

Perspectives on Accessibility and Its Users Amongst Practicing Danish Landscape Architects

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Abstract. This paper presents findings from 15 interviews of randomly selected Danish landscape architectural offices focusing on how these work with and understand accessibility. The paper finds that Danish landscape architects mostly understand accessibility and its users in relation to existing building regulations. Moreover, in finding that the informants possessed a limited professional vocabulary for understanding accessibility, the paper discusses the type of knowledge requested and by, and necessary for, Danish landscape architects to gain a more reflective understanding of accessibility and its users. Towards such ends, universal design can help the profession. However, with only a few informants mentioning ideas related to universal design, this indicates that more education is needed for universal design to provide a different perspective on accessibility and its users amongst Danish landscape architects.

Keywords. Accessibility, universal design, landscape architecture, Denmark

1. Introduction

The number of issues landscape architecture are expected to help solve, and the texts written about how to solve these issues, come out at an ever-increasing pace. Spurred by the World Health Organization (WHO) and United Nation's (UN) emphasis on socially and environmentally sustainable cities [1, 2] issues such as gender [3], mental and physical health [4], and what could be loosely defined as 'liveability' [5] have gained increased traction. In addition, the UN's Sustainable Development Goal (SDG) 11.7 emphasizes universal access to safe, inclusive, and accessible green spaces by 2030 for women, children, the elderly, and people with disabilities [6]. In other words, for cities to become sustainable we need to think about how we grant access to these new and improved spaces as an inherent aspect of the design process.

Despite this, there has been few attempts in empirical research at granting primacy to practicing landscape architects for whom accessibility or universal design competes with a plurality of other issues which they are expected to act upon [see 7 for an exception related to inclusive design]. Practitioners' framing of such issues can stem from the perceived responsibility and ethical considerations of the profession. In practice

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however, the pragmatic expectations of e.g. the client, the restraints of building regulations, and municipal guidelines greatly influence their decisions [8]. Previous research by Kirkeby [9] has framed this as a choice between context-independent knowledge and context-dependent knowledge, in which practitioners will tend to choose the context-dependent knowledge which is directly applicable to their project.

It is in this intersection, between the daily professional reality of practicing landscape architects and the ethical responsibilities imposed on them externally and internally to their profession, that this article is positioned. Specifically, we wish to explore this by focusing on *how Danish practicing landscape architect's perceive users with disability and solutions designed for this group*. Such solutions being both shaped by practitioner's ethical responsibilities, perception of users and legal requirements.

2. Methodology

The article is based on 15 semi structured qualitative interviews with randomly selected Danish landscape architecture offices conducted during winter and spring 2021. The offices varied in size from one-person offices to offices with several hundred employees and were geographically located throughout all regions of Denmark. All interviews were conducted with trained architects or landscape architects who had experience with project management. All of the informants had taken their education in Denmark and through them all schools that train landscape architects in Denmark were represented. Collectively the interviews represented over two centuries of experience from practice with informants having between 8 and 25 years of experience. Due to COVID-19 all interviews took place online either through Microsoft Teams or Zoom and lasted between 40 and 70 minutes.

We explicitly chose to employ the word 'accessibility' in its Danish translation ('tilgængelighed') in our interview guide and our contact with informants. This choice was made because the word is used throughout the building regulations and is as such well known to landscape architects. All interviews took place in Danish and the quotes are translated by the authors into English.

The interviews were conducted following an interview guide and analyzed according to a grounded theory approach. Following the completion of all 15 interviews several themes were identified as reoccurring and/or interesting. This led to the construction of 30 codes which were subsequently used by the authors to independently of one another code each interview. The outcome of this analysis can be found in [8] – the results presented here are specifically related to the aforementioned focus of this article and all quotes included below have not been published previously. Given the methodology employed in collecting and analyzing the data we emphasize that the results section should be read with the intend to understand the type and variety of perspectives present amongst Danish practicing landscape architects. This is a limitation inherent to grounded theory, as this methodological approach does not allow us to develop a representative description of the Danish landscape architectural profession at large.

What it does allow, is the development of a broad understanding of the professional nuances in Danish landscape architects' perceptions of users with disabilities [10]. The strength of arguments developed through grounded theory rests upon it achieving data saturation. Data saturation refers to a situation when researchers have either 'heard it all' (i.e. code saturation) or 'understand it all' (i.e. meaning saturation) [11]. In the context of this study, data saturation was achieved around the 13th interview.

3. Results

The results section is structured by first framing the context-independent perspectives of practicing Danish landscape architects' perception of users, followed by an exploration of the definitions of accessibility used by the informants as a bridge to move into more context-dependent quotes about user experiences.

3.1. Framing the perspectives of Danish practitioners

The perspective of the informants is inherently, and often times explicitly, framed around the spatial and architectural qualities of discussing accessibility. In relation to this it is important to emphasize that no matter their personal opinions, or those of the office they are employed at, the informants are primarily interested in making high quality landscape architecture. One example of this is the following quote which articulates a frustration with the disagreements that can occur between architectural concerns on the one hand and accessibility on the other hand:

"I often experience that something remains unsaid; why is it not more dialogue based? I can't quite understand it. I'm thinking that it's people, flesh and blood I mean, just like we are people of flesh and blood who are also interested in... Without getting polemic, I think they are also interested in good architecture"

This hints at the issue that many informants have with how accessibility is sometimes framed and handled as a topic in design processes. Namely that they often find themselves in situations where they feel forced to choose between landscape architectural qualities and accessibility. A frustration which is explicitly stated by some of the informants more experienced within accessibility. In a similar fashion, the interviewed landscape architects understand that users with disabilities is a diverse group. However, this diversity is primarily understood through what spatial necessities this diversity translates into:

"I think it is a little bit rude to say disabled are all alike like one big homogenous group, which they are absolutely not. It is almost impossible to make something which acknowledges everybody's needs (...). I think we would be better off with a catalogue of examples and how to use these than we would be with strict rules"

This particular quote relates to a conversation about how building regulations function, and what could replace them. It is none the less interesting because it emphasizes how landscape architects perceive accessibility and its users through the lens of their professional relationship with space. In other words, if practitioners cannot translate the experiences and information they are given into a spatial context it falls outside their professional perspective and is as such lost in the design process [12]. As we will see in the next section this is a reoccurring tendency when we explore how Danish landscape architects define accessibility. Moreover, this helps clarify Kirkeby's argument by suggesting that knowledge which can be made to become context-dependent, i.e. translated into design elements in landscape architectural work, is prioritized. This appears to also be the case when dealing with accessibility.

3.2. Definitions of accessibility

While the word accessibility is well known to Danish landscape architects as it features as a legal requirement in the Danish building regulations, how accessibility is defined and worked with in design processes varies greatly. Of the 15 informants only a few directly mentioned universal design, design for all, or some similar definitions, while most clearly tied accessibility explicitly to the legal demands for level free access, tactile guidelines, and so forth. However, during the interviews as informants continued to answer questions and reflect on the topic, several informants expanded their definition of accessibility as more than just a legalistic framework imposed on design processes:

“In our profession we are quick to perceive accessibility as how to enter and exit but what do we do about people with allergies for example? If we expand [our definition] we are properly not particularly forward-thinking. Sitting here talking about it, one begins to wonder, but it is properly mostly people with physical disabilities we know how to handle”

Reflections like this, where it becomes evident that practitioners are aware of the limitations to how accessibility is currently solved in design processes, are common across many of the interviews. What is important to highlight is that these reflections often point to how particular types of disabilities (eg. mobility disabilities and visual impairments) are protected and prioritized by existing building regulations and/or by the design processes of the office. Reflections which engage with defining accessibility as a general topic for the landscape architectural profession, which the next quote shows, are rarer:

“(...) it is a type of social responsibility we try to adhere to when we make quality outdoor areas. I hadn't thought about this in relation to accessibility (...). Which makes me think more about level free access and tactile guide lines. But since you broaden it to include social responsibility I actually think it is a large part of what we are already doing naturally as part of our work as landscape architects”.

Brought on by the questions in our interview guide, the informant broadens their definition of what accessibility is and relates to. This has two important implications: 1) Accessibility continuous to be defined as a legalistic framework under which Danish landscape architects must operate. We did not see something akin to this in terms of e.g. rainwater management and environmental sustainability, both terms which are also present in Danish building regulations. 2) Perhaps due to the significant experience of our informants, the explicit questions introduced through a single interview was enough to shift, or at the very least reevaluate, the meaning of accessibility. This shows an ability by the interviewed practitioners to actively reflect on the premises for their design processes [13].

This somewhat narrow definition of accessibility in design processes and practitioner's ability to reflectively adapt these definitions based on new questions and ideas, sets the stage for moving into the next central results section of this paper.

3.3. Conceptualizing users with disability, their experiences, and accessibility

While there is a great deal of variance in how informants formulate themselves, almost all informants are focused on accessibility as something which should be seamlessly integrated into the general experience of a space:

“(...) accessibility should be seamless enough for users, whether they need special accessibility or not, to not think about it”

One might be inclined to think that striving for seamlessly integrating accessibility in the spatial design at large is akin to the goals of universal design. However, accessibility is still perceived as something ‘special’ for a certain user group by most informants. In other words, the theoretical ideal for universal design that accessibility is, and should be, perceived as a benefit to all users, is not present in this quote. On the contrary, perhaps due to the definition of accessibility presented in the previous section, accessibility is often perceived of as a tool for eliminating the disparity in spatial experiences between abled bodied users and users with disabilities through particular design solutions. This context-dependent understanding of accessibility in turn means the user experience of a particular group of individuals (with disabilities) should not ‘drown’ the intended spatial qualities of the entire project:

“When you sit and design and integrate accessibility, you do it from the perspective of the users. Otherwise there is no reason to do so, you could say. You sit and imagine how a user will move back and forth, getting from one spot to the next, in a reasonable manner without it overpowering the entire project, so it is a little bit of a balancing act. Sometimes, if you had to make something fully accessible with all the things listed in the recommendations, it would drown the project so much that some of the quality would be lost”

While the landscape architect attempts to uphold the ethical and legal responsibility of his profession, he simultaneously perceives this particular type of user’s experience as an externality to what parameters define the quality of the project. The spatial experiences of users with disability are as such measured against how much alike it is to that of able-bodied users. For the professional practice of landscape architects, this indicates that a potentially increased quality of spatial experiences by users with disability does not directly translate into a higher quality landscape architectural project, unless it coincides with how quality was previously measured in the project. Nonetheless, as previously stated, some informants refer to universal design or terminology similar to universal design.:

“But accessibility that is the question, what is accessibility? Is it the physical aspect that everybody can enter through the door or what type of accessibility are we dealing with. If one were to speak about it at a grander scale then it could also include ethics somehow. I mean, who is it for, this thing? Is it for everybody? (...) This is the kind of thing that fuels the program for these different projects”

In this instance, and in others like it, the landscape architect attempts to articulate a broader definition of accessibility which asks questions beyond how it can be easily

solved spatially. However, this is done without actually articulating an alternative for practitioners beyond reiterating the ethical questions and dilemmas which Danish landscape architects struggle with in their practices:

“Again, I’m thinking that we always attempt to integrate it [accessibility] fully so everybody can use the space without getting the impression that certain parts have been created specifically for some. A kind of equality, we think. It’s tough because it’s always a difficult balance”

What these two previous quotes have in common is that they struggle with articulating a context-independent approach to conceptualizing users with disability and their spatial experiences. The ideal design, even if this is questioned by the landscape architects themselves and pointed out as a point of contention in their projects, is still to find a ‘one size fits all’ design, even when universal design is referenced explicitly or implicitly. This indicates a conceptualization of the user with a disability as something other than the average able-bodied individual. Arguably this is because the conceptualizations of users with a disability encountered in the interviews had more to do with the *how* of spatially designing for this ‘other’ rather than the *what*. This meant answers, and the frustrations which were voiced in interviews regarding accessibility, were primarily centered around integrating these users into the imagined experience of the average or ‘normal’ user. Even when asked directly, very few landscape architects could explicitly conceptualize users with disabilities beyond this *how*. One example which does divert from this is the following:

“For me it’s not so much about if you’re in a wheelchair. It’s about freedom of movement. If you have this way of thinking (...) then there are quite a lot of other people than the ones sitting in a wheelchair which need level free access. For instance, parents with prams, all kinds of other user groups, drivers which need to enter with a pallet jack, sack carts, and all kinds of other stuff. It’s suddenly not so hard, once think on it a little”

Here the landscape architect states that accessibility should be perceived as an advantage for both users with disabilities and able-bodied users. While this might seem like a small deviation from previous quotes, the significant difference with this quote is that it deals with the *what* of accessibility as well as the *how*. What is apparent, though, from our interviews is that Danish landscape architects in their practices are primarily interested in solving *how* to design with accessibility. This resonates with Kirkeby’s findings that context-dependent knowledge is prioritized over context-independent knowledge. However, as this last quote also indicates, especially the more senior landscape architects expressed a professional frustration that accessibility as a quite significant topic in their daily practices did not gather more professional attention. This indicates that even though context-dependent knowledge is what is almost exclusively present and sought after in the interviews, there might be a necessity to introduce context-independent knowledge, referring for instance to universal design, for Danish landscape architects to become more aware of and better at dealing with matters of accessibility.

4. Discussion and conclusion

The results show that perceptions of accessibility and its users were often times mediated by a ‘normate’ understanding of designing for accessibility in practice [14]. We mention this because very few informants implicitly or explicitly referred to the physiological diversity of both human beings with disabilities and able-bodied human beings [15]. Similarly, while continuously referencing the general landscape architectural quality which practitioners sought for in their projects and work in general, no link was made between such context-independent qualities and the shared human dependency of our physical environments – i.e. accessibility [16]. To be exact, it is not that the general sentiment of Danish landscape architects is one of being dismissive of the importance of accessibility— though there are practitioners who are very critical of the way accessibility features in current Danish building regulations. A more precise analysis would indicate that there is a general lack of ability by Danish landscape architects to employ a vocabulary which can adequately describe their conceptualization of accessibility and its users. This is despite some senior informants, as per the last quote, approach an understanding of the quality of e.g. level free access to people in all types of situations.

Simultaneously, what is most often referred to as the guiding principle in practitioners’ work is that of landscape architectural ‘quality’. This indicates that context-dependent knowledge is what is sought after by Danish landscape architects in matters of accessibility but this is primarily due to the fact that accessibility is not perceived of as an inherent part of what constitutes landscape architectural quality. It is important to emphasize that informants showed a significant ability to quickly adapt and appropriate alternative understanding of accessibility through our interviews. As such it is far from impossible for practitioners to appropriate accessibility as an inherent aspect to the ethical and sustainable dimensions of their practices through education or experience from projects in which accessibility featured as a central goal.

The inability to overcome this divide between the context-independent landscape architectural quality and context-dependent accessibility might explain the frustration of senior practitioners mentioned earlier. In light of this, universal design could allow for practicing landscape architects to obtain a vocabulary about accessibility and its users while simultaneously providing a link between context-dependent accessibility design and the context-independent quality of landscape architectural projects. However, this rests upon the premise that it is possible to convince practitioners that universal design can be adopted as a context-independent measure of quality in landscape architectural projects. While our research indicates that Danish landscape architects are quick to reflect and accept that social sustainability is tied to accessibility we cannot speak on the difficulty of implementing such changes to an office, much less the profession at large. The best solution therefore seems to train future landscape architects to reflect on how they conceptualize users with disabilities and the accessibility these users and human beings at large require to ‘seamlessly’ exist in our physical environments. For a more immediate solution which does not postpone changes to the next generation of practitioners, it appears that the best way to sway practitioners to take seriously a specific issue is to provide them with a professional vocabulary about issues which resonate with existing professional quality measurements.

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