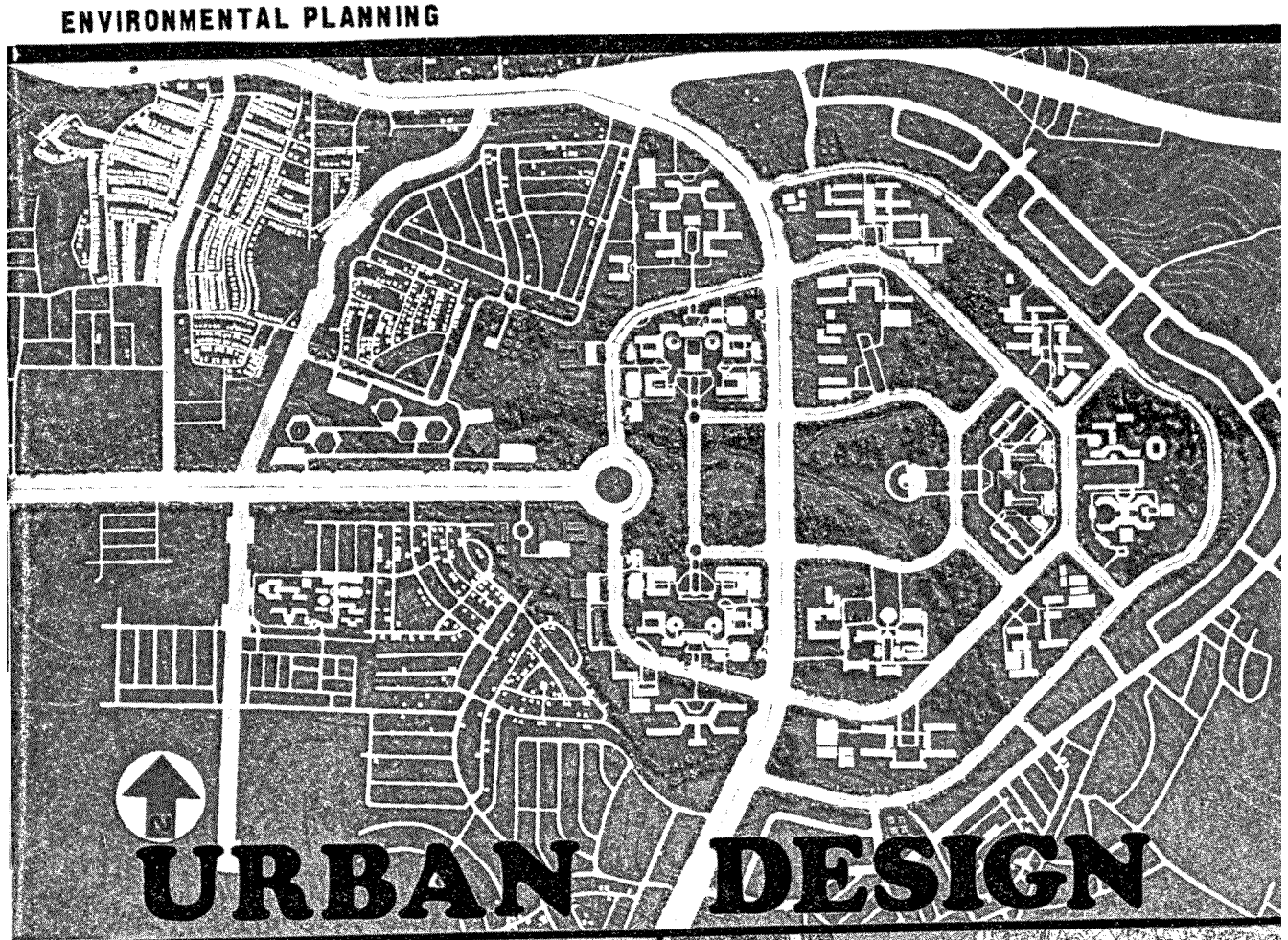
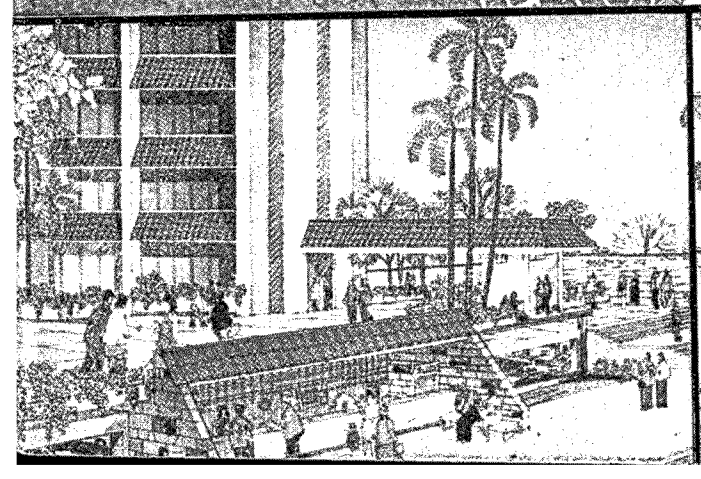
# PHILIPPINE PLANNING JOURNAL

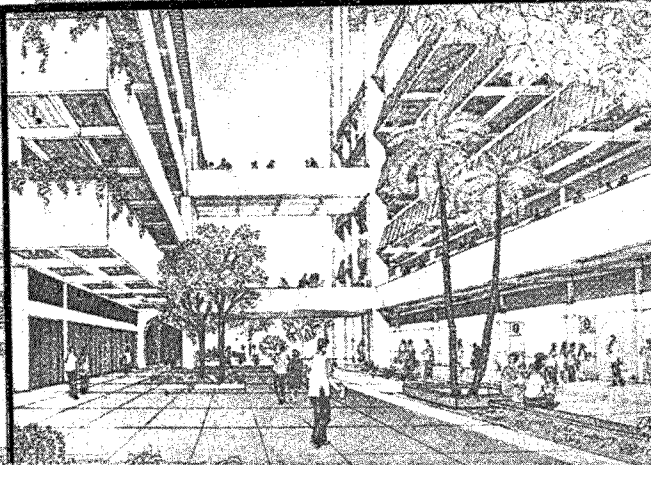
INSTITUTE
OF
ENVIRONMENTAL PLANNING

Vol. IX, No. 2, April 1978
Vol. X, No. 1, October 1978



## URBAN DESIGN





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The *Philippine Planning Journal* is published in October and April by the Institute of Environmental Planning, University of the Philippines. Views and opinions expressed in signed articles are those of the authors and do not necessarily reflect those of the institute. All communications should be addressed to the Business Manager, Philippine Planning Journal, Institute of Environmental Planning, University of the Philippines, Diliman, Quezon City, Philippines 3004.

Annual Subscription Rate: Domestic, ₱12.00; Foreign, $8.00.
Single copies: Domestic, ₱6.00/copy; Foreign, $4.00/copy.
Back issues: Domestic, ₱8.00/copy; Foreign, $6.00/copy.

PHOTO CREDITS

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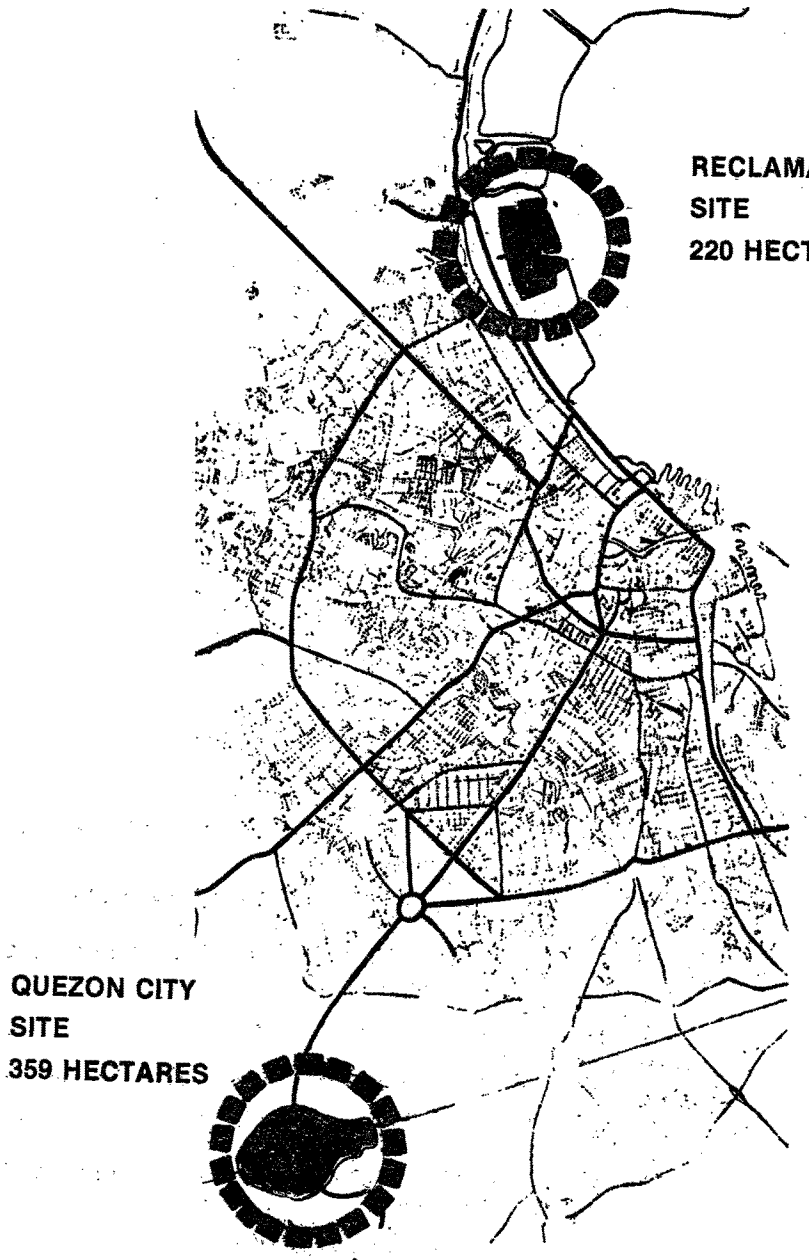

RECLAMATION
SITE
220 HECTARES
QUEZON CITY
SITE
359 HECTARES

# THE PROJECT

# THE NATIONAL GOVERNMENT CENTER*

COMPTECH ASIA

## Background

The concept of the National Government Center (NGC) emerged out of a desire to establish an administrative and political center for the Filipinos, where national government offices could be clustered by functions to effect greater efficiency and economy.

Two sites were selected for the National Government Center. One is at the Manila-Cavite reclamation area, which consists of 220 hectares, and where all government agencies involved in policy-making, foreign relations and financial matters, such as the Office of the President, NEDA, the Ministries of Finance, Trade, Industry, and Foreign Affairs will be located. The other site is at the Constitutional Hill in Quezon City, an area of 359 hectares, where all government agencies performing line functions and sectoral programs will be situated. The grouping of agencies was based on their functional linkages and on the criteria drawn up by the Project Planning Development Office of the Ministry of Public Works, Transportation and Communication.

As envisioned, a light rail system, which is planned to service the Metro Manila area, will link the two sites together as well as with other centers of the area.

## CONSTITUTIONAL HILL SITE

### *Approach to Physical Development*

The physical plan of the National Government Center at Constitutional Hill was based on the original plan prepared by the Bureau of Public Works in the early 1950's. Existing land uses have been retained in the new plan by dovetailing them with proposed developments. Peripheral and inner vehicular access loops are laid out following the original interior access. Even the existing 12-storey steel superstructure, which was erected in 1955, is utilized to the fullest by incorporating it in the design of the Batasang Pambansa Complex.

The boundaries of the outer periphery of the site were determined based on an aerial photograph made on 30 October 1976. These boundary lines are extended up to the edge of existing built-up subdivision so as to include only the relatively undeveloped areas in the proposed expansion.

To emphasize the focal points and the symmetrical composition of the National Government Center, Republic Avenue is proposed to form a heavy east-west axis which will divide the site into two and intersect with the North-South main highway —the Don Mariano Marcos Avenue. Along this major axis is aligned a long stretch of

**Project Design*

| | |
|---|---|
| *Coordinator:* | Comprehensive Technical Services of Asia, Inc. (COMPTECH ASIA) |
| *Lead Firms:* | Research and Planned Development Systems, Incorporated (REAP)<br>FELIPE M. MENDOZA and Associate (FMMA) Architects-Planners |
| *Participating Firms:* | Spaceconsult, Madecor, Trans-Asia ( Phil.), DCCD Engineering Corp. |
| *Client:* | The Government of the Republic of the Philippines |
| *Executing Agency:* | The Ministry of Public Works, Transportation and Communications (MPWTC) |
| *Project Manager:* | National Government Center Project Implementation Office (NGC-PIO) |

open space—a Central Park which is intended to provide a scenic view of the proposed monument, the Batasang Pambansa, and other buildings clustered around the area.

The Constitutional Hill site will be made accessible to other surrounding areas by means of efficient road arteries. On the north, it will be linked to Novaliches, on the east to Marikina Valley with its potential residential areas, on the south to Manila's commercial, financial and cultural centers, and on the west to Bulacan's industrial land residential areas. The proposed C-4, C-5, and C-6 road arteries will link the site to the Manila-Cavite Reclamation Site.

### *Development Zones*

The National Government Center consists of an orderly arrangement of buildings and structures housing the essential functions of a government center. The planning area may be divided into four development zones based on general function groupings. These development zones with distinct characteristics are unified by a loop road network, a landscaped design that enhances visual linkages, and an architectural character that reflects the image of a National Government Center.

### *ZONE I: The Central Park*

The Central Park, located along the main spine of the National Government Center, is a wide stretch of open space, 133 hectares in area, extending from the Republic Avenue to the Batasang Pambansa.

One of the distinct elements of the Central Park is the monument, which gives the Batasang Pambansa Complex an appropriate foreground. Another prominent feature of the Park is the multi-level lagoon that forms a "Y" shape within the central area. Starting as two small waterfalls flowing down on both sides of the Batasang Pambansa and the monument, it merges near the Don Mariano Marcos Avenue. This water body, which also supports marine life, enhances the natural setting of the whole complex.

### *ZONE II: The Inner Ring*

This zone, shaped like an arch, is bisected on two sides by the Central Park. Three distinct building clusters are thus formed—the Batasang Pambansa Complex and the two building clusters for the constitutional bodies.

The Batasang Pambansa Building is the focal point of the National Government Center, and its prominence is achieved by making it the tallest structure within the center. On both sides are the constitutional bodies—the Supreme Court and COMELEC on the north, and the Commission on Audit and Civil Service Commission on the South. The grouping is based on the analysis of the functional relationships existing among the relevant government agencies, and therefore has the advantage of promoting efficient interaction between related agencies.

### *ZONE III: The Outer Ring: The Implementing Bodies*

This outer ring of development encircles the first two zones. It features a landscape design that unifies the different building clusters within it, and enhances linkages with other zones. Within this zone are the implementing bodies, namely: 1) Ministry of Education and Culture, 2) Ministry of Social Service and Development, 3) Ministry of Local Government and Community Development, 4) Ministry of Health, 5) Ministry of Youth and Sports Development, 6) Ministry of Agriculture, 7) Ministry of Natural Resources, 8) Ministry of Public Works, Transportation and Communications, 9) Ministry of Public Highways, 10) Ministry of Energy, 11) Ministry of Environment, 12) Ministry of Agrarian Reform, 13) Ministry of Labor, and 14) Ministry of General Services.

The allocation and clustering of these agencies within this development zone is likewise based on the analysis of functional relationships among them through the use of an interaction net.

### *ZONE IV: The Fringe Areas: The Support Facilities*

These fringe areas include support facilities that are located on the north, south, east and west portions of the site.

A MERALCO substation will service the northern half of the NGC. It has an area of one (1) hectare and will be serviced by the outermost vehicular access loop.

Another MERALCO substation will service the southern half of the Center. It has also an area of one (1) hectare.

An Interaction Center, a country clubhouse overlooking the Marikina Valley, will be located at the eastern fringe area. This is where informal meetings or caucuses among officials can be held.

The western fringe area will contain the motorpool, police and fire station, chapel, shopping and recreation center, infirmary, and sewage treatment plant. The facilities will serve not only the NGC but the surrounding housing subdivisions as well.

The support facilities are appropriately located in such a way that they cater to the needs of their users efficiently without interfering with the normal functioning of the whole NGC.

### *Movement System Concepts*

Three modes of movement are incorporated in the design: one is by public transit system and private vehicle; another is the bicycle mode purposely provided for employees living in the communities surrounding the center; and the third is the pedestrian mode through the use of covered walks and landscaped spaces between office buildings and between building clusters.

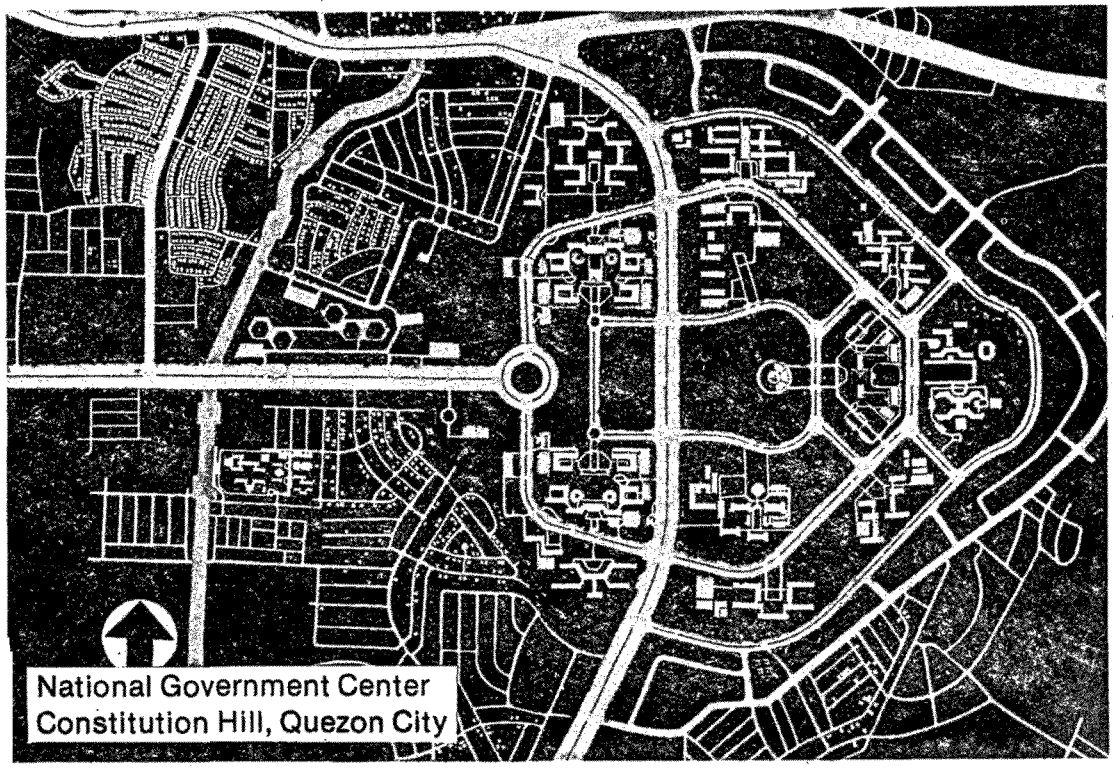
Public vehicular movement will be by means of rapid transit through the Don Mariano Marcos Avenue and the Republic Avenue. Local shuttle buses will be confined along the secondary road network.

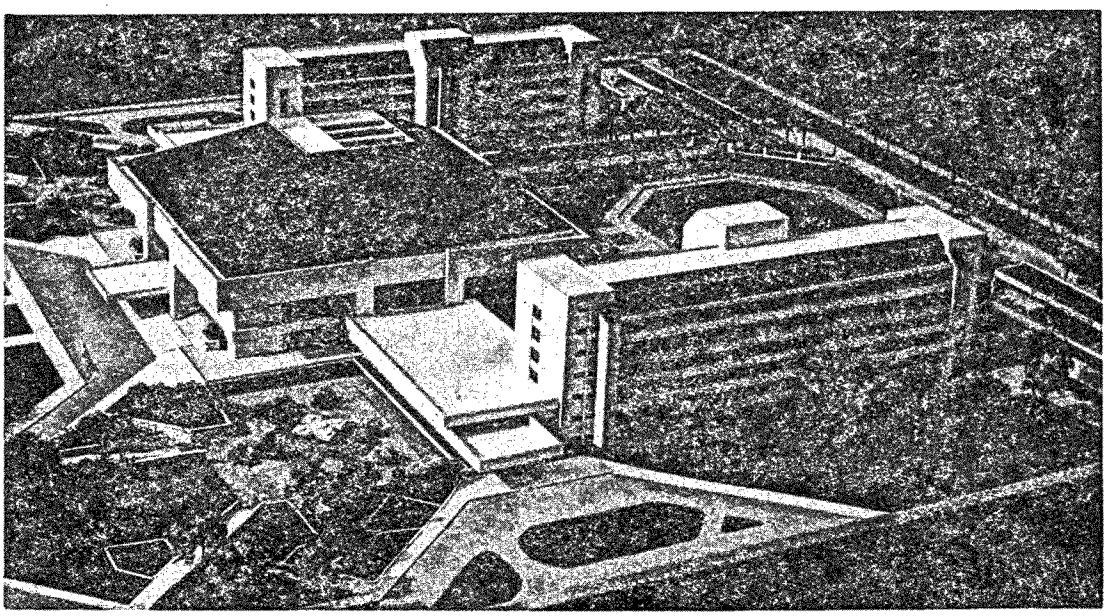
Bicycle lanes will be provided along all primary and secondary roads. Bicycle circulation will extend into the public park system and courtyards within the building cluster.

Vehicular service will be through a system of driveways and parking on the level below the podium of office buildings. Podium level will be pedestrian-oriented.

### *Open Space System: Ecological Design*

The open space system bears more than just significance when it is linked with the concept of a metropolitan park system. The Constitutional Hill open space provides a high level of environmental protection. The provision of extra open space into the area is based on value judgment, especially because the Constitutional Hill site is an inland





*The Batasang Pambansa Building Complex Model*

and highland area where environmental and ecological balance is critical.

The site features landscaping designed in such a way that it becomes the natural habitation of birds and some animal species. Trees and shrubs are so selected that their blooming period coincide with the sessions of the Batasan Pambansa.

Its accessibility can easily attract park visitors so much so that its excessive use could be detrimental. To counteract the possible negative effects of concentration of park users, stricter environmental control will be instituted.

### *Security Plan*

The crime and security problems arising from the development cannot be solved simply through augmented police force or firepower. Security can be achieved in two levels: first, by sophisticated monitoring equipment located in the office and building clusters which will be connected to a central communication monitor; and second, by natural surveillance methods.

Architectural design can show that a public space is the shared extension of the private realm of a group of individuals. The design makes it possible for both user and stranger to perceive that an area is under the influence of a particular group.

The incorporation of amenities and facilities within these defined zones of influence will reinforce natural surveillance because of the presence of people. Patrolling public areas continually can have an effect of securing a peaceful environment. Surveillance also has a demonstrable effect of reducing fears and anxiety of people. The feeling that an area is secure will encourage people to use it more often, and thereby improve its security by providing the safety which comes with intensive use.

### *Batasang Pambansa Building Complex*

The Complex is the first priority building at the National Government Center, it being the seat of policy making and the nucleus of vital functions and activities of the government. Its location has a panoramic view of the Novaliches Reservoir on the north, the Marikina Valley on the east, and the housing subdivision around it. Government agencies that have related functions with it are placed near the Complex to facilitate communication and business transactions. Its encircling avenue provides vehicular and pedestrian access to this summit, thus, ensuring a smooth traffic within and outside the Complex.

The Complex is composed of a cluster of three structures: the Main Assembly Hall with committee wings, and two 6-storey

office wings flanking it on both sides. These office wings were constructed by utilizing the existing 12-storey skeletal structure erected at the site way back in the 1950's for the proposed legislative building, the construction of which did not materialize.

Within the constraints of the existing structure, a modular design was adopted, such as the use of standards sizes for windows, wall paneling and partition, and other building components.

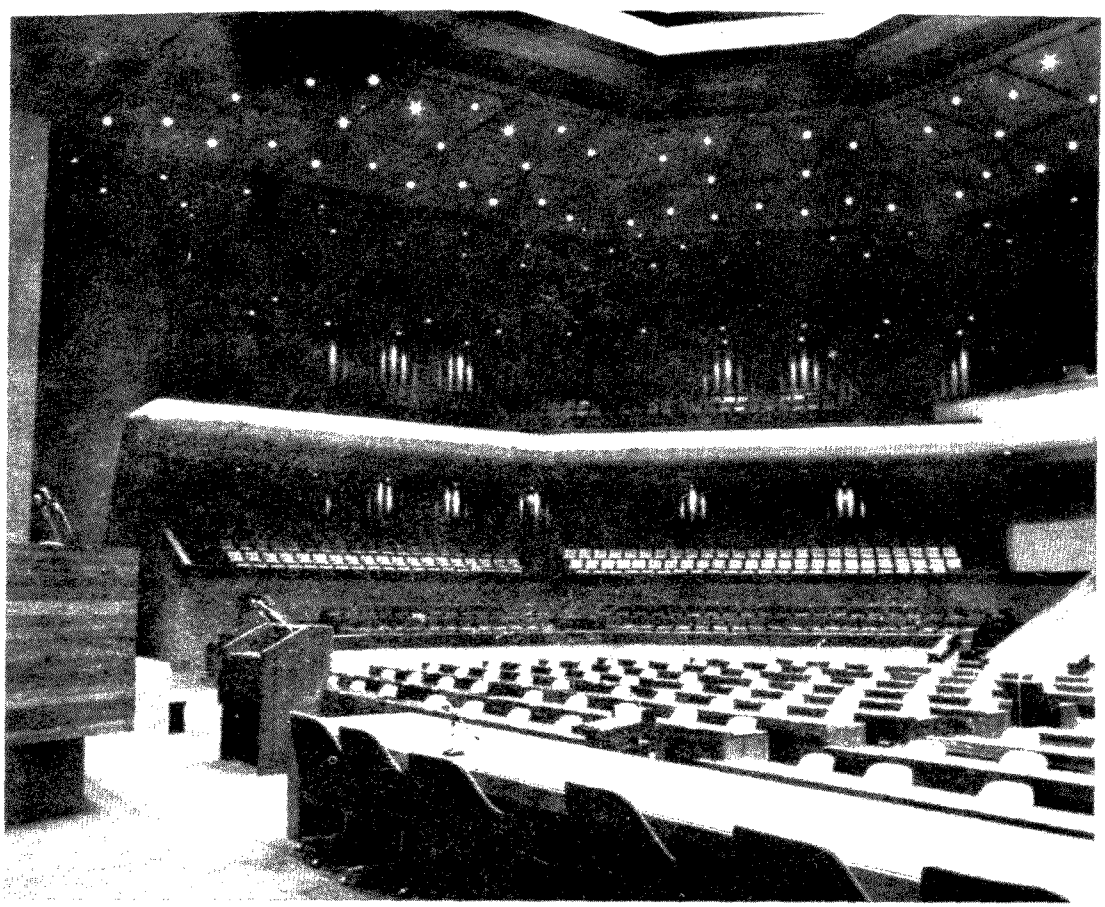
### *The Design*

The main session hall can accommodate 200 Batasan members, some 1,500 observers in three-level galleries, and about 800 "standing audience". The Session Hall is linked on two levels with the six-storey office wings for the convenience of the Batasan members.

The Prime Minister's Office has direct access to the Main Session Hall. He is provided with a caucus room immediately behind the Session Hall for huddles whenever these are necessary.

Sixteen committee rooms are provided for committee meetings and public hearings and a lounge to provide the Batasan members a place for relaxation during session recess.

The office spaces are designed to minimize unnecessary outside disturbances and maximize communication. Natural ventilation is assured by utilizing office partitions that are open at the top and wide concourses that will allow fresh air to circulate through the corridors into the offices. These corridors shall, at the same time, serve as overflow area for the estimated 4,000 people who will be working and transacting business in the building complex. Except for the Main Assembly Hall, both the two 6-storey office wings are naturally ventilated. Provisions for a central air conditioning system was also taken into account. Likewise, no elevator is installed at present, but a shaft for future vertical access from the ground to the sixth floor was provided.



### Conclusion

The planning of the NGC, like other major projects of the government, was conceived within the framework of the country's overall goals for national development. Apart from its symbolic significance, the center is geared towards promoting one of the basic development policies of the government which is embodied in the Development Plan of the National Economic Development Authority, and that is the continuous pursuit of efforts at streamlining the administrative machinery for coordinated planning and developments through effective concentration of government offices.

The two-center scheme was decided for the following reasons: 1) the scheme would promote the policy of dispersed concentration of major activities, where functionally-related offices would be clustered in two sites which are readily accessible to their clients; 2) traffic congestion would be alleviated because of strategic locations of the two Complexes; and 3) based on planner's evaluation of the advantages and disadvantages of having a single site against more than one site, the latter was found to be more beneficial.

As a whole, the physical development of the National Government Center is expected to have the following results:

1. it will enhance and provide new dimensions to the present role of the MMA, thereby making the area the national center of major public and private decision making;
2. it will influence private and governmental decisions regarding land uses which will later determine the future patterns of land development in MMA; and
3. it will influence major public infrastructure investment in MMA, since the center sites will be provided with efficient transport services, utilities, and community services.

## *NATIONAL GOVERNMENT CENTER*

### *Manila Reclamation Site*

| | |
|---|---|
| Total Employee Population | Year 2000 – 48,000 |
| Total Office Space | Year 2000 – 483,000 sq.m. |

| | Area | Percentage |
|---|---|---|
| Executive Island | 40.74 has. | 18.62% |
| Security Housing and Buffer Zone | 37.03 has. | 16.92% |
| Office Building Cluster Zone | 121.21 has. | 55.40% |
| Main Highway | 10.19 has. | 4.66% |
| Waterways | 9.63 has. | 4.40% |
| Total | 218.80 has. | 100.00% |
| Say | 220.00 has. | |

### *Constitution Hill, Quezon City*

| | |
|---|---|
| Total Employee Population | Year 2000 – 69,000 |
| Total Office Space | Year 2000 – 692,000 sq.m. |

| | Area | Percentage |
|---|---|---|
| Office Building Cluster Zone | 188 has. | 52.4% |
| Public Park | 46 has. | 12.9% |
| Main Road Artery with NGC | 35 has. | 9.7% |
| Non-Buildable Areas | 33 has. | 9.2% |
| Waterways | 17 has. | 4.8% |
| Commercial Zone | 40 has. | 11.0% |
| Total | 359 has. | 100.0% |

# TRAFFIC PROBLEMS IN MANILA FROM A CITY PLANNER'S POINT OF VIEW

**Prof. Dr.-Ing. Dieter Mark Dückert**
*City and Regional Planner-Architect*

## Introduction

Surprisingly, there are still opposing opinions about whether or not there is a serious traffic problem in the metropolis. Indeed, the extreme patience and the resourceful adaptability of the Filipino to worsening conditions could easily lead one to the conclusion that there is none. Also, those who are otherwise in a positon to induce changes are much too inclined to assess the situation from their personal experiences but which are not typical. There is also a strong belief that intensive traffic is an indicator of general progress, and since mobility has been officially proclaimed as a basic human need, this could contribute to the misconception that traffic is a value of its own and not necessarily a prerequisite for the utilization of the full choice of opportunities which the conurbation should offer to its inhabitants to enhance the quality of their lives.

At any rate, with the exception of occasional incidence of catastrophic events, urban traffic is largely accepted by the majority as it is.

Relatively little pressure is exerted on politicians to bring about drastic changes which are badly needed. On present trends, the cities of the developing world risk to repeat, and in an exaggerated manner, the shortcomings of urban transport and urban physical patterns of the cities of the developed world.[1]

In one way or another, the economy of the metropolitan area is affected by an enormous daily loss of manpower caused by traffic. Travel times of one to two hours per trip are the rule for the majority of employees. Even if people manage to be at the jobsite on time, the lengthy exhausting trips will considerably reduce their professional efficiency. At any time of the day, business transactions, meetings or deliveries of goods will be subjected to unproductive delays and will therefore need to be given extra time allowance.

Proportionate to the sacrifice of human resources is the inconceivable squander of gasoline caused by extremely slow moving urban traffic, and the inadequate utilization of car stock (especially in public transportation). In a country where the human settlements approach is the main concern of the authorities, the various impacts of traffic on the quality or urban environment have to be given attention. The concentration of pollutants in traffic-congested areas has long reached limits which pose a serious threat to public health.The same is true with traffic noise. The most crucial aspect, however, is the continuous danger to life and property of inhabitants that arises when the internal communication between residential areas and their traditional facilities is cut off by heavy and inadequately routed through-traffic.[2] All these intrusions of traffic into

[1] *Urban Transport*, Sector Policy Paper, World Bank, Washington D.C., 1975, p. 4.

[2] Colin Buchanan a.o., *Traffic in Towns*, a study of the long term problems of traffic in urban areas Steering Group and Working Group appointed by the Minister of Transport. Her Majesty's Stationery Office, London, 1963, p. 222.

urban environment are incompatible with the proclaimed concept of the City of Man where people are supposed to live in safety, dignity, and self-fulfillment. Hence, it can no longer be a question of whether there are traffic problems or none. There are!

The various technical and organizational means to solve them are known. And several sectoral measures, in fact, have been implemented in the metropolis, mainly in the field of civil engineering, e.g., road construction and interchanges, grade separation; and traffic management, e.g., traffic efficiency program, traffic guidance, truck ban, and law enforcement campaign. However, it seems that most of these undoubtedly appropriate actions and programs have not brought about the expected alleviation, although similar solutions, obviously, are being successfully applied in different parts of the world.

From my observations, there are three basic reasons for the apparent failure of the efforts to solve traffic problems which have been made so far.

Firstly, particular measures have not been carried out properly. For example, the construction of a wide road will bring about little improvements if it is not properly connected with the other high capacity components of the urban street network. Neither will traffic management campaigns be of much effect if these are not continuously monitored and adjusted to local conditions.

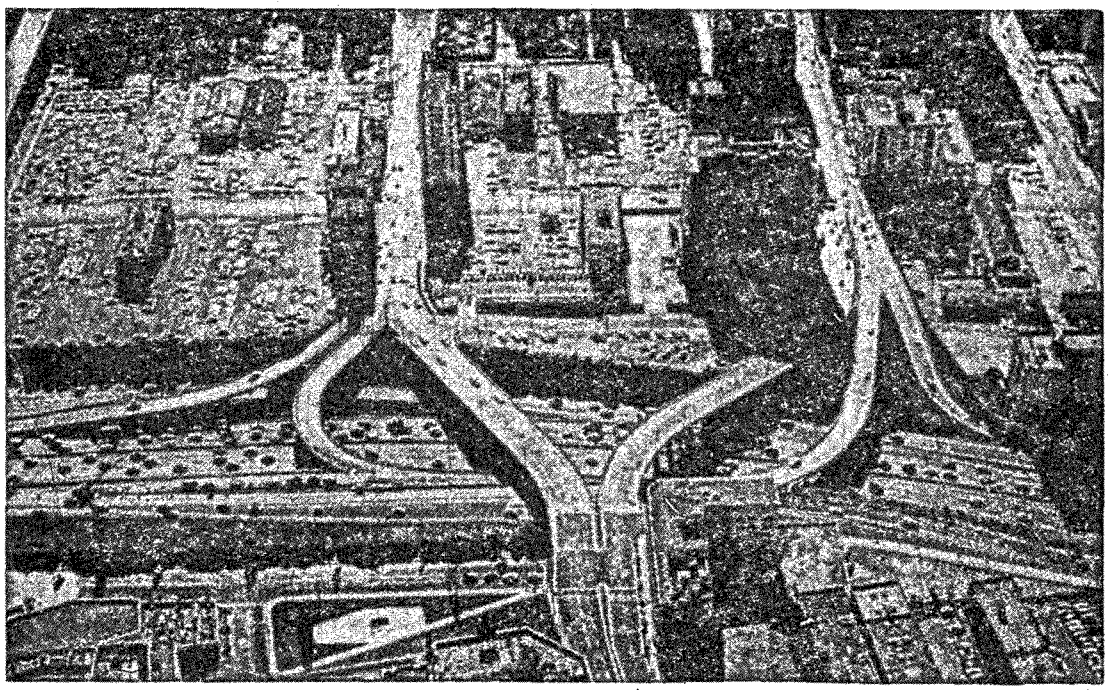
Secondly, the complexity and magnitude of urban traffic problems, specific counter actions will not have considerable effect if not backed up by and coordinated with other related measures.

Thirdly, approaches to solve the traffic problem have been unilaterally focused on attempts to accommodate and to ease traffic in its existing volume and nature (accommodating approach), whereas little consideration has been given so far to possibilities of reducing or even eliminating traffic jams.

Indeed, this preventive approach requires the inclusion of sectors which have hardly been activated for the particular purpose of improving the traffic situation in the metropolis. Whereas the conventional accommodating approach is mainly associated with measures in the sector of traffic engineering and traffic management, the preventive approach will require various actions which can be attributed to three sectors, namely: change of lifestyle and habits; development of public transportation; and urban planning.

In the following sections, the most outstanding measures from the sectors are discussed, their specific effects, the prerequisites under which such effects may be expected, and how they are interrelated to each other.

*The do-nothing forecast*



*A questionable equilibre between circulation area and buildable area (Los Angeles)*

SECTORAL MEASURES

**1. *Traffic Engineering***

The construction of wider roads, interchanges, flyovers and underpasses is commonly believed to be a main remedy to traffic problems. However, provision of more and more convenient space for automobiles will only create higher traffic loads and the steady increase of vehicles per inhabitant might very well result in a situation which is worse than before. This is because motorists have the tendency to spend more or less a fixed amount of time per day on the road (travel time budget)[3] Thus, if driving becomes more convenient, the mileage will be increased.

Luckily, the budget for road construction is limited; otherwise, urban buildable land would be increasingly converted into traffic areas until, eventually, a questionable *equilibre* would be established forming patterns which no longer deserve the designation "city."

Nonetheless, there is no doubt that within reasonable limits, improvements and expansion of the metropolis' road-network are needed. The main concern should be the upgrading of undersized components (bottlenecks) of the main arteries in accordance with a comprehensive street hierarchy and the integration of these arteries into a systematic street network which is so interconnected as to suit the kind and intensity of land use in that particular area. A properly developed main street system would normally keep through-traffic away from the secondary (residential) street categories, leaving them as a reserve for occasional bypasses of traffic congestions caused by accidents, and the like. These are prerequisites, at the same time, for efficient large-scale traffic management actions. However, no matter how many lanes may be added to a certain street segment, it can accommodate only as much traffic as the next intersection is able to absorb.

It should be noted that grade separation is not the only solution. A crossing on grade level can process a remarkable load if segregation lanes, sufficient in number and length, can be installed.

[3]Wolfgang Heinze, Spatial Development and Transport Generation Understood as a Multi-dimensional Distribution Problem. Paper presented at the International Seminar on New Approaches to Local Transport Planning in Conurbations, Berlin-Tegel, 6 to 19 June 1977. Deutsche Stiftung Für Internationale Entwicklung, Berlin-Tegel, 1977, p. 4, 8ff.

When new streets are to be planned, or when existing streets are to be reshaped, consideration should be given to the precise vertical alignment to avoid flooding. It will add little to the construction costs, but will ensure that the theoretical capacity of a profile will really be usable at all times, provided that a fairly efficient drainage is installed.

It is almost needless to mention that proper surface conditions of roads can contribute to smoother traffic flows and to a lessening of accidents.

**2. *Traffic Management***

The basic objective of traffic management is the optimum utilization of the existing street network by proper organization of traffic. Large-scale traffic organization, in turn, requires the aforementioned categorization of streets and systematization of street network. Traffic management comprises a variety of specific measures, the effect of each of which is multiplied by the additional application of others. The more common elements of traffic management are still spot traffic guidance (traffic lights/policemen) and traffic routing (one-way directions), both temporary or permanent. Their efficiency depends largely on the extent to which they are governed by an overall strategy which, in turn, should be based on currently updated traffic surveys.

Unattended automatic traffic lights are not suitable means of control for heavy traffic loads. Traffic aides, even after adequate training, tend to have a too limited view of the scenario in their vicinity to be able to efficiently direct traffic. Traffic management can be made much more efficient if it is integrated into a comprehensive traffic monitoring and control system. The advantage of such a system is not so much the control of the regular traffic flows, which might as well be done by a computer, as in its ability to react instantaneously and comprehensively on various disturbances which are continuously threatening to affect daily traffic patterns.

The system which consists of an information network by which all strategic points are monitored—a center with a well-trained staff of controllers and a communication network by which stationary or mobile police units are instructed—coordinates traffic flows on intersections and advices, if necessary, the utilization of bypasses (temporary routing).

Unlike computerized systems which coordinate traffic lights in a certain street or area, the system itself is extremely flexible in various aspects. It can be adjusted to any gradual change or expansion of the urban structure as well as to temporary conditions caused, for example, by special events like international congresses or exhibits which create heavy additional, irregular traffic flow. Through cooperation with local radio stations traffic advices can even be transmitted immediately to motorists in the area of concern, while detours around notorious traffic congestion points can be coded for faster and more reliable instructions. At any rate, the system's success will depend on thorough training of the involved personnel and on the existence of alternatives in the road network.

In Hannover and several other German cities this monitoring and guidance system has been developed to the highest efficiency over the past twenty years as an alternative to excessive road construction.

A different way of reducing or eliminating some negative effects of traffic is the imposition of various kinds of restrictive measures. However, three questions should be discussed before any restriction is applied. Firstly, what is the specific purpose for which a restrictive measure is envisioned? Possibly, in order to straighten out peak traffic loads; for protection against undue environmental stress; for traffic decongestion in or around high intensity commercial areas; or generally, for improving traffic flow.

Secondly, does the benefit achieved for one social group justify the inconvenience or disadvantage of another group of citizens? "It seems to us," the Buchanan Report states, "a questionable ordering of social priorities that one group of people should find their established amenities ruined in order to enable another group of people to use their cars for optional purposes."[4] Thirdly, can the restriction be en-

[4]Colin Buchanan a.o. p. 197.

forced reliably? A wide choice of measures allows the authorities to apply adequate restrictions for specific purposes under particular local conditions.

Since, in most cases, it would not be appropriate to impose absolute restrictions, distinctions have to be specified in any of the following ways or combinations thereof: by type, weight or operator of vehicles; by kind or purpose of traffic; by time or weekday; by maximum and/or minimum actual or rated speed; and by taxation or fees (area licensing).

For the heavily congested core areas of the metropolis a restriction of private cars at certain hours and weekdays, which could be kept flexible to individual needs through cordon pricing, seems to be the most suitable solution at hand.[5] However, it will not serve its purpose and will impose an undue hardship on car owners unless an acceptable choice is offered in public transport. Another difficulty is that a clear cordon of points cannot be determined if no circumferential roads are offered as alternatives to heavy traffic, including long-haul public transport unnecessarily plying the roads of core areas.

This section would not be complete without mentioning the aspect of law enforcement which could, in fact, be one of the most efficient and least expensive ways of counteracting the traffic problem even with the present road network, incomplete as it is. To generally blame the public for its lack of discipline appears to be too great a simplification. In fact, it is just the unconventional behaviour of motorists which often proves to be the only way out of a traffic dilemma. On the other hand, undue behaviour reflects the traffic participants' deep frustration over the fact that, seemingly, nothing is being done.

The previous section dealt with the question of accommodating existing traffic more efficiently within the given urban infrastructure. In the following part, possibilities of reducing or substituting traffic movements will be discussed.

[5]Freeman Fox and Associates, MMETROPLAN: Metro Manila Transport, Land Use and Development Planning Project *Final Report*, Main Volume. Dept. of Public Works, Transportation and Communications, Quezon City, 1977, p. 41, 5/22, 8/12.

### 3. *Lifestyle and Habits*

Travel time budget, the daily amount of time which people are willing to spend for transportation, and the purposes of their usual rides reflect a deeply rooted value system. In a country where on one hand, personal interrelationships both in business and private play an extremely important role and, on the other hand, where time is not as highly appreciated as in western countries, traffic in urban agglomerations necessarily must become heavy. Moreover, due to abundance of cheap manpower it is a habit to keep messengers and drivers occupied more than perhaps the necessary with all kinds of official or private missions thus adding not little to general traffic congestion.

People are surprisingly indifferent towards the manifold inconveniences inflicted on them by traffic. Many obviously seem to enjoy driving/riding.

Due to the neglect and sometimes total absence of sidewalks even along main roads, and the general disregard of pedestrians' requirements in architectural and urban design, and also because of the low standard of public transportation, there is an understandably strong desire among people to own cars.

Although under such circumstances, no overwhelming response can be expected on appeals to change lifestyle, it should be noted that rationalization of individual movements would be the most logical and efficient way that can be made to alleviate urban traffic problems. In fact, quite a number of typical rides, by private or public transport, could either be reduced or substituted by other means of communication or carried out by appropriate public services.

Rationalization could be achieved by considering commuter distances between the place of employment and the location of schools and residences, whenever any of them is to be chosen. Proximity to residences, rather than prestige aspects, should also guide the choice of facilities and services to be availed of occasionally or permanently.

As far as substitution of personal traffic movements by public services is concerned, most institutions need to improve or extend their performances before the public can be expected to change their communication

habits and readily utilize their services. As a prerequisite, considerable contributions could be made mainly by: improved efficiency and reliability of telecommunication service; promptness and guaranteed safety of mail and parcel service; and introduction of cashless transfer system by banks.

Apparently, it will require joint efforts from the service sector as well as a broad information campaign for the public to further develop that particular common sense which will eventually result in a wiser use of mobility for the benefit of all inhabitants.

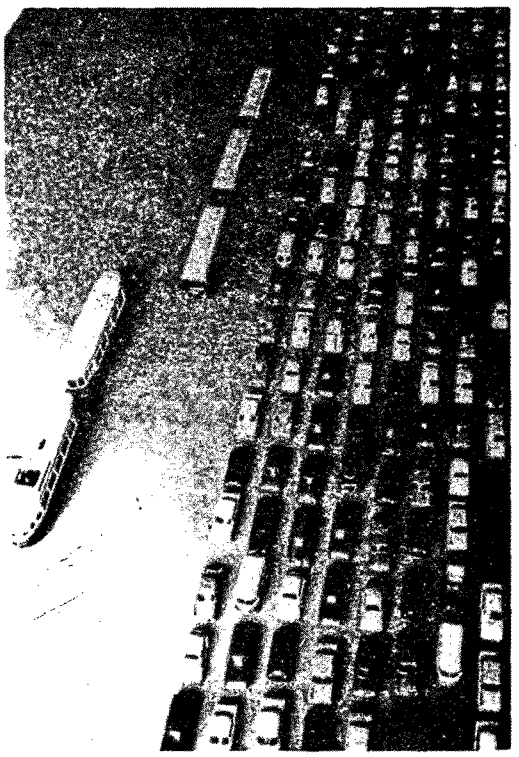
### 4. *Public Transport*

Aside from providing the necessary mobility to the less affluent who do not have any other choice at lowest possible costs, public transport should serve another purpose, namely, to reduce traffic volume by attracting more car owners to use it as an alternative, especially on the way to/from their workplaces. Already the shifting of car owners to public transport would produce remarkable gain, since an efficient mass transit system is capable of accommodating more passengers on one lane than in private cars on eight lanes.[6]

In consideration of such quantitative comparison, it is not only justifiable then, but imperative for the authorities to undertake adequate actions either to promote public transport or to restrict the use of private cars or both at the same time.

The private sector which has, so far, operated public transport for a clearly defined social group is, understandably unable to respond to such diversified request alone. The task is too complex and voluminous. Neither funds nor expertise is at hand.

Therefore, the authorities have to take the initiative by providing planning and organizational capacities, giving the guarantees, and granting all necessary privileges and exemptions which development and operation of an improved transport system might necessitate.



*Comparative road area requirements 270 passengers in public transport (light rail or bus) or in 193 private cars—a typical peak period situation*

A pulling effect towards public transport or a pushing effect away from private transport could be achieved through some principal options:

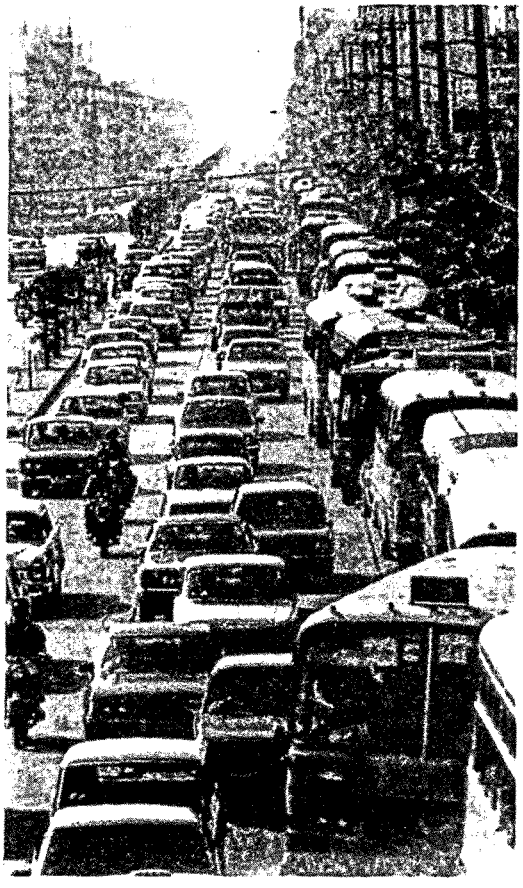
1. Restriction of car ownership through higher duties or import quota would be relatively easy to administer but would unnecessarily curtail individual transport in low density and rural areas where public transport is not feasible.
2. Therefore, a restriction of car usage within those areas or hours where traffic load is most critical seems to be more adequate.
3. Drastic limitation of road construction would eventually lead to a state where motorists, out of desperation, would change over to public transport.[7]

[6]F.H. Kocks KG, *Bangkok Transportation Study*, Final Report, Volume I, 1975, p. 40.

[7]Colin Buchanan a.o., p. 102.

4. Hence, it would be preferable to promote the development of a mass transit system which will suit a 7 million conurbation and, thus, absorb a growing number of car owners.

Before the new modes of mass transit are discussed, the possibilities of improving the existing public transport facilities have to be examined. Aside from a relatively few changes which can be brought about by individual bus operators; e.g., cleanliness, comfort, seat capacity, and technical reliability; several other improvements, such as comprehensive line network and fare system, pricing, coordination of schedules, introduction of fixed stops and interchanges would require closer cooperation among all transport enterprises. A higher than average speed of buses will require the granting of substantial privileges in traffic control and assignment of separated movement areas by the authorities.



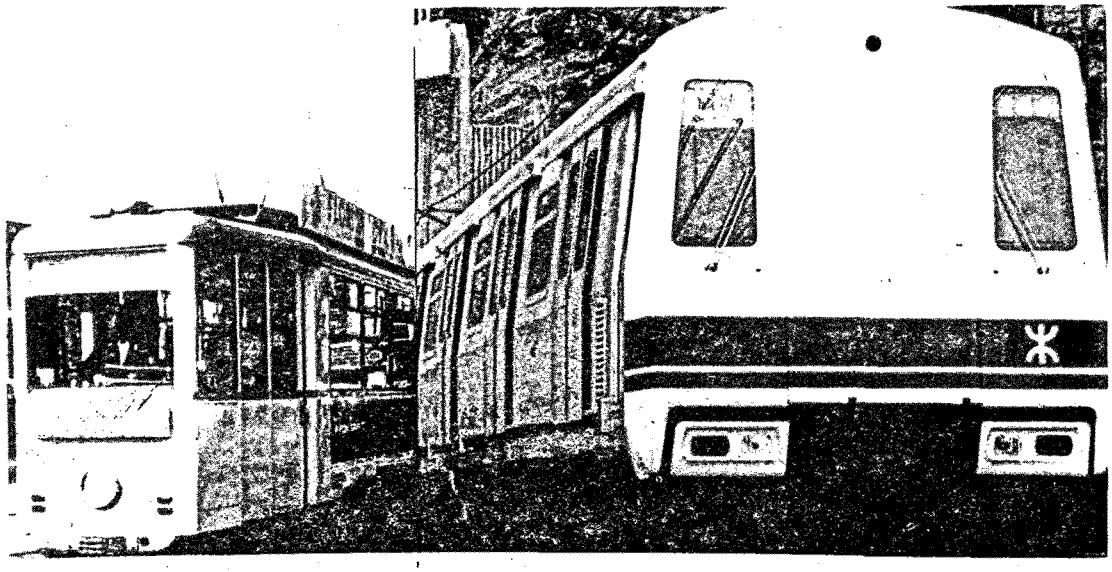
*Public transport on segregated lanes gets stuck with the individual traffic (Bangkok)*

Such special arrangements, as can be observed elsewhere beyond a certain traffic density, particularly during the crucial peak hours, will yield only very little advantage because of unavoidable interference at intersections and the traffic to and from adjacent lots along the roads.

Under such condition, the introduction of a new mode of public transport, particularly railbound, would be of no advantage. The potential of greater passenger capacity of the so-called light rail system, for example, cannot be utilized as long as it is operated on the same level as the road traffic. Continuous infringement of the right of way along main roads, most of which are busy commercial areas, cannot be avoided. Being fixed to rails, the vehicles would have less flexibility than buses to by-pass vehicles involved in an accident. Braking action of rail cars being naturally poor, the system is likely to become involved in many accidents itself or bound to move at an inefficiently low speed.

Moreover, the width of roads, already narrowed and bisected by the segregating guideway, would further be reduced in regular intervals by the islands to be installed to accommodate waiting passengers at the stops. Most probably a light rail system would not only fall behind the transport capacity of buses (let alone its own theoretical capacity) but, also, unproportionately impede the traffic flow on the remaining roadspace.

One might wonder at this point why, on the other hand, light rail systems are still being used in several European cities and, apparently, with efficiency. Actually, most of the larger cities have gradually phased out the use of the traditional street car and have replaced it by a combination of high performance metro and special types of city buses. Some smaller cities (below 1 million) which could not afford to abolish their streetcar system have, indeed, developed it over the years to almost perfection. Hannover (Germany) is perhaps the most prominent example. But if the local authorities had the free option, they definitely would have preferred a wide-bodied heavy rail system. At any rate, the differences between the latest versions of modified streetcars and the traditional metro have diminished, since many cities have begun to place their light rail system underground as well in the core areas. Some were even wise enough to build the



*Tranvia or light rail system with narrow bodies limited passenger capacity and hampered by other traffic.*

*Extremely wide-bodied mass transit vehicles (Hongkong)*

tunnels wide enough to allow future changes to high capacity trains.

As a matter of fact, substantial relief from increasing traffic problems can only be achieved when public transport is operated at separated level (grade separation), at least within the inner urban area, be it above or below the ground. Whatever mode might be chosen is a *priori* and also of less importance. The gain from such a mass transport system would be manifold:

1. The main roads would be partly relieved from bus traffic.
2. Public transport, if given an absolute, unimpeded mobility, would carry larger volumes of passengers fast and safely.
3. Increased speed and reliability of the public transport system would attract car owners.
4. Even more road space could be reclaimed.
5. The recovered reserve of road capacity would allow efficient traffic guidance.

The horizontal and vertical alignment of the system would require thorough and extensive studies of local conditions. Generally speaking, routing depends on density of residences and working places. Vertical alignment is influenced mainly by technical and functional requirements, the availability of space, and aesthetical aspects (visual intrusion). In principle, level changes can be applied as required by local ambience. However, the necessary ramps impose extensive obstacles into the urban structure. Unfavorable geological and topographical conditions in the metropolitan area as well as the tremendous costs that go with it largely rule out underground alignment, whereas installation above ground would cause some environmental impacts which could, however, be minimized.

Assuming a railbound system with electrical propulsion, noise and vibration nowadays can be decreased to tolerable levels. Research on how to further reduce the nuisance from public transport is still going on.[8] Also it has been experienced that train-generated sounds are more psychologically accepted than other traffic noise.

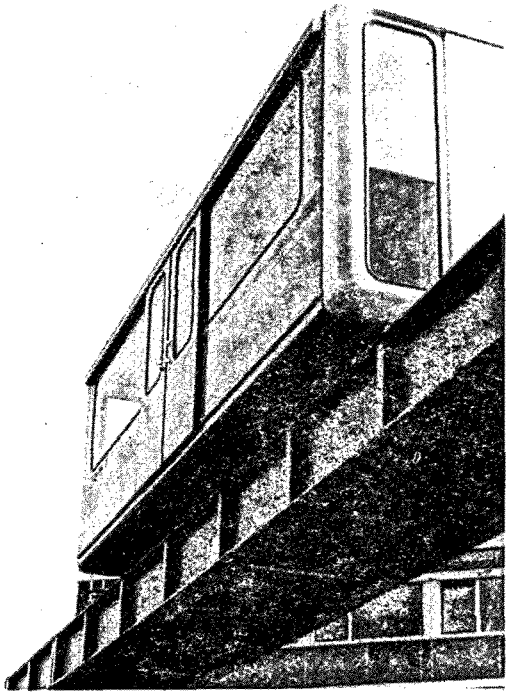
As far as the visual intrusion of any elevated mass transit system is concerned, opinions are quite controversial. The opponents, perhaps, have in mind the overaged New York Metro, rattling over bulky ironwork or the massive space consuming traffic constructions of urban highway interchanges.

[8] Nahverkehrsforschung '79. Der Bundesminister für Forschung und Technologie Bonn, 1979. ISBN 3-88 135-075-6, Summaries in English. p. 73ff.

Nowadays, however, the supporting elements of mass transit lines can be designed light, elegant, and colourful. The overall impression one gains is influenced also by its smooth, pleasant appearance and non-pollutive operation. If would-be passengers were to give their opinion, they would certainly prefer the moving panorama of an elevated alignment, which might even become a tourist attraction. At any rate, grade separation for a mass transit system would be limited to the highly congested inner urban areas, not only for economic reasons, but also to have a system ready for operation within a reasonable time.

As far as the mode of a public transport is concerned, options would be largely open for the metropolis, since no comprehensive system is in use so far. Any considered system should meet three principal requirements: it should be attractive to a widest possible range of users; it should be economical for the operator; and it should be compatible with the environment,

These objectives lead to some basic, mainly technical, options regarding the guideway, the propulsion principle, and the passenger capacity, which in this context cannot be discussed in depth.



*New technology for urban mass transport—test vehicle with longstator propulsion.*

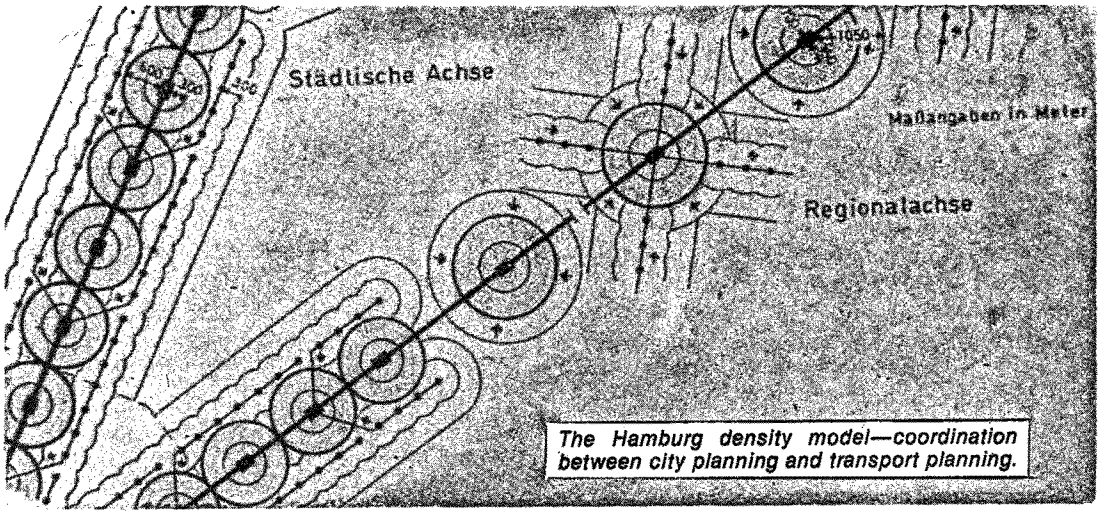
*Coordination of alignments, schedules and fares mass transit and bus (Berlin).*

As far as the choice of guideway is concerned, it should be noted that all of the 40-odd urban mass transit systems presently in service have conventional railtracks. As of now, no substantial advantage can be cited which would justify the introduction of widely untried technology of monorail or suspension of vehicles or a vertical combination of both (with two different vehicle types). The latter is claimed to be the *ultima ratio* where a system has to be fitted into very limited urban spaces.

In various industrial countries, innovative propulsion systems are being tested, though primarily designed for future inter-urban transport. One system, however, the "M-Bahn," which is presently operated on a test track in Braunschweig (Germany), seems to have remarkable features for the operation in urban mass transit.[9] The vehicles which have no motors are propelled and partly levitated by magnetic fields generated in the tracks. They are relatively light and produce little noise. But most importantly, the vehicles can climb up to 15% (normal trans 3%) whereas the length of ramps for level changes could be minimized, thus, avoiding the undesired bisecting of closely interrelated urban areas. It will require thorough examination as to whether such advantages would justify the adoption of an unconventional propulsion system or not.

The passenger capacity of a mass transit system largely depends on the width of its carriages as can be observed in Moscow and in Hongkong, where exceptionally wide cars

[9] *Ibid*, p. 210ff.




*The Hamburg density model—coordination between city planning and transport planning.*

are in use. (The recently inaugurated first transit line in Hongkong is estimated to carry up to 60,000 passengers per hour).[10] In general, an increase of capacity is limited to the improvements of the control and safety devices of the lines, possibly allowing higher train frequencies. However, all attempts to raise the passenger capacity of a projected mass transit system will be ineffective unless a variety of measures is undertaken to ensure that the actual passenger load will reach its full capacity as often as possible. Close coordination and cooperation with other carriers have to be established and monitored by the authorities.

A feasible compromise has to be arrived at between the necessity to operate the system in strict accordance with common economic principles and the need to fulfill a basic social function. This will include a prudent fare policy with seasonal tickets, off-peak pricing as well as reductions for the lowest income groups. Aside from the aforementioned technical and operational considerations, the succes of a mass transit system depends basically on the number of potential users who live or work within the catchment areas of its stations. The mass transit lines therefore have to be installed in or as near as possible to existing high density residential areas and existing high density commercial/industrial areas. Moreover, it has to be examined whether the existing railway system or its rights of way can be partly incorporated into the new network. Studies have to be made with utmost thoroughness because rail trunks allow hardly any adjustments unlike bus lines.

A more dynamic approach could be adopted whereby future development of commercial, industrial and residential areas could be concentrated within the catchment areas of the mass transit stations.

Such strategy, however, should promote the concentration within reasonable limits. However, such attempts would eventually lead to an extremely unbalanced utilization of rolling stock because of the unidirectional flow of commuters during peak hours.

Therefore, an overall urban planning strategy must promote a counter balancing development of mixed-use townships along the mass transit lines, and encourage residential land use in or near existing concentration of working places.

These integrated transportation planning and urban development concepts have been applied in Stockholm and in Hamburg, where density standards have also been set to optimize the operation of mass transit systems.[11]

### 5. *Comprehensive Urban Planning*

The Charter of Athens was promulgated as a reaction to the unwholesome impact of industrialization on urban environment.

[10]John M. Gold, "Hongkong Mass Transit System" *International Railway Journal,* 1977, p. 1.

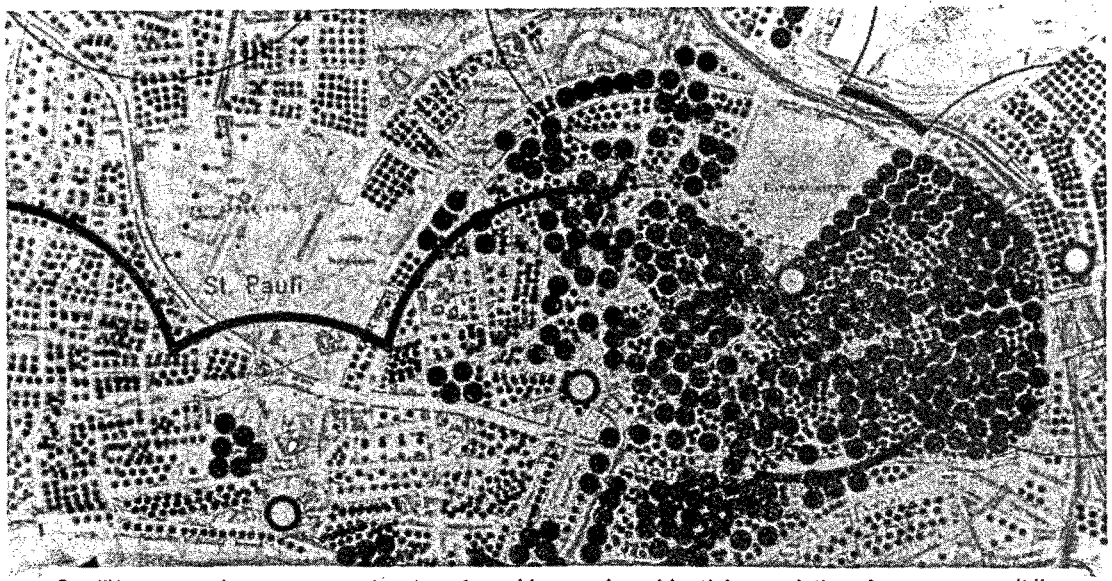
[11]Till Krüger, Peter Rathmann, Joachim Utech, Das Hamburger Dichtemodell in Stadthauwelt 1972 Heft 36, Bertelsmann Fachzeitschriften CmbH, p. 293.

Through this, the demand for separation of the four basic land uses was introduced to planning. In those days no other remedy but disintegration of land uses, under the criterion of compatibility, could be thought of. No distinction was made, though, between the elementary functions, living-working-recreation, and the resulting subordinate function-circulation. Surprisingly, in urban planning little attention was paid to the possibility of preventing traffic generation through appropriate location of uses and facilities and positive control of building density.

As can be observed in the metropolis, unnecessary traffic is generated through the uncoordinated development of public facilities and community services. Especially in newly developed residential districts, facilities are scarce, their locations are accidental and scattered, and their accessibility from a reasonable catchment area is hampered by subdivision walls. There are places where not even a sari-sari store can be found within a walking distance. The problem is that the residents of such areas do not seem to be bothered about their lifestyle and the waste of time and resources such a lifestyle imposes on them: thus, planning authorities would have but little justification to interfere.

Another phenomenon which increasingly leads to traffic congestions, especially along the radial roads, are the large fully-developed areas of idle or inadequately used land within the Metro Manila area. These areas bind public investments without significant return. Meanwhile, more road construction funds have to be allocated for new settlements in the outskirts.

Perhaps, if detailed plans that are more definite than zoning maps, and more binding for those idle areas could be setup, illusive speculations could be lowered. Eventually, cooperation of the landowners can be achieved in utilizing their land for badly needed comprehensive development projects which should include, aside from housing for all social levels, an integrated community with commercial facilities and labour-intensive non-pollutive industries. The concept of self-reliant communities (BLISS) which was launched by the Ministry of Human Settlements (MHS) in early 1979, and several redevelopment projects undertaken by the Human Settlements Development Corporation (HSDC), are promising approaches which are likely to generate the desired effects on urban traffic. Naturally, such development of the metropolitan area would yield only long term benefits in ameliorating the traffic situation and even these might, to be realistic, very well be covered up by general trends of gradual deterioration of urban mobility, unless supported by other measures.




*Studies on catchment areas, density of working and residential population for mass transit line (Hamburg).*

Considering that significant traffic loads in any city result from regular movements between working places and residential areas, a fundamental objective in planning is to bring such uses closer to each other without necessarily impinging on the established principles of land use planning.

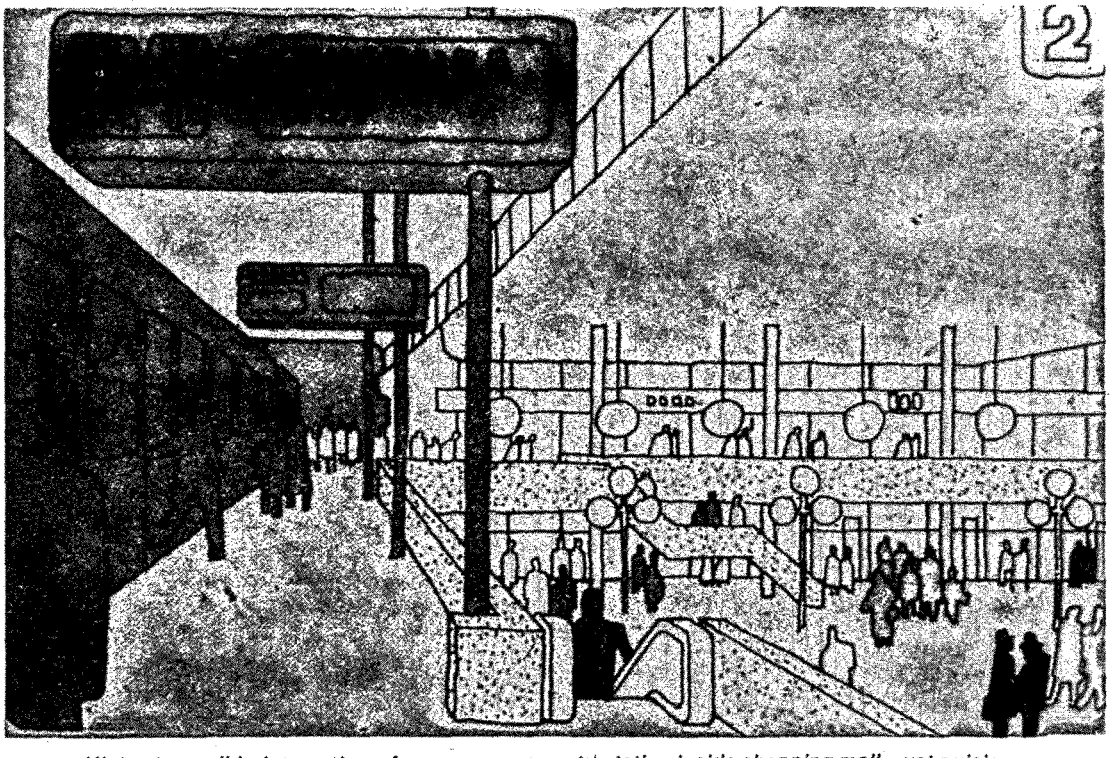
The nearness of industrial or commercial uses, alone, does not imply that the majority of the labour force will actually be absorbed from adjacent residential areas. This depends on whether the socio-economic level of the inhabitants fairly matches with the kind of labour offered. But usually, neighbouring areas with complementary uses will, sooner or later, adjust to each others' standards and become closely interrelated. This will result in traffic flow that is reduced in both quantity and length.

In fact, the pluralistic real-estate market is quite sensitive to such linkage-economics, unless overruled by spectacular mono-functional developments of unproportionately large properties. The modernistic and orderly appearance of such development form the very antithesis of what is referred to as the "City of Man."

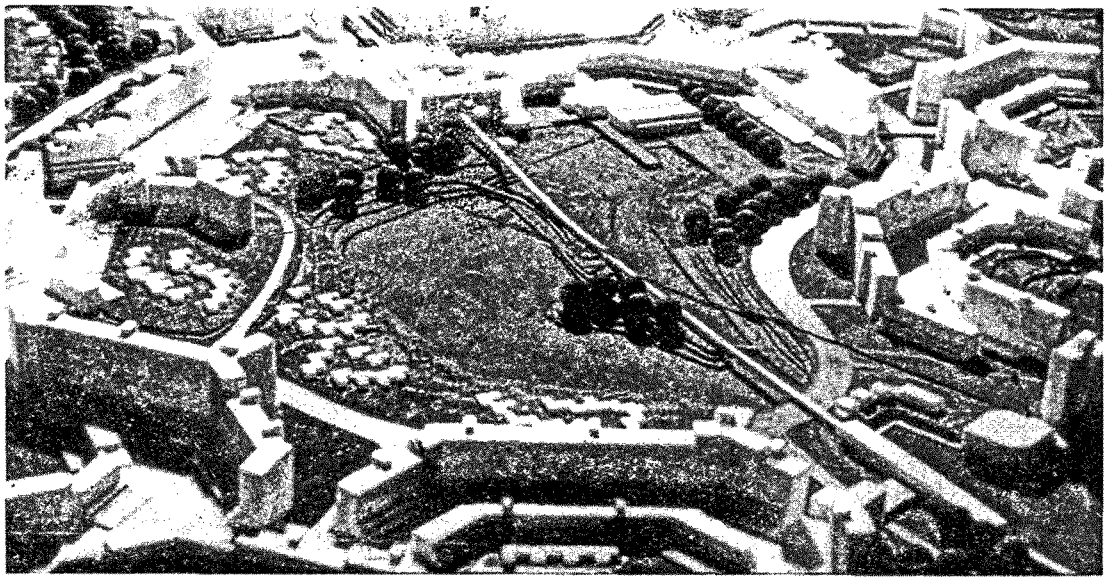
The way by which planning can be contributory to the development of less traffic-generative collocation of uses is by restricting the size and (with the exception of residential areas) the building density of any kind of monofunctional area. Density restriction would mean that the overspill of activities in highly attractive commercial areas could be channeled to other potential centers, with the effect of a more even spread of supply, services and job opportunities, smoother accessibility, and shorter travel distances. Space between centers should be determined by walking distances and the catchment areas of public facilities ("public" here is related to function, not necessarily to operator). Residential density should correspond to the capacity of said facilities, and should decrease with the distance from the center to allow a wider choice of different housing types.

If collocation of uses is likely to reduce traffic generation, the objectives of land use planning and zoning have to be examined. Possibly, a combination of uses should be permitted to become even more intense.

The usual justification for land use plans still implies that density and mixed uses are synonymous to unhealthful and dangerous



*Highest possible integration of uses: mass transit station inside shopping mall—yet a vision.*



*A self-contained township of 20,000 people with elevated mass transit link to two cities (Duisburg/ Düsseldorf).*

environment. Meanwhile, the industries have either ceased to exist or changed their pollutive operation, and entirely new highly labour intensive industrial and commercial sectors have developed, which do not produce any adverse environmental impact at all. Rather than in public parks, people nowadays spend more of their leisure time in shopping and amusement centers which, at the same time, cater to their household needs. Urban lifestyle has become so multi-faceted and interrelated that it is incomprehensible why this has not been reflected in a correspondingly integrated physical environment.

With urban land becoming scarce and transportation becoming costly, time consuming, and unpleasant, urban planning should comprise three dimensions. Hence, urban centers and subcenters should be designed according to specific functional requirements of different levels instead of lot areas.

In the centers, the ground level could be allocated to shopping and related uses; the second and third levels, preferably to offices, community services or non-pollutive industry; and the fourth and fifth levels for special types of residences. Other facilities may still be arranged laterally, sharing internal circulation and parking space.

To promote such inward development or urban renewal projects, the authorities would have to take a stronger lead in shaping critical urban areas, both by quantitative and qualitative decisions. To correspond to the desired mix of uses, two new zoning categories need to be defined; "core area" and "mixed area."

Density control will require regulation of split gross floor ratios for commercial and residential uses. Design and construction of those environmental elements which do not yield any return, but are nonetheless vital to the success of a project, like pedestrian zones linking the center with its respective residential areas have to be carried out by the authorities.

This does not mean Utopia. It can and ought to be realized in quite a human scale, with conventional means, in the existing social structure and free market economy. As is well known, mixed functions have a tradition in Southeast Asia. The typical 2-3 storey shop house (town house) represents the smallest unit where integration of working and living has been practiced ever since.

The chance to reduce traffic generation is certainly not the only advantage which such comprehensively planned areas would offer. With regards to the appreciation which complex shopping centers are presently enjoying, developers will welcome the flexibility and higher return which mixed land uses can yield. Also, people will find it increasingly attractive to have all the facili-

ties, services, and institutions which are frequently visited, including perhaps their own working places, within a convenient walking distance that can give them the kind of unhampered mobility and make urban life more desirable.

*SUMMARY*

The solution of traffic problems in the metropolitan area would require a multitude of measures. They consist of short-term and long-term actions. The efficiency of the particular measures highly depend on their joint implementation. Substantial effects, therefore, will materialize not earlier than accomplishments if long-term measures have been made.

Indispensable long-term-measures are the installation of a mass transit system with grade separation and the re-integration of uses through development of large self-contained townships in the inner and intermediate metropolitan area.

However, traffic problems have to be dealt with in the wider context of general environmental aspects. They are not primarily a matter of technology and know-how, but rather pose an administrative problem.

The proven mechanism of self-regulating free economy fails to function in an urban order of magnitude. Instead, the authorities have to intervene to safeguard the public good by directing private initiative through a positive, mainly stimulating, rather than restrictive approach.

As a basis, therefore, a continuously updated overall development concept comprising urban expansion as well as inward development and urban renewal for the whole metropolitan area is needed.

Ongoing uncoordinated urban growth would progressively narrow in the spatial options for improvement measures. As a consequence, costs of land and development for such measures would be growing over-proportionately.

The present extent of traffic problems in the metropolitan area is caused by only approximately 60 PCU/1000 inhabitants (as compared with more than 300 in Europe and more than 400 in USA). With the expected increase in car ownership and with further urban growth the situation is bound to worsen rapidly.

Like the Asian societies themselves, the cities in Asia have been undergoing a series of rapid social changes. Indeed, the cities have become centers of such changes and have also become the principal areas where the nation's dysfunctional elements make themselves most explicitly felt. This inevitably highlights the crucial role of the cities in the development of societies.

Both national and local leaders as well as planners in Asia have not been oblivious of the changing environment in their cities. The enormity of urban problems, such as substantial unemployment and increasing slum and squatter settlements, has made a positive concern with the cities inevitable. It is also possible that the leaders may have been pushed into a positive concern with city problems by their own rhetoric of "equality" or "social justice", intended to extend their personal appeal and legitimacy. Periodic attempts have been made by leaders and planners to improve the condition of the cities and of their dwellers. Reality reveals, however, that urban problems, instead of decreasing, have steadily increased both in magnitude and in intensity.

It will be submitted in this paper that the relative failure of the Asian planner to cope with urban growth may be attributed, at least in part, to the way in which he has tended to conceptualize the Asian urban experience. His framework of reference has been the "conventional model" which is essentially a Western orientation to urban development, which hardly takes into account the reality of contemporary life in Asian cities. This suggests an urgent need for a reorientation of our urban vision and for a formulation of a new urban model which would both reflect more adequately actual urban conditions in Asian societies and could serve as a realistic guide to dynamic urban development. The aim of this paper is to advance such an alternative model—a "positive perspective" —for urban development. The proposed model consists of a cluster of "positive" proposals for improving the quality of life in

# THE ASIAN CITY: THE POSITIVE PERSPECTIVE IN URBAN DEVELOPMENT

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Asian cities. This is envisaged to be in the direction of more active, interventionist public policy and of more humanistic ideas about the nature of urban development.

More specifically, the reality of the Asian city will be contrasted with the construct of the conventional urban model to suggest the limitation of the conventional model in many respects. Subsequently, certain popular views on city growth in Asian countries will be considered and shown to be open to serious criticism. A statement of positive proposals for urban development is the core of this argument. Appropriate strategies and standards will be proposed next. Here an emphasis will be given to strategies utilized for social development or social policies, particularly for housing and squatter settlements. In addition, current dynamic policies for city development will be subjected to criticism and possible future trends in Asian urban theory and practice will be explored. Six cities of Asia have been selected to illustrate our argument. These represent the dynamism of urban development in different degrees, with Hongkong, Singapore and Seoul identified with one extreme, the "success" story of city growth (when measured roughly by the developmentalist criteria of the 1960's), Manila and Bangkok located in the middle (at least until about 1975), and the developmentally stagnant Calcutta in India located in the other extreme of the development spectrum.

### *The Conventional Model and the Asian Reality*

Urban development in Asia inevitably takes place in the peculiar context of Asian historical experience. This should make the Asian planner suspect the various notions found in standard theory of urbanization, of urban propriety or urban growth that are based on Western experience. Or this should limit the applicability of such notions to Asian urban conditions. We shall briefly suggest some of the major differences between the "conventional" urban model and Asian urban reality.

In the first place, the Asian city exhibits an enormous growth in population. This is partly due to an increase in natural births and decrease in mortality and partly to rapid in-migration. The city of Seoul, for example, has been expanding at a rate of about 200,000-250,000 people a year for a period of two decades and the city of Calcutta had to absorb one million refugees at almost one shot as a consequence of the partition of colonial India.[1] However, in-migration of like proportions is a familiar experience in most Asian metropolitan areas amounting to a situation described by Dwyer as "the scene of the greatest movements of people in history."[2] Such urban trends give rise to enormous pressures on the available resources and on the capacity of the cities to absorb the additional humanity. Problems of this nature have not been anticipated in conventional theories of urban growth.

The excessive concentration of the population leads to another characteristic of the Asian city referred to as "urbanization without industrialization", which means that the cities simply grow in population without experiencing a corresponding economic or industrial growth. Again, this type of uneven urban growth is not accounted for in the conventional urban theory. Yet the importance of this pattern of growth is

[1]For description of the dynamism of development taking place in most of the Asian cities covered in this study, see the various working papers, written in the late 1960's, by R.C. Meier, published under the title *Developmental Features of Great Cities of Asia (1968-1970)* (Berkeley: University of California, Institute of Urban and Regional Development).

[2]D.J. Dwyer, ed. *The City in the Third World* (New York: Harper and Row, 1974), p. 11.

crucial to the understanding of modern Asian cities, for it seems to largely explain the reason for the presence of major urban social ills.

Another conspicuous feature of the Asian city closely connected with the previous point is the presence of extensive slum and squatter areas. These have often penetrated nearly all sections of Asian cities and appear to be still growing. They are the consequence of the enormous and uncontrolled inmigration noted above. Perhaps most of the worst urban problems in Asia can be traced to this phenomenon, which is present universally in big Asian cities. Yet it may be argued that, when viewed in the context of rapidly expanding Asian economies, this type of urban growth is not unexpected or unnatural and paradoxically may even be welcomed for instance, the presence of squatter areas may be the price that the cities must pay for their dynamic growth. It is these "undesirable" urban areas that provide a pool of cheap labor which is the life-blood of industrial and economic development. As Laquian has put it, "growth of slums and squatters are only a normal manifestation of urbanization due mainly to urban inmigrants on whom cities must depend... for the energy that fuels urban dynamism."[3] Arguments like these would hardly be found in classical thinking on proper pattern of urban development.

Another feature associated with the Asian city is the sharp distinction between the city and the countryside. Here the cities are said to reflect the dual structure of the national economy; one based on the traditional, labor-intensive sector, and the other based on the modernized, capital-intensive sector. This is frequently referred to as the dichotomy of the "bazaar economy" versus the "firm-centered" economy,[4] where the latter often forms industrial enclaves in an overwhelmingly rural environment. Such city-countryside dualism may be a great divisive force in the nation—socially, economically and culturally. This trend may retard rather than facilitate the cause of general development. Again, theories of early urbanization have failed to anticipate such a possibility, or have underestimated the persistence of the "peasant problem" and the widening gap between the two sectors in contemporary Asian societies.

The Asian city is also characterized by distinct native cultural patterns. The primate cities assume extraordinary importance. They perform not only supreme administrative or regulatory functions, like in the West, but are also the country's "show-window" and as such are accorded special or preferential treatment. At the same time, they tend to retain some of their traditional aura of sacredness as centers of the ultimate authority or power which is now personified in modern nationalist symbols and values rather than in traditional imperial or religious symbols and values. As McGee has put it, "In some ways the cities of the Third World begin to assume the character of the 'cult-centers' associated with the pre-industrial era. Only now the rites of nationalism replace the cities of the 'god-king'."[5] This may bring such cities even farther from the rest of the nation and widen the gap between the city and the countryside.

The Asian city also reveals a fairly special pattern of economic, occupational and demographic distribution which is different from patterns present in Western cities. There is, for instance, the tendency that a relatively low percentage of the labor force is employed in manufacturing under conditions of insufficient urbanization. Manufacturing is then frequently concentrated in a large number of small-scale or cottage-type enterprises, while capital markets and modern banking which stimulate economic growth are virtually absent or not well represented. There is little occupational mobility. Urban growth appears irregular and spotty in character, with people tending to concentrate in central areas of the cities rather than in the peripheral areas. These people belong to the poorer sectors who cannot afford paying additional transportation costs.

There is finally the peculiar impact of native culture upon the Asian city in the sphere of political values. In some Asian cities, a great gap prevails between the domi-

[3]Aprodicio A. Laquian, "The Meaning of Tondo," *Solidarity* (1968).

[4]See T.G. McGee. *The Southeast Asian City.* (London, Bell and Sons, 1967).

[5]*Ibid.*, p. 19.

nant elite and the people at large, such as in Indian cities, where rigid stratification based on the system of castes reinforces such a gap. This tends to favor the traditional conservative authority and to obstruct attempts at modernization and major reforms. Moreover, the tradition of local autonomy is usually fairly weak, which is another factor mitigating against local initiative to institute more radical urban change. Such conditions are normally absent in the West. Hence, although crucial in Asia, these conditions are not seriously considered in conventional theories of city growth.

*The City and National Development*

Recent literature on Asian urbanization[6] reveals the growing awareness of the central role that the city plays in the development of Asian societies. In Gerald Breeze's words the city is the ". . primary agency and diffusion point of social change for its new nation."[7] Yet the same literature presents the city in a highly critical fashion, that it has failed as an agent of national development. We shall presently consider two popular theses on the relationship of the city to national development in Asia to suggest their vulnerability. The first is a highly critical thesis in which the Asian city is viewed essentially as a "parasitic" formation. The advocates of this thesis emphasize the peculiar colonial or neo-colonial pattern of growth taking place in Asian cities focusing on the dualistic or exploitative nature of their economy. In sum, city growth in Asia is seen as a superficial, if not harmful experience which fails to provide a positive response to the needs of nation-building. It is said to have created new social and economic inequalities and divisions and to perpetuate the immobility of traditional social and occupational arrangements, thus to be counter-developmental in its effects. In this context, the great social problems found in Asian cities are viewed as merely reflecting certain deeper problems that are present in the societies themselves. Unemployment and the squatter problem are "a symptom of processes operating at a societal level,"[8] manifesting the unbalanced pattern of social development that these societies follow.

The other popular thesis presents a highly optimistic sentiment on urban development and is frequently identified with the "unlimited urbanization" thesis. The advocates of this thesis prefer to highlight the beneficial changes that urban growth has brought about and the opportunities that it offers. For them, if modernization is the goal of Asian societies, urbanization is the most reliable instrument to achieve it. This message is reflected in the writings of many prominent theorists of urban development. Dobson and Teune, for example, imply in their empirical study conducted in the Philippines, the desirability of more extensive urbanization, this on the basis of their finding that there is a positive association between increased urbanization and a higher level of social development and of administrative capacity.[9] John Friedmann even more dramatically perceives the city as an engine of development generating modernity and economic growth. He advocates a strategy of "deliberate urbanization" which, in his view, will destroy old unwanted structures and values and will stimulate the formation of truly modern structures and attitudes.[10] Gordon Edwards, writing in the same spirit,[11] condemns planners who extoll the virtues and opportunities of rural life as unrealistic sentimentalists, insisting that it is in the city where "the action is." He further relates the growth of cities to the growth of industrialization which he sees as the key to all future development efforts. Edwards contends that such popular conventional remedies to social ills of Asian cities as family planning, restriction on population, and other

[6]See, for instance, relevant works by Meier, Dwyer, McGee, Gerald Breese, Jakobson and Prakash, Laquian and Abueva.

[7]Gerald Breese. *Urbanization in Newly Developing Countries.* (New Jersey, Prentice-Hall, 1966), p. 41.

[8]T.G. McGee. *The Urbanization Process into the Third World.* (London, Bell and Sons, 1971), p. 31.

[9]Arch Dotson and Henry Teune. "On the Consequences of Urbanization: Contributions to Administrative Capacity and Development" in Jakobson and Prakash, eds., *Metropolitan Growth: Public Policy for South and Southeast Asia.* (New York, John Wiley and Sons, 1974).

[10]See John Friedmann. *Urbanization, Planning and National Development.* (Beverly Hills, California, Sage Publications, 1973).

[11]See Gordon Edwards and L.A. Viloria. "The City in the Third World." (Occasional Paper No. 6, Institute of Planning, University of the Philippines, 1971).

social strategies that focus on the "anti-urban" rural alternative are developmentally harmful. Such strategies, he claims, detract our attention from the real problem of national development, which is productivity. All the other problems are of secondary importance and ultimately manageable. Hence, extensive urbanization accompanied by a dynamic policy of urban growth is the answer to perceived needs for progress in the Asian developing economies.

Both theses just discussed are open to major criticism which, if valid, would suggest their conceptual vulnerability. The "parasitic city" thesis, although perhaps justified in certain respects, appears open to criticism for being too negative in character when it is unaccompanied by a set of realistic policy-generating alternatives. Moreover, with its excessive emphasis on dysfunctional social structures, this thesis seems to view piecemeal approaches, however beneficial, as fairly meaningless "improvisations", which then tends to encourage the belief, politically unrealistic, that no reformist action short of social revolution can ever bring about genuine urban development.

The "unlimited urbanization" thesis, on the other hand, appears to suffer from excessive optimism. It implies the belief in near magical power of urbanization to resolve all the major social and economic problems of Asian societies. Yet reality indicates that such problems are often brought about exactly by extensive and rapid urbanization of these societies. In fact, such problems are present in great measure even in those Asian cities in which dynamic strategies for urban growth have been widely adopted.

### *Positive Perspective*

An alternative model called the "positive perspective" for urban growth which is developed in this paper is an attempt to overcome or minimize the difficulties that are present in conventional models or approaches, some of which have been discussed. It highlights certain aspects of urban experience that have not been given due recognition hitherto in urban development in Asia. The positive urban perspective consists of a package of "positive" proposals which include: 1) commitment to growth in the context of national policy for development; 2) the recognition of the need for substantial social change in the cities; 3) the advocacy of comprehensive approaches to city planning; 4) the advocacy of a "balanced" position on city development; and 5) a commitment to a normative position in urbanization. These five proposals will be briefly discussed.

The *commitment to growth* in the context of national policy for development is the first major feature of the positive perspective. A more active role for Asian governments is proposed for city development. Whereas non-interventionism or a *laissez faire* attitude has been the conventional practice where urban growth is left to the forces of a "free market" and thereby the social consequences of urban growth tend to be neglected. There are several reasons why such interventionist policy should be adopted. One is the rapid and enormous expansion of the cities in recent decades, a trend which has deeply affected Asian societies and their economies. This gives rise to problems of great magnitude which are beyond the capacity of the cities themselves to tackle. Only the central authority has the necessary resources to do so. Another reason is that the politics of the cities has often been dominated by *status quo* defending interests so that any meaningful change that may be urgently needed can come only from the outside. This might have been the case in Calcutta or in Manila. Moreover, if a more balanced policy for national development is to be followed, the place of urbanization cannot be disregarded, which then may require some form of urban planning or control on a nation-wide scale. The proposed commitment needs to be qualified, however. By a national policy for the cities, it is not implied that there is an inevitable increase in statism or central bureaucratic control, the tendency to treat urban problems as purely "national" problems or simply administrative problems. Rather, the role of the central authority would be primarily to provide a general guidance or stimulus to ensure that a more equitable distribution of development take place which is in harmony with the national objectives of social welfare. It is envisaged that ideally the autonomy of local units would be encouraged, that the cities would enjoy sufficient financial viability and would handle some of the major urban social problems with minimal

intervention or manipulation by national political or bureaucratic interests.

Secondly, the positive perspective gives *recognition to the need for substantial social change* in the cities. Here the forces of modernization and the influential ideas of human equality and social justice exert a powerful pressure in the direction of more positive action in matters of social policy. On this orientation, the problem of slums or squatter settlements is viewed with serious concern as a real and not a mere transitional problem. Also, other social problems of the cities are identified. Such new awareness of urban social problems should compel Asian planners to recognize the centrality of social development in city planning. This then should lead to a significant extension in the scope and effectiveness of urban social policy.

Thirdly, the positive perspective exhibits a *commitment to comprehensiveness* in city planning. It is submitted that piecemeal approaches, utilized in the past, are, on the whole, insufficient to cope effectively and in an orderly manner with the great dysfunctional forces present in Asian cities or with current pressures for extensive expansion of the cities. They are unlikely to meet the need for more radical urban change. Here, more comprehensive strategies such as master-planning or regional-scope city planning or large-scale "integration" of urban services and planning will yield better results. The comprehensive-approach thesis should not, however, remain unqualified. First, piecemeal approaches, involving "partial" remedies to urban problems, will still play an important role in city development. Indeed, they are very realistic strategies under certain conditions. Second, by comprehensive approaches we should not understand mere "efficiency" in the conventional sense. Rather, comprehensiveness should be taken to apply to *all* aspects of urban life. This should also include concerns with human welfare which may indeed be treated as central to meaningful city development. Third, neither planning nor integration should be conceived in a bureaucratic, manipulative way. They should not be divorced from what is wanted by people themselves; nor should they be used to supplant or repress popular local initiative.

One other feature of the positive perspective is the advocacy of a *"balanced" position* on city development. Cities are perceived within a larger framework of the nation's social and economic goals and excessive concentration on the cities is rejected as most likely to do more harm than good if more universal social welfare is our ultimate goal. The strategy of "unbalanced" growth (concentrated mainly on the cities) and the diffusionist thesis of development are refuted for the same reason. On this position, improvements in the cities must go hand in hand with improvements in the countryside, both for the sake of more dynamic national economy and of more equal distribution of national income. The rather uncritical enthusiasm of Edwards and of the "new urban economics" in favor of all-out urbanization is viewed with a suspicious, if not cynical eye, as another attempt on the part of planners to conceive urban development in narrowly economic or administrative terms and to disregard its social consequences.

Lastly, the positive perspective is committed to a *normative position* on city development. This is intended to introduce a critical and moral-directional dimension into urban thinking and planning. The normative position departs radically from the belief of the dominant school that urban development is essentially a matter of "more rational" (meaning more efficient) handling of urban problems, usually expressed in terms of narrow calculations of costs and benefits figures. It entails a normative approach to urban growth, one which contains a clear statement of goal-commitments in urban development which, then, are related to the nation's more general value-commitments.

The introduction of such normative approach is expected to improve the chances for more meaningful urban development in many respects. First, this approach, which makes development an expression of explicit "moral" choices, of human preference, should allow us to treat urban problems on the level where they belong, the level of morality, of an intelligent debate on the ends to be pursued. Second, concrete commitments to stated goals should enable urban planners to establish definite priorities over time. Third, this approach should help us overcome some of the limitations of "projection" planning, based on data of the past, by focusing instead on

the society's future needs, goals and expectations. Here the model makes use of "normative forecasting" which involves probabilistic statements related to such future expectations.[12] Thus, we should be in a position to mold the process of development as we would like to have it, as we think it ought to be, rather than letting certain trends originating in the past determine our future for us. Fourth, the relative absence of projection-planning should then free us from some of the undesirable trappings of current developmentalism, namely, of an essentially physical and manipulative conception of urban development. In addition, the normative approach should free us from a single, strictly linear time framework enabling us to think of urban progress as more than a one-directional or one-dimensional process. It would conceivably accommodate as legitimate multiple types of development, such as those involving differences in their temporal and spatial patterns, yet occurring simultaneously.

*Strategies and Standards for Development*

The positive proposals for Asian urban development, to become effective, must be translated into a set of appropriate strategies, of which the major ones will be briefly considered. The enlightened policy of human settlements and the policy of urban growth centers, which in recent years have acquired considerable popularity among development planners (e.g., in the Philippines), are two examples of constructive urban strategies. Human settlements reflect a combination of humanistic ideas *cum* balanced development while the new urban growth centers appear likewise to aim at balanced development. More specifically, urban growth centers have been conceived to spread the benefits of urban growth more widely throughout the country and to help in decongesting the overcrowded metropolitan areas.

Other constructive strategies focus on combatting certain ill effects of urbanization. One such strategy is referred to as "modernization without urbanization" and has had considerable success in Slovenia.[13] This consists of dispersal of industrial development in the rural areas rather than its concentration in the urban areas. Another constructive strategy involves certain restrictions on city development such as on the location of new industrial enterprises. Also, the strategy of industrial dispersal, such as has been advocated in the Philippines, may be in a constructive direction if the growth of metropolitan areas is to be kept within reasonable limits. Even the "rural alternative" may well be explored as a desirable alternative to excessive urbanization, for it may encourage modernization and industrial growth in the rural areas and so spread to rural people the benefits which city-life can offer.

Other constructive strategies focus on "urban renewal" and on social development of the poorer sectors of urban population. The strategy of urban renewal aims at injecting dynamism into blighted or economically stagnant urban areas by stimulating entrepreneurship and new economic activity. It involves the diffusionist thesis of urban development. Granted that such a strategy is likely to appeal more to progressive businessmen than to ordinary people, still, it may deserve being tested in the Asian city setting, perhaps in combination with other strategies. Strategies intended to improve the lot of the poor focus on the critical problem of urban slums and squatting. One such strategy involves the improvement of existing slum settlements. An example is the "slum improvement" schemes introduced in Calcutta in 1969, which consisted of a package of community standard improvements with minimal expenditure for land acquisition.[14] Another example is the establishment of sanitary barrios in Manila in the 1920's. The idea of sanitary barrios could be conceivably applied even today as a "temporary" measure to deal with blighted city areas, with appropriate modifications and upgrading of the original standards to meet present-day basic requirements. The ZIP (Zonal Improvement Program) strategy, recently adopted in the Philippines, implies a similar idea of partial, yet significant urban

[12]Leo Jakobson and Ved Prakash. "Urban Planning in the Context of a New Urbanization" in Jakobson and Prakash, eds., *op. cit.*, p. 266.

[13]See D.I. Rusinow. "Slovenia: Modernization without Urbanization?" (Southeast Europe Series, A.U.F.S., 1973).

[14]For more details, see Jakobson and Prakash, *op. cit.*, p. 150.

improvements, which should also be of benefit to poor city dwellers. Other strategies along this line include relocation of squatters to new homes, migration and the like.

The issue of appropriate strategies for urban development touches also on the wisdom of macro-planning as against *ad hoc* planning. In Asian cities *ad hoc* planning has normally been preferred. This may be explained as a pragmatic response to strong pressures for active urban policy, which often threaten to assume explosive dimensions socially and politically. The housing policy for low-income people in Hongkong illustrates what in Dwyer's phrase is a policy developed, "from *ad hoc* decision-making rather than from rationalization within the framework of development economies."[15] To do nothing would have meant courting a national disaster in the long run.

Planning on a macro-level would conceivably be a more constructive strategy for city development in Asia. Implying a huge vision of a more perfect city of the future, this kind of planning is likely to incite the imagination of urban planners toward the desired positive outlook. However, this type of planning may be an expensive undertaking demanding firm long-range commitments of political and financial resources which may be hard to obtain. For this reason medium-range planning or a modified comprehensive approach may be a realistic alternative, one focusing on the solution of more basic urban issues with more immeidate impact on general urban welfare. For example, certain minimal urban services and infrastructure and minimal housing could be made accessible. Such basic facilities should then be planned, in E.S. Mills' phrase, "on a very broad base for the people that come to big cities in less developed countries in such large numbers."[16] It is envisaged that this type of strategy which involves more limited positive objectives will eventually generate more substantial positive objectives.

The consideration of appropriate standards is another important feature of the proposed scheme for positive urban development in Asia. Such standards should be realistic for low-income countries and should harmonize with the peculiar life-style that characterizes Asian cities. This may call for the development of appropriate technology which the poorer city dwellers could afford to utilize. Also, methods of self-reliance or self-help may be effective under certain conditions. Here the idea is not only to get people involved but also to save on scarce government resources. Two examples of the application of some such methods are the Tondo Foreshore Urban Development Project in Manila and the low-cost housing project for the economically depressed urban people in Kerala in India.[17] In Tondo, the emphasis is on self-help. Hence, only the basic building structure was provided to those who were relocated, but this may be expanded later by the occupants themselves. In Kerala, the emphasis is on self-help *and* cooperative action. The low-cost housing project at issue involves a unique subsidy plan and a construction scheme where the initiative is expected to come from the townsfolk who form village-bodies (called *panchayats)* for the purpose of self-help while the government will provide the initial funds and will perform coordination functions.

Jakobson's proposal for a multiplicity of standards for urban growth might also be put to productive use with certain reservations. This is based on the idea that we may think of urban progress as taking place in multiple, yet simultaneous, ways at different speeds in different sectors. According to Jakobson, this idea applied to housing involves the recognition of at least two housing standards, the "welfare model" standards (for the poor) and the "elitist model" standards (for the rich). Jakobson insists that the dualistic standards should be viewed not as an attempt to reinforce or freeze the prevailing structural distinction but rather as pragmatic and "temporal" measures intended to cope realistically with the urgent problem of urban housing.[18] Such standards do not preclude an upgrading of the lower standards by the individual city

[15]D.J. Dwyer, "Problems of Urbanization: The Example of Hongkong," *Ekistics* (November 1969), p. 342.

[16]E.S. Mills in Raanan Weitz, ed. *Urbanization and the Developing Countries.* Report on the Sixth Rehovot Conference. (New York, Praeger Publishers, 1973), p. 206.

[17]Arun Bhattacharjee. "India embarks on self-help rural housing plan." *The Times Journal* (June 6, 1978).

[18]See Leo Jakobson. "Housing Policy and Housing Standards: A Dualistic Dependency" in Jakobson and Prakash, *op. cit.*

dweller himself or by the community seeking better basic conditions for urban life.

Urban strategies aiming at positive development are, however, unlikely to be successful without drastic revisions in the current policy or practice of urban zoning and land use. Such policy is said to be at the root of some of the greatest social evils that beset Asian cities. Indeed, it may be argued with good reason that people live in squatters' areas simply because the high cost of land makes it prohibitive for them either to buy land or build a house or rent. The cost of land has pushed up the cost of housing and rents so high that rents determined by "the market" can no longer be paid by lower-income people. The criticism raised against urban zoning and land use is that customarily these have been treated in a legalistic way and so have tended to obstruct, rather than facilitate, a dynamic and orderly growth of Asian cities. The prevailing practice has also been assailed as reinforcing traditional structural patterns, for it follows outdated regulations introduced in the pre-development era, or tends to favor, in urban politics, the politically powerful property owners whose vested interest is to maintain the *status quo* conditions. This makes all attempts to effect a more mobile and egalitarian urban society in Asia difficult, if not impossible to achieve.

Positive changes in Asian cities therefore demand a set of new policies for urban zoning and land use. This will conceivably entail a land reform program applied to urban areas or alternatively some form of land pricing policy. Such measures may prove to be a meaningful and necessary strategy to break the prevailing practice of land monopoly and speculation and to prevent escalation in urban poverty due to uses of land, which may have dangerous social land political effects. A land reform program in the cities may not, however, be easy to introduce, since such radical reforms in zoning and land use would undoubtedly generate a strong opposition among the powerful landowning interests which, in many Asian societies, are closely associated with the ruling party. The success of such a move would, therefore, depend on the determination and strength of the government in power to overcome or minimize such opposing interests and to muster the support of a sympathetic public in the name of more general human welfare.

***Participation and Politics***

Popular participation and the presence of strong political commitment are two factors that are likely to play a crucial role in the success of the positive urban outlook proposed in this paper.

Planning for people without making them feel that they are improving their position in life is hardly a worthwhile undertaking. Hence, what is wanted in urban development is not so much the presence of politicians deciding for the people, but that people decide as much as possible for themselves. Two strategies may be suggested for "getting people involved" in urban development. One is known as "grass-roots" participation in planning decision, such as was proposed by Mary Hollnsteiner in her study based on Philippine experience.[19] The other focuses on self-reliance. Here, people are expected to rely as much as possible on their own resources for development contrary to the usual practice of having the government doing it for the people. As previously noted, several Asian cities have adopted such strategies.

Actions and perceptions of political leaders also affect urban development deeply whether in a positive direction or otherwise. It has been increasingly recognized that effective urban growth depends to a great extent on the good will, interest and power of politicians or the government in power. A review of the cities covered in this paper also indicates a relatively slow or uneven urban growth in the presence of a liberal political tradition while considerable dynamism has been observed in the cities where authoritarian leaders are in the saddle. An excellent example of the adverse impact of unwieldy democratic politics on urban development is the city of Calcutta. With its fragmented local authority, weak capital resources, a political leadership monopolized by a powerful rentier class and the masses of in-migrants politically indifferent and immobile, this vast Indian metropolis is said to have reached near inertia in its overall growth, a state which, as one writer has put it, ". . .has been the chief characteristic of the city's administration for the last forty

[19]Mary R. Hollnsteiner. "Urban Planning: A Curbside View", *Philippine Planning Journal* (October 1975), pp. 70-72.

years."[20] A similar impact due to a free-wheeling political style was observed by Laquian in Manila in the 1960's where "political compromise rather than administrative efficiency has been the most important factor"[21] and "political fragmentation an obstacle, local units jealously guarding their precious independence."[22]

The authoritarian hand has made itself felt in most Asian metropolises and has, as a rule, led to considerable increase in urban dynamism. In Hongkong, massive housing programs were made possible only because of "benevolent despotism" (Dwyer's phrase) of a concerned colonial authority. In Seoul, according to Meier, developments were pushed because politicians, except those in power, were not consulted. Meier explains the mechanics of Seoul's urban planning saying that, "the Koreans do not bother with a city council because it would slow down the action."[23] In the Republic of the Philippines, the precious independence of Manila has been curtailed by an authoritarian act of the national government following the advent of the martial law regime in 1972, calling for the reorganization of the Metropolitan Manila Area and government. The new structure is now widely hailed as having injected a new dynamism into the life of this primate Philippine city.

Although authoritarianism, rather than the traditional political style, has been a more effective agent of change in Asian cities, the perspective advocated in this paper precludes mere authoritarian solutions from becoming a permanent feature of Asian urban development. The element of participation will have to be accommodated on an increasing level if urban development is to be more than just another government-manipulated project, which, incidentally, may be open to corruptive influences on the highest level. On the other hand, this need not imply going back to the old and perhaps discredited political practice. Rather, this may suggest the possibility of exploring new directions for popular urban representation or participation, which would overcome the major shortcomings of the old directions.

[20]Ali Ashraf. "Calcutta," in W.A. Robson and D.E. Regan, eds., *Great Cities of the World*, Vol. I (London, George Allen and Unwin), p. 300.

[21]Aprodicio A. Laquian. "Manila" in Robson and Regan, *op. cit.*, Vol. II. p. 615.

[22]*Ibid.*, p. 622.

[23]Meier, *op. cit.*, Working Paper No. 112, p. 54.

### *Limitations*

The positive perspective seeks a dynamic approach to urban development. Dynamism is, however, unlikely to be sufficient if our aim is a *healthy* growth of Asian cities. Indeed, the "new urban dynamism" has been assailed as having failed to generate genuine urban development. Such criticism of the dominant urban approach has then been supported by at least three arguments. The first is that urban planners in Asia are excessively pre-occupied with economic growth or "efficiency" to the detriment of social or human development. The consequence of this is then the enduring presence of serious dysfunctional social conditions in most Asian cities.

The second argument focuses on the relative disregard by Asian urban planners for the aesthetic dimension of human experience. Beauty is frequently sacrificed to "getting things done" and the monotony of the new physical environment is experienced as undistinguished grey, creating the mood of disinterest and spiritual boredom. This trend is likely to impoverish man's capacity to appreciate the physical or visual aspects of his urban experience. The third point of criticism focuses on the bias of urban planners in favor of physical planning as against social planning. Their professional training, essentially engineering-oriented, is said to predispose the planners to conceptualize the cities in terms of physical structures or services such as urban health, sanitation, garbage collection and the like. The less technically tractable "human" problems, such as problems of slums and squatting, have been given little or no attention. It seems to be implied that these can "take care of themselves" or are simply "non-problems" or mere "policing problems."

The criticism of the "new urban dynamism" applies also to the progressive cities covered in this paper. Although planning has been extensively used in them to stimulate or control urban growth, such planning appears to have produced considerable pathological defects by which the potentially beneficial effects of planning have been to a great extent negated. In sum, while such planning has been successful in certain aspects, it has failed in other important aspects, specifically to integrate meaningfully the poorer people into the dominant model of urban development. As

Robert Gamer has observed in his critical study of Singapore's "miracle" of urban transformation, this failure "raises the question of whether these shortcomings might be overcome by (mere) structural reorganization of planning."[24] A similar question has been raised by Ocampo, in the context of Philippine experience with city housing. According to him, housing policy traditionally advocated by local jurisdiction in Metropolitan Manila has had equally negative social consequences.[25]

*Positive Development*

The positive urban outlook advanced in this paper should lead the Asian planner to adopt a type of urban development that we think *ought to be* adopted. This implies the recognition of qualitative differences in development, that development is not mere dynamic growth but rather the right kind of growth. As Gamer has suggested, mere pursuit of development may not be enough, for it may lead to a distorted type of growth which may not be worth very much in the end. In sum, the type of urban development that is envisaged as desirable is one that aims at more general urban welfare and that demonstrates the capacity to satisfy a wide range of needs and aspirations both individual and collective, thus enhancing the quality of life in Asian cities.

Our inquiry into the theory and practice of development appropriate for the cities in Asia has revealed that in the decade of the '70's, references to and the use of positive approaches have become more frequent although in a limited way. The Philippine experience is a prominent example of such recent trends. Here the new urban ethos has been translated into such value-impregnated concepts as "Human Settlements" or "The City of Man." A new Ministry of Human Settlements was established in 1978 to give political muscle to more positive urban planning as well as to meet increasing public demand for a better quality of urban life. In 1978, too, a scheme for urban land reform was announced, initially intended for Metropolitan Manila, but its implementation has not been clearly specified. The positive urban policy in the Philippines can perhaps be summarized under the "six guiding principles" which the government announced in 1977. These principles are intended to serve as the basis for new urban development, at least in the Metropolitan Manila Area.[26] These are: 1) maximum community participation in planning and implementation; 2) a total community development; 3) provisions for economic opportunities; 4) maximum retention of structures and families; 5) provision of sites and services; and 6) maximum recognition of land rights. The adoption of such a progressive formula for urban development is an encouraging event, demonstrating the willingness of Philippine planners to explore more positive or dynamic policies for urban growth without disregarding such outstanding problems of the cities as unemployment, alienation and poverty.

Despite such recent trends toward more positive urban policies and outlook, major shifts in the dominant urban perspective are yet to be realized. After all, there are great constraints, such as of financial nature, which may explain why planners of Asian cities should feel more comfortable with the conventional developmentalist pursuit of administrative efficiency and economic growth than with the less tractable and possibly more expensive issues and policies for social improvements. Reluctance to respond more positively to new trends in urbanization may, however, be traced to deeper causes than the planners' concern for scarce financial resources. More likely than not such reluctance is rooted in the peculiar personal values or in the assumptions which the planners hold about the nature of society and man. The generation of Asian planners dominant today still appears to view urban development in essentially mechanistic or manipulative terms, focusing attention to structural and physical rather than human factors. Hopefully, the new generation of Asian planners will perceive a need for more humanistic urban values such as those that have been outlined in this paper, based on the realization that the city is made for man rather than man for the city.

[24]Robert E. Gamer. *The Politics of Urban Development in Singapore.* (Ithaca, Cornell University Press, 1972), Introduction XXII.

[25]See Romeo B. Ocampo. "Historical Development of Philippine Housing Policy." (Part I and II). Occasional Paper Nos. 6 and 7. (Manila, College of Public Administration, University of the Philippines, 1976).

[26]Val Abelgas. "Improving life in slum areas," *Philippine Daily Express* (March 25, 1977), p. 10.

# DEVELOPMENT OF INDIGENOUS CIVIC ARCHITECTURE

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### *Historical Precedents*

The current policy of deriving architectural concepts for massive and permanent buildings from the country's past cannot go beyond the Colonial I period because there were no stone structures or public monuments in pre-Spanish Philippines. Authorities have cited numerous reasons but cogent are:

a. The Philippines was in a marginal position in relation to Chinese or Indian centers of culture, thus receiving no direct impact on building massive structures.
b. There was no strong political or religious structures which can capably direct the erection of massive edifices.
c. The people had impermanent settlements for they had a shifting type of agriculture.
d. Religion was centered on kinship groups called *anitos* and ceremonies were conducted in abodes of religious functionaries.

Nevertheless architects, builders and designers can derive from pre-colonial sources motifs, patterns and ornamentations that are culturally relevant and entrenched in traditional beliefs. These ethnic designs can be the catalysts for evolving an Architectural Language for interior architecture and ornamentation.

Aside from the primitive dwellings of nipa, cogon or bamboo that have often been described as picturesque, the early Spanish churches and important buildings of the community are the only historic precedents from which architectural forms and massing can be derived from. These structures were built under the direction of architect-priests. Most of them were better known as *maestro de obras.* Between the 16th and 18th century, there were no more than 19 architects/ builders in the country. It was only when the Suez Canal was opened to shipping, as well as when trade restrictions in the Philippines were lifted that construction increased in volume.

By the 18th century, there were already Filipino *maestros de obras.* Stone masons were also increasing in number. During this period one can evince certain architectural qualities and regional expressions in the structures. Oriental motifs were also becoming evident since some of the craftsmen were Sangleys or Sangley-trained. This was particularly true for woodwork. In 1805 an ordinance created the Corps of Engineers. This government agency took charge of the erection of all public buildings including churches. In the remote areas it was still the parish priest who managed the erection of churches and related buildings. The plan was basically rectangular. In many places nipa was the only roofing material since tile-making was not widespread. When quality building stones were not available, chapels and visitas were built of timber poles and *tabique pampango* walls.

In 1883 the first galvanized iron sheets for roofs were introduced. It was used in the reconstructed Tondo church which was destroyed in 1863. The *armodura de hierro* was imported from England.

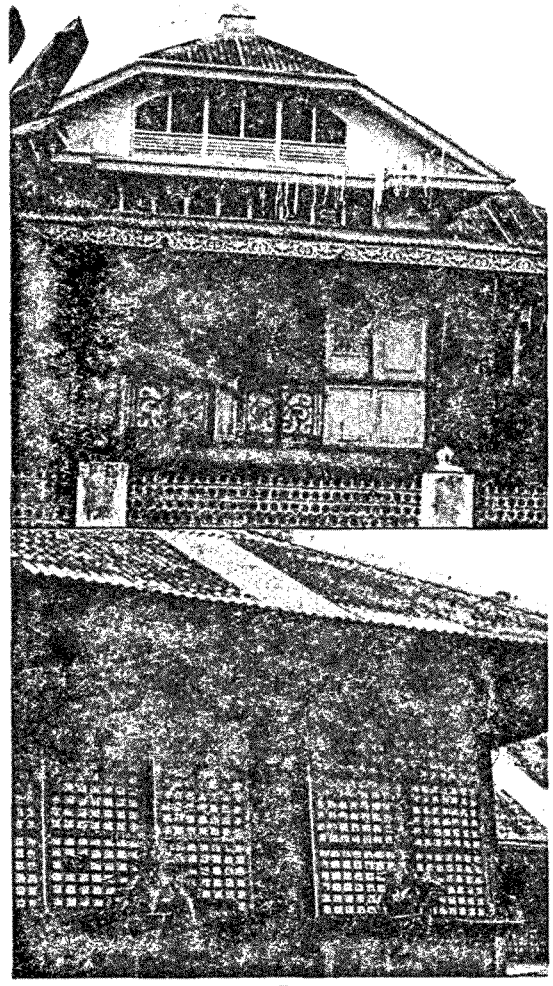
### *Architectural Evolutions*

Architecture for massive and permanent buildings derives its models from Spanish architecture of the middle ages, but on a round-about way. It has been greatly modified to come to terms with the harsh environmental conditions of the country. It is an architecture where the tropical climate has to be considered; where structures have to withstand typhoon winds, rains,

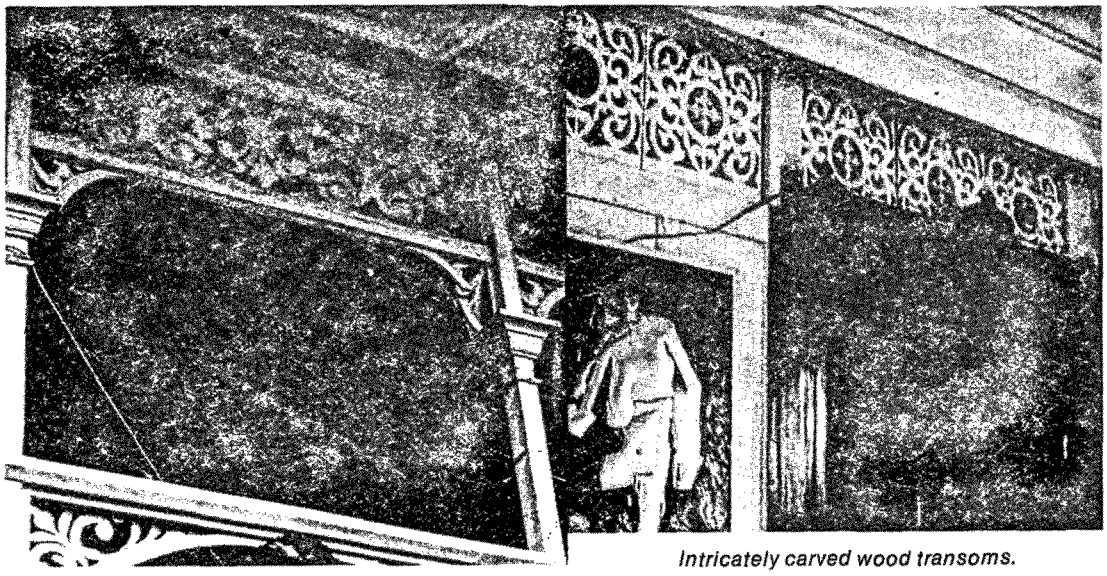
earthquakes, floods and conflagrations. Materials and technical skills were very limited. Thus, influences were a blending of oriental and occidental; the latter transmitted by way of Mexico (Nueva España) of the Galleon Trade days. When Mexican Baroque emerged in the 17th century and up to the 18th century, it led to distinctive architectural models for Philippines religious and public buildings.

Originality and ingenuity in design of Philippine churches in the 17th and 18th centuries are manifested in the treatment of the structure, in the use of native materials and woodwork, as well as in ornamentation. Bamboo, rattan, nipa, cogon, cabo negro, anahaw and all Ithe best hardwoods were used. The early *capillas,* also known as *tipo kamarin,* were barn-like structures of wood and bamboo which have roofs of cogon or nipa.

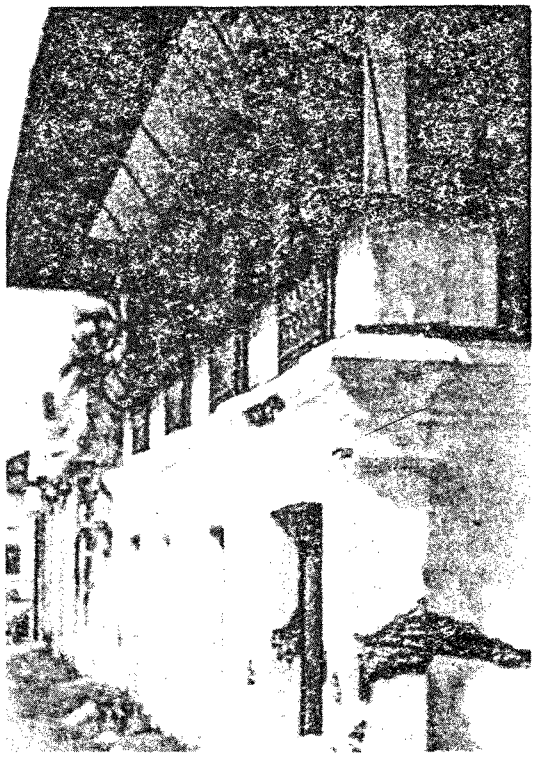
The *convento,* the residence, a prime guest house and administrative office of the parish-priest was where the architectural concepts of the Filipino emerged. Its massing, the nature of materials used and the architectural treatments were derivatives of the *bahay kubo.* The structure was usually of two stories. The ground floor was of massive stone buttress for resistance to earthquakes. On the other hand, the upper floor was made of wood panels. It had an *azotea,* window panes were of *capiz* shells, and transoms were intricately carved wood screens. Balustrades were exquisitely turned.



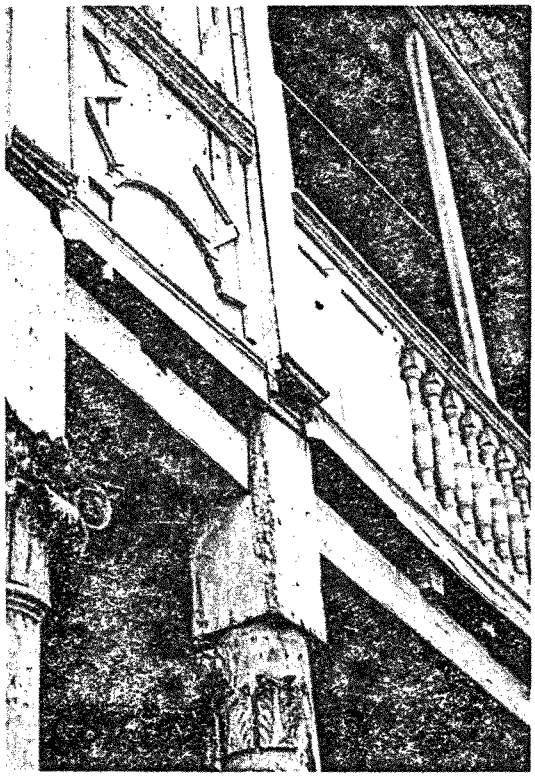
*Capiz shell window panes.*



*Intricately carved wood transoms.*



*Typical two storey-structure.*



*Ornate columns.*

***Project Implementation Colonial Precedents***

Because the ministry of the faith in the regions were given over to the religious order, this became more of a permanent tenure. Thus each region eventually developed its own architectural trademark. The planning, design and construction of churches and convents became the responsibility not only of the incumbent curate but of the religious order as well. Construction was slow, taking several decades to finish. Nevertheless, the fine workmanship of the Sangleys served as a standard for the craft.

***New Thrusts for Civic Architecture***

Present thrusts for civic architecture in the Philippines can therefore take its precedents from the massive building projects done during the 17th and 18th centuries. The continuation of the evolution should begin from these periods.

Having these as historic precedents, the non-uniformity of building types that vary from region-to-region should stem from:

a. Climatic conditions
b. Nature of materials available
c. Site planning considerations
d. Building skills available
e. Cultural considerations
f. Economic base and trends of the region.

In general, the evolution of an indigenous civic architecture must take a strategy that stresses:

a. Deep thought in regional design approaches;
b. Recognition of the nature of materials and their local exploitation;
c. Fine workmanship in both the shell, the finish and ornamentation;
d. Site planning as an avenue for both design and safety in building;
e. Life-cost rather than only the initial cost. Necessarily the building maintenance cost should form part of the budget.

***Architectural Language***

This strategy will require the development of a mechanism for inculcating awareness for local design images among the Filipinos. The ultimate goal of this strategy is to make Filipinos identify, appreciate, and use local

aesthetics in their shelters. Such mass demand will therefore require an architectural language.

The approach in evolving an architectural language in the Philippines will require systematized documentation of the artifacts and activities of the diverse cultural roots along regional contexts.

Through formal as well as informal channels, but primarily through the practising architects and mentors of the architectural profession, an architectural language properly documented and widely dessiminated, can aptly be used as synthesizing functions towards an architecture truly PHILIPPINE.

### *Outcome*

The outcome of the work is an evolutionary one. Necesarily, this has to be institutionalized within regional networks which the architects undertaking commissions in specific "architectural regions" of the country can use as a compendium reference of Architectural Languages not unlike any writer of the print medium when using a Thesaurus of word-meanings.

The Architectural Language can therefore be used by architects as a means to develop their design concepts. By this way, no institution or stereotyped rules and regulations can usurp their creative prerogatives. The Architectural Language should be only a compilation of programmatic concepts which are documented as responses to the considerations of environment, culture attributes, and activity provisions.

### *Means*

The procedures for developing the Architectural Language shall be on an incremental and cumulative basis. Tradition and geographic atrributes are the bases from which architectural patterns shall evolve. Only meaningful elements from which architectural languages can be derived shall form the basis of the system. These shall be linked to behavioral and activity oriented considerations that may require sheltering, enclosure, territoriality, and symbolisms. Stages for developing the language, from inception to institutionalization, are itemized below:

### *Process for Evolving an Architectural Language*

Stress shall be given on visual documentation with annotations:

A. Develop Environmental and Regional Image
   1. Climate
   2. Geographic Character
   3. Raw Physical Resources
   4. Boundaries

B. Map Activity and Behavior Patterns
   1. Culture
   2. Folkways
   3. Livelihood
   4. Beliefs

C. Establish Perceptions, Proximics, and Memory Structures
   1. Visual System
   2. Auditory System
   3. Smell-taste System
   4. Haptic System
   5. Basic-orienting System

D. Compile Architectural Language
   1. Patterns
      a. Landscapes
      b. Landmarks
      c. Services
      d. Resources
   2. Behavioral Circuits
      a. Activities
      b. Linkages
      c. Hierarchies
      d. Responses
   3. Programatic Concepts
      a. Groupings
      b. Relationships
      c. Security
      d. Flexibility
      e. Flow/Movement
      f. Orientation
   4. Character
      a. Image/Vistas
      b. Orientation/Articulation
      c. Scale/Proportion
      d. Materials
      e. Unity/Harmony
      f. Ornamentation
      g. Color

### *Architectural Rebirth*

The evolution and realization of an Architectural Language for the Philippines will hopefully inculcate in the new architects of the country a renewed enthusiasm to think and design Filipino, and to make them aware of the country's architectural and historical precedents, so that they may promote a rebirth of Filipino art in building.

# TOWARDS AN APPROPRIATE ARCHITECTURE FOR THE PHILIPPINES

**Jaime Uyvico Nierras**
**Ministry of Human Settlements**
**Philippines**

Food, shelter and clothing are the universal needs of man. Of these three, shelter protects man and his family from the harsh elements of nature—the bitter winter cold in the temperate countries and the intense heat of the sumer sun and the strong winds during the typhoon season in the tropical regions. It provides him with the minimum spaces within which he and his family dwells and carry out their domestic activities. It is the place that eventually man calls his home.

In the Philippines, the Ministry of Human Settlements has identified shelter as only one of the eleven basic needs of man and his community—together with food, clothing and cottage industries, livelihood or economic base, ecological balance, water, power, sports and recreation, education and culture, health and nutrition and mobility. The goal of the Ministry of Human Settlements is to provide all the human settlements of the country with at least the basic minimum adequate provisions for all of these basic needs.

In terms of shelter or housing, the primary goal is twofold: one, to provide man and his family with the basic minimum adequate spaces in which to live; and two, to express, design and build these minimum adequate spaces in what might be called *appropriate architecture.*

*Minimum Adequate Space*

The International Labor Organization has suggested that the target minimum adequate space for a house in the developing countries of Asia is about 5.25 square meters per person. In the Philippines therefore, where the average number of persons in a household is about 6 persons, we would have to provide a minimum of about 31.5 sq.m. for each house. This is very much smaller than what is presently provided in existing low-income housing projects in Metro Manila, where the floor areas of houses would range anywhere from 50 sq.m. to 90 sq.m. or even more. On the other hand, the 31.5 sq.m. minimum is probably larger than most houses that farmers and fishermen build for their families in the rural areas.

At present there is actually no standard yet for the minimum adequate space for the Filipino family, either in the urban or rural areas. This topic is still the subject of current intensive research.

For the rural housing component of the Bagong Lipunan Sites and Services Program of the Ministry of Human Settlements or BLISS I Program,the minimum floor area for house that must be provided for a family of 6 is set at 30 sq.m. This is a 5 m. by 6 m. house, which our architects find reasonably adequate for a small house with a small veranda, a combined living and dining area, one bedroom and a small kitchen and toilet.

Perhaps the setting of minimum adequate standards is not all that important, especially when placed in the context of Philippine local conditions. In the rural areas, for example, although the extended family is still the tradition, families actually live more in a community rather than in a house. What we mean is this: blessed with warm tropical climate for the entire year, most of the members of the family spend most of their time outside the house. The father, together with his eldest son, is out tilling the ricefields the whole day. The older children entertain their friends or "barkada" at the improvised basketball court or in the nearby "sari-sari" store; the younger children are either attending school, or out playing with their peer groups in the playgrounds or in the streets. The only member of the family left in the house is really the housewife, who also spends a good time of the day at the

nearby public market where she buys the food for the family for that day. The family therefore actually get together only during mealtimes and at night. It is little wonder then, that the typical one-room Filipino rural house is actually adequate shelter. The interior spaces are sensibly used such that the entire house becomes the living room and play area for the younger children during the day. The house is converted into a dining room during mealtimes, and into a spacious bedroom at night.

The small rural house might not look good by some standards—it might even look frail—but it is adequate shelter.

*Appropriate Architecture*

Over and above the provision of minimum adequate spaces for shelter, the Ministry of Human Settlements is mandated to express this shelter in *appropriate architecture*. This is architecture that seeks to effectively respond to the Filipino family's socio-cultural activities, to protect its member from the hot and humid climate and more importantly, to strongly reflect their cultural identity as Filipino.

The goal of appropriate architecture is to create shelter that will not only provide the family with the minimum adequate spaces, but one which also extensively use readily available indigenous building materials in a house designed and built along Filipino architectural motifs.

If one makes a comparison between the remote rural villages in the country and some of the exclusive resorts and sports clubs of Metro Manila, it will be noticed that they have something in common—that is, they may both be considered "appropriate architecture." Both use indigenous building methods and their facades are designed along distinctively Filipino architectural motifs. Indeed, it has become ironic that appropriate architecture has been relegated to the remote rural villages, whose inhabitants fortunately still adhere to traditional building techniques, and to the very rich in the urban areas, where it has become something of a status symbol. For the majority of the Filipinos, appropriate architecture, or the use of indigenous materials and Filipino architectural motiffs, has come to be regarded as fragile and impermanent, uneconomical, impractical, and even out of style.

For those who are familiar with Philippine history, the reasons for such disturbing attitude is not difficult to identify. It is simply a sad mixture of the vestiges of colonial mentality on the part of the occupants, and a bit of misguided architecture on the part of the designers. Most of today's Filipino architects, unfortunately, went through a curriculum and a system that encourages them to almost follow, if not copy, western architectural trends. The lack of serious research on Filipino architecture only serve to compound the problem, and hampers any effort towards the creation of Filipino architecture.

Redirecting values and revising the architectural curriculum is, of course, another subject matter and cannot be covered here. However, it may be noted that the architectural profession, specifically the United Architects of the Philippines (UAP), has taken note of this disgraceful trend, and has formed an Architectural Education Evaluation Committee to revise the curriculum, and is now in the process of identifying the pertinent syllabi and textbooks to be used by the students and teachers in order to effect a redirection of trend towards the creation of an appropriate architecture for the Philippines. Hopefully, in the next few years, these efforts will result in a new set of architects who will think and design "Filipino."

Meanwhile, the questions that confront us at this point are the following: what are indigenous materials? Are those materials weak and temporary, uneconomical and impractical? What is Filipino architecture? Is Filipino architecture out of style or obsolete?

Indigenous materials may be defined as those materials that are readily available in the area, or that are native to that locality. These are the more traditional building materials which our forefathers so wisely used, such as the ubiquitous nipa palm, which grow wild in swamps and rivers, the bamboo, of which the Philippines has around 32 species; rattan, cogon grass, clay tiles, wood shingles, capiz shells and the like.

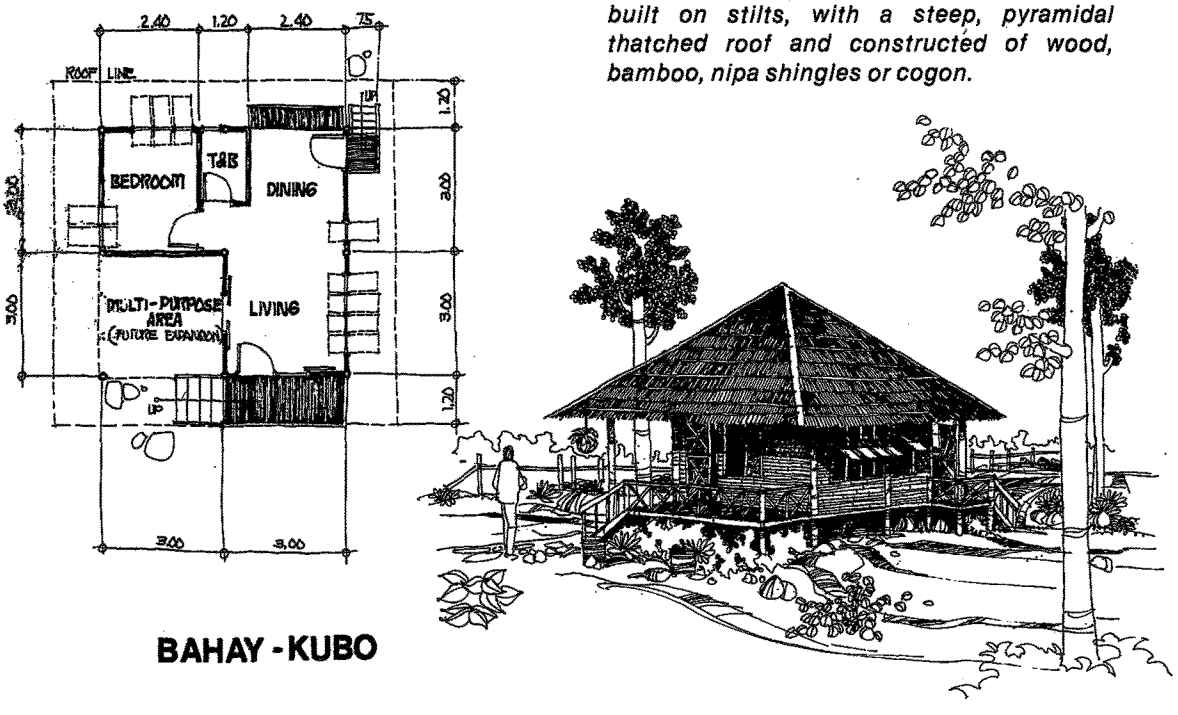
Indigenous materials, however, is not and should not be limited to these traditional building materials. It must include the more modern and ingenious inventions and discoveries, the new ways to which indigenous raw materials can be put to use. For instance, the use of corals in Cebu, where

they are plentiful; panels or board made of laminated bamboo, coir, or even rattan; floor tiles made of coconut shells or bamboo; or building blocks made of saw dust, rice husks, or even mine tailings—raw materials which up to now have been regarded as wastes.

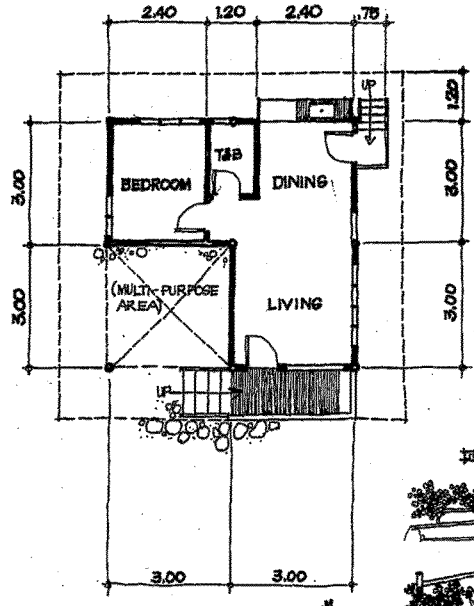
There is also the coconut tree, which has enumerable uses foremost of which is the emerging use of Madera Imelda. Madera Imelda is a new construction material made from virtually useless coconut trees that are 40 years old or more. It has a fine-grained natural finish and is exotically flacked with a design resembling the feathers of a Palawan peacock. Lumber that is cut from the coconut trunk may be used for flooring, siding or panelling, and for exterior walls. Since Madera Imelda uses old coconut trees which have decreased their productivity, its production will contribute to the importance of replanting coconut trees that have to be cut down and replaced in order to increase coconut production.

If these are the indigenous materials that form the building block of appropriate architecture, what is Filipino architecture? Is there Filipino architecture? The Filipino is a mixture of influences, including the Malays, the Chinese, the Spaniards, and the Americans. Will a mixture of all these influences and architectural types produce Filipino architecture? This question is admittedly difficult to answer now, simply because there are no answers yet. At this time it might be safe to identify the traditional architecture of the country as representative of the Filipino architectural style. These are the nipa hut or the "bahay kubo" in the Visayas regioin; the Antillean or Spanish influenced architecture of the Tagalog region; the Muslim-inspired architecture of the South; and the architecture of the cultural minorities, exemplified by the Igorot house in the mountain provinces.

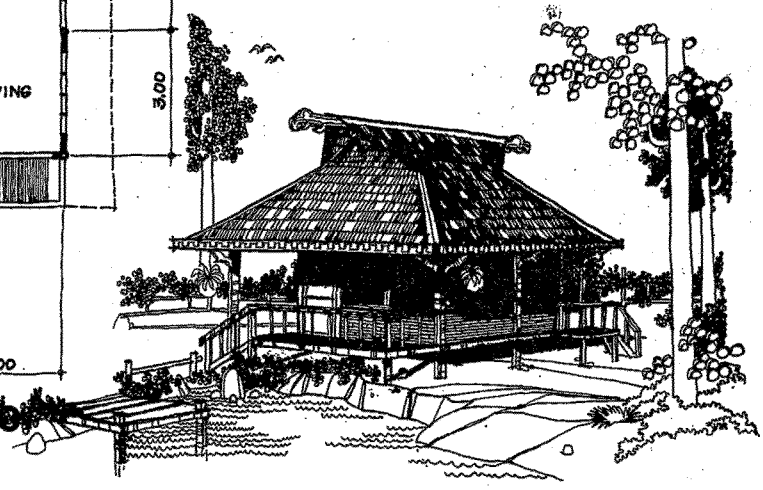
*The "bahay kubo" or nipa hut is the most predominant motiff in indigenous housing. It is essentially a one-room rectangular house, built on stilts, with a steep, pyramidal thatched roof and constructed of wood, bamboo, nipa shingles or cogon.*



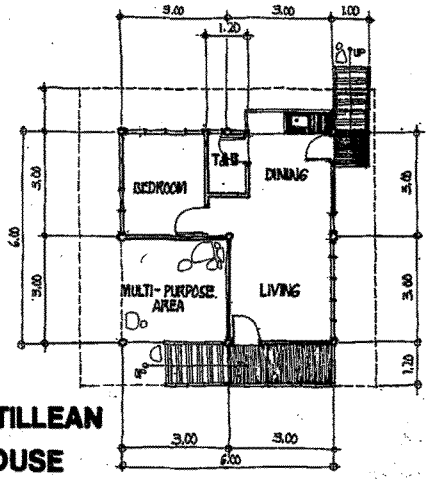

**BAHAY - KUBO**



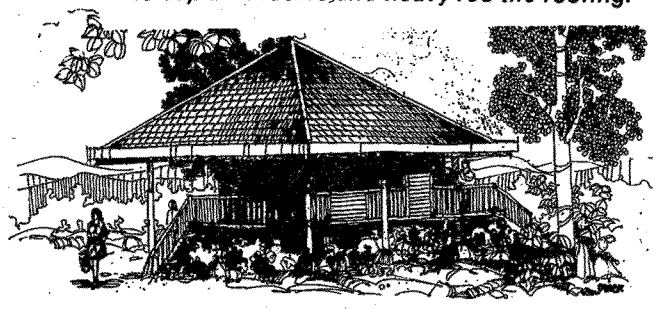

*The Muslim-inspired house is based primarily on the bahay-kubo. However, the artistry of the Muslims is evidenced in the introduction of color and carved animal representations or ornaments such as the sarimanok, panalo, and magoyoda.*



**MUSLIM FILIPINO HOUSE**



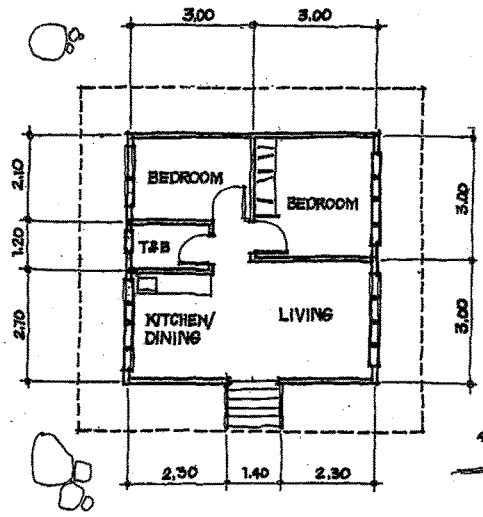

*Influenced by the Spaniards, the Antillean house is an elegant two-storey house characterized by its thick stone and masonry walls on the ground floor, constrasted with the light and airy wooden second floor with its capiz windows and heavy red-tile roofing.*



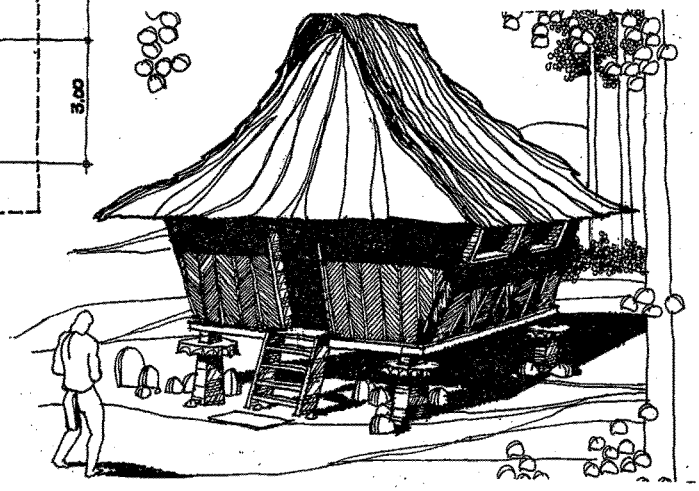
**ANTILLEAN HOUSE**

These four architectural forms are a direct response to the socio-cultural needs of the people; the dictates of climatic conditions; the constraints of building technology; and the availability of indigenous building materials. These houses can therefore be regarded as *appropriate architecture*. Today, these forms can be found only in the remote barrios of the country; in areas designated by the Historical Commission for preservation; or in some exclusive clubhouse or tourist resort. Appropraite architecture has therefore been associated only with either the rural areas and the very poor, and therefore thought to be fragile and not durable; or the urban and the very rich, and therefore expensive and impractical.

Are indigenous materials not durable? The question of durability is rather debatable. Although indigenous materials may not last for centuries like the pyramids or other monuments, they are suitable and durable enough for domestic architecture or housing. Nipa shingles, when thatched, may last for an average of five (5) years. The lifespan may increase up to 15 years depending upon the degree of slope of the roof, and the distance between shingles. The steeper the




*The Ifugao house is basically a square, windowless enclosure raised high above the ground on four posts, with its heavy pyramidal roof and wide eaves as the dominant features. Carved into the beams, walls, and doors are decorations such as animal forms and other colorful and artistic patterns.*



**IFUGAO HOUSE**

slope and the closer the shingles are to one another, the longer they will last. The degree of slope affects water retention in the roof during and after a rain. Bamboo and rattan, when properly treated, which could be as easy and simple as soaking them in sea water for a specified number of days, will similarly last for a good number of years. Cogon, which is a grass and regarded more as a nuisance, is used as a roofing material in the rural areas and can last up to 20 years. Madera Imelda, or coconut lumber, is expected to last up to 30 years or more, when properly treated.

The challenge, therefore, is to find better ways of treating these indigenous materials so that they can resist tropical weather and tropical insects, and become more durable. To dismiss these raw indigenous materials as something weak and impermanent, and to substitute steel and concrete and corrugated galvanized iron sheets, is a solution that is too easy, too costly, and too inappropriate. At the same time, the durability of a structure is not wholly dependent on the materials used, but is obviously also contingent on proper care and maintenance, careful site planning and judicious use of land forms and vegetation for protection against strong winds, and proper construction methods.

Is the use of indigenous materials impractical? Nipa shingles, cogon, bamboo and other such materials easily catch fire. But, when properly used and maintained, and when treated, can become fire retardant, even fire resistant. On the other hand, the Philippines is only a few degrees from the equator, with a temperature that hovers in the high 90°C during summer, with a relative humidity also in the nineties. Such considerations therefore require that indoor spaces such as that of a house are to be carefully shaded, provided with proper adequate cross ventilation, and built of materials that are light and airy.

In the coastal areas, where most of the rural villages are located, the use of nipa shingles for roofing is not only light, airy, and inexpensive; it is also preferable over corrugated galvanized iron sheets, which are easily corroded by the saline atmosphere of the seashore areas.

Is the use of indigenous materials uneconomical? On the contrary. The present cost of indigenous materials can be made less expensive through mass production and by developing industrialized housing. Thus, building components such as doors, window panels and even entire walls can be designed on a modular basis and mass produced in areas where these indigenous raw materials

are abundant. An entire building industry can therefore be generated from this. Thus, a community located in an area where bamboo is abundant could start a cottage industry based on this raw material. It could then produce housing components such as laminated bamboo doors and windows, or wall panels, and supply the needs of other communities which would similarly be building houses. The same can be done for the other raw materials, such as clay, stone, and the more traditional materials such as nipa shingles, rattan, cogon, and others. This will not only supply current demands for these products, but will obviously create the much needed employment in the rural areas. When the use of these indigenous materials shall have been accepted, the demand is expected to increase. Perhaps it is now the proper time to efficiently farm and cultivate these indigenous raw materials, so that instead of depleting our supply of bamboo and nipa palms, for example, which only grow wild in swamps and river tributaries, these materials could be cultivated properly to produce bigger yields and create a steady supply of raw materials. A research might even be started to see how these materials can be produced more economically and how they might become more resistant to tropical insects and made more durable for tropical weather.

The economic possibilities of industrialized housing based on indigenous building materials is limitless. What is needed is the provision of proper extension services such as credit facilities, efficient utilization of raw materials, financial incentives and organized efforts to make use of volume discounts in the procurement of raw materials.

Lastly, is appropriate architecture out-of-style or obsolete? Is it only for the very poor, or for the very rich? This is perhaps the most difficult problem that faces today's Filipino architects and designers. When the First Lady launched the Architectural Renaissance Program of the Ministry of Human Settlements, and when she challenged the architects and designers to develop Filipino architecture, she was not asking for another "bahay kubo," or another Spanish or Muslim house. What is needed today is architecture that is at once Filipino and yet contemporary. This means that the architects and designers must create new forms that will evolve from the traditional Filipino architectural forms and motiffs. These forms must be modern, but not western; traditional, but not archaic.

It is a difficult challenge, one that can only be set by the limits of the creativity and innovativeness of our contemporary architects and designers. However difficult, it must be met.

The current revision of the architectural curriculum and the efforts to re-educate the Filipino architects are all laudable. But the results, like architecture itself, must be seen, felt and experienced. Only time will tell whether today's architects and designers are able to meet this challenge and create a true Filipino architecture that will be accepted by the majority of his countrymen, and not only by the elite.

To summarize, the goal of the Ministry of Human Settlements in its shelter program is not only to provide adequate spaces for living, but also to express this shelter in terms of appropriate architecture. This means that indigenous building materials must be used extensively and the housing designs should adopt Filipino regional architectural motifs. These indigenous materials are durable enough, and can even be made more durable through proper maintenance, treatment, and construction methods; they are suitable and practical for the country's hot and humid climate; and they are inexpensive and can even be made less expensive through mass production of building components made of indigenous raw materials. True Filipino architectural forms that are modern and contemporary are yet to be created. Meanwhile, there are the traditional architectural forms to start with.

To conclude, the use of indigenous materials and of Filipino regional architectural motifs has both an economic and socio-cultural role; it can start massive cottage industries based on the industrialized use of local materials in the production of building components; it can rationalize the farming or cultivation of these indigenous raw materials; create employment in the rural areas where these are urgently needed; and help in attaining the goal of self-sufficiency and self-reliance.

At the same time, it can start a re-awakening among the people of the true value and beauty of traditional building materials and building forms more attuned to his culture and traditions; and perhaps more importantly, it can augur a rebirth of Filipino art in building, and create appropriate architecture for the Filipinos.

# INTRAMUROS REDEVELOPMENT*

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## Introduction

Interest in the restoration and preservation of Intramuros dates back to 1936 when Commonwealth Act No. 171 promulgated the adoption of the Spanish colonial type of architecture, at least for the facade of buildings and other structures within the walls of Intramuros. This was, however, repealed by Republic Act No. 1607.

On 24 March 1966, President Marcos issued Executive Order No. 13 which created the Intramuros Restoration Committee (IRC), charging that body with the "restoration, preservation and maintenance of the walls, gates and bastions of Intramuros and other historical edifices and artifacts therein as monuments of cultural heritage and historical past of our country." Through Presidential Decree No. 186 (10 May 1973) the duties and functions of IRC were transferred to the National Historical Institute.

The signing of Presidential Decree No. 1277 in January 1978, again revived the interest in the project. This decree provided, among others, the general guidelines for the restoration of this historic site. It however only emphasized the restoration/preservation of its famous walls.

Yet with all the movement to restore Intramuros to its former grandeur, nothing so far has happened on a large and revolutionary scale. This paper then proposes two development plans for Intramuros. One proposal envisions the transformation of Intramuros into an embassy district and the other as a cultural/historical center.

Present-day Intramuros is briefly described before the presentation of the two proposed concept plans for Intramuros will be made.

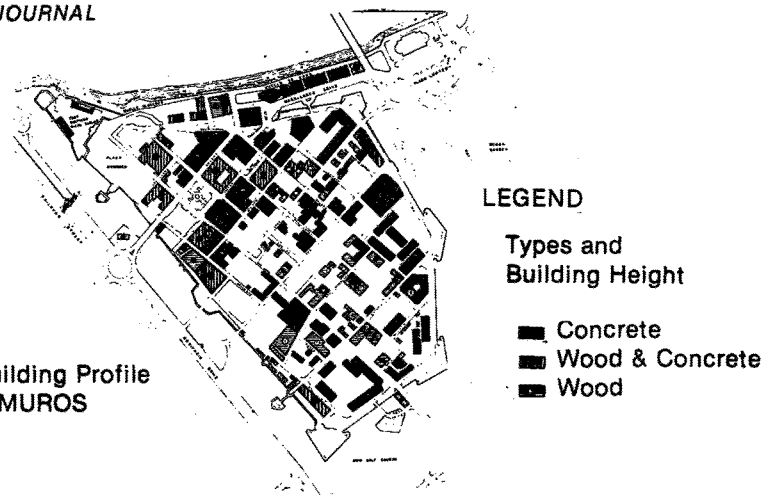
## Intramuros Today

The present-day Intramuros is indeed a far cry from the glorious Intramuros of old. But reminders of the former significance of the area can still be felt and seen. For one it can still be considered as a center of learning, as within its confines are a number of educational institutions. It also has a number of religious institutions, among them being the historic San Agustin Church and the Manila Cathedral.

Intramuros may not be the seat of the government anymore but it still remains the home of several government offices such as the National Treasury which is situated at the old Central Bank building and the former Ayuntamiento, the Ministry of Labor, the Ministry of Public Information (Region IV), the Commission on Elections, the Commission on Immigration and Deportation, the National Seamen's Board, the Overseas Employment Development Board, and the National Media Production Center. These government offices are scattered all over the place. The NMPC alone is housed in no less than five buildings located in the central area, while others are spilled around the peripheries.

It is evident that the influence of modern times has somehow affected the area as may be seen in the existence of a number of modern high-rise structures. Such structures are of modern architecture ranging from four to twelve storeys high. The existence of

*This proposal was based on the study done by the MPWTC/IEP MURP class '78.




Existing Building Profile
INTRAMUROS

these establishments, many of which are banks and offices, signify that present-day Intramuros fulfills relevant commercial purposes. The presence of such offices and schools in the area has given rise to the mushrooming of smaller commercial establishments in the area such as book stores, restaurants and other eateries, sari-sari stores, barber shops, boutiques, and others.

A large portion of the land area of Intramuros remains relatively free of structures. Except for some law offices, insurance agencies, travel agencies, and newspaper offices, the heart of Intramuros is made up of warehouses of different shipping firms, transportation companies, and several brokerage firms which now have been ordered demolished. The proximity of Intramuros to the Manila Harbor Docks makes it a convenient depository of shipments and cargoes, thus, giving rise to related activities like the handling and transporting of cargoes. Residential units abound in the area. They are widely dispersed and of different styles. Some are just a little better than shanties while a few are, surprisingly enough, imposing the kind of houses that one finds in new and modern subdivisions. Most of the dwelling units are of the apartment variety or of the dormitory type and situated usually near the schools. The office buildings are of the mixed residential-commercial type, the ground floors of which are utilized as stores or restaurants while the upper floors are for residences.

The area, too, has a number of open spaces such as the Plaza Isabel, the Plaza España, Plaza McKinley, the Boy and Girl Scouts Plaza, the Manila Aquarium, and Fort Santiago. The latter, aside from serving as open space, also reinforces the historical attractions of the place and serves as a recreational park. Now, the proposed concept plans.

**Intramuros as a Historical/Cultural Center**

This concept plan proposes to set up in the heart of Intramuros a cultural complex and a miniature Intramuros to house Filipino-Hispanico art and culture. The proposal seeks to declare a choice portion of Intramuros, right in the very heart of the old city, a pedestrian zone or mall. This area will contain the complex and miniature Intramuros. More specifically, this zone will be bounded on the northwest by Beaterio, on the Southeast by Sta. Potenciana, on the northeast by Gen. Luna, and on the Northwest by Solana Street. This strategic location of the museum complex will afford ease and convenience.

The circulation system is basically pedestrian oriented. The separation of vehicular from pedestrian traffic is made possible by a major circumferential road at the periphery and the pedestrian precincts.

The spatial arrangement of the various components was evolved focusing on land uses, separation of vehicular from pedestrian traffic and environmental quality. In short, the proposal which seeks to rationalize the land use in the area envisions an approach that strikes a balance between those in favor of complete restoration, regardless of funding requirements, and those opting for a combination of historic and commercial solution.

**Rationale for the Development**

The identity of a nation depends to a large extent on tradition, customs, and the cultural heritage of its people. Components of the physical environment could be viewed as monuments depicting the arts, architecture, and characteristics of the people's culture and development.

Intramuros, the walled city, is one of Manila's historical landmarks and a stark evidence of the nation's glorious past. The development of Intramuros into a cultural/historical complex has several justifications:

- The restoration and preservation of the walls represent the country's appreciation for precious historical relics of artistry and craftsmanship. Furthermore, a policy statement for the development of the area into a cultural complex is contained in a proposed Presidential Decree amending PD 1277 which provides the restoration of its original moat and esplanade by including the preservation and restoration of the walled city;
- The "walled city" represents an integral part of our national history;
- The proposal will bring to life the splendor of the past era within the walls as tourist attraction in particular and as enrichment to the cultural heritage of the nation in general, and
- The move will rationalize the land use in the area to balance the combined historical and economic (commercial) aspects of development.

**Strategy**

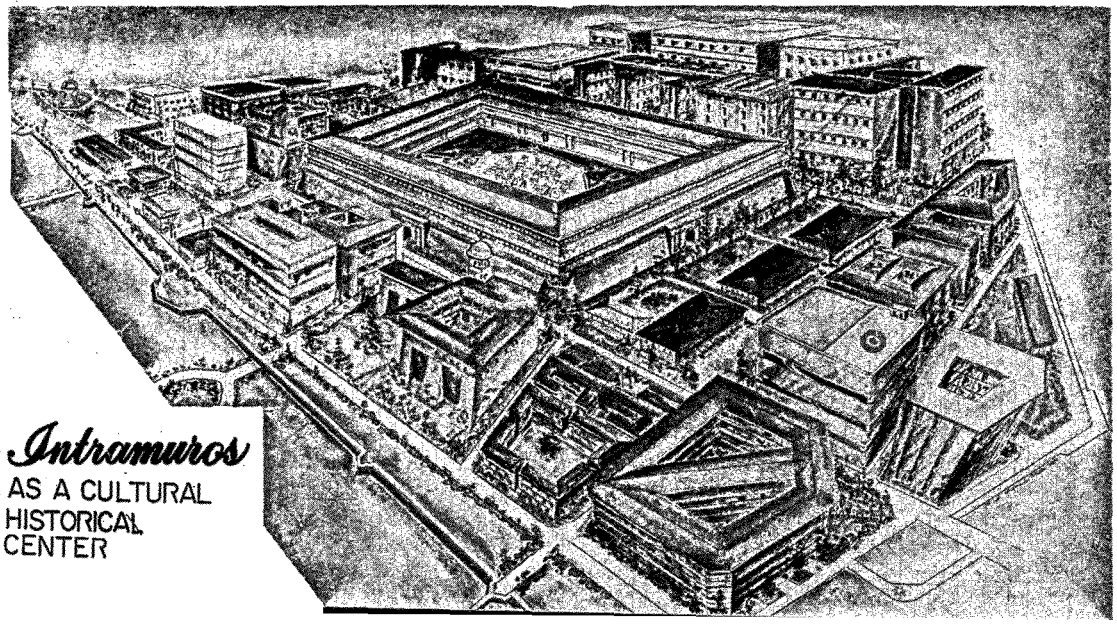
The strategy calls for the restoration of historic buildings or its ruins like the Ayuntamiento, the Intendencia and some religious structures like monasteries, schools, and churches to their original structure as may be possible.

To dilute the sentimentalism of the proposal and thereby inject realism or pragmatism into the entire development plan the commercial buildings will be allowed to function as originally intended.

As in other development plans influenced by citizen participation, a number of drastic steps that jolt the status quo are recommended:

- The transfer of Manila City Hall into the area now occupied by the Pamantasan ng Lungsod ng Maynila;
- The transfer of Pamantasan ng Lungsod ng Maynila at the vicinity of the Mapua Institute of Technology; and
- The transfer of the following institutions or offices into Intramuros: Cultural Center, the National Library, the National Historical Commission, Bureau of Buildings, Archibishop's Palace, Papal Nunciature, Pope Pius Center, and the Planners Group.

Therefore, unlike the ruins of Ayutthya, the old capital of Thailand, where dynasties of pre-European periods have left monuments to their passage, or those of Rome where the ruins have been left as they are without attempting at restoration, Intramuros is also intended to be a living museum of art of the medieval times.



*Intramuros*
AS A CULTURAL
HISTORICAL
CENTER

**Intramuros as an Embassy District**

This alternative development scheme for Intramuros proposes to develop the walled city into a viable embassy district, without losing sight of its historical merits. Together with the infusion of diplomatic air, the historical aura of the place will be maintained by restoring and preserving buildings and other structures of historical value.

The security measures and safeguards required by a diplomatic complex are considered, without hampering and discouraging the general public from enjoying and using the historical, cultural, and religious facilities within Intramuros, which are in the first place preserved for popular appreciation. Adequate support facilities within the area to meet the needs of the international community are likewise provided for.

**Rationale**

The Office of Protocol of the Ministry of Foreign Affairs lists some thirty-eight foreign embassies with offices in the country as of 1975.

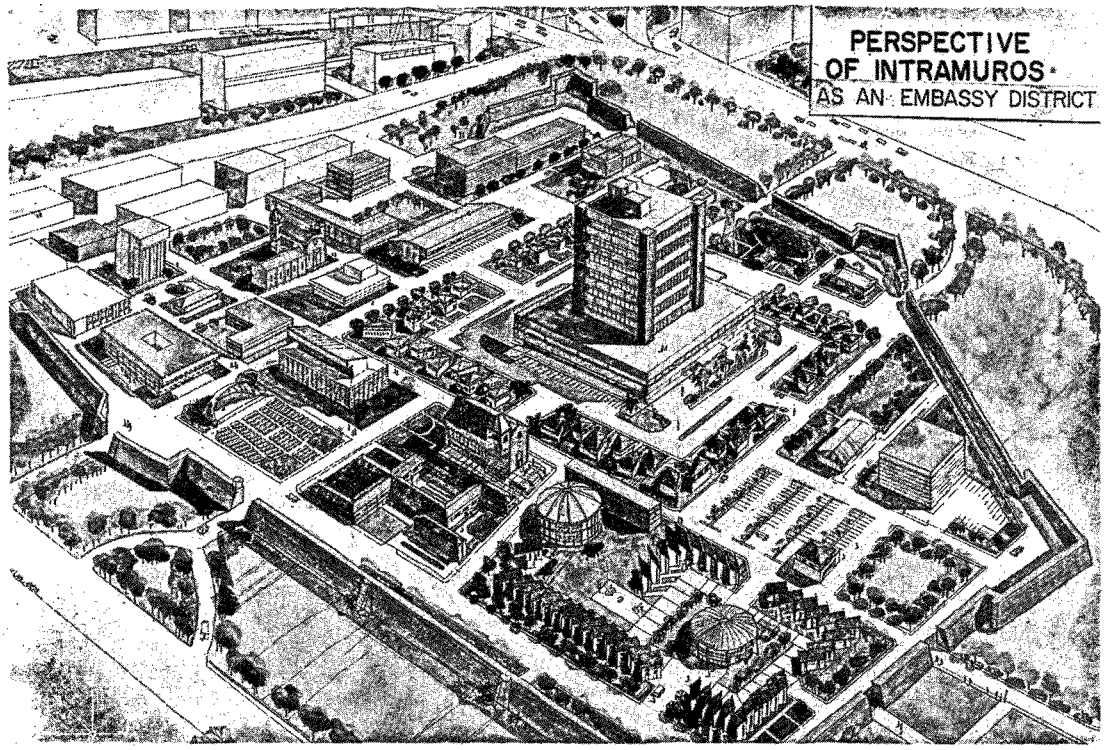
About twenty-eight of the embassies (or roughly 73.6 percent) are found in the Municipality of Makati, twenty-two of which are along the business hub of Ayala Avenue. Pasay City has the next largest claim of embassies in residence with eight, six of which are located on Roxas Boulevard. The boulevard includes the sprawling complex of the United States Embassy as well as the vacated embassy space of Taiwan which is now occupied by the People's Republic of China. Aside from these embassies, international organizations also have offices in the country.

To facilitate transactions with these offices, it is possible and desirable to locate them in an area where coordination among them is enhanced. Planning for such an area should, however, include provisions for the entry of new embassies which might result from the government's foreign policy.

**Assumptions**

Before the plan for the Embassy Precinct could be properly conceived it was essential to make the following assumptions:

- The responsibility of the development of Intramuros rests with the proposed Intramuros Development Authority,



clothed with full corporate powers and exclusive jurisdiction over the walled city;

- The Authority shall take over the proprietary rights of all parties—government, private or religious—except for San Agustin and the Manila Cathedral—through just and appropriate acquisition schemes. The properties, especially land will be for lease or for rent only;
- The Authority is empowered to remove existing structures, except those certified by the NHC as historically valuable, and relocate establishments—private, government or religious out of/into Intramuros;
- Although the warehouses, container yards, and terminals will be moved out of Intramuros and probably relocated in the Port Area, shipping line offices and related business offices which need to locate close to the Port of Manila are allowed into the commercial/business section of the district;
- All the schools in Intramuros will have to move out of the area;
- At least 90 percent of foreign embassies/legations and their units are willing to locate within the international complex as well as international and regional organizations' offices, like ILO, UNESCO, ESCAP, ASEAN, etc; and
- Sufficient resources are available for the proposed development.

**Proposed Physical Development for Intramuros**

Intramuros covers a total area of 94 hectares, 58 hectares inside and 36 hectares outside the walls. For development purposes, the planning area is divided into six zones:

A. International Complex
B. Historical/Cultural Zone
C. Commercial/Business Section
D. Government Section
E. Residential Zone
F. Sunken Garden

**A. International Complex (Inco)**

Inside the International Complex (INCo) are the embassies, the International Center Building (IC Building), the State Guest House (SGH), the Ecumenical Center (EC), the Friendship Park, and a few exclusive restaurants. The area presently bounded by General Luna, Real Street, and the historic walls was chosen as the site of the INCo. This area offers enough space required by such a complex with the least number and least costly structures which have to be demolished to give way to the new development.

This complex will relatively be a restricted area. Only people with business to transact in the complex are allowed to enter, together with some guided tours.

**B. Historical/Cultural Zone**

The area from Fort Santiago to San Agustin Church will become the cultural/historical zone. The Fort Santiago, San Agustin, and Manila Cathedral will be maintained and preserved and the parks fronting them will be improved. While the International Complex is relatively restricted, this zone is wide open for public use and appreciation. All new buildings to be built and/or remodelled will sport the Spanish-colonial architecture of their decade.

**C. Commercial/Business Section**

The area bounded by Cabildo, Anda, Muralla Streets and the Pasig River is designed as the commercial/business section. This section will include the banks, shipping offices, tele-communications offices, service shops, boutiques, restaurants, fast food center, shopping mall, a moviehouse, and the supermarket which will primarily serve the international community and other establishments in the area.

**D. Government Center**

All government offices which have frequent contacts and interactions with foreign governments and foreign organizations will locate in this mini-government center within Intramuros. These are the Office of the Protocol, Ofice of Consular Affairs, Office of UN Affairs, and International Organizations, the ASEAN Secretariat, the Bureau of Foreign Trade Office and a Philippine Display House, and the Ministry of Labor's Overseas Employment Development Board (OEDB). The four MFA Offices above will be housed at one of the two new buildings of *Bulletin Today;* the other building will be

reserved for the BFT and its display house. The OEDB will take over the Shurdut building.

If it is not possible for the MFA to be relocated to the government center at Quezon City, then it is proposed that the whole Ministry will occupy the two buildings of the *Bulletin Today,* The Bureau of Foreig Trade will instead remodel the Phoenix Building along Recoletos Street for its offices and display house.

Block 53 bounded by the streets of Gen. Luna, San Jose, Cabildo, and Victoria will be made into a tree-shaded parking space to service some of the visitors of BFT, MFA, and OEDB. The two-storey MOL Annex Building at the corner of San Jose and Gen. Luna Streets will be used as the Police and Fire Department Outpost II.

The one-storey concrete building at the corner of San Jose and Cabildo at the back of Shurdut Building will be remodeled and enlarged into a fast food center with a fast-food section and some more exclusive restaurants to service the government center. The rest of the area will be developed into a park, a Freedom Park.

### E. Residential Zone

The southern portion of Intramuros, specifically the area bounded by Sta. Potenciana, Sta. Lucia, Muralla and Gen. Luna Streets will be the site of a roughly 4-hectare residential area. It is assumed that some staff-members of the embassies and international organizations may need to live close to their offices. About 150-200 units of residential apartments, the cluster type of modern Spanish architecture will be constructed. In addition, a children's playground, 2 tennis courts, a swimming pool and a multi-purpose center to house the nursery, a sari-sari store and a mini-auditorium/meeting hall will be provided in this housing compound.

The present Philippine National Red Cross Office along Gen. Luna Street will be retained, and the two buildings beside it will be remodeled as the infirmary of the Intramuros district.

### F. Sunken Gardens

Manila does not have adequate parks and playgrounds so much so that people crowd themselves at Luneta Park and at the seawall along Roxas Boulevard. The Sunken Garden can be developed into a park/playground to help lessen the gap between demand for and supply of these facilities.

### Street and Circulation System

The streets of Intramuros, being originally designed for horse-driven caretelas, are quite narrow for vehicles of today. Only one has four lanes, Aduana Street; the rest have two lanes of approximately six meters in width. If the entrance of vehicles into the area will not be limited, then traffic as well as security problems will be tremendous.

It is therefore proposed that vehicular flow inside the walled city be restricted to diplomatic cars and service vans of the area. All the people working and transacting business inside Intramuros will have to leave their vehicles in strategically located parking spaces near the main entrances. In like manner, no public utility vehicle is allowed to pass through Intramuros. All public utility vehicles are only allowed up to the main entrances. However, a fleet of shuttle jeeps going around the walled city at scheduled intervals is provided for and stationed at three terminals: Gen. Luna corner Muralla terminal, Maestranza terminal and Intramuros Hotel Terminal.

### Summary

The paper has presented two development plans for Intramuros, one as a cultural/historical center and the other as an embassy district. The first proposal envisions the 'walled city' as a living museum of art of the medieval times. The other proposes to develop Intramuros into an embassy district without losing sight of its historical merit. For both proposals the overriding goal is the restoration and enhancement of Intramuros' role as a cosmopolitan center of the country as it was during the 16th to the early 20th century.

# PLANNING NEWS

## RP Delegation to UNEP Meeting

The Philippines sent a delegation to the Sixth Session of the Governing Council of the United Nations Environment Program (UNEP), which was held in Nairobi, Kenya from 9-25 May 1978.

The delegation was composed of the Ambassador to Kenya, Pablo Araque; Dr. Celso Roque (NEPC); Director Veronica Villa-Vicencio (Human Settlements Commission); Dean Leandro Viloria (U.P. Institute of Environmental Planning); Dr. Josefina Ramos (National Housing Authority); and Mr. Rogelio Lorenzo (UNAICDFA).

Among the items discussed during the meeting were: the report on the state of the global environment, the United Nations Habitat and Human Settlements Foundation, the draft principle of conduct for the guidance of states with shared natural resources, the regional seas program, a technical assistance clearinghouse, and guidelines on reducing the adverse environmental impact of specific industries.

## Two Rural Development Projects Launched

The United Nations Development Program and the Philippine government jointly launched two separate projects designed to support the country's rural development program. The two projects involve a total of ₱1,362,960.00 in UNDP contribution and ₱7,452,600.00 in counterpart peso funds.

The first project involves the second stage of the regional development program of the government which seeks to attain a more balanced development of the different regions of the country.

The other project will support a pilot project on the proper use and distribution of fertilizers designed to further increase the productivity of small-scale farmers covered by the "Masagana 99" production programs.

## International Symposium on Resource Management Held in Manila

The International Symposium on Integrated Surveys and Resource Management was held in Manila at the Silahis International Hotel from 22-28 February 1978. It was organized jointly by the International Institute for Aerial Surveys and Earth Sciences of the Netherlands, the Human Settlements Commission and the Technology Resource Center of the Philippines.

An international panel of experts led discussions on topics which included: perspectives in resource management, resource management and requirements, integrated surveys in resource management and earth resources survey systems.

# PLANNING NEWS

## FM Proposes Asean Remote Sensing Center

In his address at the opening of the 12th International Symposium on Remote Sensing of the Environment, President Marcos said that the Association of Southeast Asian Nations (ASEAN) should establish its own remote sensing center. He added that the cost of a ground receiving station should be shared for the mutual benefit of the neighboring countries: Indonesia, Thailand, Malaysia, Singapore, and the Philippines.

The symposium was held under the auspices of the Natural Resources Management Center of the Department of Natural Resources and the Environmental Research Institute of Michigan. Some 500 scientists from all over the world, including 200 local delegates, attended the symposium whose aim was to disseminate information to the world on new ways of gathering data about natural resources and the environment needed by development planners and policy makers.

## NSDB Okays Disaster Research Funding

The National Science Development Board recently approved an outlay of ₱367,000.00 for a two-year research project on disaster risk mapping, warning dissemination and disaster technology.

The multi-agency project hopes to accomplish the following objectives: (1) identify disaster prone areas and their vulnerability; (2) develop risk maps for each type of natural disaster; (3) formulate better measures of reducing risks and recording natural disasters; (4) determine the sociological impact of natural disasters on the lives of their victims; (5) determine the effectiveness of various warnings and how well they are received; (6) determine which of the folklore methods of predicting impending disasters has any scientific basis; and (7) study other untapped means of communication which may be used to facilitate collection of data and dissemination of warnings.

## 3 IEP Staff Members to Attend International Courses

In its effort to upgrade and strengthen the graduate courses, the Institute, through the staff development program, has been continually sending and encouraging faculty and research staff members to undertake academic studies and/or short-term training courses either here or abroad. This year three staff members received fellowship grants from European countries.

The first to go was Ernesto M. Serote, a Research Associate, to attend the nine-month Postgraduate Course in Multi-disciplinary Investigations for Development Planning and Implementation at the International Institute for Aerial Survey and Earth Sciences at the I.T.C. in Enschede, the Netherlands from 4 October 1977 to 30 June 1978 under a UNESCO fellowship grant.

He was followed by Renato L. Cerdeña, a Senior Research Assistant, who left for the Technical University of Dresden, German Democratic Republic to participate in the International Postgraduate Training Course in Ecosystem Management from 2 October 1978 to 27 July 1979.

Alex Q. Cabanilla, an Instructor, also left for the International Institute for Aerial Survey and Earth Sciences at the I.T.C. in Enschede, the Netherlands, to pursue a Postgraduate Course on Multi-disciplinary Investigation for Development Planning for nine-months starting 3 October 1978 under a fellowship grant from the Dutch government.

# PLANNING NEWS

## Government to Raise ₱12.9 Million Up to 1982 for Housing

The government expects to raise ₱12.9 million starting this year up to 1982 for its housing program. This amount will be used to finance the first half of the government's 10-year housing program which starts this year.

The program seeks to provide housing to 431,000 low and middle income families by 1982. The funding requirements for this program will go to direct housing, upgrading of sites and services, land assembly and corollary programs.

The government expects to raise a total of ₱42.132 million for the entire 10-year program.

## FM Acts to Save Environment

President Marcos recently acted to safeguard the environment by requiring all those engaged in the exploration of natural resources to restore and rehabilitate areas affected by their operations to their original conditions.

Affected by Presidential Decree No. 1198 are individuals, partnerships or corporations engaged in mining, quarrying, construction of dams, irrigation systems, roads and bridges, and infrastructure projects.

The President directed the Secretary of Natural Resources to promulgate the regulations that shall carry out the provisions of the decree.

## PDs ENACTED

The following are presidential decrees enacted from November 1977 to October 1978 which planners may find significant:

- *Presidential Decree No. 1216:* Defining "open space" in residential subdivisions and amending Section 31 of P.D. No. 957 requiring subdivision owners to provide roads, alleys, sidewalks and reserve open space for parks or recreation use
- *P.D. No. 1217:* Extending benefits provided under P.D. No. 745 not only to employees or workers but to low-income families in general (re low-cost housing)
- *P.D. No. 1259:* Amending paragraph 1,2 & 3 of P.D. No. 1224, further defining the policy on the expropriation of private property for socialized housing upon payment of just compensation
- *P.D. No. 1261:* Amending R.A. 2616, providing additional funds for the acquisition of the Tatalon Estate and designating the National Housing Authority as the administrator of the Tatalon Estate Housing Project
- *P.D. No. 1265:* Creating the Metropolitan Manila Traffic Management Authority
- *P.D. No. 1267:* Creating a National Home Mortgage Finance Corporation, defining its powers and functions, and for other purposes
- *P.D. No. 1269:* Further amending R.A. 6234 entitled, "An act creating the Metropolitan Waterworks and Sewerage System and for other purposes", as amended by P.D. No. 425
- *P.D. No. 1274:* Amending P.D. No. 824 entitled, "Creating the Metropolitan Manila and the Metropolitan Manila Commission and for other purposes "
- *P.D. No. 1277:* Providing preservation of the walls of Intramuros and the restoration of its original moat and esplanade.
- *P.D. No. 1298:* Implementing the Rural Infrastructure Project
- *P.D. No. 1308:* Regulating the practice of the profession of environmental planning in the Philippines
- *P.D. No. 1313:* Further amending paragraph 3 of P.D. No. 1224 as amended by P.D. No. 1259, defining the policy on the expropriation of private poverty for socialized housing upon payment of just compensation
- *P.D. No. 1314:* Repealing P.D. No. 814, redefining the policies on land tenure in the Tondo Foreshore Dagat-Dagatan Urban Development Project

# PLANNING NEWS

## IEP Graduates 27 MURP Students

The second batch of MURP graduates numbered twenty-seven this year. Twelve graduates chose housing as their area of specialization; nine selected regional location; and six others opted for transportation.

Victoria V. Loanzon and Eleanor S. Guerrero, with housing as their specialization, successfully defended their theses entitled, *Towards a New Approach to Betterment Changes,* and *Housing Needs of Selected Single Employees in an Area in Makati,* respectively. Gil R. Ramos also successfully defended his thesis on regional location entitled, *A New Approach to Financing Industrial Starts in the Philippine Countryside: A Proposal.*

The new graduates include: Rolando A. Alanes, Ma. Filomena A. Alforque, Serafin M. Aquino III, Athena F. Azarcon, Norma B. Bernal, Rodino G. Bernardo, Zenaida B. Cuenca, Celestino F. Desamito, Jr., Omar Maxwell P. Espina, Eleanor S. Guerrero, Jose E. Lao, Victoria V. Laonzon, Eric C. Lopez, Erlinda H. Luis, Anna M. Malvar, Ruby C. Mangulabnan, Conchita Estella C. Manongdo, Jesus B. Marzan, Alfredo R. Matolo, Michael I. Molina, Hobson Emeka Nnebe, Ma. Erlinda B. Padilla, Gil R. Ramos, Alma D. Recio, Eduardo U. Taala, Renato P. Troncales, and Manuel B. Urdelas.

## 10-Month SCURP Winds Up

The closing of the ten-month Special Course in Urban and Regional Planning was held on 31 March 1978 at the Institute of Environmental Planning. The theme of this year's course was on land resource development and management, with Naic, Cavite serving as their laboratory town.

Director of Training, Prof. Tito C. Firmalino, awarded the certificates to the twenty-two successful participants who include: Bienvenida Angco (PDS, Tagbilaran City), Oscar Balbastro (NEDA, Region IV-A), Ernesto Bolivar (BOL, Region IV-A), Ernesto Cabilitazan (BOL, Central Office), Regina Caragayan (BOL, Region IV), Restituto dela Cruz (BOL, Central Office), Lazarus Digal (BOL, Region X), Jose Donato (DEC), Abelardo de Leon (DEC), Arthur Manalo (BOL, Central Office), Agaton Manga (BOL, Region III), Merlinda Manampan (NEDA, Region XII), Ricardo Mendoza (DAR), Glenn Navera (DAR, Region V), Felix Cal Ortiz (BOL, Region V), Irma Pabalan (DAR), Renato Paraggua (BOL, Central Office), Rogelio Pereña (NEDA, Region IV), Jose Ping-ay (NEDA, Region I), Ismael Rivera (BOL, Region IV-A), Felipe Tolentino (BOL, Central Office), and Raquel Villanueva (BOL, Region XII).

## About the Contributors

Comprehensive Technical Services of Asia, Inc. (COMPTECH ASIA) is a management component under whose umbrella Felipe M. Mendoza and Partners (FMMP) and its sister company, Research and Planned Development Systems, Inc. (REAP) and a consortium of consultant firms operate. FMMP offers comprehensive architectural services. Among its most significant contributions are the Batasang Pambansa Complex at Constitutional Hill, the International Rice Research Institute Laboratory and Training Center Complex at Los Baños, and the Philippine Veterans Bank Building. REAP formulated the master development plan of the National Government Center at Constitutional Hill and at the Reclamation site; and supervised the planning of regional agricultural research centers in Ilocos, Cagayan, Palawan, Visayas and Davao. COMPTECH ASIA provides varied services which include research, feasibility studies, environmental planning, site selection and planning programming, interior design, landscaping, architecture, engineering, construction, and post-construction management.

DIETER MARK DÜCKERT, Ph.D. is a city and regional planner-architect, who is currently a visiting Professor at the College of Architecture, University of Santo Tomas. Dr. Duckert is the head of the Institute for City Planning, Housing and Regional Planning at the Technical University of Hannover since 1968. He has taught in different universities of Southeast Asia, and has attended quite a number of international conferences and seminars on planning. He has actively served as city planning consultant to public institutions and private enterprises in the Philippines and abroad. Likewise, many of his planning works have been published. He is presently doing research studies on urban land use and traffic generation; low income housing; and urban renewal, upgrading, and rehabilitation.

ROMAN DUBSKY, a Ph.D. candidate at the U.P. College of Public Administration is a lecturer at the Diliman campus and at U.P. Baguio. Before he came to the Philippines, he taught at the University of Malaya for nine years. He obtained his Master's Degree in Philosophy and a graduate Diploma in Town Planning from the University of Toronto. He was also a planner for several years in the government of Ontario.

GERONIMO V. MANAHAN—is Secretary and Associate Professor of the U.P. College of Architecture. His educational attainment includes a bachelor's degree in architecture (cum laude) from U.P. and a Master of Town and Country Planning from the University of Sidney, New South Wales, Australia. He is currently the project director of the Housing and Environment Systems, United Nations Environment Programme and National Housing Authority. He also acts as consultant in such agencies as the Land Specialist, Inc.; Planning Resources and Operations Systems, Inc.; and the Urban Designers Associates, Inc. His major projects include master planning for the Manila-Cavite coastal reclamation area, the Makati Commercial Center, and the proposed financial center of the government.

JAIME U. NIERRAS—is Assistant Professor at the UP Institute of Environmental Planning and Consultant to the Ministry of Human Settlements. He obtained two master's degrees in planning: Master in Urban Planning (Michigan State University, 1971) under a Fulbright-Hays grant and Master in Urban Transportation Planning (University of British Columbia, 1977) under a United Nations Fellowship and a degree in Architecture (University of the Philippines). Mr. Nierras has had a very extensive experience in physical planning, comprehensive town planning, urban renewal and the like, having been connected with various government and private planning agencies. Part of his fellowship grants was the opportunity to observe city planning and transport planning and management in major cities of North America, Western Europe, the Middle East and Asia. He has also lectured extensively on various topics related to planning as well as attended several international conferences on different aspects of planning.

FEDERICO B. SILAO—is at present, the Secretary of the U.P. Institute of Environmental Planning. He is currently an Associate Professor, and he has been with the Institute's faculty for the last ten years. He is also serving as consultant to the Committee on Transport Cooperatives, Office of the President, and the Metropolitan Manila Traffic Committee. Prof. Silao obtained his Master in Public Administration at U.P. in 1966. In 1971, he was awarded a United Nations fellowship grant for an international course in planning administration.

VICTORIA A. EUGENIO—is a Research Associate of the Institute of Environmental Planning. She finished her B.S. in Architecture at U.P., where she is also currently taking up graduate courses in Community Architecture. Her stint as Research Assistant at the Planning and Project Development Office of the MPWTC, before her transfer to the Institute, gave her enough experience in developing project plans. In 1977, Mrs. Eugenio completed a Project Study Preparation Course at the U.P. Institute for Small-Scale Industries, where she was awarded a certificate of distinction for having prepared the best project study.

NOTE:

Due to delays in the printing of the *Journal*, conflicts in the dates of articles with the date of publication cannot be helped. Our apologies.

*—Editorial Staff*

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