Nothing about us without us: The journey of digital accessibility in the making

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The journey of digital accessibility in the making

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Abstract

This exploratory paper aims to discuss and reflect on digital accessibility practices in developing projects and products, focusing mainly on design activities. Digital accessibility is a characteristic of digital products and services like websites that allows people with disabilities to access and use them. Although its relevance, accessibility is not present in many technological objects. When tech practitioners and companies are asked why accessibility is not a priority, several reasons are mentioned, like costs and the available development time. What would lay below the most apparent arguments? What constitutes an organisational culture that leaves factors such as accessibility behind? The reflections developed in this work result from an anthropological study conducted in 2021 in the field sites of Sweden and Brazil.

Introduction

I have been working as a digital designer for more than twenty years, and for three of these years, I have worked in Sweden. To be more precise, I am a “user experience designer”.

As user experience designers, we are usually proud to be “the user’s advocate”, the practitioner responsible for designing easy-to-use services and products with friendly interfaces and interactions. A good design is visually appealing but also meets real needs, has substance and depth, and works well and intuitively” (Horton & Quesenbery 2013:2). Nevertheless, although the glossy definition, I was surprised that I have never worked in a place that had prioritised accessibility. I was also surprised that I found some hostility against the idea among my peers. Although digital accessibility was not something new, the project showed that the matter was still unknown to many. I heard in an Ethics workshop, “accessibility is kind of old news, no?”

However, it looked like many practitioners still had not known what it meant in practice. Was I experiencing a particular situation happening only in the company where I had worked, or was it a broader situation?

Assuming a certain feeling of shame and perplexity, I shared my impressions with a designer quite experienced in the accessibility area. He said he was not surprised because it was a global scenario. Around the world, this number was similar. Only 2.5% of websites were compliant with accessibility guidelines. The numbers proved that the lack of knowledge was still substantial. It was a sign that companies have not taken accessibility as a serious and relevant topic.

What is the design’s role in this matter? Design is not a lonely player in project decisions. Projects are planned in conjunction with other corporate entities, such as business, finance, and technology, in a complex net of roles and goals within a company. Nevertheless, Monteiro (2019) highlights that all design decisions are political. What we design, how we design, what we choose to leave outside, and more importantly, who is considered the “audience” and the “users” are all political decisions and have impacts (Monteiro, 2019). Technology is never neutral, as well as design.

Design practitioners seek to develop intuitive, easy-to-use interfaces, but who can define what fulfils these categories? Maj and Derda-Nowakowski (2010) describe how the interactions between human beings and computers are an acquired cultural competence. It relies on the user to learn and gain this expertise. This learning curve depends on the user’s context and background, and technological object characteristics. If the object’s attributes present barriers or inappropriate usability, they will produce “virtual disabilities” by offering faulty interactions to everyone, not only people with disabilities. Design can contribute to the invisibility of people with disabilities.

METHODOLOGY

This exploratory paper results from an anthropological study performed in Sweden and Brazil, which leading field site was a tech company in Stockholm, Sweden. Through ethnographic methods, mainly participatory observation, the study followed an “accessibility implementation project” for almost three months, from October to December 2021. During this period, I observed how the studied company, particularly one of its teams, reacted to new accessibility procedures, the challenges they faced, and how the process of incorporating these new accessibility elements occurred, from not having accessibility presented in the produced artefacts to integrating accessibility as a routine. In addition, the study also counted on the participation of fifteen Brazilian design practitioners through semi-structured interviews. The methods were observant participa-
DIGITAL DISABILITIES

Around one billion people, or 15% of the world’s population, have any impairment. Adding to that, the world is becoming more and more digital. In the last two decades, the proportion of people online in developing countries increased by around 45% (UN The Age of Digital Interdependence, 2018). The increase in digital services varies from country to country, but there are some significant trends. For example, governmental services are growing digitally in many countries. It allows people from all places, like those who live far away from urban centres, to access health services, tax information, and retirement savings. However, when the website or mobile apps have accessibility issues, they can add obstacles to their use. Furthermore, even worst when the service is only accessible through digital means.

Digital technology has the potential to be a great equaliser when it is accessible (UN Disability and Development Report, 2018). According to the United Nations Convention on the Rights of Persons with disabilities, access to information and communication technologies is a human right. Accessibility is ensured by legal rights and laws in many countries as well. Although accessibility is an important topic, has regulations and laws, and its importance is highly acknowledged among many digital and interaction designers, only 2.5% of the most popular websites’ home pages are free from accessibility issues, according to WebAIM. This number indicates a considerable gap between this acknowledgement and the adoption of accessibility practices in the design work. Geographically speaking, around 80% of people with disabilities live in the Global South (Ginsburg & Rapp, 2013). This number is relevant as many large tech companies are found in the Global North and are responsible for creating and developing digital services used around the globe.

In digital realms, the platforms and systems are also built over what is considered “normal” abilities, creating barriers to people with different characteristics. Boellstorff presents how virtuality could offer options to new embodiments but also impose some barriers through the lack of accessibility on devices and interfaces and even creating “virtual disabilities” (2008), a consequence of the inability to perform an action, or the inability of performing it in the most optimised way. Two examples of the “virtual disabilities” that technology may create are small fonts that impose barriers to reading and flashing effects that may provoke seizures. Ginsburg (2012) also highlights how the accessibility of technology may enhance or obstruct one’s possibilities to interact and communicate with the world. Technology enhances people when offered adequate resources, but it may “disable” potential users with a range of impairments in vision, hearing, or fine motor coordination due to inequalities in access (Ginsburg, 2012).

DIGITAL EMPOWERMENT

When technology and design are properly prepared for a range of different abilities, it empowers people. Hartblay points out that digital platforms may act as enhancers, allowing people with disabilities to perform actions and express themselves similarly to other people (Hartblay, 2015). One of Hartblay’s interviewees, a man in his 30s with a traumatic brain injury acquired in his childhood, described that the moment he could be his true self happened when he was online, and he could have more control over his interactions. The enhancement allowed him to extend himself in digital time and space.

Donald Norman points out that “a major role of new technology should be to make tasks simpler” (Ingold, 2012). But Ingold (2012) questions if design - and technology - has failed and, according to him, if it “failed so spectacularly” in its purpose to simplify our lives. On the reverse idea of simplifying our life, he asks if the real goal of the design was to set obstacles for us and challenge our capacity to overcome them. Ingold provokes that “every object of design sets a trap by presenting a problem in the form of what appears to be its solution”. Should the designed objects exist to solve problems, or are they here to dictate how people perform their actions? Ingold questions if it is possible to plan ideal things in a continuously under-construction world, where the forms arise from the engagement of forces and materials within the ongoing process of life (Ingold, 2012).

Despite the barriers, Ingold presents some glimpses of hope by affirming that design is about imagining the future, but in an open-ended manner.

The literature on design and disability has also highlighted the fact that designing for a broader and diverse spectrum benefits the whole society. One of the best-known examples is the “curb-cut effect” (Blackwell, 2017). In the decade of 1970, thanks to a movement promoted by disabilities activists, the city of Berkeley (California, USA) started building several curb cuts on the sidewalks. A consequence that nobody predicted: the curb cuts not only benefited people with movement impairments but also others like parents pushing strollers, people pushing heavy carts or luggage, runners, skaters, and cyclists. Blackwell (2017) mentions research that pointed out that nine out of ten “unencumbered people” prefer to use a curb cut when there is one (2017). In digital spheres, technology has the potency to augment the capacity and functions of human bodies. As Hogle (2005) points out, the human body is imperfect, variable, and in a state of constant degeneration and in need of repair, along with the cultural assumptions of what is “deficient” or “normal”. Miller, in his turn, points out how a digital platform can enhance an ageing body whose increased disability affects socialising (2011).

Ginsburg and Rapp (2015) highlight the importance of building new social imaginaries to show the
horizons of possibilities for people with disabilities. An accessible future where the inclusion of disability should be not an exceptional act but a regular one. As Ginsburg and Rapp state, resignifying the hegemonic frame requires visionary activism to create an inclusive future vision and rethink disability. Tomás Criado adds the existing calling for anthropology to participate in the materialisation processes of alternative forms of world-making (2020). Anthropology may perform “beyond the text” and in multimodal settings (2020) for opening to a plurality of worlds, in conjunction with the debates on decolonising design.

The visionary activism and new forms of world-making open space for a multitude of disciplines’ interactions. Ventura and Gunn, professors of design anthropology with research on medical products, affirm that the dialogue between anthropology and design benefits the latter, allowing it to gather a broader perspective beyond the techno-practice realms (2017). Jenny Davis underlines that solving design problems in our increasing environment of needs (2020) requires groups of people with skills from several disciplines in addition to skills of collaboration, listening and learning from each other as they solve problems (Davis, 2020).

Davis previously stated that if left unchecked, technology will favour privilege and normality, power and privilege (Davis, 2020). “Left unchecked, producers are likely to make products for users who are just like themselves” (Davis, 2020).

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Adopting a more inclusive design means a change of mindset and habits from the companies and professionals. A change of mindset because, usually, disability is an invisible topic within the companies. As far as one can observe, few employees with disabilities work within the companies. Furthermore, the much-publicised diversity does not embrace disability that much. But not only. When speaking about a change of habits, it is also that tech practitioners can and should adopt accessibility practices as part of their work process. Daniel works in a large company focused on construction materials, and he points out that:

People with disabilities are usually excluded from the process of creating and testing products. It is very common to exclude them, we talk about creating personas, but we never create a persona that needs accessibility. How is the person going to handle it? How a person who only has one arm is going to use it?

One common observation presented in my conversations and interviews was the reference to “bubbles”, that in one way or another we dwell in our “bubbles”, and our perception is affected by it. Bella, a designer from a Brazilian consultant agency, observed:

*I think because our society raises people with disabilities separately, so we have schools for deaf children, for autistic children, with Down Syndrome. We don’t see them later in society, or when we do, it’s very rare, it’s very little. If we think that more than 50 million people have disabilities [in Brazil], then we see them very infrequently. So I think the fact that we are not living together with them on a daily basis ends up creating this bubble, like “oh, the number is much smaller than we think”, so it doesn’t have to be a priority to create an application, considering these people.*

The term “bubble” in technology was popularised by Eli Pariser (2011). The author defines the bubble as an environment created by engines that cater for the information delivered to people (Pariser, 2011). The filters that create the bubbles are invisible (Pariser, 2011), and people do not choose in which bubble they would dwell (Pariser, 2011). Being a prevalent term in the technology area, it is comprehensive that my interviewees expanded the concept to describe the “filtered” environments they inhabit, spaces that “filtered” and left out the different ones. There are similarities between the bubbles and the assemblages. DeLanda describes that people, as assemblage’s component parts, are both limited and enabled by the assemblage (2006). Both bubbles and assemblages tend to have borders. The more cohesive, the more they reinforce their own territory. They are limited by their component parts in some aspects, and they enable other potentialities by symbiosis.

The perception that we, as designers, dwell in a “bubble” is present in some of the experiences reported by Swedish and Brazilian practitioners. In the company I investigated, Ryan also observed that he lacked this type of education at college, and the feeling of exclusion pervades his experience. “We never got exposed, never were able to understand, we never built empathy”.

The unrest feeling experienced when the accessibility project started in the researched company is not a unique situation. In several conversations, similar situations were experienced by other practitioners, in other places. Accessibility requirements are often not prioritised for a series of excuses such as time and cost. Sometimes, these requirements are left aside until laws and fines emerge. Some Brazilian interviewees illustrated the situation by quoting a rhyme in Portuguese: “se não aprende pelo amor, aprende pela dor” (if you do
not learn through love, learn through pain), meaning that if the corporate culture cannot change due to humanitarian reasons, it needs to change due to legal reasons.

Behind the excuses, other factors could be observed. The scenarios in Sweden and Brazil are different, with distinct historical backgrounds, but in both, it was possible to perceive the absence of people with disabilities working within organisations. This realisation can be extended to the absence of people with disabilities in many social structures, not only in business companies. The lack of diversity, or the absence of what is considered the “other”, is not a problem exclusive to the technology and design fields. It reflects a social issue present in several other sectors.

Design and technology reflect the society in which they are inserted, but they can also shape and provide a more inclusive living. The interaction and cooperation with a broader diversity of experiences could assist in understanding how disability worlds are made. It is possible to learn and build new worlds and futures through these relations. As Escobar points out, “design is about creating cultural meanings and practices, about designing culture, experience, and particular ways of living” (Escobar, 2018), and people with disabilities should participate in the process of designing the world to make one that includes them too. When social institutions and organisations are built on presumed access, the impacts for those without access are amplified exponentially (Davis, 2020). It is more than time to realise that the structures and mechanisms that produce digital disabilities create more than barriers on apps or websites. It creates digital inequalities (Davis, 2020), and nowadays, these limitations do not restrict or act only on the digital spheres but can affect the whole social existence of people with disabilities. As design practitioners, we should reflect on going from a space unintentionally left blank and moving to a space intentionally left blank that should be occupied by the proper actors.

References


“The DRM’s [disability rights movement] demand for control is the essential theme that runs through all its work, regardless of political-economic or cultural differences. Control has universal appeal for DRM activists because the needs of people with disabilities and the potential for meeting these needs are everywhere conditioned by a dependency born of powerlessness, poverty, degradation, and institutionalization. This dependency, saturated with paternalism, begins with the onset of disability and continues until death. The condition of dependency is presently typical for hundreds of millions of people throughout the world.” (Charlton, 1998)