



DESIGNING FOR THE DISABLED IN MALAYSIAN ENVIRONMENT

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**dedicated to my parents and friends
who remind me to CARE**

Happiness cannot come from without,
It must come from within,
It is not what we see and touch or that,
which others do for us which makes us happy;
It is that which we think and feel and do;
first for the other fellow,
and then for ourselves.

HELEN KELLER

preface

One knows that the environment designed for the common man is often inadequate for the physically disabled who have similar social needs. As such their mobility are impaired and so their interactions with other people are restricted to their mutual detriment. Architectural design should strive to eliminate the barriers to social interaction between the physically disabled and the rest of our society.

The accessibility of buildings to the disabled persons is now widely discussed. For practising architects, the design for accessibility to buildings should be more than lip-service human interest; it should and must be a professional responsibility.

The basic objective of a barrier-free design is to provide the same opportunities for the Disabled Persons as are available to every citizen. Some may argue that the barrier-free designs benefit only a small number of people. Whereas there are some who are now able-bodied but may be disabled at some future date. In general, the barrier-free design will be beneficial to all.

The range of physically disability the physically disabled endure is wide and their causes are many. It is the purpose of this research, as a ^{to be used} guide book to make the movements of the physically disabled easier in the accessibility of specific buildings. Besides, the number of the physically disabled will continue to increase with the increase of accidents etc. A large number of elderly persons, or the very young, would appreciate the presence of barrier-free design or design for accessibility.

While the utilization rates of barrier-free design will depend on the kind of building being considered, it is important in this respect to know what type of people are likely to use it and the possible location of the building.

It is the objective of this research of this research to draw the attention of people involved in the design and construction of buildings in Malaysia today to the plight of the disabled, who are human beings which design cannot ignore.

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abstract

In most countries, it has been estimated that 10% of the total population can be categorised under "The Disabled". With such percentage and its existence in our society, one should not deny the importance of designing for the disabled which has been studied in other countries but not Malaysia. Thus, the topic "DESIGNING FOR THE DISABLED IN MALAYSIAN ENVIRONMENT" is chosen for final year paper, PBP461: Student Initiated Research Project, in partial fulfilment of the requirements for the deg. of Bachelor of Science (Housing, Building and Planning). It is also chosen bearing in mind the following aims:

- o in conjunction with the International Year of the Disabled Persons, 1981;
- o to realize the existence of the disabled in our society;
- o to help but not sympathize them in whatsoever ways possible;
- o to involve oneself in welfare and social works and ready to serve those considered "less fortunate";
- o to provide opportunities for them to participate in the everyday life of the society and to be involved to do what others do; and
- o to provide as a guideline for our local designers in designing, planning and organizing of the houses which the disabled live and buildings which they use for work, education, recreation and others.

In researching and reviewing standards for design for accessibility, it is realized much more than before the multitude of even minor things which, when overlooked or incorrectly designed, make the everyday life of the disabled person unnecessary difficult. It is certain that as more architects and designers become aware of what they can do - easily - to provide accessible building and facilities, they will remove the unnecessary burdens which have been unknowingly placed on the lives of the handicapped for too long.

Besides, there were lots of difficulties and problems encountered mainly limited time and lack of manpower. Thus the research is

carried out with special reference to Penang, regarded as the pioneers in the field of rehabilitation of the disabled persons in Malaysia. It also includes relevant information and data available from literature research, since in physical terms, the problems of the disabled are much the same over the world whereas the resolution may not be the same. As a whole, it treated as academic work, this research can be considered good exercise.

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"Manusia sama saja
Mulia bukannya hina
Jiwa tersiksa, raga merana
Harapan ingin bahagia

Yang patah tumbuh lagi
Yang luka sembuh kembali
Yang lemah usah terus disiksa
Yang lumpuh minta dikasihi

Mari rakyat kita semua
Bulur tangan beri bantuan
Damaikan yang bergelora
Ubatkan hati yang luka

Manusia sama saja
Mulia bukannya hina
Jiwa tersiksa, raga merana
Harapan ingin BAHAGIA"

(Song for IYDP by Y. Sinar)

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1

Introduction

This research is mainly studying the interactions between the buildings which the architects design and the disabled who use them. It is concerned with all sorts of buildings and spaces of our built environment and with all sorts of disabled people. Its theme is that people who are disabled are people who deserve help from the architects or designers, help in the planning of the houses they live in and the design and organization of the buildings they use for work, education, recreation and others. They need the opportunities to participate in the everyday life of our society, to be involved, to do the same sort of things that other people do. They need to be able to get the most out of life and they need architects to help them.

The recommendations suggested can be applied in most situations, equally to new buildings, alterations or additions to existing buildings. Some compromises may be necessary where physical constraints mean that the ideal is unobtainable. Such compromises should be based on a commonsense interpretation of the recommendations and will be more satisfactory than making no provisions at all.

It should be clearly noted that due to practical reasons, it is not possible to make every part of a building accessible by the disabled and not to mention an environment barrier-free. (for example, in auditoria buildings and sites of steep topography) But in such situations, they should be planned so as to be conveniently manageable as possible.

1.10 OBJECTIVES

The main objective of this research project is to achieve the stated aims under PREFACE. It is to bring about a broad public awareness of the physical barriers that exist in our environment which impede the disabled from having a right to normal living conditions as any other citizen in the society; the obstacles facing the disabled who set about using the buildings which an able-bodied world has fashioned for its own undemanding purposes. It is

because of this awareness that many people will be concerned to make buildings fitter places for peoples with disabilities to use.

The underlying objective is to make the most out of living by realizing one's potential, making use of the talents one is born with and opportunities and challenges that life affords, to achieve in some measure personal fulfillment.

Thus both the physical barriers and obstacles should be eliminated because they restrict the disabled from attempting to travel in the environment and gaining access to public buildings and consequently prevent them from doing all kinds of human activities, for example not to be able to go to normal school or university buildings if they want to pursue further studies. When work is offered, the young disabled people often have no possibility of entering the place of work conveniently. If they wish to meet other young people, they find it difficult to get in public buildings like cinemas, theatres, community centre, hall etc.. If they want to leave home, they encounter difficulty in movement along the circulation space and in finding suitably equipped accomodation. If they want to visit friends, they cannot get into their house. Thus, it is no doubt that in Malaysia, the disabled people are seldom seen in public buildings.

From the disabled person's point of view (The Canadian Architects, Oct. 1974, pg. 32-40), the architect is the villian as the architectural profession is responsible for the physical barriers which impede, endanger and create inconvenience their daily mobility. This point of view is unfortunate in many aspects because it is used discriminately wherever a disabled person meets a physical barrier even though one that cannot be blamed onto the architects. It is also unfortunate because it implies that all architects are ignorant of such problems, which

is not true. What is evident however, is that many architects are ignorant of what can be done to break down the barriers and even if they are knowledgeable, frequently fail to convey their expertise to the clients.

Therefore throughout this research, it should be clear that it is not only the architects but also planners, environmentalists, government officials, volunteers and rehabilitation workers and the disabled to have a responsibility to ensure that every feature of the environment, both physical and social, be made healthy for, hospitable and protective of all members of our society. The disabled can play their role by taking a leadership role in the abolition of these barriers, by addressing to public ^{via} broadcasting media like radio and television and through newspapers and bring^{ing} the problems to the attention of the architects, planners and environmentalists.

However, the architects, planners and the environmentalists ^{hold} own the primary responsibility ^{of} to make ^{sure} that our environment can be accessed ^{by} everyone and not to deny a person ⁱⁿ wheelchair access to the public building because of steps at entrance, a door too narrow to accept a wheelchair or no ramp for the building that is raised on the plaza. Therefore, it is important for architects to consider for the disabled in the initial planning stage before the final building design.

In physical terms, the problems of the disabled are much the same over the world. But while problems may coincide, the way they ought to be resolved may not. Thus, final objective of this research is to study in our Malaysian environment. Appropriate solutions are governed by the way that services are organized, along with social, economic and cultural influences in our local context. This objective is to serve the present and long term responsibilities of our society in providing access for the disabled to ensure the rights of every citizen.

1.20 INTERNATIONAL YEAR OF THE DISABLED PERSONS (IYDP)

On 16th. December, 1976, United Nations Organization in its annual conference passed the resolution 31/123 that the year 1981 to be regarded as the International Year of the Disabled Persons. Its main aim is to increase the public awareness of the plight and needs of the world's estimated 400 millions disabled persons suffering from some form of physical or mental impairment. The theme for the year is "Full participation and Equality", which aims to have full participation of the disabled persons in all fields of everyday life including economic, social, political, cultural and sports.

The objectives for the IYDP are:

- 1.21 To help the disabled in adjusting oneself in the society from both physical and psychological aspects;
- 1.22 To further develop the effort at national and international level to provide assistance, training, guidance together with suitable job opportunities for the disabled to ensure their integration in the society;
- 1.23 To encourage both study and research on helping the disabled to carry out their daily affairs perfectly and to improve the facilities so that they have easier access to public buildings and public transportation;
- 1.24 To provide information and teach the public about the basic rights of the disabled so that they can participate and contribute towards various aspects like economic, political and social conditions; and
- 1.25 To encourage more effective steps for the treating and rehabilitating of the disabled persons.

As a member of the United Nations Organization, Malaysian government has also received the Resolution 31/123 to take part and remember IYDP in our country. A nationwide committee chaired by The Minister of Social Welfare was formed to plan and implement programmes for the year. The elected committee members were representatives from from various related Ministries, universities, commercial organizations and voluntary organizations as follow:

Jabatan Perdana Menteri
Perbendaharaan Malaysia
Kementerian Kebajikan Am
Kementerian Kesihatan
Kementerian Buruh dan Tenaga Rakyat
Kementerian Pelajaran
Kementerian Penerangan
Kementerian Pertahanan
Kementerian Hal Ehwal Dalam Negeri
Kementerian Kebudayaan Belia dan Sukan

Universiti Malaya
Universiti Kebangsaan Malaysia

Majlis Kebajikan Masyarakat Kebangsaan
Malaysia
Majlis Pemulihan Malaysia

Dewan Perniagaan dan Perindustrian Kebangsaan
Malaysia

1.26 Logo IYDP 1981



fig.1.1

The Logo represents two human beings, one disabled and the other apparently without any disability, holding hands in solidarity and support of each other in a position of equality.

The triangle surrounding these two human beings might symbolize the process of development in which there should be scope for the full participation of disabled persons.

1.30 RIGHTS OF THE DISABLED PERSONS

As a member of United Nations, it is only logical that Malaysia should abide by the Declaration on the Rights of Disabled Persons, a resolution adopted by the United Nations General Assembly on 9th December, 1975. These Rights are "granted to all disabled persons without any exception whatsoever and without distinction or discrimination on the basis of race, colour, sex, language, religion, political or other opinions, national or social origin, state of wealth, birth or any other situation applying either to the disabled person himself or to his or her family."

In presenting the rights of disabled or handicapped person, it is difficult to avoid quoting the Rights as proclaimed by the world body. The salient extracts of the Declaration state that disabled persons:

- 1.31 Have the inherent rights to respect for their human dignity;
- 1.32 Have the same civil and political rights as other human beings;
- 1.33 Are entitled to the measures designed to enable them to become as self-reliant as possible;
- 1.34 Have the right to medical, psychological and functional treatment, including prosthetic and orthotic appliances, to medical and social rehabilitation, education, vocational training and rehabilitation, aid, counselling, placement services and other services which will enable them to develop their capacities and skills to the maximum and will hasten the process of their social integration or reintegration;
- 1.35 Have the right to economic and social security and to a decent level of living. They have the right, according to their capabilities and skills, to

secure and retain employment or to engage in a useful, productive and remunerative occupation and to join trade unions;

- 1.36 Are entitled to have their special needs taken into consideration at all stages of economic and social planning;
- 1.37 Have the right to live with their families or with foster parents and to participate in all social, creative or recreational activities;
- 1.38 Shall be able to avail themselves of qualified legal aid when such aid proves indispensable for the protection of their persons and property. If judicial proceedings are instituted against them, the legal procedure applied shall take their physical and mental condition fully into account;
- 1.39 Are protected against all exploitation, regulation and service which are in the form of discrimination, abuse or moral degradation.

Under this Declaration, it also makes clear that all the organizations for the disabled persons can be contacted to discuss problems concerning the rights of the disabled persons and ^{to} give advise. The disabled persons, their families and community should be provided with information concerning the suitability of their rights contained in the Declaration.

Admittedly the rights of the disabled in any country have to be given due consideration and priority not only because of the need to prevent economic liability and to conserve manpower but more importantly to preserve,

"the necessity of preventing physical and mental disabilities and of assisting disabled persons to develop their abilities in the most varied fields of activities and of promoting their integration as far as possible in normal life."



2

Disability

2.10 DEFINITION OF DISABILITY

It has always been a tricky business in endeavouring to define disability. There is no commonly accepted definition of the term "disability", which enables individuals to be categorised as either disabled or non-disabled. The dictionary definition ^{is} ~~as~~ "inability, incapacity, impotence" which is loose. At its 29th Assembly held in 28th. April, 1976, World Health Organisation spent considerable time and space before summarily declaring,

DISABILITY is defined as an existing difficulty in performing one or more activities which in accordance with the subject's age, sex and normative social role are generally accepted as essential basic components of basic living such as self-care, social relations and economic activity.

If one cares to scan the definition of disability or a disabled person adopted by each and every country in the world one will encounter as many differently worded definitions as there are countries. This is not an exaggeration. And such varied forms of interpretation seem to reflect rehabilitation of the disabled persons is just as intricate and complex. In other words, the process for integrating and re-integrating the disabled into society faces multitudinous constraints and problems and it is one that can function neither smoothly for the dedicated social worker nor satisfactorily for the disabled client.

The Malaysian Council for Rehabilitation, the umbrella ^{whose function is} body [^] "to coordinate the efforts of voluntary organizations, government departments and other organizations working in this field; and to promote the establishment and development of State societies for rehabilitation", defines the disabled person as one who is "incapable (or likely to become so) of receiving education in a normal school or whose prospects of securing and retaining employment and

of undertaking work or business on his or her own are substantially reduced as a result of physical or mental impairment."

The disabled persons in this research include all persons with physical disabilities in all physical environmental situations. For convenience and better understanding, they may be considered in 3 main groups: (Bayes, K., 1971)

- 2.11 Those whose mental ability makes them in need of special care. This group includes the mentally handicapped (subnormal or handicapped), the gifted and the brain injured;
- 2.12 Those whose emotional stability makes them in need of special care. This group includes the mentally ill and the maladjusted (emotionally disturbed). It is also the hidden handicap of the general public;
- 2.13 Those whose physical conditions make them in need of special care. This group includes the blind and partially sighted and the deaf and hard of hearing, as well as the physically ill, the physically disabled, the aged and the very young.

2.20 DISABILITY AND HANDICAP

In countries more involved and advanced in rehabilitation work, disability and handicap carry different meanings, for example, in simple definitions, a disabled person is one who suffers from a medical condition i.e. physical, sensory or mental; and a handicapped person is one whose functions and mobility in specific areas are restricted due to a physical or mental deformity.

The following is another interesting development in the use of the two words in the field of rehabilitation:

"Both handicapped and disabled are acceptable as adjectives in written and verbal communication; the former is more commonly used in the United

States Midwest and the latter tends to be preferred on the East Coast. On the contrary, their use as nouns in expressions such as the disabled or the handicapped is not acceptable because it conveys a separate and inferior status. Handicapped individuals or persons with disabilities are positive alternatives which convey a sense of respect and equality." (Corcoran P.J., 1979)

In Malaysia, among social workers and administrations, the two words, "disabled" and "handicapped", are treated as synonymous and are interchangeable just as they were interpreted similarly in the not too distant past in developed countries during their early stages of development in comprehensive rehabilitation. Thus, it is treated in this way in this research paper.

As quoted by Goldsmith S. (1976), a chair bound person is not handicapped if he wishes to do/can be managed from a wheelchair without difficulty. Thus,

"A physical disability is a handicap only when it constitutes a barrier to the achievement of specific goals."

2.30 CAUSES OF DISABILITY

Everyone will at some stage in life be handicapped by a temporary or permanent physical disability. As explained by Goldsmith S. (1963),

Temporary disabilities may be the consequence of an accident on the road or in the home, the duration of convalescence following a severe illness or the later stages of pregnancy.

Permanent disabilities may be due to the result of disease, congenital malformation or trauma.

Permanent disabilities occur as a by-product of the natural aging process. There is decreased range of

mobility and impairment of sensory facilities. Advanced medical techniques have helped to increase the life expectancy and also make it possible for many to stay alive after serious illnesses and accidents. Though those who have survived, many have suffered from the disabling conditions.

2.40 EFFECTS OF DISABILITY ON MOBILITY

The principal disabling conditions and their effects on mobility can be summarised as follow:(Goldsmith S.,PRU)

2.41 Degenerative Conditions associated with Aging

These conditions are found mainly among the elderly:

<u>DISABLING CONDITIONS</u>	<u>EFFECTS ON MOBILITY</u>
o Heat & respiratory conditions	Should avoid sudden stress or prolonged exertion. Unable to climb flights of stairs, gradients or steep ramps or walk long distance. Unsteady.
o Arthritis	Have stiff joints, and move slowly, painfully and unsteadily. Difficulty in climbing high steps and kerbs and in negotiating steep gradients.
o Hemiplegia	Involves varying degrees of paralysis usually on one side of the body. Walk with difficulty and unsteadily. Many use sticks and callipers. Wheelchair users find difficulty to propel them-

selves because of the one-side paralysis, use of the electric wheelchair would solve this problem.

o Amputation

Amputation of leg may result in some unsteadiness especially on gradients.

2.42 Hereditary and Congenital Conditions

These conditions are found mainly in children and young people. It is normally very rare case:

DISABLING CONDITIONS

EFFECTS ON MOBILITY

o Epilepsy

Normal mobility, afraid of having convulsions and falling in lifts or on winding staircases.

o Bleeding disorders such as Haemophilia

Avoid undue energy expenditure, should not be bumped or jolted. Some need to use a wheelchair.

o Cerebral Palsy

Different types of cerebral palsy may result in weakness, poor balance or wild unco-ordinated movement.

o Spina Bifida

Complete or partial paralysis of the lower limbs, difficulty and unsteadiness in walking, sometimes inability to walk at all. Inconvenience is a major problem associated with this condition.



3

The problem

3.10 WHAT IS THE PROBLEM?

The problem is that the environment designed for the average person often does not take into consideration the wide range of mobility limitations caused by aging, the physical disability or temporary injury. Such persons frequently find themselves isolated and segregated from the mainstream of society because they are unable to enter into the community and participate in its everyday life.

quoted and stated by Panayiotis Psomopoulos, Athens Centre of Ekistics, Greece: (Report of U.N., 1974)

"One major cause of disabling settlements is that they are built for a non-existent population. Buildings, roads, open spaces cater to a fictitious model of the human being exclusively for a man (not a woman) in the prime of life and peak of his physical fitness.

Statistically speaking, only a small minority of the population can fall into the category, even among the fit. Naturally there is no thought for the handicapped."

3.20 WHY IS IT A PROBLEM?

3.21 Impedes Daily Mobility

Flights of stairs, protruding thresholds, revolving doors, narrow entrance ways, all combining to turn manmade environment into a frustrating obstacle course for a portion or even a majority of the worlds' citizens. The elderly, mothers with prams, wheelchair users, pregnant mothers, people with chronic heart or bronchial conditions, the person with a crutch: all are daily impeded, endangered and inconvenienced and endangered by architectural barriers.

3.22 Restricts and Affects Human Activities

Barriers provide a hindrance to a very broad spectrum of disabling conditions, and have the effect of restricting severely the mobility of large numbers of disabled persons. They affect all kinds of human activities, from doing the weekly grocery shopping, to pursuing employment, taking a vacation or seeking cultural, recreational or educational fulfillment.

3.23 Unaware of the Importance of this Problem

The world does not realize the importance of this problem. Due to the progress in medical science, the survival rate of victims of accidents, disease and disability has increased to a near normal life expectancy and greatly extended the life span of the elderly and the infirm.² Modern-day technology possesses the skills and the techniques which enable such persons to be productive members of our society. However, the large majority of the disabled persons do not have the benefit of the resources available because our society is unaware of their needs and unformed solution.

3.24 Industrialization, Speed and War

Industrialization, speed and war have made this problem more acute. Rapid urbanization and industrialization of many countries have increased the rate of road accidents and industrial accidents.

3.25 Cost

In the public sector, the taxpayers will pay for them whereas in the private sector, very often the client/developers are not willing to provide these accommodation or changes in buildings because they are not willing to pay extra costs. This is especially true in our society where most or even all the

developers are profit-orientated. As stated by Gretton ~~in~~ in his article: (Canadian Architect, Vol. 19 No. 10, Oct. 1974)

Architects are often asked to accommodate the handicapped persons to a point but there is always a point where the client is no longer willing to pay for the convenience.

3.26 No Formalistic Approach to solve the Problem

There are too many individual situations, too many complex factors, too many obstacles in finding a common thread for building design and in deciding who will have to pay.

3.27 Discrimination

In most cases, our society will retain prejudice against the disabled persons, thus little or no thought is given when designing.

3.30 FACTORS CONTRIBUTING TO THE PROBLEM

3.31 Social Attitude towards the Disabled

For years, our society has ignored, not to say slighted people with disabilities, considering them as a hindrance, as a disgrace, a burden which his family or perhaps the country should bear and although incomprehensive and cruel, that attitude was logical, as the census of the disabled was small, and only affected a few and their number did not interfere with the country's economy. But as a developing country today, rapid urbanisation and industrialization have made this problem more serious.

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Thus we should not deal with this problem in isolation, that is discriminating the disabled people by

putting them in institutions and segregating them from the rest of the society. Instead we should learn to accept them and be aware of their needs so that their daily human activities can be made possible in our environment.

We should also realise the human problems that are related to this problem of accessibility. The facts are that everyone comes into contact with disabled persons in somebody else at sometimes. Moreover, everyone is in need of special care at some period in his or her life as we are all potentially handicapped.

3.32 Unawareness

It can be seen clearly in our local context, that buildings are constructed with little or no consideration given to the disabled persons. This may be due to the fact that this problem only involves a minority group of the population (around 139,000 persons have been registered) but this figure is inaccurate as many have not come forward to register and it will increase in the near future due to the effects of urbanization. This will pose as a serious problem and thoughts to this problem should be present in the minds of our architects, planners and environmentalists.

We should also be aware that the situation of the disabled persons has changed. Unlike in the past where they are confined to institutions or homes and they shy away from the public, the disabled today strives for independence by getting themselves gaining full employment. The situation being such that the architects, planners and the environmentalists should help them by creating as far as possible a barrier-free environment so that they can

prove themselves useful to our society in all fields such as social, education, politic and economic.

Only lately, ~~that~~ this problem of accessibility for the disabled has been brought out by our architects to the general public. The recent architectural competition of Penang Indoor Stadium has included various features like ramp, toilet compartments, larger entrance door, etc. provided for the convenience of the disabled and efforts have been made to minimise barriers and obstructions so that people in the building would not have to move around too much.

3.33 Cost

The client's decision is one of the reasons why many of our buildings in Malaysia are not designed for the disabled especially if it involves additional cost and the problem only concerns a minority group of the population. Architects in the private sector should take effort in persuading their clients to see the lights in the matter. Additional cost is one of the deciding factor which the client will decide against the matter but the architect should inform the client that it will be minimal cost if provisions are planned in the design stage and that the social benefits gained from these provisions will outweigh the additional cost.

3.34 No Publicity Move by Government Bodies

Architects in the public sector can be said to be unaware or ignorant of the needs of the disabled. ~~As~~ the buildings undertaken by J.K.R, U.D.A, and H.D.B are found ^{to be} lacking badly in these aspects or ^{at the worst} none ^{have been} being ^{designed} designed for the disabled. ^{Being} ~~As~~ the main government statutory bodies concerning ^{ed} with the

the majority of building construction, planning of housing estates and planning of our Malaysian towns as a whole, they should take the responsibility and initiative to help to promote a barrier-free environment so as to ensure the well-being of all citizens of our society. Sad to say, ~~we have~~^{there} majority of the public buildings like post office, government departments, libraries etc. are impossible for the disabled to enter them.

But the most unfortunate situation is that most of our public housing are planned without these considerations. This is a serious problem because most of the people with disabilities come from low or middle groups and thus they are likely to be housed in the public housing flats. Therefore their daily lives not to mention mobility are inconvenienced by architectural barriers.

3.35 Lack of Co-ordination among the Various Organization

There are at present too many organisations representing the disabled and co-ordination is much needed to integrate them into one major body to represent their needs and problems. Being disintegrated they represent small bodies and thus their needs are usually left unheeded. Moreover only a small number of the disabled are willing to come forward to register under the organizations and hence ~~does~~ not represent the total body of disabled in the population, which means the force of their actions and ~~says~~ will be much lessened. Since the problem of accessibility for the disabled persons will pose a sizable problem in the future, architects and planners should have bear this in mind when they plan for the future to cater for our future generations as it is impossible to ? create a barrier-free environment for our present generation. Certain situations can be remedied by making adaptation in existing building if possible.



4

The Disabled in Malaysia

4.10 POPULATION OF THE DISABLED

The Asian family pattern in social behaviour and traditional beliefs still persists strongly in certain societies like Malaysia especially among the rural communities where the majority of the disabled are found. The birth of a deformed child in the family is accepted as an inherent right of the child to be solely cared for and nurtured by the family. Therefore it is not surprising that although the projection of the Ministry of Welfare Services says there are over 139,000 disabled persons (W.C. Cheong, 1981) fall in the four major categories of disability (1% of the population) viz blind, deaf, mentally retarded and orthopaedically handicapped, less than 17% of them have come forward voluntarily to register for assistance. Take an example, in Federal Territory, up to December 1980, there was a total of 667 disabled persons registered with 95 deaf, 162 blind, 231 mentally retarded and 171 orthopaedically or physically handicapped. (New Strait Times, 100381). This poor response might be due to a number of factors. Either they might not be aware of the rehabilitation facilities available for them, they might be ashamed to come forward or their families would not part with them.

True, but unbelievable, even today there are many families who are reluctant to reveal the presence of a deformed child. The Department of Social Welfare, inspite of intensive publicity campaigns at both State and District levels to encourage disabled persons, especially in the rural areas, to come forward for aid under the rehabilitation process, namely medical, educational, social and vocational, has met with lukewarm response. For example the two schools for the blind, the St. Nicholas in Penang and the Princess Elizabeth in Johore Bharu, for some years have not been able to meet with full enrolment for their classes. Thus it is only the initiative of the disabled that will help our nation to be successful in its rehabilitation programme.

There are today patients who lose their limbs will not, in spite of pleading of the medical officer, to have the artificial limbs fitted properly before they are discharged from the hospital. And there are also others who, after having been fitted with artificial appliances, have discarded them once they reach home from the hospital bed.

Some artificial appliances are not always appreciated by the disabled especially in the rural areas because they are too sophisticated. Wheelchairs are found to be unsuitable in the 'kampongs' where the terrain is not conducive to smooth mobility. Crutches often pose a hindrance because they easily get struck in the mud.

Like most developing countries, Malaysia is in dire need of specialist personnel to staff rehabilitation institutions, Governmental or otherwise. The Government Rehabilitation Centre in Cheras, Selangor, has never been able to fill its sole vacancy of speech-therapist since it was established in 1965. The two posts of physiotherapist have seldom been both filled at any one time, while the one post of hydrotherapist, like that of the speech therapist, is still waiting for an interested body. For a start, to overcome the shortage of such professionals, the School of Physiotherapy was established in 1974 in the country and it is hoped that other schools will follow suit. (W. G. Cheong, 1981)

Placed in similar position with all countries in the world, Malaysia's national rehabilitation programme is very sadly hampered by the negative attitudes of her people towards the disabled. It is quite convinced that these negative attitudes constitute very significant barriers to achieve successful rehabilitation and will persist indefinitely until such time that the able-bodied can overcome the stigma, the prejudice and the ignorance they harbour

towards people with a deformity particularly multiply disability. The disabled are already handicapped because of their disability; but on account of the negative attitudes displayed by the able-bodied, they have additional handicaps placed on them thus making their burden even heavier.

Lip service, in the field of rehabilitation, is unfortunately still rampant even among responsible bureaucrats and prominent individuals. Where there is a choice between a trained handicapped and a non-handicapped for a job, the potential employer invariably opts for the latter giving lame excuses such as the non-availability of access facilities in his office or factory has influenced his decision.

4.30 EXISTING FACILITIES FOR THE DISABLED

Rehabilitation of the disabled is still a comparatively new service in Malaysia and it is one of the most, if not the most, difficult social services to discharge by any voluntary social welfare body. The Malaysian Council for Rehabilitation has looked forward to make its contribution to rehabilitation for the disabled viz four broad direction as follow:

- o Vocational training;
- o Employment opportunities;
- o Transport facilities; and
- o Accessibility.

4.31 Ministry of Welfare Services Malaysia

- o Rehabilitation Services

The objective of the Rehabilitation services of the Ministry of Welfare Services is to enable disabled persons to become self-reliant and to be more productive members of the community commensurate with full potential.