

Access Unlimited: Approaches to a Barrier-Free Pedagogy

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With the conviction that architecture, as a practice and a pedagogy, is equipped to navigate and accommodate emerging issues in a capacity that transcends the perception of limitation, and that architectural education is fertile ground for experimentation outside the pressures of practice, ‘Access Unlimited’ is an ongoing pedagogical, design, and research project focused on methods of engaging architecture students in re-thinking defaults in accessible design. This work endeavors to make barrier-free design, the understanding of disability, and the topic of accessibility, in a word, accessible. Issues of accessibility can be physical, social, legal, spatial, perceptible, and imperceptible, and to be accessible means a lot of things (especially about being approachable, able to be reached, or friendly and easy to talk to). A significant challenge of making the world more accessible to those with disabilities involves making the topic of accessibility not only more easily understood, but even more inviting, toward productive possibility. Selwyn Goldsmith’s 1967 *Designing for the Disabled: A New Paradigm* identified the built environment as complicit in the creation and promotion of disabling situations, by pointing out that it is the architecture that must make accommodations, not the disabled user’s body. However, 56 years after Goldsmith’s critique, architecture continues to struggle with a delayed reaction to accommodation. Despite progress in the form of the Americans with Disabilities Act (ADA), it remains common for architects and students of architecture to approach accommodation as an unwelcome afterthought to a design, making it challenging to recognize opportunity instead of constraint.

The nature of disability is not defined so much by impairment as by the ways in which society - and the designed environment - bolsters and shapes our definition of ability.

—Elizabeth Guffey, *Designing Disability: Symbols, Space, and Society*

‘Access Unlimited’ was prompted by an impactful 2017 lecture given by two disability activists (both students, both disabled) within my institution.¹ As an architect and educator, I was struck by two things: how much the presenters lamented disabling architectural conditions which seemed almost impossible to resolve, and how few architecture students attended this lecture. ‘Access Unlimited’ continues to be motivated by both challenges, and is fueled by the idea that architecture is inherently equipped to navigate and accommodate emerging issues in a capacity that transcends the perception of limitation, but also that architectural education is fertile ground for experimentation outside the pressures of practice. The work is pedagogical, design-focused, and research-based, focusing on diverse methods of engaging architecture students (and others) in situations where innovative design for accessibility is understood as a given and not an exceptional situation. The goal is to make barrier-free design, the understanding of designing for disability, and the topic of accessibility, accessible.

THE (IN)VISIBILITY OF DISABILITY

Accessibility can be physical, social, legal, spatial, perceptible, and imperceptible. To be accessible means a lot of things, but a significant challenge of making the world more accessible to those with disabilities involves making the topic of accessibility not only more easily understood, but more approachable. In simple terms, this can sometimes come down to the fact that it’s difficult to understand what can’t be seen, or to see what is not understood.

The history of disability rights is characterized by exhausting efforts by disabled individuals to be seen, heard, and understood, in order to make even minor inflections on the deep-seated attitudes of indifferent misapprehension held by



Figure 1. 'Mobile Access' Thesis project by Morgan Cook, 2019

those in positions of power. In April 1977, disabled activists in San Francisco demanded the enforcement of Section 504² of the 1973 Rehabilitation Act, which had still not been implemented; and Joseph Califano, the new Health, Education and Welfare (HEW) Secretary was proposing a further diminished version before signing. The efforts of the 504 Sit-In would finally pay off after 24 days of grassroots commitment, unparalleled resourcefulness within the disabled community, and growing support from multiple directions. But one moment stands

out: on April 15, 1977, about halfway through the sit-in, Judy Heumann, of the Center for Independent Living and the ACCD (American Coalition of Citizens with Disabilities), addressed the HEW's Eugene Eidenberg. Judy's voice broke uncharacteristically as she asked for basic human rights, through the enforcement of Section 504. Eidenberg, sent by Washington to try to shut down these inconvenient (for Washington) protests, sat facing her, nodding uncomfortably, as Heumann continued: "and I would appreciate it if you would stop shaking your head in agreement when I don't think you understand what we are talking about."³

These words - "I don't think you understand" - are present in every barrier to accessible use, every empty gesture that misses the point, and every time (decades after the hard-won and long overdue milestones of 504, or the Americans with Disabilities Act) accommodations within the built environment are presented as favors rather than civil rights.

ACCESSIBILITY IS AN AFTERTHOUGHT INTEGRAL

It's not so difficult for architecture to follow whatever rules it prizes, and though much of architecture built in the U.S. today is sufficiently respectful of the ADA, it can seem to be so with an attitude of being put on the spot and nodding in agreement (or disagreement), but not always understanding. We can trace this ambivalence to how we have been trained to think about the bodies that use what we design, and how often that defaults to an idealized human user like the Vitruvian Man or Le Corbusier's Modulor. Architecture's large scale makes it easy to ignore people completely, or to acquiesce to a 'typical' in the consideration of human users, but there is great value in embracing reality, and in understanding what motivates other design disciplines' attention to humanity. Legendary industrial designer Henry Dreyfuss had his staff wear the artificial limbs they designed for WWII veterans. Unable to use the devices effectively, they sought the direct involvement of the amputees who would wear them. "Everything we design is used by people," Dreyfuss wrote, and "people come in many sizes and have varying physical attributes."⁴ For the past 15 years, Nissan has been perfecting the 'aging suit,' a full body garment that physically mimics an elderly body, toward improved insight in the design of automobiles that address an aging population. And the OXO Good Grips kitchenware brand has discovered that designing products to benefit those with disabilities benefits everyone else as well. In architecture, by making disability more visible to ourselves as designers, we can increase our agency to push back against a recurrent primary defense against accessibility (which has typically been along the lines of, 'but who will pay for it?') and more willingly take responsibility for the fact that, lacking accessibility, it is the disabled community that has always borne the highest costs in society.⁵

Selwyn Goldsmith's 1967 *Designing for the Disabled: A New Paradigm* identified the built environment as complicit in the creation and promotion of disabling situations, by pointing out that it is architecture that must make accommodations, not a disabled user's body. This is not news to any disabled person, but still seems to come as a surprise to many. 'Access Unlimited' is asking architecture to keep going - way beyond the ADA - to respond to the imperative for barrier-free inclusion with a depth and breadth that avoids what David Gissen describes as the "shallowness" of attempts at accessibility that are more like technical problems to be solved than cultural and architectural integrations.⁶ The courses, activities, and events described herein represent a series of continually evolving and often overlapping approaches to teaching that prompt students to start new conversations about design for accessibility, toward

architectural thinking that not only 'lowers the cost' to the disabled community, but elevates all users.

TEACHING ACCESSIBILITY

The Master of Architecture Graduate thesis studio 'All Access' proposed that, in bringing to the forefront our thinking about design for accessibility, we can better ask architecture to lead instead of follow. By not defaulting to a delayed reaction to accommodation, this course asserted that architecture can become more, and not less, inventive. Run as a research seminar in Fall 2018, and design studio in Winter 2019, this was an important starting point for the farther-reaching 'Access Unlimited' teaching agenda, aspects of which have subsequently been included within the required building studio and professional practice courses for graduate students in our program. Significantly, "Mobile Access," the final thesis project of student Morgan Cook was chosen as the runner up for the best thesis award in our school, from a class of over 150 other students; and her project was later featured in an exhibition of barrier-free design solutions in an international design competition. The students from this studio are now active members



Figure 2. 'Fresh Access Guidebook,' 2019. Cover: Julia McMorrough



Figure 3. Students in the ‘Fresh Access: All Graphics’ seminar displaying copies of *Approachable*, vol. 1 in April 2023

of the professional community, well-equipped to share their knowledge of design for accessibility with an expanded field of colleagues and clients, and many continue to develop their thesis ideas in practice.

ADJUSTING ATTITUDES

The Master of Architecture seminar, ‘Fresh Access: All Graphics’ is an offshoot of the ‘Fresh Graphics’ design seminar, itself an elective course that operates under the ambition to ‘draw to architecture’ through communication of complicated ideas in accessible ways. ‘Fresh Access: All Graphics’ has specifically focused on the topic of accessibility as both design for disability and the communication of ideas to expanded audiences. The class is organized as a simultaneous research seminar and design workshop focused on the role of graphic design and communication in providing access to greater understanding of design for and about accessibility. The work in the course intertwines graphic design logics set forth a century ago by Otto and Marie Neurath (pioneers of the Isotype and visual education), and a historic understanding of the graphic world that has shaped current understanding of design for accommodation. Neurath’s motto, “words divide, pictures unite,” unifies this course’s efforts to give accessibility a stronger

graphic voice within our designed environments, including a re-evaluation and re-design of current graphic standards for accessible design. In the first offering of the class (2019), students collaborated on a “Fresh Access Guide to Accessible Design,” a document created specifically for their peers. The book continues to be shared with incoming students to our program, and spurred by student interest in this Guide, the students in the most recent offering of this class (2023) picked up where this effort left off, proposing increasingly interactive formats for the work. In the class this past winter, the students worked together to create “Approachable,” a zine-based experiment in communication about barrier-free design. Issue no. 1 was prepared for an audience of the students’ friends, with a focus, in this first volume, on providing a framework for understanding multiple historical issues and challenges in the evolution of design for disability. More volumes of the magazine are being planned for future studio and seminar courses, each focusing on unique themes within design for disability.

HANDS-ON LEARNING

In the seminar ‘Fresh Graphics: Fun-n-Games,’ students created pedagogical games about architecture, testing them with various audiences that ranged from children to architects. This class was instrumental in the later development of the “Measures of Access,” design and research project⁷ focused on the creation of games and play as lighter methods for sharing



Figure 4. *Approachable, vol. 1*: sample spreads. Students: Abraham Ramirez, Belen Heybroek, Kendra Soler, Esther Francois, Maya Fraser, Ellen Taube, Timothy Peterson, Pilar O'Hara, Claire Jiang, Areej Shahin

accessible design concepts. After first researching games throughout history, we proposed a set of our own, beginning with Access Chess, which, like the original, is a study of multiple subjects and strategic thinking. Access Chess redefines the pieces of the game, which now reflect a range of abilities. The objective changes too, to move with all pieces together, from side to side. The goal is no longer dominance, but cooperation, as a study of multiple subjects in the choreography of care.

Access Chutes and Ladders is a study of movement, inspired by the original (a game of fate and enlightenment): in efforts to ascend, one comes across obstacles and opportunities. Within our study, we translated the game into Elevators and Stairs, revealing it as a building section whose navigation is dictated by the provisions of circulation and of movement assistance.

Access the Game is a pedagogical system that is part game, part tool, part toy, invested in the development of ideas about accessibility across a wide audience. While the general motivation of accessibility is easy enough to convey (make things possible for everyone), to understand how is a more difficult proposition (in that it might be different for everyone). The game engages exploring difference and accessibility in a manner that is more than only adhering to the ADA, but also more didactic than simply having “good intentions” toward making accessible environments. Through play and interaction, the game facilitates an understanding of differences in the ways that people move through and interact with the world. Primarily, each player is responsible for two game pieces (one ambulatory and one in a wheelchair) as well as two pieces of a final communal space. The objective is simple: to bring everybody together into one shared space. Every turn brings an opportunity to move, but obstacles will abound, requiring re-calibrations of movement. The design of the pieces lets the player know right away who can have access; players figure out quickly what kinds of spaces make an environment available to all. Playing the game sets up opportunities for cooperation, accommodation, and celebration of differences, toward increased understanding of barrier-free design, and is being tested not only with players of all ages, but also strategically within all of my courses of graduate students. Access the Game allows the player to ask, discover, and feel, in pursuit of designing a more accessible world.

UNLIMITED FUTURES

‘Access Unlimited’ will continue into studios, seminars, and lecture courses. In Summer 2023, copies of “Approachable, vol. 1” were included in the supplies provided for the 54 international high school students participating in ArcStart, a three-week intensive pre-college architecture camp running in July 2023.⁸ The idea is to allow for more organic conversations and investigations about accessible design at a moment in the students’ educations where everything is still being discovered, and before unconsidered retrograde attitudes are cemented as bad habits.



Figure 5. Testing prototypes of Access Chess (top) and Access the Game (bottom).

While ‘Access Unlimited’ is committed to expanding in type and scope, its efforts are united in their ambition to empower students of architecture to become ethical professionals and caretakers of the world – not only in their futures, but within their immediate academic environments among their classmates, instructors, and friends. Through even passive exposure to these efforts, it becomes difficult to ignore them, making it harder to treat accessible design as an add-on or a lamentable condition.

This work is continuing to develop as a book that ties together these teaching and design threads, not as an explanation of work already completed, but learning from it in order to create a guide

to support those in the study and practice of architecture (and anyone else) to engage accessible ideas toward innovative and compassionate environments. The goal, as characterized by Graham Pullin’s *Design Meets Disability*, is that “when the issues around disability catalyze new design thinking” they “influence a broader design culture in return.”⁹ ‘Access Unlimited,’ in all its forms, proposes an accessibility that is necessary, integral, innovative and beautiful, while remaining accessible and friendly in its approach.

ENDNOTES

1. “Segregated Spaces,” Celeste Adams and Mieke Preston. Sponsored by the Initiative for Inclusive Design at the University of Michigan. April 2017.
2. Section 504 states that “No otherwise qualified individual with a disability in the United States . . . shall, solely by reason of her or his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance...”
3. “Crip Camp: A Disability Revolution,” directed by James LeBrecht and Nicole Newnham (Higher Ground Productions, 2020).
4. Henry Dreyfuss, *Designing for People* (New York: Allworth Press, 1955), 26.
5. “Living with a disability is costly. Often called the ‘crip tax’ within the disability community, disabled people are faced with paying extraordinary rates for services, tools, etc., that are needed to make their lives easier and accessible.” Vilissa Thompson, fellow and co-director of the Disability Economic Justice Collaborative at The Century Foundation, testifying before the House Committee on Financial Services, Subcommittee on Diversity and Inclusion, Hearing on Diversity, May 24, 2022.
6. David Gissen, *The Architecture of Disability: Buildings, Cities, and Landscapes beyond Access* (Minneapolis: University of Minnesota Press, 2022), 10
7. “Measures of Access” was funded by a 2019 Prototyping Tomorrow grant from Taubman College of Architecture at the University of Michigan. Project team: studioAPT (John McMorrough, Julia McMorrough, Niels Hoyle-Dodson, Ana Tang, Danrui Xiang).
8. ArcStart is a pre-architecture residential program designed to introduce students to the built environment, architectural design principles, and Taubman College of Architecture and Urban Planning. Over the course of the program, high school students witness how a design education prepares them to engage the world around them.
9. Graham Pullin, *Design Meets Disability* (Cambridge: MIT Press, 2009), xiii.