Perspective from Denmark: Design for All – Point of no Return!
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Summary
Over the last 17 years, we have seen an increasingly qualified approach to Design for All in Denmark in terms of methodology, solutions and concept development, based on the Scandinavian welfare model, Scandinavian functionalism and Scandinavian co-operation. Scandinavia's common socio-political background has provided a common platform and led to a change in direction—from a purely social dimension, focused on solutions and design for people with disabilities, to a design topic that is associated with business potentials, sustainability, innovation and Corporate Social Responsibility (CSR).

The success that any Design for All policy can achieve in promoting the inclusion of all people—people with disabilities and the growing number of older people—in mainstream society will depend, among other things, on the extent to which that policy is followed up by obligations and supported by initiatives and commitment on the part of others—society in general, employers, design and architectural associations, companies, business, educational institutions, providers of goods, transportation systems, services etc. As an example, both the Danish Designers’ Association (DD) and three Danish Architects’ Associations have drawn up a Design for All Policy. DD has incorporated a very strong commitment to and policy on Design for All in its new vision and strategy, entitled “The Role of Design in the 21st Century”. Other important players in the field are networks and NGOs, including the Design for All network and the Danish Disability Organisation.

The above will now be explained and illustrated with several specific examples describing Design for All processes, concepts and policies.

This article will take you on a journey - with pit stops in the Design for All landscape in Denmark and featuring a detour elsewhere in Scandinavia.

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The title of this article is “Perspective from Denmark: Design for All—point of no return!” This “point of no return” is a very journalistic way of emphasising that we cannot go back. We have to go forward: we have to use the knowledge and experience that we have gathered over the years and share them, so as to go even further in innovating Design for All national and international.

For the purposes of this article, I use the terms inclusive design, Design for All and universal design synonymously, even though there are differences in their content and they are understood and used in different cultural contexts.
How do we look at Design for All? Is Design for All a separate area or is it part of a bigger picture?

“We can look at Design for All from two points of view – one is focused on the individual, concentrating on the disabled person; the other looks at society at large as being disabled. We need to bring out products that are beneficial to all instead of manufacturing individual solutions characterised by inferior design and expensive repairs.

A society based on the principle of Design for All allows us to benefit much more from our human resources. This could also be a valuable approach when facing the growing senior population.”

The quotation derives from an interview I did some years ago with Yrjö Sotamaa, Professor Emeritus of Design Innovation in the Aalto University School of Art, in Helsinki, Finland. I find the point of view he expressed in this quotation to be very useful and right. We must all ask ourselves how we look at and perceive Design for All: the answer is the starting point for our work and the success of Design for All in the society.

The Scandinavian Platform & Common Mindset

The Scandinavian welfare model is often used as a general term to encapsulate how Denmark, Finland, Norway and Sweden have chosen to organise and finance their social security systems, health services and education. Their shared democratic perspective means that these countries also share their recognition of everyone’s right to participate fully in society.

Design for All has roots both in 1950s Scandinavian functionalism and in 1960s ergonomic design. It also draws on the socio-political background of Scandinavian welfare policies, a common set of basic values and democracy based on dialogue, consensus and commitment. One concept that was leading in the Nordic countries was “A Society for All” and some architect Schools and professionals focused on ergonomic and human centred design. One of the thinkers who initiated some of the earliest discussions in the Scandinavian countries about social responsibility, ecological sustainability and ethics with regard to product design was the Austrian designer and professor Victor Papanek in the late 1960s and early 1970s. His point of view was that “the only important thing about design is how it relates to people”. These facts and Papanek’s ideology gained ground. But it was not until the United Nations member states signed the UN’s “Standard Rules on the Equalisation of Opportunities for Persons with Disabilities” in 1993 that accessibility and political action plans really made it onto the agenda in the Scandinavian countries.

In addition to the 1993 UN Standard Rules, the Scandinavian countries have of course also been influenced by EU legislation, recommendations and resolutions. More recently, our governments also signed the UN Convention on the Rights of Persons with Disabilities (CRPD), which I am sure will have a major impact on Design for All work, not only in Denmark and the other Scandinavian countries, but throughout the world.

The Danish Design for All Platform

In the Scandinavian and Danish tradition, the Design for All concept (sometimes other terms are used) has developed from a purely social dimension, focused on solutions and design for people with disabilities, to a design topic that is associated and discussed both in terms of business potentials and innovation and in relation to Corporate Social Responsibility, CSR: this latter is a very important point.

In Denmark, we have always preferred to use dialogue rather that legislation to get to the right solution: this approach has also been applied to finding the right Design for All solutions.
The overall objective of Danish disability policy since the early 1970s has been equal treatment, independent living and the promotion of human rights; this policy is pursued through integration and compensation, such as assistive technology first and later accessibility and Design for All.

Let me tell you very briefly about the terminology that we use in Denmark, although for me the most important thing is what Design for All can do for us and for the world, rather than what it is and how we define it. The fact that we use different terms - Design for All, accessibility, inclusion and universal design - depends on organisations and persons. But since the UN Convention on the Rights of Persons with Disabilities was in the process of being ratified, the community in Denmark also discussed whether we should find or agree on a common and standardised term to be able to “measure” what exactly we understand by UD. I find the term Design for All very useful and operational: it gives you a goal. Regardless of whether you are going to design a house, IT, a product etc., the starting point is that it must be for ALL. The common denominator shared by all these terms is that they have equality and dignity as their main goal. The EIDD Stockholm Declaration, which dates to 2004 and is translated into 22 languages, has a very fine definition of Design for All:

“…Design for All is design for human diversity, social inclusion and equality. This holistic and innovative approach constitutes a creative and ethical challenge for all planners, designers, entrepreneurs, administrators and political leaders.

Design for All aims to enable all people to have equal opportunities to participate in every aspect of society”. (Quotation from The EIDD Stockholm Declaration©)

Please take a look on the EIDD—Design for All Europe website for further information.

Design for All is not only about including: it is also about designing usable houses, surroundings, products, IT etc., in order to prevent situations in which people may suffer pain or use the body incorrectly.

Demographic Changes

Like many other countries, Denmark is facing demographic changes, as an increasing ageing population generates increasing pressure to make society inclusive and thereby increases the demand for Design for All. That is why it is important that we do not only think about people with disabilities, but also include the elderly in our design processes and planning, since the barriers that people with disabilities face in society are also experienced substantially by older persons, nor should we forget parents with prams, children, people who are temporary disabled because of a broken leg or arm etc.

Dedicated Advocates & Key Players in Promoting Design for All

In my work I have always been very keen on co-operation with both users and other professions. For me, that is the way ahead for Design for All to be successful and this fact is also underlined by Anna Lawson, from the University of Leeds, who points out that the success of any policy in promoting the full inclusion of disabled people in mainstream society is likely to depend—in part—on the extent to which it is underpinned by an effective obligation to practise reasonable accommodation.

Such obligations require duty-bearers, such as employers, providers of goods, designers, architects and public authorities etc., to take responsible steps to adjust their policies, practices and premises in order to remove the disabling barriers that lie in the path of relevant individuals.
All these advocates and duty-bearers have an incredible power and they all use different tools to get the message through. We need their commitment. If we do not include all the stakeholders, we will never succeed.

In addition to the initiatives launched by the Danish government and its agencies with regard to Design for All, accessibility or inclusive design, other parties also make contributions in the form of knowledge, debates, communications and method development. The disability organisations are of course key players among these parties. The Danish Disability Organisation is an umbrella of 32 member organisations with a total of over 320,000 individual members covering all types of disabilities, which keep the politicians on their toes!

Other interested parties include organisations for seniors and elderly people. In each municipality in Denmark, there is – by law – a “Senior and Disabled Citizens Council”, while trade associations, NGOs (including the Design for All network), associations of professionals, design and architecture firms all have a function and play a very important role as a critical mass, but also as initiators and promoters of discussions, projects, policies and plans.

In each municipality in Denmark, there is – by law – a “Senior and Disabled Citizens Council”, they have the power to get Design for All on the political agenda. (Photo: Karin Bendixen).

Besides the Danish Disability Organisation as a key player at one end of the scale, I would also like to tell you about the association of Danish architects and the Danish Designers Association (DD) at the other end. As a matter of fact, I am a member of the DD board. DD and the three Danish Architects’ Associations have just agreed on a strategy for a common policy for implementing the UN Convention. Which is quite unique.

The Danish Designers Association – with approx 900 members – has incorporated a very strong Design for All commitment and policy into its new vision and strategy called “The Role of Design in the 21st Century”, which can be downloaded from the DD website (http://www.danishdesigners.com/?lang=uk). The Danish Designers association is a professional designers’ community with a main focus on “What can design do for the world?”

And DD highlight the following in the stategy:

a) for design to be meaningful, it needs to balance concerns for people, profit and the planet;
b) designers need to focus on what design can do - rather than what design is;
c) design must contribute to fulfil the needs of the future;
d) four building blocks are needed to fulfil this goal: design research and education, design support, design promotion and design commitment.

The three PPPs - PEOPLE, PROFIT and PLANET - are not new: they were introduced at the turn of the century by the UK-based consultancy firm SustainAbility. Many have adopted this concept since then and this also includes Danish Designers: I contend that it could also be used as a tool for working with Design for All.

Another important player on this scene since 2002 is the Danish Design for All network (Design for Alle.dk), a cross-disciplinary, cross-sectoral network with more than 45 members, including private and public companies, educational organisations etc. Design for Alle dk puts its focus on Design for All into practice by networking, holding seminars and entering into co-operation agreements and is invited by the government to provide input to Design for All related issues.

Target Populations & Customer Involvement

Whom do we want to reach with our Design for All message? Who are the target population who constitute the customers?

It is difficult to find out whether companies involve users/customers with disabilities in their design process and how they do so, when they do, but from many of my interviews with companies I know that they very often say that they try to “imagine” the needs of people with disabilities—but they do not involve them. They very often use their own employees, their family or neighbours or just one token person with a disability. This of course is unacceptable…

One Scandinavian research project conducted ten years ago, entitled “Methods Used for Development of Products with Assistive Technology”, examined the approaches involving users adopted by Scandinavian companies and which methods they used. Most of the companies in question gave the highest priority to three methods:

- Market analysis;
- Active involvement of several end-users with different disabilities, in part of the development process or the whole process;
- Use of professionals with experience of working with disabled persons i.e. training and treatment.

This combination seemed to be very strong and efficient, showing that Scandinavian companies were aware of and interested in user involvement in product development.

But when it came to practice, the result was quite different, as the majority of Scandinavian companies stated that they mostly used these methods:

- Feedback information from sales staff and dealers;
- Using professionals with experience of working with disabled persons (i.e. training and treatment);
- Using technical experts.

These results highlight the need for Scandinavian companies to involve design consultants to a higher degree, especially considering the fact that people with disabilities and professionals operating in the area often say that many assistive devices are ugly and do not have good functionality for use in daily life. Clearly, the majority of companies do not find it very useful to involve users in the planning phase or the design phase: only 8 to 10 percent of the 94 responding companies indicated that they found it useful to involve users in the process. But this is slowly changing – except for it is not that often that people with disabilities are involved systematically.
Some years ago, I was a project partner in a Danish research project, in which I examined user needs and demands for the kitchen-dining area and family room. The report, entitled "Family room - Space for All: User Survey and research on the basis of the demands and needs of people with rheumatism", concluded that:

- There was a lack of efficient (Design for All) mainstream products and that the assistive devices found stigmatised the individual;
- Users preferred to use products that were aesthetically attractive, rather than ugly aids, even though they may cause them pain;
- People who already used assistive devices often felt stigmatised by their use (as did their families – this was new knowledge), because the fact that they were using the devices signalled that this was a user with a disability;
- There was a lack of information about aids and services and the interviewees did not know where to seek help;
- There was a lack of marketing and promotion of the efficient products and services by both public and private providers.

This insight into the "world" inhabited by users and their daily life contributed to new ideas and inspiration for designers and manufacturers, among others.

The Danish Intra-governmental Programmes

Besides legislation, regulations, recommendations and guidelines whose specific aim is to support and secure accessibility, the Danish Government has taken initiatives and implemented plans to factor Design for All into some overall government action plans in the fields of public procurement, culture, the built environment, transportation, IT etc.

In addition, Denmark also has some other very interesting intra-governmental programmes, focusing on user-driven innovation, Corporate Social Responsibility (CSR) and – the latest - the Renewal Fund, which supports business opportunities for green growth and welfare technology. This new fund, which aims to support the green transition and economic renewal, especially in small and medium-sized enterprises and welfare technology, will distribute 760 million DKK (138 million USD) in the period 2010—2012.

These programs do not exactly mention Design for All but they all have it as an element but it is our job to find opportunities in these programs.

The Danish Government’s User-Driven Innovation Programme

Denmark is a pioneer in user-driven innovation. This is partly because Denmark was the first country in the world to have a strategic focus on the area and partly because we in Denmark have a tradition of dialogue, of working together across disciplines and finding common solutions that function in practice.

The Danish government’s programme for user-driven innovation had an annual budget of DKK 100 million (18 million USD) and covered the period 2007-2010. Run by the Ministry for Economic and Business Affairs, it had several themes: one of these was elderly people and people with disabilities; others included public health and disease. The key point in the programme was innovation, with an emphasis on developing methods, processes, interdisciplinary collaboration, products and business models.

Preliminary experience from the projects shows that they contributed to creating value for the participating parties and contributed special help for developing new methods of user-driven innovation in the public and private sectors. An evaluation of the programme conducted at mid-term showed that 72 percent of the participating companies were developing new products, services or concepts and 36 percent of these had already done so, while 82
percent of the public institutions involved were developing new products, services or concepts and 32 percent of them had already done so.

These projects are innovative, creating unique knowledge, new constellations and unprecedented models of innovation. Professions and industries that had no tradition of working in interdisciplinary settings or including elderly users or people with disabilities have gained access to new knowledge, new methods and a new market potential—as well as knowledge about Design for All. A survey of 62 innovation projects from the programme identifies 30 methods and tools that were described in a report published by the Enterprise and Construction Authority (Ministry for Economic and Business Affairs). By strengthening the diffusion of methods for user-driven innovation, the programme aimed to contribute to increased growth in participating companies and increased user satisfaction and/or increased efficiency in participating public institutions. In order to be eligible for grants under the programme, projects had to include user needs and examine them in new ways.

From Ramps & Toilets to Processes, Concepts & Policies

At one time, any discussion about Design for All used to be deflected into one about accessibility, ramps and toilets… but that has changed now! Some of the Danish examples of Design for All process, concepts and policies that I am using to illustrate this support both quality and business potential. The first one is an interactive web-based education tool about Design for All called “Accessibility—take up the gauntlet!”

Example A: Interactive web-based education tool: “Accessibility—take up the gauntlet!”

“Accessibility—take up the gauntlet!” which I developed in co-operation with the Danish Architecture Centre. The website targets students and lecturers at educational institutions working in architecture, urban space and design. It is part of the Danish government's 2007 architectural policy "A Nation of Architecture—Denmark - settings for life and Growth", which focuses on ten target areas. One of those areas is "Innovative architecture must create healthy, accessible and sustainable buildings". Unfortunately the website is only in Danish. (http://www.dac.dk/visEmneside.asp?artikellID=3920)
The Interactive web-based education tool: “Accessibility—take up the gauntlet!” is part of the Danish government's 2007 architectural policy “A Nation of Architecture—Denmark - settings for life and Growth”.

Example B: Architecture: The Elephant House
From the outset, Design for All was a highly prioritized quality as part of the architectural vision for the Elephant House in Copenhagen Zoo. (Photo: Karin Bendixen)

The Elephant House in Copenhagen Zoo, by Foster + Partners (2008). The English architect Norman Foster wanted to create a facility that offers optimum conditions for animals, zookeepers and guests. (Photo: Niegel Young).

Designed by Foster + Partners (2008), the Elephant House in the Copenhagen Zoo is an exemplary case of taking all users' needs into account. From the outset, Design for All was a highly prioritised quality in the architectural vision. The idea is that the public should be able to move through the structure on a ramp: this enables families to visit the Elephant House together, even if one family member is in a wheelchair or a stroller. The English architect Norman Foster wanted to create a facility that offers optimum conditions for animals, zookeepers and guests. Even the toilet for disabled visitors is an aesthetic experience – something that is not very usual in any country.

Example C: Bus Shelter - Design for All & Sustainability

Another great example is a concept that combines “Design for All and sustainability”. The bus shelter and public toilets designed by Knud Holscher Design and manufactured by the international company JCDecaux for Aarhus City Council feature the Design for All concept adopted by the company, whose managing director states that there is major business potential in the combination of Design for All, environmental sustainability and social responsibility.
AFA JCDecaux’s bus shelters in Aarhus, Denmark. They have developed a Design for All concept with tactile information about the bus lines and tactile pavement. Users have been involved in the process. The combination of Design for All and sustainability has a major business potential. (Photos: Karin Bendixen)

The company has partnered with famous designers and architects, including Philippe Starck and Norman Foster, in several different countries, combining good looks with functionality. Knud Holscher’s bus shelter for Aarhus City Council is used in the City of Aarhus accessibility plan. The Danish shelter has tactile information about the bus lines and a tactile pavement.

**Example D: The Copenhagen Metro**

The third example is a comprehensive project in the area of public transport and is probably my favourite Design for All example, one that I have promoted everywhere I have been. It is the Copenhagen Metro and you have probably seen the pictures before.
The Copenhagen Metro (platform and the train design) is the result of a deliberate design process and strategy that included the users from the early planning stage. The Copenhagen Metro has managed to minimize the distance between platform and train. (Photos: Karin Bendixen)
The Copenhagen Metro. User requirements were specified in the brief (sketch: Henrik Priess Christensen)

The Copenhagen Metro is the Copenhageners’ preferred means of transport: both the platform and the train design are the result of a deliberate design process and strategy that included the users from an early planning stage. User requirements were specified in the brief and one of the essential requirements expressed by the client was to ensure that the distance between the platform and train would be minimal. The development process included tests with full-scale mock-ups for all user groups and was followed up by user interviews. The seats in the Metro train have no legs, as they are suspended from the wall, making it easy for passengers to push their luggage under the seat, while blind passengers also have plenty of space for their guide dogs. And the train is also easy to clean.

At the moment, the Copenhagen Metro is being expanded, as construction is under way on the City Ring, building on experience acquired from the old Metro and including new user needs and demands. The key objectives are to create a fully inclusive Metro system that is also very efficient, with short headways etc. The inclusive design approach is regarded as beneficial to this outcome.

Example E: Knowledge Transfer: the i-SIT project

My fourth case is about knowledge transfer. Organised under the Danish government’s programme for user-driven innovation, i-SIT was an interdisciplinary project working with user-driven innovation in the furniture industry. The objective was to create an example of the use of interdisciplinary knowledge and systematic user involvement to produce better and more competitive furniture (easy chair) that meets future seniors’ demands.
The i-SIT project: The findings of the user survey and user fieldwork were transformed and presented as personas that can be used by designers. (Photos: Karin Bendixen).
In the i-SIT project, we gathered all the findings from our user surveys and academic research into two “personas”, in the shape of a woman and a man. The tool proved to be both operational and very effective for project partners who had no prior experience with users with disabilities and elderly people.

A word about the interdisciplinary approach: it does not mean that any one participant in the process somehow “takes over” others' competencies, but that a real exchange takes place on the basis of reciprocal respect and the resulting knowledge is then applied. One way to get this knowledge implemented in a design process or in the planning of a building is to use personas as a method, as our experience in i-SIT showed.

The Design process took over two and a half years and involved six partners—partners who would never have had the chance to work together without the governmental user-driven innovation programme. The six partners were the Knowledge Centre for Smart Textiles, the Furniture and Wood Development and Research Centre, the furniture company Magnus Olesen, a manufacturer of furniture fabric, a design company and my company Bexcom as a Design for All expert responsible for user tests, methods and communications. I am mentioning the partners because they would never have had the chance to work together with people with disabilities or the elderly under normal market circumstances. For the furniture company and for the smart textiles and furniture and wood centres, it was a completely new world and an eye-opener.

The project was interdisciplinary, aiming at creating an example of using interdisciplinary knowledge and systematic user involvement and producing better and more competitive furniture that meets future seniors’ demands. If you have a bad back, problems with your legs, hips or knees, you soon find that the chairs available for the elderly are all horrible chairs that simply don’t fit into the Scandinavian seniors’ homes.

The objective was to create an example of the use of interdisciplinary knowledge and systematic user-involvement to produce better and more competitive furniture that meets future seniors’ demands.
We succeeded in transforming the findings of our user survey into an attractive Design for All easy chair, which has already won two international awards, and the chair will be put into production in 2011.

Design for All Challenges & Perspectives on a Larger Scale

One of the most important challenges is communicating and disseminating Design for All—not only to those who already know about Design for All and are convinced that it is an obvious tool to achieve a more inclusive society—but especially to those who are not yet convinced. We must be aware of what we want to achieve—it is debate, awareness, information, provocation or something else?

Two examples—a Danish and a Swedish—of communication the Design for All message to the public in stations. (Photos: Karin Bendixen and Eva Lindblad).

We could cast a sidelong glance at the discussions about sustainability and the eco-friendly market to see if we can learn something from this area. When we are talking about sustainability, buying and acting in an eco-friendly manner is much more within the power of the consumer, who can decide and act in daily life as a consequence. But that doesn’t go for Design for All, where users and consumers are dependent on politicians, organisations, manufacturers etc. The supply of Design for All goods and services is limited. There is no doubt that when design meets the demands of Design for All, it may mean that products and
services will carry a higher price. Yet some of my examples and others like OXO show that enterprises that use the Design for All approach perform better in the market, so Design for All is important for the competitiveness of Danish and worldwide enterprises.

If Design for All is the answer to the need for anti-discrimination, what are the demands for Design for All? This is something we have to take into account: Design for All must be part of a larger scale if it is to be efficient; it must be part of a cohesive mindset.

Design for All must been seen as a whole: the concept has an important role to play in relation to demographic change, which will bring a drop in the number of hands available to work in the public sector and a rise in the use of welfare technology; other factors at work are the increase in numbers of seriously overweight people, the UN Convention on the Rights of Persons with Disabilities, international dissemination of Design for All and education. And none of this happens in isolation: at the same time, we also have to pay attention to and make due allowance for climate change, economic crises and migration.

“Design for All is more than an appealing point of view. It is a concept that offers a new set of challenges capable of generating innovation and giving architecture and design added value and weight in the 21st century!” (Karin Bendixen, Bexcom)

We are on our way and we are getting there: for sure, we are at the point of no return!

Thank you very much for your attention!