Japanese Geography: an overview

by

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1. Introduction

Japanese geography is still difficult to be generalized due to the diversified nature of research activities and comprehensive survey in terms of geographical institutes, including both public and private, has never been done in a consistent way. However, the author believes that this kind of survey would be useful since an opportunity to exchange geographical informations among world nations is still lacking compared with those in the West. Now that the national survey is beyond the effort of an individual, the comments made in this paper are entirely based on the author's opinion and they do not represent that of all geographers in Japan.

The major emphasis on this paper is set for the expansion of academic institutions, the activities of professional organizations and the diversity of current geographical research in the making of modern geography, and some conclusions and recommendations will be presented at the end. There are approximately five hundred geographers who are active in research and eighteen universities which have established graduate studies. Among them, fifteen grant a Doctor's degree in Geography. In addition, there are more than one hundred universities and colleges which offer introductory courses in geography and also economic geography for students majoring economics.

The Association of Japanese Geographers (Nihon-chiri-gakkai) is made up of approximately two thousand members and publishes Geographical Review of Japan (Chirigaku-hyoron) monthly since 1925. The association is now preparing for the publication of a book entitled, “Fifty Years of Geography of Japan,” in order to commemorate the fiftieth anniversary of this institution.

2. The Expansion of Academic Institutions

Japanese geography developed first in the field of physical geography. In 1887, the University of Tokyo established the Institute of Geology. From this institute, two prominent geographers, Professors N. Yamasaki and T. Ogawa founded the basis of geographical institutes at Tokyo in 1919 and at Kyoto in 1907 respectively for the purpose of promoting academic research of geography. The August issue of Geographical Review of Japan in 1971 was dedicated for those distinguished scholars to celebrate their centennial birthday.
In the 1870's, right after the Meiji Restoration, geography was adopted to the curriculum of compulsory educational system, and publication of text-books and training of school teachers were urgent problems at that time. In order to supply school teachers, the first normal school was established in Tokyo in 1886 and then dispersed in each of forty-six prefectures. Although there were some innovations in terms of duration, practice and content, the general introduction of geography and regional geography of Japan and overseas countries were taught at primary and secondary schools as an independent subject.

The higher normal schools which supplied teachers of secondary and normal schools were instituted first in Tokyo in 1887, and Nara and Hiroshima afterwards. All of them were promoted to be a university under the new education system after the Second World War and have become national and regional centers of geographical research.

There was also a need for commercial geography at commercial colleges. First at Tokyo, a predecessor of Hitotsubashi University, commercial geography was taught, and later, professors of geography were appointed at another institutions of the same type, such as at Kobe and at Hikone. After they have promoted to be a university, most of these chairs are succeeded by economic geographers.

In 1907, a geographical institute was established in the Faculty of Literature at the University of Kyoto. It was a first attempt to promote the field of academic geography. In 1919, another professor's chair of geography was set at the geological institute of the Faculty of Science, the University of Tokyo. Kyoto institute has held one chair of geography, but a new institute was founded in 1949 at the General Education Division of the same university. The Kyoto school has put a special emphasis on human, economic and historical geography. They did expeditions in China, in Mongolia, and in Southeast Asia in collaboration with other scientific disciplines. Tokyo institute has now two chairs of professorship. It has a major interest in physical geography, particularly geomorphology. The new Institute of Human Geography was opened in 1955 at the Faculty of Liberal Arts with an emphasis on human geography, regional studies and applied fields. Even though the number of chairs is limited in a few, both Tokyo and Kyoto universities have produced leading geographers among diversified fields of research activities.

In 1929, the geographical institute of Tokyo Bunrika University was established on the campus of the Tokyo Higher Normal School and developed to be Tokyo University of Education in 1949. This university has now the largest institute of geography which holds five chairs of professorship. The institute has been influential not only in the training of geography teachers but also in the development of intensive research methods in every field of systematic geography. The graduates of this institute organized the Ohtsuka Geographical Association which
was amalgamated into the Association of Japanese Geographers in 1944.

In 1943, the Geographical Institute of Tohoku University was founded in Sendai with a special emphasis on applied geography. The institute has two chairs of professorship and is generally well-balanced in physical as well as in human geography. The Tohoku Geographical Association, organized in 1948, has its office at this institute and is expanding as a research center of geography in Northern Japan.

The Hiroshima Higher Normal School was another core of geographical education in the southwestern part of Japan. A new institute of geography was established in 1949 when the school was expanded to be Hiroshima University under the new education system. The same situation can be seen in Tokyo and Nara Higher Normal Schools for Women and they were reorganized to be two national universities for women under the new system.

Since the 1920's, geographical departments of private universities have opened for those who had been qualified as school teachers and who were anxious to take advanced courses. In Tokyo, new geography departments were opened at the following universities: Nihon University in 1926, Komazawa University in 1928, Rissho University in 1928, Hosei University in 1935, and Meiji University in 1940. In Kyoto, Ritsumeikan University has had a geography department since 1935. All of them have doctoral courses at present and supply a considerable number of graduates majored in geography.

The Geographical Institute of Nagoya University was founded in 1948 and has become a center of geographical research of the Chukyo Region. It has a doctorate course in geography and is, so far, the last institute established at the national university of pre-war origin.

The post-war reformation of education system gave substantial impact on teaching and research in geography. Most of the newly-born colleges were formerly national or private highschools, higher commercial and technical schools and normal schools. Among these institutions, Tokyo Gakugei, Tokyo Metropolitan, Osaka City and Rikkyo Universities have added graduate courses.

The Institutes of Geography at the Tokyo Metropolitan and Osaka City Universities, both of which were established in 1949, have been in better situation as far as the number of chairs of professorship and research facilities are concerned. The Tokyo Metropolitan University has now five chairs and is strong in more diversified fields, such as geomorphology, climatology, applied geography, and urban and rural geography. The Osaka City University does not hold chair system but has four professors. Its geographical institute specializes exclusively in the field of human geography, particularly economic, cultural and settlement geography.

The new education system puts emphasis on liberal arts education in contrast to the specialized course in the old system. Human geography is one of the liberal arts subjects and, therefore, it would offer more employment opportunities.
for human and economic geographers and less for physical geographers and regional specialists.

Graduate courses in geography have been established mostly at the universities of pre-war origin. Those universities which offer graduate courses in geography are smaller in number. In 1974, there are only eighteen graduate schools:

National: (9) Tohoku, Tokyo, Nagoya, Kyoto, Tokyo Kyoiku, Ochanomizu, Nara Women's, Hiroshima and Tokyo Gakugei
Municipal: (2) Tokyo Metropolitan and Osaka City
Private: (7) Nihon, Komazawa, Rissho, Hosei, Meiji, Ritsumeikan and Rikkyo

Education in geography is included in the category of social studies in elementary, secondary and high schools. Geography itself, however, has met some difficulty in maintaining its own aspect. Therefore, rehabilitation program, especially for highschool geography, is needed in terms of the well-balanced identity of both regional and systematic fields.

Besides these educational institutions, research institutes attached to certain major universities have gradually been enlarged to accept geography as their research subdivision. Such are the cases of the Institute of Oriental Cultures of the University of Tokyo and the Institute of Humanities at the University of Kyoto. Other non-profit research institutes in which geographers are involved are namely Geographical Survey Institute of the Ministry of Construction, Institute of Population Problems Research of the Ministry of Welfare, Agricultural Research Institute of the Ministry of Agriculture and Forest, and Institute of Asian Economic Affairs.

3. The Activities of Professional Organizations

In accordance with the establishment of geography in education, public interest in geography brought about the foundation of Tokyo Geographical Society in 1879. Its organization was similar to that of the Royal Geographical Society in London, and its activity was mainly concerned with the neighboring regions of Asia by sending expeditions and producing publications. The publication of bimonthly journal of Journal of Geography (Chigaku-zasshi) has been carried on since 1889.

The Association of Japanese Geographers was organized mainly by faculty members and alumni of the University of Tokyo in 1923, and it has later developed as a nation-wide academic circle of Japanese geographers. The association has been publishing monthly journal of Geographical Review of Japan since 1925. This is a leading periodical of wide international interest. It covers the whole range of geography from geomorphology and climatology to historical, agricultural, industrial and urban geography. The association had 259 members in 1939. The
increase in members up to 549 in 1949 was due to the fact that the association opened the door widely to those who were graduates from newly-promoted geographical institutions. The membership had reached 2395 as of July 1, 1973. The regional distribution of these members was as follows:

<table>
<thead>
<tr>
<th>Region</th>
<th>Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hokkaido</td>
<td>72</td>
</tr>
<tr>
<td>Tohoku</td>
<td>151</td>
</tr>
<tr>
<td>Kanto</td>
<td>1,199</td>
</tr>
<tr>
<td>Chubu</td>
<td>300</td>
</tr>
<tr>
<td>Kinki</td>
<td>302</td>
</tr>
<tr>
<td>Chugoku</td>
<td>115</td>
</tr>
<tr>
<td>Shikoku</td>
<td>70</td>
</tr>
<tr>
<td>Kyushu</td>
<td>140</td>
</tr>
<tr>
<td>Overseas</td>
<td>46</td>
</tr>
</tbody>
</table>

Originally, the association had chiefly been made up of geographers in the Kanto Region, but members from other regions, especially from the Kinki Region have increased since 1935 and it is truly a nation-wide professional organization.

Since the Second World War was over, there has been a trend to establish regional associations and thematic organizations. Among them, the Human Geographical Society of Japan, established in 1946 as the Geographical Association of Kyoto University graduates, has grown up to be a nation-wide association of social and economic geography. Its bimonthly journal of the Human Geography (Jim-bun-chiri) includes interesting and valuable articles devoted to human geography in a broader sense.

Among others, the Association of Economic Geographers founded in 1954 and Japan International Cartographic Association in 1963 are to be noticed. The former association publishes Annals of the Association of Economic Geographers (Keizai-chirigaku-nempo) twice a year which includes papers on all aspects of economic geography, while the latter sets its journal of the Map (Chizu). Based on the Institute of Geography at Tohoku University, the Tohoku Geographical Association was organized in 1948 and its periodical of the Tohoku Geography (Tohoku-chiri) is published four per annum. It covers all phases of geography with some areal concentration of field works done in the northern part of Japan.

The Association of Japanese Geographers started to distribute its special publication in English in 1966 when the 11th Pacific Science Congress was held in Tokyo. The first publication was entitled, "Japanese Geography 1966: Its Recent Trend." It is a comprehensive review of work done by Japanese geographers in the whole range of geographic research with extensive bibliographies of the literature available in Japanese. The second report was published in 1970 in terms of urban geography. Its title is "Japanese Cities: A Geographical Approach" and most of the papers presented are analytical in nature showing good guideline for this expanding field of geography.
4. The Diversity of Current Research

According to a recent survey of research publication made by Japanese geographers, human geography comprises nearly seventy per cent of all papers. In general, the prevailing topics are available in the following systematic fields: agricultural, settlement, manufacturing and historical geography, and geomorphology. They are followed by climatology, hydrography and population geography.

The study of primary industry, once predominant, has been declining in number in contrast to the growth of studies on secondary and tertiary industries. This trend is further promoted by the recent development of Japanese economy, particularly during the 1960’s. The change in industrial structure was so drastic that geographers were busy in catching up this trend, especially in terms of practice and need for application.

Almost all of the papers deal with the cases occurred in the country and are written in Japanese. In order to clarify the diversity of research trend, the author would like to divide the discipline into two distinct fields which have been widely accepted among Japanese geographers. The dualism between the two exists to a large extent and the discrepancy becomes wider in accordance with the commitment to neighboring sciences.

The improvement of topographic sheets, aerophotographs and other associated instruments has made considerable progress in the research work of physical geography, but the application of computers and technique of remote sensing have not fully been introduced compared with civil engineering and meteorology. Researches done in this field are commonly classified into five categories: (1) The morphological study of landforms, (2) The development of landforms and climatic change, (3) The classification of physical regions, (4) The regional study of physical phenomena, (5) The study of natural hazards and their impact on human environment.

The Japan Association for Quaternary Research has deeply concerned with the second category of study and there have been an increasing number of scientific expeditions sent to the Andes, the Middle East, East Africa and the Antarctic. These expeditions would also contribute to the fourth category of study. The fifth category is one of the contemporary studies to be done in this country since Japan always faces natural disasters caused by typhoon, heavy rainfall during the Bai-u season, cool summer, earthquake, and tsunami.

Among physical geographers in Japan, there exist two opposite viewpoints of observing natural phenomena. One believes natural phenomena as the object of physical or biological science in itself, and the other as the environment or natural basis of human activity. It is the author’s regret that most of the papers dealing with physical geography are based on the former viewpoint and there have been
a smaller number of papers belonging to the latter category.

Human geography covers a wide range of subfields on historical, cultural, social and economic geography.

Historical geography has a deep root for the establishment of human geography in Japan. Historical cause and effect are primary concern for the research of human geography. The most popular subdivision of historical geography is that of paleo-geography which covers extensive topics available from prehistoric days to the nineteenth century Japan. Newly-opened fields in feudal days, village structure of medieval days, and trace of ancient highways and their functions are only a few topics dealt in this subfield of geography. However, they would be more satisfactory in their results if the spatial data could be added in order to confirm the extent and nature of the intensive survey of historical geography.

Cultural geography investigates the regional differentiation of culture, cultural diffusion and acculturation. Local house types, dialect distribution, migration behavior, diffusion and expansion of paddy rice field, and social analysis of village community are major topics available in this subfield. These topics are actually located in the intermediate position with other humanities, and social geography in a contemporary sense has not been established as a behavioral science.

Settlement geography is one of the oldest subfields developed in Japanese geography. Rural and urban settlements have intensively been being surveyed with using morphological, evolitional and functional approaches. Intensive research of micro-scale area is quite a distinct feature of studies done by Japanese geographers and it was reported that sixty-six per cent. of papers of all kind produced during the period of 1946–1962 belonged to the category of micro-scale. Therefore, the number of papers eventually decreased with an inverse relationship to the scale of study area.

The study of urban geography has rapidly been made progress since 1950 when the first comprehensive book was published. Regional structure, economic functions, and urban hierarchy have been studied in this subfield. These studies are involved especially in the contemporary problems which the country faces, and new techniques of analysis are now being explored to find a way to more analytical approach. To solve existing urban problems, Japanese geographers are cooperating with planning and administrative authorities to find out more realistic incentives.

Economic geography is a subfield of geography in which most of human geographers are interested. The theories set by Von Thünen, A. Lösch, W. Isard and other regional scientists are commonly known among Japanese geographers. However, they are not so influential as American colleague among regional scientists in Japan. The Japan Section of Regional Science Association was organized in 1962, but the core of the association is dominated by economists and planners.
Far Eastern Conferences were held in Tokyo in 1963, 1965, 1967 and 1971, but only a few papers were read by geographers.

The most common approach for economic geography in Japan is based on historical analysis and intensive survey of micro-scale areas, and a large number of economic geographers prefer the locational analysis of regional economic activities and their historical background. Among subdivisions of economic geography, agriculture has lost its importance in the national economy, but agricultural geography still holds a majority of economic geographers. Complicate land use patterns, climatic and topographic limits of cultivation, regional specialization of commercial crops, hierarchical differentiation of farm size, increase in subsidiary farmers and migration of laborers from rural to urban areas are contemporary topics studied in agricultural geography. Among the topics studied in manufacturing geography, a survey of the relationship between parent companies and satellite workshops is rather unique to find out the hierarchical nature of Japan's industrialization.

In this country, there are still a considerable number of part-time farmers of subsistence-type clinging on small size of farms and of urban workers engaged in their jobs at small- to medium-size establishments. All of these structures which are changing from traditional to modern and their future patterns would be a principal theme of research in economic geography.

5. Conclusions and Recommendations

Present geographical studies generally follows the world trend, but they have shown somewhat unbalanced growth. Well established fields of geographical research are to be seen in terms of geomorphology, climatology, hydrography as well as economic, settlement and historical geography. On the other hand, biogeography and perception studies have not fully been developed and are expected to be a central theme in the research of ecosystem and other ecological and environmental studies.

Besides the effort to maintain balanced growth in geographical research, the associated techniques along these lines have to be improved in order to keep up with the development of systematic geography. Once systematic approach becomes deeper in insight, there comes a need to fill a gap between systematic fields of geography and related sciences focusing on a region. Western geographers usually have unilateral knowledge on non-western world since they try to evaluate the other part of the world with their own doctrine. Japanese geographers should observe the world with their own indigenous standards. Although basic concepts and methods may be the same all over the world, mode of life brought up during the long historic time and influenced by the environments would not be the same even within the country. Indigenous-oriented surveys could play more im-
important role in the regional studies to develop a cross-cultural aspect of systematic geography.

As a technique of geographical research, quantitative analysis has been expanding especially among young geographers who were stimulated by the "Quantitative Revolution" occurred mainly in the United States, Canada, the United Kingdom, and Sweden. However, some pioneering trials on this line had already been done in the 1930's. They were criticized by traditional geographers who paid more attention on complex diversity of cultural phenomena. In order to prepare for further development of quantitative approach, it is necessary to reorganize the theoretical and conceptual background of previous studies, and to promote the advancement in computer application.

In pre-war days, almost all of the geography graduates found their jobs in schools, colleges, and research institutes, and this tendency exists even today. However, more and more graduates can find their employment in governmental services, particularly survey and planning divisions. Such are the cases found at the Economic Planning Agency and the Tokyo Metropolitan Government. Academic circle is also co-operating with them in terms of planning regions, finding water resources, preventing disasters and rationalizing areal units of statistical enumeration. There are substantial differences between academic and applied fields of geography. The former investigates academic possibilism, while the latter requires decision for action. If these two could be amalgamated into a single body with particular reference to a specific and integrated project, the co-existence and co-operation of the two would be more realistic to geographical research in the future. The author hopes to accomplish this task.

References


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