



Radical Inclusion: The Key to Urban Transformation

Abstract Fifteen percent of the global population has a disability, which will only increase with aging demographic trends. The elderly population is expected to rise to 1.4 billion by 2030 and 2.1 billion by 2050. Half of the world's population already live in cities and cities will play an increasingly crucial role in promoting inclusion and addressing the needs of a rapidly changing demographic. As technology advances and assistive technologies are developed, disability will become increasingly common and cities must be transformed to be inclusive of everyone. The Capability Model argues that disability is not the attribute of the individual; instead, it is created by barriers that exist in the social environment and therefore requires social change. When barriers exist, inclusive communities work to transform the way they are organized to meet the needs of all people by mobilizing social, political, and economic factors to identify and eliminate participation barriers. Radical inclusion is a framework aimed at eliminating the barriers that hinder individuals and communities from reaching their full potential. It goes beyond full participation to create inclusive systems that promote equity and resilience. Inclusive communities aim to remove barriers that perpetuate poverty, inequality, disempowerment, isolation, and exclusion.

Keywords Radical inclusion • Disability • Agency • Equity • Resilience • Aging • Poverty • Capability deprivation

We all personally have, or know someone near and dear to us that has, some type of disability. That disability may be permanent or it may be temporary. Indeed each and every one of us will face all kinds of disabilities in our life. That is why it is so important that we design cities and our urban environments to meet the needs of all people. (Alice Charles, Director for Integrated Cities, Planning and Design, ARUP)

As I arrived at Burning Man for the first time, I was struck by the vibrancy and creativity of the playa. Everywhere I looked, I saw people of all ages, backgrounds, and abilities coming together to create, explore, and celebrate. It was a world unlike any I had ever seen before, and I was immediately drawn to its energy and spirit.

As I began to learn more about the culture of Burning Man, I was introduced to the concept of radical inclusion. This concept, which is central to the Burning Man community, recognizes that everyone has something valuable to contribute, and that we are all stronger when we work together. It challenges the notion that some people are more worthy or deserving than others and instead celebrates the diversity and uniqueness of every individual.

This fateful day on the playa was a turning point in my academic journey. As I encountered the vibrant culture of Burning Man and learned about the concept of radical inclusion, I realized that this was an approach that could be applied to many of the issues I was studying in my field. I began to explore the ways in which radical inclusion could be used to address issues of social justice, equality, and empowerment, and I became determined to use my research to make a positive difference in the world.

In the years since my first encounter with radical inclusion at Burning Man, I have continued to be inspired by the spirit and values of the community. This book is a testament to the profound insights that have grown over time. In the following pages you will learn ways that you can incorporate a radically inclusive approach to your work, and I have done firsthand. The experiences and lessons I have learned at Burning Man, and I am committed to continuing to promote the values of radical inclusion in my research and teaching.

DISABILITY AND INCLUSIVE DEVELOPMENT

Radical inclusion is a framework that seeks to eliminate the barriers that prevent individuals and communities from exercising agency and achieving their full potential. It goes beyond promoting full participation and seeks to create inclusive systems that allow for greater equity and resilience.

Approximately 15 percent of people globally have a disability. And this proportion will only continue to rise due to aging demographic trends. More than half of all persons with disabilities¹ live in towns and cities. By 2030, this number is estimated to swell to between 750,000 and 1 billion.²

In 2017, the population over the age of 60 was already approaching 1 billion people, or 13 percent of the global population.³ And of those, approximately 460 million older adults have one or more impairments.⁴ This demonstrates the significant, self-evident, and interlined phenomenon, that is aging and disability. In 2030, the population over the age of 60 will rise to 1.4 billion or 17 percent of the projected global population, which will usher in a corresponding increase in the proportion of people who live with a disability. By 2050, it will be 2.1 billion or 21 percent of the population. Impairments will not be eliminated in the future, they will be multiplied, and since the launch of the United Nations Sustainable Development Goals and the COVID-19 pandemic, we are being called to accelerate what I call the inclusion imperative. We must build back better and co-design the world at scale to ensure that no one is left behind.

Persons with disabilities face dramatically higher poverty rates than the overall population. In some countries, poverty rates can be double that of persons without disabilities.⁵ This has further consequential effects on people's health and their opportunities for education. Persons with disabilities also face digital barriers due to inaccessible websites or apps providing city services as well as barriers in the physical environment. In many cities, a lack of enforceable accessibility standards, lack of strict

¹We will use persons with disabilities (as defined by the UN), as well as disabled persons. There is considerable debate with the disability community on the usage of person-first versus identity-first language to describe the experience and identity of disability. For the purposes of this book, I have chosen to alternate between person-first and identity-first language, using the terms disabled persons, disabled people, persons with disabilities, and people with disabilities. Under Article 1 of the UN Convention on the Rights of Persons with Disabilities (UNCRPD), persons with disabilities “include those who have long-term physical, mental, intellectual, or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.” In addition, I want to recognize the scholarship and support of Dr. Catalano, who has accompanied me throughout the process of reviewing and completing this manuscript.

²WHO. (2011). World report on disability. World Health Organization, The World Bank.

³United Nations, Department of Economic and Social Affairs, “World Population Aging 2017 – Highlights,” 2017, https://www.un.org/en/development/desa/population/publications/pdf/ageing/WPA2017_Highlights.pdf

⁴*Ibid.* WHO. (2011).

⁵United Nations. (2019). Disability and development report: Realizing the sustainable development goals by, for and with persons with disabilities. Department of Economic and Social Affairs. United Nations.

regulations, and lack of training, tools, and guiding documents impede progress. In addition, up to two trillion dollars is forgotten as lost income from excluding persons with disabilities from employment.⁶

As technology advances, people with disabilities will attain greater capabilities that improve their capacity to live productive lives. In Silicon Valley, the merging of biotech, medicine, IoT, cloud computing, and machine learning is unlocking unprecedented advances in assistive technologies. This means that more people with disabilities are leading more diverse, productive, and authentic lives.⁷ There is a cultural shift occurring that is leading us toward fulfilling the promise of a better future for all. As more life-saving and life-extending technologies are developed, and as corresponding augmented and adapted human capabilities are unlocked by assistive technologies, we will see disability less as an oddity and more as the norm. Making cities age-friendly is an effective policy response to an aging population and ensures that physical and social environments exist that enable people to live healthy, independent, and autonomous lives into older age.

TRANSFORMATION BY UNLOCKING CAPABILITIES AND REMOVING BARRIERS

Nearly four billion people on earth already live in cities. And the population living in urban areas is increasing by 200,000 people per day. All of these new additions to urban environments need affordable housing as well as social, transportation, and utility infrastructure.⁸ Cities shape virtually every aspect of global development, including the manner in which fundamental dignities and human rights are recognized, discussed, and implemented. This rapid urbanization has provided opportunities for transformational change, moving at an accelerated pace to improve social inclusion, access to services, and livelihoods. Cities also play a vital role in engaging marginalized populations that might otherwise be at risk of exclusion. How are we building our cities, and what rules and structures

⁶International Labour Office. (2009). The price of exclusion: the economic consequences of excluding people with disabilities from the world of work/Sebastian Backup; International Labour Office, Employment Sector, Skills and Employability Department. – Geneva: ILO, 2009 85 p. (Employment working paper; no. 43).

⁷World Health Organization. N.d. Assistive technology. https://www.who.int/health-topics/assistive-technology#tab=tab_1

⁸Agenda, I., (2016), May. Shaping the future of construction a breakthrough in mindset and technology. In *World Economic Forum*.

are in place to ensure that they meet the needs of a rapidly changing demographic?

Inclusion is not about inserting persons with disabilities into existing structures, but about transforming systems to be inclusive of everyone. Amartya Sen⁹ proposed the Capability Model, which was further developed by Martha Nussbaum¹⁰ in the *Frontiers of Justice*.¹¹ I argue that their work helped advance my understanding of inclusion and provided a rich framework for my professional and academic journey to build cities of inclusion and belonging. The Capability Model focuses on the type of life a person is able to live, with “capability” defined as “practical opportunity.” Under the Capability Model, disability is when an individual is denied or prevented from achieving practical opportunities as a result of their impairment. Thus, an individual is disabled when they are unable to do the things they value as a result of the interactions between their impairment and the social, cultural, economic, and built environment around them.

In this model, an “impairment is a prerequisite to disability,” but it is its interactions with other characteristics (e.g., gender, age, race, etc.), the environment, and the resources at the disposal of the individual that cause capability deprivation, that is disability.¹² Unchecked barriers perpetuate exclusion, isolation, disempowerment, poverty, and inequality. In this sense, the Capability Model overlaps with the Social/Rights model of disability that sees disability as a social construct.¹³ To be sure, disability is not the attribute of the individual; instead it is created by the social environment and requires social change. When barriers exist, inclusive

⁹Amartya Sen is an Indian economist and philosopher who is best known for his work on the causes of famine, welfare economics, and the capabilities approach to development and social justice. Sen has made many significant contributions to these fields, including his development of the concept of “capability deprivation” to describe the ways in which individuals are denied the opportunities to lead the kind of lives they value.

¹⁰Nussbaum’s contributions to the capability approach and her critique of Rawls’s theories of justice help us understand the ways in which individuals with disabilities are often denied or prevented from achieving their full potential due to the barriers and limitations they face.

¹¹Nussbaum, M.C., (2007). *Frontiers of Justice: Disability, Nationality, Species Membership*, The Tanner Lectures on Human Values. Belknap Press, Cambridge, MA.

¹²Mitra, S., n.d. The Capability Approach and Disability 16. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.546.9171&rep=rep1&type=pdf>

¹³We will introduce later Ed Soja’s notion of Social and Spatial Justice to expand and tie together diverse and complementary theoretical approaches to building cities of inclusion and belonging.

communities work to transform the way they are organized to meet the needs of all people by mobilizing social, political, and economic factors to identify and eliminate participation barriers.

We often think of barriers on a smaller scale, such as the provision of wheelchair ramps or curb cuts. But in truth, many of these barriers exist at the macro level. This includes outdated laws and incoherent, incomplete, or outdated approaches to inclusion. These are intermingled with prevailing social attitudes that can include implicit bias, discrimination, prejudice, or general misconceptions about disability. These sometimes appear as fixed requirements and standards that create additional burdens, such as having affordable housing applications on an inaccessible website, or a medical or social welfare office housed in a public building with steps, or without proper signage or a working elevator.

Thinking about barriers in a systematic way encourages policymakers, designers, architects, engineers, construction companies, and service providers to confront very compelling and complex issues of contemporary societies in order to create capabilities. For example, spatial segregation, economic exclusion, lack of opportunities, and skills mismatches result in a majority of marginalized individuals in low-paying and sometimes informal jobs that don't provide them with any kind of reliable income. Lack of a formal address or identity may preclude access to formal jobs while lack of education and poor health can also restrict access to higher-paying jobs. Additionally, unaffordable transit fares and disconnection from the public transportation network further suppress access to economic opportunities. By acknowledging, identifying, and assessing barriers, pathways to bringing previously hidden issues to the surface are created. This in turn allows for collaborative designs and innovative solutions to be developed and implemented to make our cities and societies more inclusive and accessible for all.

The insights of Amartya Sen and Martha Nussbaum on the capability approach contributions on social and spatial justice can be applied to urban planning in several ways.¹⁴ First, urban planners can use the capability approach to understand the ways in which the built environment and urban infrastructure can enable or disable the capabilities of individuals with disabilities. For example, planners can design accessible public transportation systems, buildings with ramps and elevators, and other features

¹⁴Amartya Sen applied this approach to issues of poverty, inequality, and social justice, arguing that these are not just economic problems, but also moral and political ones. Sen has received numerous awards and honors for his work, including the Nobel Memorial Prize in Economic Sciences in 1998.

that can help individuals with disabilities move around the city and access the same opportunities as those without disabilities.

TRANSFORMATION BY OVERCOMING THE “MISMATCH”

For better or worse, the people who design the touchpoints of society determine who can participate and who’s left out. Often unwittingly. A cycle of exclusion permeates our society. It hinders economic growth and undermines business success. It harms our collective and individual well-being. Design shapes our ability to access, participate in, and contribute to the world. (Kat Holmes, Author, Mismatch)

She sat down in my living room, leaned forward and said, “you don’t know how excited I am to finally spend some time with you.” It was 2014 and the brilliant and unassuming Microsoft executive named Kat Holmes was an inclusive design champion. Kat was just starting to formulate the core structure of her [book, Mismatch](#). We shared stories of travels and mutual friends between sipping on afternoon tea. At some point, we started talking about human agency and she plunged into describing how mismatches have come to be a core litmus test for what would constitute effective or ineffective design. She described a mismatch happening between people and objects, either physical or digital, when the object doesn’t fit a person’s needs so that people then have to adapt themselves to make the object work. A wheelchair user, upon encountering a curb without a curb cut, is experiencing a mismatch. As is anyone who has ever tried to open a manual door with their hands full. Essentially, disability is the result of mismatched interactions under the social model of disability.

Mismatches make aspects of society accessible to some people, but not all people, which contributes to the societal invisibility of certain groups like people with disabilities. Radically inclusive cities identify, monitor, and respond to these mismatches, creating cities that work for all their inhabitants and in doing so, promote capabilities through the implementation of Universal Design principles. Every time we remedy a mismatched interaction, we are creating opportunities for more people to contribute to society in meaningful ways, which in turn increases the number of people who can participate in building the world that we want to create.¹⁵

I think my favorite example of technology that was introduced into the world without thinking clearly and including a broad set of perspectives is in public restrooms. The image I like to share is a toilet which has a sensor

¹⁵ Holmes, K., (2006). *Mismatch: How inclusion shapes design*. MIT Press.

on the back of it for the flushing mechanism and it has a little sign on the wall that is not so intuitive and it tells you to wave your hand over the sensor in order to activate the toilet to flush. It's a great example of where I can just see somebody saying, "this is innovative, this is the future" but it's just such a perfect example of the kind of mismatches that happen when we pursue "innovation" without understanding who we've excluded in the process.

If you consider who might experience a mismatch in using that sensor, you realize that the whole system doesn't work for someone who is blind or has low vision and can't see the sensor or the sign. Or for someone who can't wave their hand or doesn't have a hand available. Or somebody who can't read English. As we put all those together we start to say, "wait a minute, who is this toilet designed for?" and it sends a signal of who is foreign and who isn't foreign or in essence, who's welcome and who's not welcome in that environment.

Without forethought, these mismatches occur over and over again. They occur anytime we introduce new technology into our cities such as payment touchpoints for transit systems or buying groceries. They generally occur when we remove a human from an environment and replace them with some kind of machine-based system. Each time we do this we create a new set of abilities that are required in order to be able to participate in that aspect of society. This is why I really love the questions "who might be excluded?", "who might experience a mismatch?", and "whose voice is missing from this process?" Because it is innate behavior to design to our own abilities and to our own preferences.

How do we build systems that identify and eliminate mismatches? How can we build belonging by design? Universal Design principles represent a highly effective starting point from which we can begin to unlock human capabilities and empower people to live the type of lives they have reason to value.

WHAT IS UNIVERSAL DESIGN?

Accessibility is the bridge between a person's human rights and the fundamental freedoms that enable them to best make use of them. It helps to create an inclusive, productive, mobile, and peaceful society where people can engage with the built environment and one another. Our built environment strongly affects our quality of life as it is a determinant of where and how almost everyone lives, works, and plays. In the United

States for example, people on average spend nearly 90 percent of their time indoors.¹⁶ So our access to those spaces and how they make us feel when we are in them is extremely important for our individual and collective wellbeing. But too often, a one-size-fits all approach is used to design buildings and urban spaces. For older persons or persons with a disability, this can mean navigating complex urban landscapes with many inaccessible public spaces.

The seven principles of Universal Design were developed to help guide the design of environments, products, and communications. The principles can be used to guide the design process, evaluate existing designs, and educate designers and citizens on the possibilities and features inherent in more usable products and environments. The goal of Universal Design is to maximize usability by individuals with a wide variety of characteristics. Some straightforward examples of effective Universal Design are things like curb cuts in sidewalks or the use of larger or color contrasting text in signage or other forms of public communications. Whether we are talking about learning strategies or physical space, Universal Design operates by a set of principles designed to maximize access to as many people as possible. The following examples were developed by the Center for Inclusive Design and Environmental Access at the University of Buffalo.¹⁷

Equitable use

The design is useful and marketable to people with a diverse range of abilities. For example, a counter space or desk surface may be raised or lowered to accommodate users of varying height, or to better suit an individual who uses a wheelchair.

¹⁶Shaping the Future of Construction: A Breakthrough in Mindset and Technology [WWW Document], n.d. *World Economic Forum*. URL <https://www.weforum.org/reports/shaping-the-future-of-construction-a-breakthrough-in-mindset-and-technology/> (accessed 5.16.23).

¹⁷The [Center for Inclusive Design and Environmental Access \(IDeA Center\)](#) focuses on research, development, education, dissemination and design projects related to Universal Design. The IDeA Center is dedicated to enabling and empowering an increasingly diverse population by developing knowledge and tools that improve the human performance, health and wellness, and social participation of groups who have been marginalized by traditional design practices. The IDeA Center's activities are based on the philosophy of inclusive design, often called Universal Design or design for all.

Flexibility in use

The design accommodates a wide range of individual preferences and abilities. For example, a captioned video will allow people to choose to listen or to read in order to better understand content. This not only provides access to individuals with hearing impairments but also accommodates those who would rather not use sound or who naturally comprehend better through reading.

Simple and intuitive use

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level. For example, a website that is well-organized with clear headings will facilitate access to information.

Perceptible information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities. For example, a video includes a voiceover for individuals with visual impairments.

Tolerance for error

The design minimizes hazards and the adverse consequences of accidental or unintended actions. For example, a hallway is free of protruding objects at a height where they would not be detectable by someone with a visual impairment who uses a cane.

Low physical effort

The design can be used efficiently, comfortably and with a minimum of fatigue. For example, an automatic door opener can facilitate access to an office space or classroom.

Appropriate size and space for approach and use

Appropriate size and space are allotted for approach, reach, and manipulation regardless of physical characteristics such as size or mobility. For example, a classroom includes a range of seating options, including a table for someone who uses a wheelchair or wider chairs for individuals who are taller and/or larger.

Research from the International Labor Organization shows that the cost of excluding persons with disabilities equates to up to seven percent of national GDP.¹⁸ It therefore makes complete sense for city leaders to invest in accessibility improvements in urban environments and services. When designed and built from the outset to follow Universal Design principles, additional costs of accessible urban infrastructure, facilities, and services are tiny, representing an increase of between zero and one percent. However, if these improvements are done as part of retrofitting or redesign exercises, then cities can expect significantly higher expenses.

A radically inclusive city understands and responds to mismatch and has the capabilities to promote, engage with, and implement principles of Universal Design at the city scale. To design a future for all, design must be used as a method for social change and must be incorporated from the very outset of infrastructure and urban development; in the planning stage. This initial phase needs to include input from all stakeholders, including those involved in the actual construction of projects as well as all stakeholders these developments are aimed at or affected by. Prominence needs to be given to project planning and scoping, for example by conducting sophisticated needs assessments and feasibility analyses.

This early phase should ideally incorporate the knowledge of all affected stakeholders as well as each of the companies involved in the construction in order to incorporate best practices at the most efficient cost basis. However, in practice the construction industry is one of the most fragmented in the world and is strongly shaped by the interplay between large numbers of participants along the supply chain and throughout the life cycle of projects and major urban developments, with the consequence that accessibility criteria are often poorly implemented, if not wholly neglected. Also, the companies tasked with building our cities rarely have the capacity to fully integrate accessibility into their established project management processes. For example many projects go to tender and even begin construction before detailed scoping has taken place. In addition, inclusive design practices and participatory planning principles are seen as luxuries and projects miss out on inclusive approaches to innovation and fail to utilize intangible resources or hidden cost saving measures.

To help address these challenges, governments, policymakers, and city leaders need to support the industry in enhancing its coordination and

¹⁸Buckup, S., (2009). The price of exclusion: The economic consequences of excluding people with disabilities from the world of work. *International Labour Organization*.

cooperative efforts along the entire extent of the value chain and jointly define and establish design and construction standards that lead to achieving common goals for the greater good.¹⁹ Focusing on design also impacts other mechanisms including governance, creates better products and services, and encourages people to imagine structures that can solve problems at scale. Being intentional through design helps us build in radical inclusion instead of bolting it on. When cities are planned to follow the principles of Universal Design, everyone benefits.

CAN WE UNIVERSALLY DESIGN AN ENTIRE CITY?

In this chapter, we discussed the extent to which the “inclusion imperative” should be an inescapable priority for policymakers, designers, and service providers. Centering on inclusion is vital to not only realizing the sustainable development goals (and the broader 2030 Agenda), but also addressing a specific set of interconnected challenges that policymakers are confronted with such as inequality, an aging population, rapid urbanization, digital transformation, climate change, and migration flows, just to name a few.

Undoubtedly cities, towns, and municipalities are the locus of inclusive and accessible transformation not only because rapid urbanization makes it even more compelling to make cities places of belonging, but also in that the proximity between local governments and their dwellers can strongly contribute to co-creating new solutions, piloting new practices, and scaling successful approaches as new norms, which ultimately shapes more inclusive urban governance models.

Governments at the national level usually aggregate solutions for the greatest good. A senior policy maker at the US Federal Government confided, “National Governments tend to use a hammer instead of a scalpel.” The obvious shortcoming here is that outliers are too often left behind. People that fall on the ends of the bell curve are simply forgotten. A radically inclusive approach at a local level would naturally be more nuanced. Local governments that center on inclusion also center their policies, programs, and initiatives on the “outliers,” or people living on the margins. This means they design their policies using the basic premises of Universal Design, through a process of creating products that are accessible to

¹⁹See above: *Shaping the Future of Construction: A Breakthrough in Mindset and Technology* [WWW Document], n.d. *World Economic Forum*. URL

people with a wide range of abilities, disabilities, and other characteristics. In essence to benefit the greatest number of people without the need for specialized or separate designs.²⁰

Building a municipal or urban governance model that empowers people to live the types of lives they value, that unlocks everyone's capabilities is not an ideal, it is not a dream. This is a necessity and a prerequisite to create scalable, robust, resilient, and antifragile²¹ commodities or services that are provided without profit to all members of a society. Systems, agencies, or organizations that are antifragile benefit from shocks; they thrive and grow when exposed to volatility, randomness, disorder, and stressors and are enhanced by risk and uncertainty. Governments, private individuals, corporations, and civic organizations should approach risk and uncertainty as opportunities to identify and enhance failures or weaknesses in vital infrastructure, enhancing a system capable of serving us for the future we need.²²

CLIMATE CHANGE ADAPTATION AND ACTION

Globally significant problems such as climate change require new approaches to urban planning and design as well as transformative interventions. The necessity of these interventions is driven by a variety of existential challenges to existing infrastructure and involves new and more inclusive approaches to urban governance, policy, and design. Each of these approaches when applied to climate adaptation, net-zero carbon policy requirements, or broader sustainability initiatives must also consider radical inclusion as a cross cutting theme for shaping the future of cities: Climate change and its impacts can disproportionately affect marginalized communities so ensuring that climate adaptation policies and sustainability initiatives are inclusive is critical. The following are examples of how radical inclusion can be incorporated into governance and policy approaches to strengthen core outcomes:

²⁰ Universal Design means planning to build physical, learning, and work environments so that they are usable by a wide range of people, regardless of age, size, or disability status. While Universal Design promotes access for individuals with disabilities, it also benefits others.

²¹ Anti-fragility goes beyond robustness; it means that something does not merely withstand a shock but actually improves because of it. The concept was developed by professor, former trader, and hedge fund manager Nassim Nicholas Taleb.

²² A classic example of something antifragile is Hydra, the Greek mythological creature that has numerous heads. When one is cut off, two grow back in its place.

Building coalitions: In building coalitions to support climate adaptation and sustainability policies, it is essential to ensure that the voices and perspectives of marginalized communities are heard and included. This should involve engaging with disability rights advocates, community organizations, and other stakeholders to ensure that policies are designed to meet the needs of all members of the community.

Educating the public and conducting outreach: Educating the public and reaching out to communities that may be impacted by climate change and sustainability policies can help to build support and ensure that the policies are designed to meet the needs of those who may be most affected. This can involve providing information through public campaigns, public forums, and social media, as well as engaging with community leaders, hosting public forums, and conducting surveys to gather feedback from community members.

Developing partnerships: Developing partnerships with businesses, non-profit organizations, and other stakeholders can help to leverage resources and build support for policy initiatives that promote sustainability and radical inclusion. This can involve partnering with organizations that serve marginalized communities, such as disability rights organizations or organizations that work with low-income populations.

Providing data: Providing data on the experiences of marginalized communities, the costs and benefits of policies and the impact of policies on different stakeholders can help to build support for policy initiatives that promote radical inclusion. This can involve collecting and analyzing data on the impacts of climate change on different communities and sharing that data with policymakers and the public.

Engaging with the legal system: Engaging with the legal system to ensure that climate adaptation and sustainability policies promoting inclusion and accessibility are legally sound and can withstand legal challenges is also important. This can involve working with legal experts to develop policies that are legally defensible and engaging with the legal system to defend those policies when they are challenged.

Fostering a culture of inclusion: Finally, fostering a culture of inclusion within city government and among the public can help to build support for policies promoting inclusion and accessibility. This can involve training city staff on inclusive practices and values, as well as promoting a message of inclusion and accessibility through public outreach campaigns.

GREEN AND BLUE SPACES AND CORRIDORS

Green and blue spaces and waterways are becoming increasingly popular in urban planning as a way to address the challenges of climate change and promote sustainability. They also have additional benefits for the health and wellbeing of a city's residents, as these spaces have a proven positive impact on mental health. They are particularly important spaces for persons with disabilities, older persons, and people who are neurodiverse, as these people may be prevented from accessing some other recreational or natural environments due to preferences against visiting crowded or difficult to access locations. Green corridors are linear parks or strips of green space that connect different parts of the city, while blue corridors incorporate water features such as rivers and streams.

In addition to providing environmental benefits such as reducing the urban heat island effect and mitigating stormwater runoff, green and blue corridors also have significant social benefits. For example, bioswales²³ and rain gardens, which are commonly used in green corridors to manage stormwater runoff, can provide opportunities for gardening and urban agriculture, creating a sense of community ownership and pride. In addition, these green spaces can provide much-needed recreational opportunities, particularly for people living in densely populated areas with limited access to parks and gardens.

Green and blue corridors can also play an important role in promoting mental health and wellbeing. Exposure to nature has been shown to have positive effects on mental health, including reducing stress and anxiety and improving mood. For older persons and persons with disabilities, green and blue corridors can provide accessible and safe spaces for physical activity and social engagement, helping to combat social isolation and promote a sense of belonging in the community.

An example of a green corridor is The Promenade Plantée, which is a 4.7 km-long elevated park built on a former railway viaduct in the 12th arrondissement of Paris. It was one of the world's first green corridors and

²³ Bioswales are shallow, vegetated channels that capture and filter stormwater before it enters the sewer system. Rain gardens are landscaped areas designed to capture and absorb rainwater runoff from roofs, sidewalks, and other impervious surfaces. An example of a bioswale is the Westwood Rain Garden in Portland, Oregon, which is a community-led project that captures and treats stormwater from adjacent streets. An example of a rain garden is the Rain Garden Park in Olympia, Washington, which features several rain gardens that capture and filter runoff from a nearby park.

has inspired many similar projects around the globe. The park has become known for its beautiful gardens, scenic views, and the diverse wildlife that it attracts. Another example is the High Line in New York City. The High Line is a 2 km-long elevated park built on a former railway line in Manhattan. The High Line provides an attractive green space in the middle of a dense urban environment while also providing a unique perspective of the city.

The High Line, New York City Before and After



Image of the highline rail tracks before the area was renovated into public park space. Image shows two people walking along the tracks elevated above the city, which have become overgrown with weeds and grass. (Image credit: Dan Nguyen https://commons.wikimedia.org/wiki/File:Walking_tour_of_rail_yards,_before_it_became_the_third_and_final_section_of_the_High_Line.jpg)



Image shows the renovated highline tracks, which are now a public recreation area. The image shows a crowd of people walking along the High Line, and in the background there are older brick buildings next to newer, larger, glass and metal buildings. (Image credit: Dan Nguyen https://commons.wikimedia.org/wiki/File:AHigh_Line_Park,_Section_1a.jpg)

For blue corridors, an example is the Chicago Riverwalk, which transformed the city's industrial riverfront into a public space with walking paths, seating areas, and restaurants. Another example is the Cheonggyecheon Stream in Seoul, South Korea, which was transformed from a polluted waterway and elevated highway into a natural and cultural amenity with walking paths, bike paths, and green spaces.

Cheonggyecheon Stream in Seoul Before and After

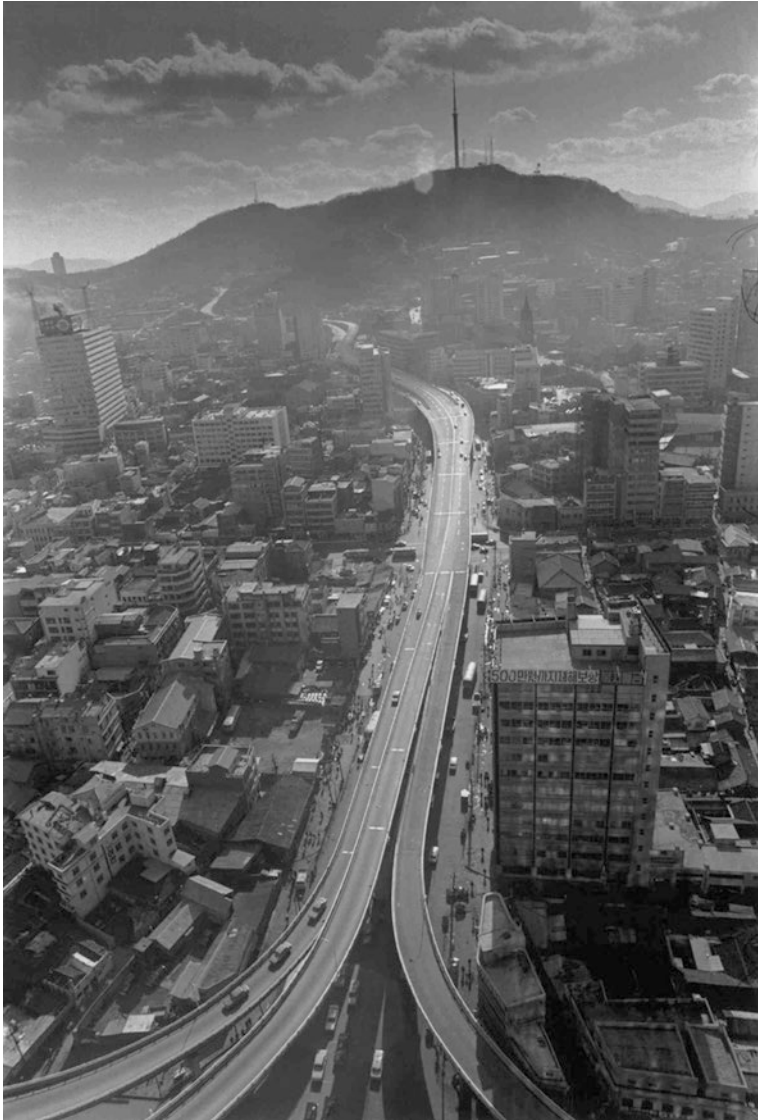


Image shows the Cheonggyecheon highway before it was removed as part of the river restoration project. Image shows an elevated highway next to a ground-level highway, with many cars driving along it. (Image credit: Cheonggye Expressway in 1972, 대한민국역사박물관 (National Museum of Contemporary Korean History) https://commons.wikimedia.org/wiki/File:Chonggye_Expressway_1972-05-20.png)



Image shows the Cheonggyecheon Stream, located where the highway had been. Alongside the stream are walking paths and grassy areas and the image shows many individuals walking and sitting alongside the river. To the river's left and right are small, two-lane roads. (Image Credit: [Grayswoodsurrey https://commons.wikimedia.org/wiki/File:CheonggyecheonSeoul.jpg](https://commons.wikimedia.org/wiki/File:CheonggyecheonSeoul.jpg))

By incorporating green and blue corridors into urban planning, cities can create more inclusive and welcoming spaces that respond to the needs of diverse populations. By providing accessible, safe, and beautiful spaces for physical activity, recreation, and social interaction, these corridors can foster a sense of community belonging and promote social cohesion. This can have significant benefits for public health and wellbeing, as well as for the overall livability and resilience of cities.

QUESTIONS TO GUIDE OUR PRACTICE

How might we empower people with new innovative solutions to build more inclusive and accessible cities? If a city is a complex system of systems, then how might we foster innovation in governance by design? Could we possibly create a cost-effective process to scale new more integrated solutions across all these urban systems? And how can those

systems promote equity, access, inclusivity, and belonging? How can they be used to prevent marginalization and further empower persons with disabilities and older persons? It's not easy but in the following chapters, we will see how we can begin to Universally Design an inclusive city.

In this book, we will try to answer these questions by keeping in mind that there is no one-size-fits all solution. Instead, we have to be intentional in seeing the multiple dimensions of exclusion and recognizing that each of those dimensions requires a different approach.

Nevertheless, before starting our journey, it is vital to dig deep into the concepts that form the basic framework for radical inclusion and the main theories and approaches related to it, which is what we will do in the next chapter.

CALLOUT BOX—NEWS ARTICLE

District faces disability rights lawsuit over bike lane designs

Source: The Washington Post

Consider This A lawsuit filed by two disabled women accuses the District of Columbia of adopting protected bike lane designs that make it harder for them to find safe parking, and which violates the Americans With Disabilities Act. This lawsuit highlights the need for urban planners to increase collaboration with all stakeholders, in this case to specifically consider the needs of individuals with disabilities, in their designs. The lawsuit resulted in changes to the design of bike lanes in Washington, D.C. and could potentially set a precedent for other cities to consider more open collaborative processes that center accessibility in their public planning processes.

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