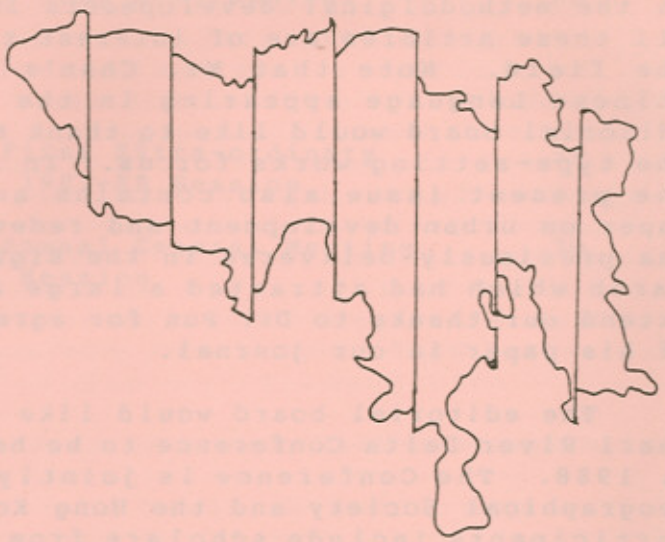
ONG KONG GEOGRAPHICAL ASSOCIATION 香港地理學會

THE HONG KONG GEOGRAPHER

VOL.6 NO. 3
JUN. 1988



P. O. Box 97553, Tsim Sha Tsui, Kowloon, Hong Kong.
香港九龍尖沙咀郵政信箱第97553號

WORDS FROM THE CHIEF EDITOR

In the past year with the help of the contributors and members of the editorial board, and with the support of the executive committee of the Hong Kong Geographical Association, we achieved some success in (i) providing information about the Association and the wider goegraphical community to our members; and (ii) strenghtening the content of the journal especially in publishing articles and worksheets which might be of relevance to teaching geography at the secondary level. The past year also witnessed an increase in membership of the Association and hence the circulation of this journal. Of course, the hard work of the executive committee in particular the holding of activities that are of interest to Hong Kong's geographers is to be praised. But certainly the publication of a journal that reflects the need of secondary school geography teachers and the geographical community at large would play an important part in enlarging the Association's sphere of influence. As a locally oriented journal, the Hong Kong Geographer can, and should, make an impact on the development of geographical teaching and research in the Territory. Hopefully, we can see more secondary school teachers and members of the public submit articles (whether full length articles, points of reflection or commentaries) for publication in the journal. Of course, articles submitted by teachers and researchers working at the tertiary level will also be welcome.

In this issue there are four full-length articles. These include a paper on teaching fieldworks in geography by Dr. P. Stimpson, a paper on the Mai Po Marshlands by Dr. R. Irving, a paper on Hong Kong's urban trees by Mr. K.M. Yeung and an article on the methodolgical developments in geography by Mr. P.K. Chan. All these articles are of interest to almost everyone working in the field. Note that Mr. Chan's paper is the first in the Chinese Language appearing in the Hong Kong Geographer. The editorial board would like to thank Mr. Chan for carrying out all the type-setting works for us. In addition to these articles, the present issue also contains an abstract of Dr. K.S. Pun's paper on urban development and redevelopment in Hong Kong which was previously delivered in the Eigth Hong Kong Geography Day in March which had attracted a large audience. We would like to extend our thanks to Dr. Pun for agreeing to publish the abstract of his paper in our journal.

The editorial board would like to draw your attention to the Pearl River Delta Conference to be held in Guangzhou on August 2-4, 1988. The Conference is jointly organized by the Guangdong Geographical Society and the Hong Kong Geographical Association. Participants include scholars from the Mainland, Hong Kong and the Overseas.

Last, we apologize for the delay in publishing this issue. Your patience is very much appreciated.

TABLE OF CONTENT

ARTICLE

STRUCTURING FIELDWORK

Philip Stimpson
Lecturer in Geographical Education
Department of Professional Studies in Education
Hong Kong University

Almost all of us at some time have been faced with the paradox that we believe it is right to take pupils out to do field work but that at the end we are not certain of the exercise's worth. There are many factors in the equation which lead to successful fieldwork. One of these is the way the exercises are structured. The structure used, however, is dependent upon the reasons for doing fieldwork and the perspectives taken to it. This, then, is the starting point for this discussion.

Why do fieldwork?

Fieldwork is an important means of providing the concrete experiences pupils need to grasp new ideas and consolidate them into their thinking. It provides experiences which are remembered when classwork is long forgotten. The greater stimulus it provides enhances understanding and is likely to improve examination performance. Indeed many examination papers contain questions where fieldwork experience is essential. It provides a situation where pupils can compare their personal perceptions of an area, a geographical issue, or a problem with the perceptions of others,in particular with accounts given in the text book. Examples of such issues could be agricultural pollution, rural conservaton, environmental quality. Importantly, fieldwork provides an opportunity for pupils to practice skills, such as the collection of primary data, which might otherwise be left out of their geographical education; in the classroom there is a tendency to stress secondary source material and its interpretation. Importantly, fieldwork provides an opportunity for pupils to think geographically. Pupils are surrounded by environmental interactions and contrasts which require explanation. In the classroom there is the tendency to look to the text book for an answer. The field provides a situation where pupils must return to the basic geographical questions of WHAT, WHERE, WHY, HOW and HOW OUGHT.

What perspective should we take to fieldwork?

Two approaches to field work are usually distinguished: Field Teaching and Field Inquiry or Research (Everson, X973). Field teaching has become unfashionable because, at its worst, it is no more than a mini-lecture in the field where pupils strive to jot down notes in difficult circumstances. Laws (1984) sees it as only involving pupils "in careful observation .... and description and suggesting possible explanations based on previously acquired information." This view is simplistic. Lecturing probably achieves little with school students but a

well led question and answer session, in which the teacher draws out the key ideas, is valuable. Law's view, however, is understandable because so often field teaching does only involve low order skills. Hence, there is a preference for field inquiry.

In field inquiry a problem or relationship is suggested from field observation or from class work. For example, interest might be in the effectiveness of government action towards countryside conservation or in solving pollution problems. In these situations we could set up a debate based on written statements of what government policy is trying to achieve. Questions raised in the debate can be set up as hypothesis to examine. Data is then collected in the field to test the ideas.

The important thing in the decision of which approach to use, field teaching or field inquiry, is to be certain of your intent. Is the intention just information transfer illustrated by field examples or is the intention that pupils should practice skills of finding out in arriving at the same geographical knowledge?

How should we organise the fieldwork?

We are not concerned here with adminstration but with organization of the geographical question. It is important to have a clear understanding of what the objectives are. If care is not taken the work can become highly descriptive. For example, in a consideration of settlement pupils might be asked to record building function, age. materials, state of repair, age and occupation of the owner etc. In these circumstances the pupils can easily become lost in a large amount of survey data and the key geographical relationships can become overlooked. The ability of the pupils to sort out data must be kept in mind. Often, although not always, the objectives will concern the development of some geographical relationship which explains an aspect of the world around us. Ideas might include:

- Uncontrolled intensive agriculture has a marked influence on water quality in rural areas.
- Soils differ according to the vegetation under which they have developed.
- Fire is a major factor in vegetation character.
- A feature such as an army camp can have a major effect on the services and environmental character of a rural village.
- Different crops are found in different parts of a valley floor reflecting differences in drainage and water supply.
- Distance from the main road is a major factor reflecting the impact of urbanization in the rural landscape.

The common element in all these is that each comprises two parts:

(1) a feature (e.g. crop variation, services, soil types, vegetation, water quality, urbanization) which we want to explain; and

(2) factor(s), or a process, in terms of which we want to give explanation of the features in (1).

How can the influence of a factor, or process, be shown?

There are two main approaches:

(1) observation of differences in the feature in situations where the factor differs. For example, differences in soil can be examined with changes in position on slope (topographic factor) or changes in vegetation (biotic factor). The time dimension can be examined by comparing the present pattern with those shown in old photographs or other descriptions. Alternatively relict features in the landscape can be looked for from which the past can be inferred, for example dates on houses or old field boundaries.

(2) alternatively the characteristics of a particular feature in a specific situation (reflecting some factor) are compared with a theoretical model or set of relationships. For example, the services of a rural village can be compared with those expected from a settlement hierarchy model and differences explained by the presence of any special factor such as the impact of an army camp.

How can we structure the work?

In both of the two approaches given in the previous section, two geographical questions arise, namely:

(1) WHAT?
(2) WHERE?

In asking "what", pupils must describe and measure the characteristics of the feature. It is thus necessary to decide on what characteristics (a) we want to measure and (b) which are feasible to measure. For example, we may be interested in soil quality and fertility, but it is outside the scope of school pupils to measure nutrient status. However organic matter is a major store of nutrients and the depth and colour of the A horizon are reasonable indicators. In general there is a need to choose visual indicators. Therefore in water quality colour, algal presence, slime and debris can be recorded possibly using a percentage cover, where appropriate, to give some precision. Scaling is often particularly useful, e.g. for urban environmental quality using characteristics such as decorative condition. Moreover are the measurement methods available to school pupils of sufficient sensitivity to record the changes pupils are likely to meet. As the range of techniques are restricted it is important to choose field sites where environmental differences are marked. Hence it is probably

better to look in the case of soil studies at differences between soil groups rather than at differences within a particular group.

The question "where" focuses on location. Answer to the question "why" follow from it. Location is important because it reflects the environment in which the feature is and, hence, the factor we are interested in exploring. For example, differences in soil can be related to differences in location in terms of position on slope or location in different plant environments. Water quality can be related to differences in stream location above and below the source of pollution.

These two questions provide a framework for data collection by pupils. However, "tell me what you see and where it is?" is too broad. It is necessary to provide guiding questions to direct the analysis. These can conveniently be provided on a worksheet.

Worksheets for use in fieldwork

A good worksheet probably contains the following features:

(1) production is of high quality;
(2) pupils instructions are clear and direct;
(3) the layout and organization of the material has been carefully considered;
(4) following from (1)to (3), the material is structured for learning (Batlett and Cox, 1982).

The worksheet needs to combine two functions:

(1) a record sheet for field observations; and
(2) a basis for establishing the relationship(s) sought.

The second element is most important. It is necessary to think what is suitable for the thinking ability and perceptural capacity of the pupils for whom it is designed. For Sixth formers a graph may be the most suitable but, for less able 5th formers, a labelled sketch may be more effective.

The worksheet needs to contain three elements:

(1) a framwork which describes feature of the object/problem/ issue under examination;
(2) a framework which characterizes the environmentalfactors; and
(3) a framework for bringing together (1) and (2).

It also needs a clear statement of what pupils are trying to find out to begin with, and what they have found out in conclusion. It is also important that pupils realize the limitation of what they have fou nd out, for example what other factors might be present.

Conclusion

It is important to have a clear idea of what you want to explain and how you are going to give an explanation of it.

Factor/Process-Form relationships are a frequently used approach. If this is to be the framework then structure worksheets around the Form and Factor/Process record and around the means to be used for setting up the relationship. Give step by step instructions on where to go, what to record and how to make the measurements. Make sure that the final conclusion is drawn out; adequate post field work follow up is essential if the work is to be worthwhile.

REFERENCES

Batlett, L. and Cox, B. (1982) Learning to teach geography. (Wiley; Brisbane).

Everson, J. (1973), "Fieldwork in school geography" in Walford, R. (ed) New direction in geography teaching (Longman; London) 107-14.

Laws, K. (1984) "Learning geography through fieldwork", in Fien, J, Gerber, R. and Wilson,P. (eds.) The geography teacher's guide to the classroom (Macmillan; Melbourne). pp.134-145.

ARTICLE

MAI PO MARSHES AND THE GEOGRAPHER

by
R. Irving
Department of Geography and Geology,
University of Hong Kong, and WWFHK Mai Po
Management and Development Committee

In 1987, the Mai Po marshes were visited by more than 21,000 people. The majority were members of organised school groups and, in turn, many of these comprised geography students. It is indeed most encouraging to see that the Nature Conservation Area at Mai Po is proving so popular as a site for geography field work. It is clear, however, that there are many teachers who have not yet had the opportunity to visit Mai Po, or who are not yet aware of the value of Mai Po to the geographer. This article attempts to clarify the status of, and means of access to, the Mai Po marshes for those teachers who are not sure how to gain entry to the Reserve; and to highlight some of the features at Mai Po which are of special interest to the geographer.

The Mai Po marshes are an internationally reowned wetland providing habitat for vast numbers of resident and migrant birds. The marshes are situated along a major 'flyway' between Siberia and Australia, and provide migrating birds with their last/first opportunity to feed before/after a long flight over the ocean during the Autumn/Spring passages. A number of visiting birds are rare or endangered species, including the Asian Dowitcher, the Dalmatian Pelican, and Saunders Gull. As a signatory of the Bonn Convention, the Hong Kong Government has a declared duty to assist in the protection of these and other endangered species. Thus, in 1975, the Marshes were accorded the status of Nature Conservation Area, and public access to the Site was restricted. In addition, strict controls were imposed to check the operations of farmers and fishermen working in the Reserve, and to prevent change of land-use which could be detrimental to maintaining the large numbers and wide variety of birds which roost at Mai Po. Since then, World Wide Fund for Nature Hong Kong (WWFHK) has acquired the lease to approximately one-third of the Nature Reserve. A manager is employed by WWFHK to supervise the daily operation of the reserve, and a full-time Education Officer guides school parties around the marshes.

The purpose of WWFHK at Mai Po is two-fold. First, it ensures that the areal integrity of the marshes is preserved, and that the various habitats at Mai Po are managed in such a way that the greatest diversity of bird and animal species can be sustained there. Second, and equally important, WWFHK is committed to promoting the educational value of the Mai Po marshes. A wide range of leaflets have been prepared, specifically designed for biology and geography students, explaining all aspects of the Mai Po landscape, the human activities carried out there, and the flora and fauna of Mai Po. A film and slide-pack about Mai Po have been produced for use in the classroom (ideally these should be shown before a visit to the marshes), and an Education Centre, housing a permanant

exhibition about the geography and biology of Mai Po, has been constructed in the Reserve itself. WWFHK has also constructed a number of footpaths, for easy access to all parts of the Reserve, and special 'hides' which allow birds in their natural habitat to be observed without undue disturbances. Perhaps the most memorable part of any visit to Mai Po is the floating 'board-walk' which takes visitors along a channel through the 500 metre wide fringe of mangrove swamp - to the very edge of the mudflats of Deep Bay. At low tide, tens of thousands of birds, including ospreys and sea-eagles, can be observed feeding on the rich marine life of the bay. All these facilities have been prepared for visitors to Mai Po in order to enhance the educational value of the marshes. For this reason, special attention is given to groups of students from the school of Hong Kong.

Teachers may apply to the Education Officer at Mai Po for a guided tour around the Reserve on any Monday, Tuesday, Thursday and Friday (except public holiday). The tour takes about 5 hours, and includes a visit to the Education Centre and a trip along the board-walk. An increasingly popular schedule is for school groups to visit Mai Po in the morning for a slightly shorter tour (Monday only at present) and, in the afternoon, visit the Island House Conservation Studies Centre at Tai Po. This newly opened facility is also managed by WWFHK, and employs a full-time Education Officer who will explain to students some of the broader issues concerning conservation and the environment in Hong Kong. School visits also include a guided tour along a Nature Trail through the superb gardens of Island House. Public access to the Mai Po marshes and Island House is necessarily restricted in order to avoid excess human pressure and disturbance to these areas. Unfortunately, for similar reasons, the number of school visits to Mai Po also has to be limited to one per day. This means teachers may have to wait a few weeks or even months after submitting their application before they can actually make a visit. The length of the waiting list varies according to the time of year although the Education Officer at Mai Po or Island House will be happy to advise how long the waiting time is. This time can be utilized, of course, by offering preparatory material to students in the classroom. Not only are the video film and slide-pack available for such purposes, but WWFHK has also published a teachers' handbook on the Mai Po marshes, explaining how various aspects of the area can be related to the geography and biology school syllabi.

For the geographer, the Mai Po marshes are an ideal site for local field work. A peaceful and relatively undisturbed landscape, the marshes offer a good idea of the former 'natural' appearance of the Hong Kong coastline. This area is experiencing rapid deposition of sediments, giving rise to the extensive area of mudflats in Deep Bay and the steady progradation of the shoreline. This process is aided by the mangroves which fringe the bay, and which accrete silt particles around their roots. The Mai Po Nature Reserve contains the most extensive area of mangroves in Hong Kong, and the floating board-walk offers an excellent opportunity to study mangal ecology. From the end of the broad walk students can also observe the great diversity of

life-forms which depend on the nutrient rich mud flats for energy supply - noting how nutrient cycling and a complex wed of food chains create one of Hong Kong's most fascinating ecosystems.

The seaward movement of the shoreline - whilst a natural process - has been considerably hastened by man. A comparison of contemporary and historical maps and air photographs reveals how man has steadily reclaimed land along the coast of Deep Bay for agricultural purposes. Before 1940 most of this reclamation was for brackish water rice cultivation. Most of the fields surrounding San Tin village, and the whole of Tin Shui Wai were reclaimed for this reason, and many local villagers are able to recall the special techniques required for cultivation of salt tolerant 'red rice'. Little other evidence of this former land use remains today, however, since all the coastal rice fields were converted to fish ponds in the 1960s and 1970s. Another reason is that after 1940, land reclamation projects in Deep Bay were for the purpose of constructing gei wais, which form the core area of the Mai Po marshes, are tidally operated shallow water shrimp ponds. The essential principle is that fish fry and shrimp larvae, which naturally inhibat the mangrove swamps, can be flushed into the ponds at high tide and trapped there by closing a sluice gate. After a few months, the mature shrimps can be harvested by re-opening the sluice gate at low tide and placing a net across the channel as the pond water drains away. Such a system of fishing requires no artificial stocking or feeding. As such, it represents a simple, effective, and rational use of the abundant natural resources of Deep Bay. Although gei wais were a common feature of the Deep Bay coastline in the 1960s, they are now only found at Mai Po. Two of the ponds are operated by WWFHK, and an explanation of the method of harvesting gei wai ha forms an integral part of the guided tour.

Another feature of interest to the geographer at Mai Po is the position of the marshes relative to the burgeoning new towns of Yuen Long, Tin Shui Wai, and Shenzhen. Situated between these urban developments, the difficulties of planning a meaningful conservation strategy can be fully appreciated. The major problem facing the Mai Po marshes at present is water pollution. At the southern end of the Reserve, near the obnoxious and grossly polluted Yuen Long River, scientists have recorded reduced oxygen levels in the water. Gei wai operators have also noticed that shrimps here are smaller and fewer than at the northern, less polluted, end of the marshes. The situation has been so bad, in fact, that many farmers have given up shrimp cultivation altogether and converted their gei wais to closed system fresh watrer fish ponds. This in turn has the effect of reducing the area available for vegetation growth, and removes an important habitat for birds. The lush, well vegetated landscape in the central and northern sections of the marshes are easily contrasted with the rather barren landscape of the southern section. Apart from being unpleasant, therefore, two effects of pollution on the landscape can be noted by students. First, it results in certain traditional activities becoming uneconomic, thus forcing people to alter the landscape to provide more viable alternative means of making a living. Second, by reducing the

natural productivity of the bay, important food chains will eventually be broken and the number and variety of wildlife in the area will diminish accordingly - if not disappear altogether.

After a visit to Mai Po and, preferably, Island House as well, discussion in the classroom can focus on the issue of conservation. A debate could be organised, with different groups of students arguing the case for pig farmers, who do not wish to increase their costs of production by installing effective sewage treatment facilities; shrimp pond operators, who see their livelihood threatened by increased levels of pollution; developers, who may wish to build high-rise residential estates on or near the marshes; bird watchers and naturalists, who wish to preserve natural habitats for endangered species; and local residents, who enjoy the educational and recreational value of the Nature Reserve. As geographers, we appreciate the need for development in both urban and rural areas. More industrial sites are needed to support the ever expanding local urban population. There is also the need, however, to pursue a policy of sensible utilization of natural resources. There is a need to create a balanced, harmonious living environment, where our natural surrounds are preserved for leisure, recreation and education - not only for ourselves but for future generations to enjoy. The Mai Po marshes have been called an "oasis in the Orient". We must strive to ensure the oasis remains forever green, and is not destroyed by the shifting sands of time.

Useful Telephone Numbers:

Mai Po Education Officer	0-716306
Island House Education Officer	0-6561272

List of relevant pamphlets and booklets published by WWFHK

All are available at Mai Po Education Centre; Island House Conservation Study Centre; or at the WWFHK office in 'The French Mission, 1 Batery Path, Central, Hong Kong.'

"Mai Po - Its Educational Value with relevance to the school curriculum in Hong Kong" $10

Mai Po Nature Reserve leaflet series includes:

"The Mai Po Landscape"
"Mai Po Land Use"
"Gei Wais"
"Gei Wai Food Web"
"Shrimps"
"Oysters"
"Mangroves"
"The Mai Po Fishing Industry" $1 each

Island House Conservation Studies Centre leaflet series includes:

Hong Kong Habitat - streams
mangroves
woodlands

Pollution - coastal reclamation
red tides
domestic sewage
beach pollution
acid rain $1.5 each

An illustrated book on the "Geography of Mai Po" (co-authored by R. Irving and B. Morton) will be available this year.

Figure 1 Mai Po Marshes

Figure 2 Hong Kong University Students taking Soil Samples at Mai Po

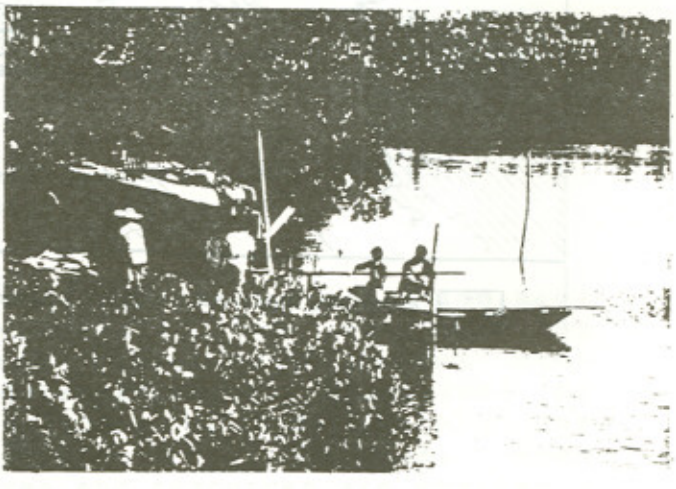
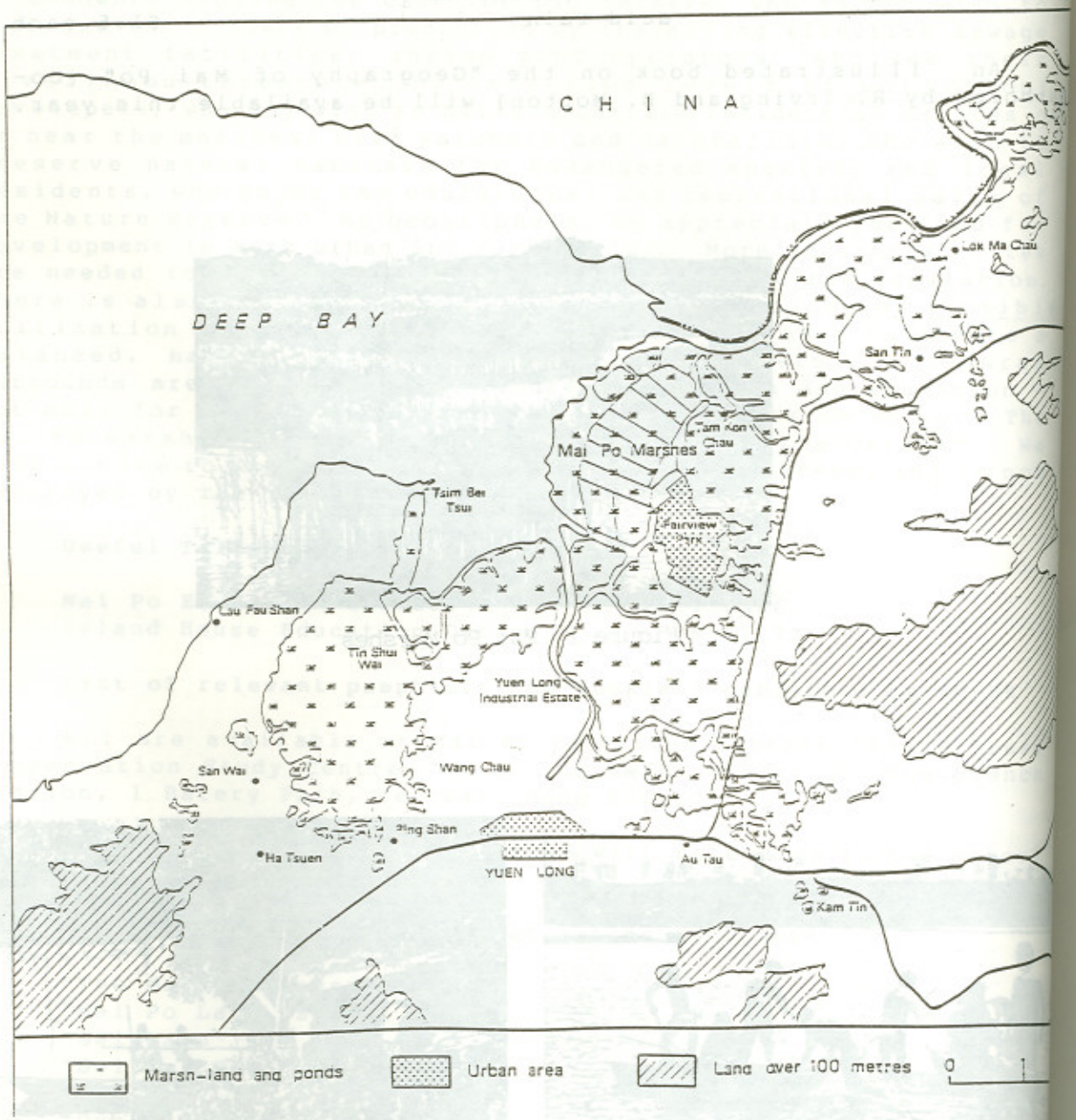


Figure 3 Another Scene of Mai Po


CHINA
DEEP BAY
Lok Ma Chau
San Tin
Tam Kon Chau
Mai Po Marshes
Tsim Bei Tsui
Fairview Park
Lau Fau Shan
Tin Shui Wai
Yuen Long Industrial Estate
San Wai
Wang Chau
Ping Shan
Ha Tsuen
YUEN LONG
Au Tau
Kam Tin
Marsh-land and ponds
Urban area
Land over 100 metres
0
1

ARTICLE

ROADSIDE TREES IN HONG KONG--ASSETS OR EYESORES?

by
Yeung Ka Ming
Department of Geography
Hong Kong Baptist College

Introduction

The word 'Tree' is diminutive but one which evokes a multitude of different meanings: psychological, aesthetic, architectural, climatic, amenity or even engineering. In Hong Kong, endeavours have been made in recent years to rectify the adverse effects of rapid urbanisation and redevelopment by planting more trees in the city. This is not only a result of the escalation of people's expectation from their living environment, the instant effects of urban trees on upgrading the quality of the environment is also tempting. Urban tree planting has come to be the necessity of most programmes of environmental enhancement. Official statistics have denoted that trees planted in the city averages to over 20,000 every year since 1982 (Figure 1).

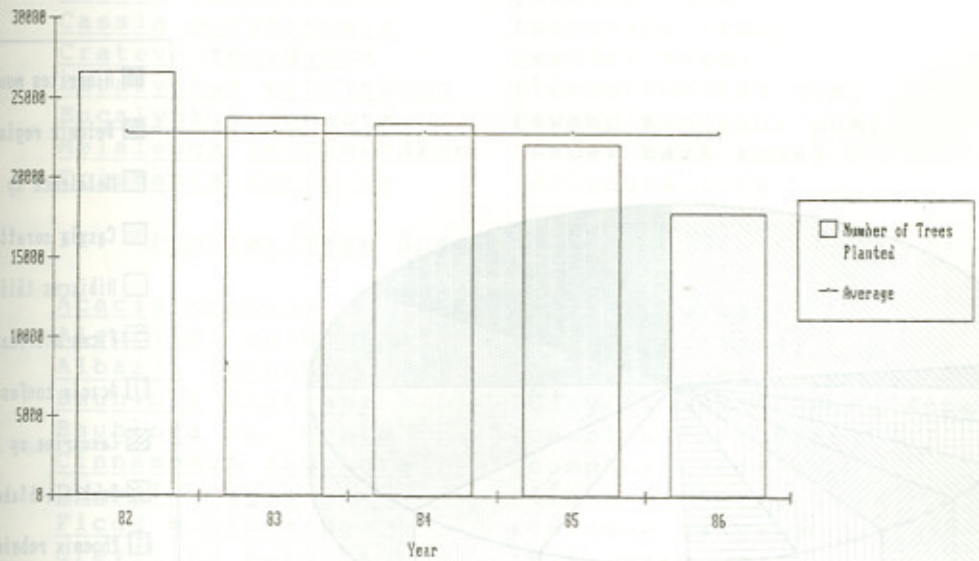


FIGURE 1 Urban Trees Planted (1978-1986)
(Modified from Yeung, 1985)

All of these have indicated more efforts and attention have been made on planting trees in the city. Yet, the fate and after-maintenance of the planted trees have seldom been attended. The quality of our roadside trees is determined by a multiple of factors and tree quantity is definitely one of the facile factors to manipulate. However, when planting is done only where spaces and resources are available without after-care and protection, roadside trees will become eyesores once after planting and vast resources are squandered.

Roadside Tree Species Composition and Selection

While Hong Kong has a cooler and dry season from September to March which needs much artificial watering for proper tree growth, the city lies in the sub-tropical zone where both the temperature and moisture regimes are capable of sustaining a luxuriant forest. Unlike some temperate cities which are dominated by two to three species (Sanders 1980; Gilbertson et al 1985), the urban canopy of Hong Kong is rather diverse in species composition. Acacia confusa, Aleurites moluccana, Bauhinia sp, Bombax malabaricum, Cassia surattensis, Delonix regia, Ficus microcarpa and Melaleuca leucadendron are among the most common roadside trees and they make up only about 50% of the total roadside tree population (Figure 2).

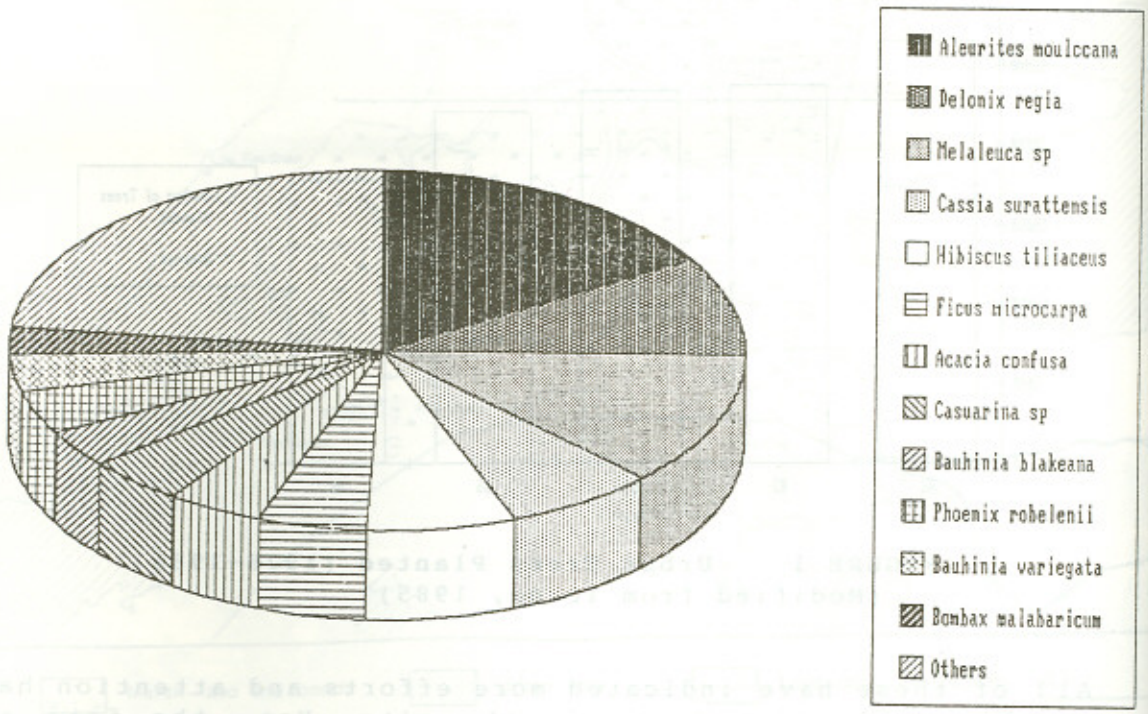


FIGURE 2 Species Composition of the Roadside Trees of Hong Kong (Source: Yeung, 1985)

These trees are often selected for their aesthetic value and they are known to be successful in the new environment from experience. Species such as Cassia surattensis, Bombax malabaricum and Melaleuca leucadendron are the most commonly planted species (Table 1). All these species are all either comparatively small, monopodial in their mature forms or less aggressive in their life forms therefore can survive better in the confined urban settings. Besides, they are mostly fast growing hence can give immediate effects. On the other hand, robust species such as Ficus microcarpa are not commonly planted as they are colossal for Hong Kong and are nuisance in some instances. For example, large cavities of Ficus microcarpa are breeding places for rats and its extensive root development poses problems of platform cracking. (Yeung, 1985)

TABLE 1

PLANTING POPULARITY OF SOME COMMON ROADSIDE TREES IN HONG KONG

I. Most Popular Tree Species

Bombax malabaricum	(cotton tree)
Cassia surattensis	(sunshine tree)
Crateva religiosa	(spider tree)
Eucalyptus citriodora	(lemon-scented gum)
Eucalyptus robusta	(swamp mahogany gum)
Melaleuca leucadendron	(paper bark tree)
Tristania conferta	(Brisbane box)

II. Popular Tree Species

Acacia confusa	(false confusa)
Aleurites moluccana	(candlenut tree)
Albazia lebbek	(Lebbek tree)
Bauhinia blakeana	(City flower of Hong Kong)
Bauhinia variegata	(camel's foot tree)
Cinnamomum camphora	(camphor tree)
Delonix regia	(flame of forest)
Ficus microcarpa	(Chinese banyan)
Grevillea robusta	(silk oak)
Hibiscus tileaceus	(Cuban Bast)

III. Less Popular Tree Species

Ailanthus fordii	(Ailanthus)
Casuarina equisetifolia	(horsetail tree)
Celtis sinensis	(Chinese Hackberry)
Erythrina caffra	(African coral tree)
Ficus microcarpa	(Chinese banyan)
Pheonix roebelenii	(dwarf date-palm)

Source: Yeung (1985)

Problems of roadside tree establishment and survival in Hong Kong

Similar to trees in other cities, many trees of the countryside are not able to survive in the city of Hong Kong as the urban environment has deleterious effects on roadside trees because of environmental stresses on moisture, temperature, light and chemical agents (Figure 3). Besides, the adverse soil conditions with confined rooting space also hamper tree growth (Yeung, 1985). In addition to these, the local environment further poses problems which forcloses tree establishment and survival.

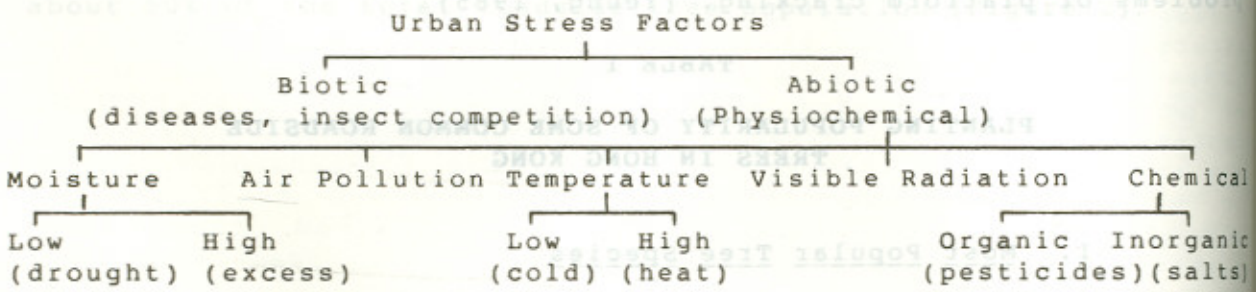


FIGURE 3 URBAN STRESS FACTORS
(Source:Roberts, 1977)

1. Lack of Space

In a city where building and population densities are among the highest in the world, there remains little space left for street trees especially in the old urban areas with narrow pavement. The urban morphology has foreclosed opportunities of planting in the city, both awning height and pavement width are often inadequate for trees to develop into their true characteristics. Very often, there are subsurface competition between tree roots and utility lines; surface competition among tree trunks, people and vehicles ,and aerial competition among tree branches, awnings and utility lines.

In high density districts such as Sheung Wan and Wanchai, suitable planting sites are deficient and roadside trees can rarely be found. Moreover, the mature trees in these districts are often under the combined pressure of urban redevelopment and vandalism. In fact, it is these highly populated areas where more roadside trees are required. In recent years, the urban renewal schemes in these districts have granted opportunities for softwork implementation in our vegetation-starved city. Yet, the spaces furnished for planting in these programmes are often in a piecemeal manner. Very often, spaces below flyovers account for a large proportion of the total open space allocated for planting and there is no room left for planting on the streets. Moreover, pavement width of redeveloped sites seldom exceeds 2 metres which is difficult, if not impossible, to plant and maintain a tree.

2. Vandalism

There remains a great deal of indifference and complacency towards natural objects in the city. To some of us, a candlenut tree (Aleurites moluccana) is only a signpost, a Cuban Bast (Hibiscus tileaceus) is only a cloth hanger and the Chinese banyan (Ficus microcarpa) an object for incense burning. Trees in the new environment have to endure damage and destruction from human beings. Vandalism has posed problems in many cities (Bradshaw, 1980; Gilbertson, 1985) but is more devastating in Hong Kong as there is often keen competition for limited space among people, trees, buildings and vehicles in the city. It was reported 30% of the newly-planted roadside trees were lost just because of damage and destruction from human beings (Yeung, 1985). Moreover, the quality of saplings and standards of after-care which is often appalling have made the transplants more susceptible to demolition.

3. Engineer Damages

Engineering works such as highway construction and building hamper the planting programmes as protection of trees in the urban landscape is largely depended on the goodwills of city engineers (Forbes, 1983). The roadside trees often give ways to engineer works as Hong Kong does not have any legislation to protect and conserve its fast dwindling urban open space. The regulations are confused and over-ridden by other demands such as road alteration. Inadequate inter-departmental co-operation poses many problems (Jim, 1987). There are instances on record of trees being moved up to four times to keep ahead of highway development (Yeung, 1985). Lots of valuable trees were snapped off or killed by engineer works. Besides, since preservations and protection given to trees in construction sites are often inadequate, many treasurable tree species will turn into feeble stumps after the construction works.

4. After-Maintenance

Unlike their natural counterparts, urban trees require careful attention from seedling to maturity.After-maintenance is just as important as the decision to plant. Trees planted cannot be taken for granted, they will thrive well only if there is proper staking and untying, fertilizing, pruning, weed control, pest and disease control, wound repair and tree surgery, watering and tree-basin maintenance. Studies on roadside trees have shown that absence of proper maintenance is the culprit for almost half of the damages (Yeung, 1985). Trees were strangled by stakes and gridled by tree guards; serious branch breakage were caused by absence of proper pruning which induced fungal attacks on unhealed scars. Indeed, many of the common species such as Delonix regia, Aleurites moluccana and Bauhinia sp require frequent corrective pruning and thinning (Yeung, 1985). Besides, as fast growing species are generally adopted for planting on narrow pavement, more frequent pruning are desired to avoid auto-damages by moving

vehicles.

Conclusion

No doubt, according to the official statistics, a growing number of trees have been planted in the city. Yet, they cannot be perceived as assets if these roadside trees are feeble stumps. The chosen species such as *Aleurites moluccana*, *Acacia confusa*, *Cassia surratensis* and *Delonix regia* can grow well in the new environment (Yeung 1985). But tree selection is only one of the many factors which determine the quality of the roadside trees (Figure 3). It is obvious from the above limited satisfactory planting sites, apathy of the public towards natural objects together with absence of proper after-care have adversely affected the growth of roadside trees.

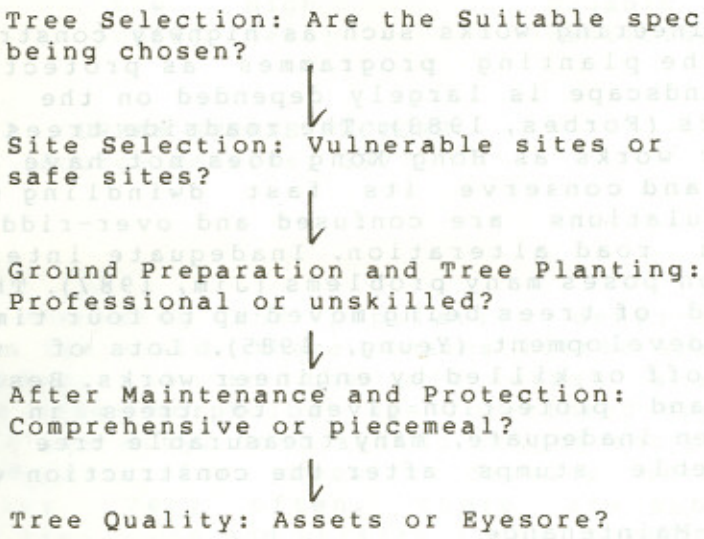


FIGURE 3 Some of the Factors Determining the Quality of Roadside Trees

Hence, if both the quantity and quality of the roadside trees are to be upgraded, efforts have to be made on planting space, public awareness , protection and maintenance works. Perhaps, the number of trees planted is easier to maneuver. Yet, a sapling selected would need adequate space to grow, careful planting and ground preparation to establish, after maintenance and protection to thrive. Otherwise, they will become the eyesores but not the assets of this city.

REFERENCES

1. Forbes J.E. (1983) 'Protecting Trees in Development Areas' Hong Kong Engineer. 11(3): 41-46

2. Gilbertson P. and Bradshaw A.D. (1985) "Tree survival in cities." Arboricultural Journal. 9: 131-142

3. Jim C.Y. (1987) 'The Status and Prospectus of Urban Trees in Hong Kong' Landscape and Urban Planning. 14: 1-20

4. Roberts B.R. (1977) "The response of urban trees to abiotic stress." Journal of Arboriculture. 3(4): 75-78

5. Sanders Ralph A. (1980) "Diversity in the street trees of Syracuse, New York." Urban Ecology 5: 33-43

6. Yeung K.M. (1985) Some aspects of planting, establishment and management of roadside trees in Hong Kong, Unpublished M.Sc. Dissertation, Dept. of Horticulture, Wye College, University of London.

ARTICLE

人與環境——地理哲學初探

陳培佳

≪地理學是研究地球表面的自然現象與人文現象的空間分佈以及兩者間相互關係的一門學科≫①

然而在過去百多年，尤其在最近卅年以來，地理學者對地理學研究重點及理論基礎頗爲分殊，今各不同學派對≪人與環境≫之闡釋，嘗試探討其哲學背景。

當代地理哲學前輩哈特向（R.HARTSHORNE, 1899－　）②定義地理爲一個≪對地球表各變動因素提供準確的、有條理的，且合理的描述≫的學科。他附和了前輩德籍地理學者赫特納A.HETTNER, 1859－1941）的看法，認爲康德（E. KANT, 1724－1804）對地理的看法能對基本題提供較滿意的答案且認爲康氏爲現代地理學奠定了哲學基礎。

康德在康尼斯堡主講≪自然地理學課程≫時所涉及的內容包括人種，人的自然活動及地表之然狀況。他認爲學習地理是掌握經驗知識的途徑之一：對實驗現象（EMPIRICAL PHENOMENA之學習須依據其特性作邏輯分類，並依據其時、空位置，作物理分類。前一種分類奠定後來發展系統科學的基礎，而後者則奠定了歷史和地理的科學基礎：歷史專注於探究各現象的時間次序特性稱之爲時序科學（CHRONOLOGICAL SCIENCE），而地理則探究空間中同時存在的各現象相互的關係，故稱之爲地序科學（CHOROLOGICAL SCIENCE）。爲對世界作全面之了解，各學科學習之。③

地理學之所以演變成獨立之大學學科可溯源至德籍地理學者洪堡（A. VON HUMBOLDT, 1－1859）及李特爾（C. RITTER, 1779－1859）二氏，故二人可稱爲現代地理學之奠基人。

洪氏認爲地球爲一有機整體（GANZHEIT）；而人則爲整體之一部份。地理學目的在於研究自然及人文現象的地域結合情況。

李氏爲最早提出人地關係思想的地理學者。他以畢生的精力完成了十九卷≪地理學≫（ERDKUNDE）：主要思想強調自然地理環境的現象及形態對人類活動的直接影響。他頗受黑格爾的觀影響，認爲地球爲人類學習了解之教育模型，從而啓示給人類上天預定的目標作其發展的指

二氏著重實驗資料之搜集，以利建立聯繫觀念，故實地考究成爲重要學習方法之一。

十九世紀末期，學術界受達爾文（C. R. DARWIN, 1809－1882）進化論的影響漸重視自然之探求。德籍地理學者拉采爾（F. RATZEL, 1844－1904）在他的≪人類地理學≫（ANTHROPOGEOGRAPHIE）一書中，把人視作與其他生物同等，沒有自我及意志因素之差異；而各區人類的特徵取決於各種地理環境的性質。地理學研習是以地區（REGION）爲單位，研究其地形、水文、土壤及植被等自然環境對人類活動之影響。因此，拉氏之人地關係觀點被公認爲≪環境論≫（ENVIRONMENTAL DETERMINISM）。自始，自然地理的地位越形重要，而漸次忽略人類在自然環境中的角色，更遑論影響！

同一時期德籍地理學者佩舍爾（PESCHEL, O., 1826－1875）、李希霍芬（F. VON RICHTHOFEN, 1833－1905）及彭克（A. PENCK, 1858－1945）等反對洪堡及李特爾之地理學統一性觀認爲地理學應集中對地表上自然因素的研究，而去除人文活動因素的研究。雖然這種二元論者不多，且影響歐美地理學界不大，但對一九一七年十月革命成功後的蘇聯影響頗巨；蘇聯自然學者及經濟地理學者均認爲二者之規律完全不同，故二者須截然分開作爲獨立學科各自發展。年代初期，以阿努欽（V. A. ANUCHIN, 1913－　）爲首的蘇聯地理學者批評　二元論之不建議在區域研究中謀求自然地理及經濟地理之聯繫與平衡。自始，蘇聯地理研究與其他國家之

漸趨消滅。中國自1949年以來，地理理論中心以蘇聯爲模範，故以二元論爲主流。至六十年代復因十年浩劫，地理學研習仍以二元論爲主導思想。至七十年代末，中國地理學者方漸次與歐美各地地理思潮交流，至今仍處於調整期。⑤

十九世紀末至廿世紀初，以白蘭士（P. VIDAL DE LA BLACHE, 1845－1918）爲首之法蘭西地理學派非議拉采爾之環境決定論：認爲人不能被自然所擺佈，因人有理性，具社會文化傳統，故其活動不應僅受環境所直接決定。在人地關係觀點上被稱爲≪或然論≫（POSSIBILISM）（或≪可能論≫（PROBABLISM））；自然環境提供人類多種發展之可能性，而能否實現則取決於人類各方面條件之配合。

白氏學生白呂納（J. BRUNHES, 1869－1930）提出在同一自然環境內，人可因心理因素之改變而創造出不同的地理事實來，成爲後來感應地理學（PERCEPTUAL GEOGRAPHY）及行爲地理學（BEHAVIOURAL GEOGRAPHY）的認識論根源。

德籍地理學者赫特納（見頁1）於1927重申康德對地理學習的看法：地表上各現象在空間中互相影响、配合，而非簡單地建立於從屬關係之上；應爲一≪時序科學≫：著重地理現象之實地探究及具體描述。

白蘭士主張自然及人文現象之綜合性區域研究方法，被視爲≪區域觀≫（REGIONALISM）地理學之創始者：人與環境之關係十分密切，實無法辨清各人類活動之主導影响因素究屬自然者抑人文者，故綜合性之區域研究較有效果。

德籍地理學者霍拉侯（G. FOHLER－HAUKE, 1906－　　）⑥，介紹專用於區域研究之幾個德文詞彙及其意義範圍，以澄清概念：

德文≪LAND≫一詞指一具體區域單位，通常爲一行政上之劃分所致；

而≪LANDSCHAFT≫（英譯≪LANDSCAPE≫，中譯≪景觀≫）可指經科學化定義之具體地理區域亦可指此種區域類別。

在區域探究方面，≪LANDERKUNDE≫是指對具體區域單位之綜合地理探究，屬傳統地誌式學習。

≪LANDSCHAFTKUNDE≫則可同時指對具體景觀之綜合探究或對各種景觀之專題性探討，其研究方向有五：景觀時序學（LANDSCAPE CHRONOLOGY）、景觀生態學（LANDSCAPE ECOLOGY）、景觀形貌學（LANDSCAPE MORPHOLOGY）、區域化（REGIONALIZATION）及景觀分類（LANDECAPE CLASSIFICATION）。前三項爲不同學派發展之方向。

景觀時序學（LANDSCAPE CHRONOLOGY）研究景觀在不同時間內的演變，法國區域學者多尚之。自始地理環境之現象探討非僅如康德所主張爲≪時序科學≫而是包括時、空之研究路向。

景觀生態學（LANDSCAPE ECOLOGY）爲區域地理學之功能性方法，如中心區域與其他各區之交通狀況研究。其後演進至利用生態學系統觀研究區域內各因素之互動研究。

景觀形貌學（LANDSCAPE MORPHOLOGY）集中研究可觀察紀錄的景觀因素之空間分佈形貌，略去非物質性的社會、經濟、心理、政治狀況，亦同時取消了自然、人文景觀之分野。此方向實以赫特納之理論爲基礎，集中注意當前區域空間分佈研究；歐洲學壇曾頗長時期崇尚此法。

從或然論及區域方法中之景觀形貌學所得之啓示，美地理學者索爾（C.O. SAUER, 1889－1975）主張用實際觀察地面景觀去研習地理，以文化景觀爲人文地理研究核心。≪景觀≫一概念包容自然與人文景觀，體現地理整體性，不再視≪人≫爲整體處理而專注於不同文化景觀中各部份群體之活動情況。此學派衍變爲≪文化景觀學派≫（CULTURAL LANDSCAPE SCHOOL）：人類對環境之影响不再被忽略而被視爲與自然力量具同等重要性。

英籍地理學者羅士培（P.M. ROXBY, 1880－1947）及美籍地理學者巴羅斯（H. H. BARROWS, 1877－1960）均不約而同受法國學派之影响：主張地理學的目的不在於考察環境本身的特徵與客觀存在的自然現象，而在於研究人類對自然環境之反應及適應；≪人≫是論題中心，其他現象須涉及人類反應時方加以探討。羅氏理論稱爲≪適應論≫（ADJUSTMENT THEORY）而巴氏者則稱爲≪生態論≫（ECOLOGICAL APPROACH）。

一九五〇年以前之各派地理觀大略可視爲≪實驗主義者之觀點≫(EMPIRICIST APPROACHES):

在認識論方面，認爲人可以通過經驗獲取知識。

在本體論方面，認爲所經驗之事物，均爲實存之事物。

在方法論方面，以描述展示所經驗之事實爲主旨。

自二次世界大戰結束後，歐美地理學者漸對以區域論爲主流之地理探究產生不滿，其原因不易理清，然就其較顯著數點闡述之：

㈠區域論學者在研習過程未盡能掌握所研習地區之言語，引致無法直接了解其特殊性質，有碍了解整體區域特點；

㈡由於學者對個別專門系統地理知識不足，對同一地域各主題發揮強弱不一致，以致地域研究效果及質素參差，不易受其他學科及決策者所重視。

二次大戰期間，地理學者對戰區地域狀況分析浮泛，對地表分佈、人文活動等未能發揮高度效率及準確性，引致年青一輩之地理學者決心改革地理之學習及進一步反省地理學之哲學理論及方法論等。

自五〇年代中期開始，北美地理學者開始引進實證主義觀點（POSITIVIST APPROACHES）以處理人文地理學之研究。1955年美籍地理學者加里森，(W. L. GARRISON, 1924－　　）開設首個計量地理學研究院課程，首批畢業生出現了地理學之革命者，對其後數世代之地理學理論及方法論影响深遠。畢業生中英籍之哈格特（P. HAGGETT, 1933－　　）及喬萊（R. J. CHORLEY, 1927－　　）在六〇年代英國地理學界舉行各種課程（包括校內、校外，在職教師研討會等），出版了具經典價值的書籍，引進了革命性之改變：使地理現象差異研究從定性進入了定量階段，從自然地理至人文地理各專題均在理論及方法上作重新之評估；另一學登哈維（D. HARVEY, 1935－　　），更在 1969 年出版≪地理學的解釋≫⑦爲新的地理改革奠定了實證認識論及方法論的基礎，至此，地理學進入了≪計量革命≫（QUANTITATIVE REVOLUTION）的時代。⑧

實證主義觀點略述如後：

其認識論是基於經驗之確證（EVIDENCE OF EXPERIENCE）及確證之如何獲取；對世界之解釋須通過≪理論導行≫（THEORY－LED）之觀察。

其本體論申明祇有可直接觀察及可量化之事物方可作爲確證之來源。

其方法論爲利用≪假設－演繹法≫（HYPOTHETICO－DEDUCTIVE APPROACH），強調假設眞實性的確證須基於觀察現象可重現性之驗證（VERIFICATION）。

此論點強調地理現象之量度、資料搜集、假設之統計測定等，明顯地改變了地理學習之方法及重點：大量精力用於尋求空間關係之建立，現象分佈之相關分析及比較各相關分析以尋求分佈之原因及變動因素等。

研習主要焦點在於≪地方≫（PLACE）與≪空間≫（SPACE）二概念；而建立在空間中事物分佈概念架構成爲此學派之哲學基礎。⑨

研習中心論題有二：

(1)特殊≪地方≫具有何等現象可反映其特性？

(2)特性可從何種分佈形式表達出來？

由此，地理學者學習集中於探討空間特性，故可稱之爲≪空間科學≫(SPATIAL SCIENCE)；其研習須尋求定理之建立——假設測定（HYPOTHESIS TESTING）及理論模型訂定（MODEL BUILDING）。

過去二、三十年以來，各種抽象數學模型不斷建立：如≪中地論≫(CENTRAL PLACE THEORY)、≪農業土地利用理論≫(AGRICALTURAL LAND－USE THEORY)、≪工業區位論≫(INDUSTRIAL LOCATION THEORY)等傳統理論之實證驗證及擴充、改良，≪重力模型≫(GRAVITY MODEL)、≪都市土地利用模型≫(URBAN LAND－USE MODELS)及≪空間互動論≫(SPATIAL INTERACTION THEORY)之建立等。

然而，此觀點不無強烈反對者，其本身亦具有基本困難，有待解決⑩：

⑴許多理論模型之理論基礎與現實相距頗大，嚴重影響其實用性及準確性：如≪中地論≫建基於假設≪人≫是尋求最高效益，完全有理性的決策者，且能完全掌握所需的資訊。而事實上，人永遠不能達到此種境界，以致其可用效度受嚴重影響。

因此歸納法之使用被重新重視，而個體實際心態及行爲的探討亦被考慮之列，行爲地理學由此應運而生。

⑵其次爲對地理假設驗證之先決性困難。艾亞（A.J.AYER, 1910－　　）⑪提出驗證之條件爲≪知道何種觀察可引領觀察者在某特定情況下，接受眞命題或拒絕假命題≫

但地理學者多未能於事前確定可供參考作確定接受或拒絕假設的條件。

現在大部份的驗證均依據統計學上的或然率及統計顯著程度訂定；但是母數基或樣本的大小比例，在實際地理探討中，不易確定，故其效果存疑。

另外，判別樣本之間相關係數之可接受程度高低，亦受樣本大小之限制。

總而言之，通過自然狀況建立科學模型，實屬事倍功半。

⑶在自然情況下，地理因素錯綜複雜，推論統計法亦難有良策對付多因素不斷相互影響情況作實驗控制。

對實證論之反省疑問如後：

⑴科學上的實證論是否獲取知識之唯一方法？

⑵實證論有否提供解決社會問題之有效解答？

⑶實證論是否無價值取向？

⑷經驗是否獲得知識的唯一途徑？

⑸現象環境是否解釋證據之唯一來源？

⑹解釋（參閱⑸）可行否？

⑺爲≪人≫的研究來說，機械式的模式是否有效？

⑻通過科學之社會控制是否受歡迎？

作爲對實證主義觀點抗衡之人文主義觀點（HUMANISTIC APPROCHES）於七〇年代漸普遍受重視。

在認識論方面，知識爲個體在其所創之意義世界中（WORLD OF MEANINGS）主觀所獲取者。

在本體方面，個人觀感所覺（PERCEIVE）存在者即爲實在存在。

在方法論方面，目的在探討各個體之主觀世界，著重個別性及主觀性。

對理想主義者（IDEALISTS）、現象學者（PHENOMENOLOGISTS）及存在主義者（EXISTENTIALISTS）等不同人文主義派別之學者而言，探索目的爲強調探討人之現況而盡量不抱預見，以影響觀察。

人文主義地理觀的普遍性取向方面，却克（W. KIRK, 1921－　　）⑫區分了地理環境爲二：

⑴現象環境（PHENOMENAL ENVIRONMENT）人受動機、傾向、思考方法，傳統及文化、社會背景影響之下的所見所聞範圍。

⑵行爲環境（BEHAVIOURAL ENVIRONMENT）：爲受前者影響下的實際表現。

地理的中心思想爲：進入個人經驗中的≪地方≫（PLACE）和≪空間≫（SPACE），促進人類更深入探求建立≪個人地理≫（PRIVATE GEOGRAPHIES），使能更了解自己以改善個人生活的質素。

至於專門性的取向方面，可分述理想主義、現象學及存在主義三學派的主要論點。

依理想主義者之看法，人主動建立其對世界之圖象指引他對未來之思考路向、觀感的演繹、及決策之本質之探討。

依現象學者之看法，個體須尋求對行動特性的了解或欣賞（VERSTEHEN）而非如實證者般尋求驗證解釋；相信對人來說，通過自主性活動（ACTS OF INTENTIONALITY），建立起一個心靈上的世界建構。現象學之功能在重新建立個體之內心世界，即其所會賦與意義之觀感以利了解其各世界內之行爲特點。中心假設認爲意義之賦與，爲存在於人類意識領域中之共通要素。通過參與觀

察（PARTICIPANT OBSERVATION），實際參與活動及接觸環境事物。

從釋義學觀點來說，（HERMENEUTIC APPROACHES），人文地理完全發生於人造符號之氛圍中；部份符號出現於口述、筆錄及表演中，地理學者須以觀衆身份注釋各種氛圍（MELIEU）中出現的人的行爲及傳送以上現象給有關之表現者。

依存在主義者之看法來說，≪人≫在空間定義自己的存有，部份其創造之自我身份涉及他與他的環境的關係；≪景觀≫是創造過程的傳記，表達了空間的編排，關係及連繫的存在⑬。

存在主義地理學爲歷史地理學新觀之一；主要目的在於通過居民、用戶、探究者及學習者之眼光重建一景觀，以表達影响其歷史處境之情況及變遷。

人文主義地理觀引發了若干地理研究的新路向，其中較爲重要有≪地的意識≫（SENSE OF PLACE）及≪時間地理學≫（TIME GEOGRAPHY）。

美籍華裔地理學者段義學（Y. F. TUAN, 1930－　　）認爲人文主義地理學之中心在於≪將純粹空間（MERE SPACE）轉譯爲一個具深切人文意義的地方（INTENSELY HUMAN PLACE）≫⑭，他創立≪地之戀≫（TOPOHILIA）觀念⑮：包容了所有人類與物質環境之有意識連繫；而他大部份的作品均嘗試闡釋此一觀點。⑯

他指出通過文學及音樂等可了解人對地方觀念之形成及型態。他以地球爲人類之家；地理爲人之鏡子，而通過了解人與地之關係更深切地了解人性。≪地≫的範圍受到構成≪人≫之意識之思想、感覺及經驗等幅度大小所影响：從人之座椅、居室、居屋、街道、市鎮、國家延至世界全體均可；所以爲人文主義者而言，≪地≫並不單是區位，而是一背景；不單爲一具體事物，且代表一種關係。因此，不同背景的人如果要了解相互之間之關係及差異，必須掌握≪地的意識≫對相同概念之不同含義及所引發之不同反應。比對已發展國家人士和發展中國家人士對經濟、資源、人力分配、土地利用、國土整治等觀念須通過人文主義地理觀加以探討，再反省方能調和實證論者處理相同概念之不足。

≪時間地理學≫由瑞典地理學者哈格斯時期（T. HAGERSTRAND, 1916－　　）於 1970 首先提出討論。⑰

他認爲≪時—空稜體≫（TIME－SPACE PRISMS），即在有限時間內，個體最大可能之活動空間範圍，規限了個體之行爲表現。個體活動之限制有三：

(1)人之生物能力及可供使用工具效能限制了最大的活動能力；(2)個人與社群或其他個體或事物、地點之聯繫需要，限制了活動之方向及模式；(3)個體權力高低對可及地區選擇之限制。從研究個人活動紀錄（INDIVIDUAL BIOGRAPHIES）可了解對人限制之因素進而促進空間策劃之改良。美籍地理學家普列（A. PRED, 1936－　　）提議此觀點可用以研究一門學科之知識性歷史發展過程，可用以重新闡釋歷史　事實之可能發生過程，可用以研究家庭生活模式演變之過程等。⑱

人文主義觀地理研習之本體說明了知識只可由個人心靈中所存在者中獲取；知識之層次有四：

(1)在≪想當然≫日常世界中，未經考察而被接受之因素；(2)所帶進生命世界（LIFE－WORLD）中之新因素；(3)連結諸因素及提供行動綱領的理論及(4)構成理論之純意識之結構及創立行爲環境程之觀感過程（PERCEPTUAL PROCESSES）。

對"人—環境"、"人—人在空間"之關係等之探究，可助個體明瞭自己以促進對本身知識深度及促成個人生活質素之改善。

與實證論及人文主義兩個當代盛行的地理觀分庭抗體的是自七〇年代始漸形成熟的結構主義地理觀（STRUCTURALIST APPROACH）。

要眞正了解人類行爲，需要留意個體內在≪結構≫（STRUCTURES）之運作情形如何。

個體通過思想上之天賦建構能力與社會及自然環境打交道。⑲

近年來，頗受歡迎之論點認爲個體行爲受制於政治經濟及社會結構。

英籍地理學者史密夫（D. M. SMITH, 1936－　　）⑳指出在七〇年代開始美國地理學界進行另一革命以抗衡該時期一個≪過度專注於物品之產出及天然資源之攫取而忽略人類福利及社會公義的重要情況≫（P. 154）自始，由斯連斯基（W. ZELINSKY）爲首之一群關注生態及社會事務之地理學者開始了歐美地理學界一股≪激進地理學≫之潮流（RADICAL GEOGRAPHY）。

他們傾向於要求地理學者轉向以與社會各現象有直接關聯之現象爲研習對象，以供政策決策者參考並重新引起大衆對地理學之重視。㉑

爲激進之馬克斯地理學者（MARXIST GEOGRAPHERS）而言，有效知識之獲取，並非由確證之累積，而在於建立能解釋社會驅動之理論，其他學派均被視爲反革命（COUNTER－REVOLTIONARY）。

以美籍地理學者皮特（J. R. PEET）爲首之馬克斯地理學派在七〇年代中期開始從事馬克思主義思想的研究，希望取代以前之實證論及人文主義觀來反省≪人與環境≫之關係，使社會資源能更平均地分配。

此學派之主要論點如後：

⑴空間組織之模式及在超級建構（SUPERSTRUCTURE）（即過程之結果）中之"人—環境"關係須被了解爲在內在建構（INFRASTRUCTURE，即過程本身）中經濟過程運作之體現（REALIZATION）。

⑵此等運作不能直接觀察而體現，而須通過理論之建立；此理論須與超級建構之產出配合。

⑶此等經濟過程及其產出均不斷改變，故不能對超級建構建立定律解釋之。

⑷經濟過程之中心爲≪階級鬥爭≫（CLASS CONFLICT）即無產階級對立於中產階級者（PROLETARIAT VS BOURGEOISE）。

⑸過程如何在超級建構體現乃取決於個體如何在參考先前體現（PRECEDING REALIZATION）及受制於各種限制之下進行活動——故個體之行動非被命定而僅受客觀限制而已。

⑹任何意圖利用實證方法分析現狀以維持現有超級建構者，均祇會延長及加深不公義體系之存在。

⑺要了解過程及其體現內容，各社會科學須重新組合爲更密切互相關聯之知識體系，及

⑻學術工作重心爲≪解放≫（EMANCIPATION）之探究，以達到社會改革之目標。

對結構馬克斯主義之地理觀（STRUCTURAL MARXISM IN GEOGRAPHY），登肯及李義（J.S. DUNCAN & D. LEY）㉒曾針對四方面作深切之批判：

⑴馬克思主義者之分析爲整體說（HOLISM）形式之一，此全體（可指資本、經濟結構、經濟過程等）被賦與具體之生命，被假設眞實存在，此點有違彼等視人爲有意識、自主之論點；

⑵個人被視爲整體之一份子，爲促進達到目標之工具之一，而非自由自主之決策者；

⑶馬克思主義之物質全在建構爲經濟主義（ECONOMISM）形式之一；將經濟過程視爲所有行爲之最終原因（ULTIMATE CAUSE），故將許多其他因素忽略且理由不易驗證，難以理服人；

⑷提一個≪人之消極觀點≫（PASSIVE VIEW OF MAN），對事物以抽象全體作解釋，令人迷惑（OBFUSCATORY）且無法驗證。

結構主義之地理觀至今仍未能正面影響以實證論爲主流之歐美地理學界，然而在八〇年代開始，人文主義觀點及結構主義觀點均以各種不同方式影響新一代地理學者之研究方向；在八〇年代末看來，一個百花齊放、百家爭鳴之地理研究局面似乎正方興未艾！

附註：

① 李旭旦(1986)：≪人文地理學引論≫、≪人文地理論叢≫，人民教育出版社。

② R. Hartshorne (1959) : Perspectives on the Nature of Geography, Murray. p. 21.

③ A. Holt-Jensen (1980): Geography : Its history and concepts. Harper & Row, p. 14-15.

④ A. Holt-Jensen (1980) : ibid., p. 18.

⑤ 李旭旦（1986）：同前書（見①附註）。

⑥ G. Fohler-Hauke (ed.) (1959) : Geographie, Frankfurt : Das Fischer Lexikon p. 251-61.

⑦ D. Harvey (1969) : Explanation in Geography, London : Edward Arnold.

⑧ W. K. D. Davies (Ed.) (1972) : The Conceptual Revolution in Geography, London : London University Press.

⑨ D. Harvey (1969) : ibid, p. 191.

⑩ R.J. Johnston (1983) : Philosophy and Human Geography, London, Edward Arnold, p. 37-8.

⑪ A. J. Ayer (1964) : Language, Truth and Logic, 2nd Ed., London, Victor Gollancz, p. 35.

⑫ W. Kirk (1951) : Historical Geography : the concept of behavioural environment. Indian Geographical Journal 25, p. 152-60.

⑬ M. S. Samuels (1978) : 'Existentialism and Human Geography' in D. Ley & M. S. Samuels (Eds.) Humanistic Geography (Beckenham : Croom Helm), p. 22-40.

⑭ Y.F. Tuan (1976) : Humanistic Geography. Annuals, Association of American Geographery 66, p. 276.

⑮ 本文作者試譯。

⑯ Y. F. Tuan : (1974) - Topophilia, Englewood Cliffs : Prentice - Hall; (1977) Space & Place. Edward Arnold.

⑰ T. Hagerstrand (1970) : 'What about people in regional science ?' Papers, Regional Sc. Association 24, p.7-14

⑱ A. R. Pred (1979) : 'The Academic past through a time-geographic looking glass.' Annuals, Association of American Geographers 69, p. 175-180.

⑲ C. Levi-Strauss (1966) : Structual A thropology, Basic Books, New York.

⑳ D. M. Smith (1971) : 'America! America? Views on a melting Pot. 2. Radical Geography - the next revolution?' Area 3, p. 153-157.

㉑ 例如：F. K. Hare (1974) : 'Geography & Public policy: a Canadian View' Transactions, I.B.G. 63, 25-8.

㉒ J. S. Duncan & D. Ley (1972) : 'Structural Marxism & Human Geography : a critical assessment.' Annuals, Association of American Geographers 72, 30-59.

ABSTRACT

PLANNING FOR DEVELOPMENT, REDEVELOPMENT AND ENVIRONMENTAL IMPROVEMENT IN THE METROPOLITAN AREA IN HONG KONG

(Abstract of a paper presented at the Eighth Hong Kong Geography Day on March 26, 1988)

by
K.S. Pun
Assistant Director (Planning), Territory Development Department, Hong Kong Government

Many parts of Hong Kong require environmental improvement and possess potential for redevelopment and for land-use restructuring. These include the old urban districts, older parts of comparatively recent development areas and sections in the rural areas. By far the largest concentrations of these occur in the Metropolitan Area (that is, Hong Kong Island, Kowloon, and Tsuen Wan). The low environmental quality in these areas affect the living and working conditions of a very large portion of the territory's population and workers.

Attempts were made to upgrade the environmental quality in these areas. Private sector, at its own initiative and for its own purpose, has redeveloped many old properties, resulting in some degree of environmental improvemnet within the boundaries of individual projects. Government and quasi-Government bodies have also proposed a number of urban renewal schemes of various scales.

These redevelopment and environmental improvement efforts have individually succeeded in attaining their own objectives to varying extent. They have, nevertheless, encountered difficulties and consequently some of them have not achieved as much as they were set out to do.

This has been due to several factors. One of these is the lack of the necessary back-up legal authority and administrative mechanism to facilitate efficient implementation of these projects. Another main factor is the absence of an integrated comprehensively-conceived plan.

The Housing Authority had also made plans to redevelop its own older public housing estates. Many of these were not provided with sufficient facilties to meet today's needs and have very low environmental quality; some are in poor structural conditions. From every point of view, they should be redeveloped as soon as possible. They are all large-scale rental estates located mainly in the northern and eastern parts of Kowloon and in Tsuen Wan. Their redevelopment will have repercussions beyond their own boundaries and hence will call for the replanning of substantial portions of the Metropolitan Area.

On the other hand, many parts in the territory offer opportunities for new urban development. Contrary to the usual belief, such opportunities exist even in the densely developed Metropolitan Area. These consist of further reclamations from the sea and land-based sites not yet included in existing town

plans.

A study was thus commissioned to investigate into possibility of further growth and redevelopment potential in the existing urban area on Hong Kong Island and in Kowloon. This was completed in 1983. A number of new urban development areas were identified and significant redevelopment potential was revealed.

Almost concurrent with this was the study on ways to expedite the process of urban renewal. This has led to the proposal to establish, through a new ordinance, a corporation with the special responsibility of urban renewal. It is hopeful that this will be a much more effective and efficient urban redevelopment approach that any of those adopted before.

At the same time, the Territorial Development Strategy formulated in 1984 makes two principal recommendations. It proposes that steps should be taken to make land available to meet the need of economic-based strategic developments. It suggests, for instance, the reclamation of a strip of land along the northern shore of Hong Kong Island to provide land to construct office buildings required as a result of the increasing demand of commercial floor space due to the growth of Hong Kong's tertiary industry.

Similarly, to cater for the predicted growth in external trades and volumes of cargo handled, the Strategy proposes new reclamations for port expansion and extension of the rail terminal. The Strategy also identifies areas to accomodate general urban growth. After in-depth analyses, it advises that detailed studies should be undertaken on the feasibility of further reclamations at West Kowloon and Green Island, in addition to those recommend for specific purposes.

Studies on these new possible reclamations are now in progress. They will not only investigate into the feasibility of these projects from engineering and other viewpoints. They will also produce land-use plans which will, amongst other objectives, take account of the relationship between these reclamations and the needs for development, redevelopment and environmental improvement in the adjacent districts.

It is therefore necessary to have a comprehensive, integrated plan covering the whole Metropolitan Area. Known as the METROPOLITAN, this plan is one of the five subregional planning statements and is obviously the most complicated. It must take account of the intricate relationship between all new development, redevelopment and environmental improvement schemes and the problems they will generate; it is a basis for the proper coordinate of planning and development in this very complex area.

This paper examines how these will affect the overall development pattern in the Metropolitan Area. It discusses how they will modify the geography of this Area and that of the territory.

NEWS OF THE HONG KONG GEOGRAPHICAL ASSOCIATION

I. Activities Held:

1. Public Lecture

A public lecture entitled "Introduction to Geographical Information System" was delivered by Dr. Anthony Yeh, Chairman of the Hong Kong Geographical Association, on Feb 27, 1988 at the Rayson Huang Theatre, the University of Hong Kong.

2. Annual General Meeting and Extraordinary General Meeting

The 1988-89 Annual General Meeting of the Association was held at the Rayson Huang Theatre, the University of Hong Kong on Feb. 27, 1988. Minutes of the Meeting are as attached.

An Extraordinary General Meeting called to amend the Association's constitution was held right after the AGM. Minutes of the EGM are as attached.

3. The Eighth Hong Kong Geography Day

This year's Hong Kong Geography Day, its eighth since inception, was held at the Hong Kong University on March 26, 1988. The Theme of this year was "Geography and the Urban Environment". Prof. C.J. Grant, Head of Department of Geography and Geology of Hong Kong University, Prof. Gordon Cherry, Head of Department of Geography, University of Birmingham, and Dr. Anthoney Yeh, Chairman of HKGA, jointly inaugurated the opening of the one-day conference.

The programme of this year's Hong Kong Geography Day included:

(i) Dr. Peter K.S. Pun, Assistant Director (Planning), Territory Development Department, Hong Kong Government (Dr. Pun's position at the government has since then changed to Principal Government Town Planning, Town Planning Office, Buildings and Lands Department) delivered a lecture on "Planning for Development, Redevelopment and Environmental Improvement in the Metroploitan Area in Hong Kong". An abstract of Dr. Pun's paper is enclosed in this volume.

(ii) Dr. Richard T.A. Irving, Lecturer, Department of Geography and Geology, University of Hong Kong, spoke on "The Urbanization of Deep Bap: A Conflict of Interests?"

(iii) Dr. Irving led a field trip to study the "Old and Modern Tin Sui Wai".

(iv) Dr. Yeh led a field trip to the Kowloon Walled City.

4. A field trip to Hainan Island organized jointly with the Department of Extramural Studies, the Chinese University of Hong Kong was conducted on April 1 - 10, 1988. 18 members from various sectors (including education, business and professional sectors) took part in the field trip. Seminars, official visits and sight-seeing have been arranged for the participants. A slide show on the development of the island will be arranged at 3 pm., June 4, 1988 in 14/F, 67 Chatham Road South, Kowloon (i.e., the Extramural Department of the Chinese University).

5. HKGA and World Wide Trend for Nature Hong Kong jointly organized a project on "the Production of Environmental Worksheets for Geography Teachers. A field day was held on April 23, 1988.

6. A second seminar on Junior Form Geography Curriculum ogranized by HKGA was held at Pentecostal College on April 30, 1988. The theme of the seminar was the Form I - III geography curriculum. About thirty teachers from more than twenty schools took part. The programme was divided into two parts: a talk and a workshop. The talk was delivered by Mr. C.C. Lam, Mr. K.F. Wong and Miss Gloria Leung. In the workshop session participants were divided into a number of groups. The participants were active in raising questions and the discussions were highly lively.

II. Forthcoming Activities

August 2 - 5, 1988

An International Conference on the Environment and Spatial Development of Pearl River Delta jointly organized by HKGA and the Guangdong Geographical Association will be held at Zhongshan University, Guangzhou. For further information, please see the attached advertisement and infomation brochure. Members are encouraged to attend the Conference.

Mid-October, 1988

An Exhibition on "Geography of China and Tourism" will be held at the Shatin City Hall in mid-October, 1988. 12-15 schools/colleges have been selected by the Organizing Committee to take part in the event. A large scale map exhibition will be considered to take place at the same venue. The Committee is now at the stage of discussing details of the exhibition with the participants and collecting the funds raised. Those members who are interesteds in this activity and would like to make contributions to it please contact Mr. C.W. Yuen, chairman of the Organizing Committee. (Tel. 3-3977123)

MINUTES OF THE FIRST EXTRA-ORDINARY GENERAL MEETING OF THE ASSOCIATION FOR THE 1987-88 SESSION HELD ON SATURDAY, 27 FEBRUARY 1988 AT 11.30 A.M. AT THE RAYSON HUANG THEATRE OF THE UNIVERSITY OF HONG KONG

The meeting was chaired by Anthony G.O.Yeh. The following amendments to the Constitution of the Asociaation were accepted, as proposed by L.M.Wang and seconded by N.K.Leung:

1 Under Article 3 of the Constitution, add "F: Student Membrship: On the payment of the annual subscription Student Members shall have all the rights as the Full Members in manner specified in the Regulations listed under A excepting (iii) and (v). Student Members shal also have the right to receive notices of and to attend the annual General meeting but without the right to voting. Only full time students can becoae Student Members."

2 Article 4 shall read "The Executive Committee of the Association shall consist of the Officers, Iamediate Past Chairman," and Honorary Representatives as shall be prescribed in the Regulations. The Committee is empowered to arrange the business and conduct of the Association in accordance with the aims prescribed in Article 2."

3 Article 6 shall read "The Chairman of the Association, who shall also be the Chairman of the Executive Committee, shall be elected at the Annual General Meeting, and shall have been an Officer for at least one term."

4 Regulation 1 shall read "Any person may becoae a Life Member of the Association on payment of a composition fee equivalent to 20 times of the annual subscription for Full Membership currently in force."

5 Regulation 4 shall read "The annual subscriptions, which may be changed from time to time by a two-thirds majority vote at any General Meeting, for the various categories of membership shall be as follows:

Full Memberhsip	$ 80.00 per annum
Joint Membership	$120.00 per annum
Corporate Membership	$160 00 per annum
Student Membership	$ 60.00 per annum.

6 Regulation 6 shall read "A person whose membership has lapsed, aay apply for re-adaission to the Association."

7 Regulation 7 shall read "The Executive Committee shall consist of the Officers, the Iamediate Past Chairaan, and Representatives from other institutions."

8 Regulation 11 shall read "No officer of the Executive Committee shall be permitted to continue to be in office for more than three consecutive terms."

9 Regulation 25 shall read "The Honorary Secretary shall give at least ten day's notice for all General Meetings, to all members residing in Hong Kong. Such notice shall state the agenda and specify date, time and place of aeeting."

As there was no other business, the meeting was adjourned at 12.00 noon.

Prepared by Confirmed by

Wang Liang-Huew
Hon. Secreatry

Anthony G.O.Yeh
Chairman

MINUTES OF THE ANNUAL GENERAL HEETING OF THE ASSOCIATION FOR THE 1987-88 SESSION HELD ON SATURDAY, 27 FEBRUARY 1988 AT 12.00 NOON. AT THE RAYSON HUANG THEATRE OF THE UNIVERSITY OF HONG KONG

The meeting was chaired by Anthony G.O.Yeh. The following items were discussed:

1 The minutes of the annual general meeting for the 1986-87 session held on 14 February 1987 were confirmed without amendment. The confirmation was proposed by Leung Yee and seconded by Kiran Singh.

2 The Hon. Secretary's Report for 1987-88 was accepted without amendment. The acceptance was proposed be Yeung Pui Ming and seconded by Pun Kin Shing.

3 The Hon. Tresurer's Report for 1987-98 was accepted without amendment. The acceptance was proposed by Li Si Ming and seconded by Li Kwai Fong.

As there was no other business, the meeting was adjourned at 12.30 p.m.

Prepared by Confirmed

Wang Liang-Huew
Hon. Secretary

Anthongy G.O.Yeh
Chairman

International Conference on Environment and Spatial Development of the Pearl River Delta

August 2-4, 1988

Conference Notice

Organizers : Guangdong Geographical Society
Hong Kong Geographical Association

Venue : Geography Department, Zhongshan University, Guangzhou

Conference Main Themes :

- Environment and Ecology: Structure and Dynamics
- Industrial Structure: Changes and Impacts on Social and Economic Development
- Urbanization: Trends and Problems
- Spatial Interaction Between Hong Kong, Macau and the Pearl River Delta
- Other Issues of Pearl River Delta Development

Conference Language : Chinese with English interpretation during the Conference

Pre-Conference Field Trip : August 1, 1988, afternoon (field trip to study new urban development projects in Guangzhou)

Post-Conference Field Trip : August 5-6, 1988 (field trip to study the environment, agriculture, and industrial and urban development of the Pearl River Delta)

Accommodation : Guest House of Zhongshan University, Guangzhou

Conference Fees :

REGISTRATION - HK $300 *(excluding meals and accommodation)*

PRE-CONFERENCE FIELD TRIP - HK $30

POST-CONFERENCE FIELD TRIP - HK $260 *(including meals, accommodation, and transport)*

Closing Date of Registration : June 15, 1988

Conference Secretariat

Mr. Xu Xueqiang
Geography Department
Zhongshan Univeristy
Guangzhou
People's Republic of China

Dr. Anthony Yeh
Centre of Urban Studies and Urban Planning
University of Hong Kong
Hong Kong

You are most welcome to participate in the Conference
Please contact Conference Secretariat for Registration Form

NOTES TO CONTRIBUTORS

The Hong Kong Geographer is published on a quarterly basis by the Hong Kong Geographical Association. The journal welcomes full-length articles, research notes, and comments and opinions on current development of Geography both in Hong Kong and abroad and the teaching of Geography at the secondary level. It also welcomes book reviews and field trip guides and publishes news of schools, colleges, universities and research institutes which may be of interest to Hong Kong's geographers. Articles may be written in English or Chinese. In the latter case, the editorial board reserves the right to ask the author to submit a typewritten copy or to bear the cost of typesetting. Very tight financial restraints render this necessary.

All articles are to be submitted to:

Dr. Li Si Ming
Chief Editor, Hong Kong Geographer
c/o Department of Geography
Hong Kong Baptist College
224 Waterloo Road
Kowloon Hong Kong