

Architecture for All - Part I

Accessibility and Universal Design

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History and Background

The concept of accessibility to facilitate access for people with disabilities is not new, with the movement beginning in the Nordic Countries such as Sweden over three decades ago. The influence filtered down through Europe where the United Kingdom, France and the Netherlands took similar initiatives to promote accessibility within their own countries by establishing committees and interest groups on access, developing codes and guidelines on the improvement of their built environment to facilitate access for people with disabilities.

In the 1970s, as a result of the Indo-China conflict North America was confronted with a sudden growth of people with disabilities as a result of injuries received from a protracted war. Likewise, in the poorer economy, Vietnam suffered similar fate but with much less economic resources to deal with such situations.

In the late 1980s President George Bush (Sen.) inaugurated in the Signing Ceremony of the *Americans with Disabilities Act (ADA)*, with the subsequent publication of the ADA Handbook published by the U.S. Equal Employment Opportunity Commission and the U.S. Department of Justice in October 1992. This became the tour-de-force for the U.S. with many equal rights and disability groups leading to eliminate inequalities including physical barriers in the built environment. Short, medium and long term programmes were established with the U.S. Government taking the initiative to incorporate barrier-free access and features in their new buildings and construction; but more importantly, to implement Actions Plans whereby existing buildings, infrastructures, and services must incorporate accessibility by retrofitting programmes that accommodate access features within a period of 5, 10, or 20 years. Infrastructures such as heavy rail and airlines, for example, must be retrofitted to be fully accessible to people with disabilities within a period of 20 years.

Europe also began to develop similar comprehensive handbooks, and in the mid 1990s, drafted the "European Manual" for their European Union partners to adopt. At the same time, the Asia Pacific Region continued with the same fervour for the Far East with the Declaration of the *Decade for the Disabled - Asia Pacific Campaign 1993-2002* inaugurated during the Rehabilitation Conference in Beijing in 1990.

The *Campaign for the Second Decade for the Disabled* in the Asia Pacific Region was declared in 2002 during the Osaka Conference marking the end of the first Decade, with the subsequent establishment of the *APDF (Asia Pacific Disability Forum)* in Singapore in 2003 to implement the Action Plans adopted by the UN-ESCAP (United Nations- Economic and Social Commission for Asia and the Pacific).

The disability movement worldwide has reached critical mass in the 21st century and is anticipated to continue having its presence felt in all continents assisted largely by use of modern communication technology that facilitate networking, the exchange of knowledge and information, thus empowering each and every person with disabilities.

Architecture and Accessibility

The enthusiasm of the disability movement took longer to reach the architectural profession, with little interest shown by the individual practitioners except for small interest groups practising in the U.S., U.K., Sweden, Netherlands, Japan, Hong Kong and Australia.

In September 1990, witnessed the beginning of Asia and North America international exchange with the *International Accessibility Mini-Summit* co-sponsored by the Centre for Accessible Housing of North Caroline State University and the World Rehabilitation Fund's International Exchange of Experts and Information in Rehabilitation (IEETR) being held in Raleigh, North Carolina. (The Author was honoured to be invited as one of the Keynote Speakers at this 3-day Mini-Summit.)

In terms of mainstream architecture, the full momentum of access for the disabled was not formalized until 1999, during the XX UIA World Congress of Architecture held in Beijing when the UIA President, Vassilis Sgoutos initiated the first ever *UIA Work Programme* entitled "*Architecture for the Disabled*". Member Section Hong Kong Institute of Architects was assigned to lead this Work Programme (WP) for Region IV, (the Asia Pacific Region) with 16 Member Sections (Institutes of Architects) participating.

Since its inauguration in 1999, the Region IV WP directed under a HKIA Member and with the associated support of the HKIA has been instrumental in organizing educational Seminars and Workshops in association with ARCASIA (Architects Regional Council of Asia) within Region IV on topics relating to Universal Accessibility for All, including the elderly and people with disabilities. These Seminars and Workshops were held in Singapore, in association with the Singapore Institute of Architects (2001); in Dhaka, in association with the Institute of Architects of Bangladesh (2003), and recently in Macau, in association with the Association of Architects of Macau (2004).

In 2002, the Work Programme with the support of the Hong Kong Institute of Architects also organized a Seminar on "Architecture for All" during the XXI UIA World Congress of Architecture held in Berlin. In addition, Seminar and Workshop Proceedings have been produced for these Events.

Within UIA itself, this Work Programme "Architecture for the Disabled" recently renamed as "*Architecture for All*" has proliferated to other world Regions, with the establishment of similar WP's in:

- Region I directed from the Netherlands
- Region II directed from Poland
- Region III directed from Mexico
- Region IV directed from Hong Kong
- Region V directed from Tunisia

The forthcoming XXII UIA World Congress of Architecture to be held in Istanbul in July 2005 will receive WP Reports from the five Regions, where it would be interesting to note the progress and status of accessibility from different parts of the world.

Legislations and Commissions

Laws, Legislations and Commissions are necessary interventions in some economies to promote equality, equal rights and participation for certain minority groups.

Civil rights and human rights movement was a major force in the United States as early as the 1960s, which also provided catalyst for people with disabilities to seek equality for access, housing, education, employment and communication.

More recently, both Britain and Australia enacted Disability Discrimination Acts with the establishment of Equal Opportunities Commission and the Human Rights and Equal Opportunities Commission respectively.

In Hong Kong, both the Disability Discrimination Ordinance (DDO) and the Equal Opportunities Commission (EOC) was respectively enacted and established in 1996. It can be regarded that both these instruments made significant contributions towards facilitating access in Hong Kong in terms of access to the built environment, transportation, accommodation, education, employment, services, etc.

Rules and Regulations

Codes, Rules and Regulations are the minimum requirements that prescribed the basic standard to be adopted. These Codes and Regulations are sometimes erroneously mistaken or taken as the optimal or the best practice standards. Therefore, a balance should be reached to develop such regulations to be performance-based and not prescriptively-based. Only then will designers and architects be facilitated with the freedom to develop and initiate better and improved design solutions to fit the needs of a larger sector of the community.

Having well written regulations easily accepted, adopted and practiced by architects, developers and various user groups is an important beginning towards implementing accessibility in any country; but if these regulatory conditions are too stringent and inflexible, any well meaning concept would have difficulties to implement.

Enforcement is the other importance aspect in the implementation of any regulations.

The Batas Pambansa Bilang 344 (Accessibility Law) and its Implementing Rules and Regulations first published by the Official Gazette in 1984 by the National Commission Concerning Disabled Persons of the Philippines is a comprehensive document; however, enforcement was a major issue from the inception of the Law, and today very few of the concepts implied in the Accessibility Law is actually translated into reality.

Codes, Rules and Regulations, and Design Manuals and Guidelines relating to accessibility and barrier-free designs are being recently reviewed, revised, updated and implemented in Asia Pacific Countries such as Singapore, Malaysia, Japan, and Hong Kong.

Publications

The ADA Handbook and Guidelines was a significant milestone in the history of barrier-free design. Other documents followed that introduced similar concepts of "design for access" or "design for the disabled". In the 1990s, academics, professionals, practitioners, government organizations and major public bodies published significant publications. These titles include:

European Manual for An Accessible Built Environment

Accessible Public Transport Infrastructure - Guidelines for the Design of Interchanges, Terminals and Stops: by DIPTAC (1994)

Building Sight: by The Royal National Institution for the Blind (1995)

Promotion of Non-handicapping Physical Environments for Disabled Persons: Guidelines and Case Studies: by the UN-ESCAP (1995)

Problems or Challenge? The Removal of Barriers Preventing Accessibility to Public Buildings (1997)

The International Standards Organization (ISO) is developing a new international standard entitled "Accessibility and Usability of the Built Environment", which is currently at the stage of Final Draft, with likely publication and promulgation in 2006.

In Hong Kong, two separate organizations have prepared best practice guidelines on design for accessibility, namely, "The Universal Design Guidebook for Residential Development in Hong Kong" by the Hong Kong Housing Society, and "Universal Accessibility - Best Practices and Guidelines" by the Architectural Services Department.

Both publications will be important and significant contributions to the architectural profession as well as in enhancing the overall design standard and quality of developments in Hong Kong. Furthermore, these documents will raise the standard of access design beyond the concepts of "barrier-free environment", "adaptable housing", "access for people with disabilities" to the higher level of "universal design" and "universal accessibility", incorporating the concepts of Inclusion by Design and Inclusive Design by embracing a much broader sector of the population, including the young, the less-able, the less-averaged, and the elderly seniors of the community.

Under this inclusive universal approach, the built environment should become less esoteric and specific; but more generic and user-friendly catering to a wider range of users who are perhaps less active and less fluent in mobility, speech and hearing, and in vision.

Recognitions and Awards

To encourage excellence in works of architecture, awards and prizes are given to buildings and the built environment, and also to persons and architects who contributed significantly in the field of architecture.

Awards for architectural projects and personal contributions such as the Gold Medal, Pritzker Prize, Aga Khan Award, and UIA Prizes attracting great works of architecture and great personage already attributed with an established and substantial history. However, "Architectural Awards in Accessibility" is less so, beginning only several decades ago.

The Government of Ontario, Canada inaugurated "*The 1987 Premier's Awards for Accessibility*" almost 20 years ago, and similar recognitions for accessible architecture have been awarded by the Singapore Institute of Architects during the 1990s. In Hong Kong, the first such Award was presented in 1989 under "*The Design Award for the Most Accessible Buildings for the Disabled in Hong Kong*"; followed in 1994 with "*The Design Award for Buildings and Open Spaces Most Accessible to Disabled Persons in Hong Kong*".

Recently, under HKIA Annual Awards 2004, two prizes were given to Architectural Services Department for projects relating to accessibility. *Special Architectural Award - Accessibility* was given to *Margaret Trench Red Cross School*; and *Special Architectural Award - Architectural Research* was given to *Universal Accessibility - Best Practices and Guidelines*.

Both of these recognitions awarded under the accessibility category signified that this area of design is approaching maturity, a stage to be recognized as an important element essential for inclusion in the building process.

Access and Universal Design in the 21st Century

Access and Universal Design are coming to the forefront as important concepts to incorporate into the design of any master planning, urban development, townscape, and buildings including individual living units.

The concept is well in place with legislations, rules and regulations firmly established in most countries. The architectural profession under UIA and ARCASIA is willing to embrace such initiatives as meaningful programmes. Educational seminars and workshops are conducted to disseminate information and knowledge throughout the region, and promotion campaigns have begun with milestone publications and access awards to recognize concerted efforts and contribution by individuals and built projects.

Yet much work remains to be done in order to mainstream the concept of universal access for all. Society under the pressures of globalization must take advantage of such realities and utilize global networking with various agencies to form strategic alliances and mutually beneficial partnerships. Global organizations such as Rehabilitation International, International Federation on Aging, the UIA, the United Nations, the World Bank, and the Asian Development Bank can form synergies to further enhance the implementation of Non-Handicapping Environments.

An integrated approach must be adopted to view accessibility and universal design as an integral part of design, not as an afterthought or superficial add-ons in order to obtain building approvals. Access Strategies should be pre-requisites and norms in all building development initiatives equivalent to health and safety aspects of buildings where access and means of escape should be regarded with equal importance as ventilation and lighting. The engagement of Access Consultants should also be a pre-requisite and the norm on all projects similar to the appointment of quantity surveyors, structural engineers and building services consultants.

Educational institutions and universities must begin to incorporate access and universal design as an integral part of any architectural curriculum to instill in graduates the need to respect equality, dignity and human values in all their architectural designs.

CPD courses and sessions undertaken by seasoned practitioners should consider access and inclusion by design as an essential addition to their skilled repertoire.

21st century architecture, although becoming increasingly complex in nature and demanding on the architect must embrace universal accessibility at the very forefront of design for the built-environment, and transportation infrastructure including housing and education, communication, leisure and recreation.

It is with the concerted care and effort of all the stakeholders, in particular the Architect, that our society will become an integrated whole, where no barriers and boundary will exist, where people whether young or old, fit and the less fit, able and the less-able can co-exist harmoniously within a built environment that facilitates human dignity, equality and full participation by all.

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