Philippine Geography: Riding the Cycles of Growth and Decline

MELITON B. JUANICO

The discipline of geography, often referred to as the "universal science" and / or the "mother of natural and social sciences," has experienced a cyclical pattern of development from antiquity up to modern times. Periods of growth and prestige alternated with those of lassitude and prosaism. It appears that geography often reflects the changing interests and concerns of people throughout recorded history. This paper discusses this global cyclical development of geography and the consequent development and state of the discipline in the Philippines. It may be said that geography has also developed parallel local patterns and expressions reflecting the goals of particular historical periods as well as the interests and values of its practitioners. In particular, this historical recounting will include the reasons for geography's low profile in some areas of the world and a discussion of its current status and potential in the Philippines and how this status can be enhanced and this potential realized.

FROM ANTIQUITY THROUGH THE PERIOD OF GREAT EXPLORATIONS

During the Greek Period, geography used to be an important branch of knowledge along with philosophy, history, astronomy and mathematics. It was then known as the "study of the earth," having been derived from the Greek *geo*, meaning "earth" and *graphein*, meaning "to describe" or "to write." It dabbled in cosmology or the physical aspects of the earth and in chorology or the characteristics of regions and their inhabitants. The development of the discipline slackened during the time of the Romans who, unlike the scholarly Greeks, were more interested in conquering lands and building an empire. The development of geography particularly as a science even suffered "the doldrums," so to say, during the Dark Ages when the sciences or studies that would undermine the Roman Catholic Church's monopoly on knowledge were stifled. Fortunately, while Europe and the Holy Roman Empire were in intellectual slumber, the Arab world preserved the Greek and Roman classics and asked questions especially about their natural world that laid the foundations of modern science (Juanico, 1987, pp. 2-13).

With the advent of the Renaissance, geography again saw a cyclical acceleration in its development when an intellectually and spatially inquisitive Europe turned to geography's navigational tools as well as physical and cultural

knowledge in the exploration of the earth. Thus, we see Pigafetta, the Venetian chronicler, vividly recording Magellan's voyage en route to the Philippines and whetting the appetite of monarchs for more voyages. Aside from amassing descriptive data on exotic lands and peoples, geography also tried to be scientific, influenced in particular by the empirical methods of the biological sciences. It was Alexander von Humboldt, the German explorer and phytogeographer, who gave geography a truly scientific basis by insisting that the distribution of phenomena over the earth's surface should constitute a specific geographic task. We saw geography's influence even up to the turn of the century when people like Rizal, the Philippines' national hero, still subscribed to geographic or environmental determinism as when he attributed the indolence of the Filipinos not only to colonial psycho-cultural conditioning but also to the enervating effects of the torrid tropical sun.

Geography, however, started to decline towards the turn of the century when it could no longer contain its broadening disciplinary content. Geography then became one of the victims of the specialization movement that swept the scientific world in the midst of knowledge explosion. Herein lie the seeds of the diminution of its scientific appeal, for science feels it can only push the frontiers of knowledge through specialized disciplines.

And so we see in many countries today geography suffering from a loss of prestige like other holistic disciplines. The low image of geography appears true in the Philippines, in the United States and in many other countries. However, in Europe, particularly in France, Germany, Great Britain, Sweden, and Russia where geography has a long tradition, the discipline has respectability and focus. So, too, in some countries which have been directly affected by the British educational system during the colonial period and these would include India, Australia, Malaysia, Nigeria, Singapore, and Hong Kong. During the 1980s in the United States, for instance, it was observed that the discipline had a poor image, despite the fact that over 400 colleges and universities in that country maintained geography departments and that close to 150 departments offered graduate degrees in the discipline (Ulack, 1983, p. 143).

MISCONCEPTIONS ABOUT GEOGRAPHY

A major reason for geography's weak profile especially in the academe is the perception that the discipline has a "fuzzy" image with regard to its topical and methodological focus. There is the thinking that geography is a multidisciplinary subject without a coherent center; that it is a discipline composed of a loosely-knit group of specializations that do not have much in common. This is understandable because of geography's traditionally holistic nature with its wide compass of interests. While science may look askance on this seeming lack of specialization, it is actually the strength of the discipline. It has been noted that there is a current trend towards interdisciplinarity in scientific researches, given that problems are better solved if methods employed in analyzing them are not piecemeal or compartmentalized. In the interdisciplinary approach, geography with its spatial point of view, has the ability to reveal the cognitive structure of concepts and therefore integrate these satisfactorily.

This spatial viewpoint or methodology can be the distinguishing feature of geography, just as the anthropologists focus on the cultural context, the psychologists on the behavioral context, and the historians on the temporal context. Thus, any phenomenon that has variation in terrestrial space is "fair game" for geographic investigation and this is one reason why geography cannot also abandon its interest in other topics or disciplines. As one noted geographer observes, while other disciplines may only peripherally ask spatial questions, "it is only geography which realizes that the fact of space is not just an awkward inconvenience in our theories, but a basic organizing principle of existence" (Scully, 1982, p. 12).

Another reason for geography's poor standing is the perception that it is not a rigorous field of

study, i.e., it is not a "hard" course like physics, chemistry or engineering. Many still consider geography an idiographic or descriptive discipline that merely compiles vast amounts of non-integrated data. This idea stems from the relative newness of the nomothetic or analytical approach in geography as well as from the fact that one of the major subject matters of the discipline—spatial or territorial behavior of humans—is difficult to quantify or operationally define. However, it must be pointed out that geography has already progressed from the descriptive approach to the analytical one. In fact, one of the influences in modern geography is quantification where we see statistics, mathematics, calculus, and computer-based tools such as Geographic Information System (GIS), Remote Sensing (RS), Global Positioning System (GPS), and digital cartography being used as standard analytical tools not only in physical geography but also in the more subjective realm of human geography.

Lastly, geography's poor standing among the disciplines is attributed to the perceived lack of employment opportunities and limited chances for social advancement with a degree in geography. Students would rather pursue better known courses for which more jobs are available and where remuneration is perceived to be higher. Actually, the employment field in geography today is wide, i.e., particularly in such areas as government service, urban and regional planning, disaster management, teaching, research, business, military, consultancy, and NGO work. Government has traditionally been the major employer of geography graduates, especially those agencies involved with teaching and promoting tourism, city and country planning, and environmental protection. Large business establishments are now creating environmental planning/monitoring as well as information technology (IT) units within the corporate structure and geographers have the training to participate in the work of these corporate units (Scott, 2007).

DEVELOPMENT OF GEOGRAPHIC TEACHING AND RESEARCH IN THE PHILIPPINES

This section presents a brief history of the development of Philippine geography from the Spanish period to the present. Like the cyclical development of geography in world history described earlier, the discipline within the Philippine context has had its ebbs and flows as seen in the fields of geography teaching and research in the country.

The teaching of geography

Geography in the elementary and secondary schools

The development and propagation of geography was slow and limited during the Spanish Regime. Following the Royal Decree of 1863, subjects like General Geography and History of Spain were taught in the primary grades. However, these were not given much emphasis as was education for social refinement and distinction since education was designed for the upper classes and not for the masses (Aldana, 1949, p. 6). When the Americans came at the turn of the century, geography emerged as an important subject particularly in the public elementary and secondary schools. From 1904 up to the establishment of the Philippine Commonwealth in 1935, geography was taught as a separate subject under the primary, intermediate, high school, and collegiate curricula. Under the primary curriculum, geography was taught first as Geography and later, Home Geography. Under the intermediate curriculum, the discipline took the form of Geography. Under the high school curriculum, geography was introduced separately as Physical Geography in SY 1936-37. Geography became Social Studies in Grade IV while in 1934, geography became Social Studies in Grades V and VI. After the war, or specifically after the Educational Act of 1940, geography was no longer taught separately at the high school level (Fresnoza, 1950, pp. 159-196).

In the case of private schools during the American Period, almost the same pattern of curricular offerings found in public schools was observed. In the 1950s, Social Studies began to be taught in place of Geography from Grades I to VI. Social Life also took over the position of Geography in the typical Third Year curriculum (Fresnoza, 1950, pp. 234-240). The introduction of Social Studies in place of the separate teaching of geography and other disciplines was a result of experimentation in American education during the first quarter of the century. Social Studies was supposed to interrelate for the students the understanding of the different social sciences in dealing with social problems (Douglass, 1967, pp. 41-45). Amidst the increase of theoretical content among the social science disciplines, there was a need to select for young minds only those concepts that were relevant to their society or to the goal of socioeconomic development.

Except for a brief period during the Japanese Occupation when it was dropped from the educational system, Social Studies continued to be offered in the elementary and secondary levels as an integrating subject for the social sciences. Under the elementary school curriculum, for instance, Social Studies included character education, geography, history, civics, community problems, good manners and right conduct, and Filipino customs and traditions (Martin, 1980, p. 315). But in the 1970s, it was noted both in the United States and in the Philippines that the teaching of geography under the Social Studies umbrella at elementary and high school levels had deteriorated as shown by the poor knowledge of pupils of the geography of their country.

This realization spurred a return to the teaching of geography as a separate subject in lower educational levels at the start of the 1980s. In 1981, then Minister of Education Onofre D. Corpuz gave geography a boost when he said, "I have already instructed my Ministry Staff ... to reintroduce geography as a separate subject in the school curricula. But they are still fighting where to place it but I insist that it would be in the elementary and also be in the high school levels" (1981, p.7). Succeeding educational administrations, however, have not really actualized this plan and the curricular changes that were done involved only a juggling of Social Studies emphasis, with geography merely fused with the other social sciences in one subject.

Thus, the end of the 1990s saw the following offerings in the elementary curriculum: Civics and Culture from Grades 1 to 3 and Geography/History/Civics from Grades 4 to 6. In the secondary curriculum, geography is not even expressly mentioned, but only embedded in the following offerings: Social Studies I (focused on Philippine History and Government), Social Studies II (focused on Asian History), Social Studies III (focused on World History), and Social Studies IV (focused on Economics) (DECS, n.d.). Looking at the Minimum Learning Competencies in each subject, it may be observed that the cognitive and psychomotor content in geography is superficial. It begs for a more exhaustive treatment of the geographic knowledge and skills necessary to make a student geographically literate.

Today, the minor attention to geography continues. Based on the Department of Education Order No. 43, Series 2002, both the elementary and secondary basic education curricula focus only on five learning areas, namely, English, Science, Mathematics, Filipino, and Makabayan. At the elementary level, geography is embedded in Makabayan and is particularly specified only in the subject called Heograpiya, Kasaysayan at Sibika. This subject is given only 40 minutes teaching time per day in Grades IV to VI while the other areas are given longer periods and mostly throughout the six-year elementary curriculum. At the secondary level, geography is not even specifically mentioned or included in the Makabayan learning area and is assumed to be peripherally taught in the subject Araling Panlipunan.

Geography at the collegiate level

The teaching of geography as a subject at the collegiate level started in the 1920s at the College of Education of the University of the Philippines (UP). The course was offered to meet the needs of students pursuing the degree of Bachelor of Science in Education. In the early 1930s, the discipline of geography was moved to the College of Liberal Arts where it became part of the Department of Geology and Geography under the Chairmanship of Dr. Jose M. Feliciano who was known more as a geographer than as a geologist. The geology unit grew faster than the geography unit on account of the demand for more geologists in the development of the mineral industry. More support was extended by the US Assistance Fund for the geology section of the Department.

Before World War II, the subject called Physiography was made a requirement for students taking up the first two-year course in the arts curriculum of the then College of Liberal Arts. The subject, which was essentially a course in Physical Geography, was the contribution of the Department to the general education program offering of the University. It was taught by both instructors in geology and geography. It was later changed to Introductory Physical Science and added concepts in physics, chemistry and mathematics (UP Department of Geography records, n.d.).

It was in the early 1950s when the Department offered an MS program in geography in order to produce qualified instructors and researchers in the discipline. The teaching staff of the Department was augmented by Visiting Professors from the United States in the persons of Professors McIntyre, Huke, Cutshall, and Doerr. In 1953, the UP Board of Regents passed a resolution authorizing the offering of a PhD program in geography. In order to provide instructional support for this program, scholars were sent abroad to specialize in geographic studies (Salita, 1985).

Amidst diverging interests and needs, geology and geography broke up in 1983 after coexisting for 45 years. During that year, the College of Arts and Sciences (CAS) also split up into three colleges, with the Department of Geography being placed within the College of Social Sciences and Philosophy (CSSP). During this time, Dr. Domingo C. Salita, a faculty member of the Department, became Dean of the CAS. The rationale for the inclusion of geography within the CSSP lies in the emerging thrust of geography which was then towards the concerns of the social sciences rather than those of the natural sciences (Salita, 1985).

As part of the effort to nurture the new Department of Geography, instruments and book donations were requested from the Federal Republic of Germany. A German professor in geography, Dr. Dirk Bronger, was also sent to the Department in 1975 to enrich its curriculum and to reinforce its teaching mandate. After Dr. Bronger, other visiting professors in geography also came, most of them Americans as indicated in Table 1 (Clawson, 1985).

Today, UP Diliman is the only institution of higher learning in the country with a Department of Geography and the only institution offering undergraduate and graduate degrees in geography. The Department was relatively small in the 1980s with an average of six faculty members and 50 geography majors. In the last five years, however, the Department has seen a significant rise in its faculty complement to an average of 25 members and some 200 student-majors per academic year. Presently, it is one of the biggest departments in CSSP. This growth can be attributed to the effective teaching of marketable skills in the use of GIS, RS, GPS, digital cartography, and spatial analysis—technologies that have gained pervasive usefulness in a digitally interconnected world. Accordingly, the Department has recently introduced into its graduate and undergraduate curricula relevant courses like Digital Cartography, Map and Aerial Photo Interpretation, Field Methods of Geography (using GPS and other instruments), and GIS Applications in the Social Sciences. The Department has a GIS Laboratory where the nature and applications of these methodologies are learned (Juanico, 2006). The undergraduate

Table 1 Visiting Professors/Lecturers of Geography in the Philippines

Visiting Professors/Lecturers	Years	Institution Affiliated With (in Geography)
Wallace McIntyre*	1952-1953	UP Diliman
Robert Huke*	1955-1956	UP Diliman
Alden Cutshall*	1957-1958	UP Diliman
Arthur Doerr*	1958-1959	UP Diliman
Donald Bennett*	1963-1964	Far Eastern University, Manila
Dirk Bronger	1975-1979	UP Diliman
Richard Ulack*	1982-1983	UP Diliman
David Clawson	1984-1985	UP Diliman
Elke Eller	1992	Visayas State College of Agriculture, Leyte
Christian Dufournaud	1998-1999	UP Diliman
David Kummer	2002-2003	UP Diliman
Mark Bockenhauer	2004-2005	UP Diliman
Jean Christophe Gaillard	2005-to date	UP Diliman

*Fullbright-Hays Program Lecturers

program of the Department is stronger than its graduate program in terms of enrolment and graduates produced. There is a need to promote the master's degree program as this will also address the need to establish a strong research culture in geography in the country. In answer to the needs of the times, the Department is currently revising its undergraduate and graduate curricula in terms of introducing new courses, updating outmoded course content, phasing out irrelevant courses, and streamlining course numbering.

It must be mentioned here that geography courses and not degrees are offered in at least 15 other notable institutions of higher learning in the Philippines, most of which are located in Metro Manila. These courses include topical, regional and methodological geography and are offered either as required or cognate subjects for certain degree programs such as those in education, social sciences, environmental science, environmental studies, and environmental education. The schools of note offering service geography courses are University of the Philippines Los Baños, University of the East, University of Sto. Tomas, De La Salle University, University of Manila, La Consolacion College, College of the Holy Spirit, Far Eastern University, Philippine Women's University, National Teachers' College, Philippine Normal University, Ateneo de Manila University, Miriam College, San Sebastian College, and Centro Escolar University (CHED, 2004).

Geographic research

Foreign researchers

Foreign visiting professors and lecturers in geography who have been coming to the Philippines since the 1950s (see Table 1) also conducted geographic research on the country. Some wrote books on the Philippines (Huke, 1963; Cutshall, 1964) and Southeast Asia (Ulack, 1989) while others focused on research on metropolitanization and megacities (Bronger), international migration (Ulack), forest denudation (Kummer), physical geographic dimensions of natural hazards (Eller), agricultural geographic models (Clawson), geographic education (Ulack, Clawson, Bockenhauer), and natural hazard and disaster management (Gaillard). Gaillard (1998, 2001), in particular, has written many articles on the physical and cultural dimensions of the 1991 Mount Pinatubo volcanic eruption. His dissertation deals with the territorial and socioeconomic effects of the Mount Pinatubo eruption and the responses of the affected population to the natural hazard.

Table 2 Foreign Researchers not Affiliated with any Local Institutions in the Philippines

Foreign Researchers	Research Interest
GERMAN	
Robert Martens	Place names and genealogy
Wolfgang Senftleben	Southeast Asian regional geography and agricultural geography
Albert Kolb	Geography of a cultural region
AMERICAN	
Donald Fisher	Structural geology
Daniel Doeppers	Economic history and social change in Southeast Asian cities
Frederick Wernstedt	Philippine geography
Joseph Spencer	Philippine geography
Walter Robb	
Donn Hart	Philippine urban morphology
Robert Reed	Hispanic urbanism
Jonathan David Goss	Exploitation of Metro Manila's urban poor
Julie Graham	Discursive geographies of Filipino migrant workers
James Tyner	Discursive geographies of Filipino migrant workers
AUSTRALIAN	
Katherine Gibson	Discursive geographies of Filipino migrant workers
Deirdre McKay	Discursive geographies of Filipino migrant workers
BRITISH	
Terence Burley	Philippine economic and social geography
Terry McGee	Philippine and Southeast Asian urbanization
CANADIAN	
Geoffrey Scott	Relationships between vegetation, soils and climate
Geraldine Pratt	Discursive geographies of Filipino migrant workers
Philip Kelly	Philippine economic change and globalization
DUTCH	
Canute Vandermeer	
FRENCH	
Frederic Leone	Responses to Mount Pinatubo and Mount Kanlaon
Iwan Le Berre	Responses to Mount Pinatubo and Mount Kanlaon
Yannick Legeat	Environmental change and geomorphology
Yves Boquet	Philippine transportation systems

Aside from the visiting professors/researchers, there were also foreign researchers who did work on the Philippines but did not affiliate with any local institution (Table 2). These include some who wrote books on the Philippines (Wernstedt & Spencer, 1967; Kolb, 1942; Burley, 1973), and on Philippine economic change and globalization (Kelly, 2000), and Philippine and Southeast Asian urbanization (McGee, 1967). Others studied and wrote articles on Philippine urban morphology (Hart), Hispanic urbanism (Reed), Southeast Asian regional geography and agricultural geography (Senftleben), place names and genealogy (Martens), exploitation of Metro Manila's urban poor (Goss), discursive geographies of Filipino migrant contract workers (Gibson, Graham, McKay, Tyner, Pratt), responses to the Mount Pinatubo and Mount Kanlaon eruptions (Leone and Le Berre), environmental change and geomorphology (Lageat), and Philippine transportation systems (Boquet). Although before the turn of the century, the Americans were the predominant researchers on the Philippines, it appears that in recent years the French have been the most active in research on the Philippines, focusing on volcanic eruptions, landslides and plate tectonics, and their characteristics and effects on Philippine communities. In the case of the few American and Australian researchers, their recent research interests appear to focus on Filipino overseas migration and globalization.

Table 3 Visiting Research Fellows at the UP Diliman Department of Geography

Visiting Research Fellows	Dissertation Topics
AMERICAN	
Ryan Ehrhart (2007)	Food security and the agricultural system
Todd Lindley (2008)	Understanding transnationalism through intercountry adoption system
AUSTRALIAN	
Amanda Cahill (2004)	Local economic development and community participation
Nathan Blank (2009)	Political ecology of overseas Filipino workers
CANADIAN	
Adam Lukasiewicz (2008-2009)	Labor migration and effects on gender and class
FRENCH	
Justin Antoine Veuthey (2009-2010)	Responses to the Guinsaugon, Southern Leyte landslide

Visiting research fellows based at UP Diliman in the last decade are listed in Table 3. At the time of their visits, they were doctoral students gathering data for their dissertations. The good number of foreign researchers in the country indicates that the research landscape in the Philippines is foreign-dependent. While these foreigners provide their own valuable insights on the Philippine situation, there is also a need for an indigenization of geographic research in the country, i.e., for a type of geographic investigation analyzed and interpreted by Filipinos. For instance, definitions of geographic concepts that are considered to be standard or given in the works of Western researchers could be reexamined by Filipino scholars from the standpoint of Filipino ethnicity, society and culture. Doing so may lead to richer theoretical insights and more effective solutions to persistent problems. But for this to happen, there is a need to develop a large pool of local geographers.

Filipino researchers

There are only a few Filipino geographer-researchers in the country today and most of them are based at UP Diliman. Before the present crop of geographers teaching at the Department of Geography, three pioneering geographers taught at the Department, namely, Dominador Rosell who focused on agricultural geography and strengthened and sustained in the 1960s and 1970s the Philippine Geographical Society and the *Philippine Geographical Journal* (*PGJ*); Telesforo W. Luna, Jr. who obtained his doctorate degree in geography from Clark University, specialized in physiography and climatology, and became Department Chair from 1972 to 1976 and from 1984 to 1996; and Domingo C. Salita, a multi-degreed geographer, who focused on resource management and conservation and geographic education, wrote the well-known book *Geography and natural resources of the Philippines (1997),* and was appointed Department Chair from 1970 to 1972 (UP Department of Geography, 2004).

Currently, there are five senior faculty members based at UP Diliman with different fields of specialization (Table 4): Meliton B. Juanico who has a doctorate from the UP School of Urban and Regional Planning, and who specializes in land use planning, spatial analysis and alternative urban and regional development strategies; Doracie Z. Nantes who did her doctorate in geography at Rutgers University, and does research on hazard and disaster studies, urban environmental issues, and resource analysis and development; Darlene O. Gutierrez who earned her doctorate in geography from Southwest Texas State University, and does studies on local agricultural systems, climate change, and perception of typhoon hazards; Daniel L. Mabazza who is currently pursuing a doctorate in geography at Hiroshima University and conducts researches using quantitative methods in geographic analysis, transportation and town planning, and

Table 4 Faculty Members of the UP Diliman Department of Geography

Faculty	Areas of Spealization
Senior Faculty	
Meliton B. Juanico *(PhD, UP School of Urban and Regional Planning)*	Land use planning, spatial analysis and alternative urban and regional development strategies
Doracie Z. Nantes *(PhD, Rutgers University)*	Hazard and disaster studies, urban environmental issues, and resource analysis and development
Darlene O. Gutierrez *(PhD, Southwest Texas State University)*	Local agricultural systems, climate change and perception of typhoon hazards
Daniel L. Mabazza *(PhD cand., Hiroshima University)*	Quantitative methods in geographic analysis, transportation and town planning, and transportation geography
Joseph E. Palis *(PhD cand., University of North Carolina-Chapel Hill*	Popular geography, cinematic geography, and geography of food systems
Junior Faculty	
Arnisson Andre Ortega *(PhD student, University of Washington)*	Population geography, migration, and quantitative methods in geographic analysis
Kristian Karlo Saguin *(PhD student, Texas A&M University)*	Dynamics of urban spaces, quantitative techniques in geographic research and the geographies of music
Evangeline Katigbak *(PhD student, National University of Singapore)*	Gender studies, sustainable agriculture, politico-environmental issues and community displacements

Table 5 Other Filipino Geographers not affiliated with UP Diliman Department of Geography

Filipino Geographers	Current Affiliation	Areas of Spealization
Mario de los Reyes *(PhD, University of Hamburg)*	UP Diliman School of Urban and Regional Planning	Geoecology of tropical aquatic ecosystems, fisheries/coastal management, and disaster risk mainstreaming in local development plans
Victoria O. Espaldon *(PhD, University of Guelph, Canada)*	UPLB College of Environmental Science and Management	Rural resource assessment, cultural geography, social impact assessment, and human dimensions of environmental change
Dante Gideon K. Vergara *(PhD student, University of Michigan)*	UPLB College of Environmental Science and Management	Tropical deforestation modeling
Pepito R. Fernandez *(PhD student, Australian National University)*	UP Visayas	Natural resource management and governance and political geography
Edward Quinto	University of Santo Tomas	Biogeography and environmental assessment
Enrico B. Garcia	Philippine Normal University	Environmental geography, cultural studies and history
Mariño Deocariza	Earthquakes and Megacities Initiatives Project in Manila	Urban housing inequalities, socio-spatial segregation and urban development approaches

transportation geography; and Joseph E. Palis who is finishing his doctoral studies in geography at the University of North Carolina-Chapel Hill and doing work on popular geography, cinematic geography, and geography of food systems.

The junior faculty members of the Department are currently pursuing their doctoral studies in geography in universities abroad. They are Arnisson Andre Ortega at the University of Washington and whose interests are in population geography, migration, and quantitative methods in geographic analysis; Kristian Karlo Saguin at Texas A&M University and whose research leanings are on the dynamics of urban spaces, quantitative techniques in geographic research and the geographies of music; and Evangeline Katigbak

at the National University of Singapore and who specializes in gender studies, sustainable agriculture, politico-environmental issues and community displacements.

The researches of the Department faculty have resulted in the publication of books and refereed articles in foreign and local journals. Many of their articles have been published in the *PGJ,* the publication arm of the Philippine Geographical Society to which the faculty are professionally affiliated. It may be observed, however, that the number of articles in the journal written by Filipinos through the years do not compare favorably with those of foreigners and non-geographers and of the few Filipino contributors, most come from the UP Diliman Department of Geography.

It should be noted that there are a few Filipino geographers working in institutions other than the UP Diliman Department of Geography (Table 5). They include an Associate Professor at UP Diliman School of Urban and Regional Planning; the Dean of the College of Environmental Science and Management (CESAM) at UP Los Baños; a research associate at CESAM; a faculty each of UP Visayas, University of Santo Tomas, and Philippine Normal University; and a researcher with the Earthquakes and Megacities Initiatives Project in Manila.

RESEARCH THEMES AND TRENDS

Among the foreign visiting professors and/or lecturers who stayed in the country for some time and were affiliated with local institutions, the earlier ones focused on researches on idiographic or descriptive geography that resulted in the production of textbooks and atlases on the Philippines and Southeast Asia. This knowledge-generation theme was born out of the realization by foreign scholars that, in order to teach geography well, textbooks had to be made available to students. These activities were actually in keeping with the goals of the Fullbright-Hays Program that supported their assignments in the Philippines. Later researchers also continued the task of promoting geographic education with the objective of spreading geographic consciousness all over the country. Later, some researchers focused on the theme of intra-national urbanization and this could be traced to the problems created by the primate city phenomenon and the large cities. These large urban centers were observed to foment spatial and regional inequality by siphoning off resources from, and subsequently impoverishing, the hinterland. The most recent theme in Philippine geographic research pertains to natural hazards and disaster risk management, influenced both by the climate change phenomenon and the perceived vulnerability of the Philippines to natural and human-induced catastrophies.

Likewise, foreign researchers who were not affiliated with local institutions, pursued knowledge-generation from early on as indicated in their invovlement in the production of books/textbooks on the Philippines. No funding institution set the agenda for the researches. The development of the cognitive dimension of geographic education evolved from the personal choices and commitments of the scholars. The second theme that followed was similarly that of intra-national urbanization but this time with greater focus on the urban ills created by the rural-urban movement of the population. The problems of urban poverty, environmental degradation and diseconomies of scale as they occurred particularly in Metro Manila were tackled. The third theme that emerged was that of transnational migration of Filipino workers, an apparent influence of the contemporary globalization phenomenon. Considering its great magnitude, the diaspora of Filipino contract workers over the global space has not escaped the attention of foreign geographers. Finally, as in the case of the first group of researchers, the latest overarching theme is that of natural hazard management particularly as carried out by the French geographers and as influenced by the Mount Pinatubo and Mount Kanlaon eruptions and by the Guinsaugon, Southern Leyte landslide. The natural hazard-themed researches have been pursued by the

French geographers following agreements between the University of the Philippines and French universities and the agenda set by the French government and the European Union which jointly provide the funding.

With regard the visiting research fellows or doctoral students, there was no distinct theme pervading their researches although an amorphous commonality that can be discerned is the concern for the quality of life of Filipinos as fomented by exploitative relations, overseas migration, and natural hazards.

Going now to researches pursued by Filipino researchers from the Department of Geography at UP Diliman, the early geographers also pursued the theme of knowledge-generation by writing books and atlases in order to support a nascent discipline and Department. Another discernible theme pursued by the faculty is that of natural hazards and disaster management which is an influence of the recurring and long-term natural hazard occurrences in a country that is located in the typhoon, earthquake, and volcanic belts of the world. These researches have been conducted by faculty members mostly in their own private capacities and supported by external funding. Other than the above themes, the researches conducted by the senior faculty are varied, i.e., including environmental impact assessment, sustainable agriculture and natural resource management, land use assessment, transportation geography, metropolitanization and rural-urban migration, gender studies, environmental perception, and urban spaces. The funding for these researches came from varied entities, namely, the University of the Philippines; Philippine government agencies like the Department of Science and Technology, Department of Environment and Natural Resources, Department of Transportation and Communication, National Economic and Development Authority, Department of Agriculture, and local government units (LGUs); international funding agencies as the Southeast Asian Geography Association (SEAGA), JICA, AUSAID, USAID, CIDA, IDRC and UN agencies; foreign universities; and foreign governments like those of the USA, Canada, France, European Union, Japan, United Kingdom, and Taiwan.

Geography was given a boost lately when the SEAGA held its 2008 International Conference in Quezon City on 3-6 June 2008. The theme of the conference was "Transformations and Embodiments in Southeast Asia (and other) Geographies: Changing Environments, People and Cultural Groups, Institutions and Landscapes." The conference had 29 panel sessions, 120 paper presenters, of which 20 papers were on the Philippines and authored by Filipino researchers (mostly from the Geography Department) and foreign scholars. The event had an impressive range of topics, namely, agrarian change, natural hazards and climate change, urban planning and sustainability, poverty and livelihoods, socioeconomic development issues, geographic education, global migration, transportation geography, political issues and conflicts, rural underdevelopment, GIS and RS applications, coastal and marine problems, cultural identities, tourism potentials, science and technology promotion, and even esoteric topics like the geopolitics of Malaccan piracy. The conference not only demonstrated geography's interdisciplinary strength but it also delivered the message that a geographer can be an in-depth specialist (SEAGA, 2004).

Outside of UP Diliman, the researches of Filipino geographers fall under the related themes of natural hazard management and environmental degradation. Actually, these are the themes that permeate the researches of all the groups of foreign and local geographers cited above. The compelling influence of these themes stems from the fact that natural hazards and environmental degradation are continually brought into the consciousness of researchers by their cyclical recurrence. This process has been punctuated recently by the devastation caused by tropical cyclones Ondoy and Pepeng in Metro Manila and other parts of the country. The two research themes—natural hazard management and environmental degradation—could be developed as the research

focus of Filipino geographers as well as that of the Department of Geography, considering their practical significance for a disaster-prone country like the Philippines. Still and all, it must be mentioned that knowledge production among Filipino geographer-researchers is not substantial. This is a function of certain factors, namely, the small pool of experts, the dearth of research funding, the diversions of teaching, community extension work, and income augmentation. A culture of research needs to be promoted among Filipino geographers inside and outside of academe.

PROSPECTS OF THE DISCIPLINE

As described above, there are few geographer-researchers in the Philippines compared to other disciplines. The weak promotion of geography can be traced to the Commonwealth Period when the Americans supplanted the teaching of geography with Social Studies. Later, at the collegiate level, the lack of a strong geographic tradition in the United States was also reflected in the Philippines in the absence of a strong government policy promoting the discipline. Admittedly, geography was a victim of the trend towards specialization in the pursuit of human knowledge, yet this did not affect so much the strength of the discipline in Europe which has a strong tradition in, and affinity for, geography. Geography should be promoted and established as an important discipline that is needed for understanding the Philippines, considering that, in many respects, the state of the country is a product of its geography.

As seen above, most of the Filipino geographers with advanced degrees and who are based in the Philippines earned their doctoral degrees from good schools in the US, France, Germany, Canada, Australia, Japan, and Singapore. Considering the rigorous programs offered by these schools, the present crop of geographers are well-equipped with the necessary cognitive, psychomotor, and affective pedagogical background for actively promoting the discipline. However, the current distribution of Filipino geographers is Manila-centric—a situation that creates a tendency among geographers to focus their attention to the development of geographic teaching and research within the University of the Philippines as well as within schools along the university belt of Manila. Along this line, UP's Department of Geography should proactively promote the opening of geography departments and the offering of geography degrees in schools in the Visayas and Mindanao. It should offer its faculty as resource persons in the development of geography curricula at the undergraduate and graduate levels. What is necessary, too, aside from spreading geographers over the country away from Metro Manila, is to increase their present small pool, to a critical mass that could initiate a snowballing movement that should increase the popularity of the discipline in other parts of the archipelago. What the UP Diliman Department of Geography can do is campaign among college students and graduates of higher education institutions in other parts of Luzon and in the Visayas and Mindanao to pursue its Master of Science in Geography course offering. Ideally, the Department should be promoting the doctoral program that it was allowed to offer by the UP Board of Regents, but which program it cannot offer yet due to a lack of the requisite number of PhD-degree holders among its faculty. Thus, it is incumbent on the Department to monitor the progress of the doctoral studies of its faculty and to make them return post-haste to the Department upon completion of their programs. The Department expects at least four of its faculty to return within the next two to three years.

The advent of information and communication technologies such as the GIS, RS, GPS, and digital cartography also offers a vehicle for enlivening the discipline. The demand for geographic skills has been increasing as shown by the emergence of work opportunities for geographers in the Philippines and abroad. Geographers with graduate degrees usually enter the teaching profession which also offers them opportunities for research. However, there is a need for more geographers with Master's degrees. The Master's

degree program of the UP Diliman Department of Geography should be strengthened and promoted vigorously. So far, since its institution in the early 1950s, the program has only produced around 20 graduates. Graduates at the undergraduate level who have had good training at the UP Diliman Department of Geography have been observed since the late 1970s to have landed good-paying jobs and reached high positions in their places of employment. It is interesting to note that in a recent study conducted on the Department graduates, close to one-half are self-employed. This trend, which is in fact encouraged by the government employment policy, is a reflection of the applicability and versatility of the education provided by the BS and MS Geography curricula, despite the fact that there are ready jobs available for the graduates. Close to one-fifth of the graduates find employment in business establishments and reaching positions like financial analysts, customer relations officers, call center supervisors, webmasters, talent managers, GIS specialists, editors, and film makers. About 15 percent became professors, college instructors, elementary and secondary school teachers and supervisors, researchers and teaching assistants. Another five to 10 percent of graduates go to each of these groups of employment categories: NGO work (especially environment-related), OFW work (e.g., as nurses and caregivers), and government employment (e.g., as directors, researchers, and staff members). It may be mentioned that geography graduates are eligible to take the Board Examination for Environmental Planners and a good number of them are already practicing licensed planners (Juanico, 2006).

In terms of community extension work, some senior faculty members of the UP Diliman Department of Geography have been prominently involved in government policy making. These high-level engagements include the formulation of the National Framework for Physical Planning; crafting of the National Land Use Code; formulation of legislation streamlining the Environmental Impact Assessment System; formulation of disaster risk management plans; conceptualization of regional development spatial groupings (e.g., CALABARZON, MARILAQUE, MIMAROPA, CARAGA, ARMM, etc.); and planning and implementation of the Indigenous People's Rights Act, the National Integrated Protected Areas System Act, and the Local Government Code, among other legislations relevant to geography (Juanico, 2006). However, considering that geographers are low on the supply side, their collective presence is hardly felt in these projects of national import.

In conclusion, it is apparent from the evolutionary exposition of this paper that geography, through research, teaching and community extension work, has a significant role to play in the country's socioeconomic development as well as in the personal enrichment of individuals through its spatial and holistic methods of analysis. The cycle of neglect and attention in the history of ideas is again bringing space and holism to a new crest of importance and respectability, ushered in by the emergence particularly of information and communication technologies and the alarming threats to the stability of the global ecosystem. Geographers and their supporters—and the Philippine government itself—would do well to ride this crest of attention if they want to strengthen the discipline and contribute to the socioeconomic development of the country.

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