The special newsletter edition features two articles on accessibility for the disabled. The first article, "Building Non-Handicapping Environments: CIB W84 Newsletter," by Adolph Ratzka, excerpts sections from the CIB W84 Newsletter of the International Council for Building Research, Working Commission for Disabilities. It is noted that CIB W84 places the highest priority on addressing accessibility issues in developing countries and on involving organizations of disabled people in its work. The article concludes by citing the text of 16 resolutions adopted by participants at a Prague (Czechoslovakia) seminar concerning the following roles: national and local governments; planners, builders and educators; researchers; consumer organizations; and supportive services. The second article, by Joseph Kwan, is titled "Examining Accessibility: The View From Hong Kong." It describes the successes and failures involved in attempting to implement standards for architectural and travel accessibility in the city of Hong Kong. Sections cover: Hong Kong architecture, rehabilitation initiatives, reasons building access is often not considered, early awareness of accessibility needs, the first code on building accessibility, the code as legislation, the situation today, access to transport, alternative modes of transport, and highway facilities. (DB)
Building Non-Handicapping Environments: Policies and Problems Related to Accessibility

We are featuring two articles in this special edition of Interchange on Accessibility. The first article is a Code of Ethics. The second article describes the successes and failures of attempting to implement mean for architectural and travel accessibility in a part of the world that has its own peculiarities as well as similarities with other large cities of the World: Hong Kong.

BUILDING NON-HANDICAPPING ENVIRONMENTS: CIB W84 Newsletter
Editor: Adolph Ratzka

With permission from the editor, the WRF is excerpting sections from the first edition of the CIB W84 Newsletter which came out in the Spring 1989.

What is CIB W84?

CIB is the abbreviation of the French title of the International Council for Building Research. Studies and Documentation whose purpose as stated in its bylaws is "to encourage, facilitate and develop international cooperation in building, housing and planning research, studies and documentation, covering not only the technical but also the economic and social aspects of building and the related environment."

CIB's work is conducted in nearly 100 specialized working commissions. Since building is the activity through which man seeks to adapt his environment to better serve his purposes, CIB's sphere of interest covers a wide range. Some primary topics are:

- the planning, utilization and adaptation of the environment to the extent it directly influences the building activity,
- the entire domain of building science and technology including engineering, economics, industrial management, the sociological and social questions related to the analysis of building needs,
- the bridge between scientific innovation and full-scale application, preparation and provision of the information for different user categories, development of information techniques and systems, development work involving both research and industry.

In 1983 CIB established a Working Commission in the disability area. The Commission's secretariat was placed with the Department of Building Function Analysis, School of Architecture, The Royal Institute of Technology, Stockholm. Initial funding was provided by the Swedish National Council for Building Research. CIB W84 aims can be summarized in three points:

- to raise the general level of expertise of and to stimulate interest in accessibility issues among the groups who influence and shape the role of the physical environment.
- to contribute to R&D and international exchange in well defined areas of strategic importance that up to now have been neglected and are suitable for such an exchange of experiences.
- to strengthen contacts, exchange and cooperation on a regional level by utilizing the benefits inherent in cultural and linguistic congruence.

CIB W84 places highest priority on addressing accessibility issues in developing countries and on involving organizations of disabled people in its work.

Accessibility of the built environment for old and disabled citizens is a relatively new field for research and development which is illustrated by the fact that this area was recognized only recently as an independent subject within CIB. In many countries today consumers put increasing demands on legislation and standardization to safeguard accessibility of the built environment as a basic human and civil right. This development points out a rising need for information, training and continued education for the planning and building professions and requires more intensive research and development efforts.

The United Nations International Year of Disabled Per-
Persons in Stockholm in August 1987 placed the of the midpoint of the United Nations Decade of Disabled Persons in Stockholm in August 1987 placed the highest priority on the need for equalization of opportunities of disabled persons where accessibility of the built environment is one of the most basic requirements. In this work the decisive role of disabled persons and their organizations was emphasized in the discussion of research and development needs, research strategy, results and implementation.

Guidelines for CIB W84

As guidelines for CIB W84's future work the resolutions adopted by the Expert Seminar in Prague are suggested. Below we produce the text of the resolutions as adopted by the participants of the Prague Seminar and printed in the Prague proceedings.

The Prague Resolutions

In our cities and villages constantly changing economic and social needs require physical adaptation to new functions. These changes present opportunities for increasing the accessibility of these environments to all citizens. Rapid urbanization and increases in the population of old and disabled persons are global phenomena. For this population accessibility is of decisive importance for exercising their basic civil right to equality and full participation.

Human settlements represent interconnected systems of functions such as housing, administration, commerce, culture, recreation and transportation including street network, parking facilities, pedestrian areas and mass transit. Accessibility to the built environment, therefore, has to be defined not only as access to single elements of the system but the uninterrupted access between all elements within the system. In the face of the diverging demands put on cities, it is of paramount importance that accessibility is guaranteed by an over-all plan based on a system of laws, regulations, enforcement and monitoring procedures. The competent use of these instruments requires a highly developed professionalism and consumer input as well as a high awareness on the part of the public. Based on these considerations the CIB W84 Expert Seminar has adopted the following resolutions:

National and Local Governments

1. We, the participants of the CIB W84 Expert Seminar consisting of both non-disabled and disabled persons, cannot accept anything else but the goal of a barrier-free environment and free movement within it for all. Accessibility must be enforced by national legislation.

2. Legal instruments should be developed to ensure accessibility both in new construction and in renovating, upgrading and expanding existing urban environments.

3. In recognition of their experience disabled people and their organizations should be actively involved at all levels in drafting, monitoring, and enforcing legal instruments for the planning and building process.

4. Public funds should be allocated for the development and maintenance of these instruments.

5. Governments shall provide funding for consumer organizations to allow them to build up their expertise in this area and to participate in the decision making and implementation of these instruments.

6. Recognizing the long-term benefits of accessible environments for all, governments should subsidize the development of products and methods that improve accessibility.

These resolutions are in accordance with the "United Nations World Program of Action Concerning disabled Persons" that has been adopted by all member governments.

Planners, Builders and Educators

7. Practicing architects, planners and builders should view accessibility as basic planning requirement and not as limitation. This viewpoint should be an integral part of professional training.

8. Instead of using the arguments of diminished esthetic values and high costs as an excuse for non-action, architects, planners and builders should consider accessibility as a basic civil right and ensure its implementation.

9. In order to stimulate professional interest in this field teaching materials should be developed showing good examples of accessible solutions that do not compromise esthetic or historic values nor the right to equal access. Planners, architects and builders must cooperate in their professional work with organizations of disabled people.

Researchers

10. Research on accessibility in the built environment should encompass the environment-society interface with its functional, social, cultural, psychological and economic aspects.

11. Research projects in this area which develop and evaluate legal instruments and their efficient enforcement, planning and design processes, consumer input, professional training and the social, cultural, psychological and economic effects should be given high priority.

Consumer Organizations

12. Consumer organizations should be aware of the political role of the planning and building process. In order to better realize their goals consumer organizations should actively involve themselves in the political and planning process and improve their technical expertise in this field.

13. Recognizing that developing countries have particular problems, we identify the urgent need for the transmission of information and the exchange of experience between disabled people of different countries and pro-
EXAMINING ACCESSIBILITY: THE VIEW FROM HONG KONG
Joseph Kwan, Dip.Arch., MSc.

Editor's Note: The IEEEIR is pleased to present this piece from Hong Kong which introduces us to that part of the World's concept of environmental accessibility for people with disabilities. We learn how terrain affects considerations of accessibility and then how policy and attitudes affect building codes. Mr. Kwan has given us a concise view of the various factors and problems that interact and intersect in determining accessibility.

Joseph Kwan is an architect who received his architectural training at the Queensland Institute of Technology and later studied environmental psychology at the University of Surrey. He is author of several articles and has practiced architecture in Australia and England. He was an architectural and environmental design consultant in France, and currently is the Director of the Environmental Advisory Service at the Rehabilitation Centre in Hong Kong.

Introduction

Hong Kong—which means “Fragrant Harbour”—is situated on the south-east coast of China at the mouth of the Pearl River (Zhu Jiang) about 130 km south-east of Guangzhou and 2800 km south-west of Tokyo.

The total land area is about 1070 sq. km. (413 sq. miles) with the island of Hong Kong and the peninsula of Kowloon comprising 117 sq. km (45 sq. miles), and the islands and mainland of the New Territories comprising the balance of 953 sq. km (368 sq. miles).

The total estimated population of Hong Kong in mid-1987 was 5.6 million forming an estimated 1.5 million households, nearly twice the population of New Zealand in just over 400 sq. miles of land (51% live in private housing, 41% in public housing and about 8% live in temporary housing).

The topography of Hong Kong island is severe with at least half of the area steep mountainous terrains. Because flat land in most parts of Hong Kong is hard to find, the dynamic urbanism has been created largely in linear patterns, weaving along the harbour shorelines, clambering up gullies or through narrow passes and frequently compressed into almost inconceivable congestion. Some 80% of the people live on 8% of the land. Parts of Kowloon, with more than a quarter of a million people per square mile, are probably the most crowded places in the world.

Hong Kong Architecture

The architecture of Hong Kong is forced skywards. Residential and commercial buildings alike are high-rise structures entered from narrow footpaths and small entrance halls. A single 30-storey apartment block would house up to 240 living units, and a typical housing estate could be planned with 50-60 such high-rise blocks housing a total of 12,000 family units within an area of a few city blocks.

Similarly, the work environment is largely in high-rise settings. Land value is prohibitive so that office and commercial complexes, even warehouses and factories are accommodated in buildings ranging from 10-storey warehouse/factories to 50-storey commercial/office blocks.

The major problem faced by the disabled community of Hong Kong therefore, lies in the accessibility aspect of the environment. Modern building designs in Hong Kong have been refined over the years and generally followed the central core principle where the vertical transportation, essential services such as mechanical and electrical, communication networks, escape stairways, etc. are grouped in a tight, efficient core unit which feeds each floor.

Therefore the design of a barrier-free high-rise building interior is seemingly simple provided that the basic floor plan design is barrier-free and details such as the lift cars, floor and call buttons, door widths, toilets, etc. are designed for use also by the disabled. Once this typical
floor plan is established to be barrier-free, the architect could apply the same principle throughout, repetitively "rubber-stamping" the remaining floors and other tower blocks in the same manner. In general, in large housing developments, variations in floor plans and block plans are minimal thus allowing a few layouts to be repeated an infinite number of times.

The difficulties for people with disabilities are shifted from one of basic interior access to exterior access, that is, access to buildings, access to transport and highway facilities become more significant when considered "en masse."

**Rehabilitation Initiatives**

In Hong Kong, as in many other developing countries, comprehensive statistics on the population are not available. In 1983, a computerized Central Registry of Disabled was set up by Government to systematically collect data on the disabled population in Hong Kong. The figures from a June 1987 survey indicated that there were 93,391 disabled persons registered with the Registry. However, according to the prevalence rates derived from overseas and local experience the total disabled population in Hong Kong is estimated to be 435,800. The percentage of the disabled population is about 7.5% of the total as in most countries.

A ten year rehabilitation programme plan was completed in 1976 and a White Paper on "Integrating the Disabled in the Community: A United Effort" published in 1977. During the past ten years Government and the voluntary sector have been working closely together on an integrated and coordinated approach to rehabilitation.

A Rehabilitation Development Coordinating Committee (RDCC) subsequent to the release of the White Paper was appointed by the Governor of Hong Kong to advise on overall development of rehabilitation services and policies. Under the Committee, there are three subcommittees which focus on three major issues in rehabilitation. Access and Transport is one of these.

**Reasons Access Is Not Considered**

A basic problem for Hong Kong is that of terrain. If the topography of the site is steep, some architects would consider the provision of shallow ramps within the building itself pointless, although it should be realized that access to the site by vehicle is the norm for everyone, in such situations, disabled or otherwise.

Another basic difficulty is that of economics. Easy access requires more space, and space in Hong Kong is expensive. The money element is not just construction cost, but also the proportion of land cost applicable to the extra space, the "accommodation cost" of the land. The loss of the selling price in commercial ventures is the most important element, and today even in residential work the figure is approaching $20,000 a square metre of which only 25% is the building cost element. This is even more paramount with valuable street level shops. In this context, the additional architectural cost of providing handrails, disabled toilets and even permanent ramps is small comparing to the overall cost. This is a strong incentive for developers to instruct the architects that access is not to be considered. A further element is lethargy and disinterest on the part of the architect. He or she does not wish to be bothered with yet another set of Codes or Regulations that place further constraints on the ever increasing complex planning exercise. He or she already has to worry about the Building Regulations, Plot Ratio, Fire Service Code, Wind Effects Code, Height Limitations, so that many architects do not want to consider access for car parking, or handrails and ramps as a factor in design. Furthermore some architects wish not to be burdened with such "insignificant" details when there are multi-million dollar projects to design.

A more serious problem is on an attitudinal, philosophical nature than architectural. It is opined that since disabled people may not be able to use the lifts/elevators of high-rise buildings in fire situations (when these are exclusively used by the firemen), they will be trapped, therefore they should not be allowed access into the building at all. A former Director of Fire Services Department expressed that everyone is effectively "disabled" in the case of a fire. There is no inherent difference between helping the escape of a panicking able-bodied person or a wheelchair-bound person to safety when the building is forty stories high. The new British Standard BS 5588: Part 8: 1988. Code of Practice for Means of Escape for Disabled People, however does provide practical recommendations in the planning provisions and management of buildings that would assist in the safe evacuation of disabled persons and at the same time relieve the various fears of the local Fire Prevention Officers.

**Early Awareness**

The year 1988 was significant for Hong Kong. It was during September that the 4th Conference of Pan Pacific Rehabilitation of the International Society for Rehabilitation of the disabled was hosted by the Joint Council for the Physically and Mentally Handicapped of the Hong Kong Council of Social Service. The Conference received a high level of sponsorship with the Governor and Lady Trench as Patrons, the Executive Committee headed by the Hon. Dhun Ruttonjee and Lady Logan, and Father John Collins as Honorary Secretary. The Planning Committee was led by Dr. Harry Fang with Christopher Haffner as its Secretary. It was decided in the early planning stage that access should be a major subject on its own. The then Director of Public Works, the Hon. Michael Wright chaired the access meeting with eminent invited speakers on the subject, including F. Cuthbert Salmon, Professor of Architecture at Oklahoma State University and Selwyn Goldsmith, who was then with the Norwich City Architect's Department from the United Kingdom.

**The First Code on Access**

The immediate result was that a committee was set up to advise successive Directors of the Public Works Department on the production and implementation of a Code on
Access for the Disabled for Hong Kong. The Committee obtained information from around the world, mostly from North America and north-west Europe and it was decided that the basis of the Hong Kong Code would be much simpler in that only the absolute minimum requirements would be included.

It was also decided to consider which building types require what degree of accessibility. Buildings where limited facilities for people with disabilities are to be provided were to include such places as sporting stadia, public entertainment venues, hotels, etc; however domestic buildings and the domestic parts of composite buildings would not be covered by this Code. It was the committee's belief that this approach would be seen as serving economic ends and thus gain in the possibility of voluntary implementation. However, the private sector depending on individual architectural firms advising their clients did very little voluntary improvement on accessibility implementation.

**Code Became Legislation**

This Code of Practice on design requirements for disabled people which was only advisory was issued in June 1976. In February 1978 after experiencing difficulties in the voluntary implementation of the Code (particularly in the private sector), the Hong Kong Institute of Architects recommended that compliance with the Code should be made obligatory after improvements had been considered. By September the Director of Building Development had set up a Committee to undertake a review of the Code of Practice which was finally approved by EXCO in December 1983. In October 1984, upon the recommendations from the Attorney General's Chambers, the voluntary design requirements in the Code were enacted as amendments to various building regulations under the Building Ordinance—a duration of 16 years from inception to advisory to legislation.

This current code for access in Hong Kong takes a mere two and a half pages, whilst the United Nations' "A guide to adaptation of the Built Environment for Disabled Persons" is one hundred and two pages and Selwyn Goldsmith's "Designing for the Disabled" is 525 pages long. These lengths indicate in some measure the difference between general accessibility and specific design for people with disabilities.

**The Situation Today**

Since August 1, 1985, Hong Kong has its code on casual access for the disabled built into legislation and it has received much criticism from architects in the private sector. With the exception of domestic buildings and a majority of schools, all buildings are now required to be designed with at least the minimal standards for wheelchair access with useable toilets, handrails and grab-bars, etc. In fact, it is based on the previous voluntary code, but even further simplified. In this respect, architects ought to have had plenty of time to get used to the concepts involved, and most of the complaints simply show how little they had done so far.

As to the public sector, government buildings which were constructed prior to August 1985 and had not been covered by the mandatory code will be systematically adapted for accessibility. Beginning from 1986, a budget of $600,000 has been allocated to modify forty existing public buildings per year which comprise of post offices, immigration offices, markets and bazaars, community halls/ youth centres, medical clinics, etc. From 1989, with an increased budget of $1.5 million, the number of government buildings earmarked to be modified for access will be increased to one hundred buildings.

From the voluntary sector, with the efforts of the CanAccess Committee of the Canadian Club and Canadian Chamber of commerce of Hong Kong, the second access information guide—"A Guide for the Physically Handicapped Visitors and Residents of Hong Kong" was published in 1987. This guide is more comprehensive while hardly exhaustive, however it does cover over 200 individual premises where people with disabilities are likely to visit and includes hotels, shopping centres, cinema, consulates/commissions, leisure and recreational areas, cultural centers, places of worship, libraries and museums, etc. The guide also provides information on transport alternatives in Hong Kong.

In the past few years, there have been increasing reports from disabled persons about planned accessible facilities which had become inaccessible. The most common complaint has been the toilets which are either misused as store rooms or are invariably locked so that an attendant must be called to unlock the doors. Other cases involved access and facilities being provided at the time of inspection by the Government Building Surveyor. It is not uncommon for these facilities to be altered or removed at a later date without the approval of the Building Authority. Unfortunately, whilst the relevant Building Authority is responsible for ensuring that such matters do not occur or are rectified when these are detected, the staff resources available to the Building Authority and the priority of other matters make the task of enforcement almost impossible to detect or to prevent all such illegal alterations.

Conversely, the importance in providing encouragement and paying due recognition to the concerned developer and architect for their initiative and skill has been considered in the effect of a "Design Award for the Most Accessible Building for the Disabled in Hong Kong." This competition initiated by the Rehabilitation Division of the Hong Kong Government and sponsored by the Hong Kong Institute of Architects will be operational in 1989 and the first such award will be presented in mid-1989. The Award will also help to focus public attention on the importance of buildings and environments that can be used by able-bodied and disabled citizens alike.

**Access to Transport**

In order to meet the demanding transport needs of the Hong Kong population, a variety of vehicles has been provided. These include a fleet of public buses, 6,385 in all, mostly double-decker; 4,340 14-seater public light buses and 16,723 taxis. In addition, the underground
Mass Transit Railway (MTR) has trains running at a frequency of one every 3 minutes serving 37 stations throughout the more populated areas of Hong Kong. Yet none of these modes of transport is accessible to wheelchair users or to people with a severe mobility problem. There are however two advances made in the transport facilities available, one is the recently opened Light Rail Transit (LRT) system that operates between two new towns in the New Territories and the other, the ferries between Hong Kong island and Kowloon, both of which, (the latter after modification) are accessible to all handicapped people.

In 1973 when the Hong Kong Government announced plans to construct the MTR, the Joint Council for the Physically and Mentally Disabled sent three representatives including the ever active Father John Collins to discuss with the relevant authorities the need to make the proposed mass transit railway accessible to the disabled. Their efforts were met with firm refusals. Even public meetings and the assistance of Captin G.E. Welch, the disabled Chairman of the Access Committee of England, did not convince the Government Authorities. Today, the MTR remains inaccessible to people with disabilities.

Alternative Modes of Transport

In September 1974, the Government set up a Working Party on Transport for the Disabled and in the following year, a report was produced including a recommendation put forth by the Joint Council. This proposed a system of minibuses of 8-14 seaters running a fixed route with a reservation system allowing for diversions to individual homes, work places, and the essential medical, shopping and educational centres. The Access Committee of the Joint Council was asked to undertake this proposal as a pilot project for six months using one or more minibuses. The trial period was extended for a further six months when it was found the demand for its use was increasing rapidly. In June 1978 the Government approved the establishment of this service which is now known as the Rehabus.

The Hong Kong Society for Rehabilitation was approached to run the Rehabus service and today, the buses equipped with a tail-lift are running on 25 routes carrying over 300 passengers daily. But after ten years the demand is far exceeding the provision with a constant 100 on the waiting list.

Other transport modes were tested such as the London Taxi Experiment and the Taxi Voucher Scheme. The London Taxi was launched in 1987 and it was proved a failure. The London taxi was seen as out of place in the taxi rank and unpopular with other taxi drivers. There were too many "disabled" logos on the cab so that it was off-putting to able-bodied passengers to take, and access for a wheelchair into the cabin was often difficult. The biggest drawback was that the vehicle was in the garage for repair for three months of the six month experiment!

Following the recommendation of another Government Working Party on Transport Needs of the Disabled, a Pilot Taxi Voucher Scheme was introduced to provide a subsidy in the form of taxi vouchers for those disabled persons who are unable to use other modes of public transport. This pilot scheme ran for a full year up to April, 1988 and it was also found to be unsuccessful. The vouchers were seen as cumbersome and inconvenient for both users and receivers. A survey on the scheme revealed that almost 85% of the participants experienced hostility and/or rejection when they offered vouchers to the taxi drivers, thus possibility accounting for the fact that 83% of the users made use of the voucher very infrequently, less than 10 times in six months. Other factors such as the means test, age limit, eligibility to only the wheelchair bound, the low sum of HK$55 of vouchers per month all accounted towards the failure of the scheme. The large majority of the participants (83%) indicated that they would not welcome the scheme to continue on its present basis and would prefer a cash subsidy to the voucher system.

Still the need for some modes of accessible public transport is seen as a means of integrating people with disabilities into the community. An appeal was again made by Father Collins in early 1988 to the Secretary for Transport and the Chairman of the Transport Advisory Council. His proposal was rejected based on practical and convenience grounds, however as an alternative, a capital account will be created for the future acquisition and replacement of vehicles to be used as Rehabuses. The Secretary of Transport agreed that the Rehabus service should be further expanded to have at least 15 additional new routes over the next five years.

Since the transfer of responsibility of transport for the disabled from the Social Welfare Department two years ago, the Transport Department has taken new initiatives and concern for the disabled, such as special concession for handicapped drivers so that there now exist in Hong Kong 508 disabled owner-drivers with privilege parking labels for free parking at metered areas, and other concessions such as free duty on certain size imported vehicles.

Although there have been significant advances in certain special transport facilities for the disabled, without direct access to public transport the aim of integrating people with disabilities in the community as stated in the 1977 White Paper is far from being fully realized.

Highway Facilities

In 1984, the Working Group on the Construction of Highway Facilities for the Disabled was formed by the Hong Kong Government's Rehabilitation Development Co-ordinating Committee's (RDCC) Access and Transport Subcommittee under the chairmanship of the late Dr. Richard Butler. The aims of the Working Group was to examine the existing and proposed provision of highway facilities to meet the needs of people with disabilities, to identify deficiencies and problems, to make recommendations on the type of facilities needed by people with disabilities and to suggest locations where these could be implemented.

One of the first tasks of the Working Group was to draft in conjunction with the Transport Department, a new chapter for the Transport Planning and Design Manual on
Facilities for the Disabled. The main purpose of this chapter is to emphasize the design considerations and needs of disabled persons in terms of highway (external environment) facilities. The manual was finally published in January 1987 with a voluntary implementation status and not as a legislated code.

Even so, the manual does provide important design guidelines on the external environment for designers and planners to consider during their design process. Some of the items in the manual include the provisions of dropped curbs, tactile strips, and audible signals at pedestrian crossings; on-street parking for wheelchair-bound drivers; fencing for roadworks on footpaths, guides and guards for the visually-impaired.

Elevated pedestrian footbridges are commonly used in Hong Kong as means of separating traffic and pedestrians, thus allowing increase in the flow of volume especially in the central business areas. In order to accommodate double-decker buses, footbridges are constructed exceptionally high. Up till now, the disabled do not have free and easy access up to these elevated footbridges.

The Working Group has recommended the installation of vertical lifts at strategic locations, however this has received the expected opposition from various Government Departments. The usual worries of maintenance, operational problems, breakdowns, misuse and vandalism were cited as main concerns. After long periods of negotiation the Transport Department finally agreed to two trial lifts to be installed in the central business area. Policy clearance has been obtained with Government and the capital cost will be funded by private donation from the Royal Hong Kong Jockey Club.

Existing resources are also considered as means to increase accessibility. As most of these walkways are connected into existing building lobbies or arcades, the lifts in these buildings can be utilized as means of vertical transport for the wheelchair-bound person. One major drawback of this concept is that some of these lobbies or arcades are opened only during office hours, thus 24 hour access is not guaranteed. The Working Group is continuing with the exploration of possible locations where the lifts in buildings may serve additional purposes.

Conclusion

It has been made mandatory that most buildings are now accessible for people with disabilities. However, in order that these facilities are fully utilized then the streets, the external environment serving these buildings, must be equally accessible. Unfortunately there exists no statutory requirement for highway systems to be constructed to be equally convenient for disabled people. The external environment of Hong Kong will remain largely inaccessible and advances in barrier-free environment will be insignificant until a Highway Code obtains similar status as the Building Code, thus ensuring that all facilities are accessible to each member of the community. Until most of the bureaucratic barriers are eliminated, the hope of a barrier-free environment for Hong Kong is still in the far distant horizon.

Acknowledgement

The author wishes to acknowledge the valuable contributions of Father John Collins, Christopher Haffner, Peter Chan Lok Sing, and Basil Wong, who presented papers at the Environmental Advisory Service seminars held on 20th-22nd October 1988 in Hong Kong. Their papers provided the sources of reference to this commentary. Thanks also to Mary Hampton for her comments on this text.

Excerpts From A Commentary On WRF-IEEIR Monograph #44: “From Barrier Free to Safe Environments: The New Zealand Experience”

By Bill Wrightson and Campbell Pope

Publication date: August 1989

Wrightson & Pope have put together a monograph which is impressive for its comprehensive approach and timely presentation. Without doubt the message is clear. We need to develop barrier-free and safe environments. And indeed we need to work for appropriate and effective design solutions in our built environment to satisfy not just the needs of people with disabilities and elderly persons, but the needs of all.

This monograph helps bring some clarity to the task, at hand by laying before us the issues, the problems, and a range of solutions and reasonable directions to be taken. There are many paths of action. These include developing design standards and guidelines, increasing the public awareness, forming advocacy groups, creating educational programs for designers and users, establishing codes and legislation, instituting regulatory enforcement procedures, analyzing causes of accidents, maintaining a statistical database of accident events, making post-occupancy evaluations and maintaining international contacts for communication and exchange of information. All of the above have been well identified, referenced and detailed in this very valuable document, which should serve as a vehicle for international application and benefit.

But, if we are truly to achieve the goal of safe environments, I believe more thought and understanding need to be given to the role that values and attitudes of people, and of society as a whole, play in effecting change.

The issue of values and attitudes involves our governments, our bankers, our investors, who frequently seem focused on cost, rather than on total return. The short term
benefit is on how much money can be saved and how much can be made. Few developers look at the benefit beyond the immediate monetary return. And by this I mean, the intrinsic benefit to the user of a new product, or of a new building environment. It should include how it enhances and improves the users quality of life, the users health and safety and access, and in addition, the community's long-term well being. The long term benefit to the building investors is in the reduced cost of maintenance and insurance premiums, in cost of operation and the benefit of user appreciation and enhanced owner reputation.

When the public and private sector perceive, that by applying the notion of universal design to their living and working spaces, that by investing in barrier free and safe environments, they will reduce their overall costs and tax burden. One could say, there is no free ride. Society pays for everything, in one way or another. So if we neglect the provision of barrier free and safe environments, we generally end up paying for rehabilitation, or more costly care later.

This monograph is a commendable effort. It is filled with sound research, with both discouraging and encouraging reports, with facts and figures and some compelling evidence on the need for change. There are solid recommendations and practical guidelines to support this effort in creating enabling environments.

I note that barrier-free design for public buildings in New Zealand came about through the doings of an activist group. Barrier free and safe environments don't seem to start naturally. Many years ago in Berkeley, California, it was an activist group that started an independent living movement and the development of published guidelines on barrier-free design. They pushed to effect changes to the public laws, to building codes and regulations, to educate and to disseminate information, to conduct seminars and to encourage the formation of regional independent living centers. Much progress has been made and more is needed.

It is suggested that part of the process of creating safe environments involves the education of the designer and requires user involvement. Although I agree with this approach, a further step could do much to reinforce this effort and to maintain its thrust for future generations. My concern is that we as a developed and affluent society are missing something in our basic education. I believe that we must start the education and awareness process for safe environments in the primary grades. I feel strongly that we must provide our children early on, with an understanding of the significance of the built and natural environment, its importance to their wellness and the wellness of their fellow human beings. Our children need to understand their future role in managing and developing the environment to serve their needs and the needs of the world community as well.

If we don't start, we will continue to experience such stories as the following: The other day, a real estate developer friend and I were talking about barrier free office buildings. He told me about a new building he is developing (in the USA) and a prospective long-term tenant who wanted to maximize his usable floor space. The prospective tenant requested that the accessible toilet stall in the men's and women's rooms be deleted from the plan since he didn't have any disabled people working for him. He figured that this change would reduce the size of the toilet room and the remaining space could be recaptured into usable floor area.

The building code in the town does not require accessible toilets on each floor. Since these toilet units were being provided on other floors the developer could legally delete these accessible units. A further request of the prospective tenant was to eliminate the handicapped parking areas in the spaces reserved for his staff's use. This would enable him to recapture an additional parking space.

When my friend heard these requests he said to the prospective tenant, "Someday you may have handicapped people working for you." The response was, "When that day comes, I'll pay to make the building changes."

So with this example, the emphasis is again on the bottom line, on business efficiency, on cost, on return on investment. Perhaps in reading between the lines of the meaning of the prospective tenant's statement "when that day comes..." is probably..."I'm not going to be hiring any handicapped people!"

And in much the same way, this is how we have been treating our planet. We have not paid heed to what we are doing today. We are not looking at the legacy we leave to future generations. Many of our fellow human beings seem indifferent to the poisoning of our environment, to the air we breath, or the water we drink, or the food we eat. We focus on living for the moment, for the good life, for the quick return, without the understanding that we have to change our priorities, our values and attitudes. We have have to make a difference. There are no other options. We must begin the task of improving our built and natural environment. We must accommodate all our fellow human beings, regardless of age or disability. The monograph by Wrightson and Pope helps us with this important and necessary task.

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