

The BAS project and further initiatives to promote accessibility

A proposal based on discussions and experience from the BAS project

Summary: _____

An 'Education Group' was proposed in the original BAS project description. The objective was 'to do an effort to enhance design knowledge and skills related to individuals and groups of people with disabilities in a wide sense'. The discussions of education issues have involved the entire BAS working group and have been intertwined with the main project work. The issue of education has widened in a natural way to involve the basic knowledge behind accessibility design as well as the role of 'good examples' – the main concern of the BAS work – for the development of practice. The discussions have been enhanced in specific parts of the BAS conferences; e.g. the education sessions in Budapest and Bruges and the research parts in Verona and Lund.

The objective of this paper is to provide a summary and reflection of the education discussions and experience from the BAS project. The BAS project has made a comprehensive contribution to the accessibility field by the Orange Book showing prominent examples of accessible buildings throughout European countries.

It is evident from the BAS work and conferences as well as from other actions that the knowledge base for design for accessibility is rather weak. It is mainly experience based. It has been built up in a pragmatic way with different sources over the last decades. There is little evidence based research and evaluation to adjust, verify, enforce – or contradict – the experience based knowledge. Today, when 'accessible environments' are common, it is time to evaluate and improve the fundamentals. The conclusion is that qualitative research and evaluation work should be given priority to enhance the basic knowledge. Future education is dependent on quality secured knowledge and practice.

This leads to a proposal for a European Universal Design Centre focusing on knowledge, prominent practice and education in the accessibility/usability field. The three main areas have to be elaborated by qualified working groups supported by reference groups of European experts. The BAS project provides a pioneering contribution to the prominent practice section. A web site connected to the centre should be erected – following the present BAS site; www.accessible-buildings.eu, – including a long-term commission to develop and maintain the site. The contents of the site must be carefully worked out by the centre to provide qualified, relevant and reliable accessibility basics.

BAS Experience

The work with the BAS project has shown that accessibility issues and design for accessibility are on the march in Europe. Accessibility has been on the agenda for 3–4 decades in some countries; a bit less in others. In the search for ‘good practice’ to put forward in the Orange Book several examples have come up from each of the partners and it has been a tricky task to select the most appropriate from different points of view. The involved countries have different building design and construction traditions as well as different social and everyday life cultures. Over the decades there has been a comprehensive exchange of ideas about legislation, building rules, design features and practical outcomes on different levels in between the countries. This complexity makes the accessibility field enormously interesting.

Accessibility is basically connected to the needs of persons with mobility and vision impairments. The discussion in the BAS project has widened to include also the conditions of persons with hearing impairments, for instance in case of emergency, and orientation opportunities of persons with diverse limitations of intellectual capabilities; as a consequence of stress, mental retardation or dementia. To some extent also problems connected to environmental factors, such as air quality, building materials, building equipment surfaces and greenery, have been touched. Thus, the BAS project has reflected the development of the accessibility field in Europe. The selection process of good examples for the Orange Book has given a good background for proposals about further initiatives to promote accessibility.

Human diversity and access design – a complex and dynamic field

It is interesting – and necessary – to look at the accessibility field in a historical perspective. It started in the 1950’s when mobility impaired people; for instance war veterans, came into focus. They required basic human rights; access to housing and public community facilities, according to the Human Rights Declaration by the UN. The first building legislations came in the late 1960’s to secure access to public buildings in new construction. Persons walking with sticks, crutches etc. and wheelchair users were in focus.

Soon vision impaired and blind people came in. In the 1970’s a considerable number of groups with different medical diagnosis and following special needs in the physical and social environment entered the arena fighting for better conditions. During the 1970’s legislation, rules and different advice concerning disabled users expanded to involve not only public environments but also housing and work environment. The user orientation widened to include persons with orientation problems; primarily blind and vision impaired but also persons with cognitive disorders. Furthermore persons with hearing impairment, allergy problems etc. were included even if it was rather difficult to decide about specific design rules. Today we are trying to find out if we for instance in some way can support children and young persons with intellectual disorders like the ADHD syndrome, in the

design of interiors and products for everyday life. The journey has been long with lots of small steps forward as well as many setbacks.

The design and building sectors are not known to have been the initiators/promoters in the development of accessibility in the environment. The building sector has in general been forced by legislation to accept and include the new knowledge and moreover to implement access design in practice. In general this process has been slow and troublesome. There are exceptions, no doubt; proprietors and builders with high ambitions which have been forerunners in the sector.

There have been lots of problems in this complex and dynamic field and there will certainly be in the future. There are many reasons to believe that the development of the field will continue in different ways. New users and new user groups with special needs will come into focus in the future as well as new parts of the built environment. The basic concepts of accessibility and usability are today often replaced by *universal design*, *inclusive design* or *design for all*; concepts which may reflect the entire complexity of the field in a better way and inspire new efforts to find creative ways to develop design and construction.

The knowledge base for access design

The basic knowledge about human diversity mainly comes from the medical, paramedical, psychological and social sciences. Design knowledge applicable in the work with environments and products has to a great extent come from user organisations and users who have the primary experience of accessibility and usability. The early proposals for general building legislation and design rules were to a large extent enforced by user organisations in their battle for human rights and a society for all. The proposals were generally accepted by state authorities, which had to defend human rights but also take a responsibility for the overall economy. They were often resisted by the building industry and the design society as too expensive when generally implemented and not really well-examined and well-considered. Individual measures could be more specific and economical according to builders and designers.

Thus, the early design rules and design advice were to a large extent experience based. They were interpretations of user experience in the existing inaccessible environment. The user organisations were often forced to overstate their demands to get anything. In general, the experience was not very well structured and systematic. The demands were not always congruent between the organisations or with experience from the few evaluations eventually made. This can be said also about later design rules and design advice concerning new and smaller user groups. As a matter of fact, there has been very little systematic and evidence based research in access design issues over the years to complement, enforce – or contradict – the experience based knowledge.

Accessibility is today to a large extent a generally accepted standard and there is legislation enforcing access design in the countries over Europe. The process of establishing building rules and advice has been laborious. The background knowledge has not been comprehensive. There have been doubts about what is really a good design. Moreover, the legislation is mostly not very detailed. There is a general idea that it should not be too detailed and definite because that has a restraining influence on further development. The bureaucratic process of launching building regulations is slow. The final legislation and the different accompanying rules and advice are often stereotype and watered down. There are in fact a lot of problems in this complex and dynamic field.

Today, we have extensive built environments; public and private, housing as well as work environments, which have been designed and constructed to be accessible according to prevalent regulations, rules and advice. However, we know very little how they really work for people with functional limitations. If the environments are too bad, uprisings come. But in general, we know very little how good or how bad accessible environments are.

It is evident that there is a need for a more well-founded knowledge base in the accessibility field, for the benefit of designers, builders and users at large. There is a need for evidence based research; experiments, comparative studies, etc. There are great opportunities to evaluate new-built environments to get improved experience based knowledge. However, very little is done over Europe of either evidence or experience based research to improve the knowledge foundations. Actions on this field must get priority.

Basics for further development of accessibility

There is a consensus about the overall goal to promote the development of accessibility in every country as well as everywhere in the environment.

It is quite evident that there is a need for extensive research and development work to enhance the relevance and reliability of access design features as well as to stimulate the further development of the problem field. This kind of work has to go on continuously. It has to be further initiated and promoted on a European level as well as in the countries and regions and in different cooperative ventures over the borders.

In a complex world of initiatives, actions and competing interests, it is necessary to somewhere take an overall responsibility to select, structure and put forward the most relevant and reliable findings. This can be done on region or country level. There are ideas to do so. It could be done in a comprehensive way on the European level.

Three fundamentals can be identified as crucial for the development of accessibility:

- A basic platform of Knowledge; that is relevant and well-structured facts, understanding, skills and general rules emanating from

reliable sources; research and development work; evidence based as well as experience based studies,

- A selection of Prominent Practice; that is examples showing how knowledge can be interpreted into good design and implemented in design and construction projects, as now accomplished by the BAS project,
- Selected basic materials for Education; that is a body of tools and methodology to communicate knowledge, to connect research and practice, and to structure information and publications about knowledge and prominent practice.

A European Universal Design Centre

The conclusion of this discussion is a proposal for the erection of a qualified European Universal Design Centre focusing on knowledge, prominent practice and education on the accessibility/usability field. The three main areas have to be elaborated by specific working groups supported by reference groups of European experts.

The work must be based on a long term commission; to sort out existing reliable knowledge, prominent examples and successful education procedures, as well as to propose actions in areas where knowledge is missing and to provide information about the findings. A web site, including a long-term commission to develop and maintain the site, is a comprehensive tool to inform about the work of the centre. The contents of this web site must be carefully selected to provide qualified, relevant and reliable knowledge according to the findings of the centre.

The BAS project has now accomplished a pioneering contribution; which can be seen as a basis for the second part described above about Prominent Practice. All the BAS conferences have discussed prominent practice; case studies have been discussed as well as many other examples of buildings, progressive actions and design experiments. Furthermore the BAS web site; accessible-buildings.eu, – can be seen as a first step towards a site with qualified, relevant and reliable accessibility basics.