. The only way in which a university teacher can bring distinction upon himself, increase his income, and acquire status and the perquisites that go with it is to

become an administrator. Accomplishments in scholarship and teaching bring no tangible rewards and no recognition in the university system. The Civil Service system provides no incentives for continuous individual intellectual and academic growth, and for that reason it does not provide stimulus for the achievement of academic excellence. On the other hand, it does protect mediocrity.

Intellectual Environment within the Universities

There is a relationship, therefore, between the way in which the universities of Thailand are organized and administered and their failure so far to create a vigorous, stimulating intellectual environment. A university is sometimes thought of as an institution which provides instruction in the basic branches of knowledge and in important professions like law, medicine, engineering, commerce, and the like. This is an incomplete understanding of the nature of a university. A fully mature university must also be a place in which learning is pursued and knowledge and understanding are advanced.

To realize its possibilities and meet its obligations a university must be the center of the intilectual life of its society. The universities of Thailand must be encouraged to move in this direction. Allowing for a few honorable exceptions, the amount of scientific investigation and original scholarly activity in the universities is so slight as to be negligible. This is serious deficiency, for a number of reasons. The lack of scholarly activities is another aspect of the phenomenon of inefficient use of a human resource and of financial waste. A teacher who has been educated abroad at considerable cost to himself and his country, and who some years after his return has failed to keep abreast of his subject and to grow intellectually must be considered a disappointing investment. A fine university is a national resource because the trained specialists who make up its staff have the capability of applying their learning and skill to the investigation and solution of problems which are vital to their society. This function is usually understood in terms chiefly of science and technology and perhaps economics; and indeed, in view of the present needs of Thailand the meager

efforts at research by these faculties should be a grave concern. There are, however, other areas of investigation equally pressing and important. Thailand is undergoing great changes. How are they affecting the country politically, socially, humanly? It is vital to ask and to explore these questions in order to anticipate difficulties and to make as effective and humane an adaptation to the pressure of events as possible. It is equally necessary to encourage humanistic studies which interpret the culture, its past traditions and its response to new influences. Recently the local newspapers reported and commented upon the strong disapproval in some quarters of a book by an American scholar, which, it was alleged, gave a distorted and unfavorable picture of Buddhism. If this book does in fact give an incorrect and improper impression of Buddhism, the proper answer is not, as was suggested in some quarters, its removal from circulation (a very grave and dangerous action in any academic community) but a good book on the subject by a Thai scholar which will stand the test of scholarship and command respect of the other serious students of the subject. Thailand should try to reduce its dependence on foreign scientists, technicians, and scholars, just as it is trying to reduce its dependence on foreign universities for the advanced training of its students. The two are, in fact, inseparable. There are talented and well-trained scientists and scholars in the universities of Thailand. They should be provided with the conditions and opportunities which will enable them to bring these universities to a proper level of intellectual maturity and social usefulness. Finally, from the point of view of the graudate program which is the main interest of this report, it is impossible to maintain a graudate program of high quality in an intellectually sterile environment. Graduate study must develop a taste for learning, intellectual curiosity, scholarly independence. It is not possible to inculcate these academic virtues in a university in which they are not manifested by the staff.

Material Resources: Laboratories, Libraries

It is frequently alleged that one reason for the lack of scholarly activity in the universities is the lack of proper resources-libraries have inadequate collections and are poorly serviced, laboratories are inadequately equipped and not kept up, etc. The causal relation implied in these statements may be challenged. Scholarship languishes not because resources are inadequate but resources are inadequate because scholarship languishes. If the library collections are poor and the service meagre, the reason for this condition may well be that students are seldom if ever required to go there and the faculty seldom finds it necessary to make serious demands on the collections. If laboratory equipment is spotty and not always in good repair one reason may well be that the use which is made of it is casual and that some of it deteriorates because it is not put to constant use. Any improvement in the intellectual environment that does occur, however, will require systematic improvement in these resources.

In the matter of scientific resources, the situation within the universities is not radically different from that painstakingly reported by Frank Nicholls in his United Nations sponsored report of 1961. The significant improvements since then are the new laboratories and the documentation center being developed by the National Research Corporation. As far as the universities are concerned, there are a few bright spots, but the laboratory resources are still uneven in quality and, what is of importance in this context, they are not being effectively put to use for any continuous research programs.

The situation with respect to libraries is more complex and may be in some respects more difficult to remedy. Again there are some bright spots, chiefly in a few specialized areas. The new medical library at Siriraj is certainly one of these. The Seato Graduate School of Engineering has a good up-to-date working collection which is well serviced and appears to be used. The two education libraries, though still somewhat lacking in depth, are well selected, up-to-date, and again apparently well used. For the most part, however, the libraries range from useful to poor. What is particularly disturbing is that there appears to be no policy for systematic and coordinated growth for any given university, particularly the two most complex ones. The library situation is chaotic partly

because the building and housing of collections is divided among the rival demands of faculty libraries, departmental libraries, and the central library. There is great preference for faculty libraries, but no one of them is completely adequate for advanced study or research in the field. Departmental libraries tend to further split up the fields which are represented in the faculty library. And the unanswered question is, what is the purpose of the central library? Somtimes the central library is referred to as though it is a place from which books may be borrowed for indefinite periods by faculty or departmental libraries, sometimes as though it is a repository for basic texts in courses (hence the complaints that there are not enough copies of a particular essential book). Neither of these is a proper function of a central library. At Thammasat, where the central library is fairly new and sensibly arranged, it seems to be shaping up as a general undergraduate library, but if that is what indeed its future role is to be, the problem of the development of departmental and faculty libraries is still unanswered, as at other universities where they exist.

Some of these faculty and departmental libraries are housed in areas which could not stand much more expansion. What is to happen when they are full to capacity? Except for small collections of basic reference texts and recent numbers of the most commonly referred to specialized periodicals, departmental and even faculty libraries are fast becoming anachronisms in a complex university. Some services are more efficiently rendered if they are centralized. Moreover the interrelationship of related disciplines is so close that separation of collections in affiliated disciplines renders each less effective. The engineer and the scientist often need the same journals, the same reference services and the same books, and both need mathematics. Anthropology and sociology are today more associated in methodology and data. If preference for faculty libraries continues strong, would it not be advisable to consolidate related disciplines into three separate groupings, science - engineering - mathematics, social and behavioral sciences, the arts and humanities, and build in the future along such plans? Such questions and others equally fundamental need to be taken into account in planning for the expansion and modernization of library resources. it would be useful to request the services of library specialists who would work closely with educational planners within the universities to provide adequately for the future.

Two surveys have already been made by library experts of the library situation in Thailand. The first of these, by Morris Gelfand in 1962, dealt chiefly with the desirability of a national library, still a useful idea, as a central repository of books and documents dealing with this geographic area, recent public documents, and all materials printed in Thailand. He also suggested the need to provide for library A program for such training was independently worked out by Francis Spain, (1964-1965), whose efforts resulted in the establishment of the program in library science at Chulalongkorn. This was a useful development, though the chairman of the department of library science is handicapped by having to double as librarian of the central library, which, moreover, does not have an adequate collection for her program. Neither of these studies, however, raised the basic question about the place and the future development of the libraries within the universities, because both necessarily approached the problem in a technical way and only incidentally raised any questions about the relationship of the libraries to the educational and research activities of the universities. Libraries can develop properly only if they are used, and if their growth is controlled by the kind of use for which they are intended, students will use the libary and for what purposes? What kind of advanced study will be conducted by the faculty? What need will determine special and routine purchases? Sir Charles Darwin bluntly declared in his report of 1954. "it is no use having a good library if no one reads the books". To which it is necessary to add, it is difficult to develop a good library unless we ask, good for what purpose. Such considerations could, for a while, be deferred, but the introduction of graduate study forces this issue of the libraries, as it does so many other educational issues, into inescapable prominence. Graduate study of good quality is out of the question without adequate library resources. Libraries are essential to a university, but they are expensive and their continuous growth is costly. Unless they serve a vital function and their growth and maintenance are guided by this function, they either decline or become a costly extravagance.

III.

Some Effect of Above Institutional Impediments to Graduate Education and Research

There exists today a strong desire, stimulated in part by the need for trained manpower in critical areas, for graduate work of high quality. Like impediments in the path of this desire stands the incapacity of the university establishment to make the necessary adjustments to accommodate to the vital needs of this effort and to provide the material and intellectual conditions necessary to its success. Out of the resulting impasse, new institutions have come into being which have achieved their purpose by circumventing the universities and thus escaping from their limitations.

The first of these was the SEATO Graduate School of Engineering. It was able to pay salaries which enable it to recruit a strong faculty, it established a small but excellent, up-to-date library, it provided text books and an effective curriculum, it used English as the language of instruction and this was able to open its courses to students from other countries, it selected the student body with care, and it assumed that the faculty would engage in research. It created, that is, a good program for advanced engineering training with essential resources and in a suitable intellectual That it received support from SEATO countries was an advantage, environment. but the fact is that if the same support had been given to one of the universities it would have been, if not reluctant, then unable to provide the conditions which would have made this program possible, and a success in a short time. SEATO Engineering maintains an affiliation with Chulalongkorn, but this is little more than a legality to enable it to award degrees. The first effect on the established universities was that Chulalongkorn discontinued its graduate work in the areas of civil engineering covered by SEATO. It continued to offer graduate work in electrical and mechanical Now, however, SEATO Engineering has decided to enlarge its program to include these fields, and in that event, Chulalongkorn expects to discontinue graduate work in mechanical and electrical engineering as well, even though a Columbo Plan party is at this moment engaged in providing assistance to improve graduate work in these very subjects. The full effect of the establishment of SEATO Engineering is likely to be that in a short time the Faculty of Engineering at Chulalongkorn, the only university in Thailand which has been offering comprehensive education in engineering (this will no longer be the case after the extended program in engineering goes into effect at Kasetsart), will abandon graduate study altogether. The initial effect of SEATO Engineering has been that it has provided a strong institution, with more than local prestige, for advanced education in engineering in Thailand, but it has dealt a severe blow to institutional development in an important sector

The establishment of the National Research Corporation illustrates the limitations of the university establishment in a somewhat different way. It is apparent that there is pressing need for research in certain areas vital to the national interest. It is also apparent that the universities have contributed little or nothing to most this need. Their failure is, up to a point, understandable. In sciences and technology able men can find better financial rewards outside the universities than within, as well as opportunity and incentive to develop their scientific interests in a more favorable environment than the universities provide. The Research Corporation met this situation by providing new laboratories, a documentation center and, perhaps most effective of all, compensation which was not limited by the Civil Service scale. tion also has a modest program of assisting research within the universities and so may prove a benefit to them, but the important point is that it came into being largely because the universities were failing in their responsibility to conduct energetic programs of research, and that it was able to secure conditions for its operations which the universities are unable to provide because of certain fixed restrictions within which they must operate.

The most recent case in point is that of the National Institute of Development Administration. The complex history of its origin and the merits of the decision to give it independent university status are not the points at issue here. Like SEATO Engineering, it was established to meet the need for advanced training in certain specialized important areas. And like it, NIDA expects to be highly selective in the admission of students and to provide an effective, well serviced library, and instruction on a fairly high and sophisticated level. The one feature of NIDA which needs

to be specially noted here is that it allows an additional twenty—five percent of the salary as a research bonus for its staff. By this stratagem, it effectively provides for a fixed raise in compensation above the Civil Service scale and by so doing not only increases its bargaining power in recruiting staff, but introduces an incentive for its staff to devote some of their time to the essential function of research and reduces the necessity for supplementing the small Civil Service salary by outside employment. NIDA will provide good training in Administration Development Economics, and related areas, but it has posed a threat to efforts to upgrade the universities in those areas, and disheartened some able junior staff who see their professional opportunities in their own university weakened by this new stronger rival whose strength comes in part by being permitted to evade conditions which restrict and hamper the established university programs.

It has been pointed out that these new organizations are a source of strength, that they will challenge the universities to better effort, and that in the long run they will provide support for the universities. No doubt there is some truth to these allegations, but they are all beside the point. The important point is that in one respect or another, these new organizations have found it necessary to circumvent the university establishment in order to succeed, that whatever the "long run" may provide their immediate effect has been to depress the momentum in certain faculties within the universities at a crucial period in university development, and that, although competition may be very bracing, it is cruel competition that frees the competitor while it retains the chains that bind his rival. These new developments are a dramatic and persuasive demonstration of the inhibiting consequences of inflexibility and lack of coordination in administration, of incentive and a proper environment for professional excellence and growth, and of a haphazard policy toward the building up of the library laboratory resources necessary for advanced work.

IV.

Undergraduate Preparation for Graduate Study

A graduate program starts with a student who has completed an under graduate degree program. The course of study which is arranged for him is determined by the tools he has mastered, such as mathematics and language, the knowledge he has acquired in subject of his specialization, and the intellectual habits he has developed. How well prepared is the Thai student for graduate work after the completion of his Bachelor's degree? Although this report is concerned with the graduate program the frequency with which this question has been asked and the doubts which have been frequently expressed about the qualifications of Thai students for graduate study make it necessary to consider some aspects of undergraduate study which have a bearing on the quality of graduate study.

The most conspicuous limitation of the Thai student for graduate study and the one most frequently mentioned, is his inadequate preparation in English. The Thai student has to assume the added burden of mastering a second language in order to undertake almost any advanced or professional training. It is true, of course, that many educated men and all scholars in other countries acquire ability in a language other than their own, but in these countries a second language is merely a great advantage. For the Thai it is an absolute necessity. The materials for advanced and professional study not available in Thai, and the most important scientific, technical and learned journals today are in English, French, German, and in some fields Russian. English is a good choice for a second language since probably more is available in that language now than in any of the others. To make the best use of his graduate opportunity, the Thai student should therefore be proficient in English. The fact that he is not means that he has to devote part of his graduate years to the continuing study of English, and that he is seriously handicapped in his ability to read the texts for his courses and the materials for his thesis.

Instruction in English begins in Thailand in the elementary schools, is continued in the secondary schools, and may continue in the university for as much as

In view of the inadequate command of English dispayed by graduate students. the amount of time spent in the study of English is out of all proportion to the results. The reasons for the deficiencies in English of the average Thai graduate student are numerous and very complex and they cannot be gone into in a brief report in which the English problem is a derivative and not a primary concern. The problem should properly be the province of experts in language instruction. It is appropriate here only to make a few obvious suggestions. The first is that since the problem of English proficiency of university graduates is a national concern and not simply the concern of individual schools alone, those responsible for the direction of English teaching programs in the various universities should be urged to meet as a group on this problem, to consider the merits of differing methods of approach, to conduct experiments and test results, and if necessary to request the advice of outside experts. A second suggestion would be to impress on the faculties the necessity of requiring a certain amount of reading in English, however small, in every course taken by the undergraduate. At present, a student may successfully pass nearly all courses, except those given by the English department, without ever being asked to read an English Thus, the instruction which a student receives in the English language appears to have no relevance to his academic success. The practice of requiring in each course even a few pages in English on which the student would be examined along with the rest of the course would provide the reinforcement necessary to relate English instruction to academic success and thus increase the student's motivation to master what is being taught him in his English courses. As a further measure, the limitations of the students in English should be frankly recognized, and until improvement in undergraduate instruction begins to bear fruit the student who elects to enter graduate study should be offered assistance in order to minimize his handicap. The suggestion (proposed and discussed at the meeting with General Netr on 9 March) that an intensive program of remedial instruction in English should be provided between the end of the academic year and the beginning of the graduate program for all students newly admitted to graduate study is one that merits very serious consideration.

the universities in Thailand must recognize that in the long run they must reconcile themselves to making English the language of graduate instruction. One sign that a university has acquired maturity and prestige is that students from other countries wish to attend it. The Thai universities can extend their influence beyond their borders only if their advanced programs of study are given in English.

In certain other respects the undergraduate program of instruction is not well suited to providing a proper education for a prospective graduate student. In the characteristic full-time undergraduate program the Thai student will carry some eight to twelve courses, which require anywhere between twenty-four to as much as thirty hours of class attendnce in a week. In most of his courses he will not have a text book, so that he must depend on the notes which he takes during the class for the material on which he will be examined. For most of his courses he needs never to consult a book in the library, and indeed if he were ever required to do so he would find that the library is open only during the hours when he is attending classes. Some efforts to alter this model are already being made, most conspicuously so far in education, but the program which has been described is typical. Its weakness as a method of instruction for the second half of the twentieth century has already been commented upon by educators who have reported on various aspects of the universities of Thailand. As a means of producing students who can enter readily upon a demanding graduate program, the undergraduate curriculum and the method of study are clearly inadequate. It is true that students who have been educated in this manner have gone to universities. abroad and earned advanced degrees, but it is no defense of an educational method that the best of the students who have been trained under it have triumphed in character to develop an appreciation of theory and method, it provides almost no experience in the use of the library and very little in the writing of analytical and synthetic papers, and it is not designed to encourage the spirit of inquiry and to cultivate independence of mind. One of the most effective steps that could be taken to improve graduate study in Thailand would be to undertake a thorough study and effective revision of the undergraduate curriculum and method of instruction.

Concluding Remarks

The purpose of this report has been to review the state of graduate education Thailand and to assess the capacity of the institutions of higher learning to undertake advanced programs of study and to expand them, and at the same time to achieve high academic standards. Sooner or later the universities of Thailand would have had to enlarge their activities to include graduate work, for however mixed individual aims and motives may be in the undertaking of such a demanding and ambitious enterprise, the pressing needs of the nation for increasing numbers of trained men and women would justify and provide the incentive for the effort. The expansion of educational activity is characteristic of all countries today, for modern societies have a voracious appetite for highly educated persons of all sorts; but it is especially in countries that have not yet accommodated themselves to the demands which the later twentieth century makes on all societies that the needs for trained individuals is most conspicuous. If time and money were unimportant, Thailand could continue to send its talented youth abroad for study, but today Moreover, Thailand cannot depend indefinitely on there are limits to both. outsiders, however willing, to teach its students, conduct its research, and assume managerial leadership. Commenting on this situation during a UNESCO conference in Bangkok in April, 1964, G. Tobias of the International Bank for Reconstruction and Development said: "The only adequate answer is for the underdeveloped countries to educate and train their own nationals for these important jobs, because it is neither economically nor politically feasible to depend permanently on expensive expatriate personnel to manage one's affairs."

Whether the undertaking of graduate education by the Thailand universities was premature or not, as has sometimes been maintained, the question is no longer a profitable one for discussion. Graduate education is here, and it represents a response to an impressive national effort and a great national need. But it is profitable, and indeed necessary, to ask whether graduate education as it appears at present is of

good quality and is likely to move steadily toward excellence. The undertaking of graduate education by a university puts its resources and its educational philosophy and its educational methods to a severe test. It is for this reason that once the question of the effectiveness of a graduate program is raised, it immediately opens up every aspect of the entire university establishment for scrutiny.

It may appear at first that the main effect of this report is to present a discouraging picture of the universities of Thailand. That, emphatically, is not its aim. The development of universities of high quality requires long and continued effort. It must be borne in mind that if the educational problems which confront Thailand seem formidable, it is largely because both the nation and its friends expect it to accomplish in one generation what it has taken other countries a century and more under conditions that less pressing and threatening. Indeed, one can only look with respect at the bold effort which Thailand is making to enlarge its educational capacity and at the wisdom it has shown in making education an important aspect of its national policy. It would, however, be a disservice to be anything less than candid in the analysis of the situation which confronts the universities of Thailand today. It is in the belief that the present policy for the support of education is equal to the task of extending the scope of the universities to include graduation that the present report is being submitted. To be less than candid at this juncture would be to betray the effort.

The development of graduate education of high quality will require dedicated educational leadership, a willingness to accept the necessity for change, and some subordination of individual and institutional interests to the common good. Without these, expenditure of money and the accumulation of resources will not of themselves provide the means for achieving academic excellence. None of the problems which graduate education presents to the universities of Thailand are insurmountable, though some will require more time than others, and in its effort to achieve success Thailand can count on support and guidance from its friends. However, the will to achieve distinction in graduate education and the leaderhip which must give direction

and form to the enterprise must, of course, come from within. This report will have served its purprose if it provides a better understanding of local problems on the basis of experience with graduate education in the United States, and if by doing so it may serve as a catalyst in the present ferment of educational activity in Thailand.

VI.

Proposal for a Graduate Board of Thailand

The present situation in graduate education in Thailand seems to require some means of providing centralized administrative direction. The universities which now award graduate degrees are concentrated in Bangkok. All of them are in the beginning stages of graduate study, and all of them face similar limitations of trained manpower and resources. They are responsive to the same national needs, and they derive their support from common sources. All of them are attempting to develop a new academic activity within established administrative organizations which do not lend themselves to flexibility and interdisciplinary cooperation, which do not encourage a flourishing intellectual climate or cultivate intellectual initiative, and which do encourage the proliferation of competitive programs without regard for the consolidation of limited resources. The problems of each faculty, each institution, are the problems of all. Though they are not insurmountable, by their nature they must become the common concern of the entire academic establishment because they can be met effectively and reasonably only by combined interest and cooperative effort.

The need for some consolidation and direction of educational activities among the universities in Bangkok was recognized as early as 1954 in the Report to UNESCO of Sir Charles Darwin, who proposed a single university on the model of the University of London. More recently, the suggestion has been informally made of establishishing a single graduate school to administer all graduate work in Bangkok. Both suggestions can be defended on good logical grounds and on the basis of the

success of the University of London and the American graduate school. But these models cannot be applied directly to the quite different situation in Thailand. Graduate work is in its infancy, the resources are still meagre, and they are distributed among administratively independent institutions, each trying to find its place in a rapidly growing educational system and each organized in such a way as to render cooperation even within the institution difficult. The problem is to devise for this special situation an instrument which will begin to exercise control and provide direction, nourish strength, and create conditions which will promote the healthy growth of graduate education. A solution to the problem which will be acceptable to all the existing universities is unlikely to be one which will meet all the issues dealt with in this report with authority and efficiency. A start, however, must be made, and made without much delay while the present period of growth and development is still amenable to some overall direction.

One possible approach would be the establishment of an inter-institutional Graduate Board which, while retaining certain features of a central graduate school, would be suitable to the special circumstances of Thailand. To be genuinely inter-institutional, the Board should be made up of representatives from all the institutions of Thailand which award graduate degrees or have been authorized to do so, and should be responsible to the National Education Council. The membership of the Board should not be made up entirely of administrators. Two representatives from each institution could be assigned to the Board with the stipulation that one of these must be from the faculty. In this way, serious and interested members of the teaching staff could be brought into discussions of educational policy. A system of rotation of membership should be used which would assure continuity and at the same time provide for gradual change of membership by instituting a three to five year term faculty members.

The duties of the Graduate Board would be partly advisory and partly administrative particularly in areas where no present administrative agency is able to exercise direct influence. For example, since it would not function as a central graduate school, the Board would not admit students, but it could recommend improvements in standards and methods of admission. It could become an instrument for effecting coordination and cooperation by acting as a clearing house to facilitate the maximum use of local resources for the individual student's benefit. For example, it could approve irregular programs of study which would involve work in more than one university so that the student can take advantage of advanced courses, research facilities, and advice in any of the universities in Thailand without loss of credit in his home university. The Board could recommend the introduction of weekly seminars to take advantage of special resources or of the presence of particular specialists, and these seminars would be open to qualified students in all the universities. These are some of the ways in which it could exert its influence to consolidate local resources, introduce flexibility in the graduate program, and modernize the curriculum and method of study. The Board could act to promote activities in which all the It could, for example, concern itself with the universities have a common interest. general problem of English proficiency of graduate students, authorize, if necessary, proficiency examination in English for all students admitted to graduate study and sponsor remedial courses in English for students who need them before they enter graduate school. And, finally, the Board could become an agency through which an improvement in the intellectual environment within the universities could be hastened. One possibility would be to act as the reviewing for requests for research grants, and for leaves of absence for further study or research from members of the faculties of all universities. In this way it would encourage teachers to continue to grow intellectually and to make useful contributions to learning, pure as well as applied. It could also sponsor colloquia and lectures by visiting scientists and scholars.

Properly used, the Board would be a useful addition to the academic establishment by its mere existence. If it would be lacking in power, it would certainly in a position to exercise influence. It could, under proper encouragement and leadership, become an influential national body of professional and academic men who would assume the role of educational statesmen, and through its continued existence and rotating membership diffuse an awareness throughout all the universities of Thailand of the state of higher education and the administrative and educational issues which must be faced. In this way it can influence the changes which must be made to create more effective and viable institutions of learning suitable to present needs worthy of the growing prestige of the nation.