

# **“That Says, For Me, You Are a Second-Class Citizen”**

## **A Concept Analysis of Accessibility**

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Submission date: 12 April 2023; Acceptance date: 3 March 2025; Publication date:  
27 June 2025

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## ABSTRACT

**Accessibility is useful to consider conceptually to contribute to the discussion about why its societal benefits are under-recognised. We sought to propose a conceptualisation of accessibility that draws together prior scholarly work on accessibility as it relates to disability from across disciplines and knowledge of stakeholders with lived experience of disability. Data sources included a literature review, focus group and interview discussions, and consultation with local disability advocacy and support organisations. We used a concept analysis, identifying different ways in which the notion of accessibility was deployed across our data. The resulting conceptual framework positions accessibility as the enablement of a full range of life's experiences to be understood, reached, and experienced equally and fully by everyone. Highly relevant but often overlooked in scholarly literature on geography and rehabilitation is the idea that to create accessible experiences the ongoing actions of each person matter: from policy to design to everyday encounters.**

## KEYWORDS

**Accessibility, accessible, conceptual framework, conceptualisation, disability**

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## Introduction

The term “accessibility” as it relates to disability is both plural and ambiguous. It is often interpreted in different ways, depending on the context in which it is used (Persson et al., 2015). Efforts to grapple with this ambiguity have been focused on deconstructing its more overt applications. For example, Persson and colleagues (2015), have reflected on various approaches to accessible design, such as “universal design”, “accessible design”, “design for all”, and “barrier-free design”. They suggested that each approach highlights the importance of enabling the widest possible range of people to make use of products, services, and spaces. However, each approach also implicitly conveys subtly different ideas about accessibility, leaving the term and its application largely open to interpretation. Indeed, there appears to be little consensus (Persson et al., 2015), comprehensive understanding (Paez et al., 2012), or unified definition (Borg and Gulliksen, 2015) regarding accessibility as a concept. As such, discussing it conceptually and considering both patterns and diversity across definitions and uses is a useful exercise to consider the wider economic, social, ethical, and quality-of-life benefits of accessibility (Darcy et al., 2011; Darcy and Pegg, 2011).

Accessibility has become largely synonymous with geographic, spatial, and physical accessibility in much of the scholarly literature on disability (Neutens, 2015), with a particular focus on its quantitative measurement (Paez et al., 2012). Perhaps because its material measurement is relatively straightforward, research

has tended toward a focus on spatial geography and physical access (Kwan et al., 2003). Kwan and colleagues (2003) have drawn attention to the way accessibility has been largely represented through individuals' physical relationship to urban environments. In spatial geography, in particular, the term accessibility often refers to measuring urban spaces to ensure local policy compliance regarding building and infrastructure planning. Deployed in such a way, accessibility has come to describe whether a person (typically experiencing impairments of one kind or another) can navigate around a metropolitan area, enter a building and use the facilities located there (Church and Marston, 2003), or reach opportunities that are spatially distributed (Neutens, 2015; Paez et al., 2012). This conceptualisation has very practical applications in the planning of urban and regional design and its policy (Paez et al., 2012). However, Church and Marston (2003) have cautioned that thinking exclusively about whether or not people can gain access to a particular space risks orientating to minimum standards regarding entry as a sufficient attempt at accessibility. A focus on peoples' "absolute" ability to enter a space obscures the importance of the quality of their experience within or around the space during its use (Church and Marston, 2003; Fjerstad, 2018). It also draws attention to the use of distinct spaces (or destinations) without explicit consideration of movement to, from, and between. This is problematic given that a location and the journey to get there are not inseparable in the context of accessibility. Certainly, accessible spaces cannot be used if people cannot get there. Further, this orientation on accessibility in the context of specific localities and minimum standards also draws attention away from broader social and economic barriers that prevent people from using goods and services to which they might have physical access (Broyer, 2020).

Some consideration has been given to the intersection between physical and social spaces, such as how various social groups (e.g. based on gender, race, class, and so on) might interact with, or be socially estranged from, various physical spaces (Kwan et al., 2003; Rydstedt and Lachowsky, 2020). The way people from different socioeconomic groups might encounter obstacles (e.g. unreliable or unaffordable transport, low proximity to affordable high-quality foods) in regard to accessing the things they want/need to live or be comfortable is one example (Kwan et al., 2003; Paez et al., 2012). Church and Marston (2003) have advocated moving beyond merely noting the presence or number of access points, to focus on people's experience of using such access points. Doing so invites thought as to the way accessibility is constructed and works to serve people differently. We believe it plausible that experiences of equity, and social and economic inclusion, while largely absent from the spatial geography literature, could play an important role in helping us to understand and (re)consider accessibility.

Our research seeks to build on recent efforts to conceptualise accessibility broadly. We look specifically at the myriad ways a wide range of people have come to understand and use accessibility as a concept. Acknowledging that other researchers

have worked with accessibility directly or approached it to make sense of related phenomena, we sought to propose a conceptualisation of accessibility by drawing together prior scholarly work from across disciplines as well as the knowledge of stakeholders who grapple with accessibility every day in our contemporary world. We then consider this in relation to the broader ways that accessibility is “actioned” in the disability studies literature and its relationship to our work.

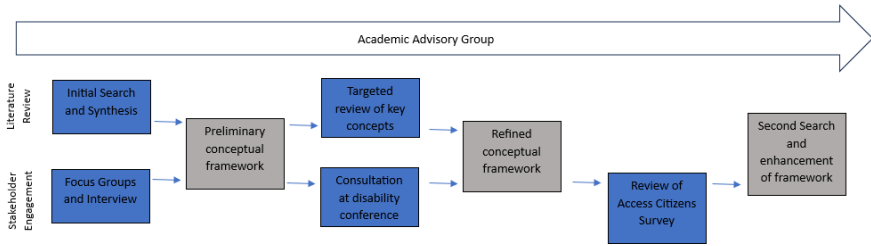
The impetus for this work arose out of a collaboration with a social change initiative in Aotearoa/New Zealand. Our partners communicated a vision for Aotearoa/New Zealand to become the most accessible nation in the world. They sought our expertise to collaborate on the development of an Accessibility Index which could be used to monitor progress, open conversations and prompt action. However, the notion of accessibility is broad, multidimensional, and diffused across several academic disciplines. As such, we recommended that, as a first step, a conceptual review was needed to more fully understand the ways in which the meaning of accessibility can be deployed in the development of a viable accessibility index that will impact on the sociocultural context, and the material and social experiences of people with accessibility needs. It was an important purpose for us within this particular piece of work to provide a tool to enable pragmatic conversations about “accessibility” without making the concept too reductive. A second purpose was to present a conceptual framework to a broader audience who can interact with it, develop it, critique and challenge it.

## Method

### Overview

Our data synthesis and analysis drew on a modified version of Rogers’ (2000) version of concept analysis, synthesising 1) the different ways accessibility was formulated across literature and 2) conversations with stakeholders in the accessibility arena in the Aotearoa/New Zealand context. This approach fits well with Roger’s (2000) emphasis on using multiple forms of data (primary and secondary) to develop an understanding of a concept. Data sources included two literature searches (one in 2017 and one in 2022), interview and focus group data, and consultation with local disability advocacy and support organisations in Aotearoa/New Zealand. Data were also extracted from an “Access Citizens Survey” carried out by local research agency, Cogo Consulting on behalf of our partners (a local social change initiative). The literature review and stakeholder engagement occurred concurrently to enable the iterative development of our conceptual framework. Moving between literature and stakeholders allowed for refinement of the developing framework as the study progressed. Figure 1 provides an overview of this process.

Although Figure 1 presents a somewhat linear progression, it is important to note that our process was recursive – we continually refined our thinking in response to the different data sources. Throughout the research, we continually engaged and re-engaged with the stakeholder data, literature, and academic advisory group,



**Figure 1** Overview of the research process.

coming to a final phase of reflection using extracts from the Access Citizens Survey. We discuss these data sources in further detail below.

### Literature Search and Synthesis

Beginning in June 2017, we compiled an initial literature corpus as identified by academics with knowledge of relevant literature related to accessibility. We chose this strategy due to the volume of research that relates to or is identified as relating to accessibility. We consulted an academic advisory group of seven academics with substantive expertise in the area of accessibility and disability within their respective fields to assist us in our search and synthesis. The combined research interests of this group are related to New Zealand Sign Language (NZSL) and Deaf studies, art and design, sport and recreation, information technology, Māori health, and rehabilitation and disability studies. The role of the advisory group included a) helping to refine our literature search strategy (including keywords used and relevant scholarly databases), b) making recommendations regarding pertinent literature in their respective fields, and c) supporting refinement of the conceptual framework.

Our initial search strategy was constructed using the following concept-based search strings:

Concept 1: Access\* AND (“universal design” OR “barrier free design” OR “barrier-free design” OR “inclusive design” OR “design for all”)

Concept 2: health literacy OR social justice OR health OR sport OR recreation OR education OR business OR employment OR tourism

We searched SportDiscuss, Google Scholar, Proquest, JSTOR, and AISWORLD databases as recommended by our academic advisory group producing 170 hits, which were reviewed by title and abstract, resulting in 20 articles that were reviewed in full-text, with all contributing to the analysis.

In the first search, the data we extracted included: the discipline each study was grounded in, the purpose of the study, participant characteristics, methods, key references cited, and key findings. We also recorded the ways accessibility was defined or referred to in each article, how accessibility was related to or differentiated from

other concepts, and what appeared to be the key characteristics of accessibility as a concept.

An updated literature search was performed in November 2022, to identify any new literature of high informational value and also to account for the COVID-19 pandemic's impacts on work, social engagement, and other access concerns. The second search was designed to update with more recent literature and to test the preliminary analytical framework developed through the earlier process. Papers were identified from a search of the following databases: SportDiscuss (EBSCO), JSTOR, CINAHL Complete (EBSCO), Scopus, MEDLINE (OvidSP), PsycINFO (OvidSP), using a combination of the following search strings:

Concept 1: Access\* AND (“universal design” OR “barrier free design” OR “barrier-free design” OR “inclusive design” OR “design for all”)

Concept 2: disab\* OR impair\* OR “special needs” OR Neurodivers\* OR neuroatypical\* OR blind OR Deaf OR “Sign language” OR autism\* OR whaikaha OR “Whanau hauā” OR whaiora OR “siva-tu‘amelie” OR “faingata‘ia” OR “ma‘i” OR “Pakipaki-tai”

An article was included if: 1) it contained a definition of accessibility as a concept; and 2) it contained new information that had not been identified in previous articles and that would further enhance or challenge the existing conceptual framework; and 3) it had been published since 2017. Of 1,608 articles, 903 articles were reviewed by title and abstract. Of these 30 articles were considered to be of relevance to the work of conceptualising accessibility and were reviewed in full-text, with 11 new papers contributing to the analysis.

## **Stakeholder Engagement**

Concurrent with the first literature search and initial synthesis, the research team approached key informants from the disability advocacy and support community in Aotearoa/New Zealand – people who would be able to provide informed discussion. The combined experience of these stakeholders related to: lived experience of disability in relation to physical access, people who identify as Deaf, blind, or visually impaired, and people with diagnoses of learning or cognitive impairments. Also, some stakeholders were accessibility advocates in local council, district health board, or community organisations.

### *Interview and Focus Groups*

A total of ten people participated in interview or focus group discussions. Five people participated in a focus group discussion in Auckland, and four in Christchurch. One person participated in an individual interview in Auckland. Interviews and focus group discussions lasted approximately one hour. The moderator and notetaker hosted discussions at venues suggested to us as accessible by potential participants and recruiting localities.

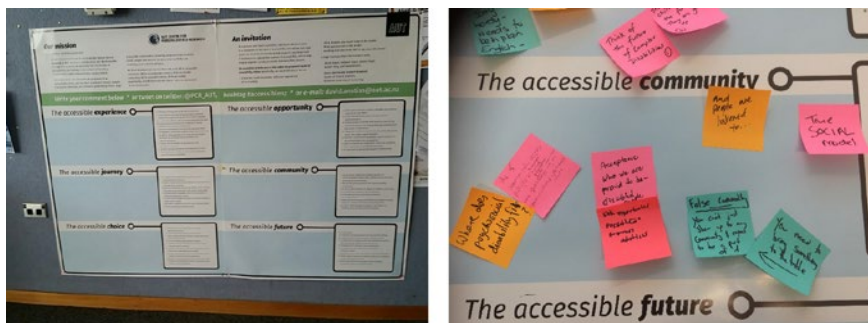
As a guide for interview and focus group discussion, we asked participants to discuss how they would define accessibility, what an accessible (or inaccessible) experience might look and feel like, and things that might enable or constrain accessibility for them. Discussions commenced with open conversation about participants’ perspectives regarding accessibility, followed by more targeted dialogue based on previous discussions and our readings of the literature. These interviews were transcribed verbatim and shared with the core research team. Where stakeholders referred to aspects of accessibility not covered in our compiled literature, we consulted the academic advisory group, which directed us toward additional literature.

**Consultation at the Disability Matters Conference**

We constructed a preliminary framework around elements of accessibility reflected in both the literature and stakeholder data. The research team subsequently presented an interactive poster (see Figure 2, left) displaying the preliminary framework at a disability conference in [city], Aotearoa/New Zealand during November 2017. The conference was attended by an audience of people with lived experience of disability and included advocates, spokespeople, and researchers in the fields of disability and accessibility. Conference attendees were invited to offer feedback and critique our preliminary framework by using “Post-it” notes and felt-tip pens provided with the poster (see Figure 2 below (right) for an example).

**Access Citizens Survey**

Annually, our partners engage a research consulting company, Cogo Consulting, to administer an Access Citizens Survey capturing the perceived accessibility of public spaces, services, and experiences in Aotearoa/New Zealand. For the 2017 Access Citizens Survey, we provided Cogo Consulting with a small number of open-ended items relevant to our concept analysis. We asked respondents for their definitions of accessibility, to identify spaces or services they considered accessible, and asked what matters to them in terms of accessibility. We used the responses to these survey items



**Figure 2** Photograph of the preliminary conceptual framework presented at the Disability Matters conference (left), and feedback from attendees (right).

to consider the extent to which our preliminary conceptual thinking resonated with a substantial population of people with self-identified access needs. These survey data was considered secondary data and were utilised for the purpose of a resonance check, rather than as primary data used to develop the framework. In total, we received 717 complete responses from people with self-identified experience of their own or others' access needs. The majority of survey respondents were women (76%) from Auckland or Wellington (63%), identified as New Zealand European (82% – with the remainder identifying as Asian, Māori, or Pacifica), and aged between 20 and 59 years (81%).

### **Concept Analysis**

We drew on Rogers' (2000) version of concept analysis to develop our understanding of accessibility. Our analysis was grounded in the stance that concepts are constructed and given meaning and significance through their practical application and expression (Rogers, 2000). A concept such as accessibility is often applied or referred to in practical ways, though not always with a clear definition or consensus. Rogers' (2000) framework focuses on identifying a concept's theoretical form by paying attention to the multiplicity and fluidity of its practical use. Our analysis focused on the various ways accessibility was deployed and referred to across the data. It is important to note that Rogers (2000) considers concepts to be malleable. They change over time in response to their practical application by people. While we sought to gather a diversity of data and expressly pursued an expansive conceptualisation. Our data were not exhaustive, and sources varied in regard to the amount of information they offered for our purpose. Further, due to our search process being informed by our advisory group, the literature results may be weighted towards their disciplinary perspectives and substantive areas of interest. Borrowing terminology from Whiffin et al.'s (2021) meta-synthesis, for academic papers, we labelled this variation along a continuum from peripheral to core. At one end, there were sources who did not define accessibility at all (peripheral); those who did define the term, or provided research findings relevant to a definition, but where the focus was not on accessibility as a concept (central); and those who sought to explicitly understand the concept of accessibility (core). Identifying the category each paper belonged to was an iterative and recursive process, as the definition developed through the process.

To organise the data from all sources, we used inductive reflexive thematic analysis, as outlined by Braun and Clarke (2022). More specifically, we read and reread the collected academic literature and stakeholder accounts, to ensure familiarisation of the dataset. We took note of words that may be used interchangeably with the word "accessibility", how it was distinguished from other concepts, and variations or nuances in references to accessibility. We then coded the data inductively at both semantic (descriptive) and latent (interpretative) levels. Patterns of meaning were constructed from codes and were organised into candidate themes and discussed by the research team. Themes were then revised following input from the disability

conference and then again following the second literature search. Themes were then named in relation to the whole dataset and these discussions. This process was undertaken with the academic literature and stakeholder accounts separately but also concurrently and iteratively. All sources contributed to the conceptual framework, and anything that was articulated in any source was considered with regard to its place within the framework. Key ideas and corresponding extracts were shared with the advisory group, and members were invited to direct the study team to additional literature where possible.

### **Ethical Considerations**

Ethical approval was sought and gained from the Auckland University of Technology Ethics Committee. Interview and focus group participants were invited to take part and were given information sheets as part of the recruitment process. In the case of recruiting potential participants identifying as Deaf, we developed a participant information video in NZSL with the help of a trained and accredited NZSL interpreter. Confidentiality was ensured by the removal of names or any identifying information from the transcripts. Focus group participants were asked to agree to maintain the anonymity of members.

### **Findings**

In total, 59 literature items were identified from both literature searches and recommendations from the advisory group and included in the analysis. Of these, 27 were research studies with human participants, 12 studies were reviews of academic literature, ten were discussion pieces (including discussions relevant to social justice and the conceptualisation and measurement of accessibility), four were research studies using publicly available data such as census surveys, four examined observable features of built environments, and two was an examination of organisational policy. A total of 20 items were designated core – defining or conceptualising accessibility explicitly (Ahmer, 2021; Ahonobadha et al., 2017; Barber, 2018; Borg and Gulliksen, 2015; Broyer, 2020; Church and Marston, 2003; Courtney and Keith, 2017; Dalvi and Martin, 1976; Fjerstad, 2018; Kwan, 2013; Kwan et al., 2003; Lee and Lee, 1998; Lynch et al., 2020; Lynch et al., 2018; Moore et al., 2022; Neutens, 2015; Paez et al., 2012; Persson et al., 2015; Rydstedt and Lachowsky, 2020; Weibull, 1980). Forty of the articles referred to accessibility within the key findings without expressly defining it, but still contributed to the analysis – particularly the boundaries of accessibility as a concept, or other supporting ideas. For example, Shimmell and colleagues (2013) noted how children’s accessibility to sports and recreation might be influenced by parental attitudes.

### **Defining Accessibility**

Accessibility is a variably and often vaguely understood concept, which considers not only physical, but also emotional, social, and cognitive experiences. Indeed, accessibility is often conceptualised, designed for, tested, and measured in multiple ways

(Achuthan et al., 2010; Brommelstroet et al., 2016; Emmanouil, 2015; Kwan et al., 2003; Lee and Lee, 1998; McMillen, 2012; Mulligan et al., 2017; Persson et al., 2015; Riley et al., 2008; Rimmer, Riley, Wang, and Rauworth, 2004). This is reflected in the way people navigate the world differently as a function of their particular access needs and the various designed environments and objects they encounter (Borg and Gulliksen, 2015; Church and Marston, 2003; Lid, 2014; Napier and Kidd, 2013; Persson et al., 2015). Similarly, throughout our stakeholder engagement, we found that understanding of accessibility would vary considerably depending on who we asked. Their understandings were often tethered to their experience of particular access needs or their work in certain areas. For example, our stakeholder from the Deaf Community shared an account that highlighted the way access can be explicitly linked to intermediary services and technologies that facilitate communication between hearing and Deaf people. Accessibility is a widely used term and this was also highlighted in our project. Some stakeholders argued the term accessibility had been “hijacked” by action groups not necessarily advocating for disability rights. A paper by Fritsch (Fritsch, 2013) discussed conversely a problematic narrowing of the concept in looking at how the symbolic coupling of accessibility with wheelchairs helps to shape people’s shared understandings of what constitutes disability and accessibility. In doing so, such symbols prioritise and enable particular forms of access need (i.e. wheelchair access) over others. Such accounts render visible the wide range of uses of the term “accessibility”, as well as the possibility of associated dynamics of power related to the term.

From our review, we have concluded that the defining characteristics of “accessibility” vary considerably between sources, and these characteristics are often specific to the context being discussed. “Accessibility” is a term that is used differently by different disciplines: for example, urban design and planning literature often locates “accessibility” within the framework of “universal design” (e.g. Lynch et al., 2020) or as requirements for legal frameworks (e.g. Courtney and Keith, 2017; Lynch et al., 2018), while subjective accounts of accessibility (often written by disabled people<sup>1</sup>) often prioritise the social attitudinal over the physical (e.g. Fjerstad, 2018). The language of possibility and future opportunities, alongside the affective impacts of repeated marginalisation (and conversely repeated inclusion), continue to develop (Ahmer, 2021; Barber, 2018; Kwan, 2013; Rydstedt and Lachowsky, 2020). The concept of “accessibility” is continuing to change, and we see previous boundaries of “accessibility” being challenged. As such, the themes that we articulate will be particular to the present context but can be useful for the purpose of facilitating an ongoing conversation about accessibility as a complex concept that needs attention, specificity, and consideration.

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1. We have elected to use the phrasing “disabled people” in alignment with the New Zealand Disability Strategy, which foregrounds the interaction with the inaccessible environment as creating disability, rather than being located with the person.

## Boundaries

Accessibility is often discussed or linked to similar concepts such as “inclusion”, “usability”, and “universal design”. Of these, the debate over whether “accessibility” includes or excludes notions of social “inclusion” is a point of tension. For example, this was apparent in literature pertaining to the design of children’s play spaces (e.g. Courtney and Keith, 2017; Moore et al., 2022), where it is argued that while play spaces are often designed to have accessibility features, those features can also have the unintended effect of excluding children in wheelchairs from playing with their same age peers. These authors therefore argue that inclusion and accessibility are separate entities. As already noted, Fjerstad (2018) defines “accessibility” as social attitudinal, both in terms of its limits and its opportunities, while Corcuff et al. (2022) brings the concept of inclusion *into* accessibility. The tension between the two concepts of accessibility and inclusion is worth noting, given that it highlights that it is the way a space is experienced (both physically and socially), that results in a place being “accessible”.

Other notable boundaries include: The difference between accessibility and usability, where accessibility is considered to be a necessary precondition of usability. Usability refers to how well one is able to use the environment, and considers perceptions of how well the design of the environment enables functioning, performance and well-being (Ackah-Jnr and Danso, 2019; Lynch et al., 2020). Another key distinction was between accessibility and universal design. Accessibility was commonly viewed within design literature to be a subcomponent of the broader field of universal design. There are boundaries also with related concepts that have been articulated within the disability studies literature, which we raise in the discussion section.

## Preconditions

In most of the papers in our review, accessibility presupposes disability, and in some cases, improving access *relies* on an understanding of the disabled experience, rather than assumptions about it (Broyer, 2020). Several of the review articles identified the role of disability experience in co-design as a way of better-informing design outcomes (e.g. Ahonobadha et al., 2017; Al-Mansoor, 2018; Broyer, 2020). Methods such as these have value in adding weight to the importance of disability experiences, and building insight into the way that spaces are experienced by disabled people. This process needs to be authentic, uphold the integrity of disabled people, and have realistic expectations of disabled people involved in the co-design process (Rydstedt and Lachowsky, 2020). However, while disabled people have lived experience which can be invaluable in the design process, many individuals may not know what the best solutions are or what opportunities might be available. It is important, therefore, that designers are themselves informed regarding features which enable accessibility, and consider how spaces can foster social inclusion and a sense of belonging for disabled people. It is also worth noting that co-design processes can only be effective if participants have appropriate access to communication with the others

they need to collaborate with. Technologies, knowledge and willingness to do things in unfamiliar ways are additional barriers to the participation of some people (e.g. those who have complex needs or who use augmentative and alternative communication). Considering the interests and needs of people who may normally be excluded from the process is equally as important when designing for “accessibility”. Not doing so means we are inevitably engaging only the usual suspects in design, which further perpetuates the privileging of some (often physical) access needs over others, and sustains limited versions of accessibility.

### **Outcomes**

Broadly, the inclusion of “accessibility” principles was considered to afford equal opportunities for disabled people and to be a catalyst for the social and economic participation of all people (Corcuff et al., 2022). Inaccessible spaces were considered to drive social exclusion (Lynch et al., 2020), and to “convey a message of disregard for inclusion, dignity and autonomy” (Rydstedt and Lachowsky, 2020, 119).

### **Attributes of Accessibility**

Drawing on our findings, and using Rogers’ (2000) framework for describing a concept, we identified four interconnected attributes of accessibility: *attainability*, *intersectionality*, *conditionality*, and *relationality*. Clear from the literature was the breadth of the ways in which the concept of “accessibility” had been applied. Despite this breadth, authors consistently referred to the central idea of people being able to effectively and reliably *attain* something they want or need. Literature also emphasised accessibility as reflecting the *intersections* between people and their environment (built, natural, social, economic, and political), as well as historical context and life events. Further, experience of multiple layers of discrimination due to one’s ethnicity, sexuality, gender, income, etc. alongside marginalisation at the level of ability, compounds inaccessibility even when physical elements of accessibility are improved (Achuthan et al., 2010; Al-Mansoor, 2018; Barg et al., 2010; Blackman et al., 2003; Bourke et al., 2017; Bromley et al., 2007; Broyer, 2020; Buffart et al., 2009; Darcy and Pegg, 2011; Hickey, 2008; Meyers et al., 2002; Mostafa, 2008; Mulligan et al., 2017; Paez et al., 2009; Ravenek and Schneider, 2009; Rydstedt and Lachowsky, 2020; Shimmell et al., 2013; Spivock et al., 2007; Ward et al., 2011). In other words, the more markers of marginalisation a person has, the more support they may need to fully experience accessibility (Kwan, 2013). For instance, to engage in opportunities for socialisation or for sports and recreation, we must first be transported there, enter the building or facility in which the opportunity is held, without the need to resist ableist, sexist, or racist norms, and have the confidence to interact with others that is fostered through encouragement and support from friends, family, and others repeatedly across the life course.

Allowing for the countless combinations of such interactions, accessibility is helped and hindered by a wide range of tangible and abstract barriers (e.g. enacted social perceptions, cityscapes, discrimination, personal histories) and facilitators

(e.g. assistive technologies, user-friendly information, people being excited to see people with varying access needs present) that often operate together making accessibility *conditional* (Barg et al., 2010; Brennan et al., 2005; Buffart et al., 2009; Dietz et al., 2009; Emiliani et al., 2011; Gross et al., 2013; Hammel et al., 2015; Hickey, 2008; Hurtado et al., 2014; Kirchner et al., 2008; Law et al., 2006; Law et al., 2007; Napier and Kidd, 2013; Ravenek and Schneider, 2009; Riley et al., 2008; Rimmer, Riley, Wang, and Rauworth, 2004; Scelza et al., 2005; Shimmell et al., 2013; Spivock et al., 2007; Ward et al., 2011). Last, and perhaps most importantly, accessibility is a fundamental and inescapable element of modern human life for *all* people. While accessibility is often drawn upon to discuss issues of social justice for disabled people (Fritsch, 2013; Hodge, 2014; Robert, 2003; Vehmas and Watson, 2014), everyone relies on access to essential necessities and opportunities (e.g. through walkable pavements, available and affordable transport to food shopping, proximity to places of employment, opportunities to live the lives we want to, a sense of a positive future, etc.) (Blackman et al., 2003; Bunel and Tovar, 2014; Dalvi and Martin, 1976; Meyers et al., 2002; Neutens, 2015; Robitaille and Herjean, 2008; Zenk et al., 2005). Given the interdependence inherent in modern life (Gibson, 2016), accessibility is fundamentally *relational* – we are all reliant in some way on other people for access to things we need, not just to survive, but to thrive. However, the experiences of those who are disabled by systems, structures, and attitudes need to shape the directions that we can take to improve access for them, which opens up possibilities for others. What is good for disabled people is good for wider society.

### Interpretive Themes

Despite the breadth of definitions of accessibility, we were able to construct seven patterns of meaning from across all of the primary datasets. First, was the notion that *physical access does not always guarantee full participation*. Stakeholders participating in our individual interviews and focus groups, and the authors of the literature reviewed, expressed investment in fully participating in warm and inviting experiences (Blackman et al., 2003). It was also important for people to work in understanding environments that are efficient and productive (Mostafa, 2008). People across a range of access needs wanted to be invited into such experiences in the same manner as any other person might (Church and Marston, 2003; Darcy and Pegg, 2011; Rydstedt and Lachowsky, 2020). An accessible experience included being able to access buildings through front entrances, and not through back or side entrances, which undermined a sense of welcome or full participation. As one focus group participant commented:

*That says, for me, you are a second-class citizen, we would prefer you to go around the back. So I don't feel included. I don't feel like its inclusive design. I actually feel excluded. (FG2)*

This participant went on to use the symbolism of pre-1965 racial discrimination and segregation in the United States to identify how having to use service or alternative entrances made them feel. Many people also wanted to engage in experiences

of leisure such as appreciating artistic or historical exhibitions in publicly shared spaces such as museums and art galleries (McMillen, 2012) or conferences (Rydstedt and Lachowsky, 2020). Although people with various access needs related to vision and hearing might not experience these activities in exactly the same way as others might, literature suggested this should not limit possibilities for inclusion. Sign language tours and tactile prints in museums, for example, can open up access to an increasing number of spaces which are intended for all public use (McMillen, 2012). However, designers or curators of such exhibitions may unwittingly draw on ableist and exclusionary understandings of what can and cannot be experienced, and by whom. Inclusive experiences that are truly accessible to a broader range of citizens require collaborative co-creation between designers and end-users (Emmanouil, 2015). Co-design principles applied throughout the entire development process have the potential to ensure that participation is built into the very fabric of the experience and not “tacked on” as a semi-functional after-thought (Emmanouil, 2015; Rydstedt and Lachowsky, 2020). Our stakeholders suggested that the “participatory” processes they had experienced across a variety of domains tended to be tokenistic with users often invited too late into the process to make significant contributions. This position resonates with more recent literature, which argued that “inadequate presentations of ‘accessibility’ convey a message of disregard for inclusion, dignity, and autonomy” (Rydstedt and Lachowsky, 2020: 119).

Second, it is important for people to *experience facilitated rather than restricted travel*. Being able to partake in fulfilling activities often means travelling outside of the home toward opportunities for social inclusion and community participation (Achuthan et al., 2010). This freedom of travel is something which non-disabled citizens take for granted and assume to be normal. Participants and papers discussed the added burden of planning well in advance of journeys (e.g. Kirchner et al., 2008), including the need to rely on inefficient public transport to manage their movement. For instance, focus group participants spoke of ringing ahead to train stations to discuss boarding options. One focus group participant emphasised the expectations of perseverance and cognitive labour in getting even basic information:

*If we are planning on going to another city and staying somewhere, that accessibility information is never up front. You have just got to keep on going, keep on delving. (FG1)*

In journeying to and from experiences, many users want to be secure in the knowledge that adequate transport infrastructures can be easily reached (Brommelstroet et al., 2016; Church and Marston, 2003; Dalvi and Martin, 1976; Robitaille and Herjean, 2008) navigated (Dalvi and Martin, 1976; Kwan et al., 2003; Meyers et al., 2002; Paez et al., 2009; Paez et al., 2012), and in recognition that there are often expectations of arriving at particular times (Kwan, 2013). Journeys can only be accessible if they can be relied upon to lead to important activities such as purchasing food and other essential living items (Bromley et al., 2007; Brommelstroet et al., 2016; Church and Marston, 2003; Zenk et al., 2005) or picking up children from school (Kwan, 2013).

Third, the literature highlighted **the prioritising of choice-supporting infrastructure**. Making informed decisions is an important element of exercising fundamental freedoms and human rights (Borg and Gulliksen, 2015; Hurtado et al., 2014; Scelza et al., 2005). These can be undermined when people do not have the information they need, or cannot understand the information provided to them. Health information, for example, can be easily misunderstood when conveyed in medical jargon, or when communication materials are designed on assumptions of average or higher literacy of the reader (Brennan et al., 2005). As one focus group participant argued, the ability to participate in the health system can be disrupted simply through ineffective communication about appointments arranged by health services:

*Why are people not attending their appointment, for instance? Well actually, they couldn't read what you sent them, so they didn't know they had an appointment. (FG2)*

People with specific comprehension support needs may miss out on appointments in which they could gain new information and engage with decisions about their health. Literature in the fields of speech impairments, learning difficulties, and communication, continually emphasised the need for materials that are tailored to people with diverse communication needs (Borg and Gulliksen, 2015; Brennan et al., 2005; Napier and Kidd, 2013). Central to such requisites is the aspiration of self-determination (Deci and Ryan, 2008; Ravenek and Schneider, 2009; Rimmer, Riley, Wang, and Rauworth, 2004), in which information can be delivered and understood without expensive or intermittently available intermediaries, such as interpreters (Napier and Kidd, 2013). However, for many Deaf people, interpreters are considered integral to their access to information (Barnett et al., 2011), highlighting the differing degrees to which self-determination is currently a reality for different groups of people. Ensuring that a person's preferred ways of accessing information are not burdensome, does not delay choices unnecessarily, nor offer a lower level of understanding than their peers is essential to choice-supporting infrastructure.

Fourth, **opportunities for participating socially, economically, and politically require equitable societal arrangements** (Vehmas and Watson, 2014). Ideally, such arrangements would not prioritise certain forms of need over others, or resort to a broad, vaguely defined universalism that attempts to reduce diversity down to a limited set of shared characteristics (Persson et al., 2015), but would instead consider everyone as equally deserving of life's opportunities (Ahmer, 2021; Fritsch, 2013). Whether the simple *visibility* of disabled people in these social contexts might be considered a form of activism – highlighting and normalising them as community members and thus reducing stigmatisation – is contestable (Broyer, 2020). Access needs to move beyond simple involvement to the normalisation of diverse practices. For instance, one focus group participant suggested that low expectations of disabled people limit their capacity for achievement in arenas such as a potential workplace:

*One guy [who had a visible impairment] was asked at his interview [by a prospective employer], "you know, well, how are you going to get here on time to the right place?" [The interviewee responded] "what, like I did for my interview?" (FG1)*

Accessible and equitable opportunities are those in which people can expect to be treated as others do, without derogatory assumptions or negative attention being paid to elements of self that might differentiate them from others (Robert, 2003). Social models of disability and accessibility have acknowledged that multiple stakeholders hold responsibility for a single person's ability to access opportunities (Fritsch, 2013; Robert, 2003). For example, planners and designers of built environments determine the extent to which the spaces they construct can be accessed by particular groups of people. As we see from the extract above, employers can further (in)capacitate the opportunities of their employees, even following the ways that working from home was normalised during the COVID-19 pandemic (Goggin and Ellis, 2020). Current orientations to "return to the office" risk re-inscribing patterns of marginalisation and undermining opportunities for many people.

Fifth, a sense of community participation and social inclusion rely on **elements of social and built environments coming together to make access possible** (Bourke et al., 2017; Hickey, 2008). While one's involvement in community practice should be unconditional and appreciated by other community members (Hodge, 2014), built environments facilitate or limit people's ability to engage with that community (Lid, 2014; Rimmer et al., 2004). As two focus group participants discussed, inclusion is inseparable from the physical environment in which social engagement occurs:

*Participant one: [Some people have argued that] social inclusion sort of trumps physical inclusion and I don't agree with that personally.*

*Participant two: No, because you have to be there to be included. (FG2)*

An accessible community is one in which people feel welcomed and are able to be present. Further, we would argue that a community dedicated to access would respond not only to its members' access limitations through compliance activities (Barber, 2018; Hickey, 2008; Hodge, 2014; Mulligan et al., 2017; Ward et al., 2011), but rather enthusiastically orienting to their need to participate in fulfilling and affirming social roles (Dietz et al., 2009; Ejerstad, 2018).

Sixth, we found that our participants thought not only of their present situations, but also of **what the future might hold for people for whom access is still precarious**. One focus group participant drew our attention to the importance of people who are key change-makers, but also to the fragility of opportunities that rely on individual people (as opposed to social structures of which accessibility could be a part):

*The manager was totally committed. They employ[ed] deaf waiters, they have a menu that's got sign language and what have you, which makes it a fun thing. But the manager's gone. Are they [the restaurant] going to continue to actually be that committed? (FG1)*

Participants argued that a more expansive and prescriptive policy was needed; developed with greater expectations than offering minimum guidelines that expect minimal rather than aspirational adherence. Participants further argued that a greater range of people with various access needs being present in society should

move beyond simple visibility, and be more appreciated for their potential contributions (see also Broyer, 2020). To some extent this could be amplified through the creation of spaces that *prioritise* the needs of diverse bodies, rather than assuming an abled norm (Broyer, 2020). This may increase the range of “normality”, what access can mean, and who is understood to be a worthy citizen (Barg et al., 2010), who could also be buoyed with greater public and professional support – including anti-stigmatisation programmes (Broyer, 2020; Darcy and Pegg, 2011; Gross et al., 2013). Recent literature explores the kinds of discussions that need to be had in terms of climate change, access, and inclusion (Lopes et al., 2018) and the ways the COVID-19 pandemic drew sharp attention to what is possible and the decision-making involved in deliberately maintaining exclusionary practices (Goggin and Ellis, 2020).

Last, the responses of our interview and focus group participants, and those who took part in the Access Citizens Survey 2017, suggested **the importance of being able to do the everyday and mundane**. Although elements of this theme are woven throughout the preceding six themes (e.g. ease, comfort, inclusion), we feel it is important to explicitly identify and emphasise the necessity of accessibility in everyday life. It could be easy for discussion concerning the accessible experience, the accessible journey and so forth, to obscure the struggle many people face in surviving from day to day. One focus group participant recounted how accessibility is woven through every facet of a person’s life:

*There’s macro and there’s micro where accessibility is concerned going right down to “can you turn your tap on” or “can you open that door”, right down to “can you get to the building and into it in the first place”. (FG2)*

Survey participants in particular drew attention to the necessity of mundane, often taken-for-granted activities such as visiting family and friends, the ability to purchase items (e.g. food, sanitary items, electricity) needed for everyday consumption, and secure income with which to participate as consumers.

## Reflections

**1. Intersections with conceptual work in disability studies.** Literature in disability studies has raised and discussed many of the issues raised within our conceptual review, so it is important to discuss at least a couple of intersections and tensions. It is our intention in presenting our conceptualisation to add to the complex and myriad ways that make it possible to discuss accessibility. We could use the concept of “misfit” (Garland-Thomson, 2011, 2024) to describe what we are trying to attend to – addressing persistent patterns of “misfit” related to how environments interact with human form and function that perpetually marginalise particular groups of people. We do this by asking how “accessibility” can be made legible through specific themes. Misfit as a concept asks us to attend to contextual encounters and argues for a productive political power to be mobilised (Garland-Thomson, 2024). In Hamraie and Fritsch’s (2019) crip technoscience manifesto, one of the four commitments is to “interdependence as a political technology”. This resists the apolitical “disability

technoscience” where solutions are invented for disabled people to help them assimilate. Instead it orients to world-building that is done by and with disabled people that reimagines what we can be together and as a society. This relates to another commitment: “access as friction”, which we read as relating to actions that contest the injustices that an inaccessible world creates. They argue that access-making is a way that disabled people use direct action strategies to show these injustices (Hamraie and Fritsch, 2019). These commitments connect with the aspects within our themes that highlight accessibility as fluid, relational and at perpetual risk of being lost.

## **2. Further considerations on all-of-society representation and intersectionality.**

One member of the academic advisory group raised concerns about the specificity of access need to culture, as well as various intersections which might accumulate to create increasing disadvantage. One of the points of feedback from the first framework was that the conceptual model of accessibility did not address how the intersectionality of culture and disability might come together. Of the articles reviewed in the second search, there were several articles which considered intersectional identities and accessibility of which three were considered core (Al-Mansoor, 2018; Broyer, 2020; Rydstedt and Lachowsky, 2020). Despite including search terms relating to non-Western concepts (specifically Māori and Pasifika<sup>2</sup>) within the search strategy of our second search, no articles referencing these populations and their conceptualisation of accessibility were found. This indicates the need for ongoing research in this area for these communities. Ours is a framework that has been developed within the context of mainstream academia based on Anglo-European/American traditions. There is the possibility that our framework overlooks non-dominant and post-colonial elements of accessibility (King et al., 2017), particularly elements of Te Ao Māori<sup>3</sup> that may further enhance an understanding of accessibility in Aotearoa/New Zealand. We could question whether the framework sufficiently addresses or conceptualises access to non-dominant cultural capital, for example. This is important in a context where attempts have been made historically to restrict cultural access for particular groups, such as Māori. Indeed, the relevance of mainstream constructs, approaches, and measurement techniques to minorities or Indigenous populations such as Māori has been questioned (King et al., 2017; McClintock and Dudgeon, 2017). It is also worth thinking about how we might conceptualise accessibility in cases where aspects of Indigenous cultures are currently being reconstructed, following their active dismantling. Further complexity is brought to the issue where one’s identity intersects across multiple domains, such as being Muslim, female, and a wheelchair user for example (e.g. Al-Mansoor, 2018). Further, approaching accessibility when considering touch points between religious and dominant

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2. Non-Western cultures prominent within Aotearoa/New Zealand, where the research was conducted.

3. Translation: *The Māori World*. Te Ao Māori relates to language (Te Reo Māori), protocols and customs, and Te Tiriti o Waitangi (the Treaty of Waitangi) – located in Aotearoa/New Zealand.

social practices in shared spaces such as public baths and swimming pools will continue to grow in importance.

**3. Salience of the digital environment.** Threaded throughout the literature analysed was a discussion on the ways access can be understood through the digital environment. This seemed to become much more salient during the COVID-19 pandemic – especially in relation to debates about work – but these have been long-standing conversations within the disability sector and beyond for decades (Foley and Ferri, 2012). While elements related to the ways that technology can support access, but also risk reproducing ableist norms were discussed in the literature (e.g. Bitman and John, 2019; Borg et al., 2015; Foley and Ferri, 2012; Hamraie and Fritsch, 2019), interviews, and focus groups, this was often done in ways that bolstered the themes and the wider discussion in this paper, rather than adding different sets of insights. However, given the increasing normalisation of digital spaces to human experience, we would suggest that this is an area that is increasingly open to new research informed by disability and access scholarship. Within the context of this article’s findings, we would note that choice-supporting infrastructure already includes digital tools and systems that extend beyond the scope of the body, and that the accessible everyday includes the “onlineness of everything”. Following others, we would also emphasise that intersections of disability with digital poverty and new forms of social exclusion mean that digital technology cannot be viewed through a utopian lens. Rather, future research must attend to “the deeper, underlying meanings of access” (Foley and Ferri, 2012, 192) with an equity lens brought to the forefront.

## Conclusion

Drawing on stakeholder accounts and literature, we have developed a preliminary conceptual framework of accessibility by constructing themes that marked the boundaries and attributes of the concept. The full framework is presented in Appendix 1. As already noted, the preliminary framework was iteratively refined in response to feedback from an advisory group, attendees of a disability conference, and responses to an access needs survey. The final refined framework includes: an accessible experience, an accessible journey, an accessible community, an accessible choice, an accessible opportunity, an accessible future, and the accessible everyday. In constructing a central concept from these components, we understand accessibility as a focus on the extent to which the full range of life’s experiences can be understood, reached, and experienced equally and fully by everyone. This means that all aspects of their identities are able to be expressed, rather than those salient due to a perceived limitation or deviation from ableist norms (Bitman and John, 2019).

This conceptualisation offers an understanding of accessibility that extends beyond Persson and colleagues’ (2015) work which frames accessibility as simply related to people’s *use* of products, services, and spaces, rather than their experiences of these (see also Ahmer, 2021). We also move beyond what has emerged from the spatial geography literature. Although we found that spaces and journeys are indeed elements of accessibility, we also observed that accessibility is about people’s ability

to engage in meaningful social roles, the availability of fair and equitable opportunities for a variety of experiences, and the provision of resources to make empowered decisions, enabling different possibilities than those currently available. Accessibility should be continuously present and pervasive, available every day, now and in the future and continually advancing, evolving, and improving as things must in a changing world – giving space for conceptual innovation.

As we noted at the outset of this article, there is a tendency to think about accessibility in ways that focus on spatial navigation and physical access, particularly as they relate to ableist values inflected in the planning, design, and assessment of urban spaces (Blackman et al., 2003). An orientation to physical accessibility *only*, limits our thinking to improved movement across space as the sole determinant of accessibility. However, it is clear from our findings, that *how* space (and time) is used, experienced, and felt is also important, particularly regarding whether people feel welcomed, included, and that they belong. We would argue that such aspects of accessibility are often overlooked in studies of accessibility grounded in spatial geography literature. However, these “extra” elements are highly relevant to urban design and planning. People do not only need to gain entry to spaces, but also function within and enjoy them, within the temporal limits (Kwan, 2013). Access might be better understood through the introduction of a temporal lens, where compounding experiences of inaccessibility have ramifications for present access (Kwan, 2013). The opposite is also true, where someone’s experience of access is reinforced by positive experiences in the past that bolster confidence and capability in the present. The experiences of life are not merely confined to physical spaces, but also to non-tangible experiences such as learning and collective meaning-making. Access to such experiences is fundamentally relational in which the action of each person designing or engaging with an experience has an impact on others’ experiences.

## Acknowledgements

Our gratitude goes to all the people who contributed their perspectives to this and helped shape the conceptual framework presented in this report.

We would like to thank those organisations who provided advice and guidance to the research team to ensure our recruitment and data collection processes were as accessible as possible.

We acknowledge the time and contribution of our academic advisory group who played an instrumental role in directing us to relevant materials: George Major, Simon Walters, Huhana Hickey, Angsana Techatassanasoontorn, Anna Nelson, and Felicity Bright.

Finally, we thank Be. Accessible for their ongoing engagement in the research, their partnership, and funding.

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