Transforming our World Through Design, Diversity and Education
G. Craddock et al. (Eds.)

doi:10.3233/978-1-61499-923-2-706

Clients´Approach to Universal Design – A Slow Change?

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Abstract. When new buildings do not comply with the accessibility requirements of the Danish Building Regulations, the main reason is often attributed to a lack of knowledge and prioritization. It is the experience of architectural firms that clients decide their own focus on accessibility during the design process, and also whether the level of accessibility should be higher than that stipulated in the Danish Building Regulations. Post-occupancy evaluations point out that when the client is particularly conscious of, or ambitious about, accessibility/Universal Design (UD), the result is a building with an extensive level of accessibility. Thus, the client is a key figure for the project and the level of ambition. Based on interviews with 15 Danish clients, this paper presents a characterisation of their conception of Universal Design. It is significant that, as a concept, UD has not gained currency among the clients that let their ambition level be defined by the Danish Building Regulations. In order to capture differences between clients, a description of the client´s conception of users and designs is based on an analytical framework about the concepts of particular, universal, market and equality. The analysis shows that three conceptions about accessibility/UD can be characterized among the clients: 1) accessibility by design, 2) broad accessibility 3) added value. Above all, the findings show that a development is going on towards UD, although slowly.

Keywords. Accessibility, client, Danish Building Regulations, knowledge, Universal Design

1. Introduction

At a meeting in an advisory group at Danish Standards, an architect explained that his architectural firm never use all of their competences in Universal Design (UD) because clients are not interested. In Denmark, accessibility is understood as the accessibility requirements stipulated in the Buildings Regulations in general [1]. But the Danish Building Regulations do not ensure that the environments can be used by all people, as the Convention on the Rights of People with Disabilities has defined UD [2], because the requirements do not include all kinds of disabilities but only encompass people with mobility impairments or people with visual impairments. The notion of a first generation UD [3] is suggested to characterise examples where architectural firms try to work architecturally with UD from the start in a new way but their work can be based on insufficient or random knowledge about the users; the sensory and the social aspects of UD. The architect from the meeting is one of the pioneers of UD in Denmark.

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In this paper, clients are the professional private or public organisations that commission and fund either directly or indirectly building design and construction and therefore are at the head of the procurement chain defining the aesthetic and functional needs for the design.

A Danish study [4] shows that when new buildings do not comply with the accessibility requirements of the Building Regulations, the main reason is often attributed to a lack of knowledge and prioritisation in the process in general, including by the design team. The same study shows that it is not unusual that a client decides to postpone implementation of the accessibility requirement if there are currently no users with a disability [4]. Architectural firms [1] are calling for a heightened awareness of accessibility and a higher level of knowledge among clients. Furthermore, it is their experience that clients do not possess enough knowledge about the consequences of a certain level of quality. The lack of definition of a quality level from the start backfires later in the process, especially in the case of a design-build contractor. On the other hand, municipal clients do not think that the quality of the consultancy they buy is good enough.

Actual understanding of the users [5] is often quite limited as the architects are patient-oriented rather than citizen-oriented. Therefore, a high level of accessibility was natural in hospitals and care centres, but UD was not a part of the architectural ambition in other types of buildings. Similar limited understanding of the diversity of the users can be recognised in Imrie´s studies [6] about the role of the human body in the practice of architecture. The body of people with disabilities is absent, together with other characteristics of human diversity.

Although the design process proceeds as a kind of interplay between the client and design team, the client will always be a key figure for the project and the level of ambition. Post-occupancy evaluations [7, 8] point out that when the client is particularly aware or ambitious about accessibility and UD, the result is a building with an extensive level of accessibility.

Lid [9] points out that understanding and practicing UD requires conception of person and disability. In this paper about clients´ approach to UD, I base my analysis on a mapping of these clients' conceptions of the users and the design.

2. Theory

The aim of UD is, through design, to support and ensure that all citizens get equal opportunities to participate in society by creating a design that can be used by all in order to avoid stigmatising people with disabilities e.g. [10][11]. A fundamental challenge of UD is to define universalism somewhere between the extremities of the universal and the particular [12].

Different proponents of UD have argued for increasing market potential by designing for all e.g. [10][13][14]. Imrie [12] points out that focus on commercialisation, commodification of access, product design, marketing and sale is an important part of the epistemic basis of UD. Imrie stresses that emphasis on design as products to sell can result in a situation where no one remembers to work for policies that can ensure the right to access for people with disabilities.

Hamraie [15] goes in another direction when she addresses problems with a consumer-oriented approach to UD. She points out that UD focuses on avoiding stigmatising people with disabilities, and yet it creates a problem because it cements disability as a stigmatising quality. Furthermore, she sees an interpretation of UD for

everyone, where a design for people with disabilities does not have a value in itself until people without disabilities can also benefit from the design. Only then does the design get added value and can be justified. Hamraie describes that this focus on *added value* stigmatises in contrast to *broad accessibility*.

> *In turn, the concept of added value itself becomes stigmatizing toward disability as a category deemed not to have enough value. Unlike broad accessibility, which expands the category of "all" to include multiple stigmatized minority embodiments, within added value, it seems, disabled people themselves are never enough to comprise the category of "all," regardless of how demographically pervasive they may be.* [15, p. 20]

In developing a feminist disability theory of UD, Hamraie identified three main ideas in UD practice:

> *"1. Accessibility by design (design that prioritizes accessibility) 2. Broad accessibility (accessibility for the greatest number of people possible) 3. Added value (design that benefits disabled people also has benefits for nondisabled people)"* [15, p. 5]

These ideas can be regarded as three different interpretations of the users and the role of the accessible design.

3. Method

The empirical material reported in this paper is based on 15 interviews conducted in 2017 with the head or another member of the management of a client or developer organisation. The Danish Transport, Construction and Housing Authority financed the study [16]. The organisations represent different kinds of ownership; private and public, and different kinds of building portfolio in relation to volume, type of construction, new building, renovation, and function.

A research interview can be characterised as a professional conversation. Emphasising *inter* and *view,* it can be described that the result is a construction of knowledge that arises in the interaction between the interviewer and the interviewee. It is also about an interchange of viewpoints [17]. At the interviews, it was the intention to gather and interchange viewpoints from the clients. Another focus was to let the interviewees express themselves with their own words about their practice [18] in the form of terms and concepts that characterise their work as a client. The interchange should not be understood as words being put into the mouth of the interviewees. On the contrary, it was the intention to make the interviewees respond to specific themes, but these themes can contain concepts that were unfamiliar. This turned out to be the case with the concept of UD.

Every interview was conducted as a conversation around an interview guide consisting of four main themes; a description of the organisation; the understanding of and work with UD; the market; and the future.

The interview format necessitated some awareness or considerations among the interviewees about the way accessibility and UD are practised. The interviewees were allowed to reflect and think about questions that they were unused to talking about. Some

of the interviewees were surprised that there was so much to talk about. Thus, the conversation flowed easily when the theme was opened up.

> *I had no idea that I could talk so much about accessibility. [client, government agency]*

In other interviews, the situation was opposite. Apparently, the interviewees were not aware of how the organisation addressed and handled accessibility and how they ensured a good result.

Each interview lasted between 30 and 60 minutes and was tape-recorded. The author has translated the relevant quotes from Danish into English.

All interviews were fully transcribed, and data was treated by referring statements to the different categories of the theoretical framework in a process of open, axial coding drawing on the principles from grounded theory [19]. In the coding process, the interview data was linked to the theoretical framework by searching for characteristic statements that either explicitly or implicitly described, named or classified the clients' conceptions of accessibility/UD. The coding process resulted in a two-dimensional mapping of the different clients' conception of users and designs, falling into three main groups, as further elaborated and presented in the analysis.

4. The analysis

The analysis is structured in two parts. First, the clients' conception of users and designs is mapped drawing on the notion of particular, universal and market stressed in Imrie´s discussion of UD, where he calls for an epistemological and conceptual foundation of UD [12] supplemented with the concept of equality. The focus here is on whom the clients build for, and if they see accessibility as a commodity or a right. On this basis, the second part of the analysis will aim at giving a characterisation of how UD is practiced and understood, drawing on Hamraie's identification of three main ideas in UD practice.

4.1. Mapping the clients´ conception of users and design

In order to map the clients´ conception of users and design, the conceptions were placed in a diagram (see Figure 1). One dimension focused on their conception of the user (particular – universal) and the other on their conception of the design (market – equality). The purpose was to create an analytical landscape of the different perspectives. The dimensions should not be seen as mutually exclusive or opposing. Therefore, I do not suggest that a focus on markets precludes equality or vice versa, however, the idea is to capture the clients' main priority in order to draw an analytical generalisation.

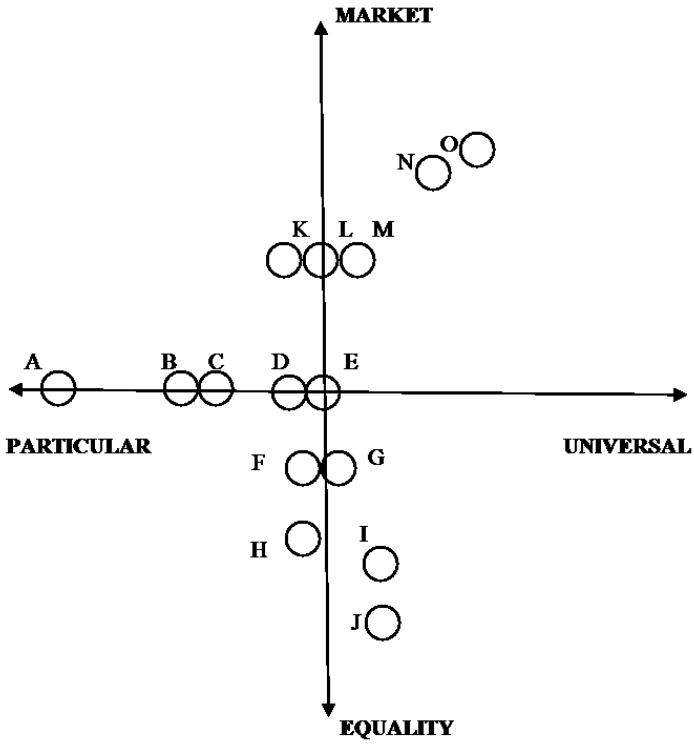

Figure 1. A diagram about the clients´ conception of users (particular – universal) and of design (market – equality). Every circle with a letter is a client. The text refers to these clients by using the specific letter.

In relation to the particular-universal dimension, it was apparent that the majority of the clients´ conceptions of the user was particular - the focus was on the people with disabilities. The reason for this focus is that the Danish Building Regulations play a significant role for accessibility, and its prescriptive requirements are instrumental in defining which disabilities should be designed for in the projects. Thus, when the clients were asked about the organisation's attitude to accessibility and UD, the Danish Building Regulations were brought up immediately. A subsequent comment from clients was that they complied with the Building Regulations and that the accessibility requirements of the Building Regulations have to be followed.

In addition, very few building clients operated with a higher level of accessibility than stipulated in Building Regulations. A government agency (H) described that someone would think that the state should lead the way. She accentuated that it was not the task of the agency to run accessibility policy or any other kinds of policies. The demand for a higher accessibility level should come from the organisations ordering the buildings at the agency, because a higher level would require extra funding.

Some municipalities (B, C, G) explained that a higher level should be driven by the legislation. If not, the politicians would not accept and finance it.

Moreover, none of the organisations had any specific policy about accessibility or UD. One municipality (B) had an architectural policy that mentioned accessibility, which only very few municipalities have [20], but apparently this policy did not influence the municipal client.

In general, UD was definitely not a commonly used concept. Furthermore, it was difficult for several clients to grasp it, but others found it very relevant. The client from a university (O) viewed the concept positively in relation to their focus areas about the working environment, the indoor climate in relation to materials and degasification, and the need for variation in the spatial facilities. She found that these focus areas belonged under UD. One municipal client (J) immediately focused on citizens with special needs that were not physical. Another client (C) saw possibilities in relation to multifunctional facilities for various types of citizens in the municipality.

Three clients (A, B, C) in particular shared a limited understanding of the users accentuated by the organisations and departments ordering the facilities. In the case of a psychiatric hospital (A), it was not recognised that the patients or the employees might need accessibility. The combination of a physical and a psychological disability was a rarity. Therefore, the client realised that it was necessary to keep the flag flying, because very few involved in the process would see the need for accessibility. Still, this client baulked at building facilities for the very few as perhaps this would spoil the possibilities of the majority. Another client (B) explained that the department ordering a building only focused on the primary users. A kindergarten should comply with the Building Regulations, but it was not the intention to focus on accessibility in relation to e.g. a grandmother with a rollator walker participating in the kindergarten's annual summer festival. Clients (D, E) focused on accommodating the needs of just some physical disabilities; primarily people in wheelchairs and people with visually impairments. This was regarded as ample for other users e.g. the staff at the hospital and elderly people in the urban space.

A social housing organisation (F) and a municipal client (G) talked about 'We don't know what tomorrow will bring'. These two clients indicated a life-span perspective and were conscious that everybody could become disabled. One of them explained that he would never accept the claim that a person with disabilities would never visit and use the building. The client behind all the cultural facilities at the palaces and museums (I) felt a responsibility for including all kinds of people in the public cultural experiences. The museums saw their users as primarily families with children instead of a range of deep-pocketed guests like elderly people, obese people and people with disabilities. However, preservation of the cultural heritage and the museums' understanding of their guests challenged this responsibility. Some clients were aware of the universal aspect. Especially the airport (N) and the university (O) had an understanding of the diverse users as being everyone, irrespective of e.g. age, religion and disability. They recognised that everybody could benefit from accessibility and UD.

In relation to the market-equality dimension, the picture was more diverse. Several clients stressed that accessibility was not a driver for the projects. The focus was on sustainability, energy consumption and especially the financial aspect of the building projects. In particular, the municipalities and the social housing organisations were worried about the budget for every project, and sometimes it was necessary to cut back on projects and among other things on accessibility.

Three clients (two government agencies (H, I) and a municipality (J)) talked about equality or equal design solutions or designs that create equality. A guided tour to the new domicile of the Disabled People's Organisations Denmark was an eye-opener for the municipal client (J) and an inspiration for working with equality as a value of the building, but also as a tool in the dialogue with the architects.

.....it affords an entirely different kind of dynamic in the dialogue. [client, municipality (J)]

Another municipal client (G) explained that they focused on the buildings being accessible for all and that the solutions were functional and the best possible for all citizens. Obviously, concepts like inclusion and equality were not a part of the vocabulary of this municipality.

I don´t think we express it in such fancy words. [client, municipality (G)]

Some of the clients (F, I, J) with a universal view on the users had experience from a try-it-yourself event, where the use of a wheelchair and a white cane became an eye-opener. However, only one client (O) stated that they had prioritised having the special competence in-house. Others sometimes bought-in the competence (H) or involved the local disability council (G) when the need occurred.

Some clients were aware of the market, especially the airport (N) and the university (O). The airport (N) emphasised the qualities of UD in relation to wayfinding, but also functional aspects like big toilets are useful for others than those in wheelchairs, for example a family or a person with a trolley. Accessibility would become a theme in their future Corporate Social Responsibility strategy. The result of being inaccessible could have financial consequences; decrease of the number of travellers and the university would perhaps preclude themselves from high-quality scientific researchers if they could not offer an accessible work place to an international top scientist with a disability. A social housing organisation (K), pension fund (L) and a developer (M) had realised that there is a market for elderly people and that the elderly have an interest in senior-housing and different kinds of co-housing, as well as staying in the same area or the same home when their needs changed. One client (M) talked about disability-friendly also being elderly-friendly.

4.2. Reflection on the characterization of the clients´ conception of accessibility/UD.

The mapping of the clients´ conception of users and design in the figure with its 15 positions showed that the clients clustered along three of the axes in three groups, which coincides with Hamraie's main ideas [15] in UD practice as presented in the theory section. This is illustrated in Figure 2.

'Accessibility by design' characterises the traditional approach to accessibility solutions for people with disabilities. The second 'broad accessibility' balances along the equality-axis between the traditional understanding of accessibility and focus on all kinds of people on the basis of equality as a value. The clients (F,G) might also be described by 'accessibility by design', but were different from that group because of their 'both feet on the ground' approach focusing on accessibility as a right for all, even though equality was not articulated verbally. The third 'added value' is grounded in a traditional approach, but the clients had begun to see accessibility as something for everybody or at least something, that was necessary for the business of the airport and the university.

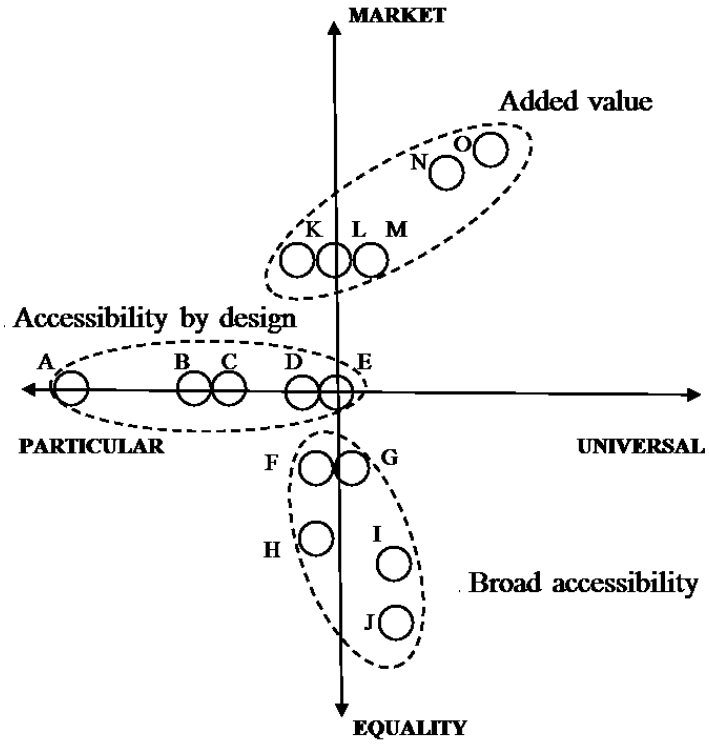

Figure 2. The characterisation of the clients´ conceptions of accessibility/UD.

Still, the legislation defined the motive and the ambition level, even though some of the building organisations had begun to discover UD's focus on equality and market. UD as a concept was not the driver, thus the development could be characterised as slow change. Yet on the other hand, even though the concept of UD was not used, the elements of UD; equality and market were in the running and contributed to the practice of the clients. However, the majority of the clients had not integrated market in their practice. From the viewpoint of Hamraie, it is positive that clients characterised by 'broad accessibility' focus much more on equality than market. This raises the question about the driver of UD: should it be the market or value equality? The pioneers of UD wanted them to go hand in hand, but perhaps we need some good examples of this combination.

Could it be problematic that the majority of the clients were placed in the 'particular-area' of the diagram with a conception of accessibility based on people with disabilities? It would be much more problematic that the departments or organisations ordering the buildings were not very open-minded for the diversity of the users, even though they were closer to the users. This should be a theme for a new study. As long as the understandings of the users are citizen-oriented and grasp the diversity of the users, irrespective of whether the tendency moves towards equality or the market, the quality level of the built environment will hopefully be raised.

The three ideas of accessibility can be regarded as stages of a development. 'Accessibility by design' could characterise the traditional approach that over time could lead to the next step 'broad accessibility' that again could lead to the last step 'Added value'.

How can we speed up such a change? Knowledge from eye-openers together with an inclusive mindset, whether or not it was based on equality or market, seem to be important factors in client organisations. An effort that makes UD visible could be a tool in relation to equality and market. This would require an awareness about value creation and an understanding of the impact of an inclusive environment on the everyday life of the citizens regardless of gender, sexuality, ethnicity, culture or disability. We cannot ignore the role of legislation. A knowledge-boost should probably go hand in hand with development of the regulatory framework. Likewise, development of the regulatory framework should be supported by knowledge. The level is defined in the Building Regulations although this should not prevent clients from thinking of the needs of all users, today and tomorrow.

5. Conclusion

The analysis shows 15 different conceptions of uses and designs characterised according to three main ideas of UD practice. The first, "accessibility by design" is based on accessibility in a traditional sense. The target group of the accessible design is people with disabilities. The second, "broad accessibility" is about accessible and equal design for as many people as possible. Thus, the third "added value" is characterised by being aware of the qualities of accessibility that can have a value for people without disabilities and therefore see a market for accessible design. What these have in common is the Danish Building Regulations and their accessibility requirements that in the majority of the projects define the level of ambition. The characteristics may be regarded as variations on the theme of accessibility showing different focus in the clients' conception of accessibility/UD. Some have approached UD from a market perspective, while others focus on the value of equality as a starting point for the design process. Above all, developments are moving forward, although slowly.

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