

# The Way Forward: Multi-abled/- generational Public Space Learning From and For Others About Physical Distancing, Public Uses, and Social Equity

New Mexico Mainstreet Conference 2021  
Creating a Climate of Confidence: COVID and Beyond  
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# What I'll be talking about today:

“Beyond Universal Design” approach, as both a design and planning response to COVID and as a way to improve Main Streets for everyone.

- ✓ Parallel lessons learned from universal design and from sight and hearing-impaired communities
- ✓ Planning and designing for physical distancing that promotes social interaction in well-travelled public spaces (e.g., sidewalks, on-street parking, plazas, parking lots, and alleys) such that community activities (e.g., outdoor seating, vending, downtown events) are safe and enjoyable.

The ultimate purpose of this research, which I will not be sharing because it is a work in progress, is developing “Best Practices” for NM MainStreet communities to go “Beyond Universal Design” as a recovery response to COVID, and as an opportunity to improve public spaces for all.



As we navigate the intersection of compounding crises, many of us are asking ourselves, “What is required of us in this moment?” The answer is radical imagination — a tool, practice, and way of being that pushes us toward the insights and strategies that remind us that a new world is not only possible, it’s happening all around us. Radical imagination means that even when we don’t have all the answers, we believe wholeheartedly that the future is extraordinary and we will manifest that irresistible vision.

<https://radicalimagination.us>

# What will you miss most post-COVID?

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**What are the first words that come to mind when I say:  
"Social distancing"?**

While “social distancing” is still widely used, it may be sending the wrong message and contributing to social isolation. “Rather than sounding like you have to socially separate from your family and friends, ‘physical distancing’ simplifies the concept with the emphasis on keeping 6 feet away from others.

<https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/coronavirus-social-distancing-and-self-quarantine>





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## What is Universal Design?

**Universal Design (UD) is a design process that enables and empowers a diverse population by improving human performance, health and wellness, and social participation.**

© Steinfeld and Maisel, 2012

<https://idea.ap.buffalo.edu>



[https://www.boredpanda.com/blind-engineer-invents-smart-cane-wewalk/?utm\\_source=google&utm\\_medium=organic&utm\\_campaign=organic](https://www.boredpanda.com/blind-engineer-invents-smart-cane-wewalk/?utm_source=google&utm_medium=organic&utm_campaign=organic)



### Annex B-3

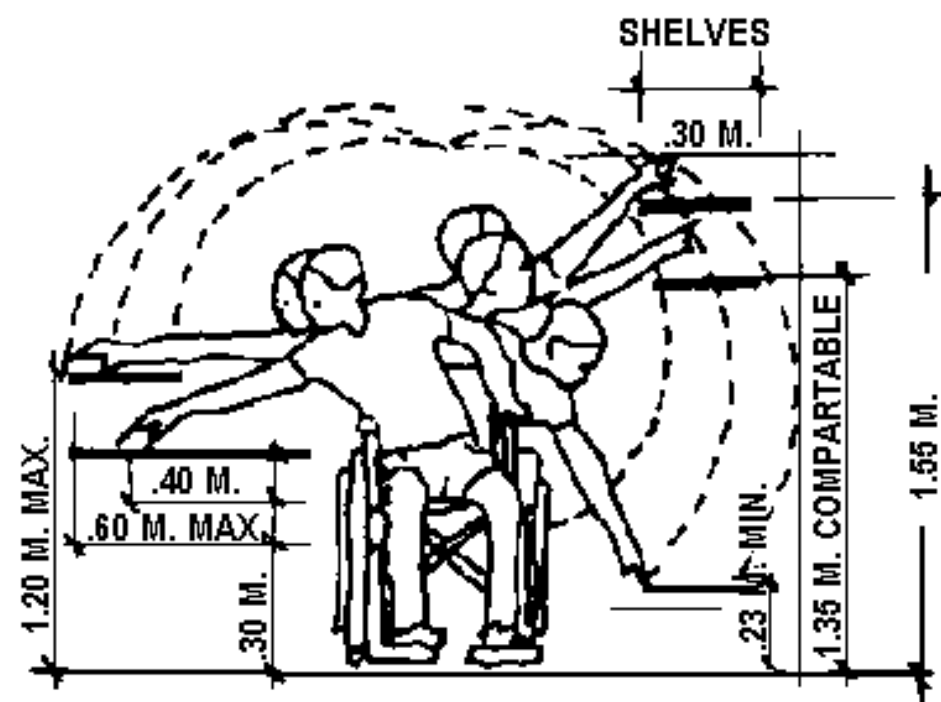


FIG. 3 REACHES OF WHEELCHAIR USERS

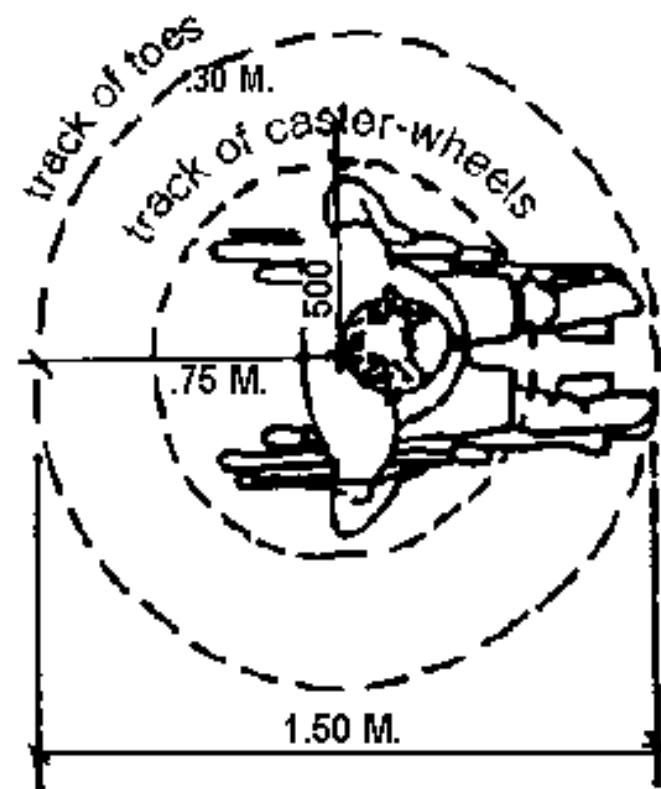
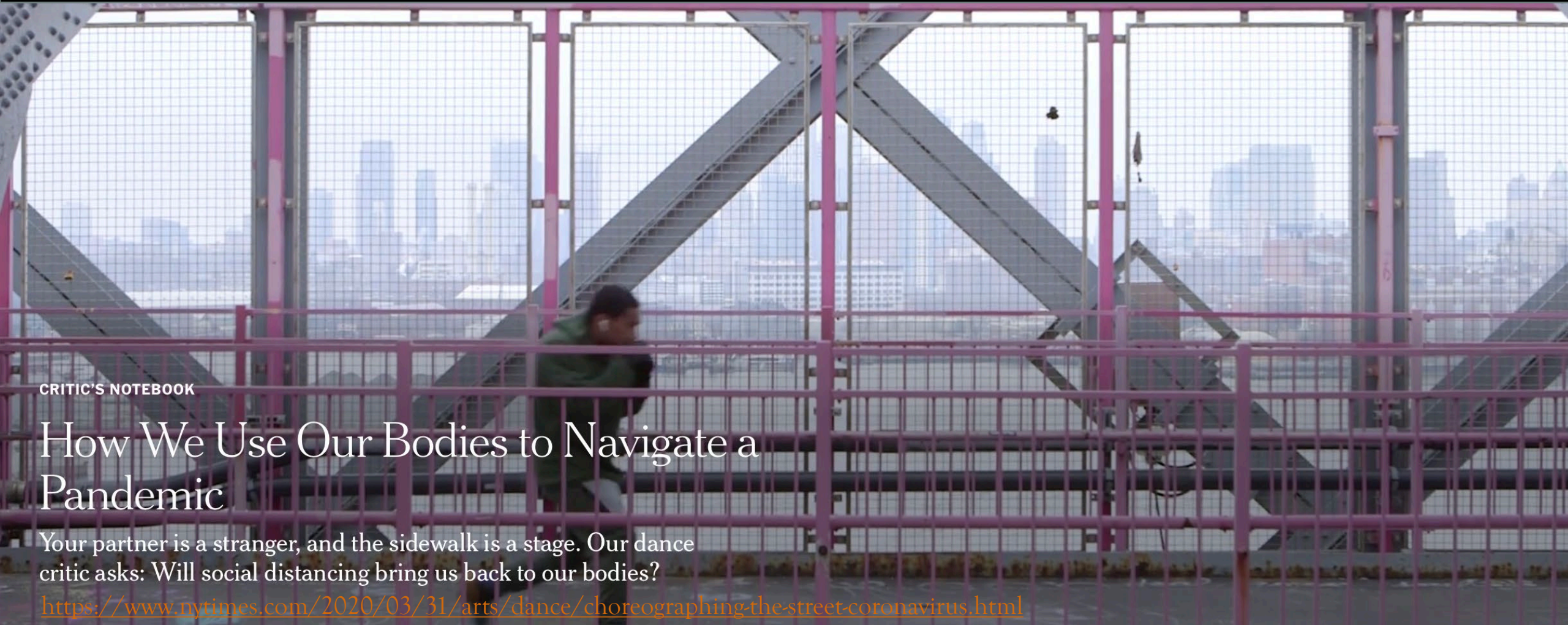


FIG. 4 360° TURNING RADIUS OF WHEELCHAIR

Spatial awareness, like coordination, isn't a given. Watching the choices people make when they move in public, much less in this time of social distancing, can be shocking, from the much-bemoaned tourist who comes to a grinding halt in Times Square to the woman with a yoga mat knocking people aside to get her spot on the floor. (It's OK; she'll still feel good about bowing her head and saying namaste.)

A person in a green jacket is walking on a rooftop walkway with a metal railing. The background shows a city skyline with several tall buildings under a clear sky. The railing is made of vertical bars and has a diagonal cross-brace structure.

CRITIC'S NOTEBOOK

## How We Use Our Bodies to Navigate a Pandemic

Your partner is a stranger, and the sidewalk is a stage. Our dance critic asks: Will social distancing bring us back to our bodies?

<https://www.nytimes.com/2020/03/31/arts/dance/choreographing-the-street-coronavirus.html>

# Come summer, what will be your first/top concern about being in a crowded public space?

A

B

C

D

E



Once a symbol of prestige (ever wait for hours to get into a club?), queues such as the one at Harper's have become a symptom of the pandemic: hour-long lines wrapping around supermarkets. Students gearing up for remote learning, waiting in line to pick up equipment. Drive-through food banks with lines snaking for miles (and no end in sight). The election was already bound to produce bottlenecks, but in states such as Georgia, even early voting has brought hours-long lines as voters wait to cast their ballot, hoping they don't catch the virus along the way.

<https://www.theatlantic.com/technology/archive/2020/10/the-pandemic-could-end-waiting-in-line/616873/>





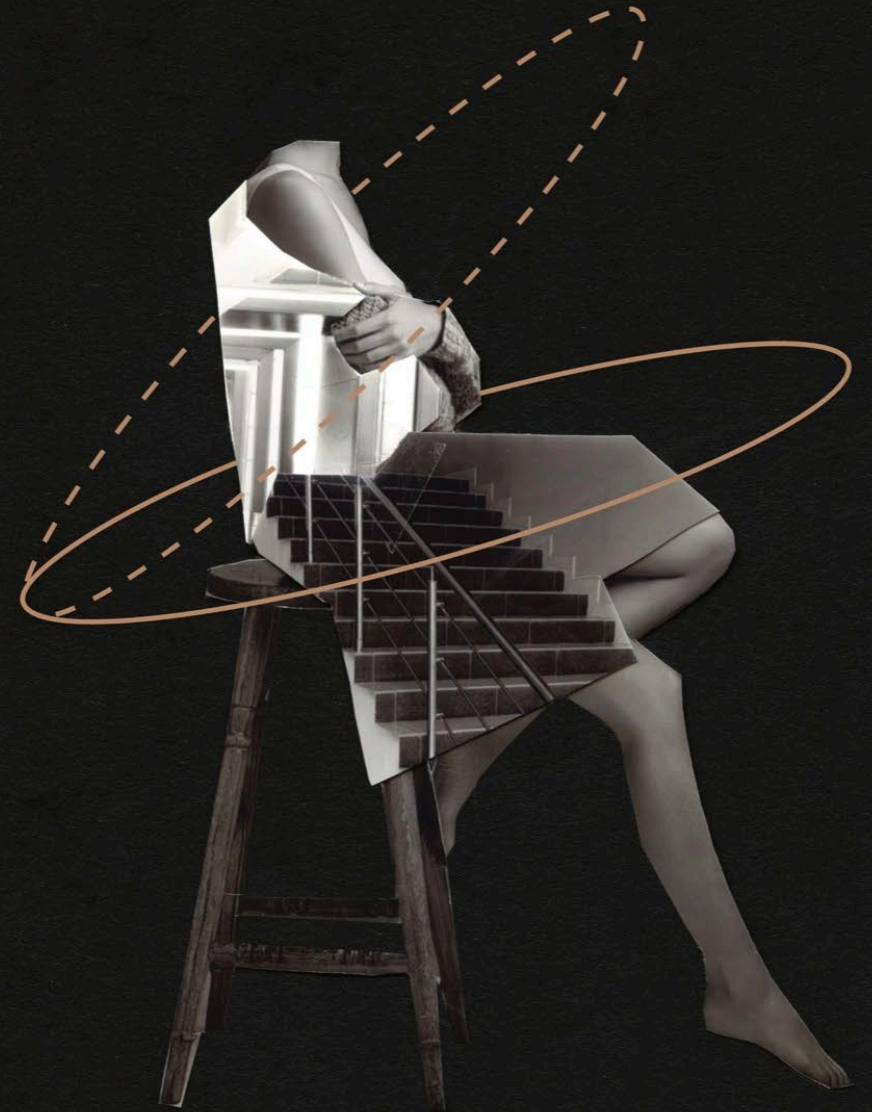
“Flexibility and agility of space, but also compartmentalization of space,” Mostafa said. Her designs include breakout pods off high-traffic areas that can serve as an escape for those who feel overstimulated. “But,” she noted, “they also happen to create spaces with different air circulation, occupied by fewer people.”

## How Architecture Could Help Us Adapt to the Pandemic

The virus isn't simply a health crisis; it is also a design problem.

By Kim Tingley  
June 9, 2020

<https://www.nytimes.com/interactive/2020/06/09/magazine/architecture-covid.html>





We need to resist the temptation to look for quick fix design solutions that narrowly frame this as a mere public health issue shaped by seemingly objective functional parameters alone. Instead, to arrive at viable design responses we must step back and look at the spatial consequences of the pandemic within a larger cultural and historical context and take into account the needs of marginalized and vulnerable populations who are often left out of the conversation.

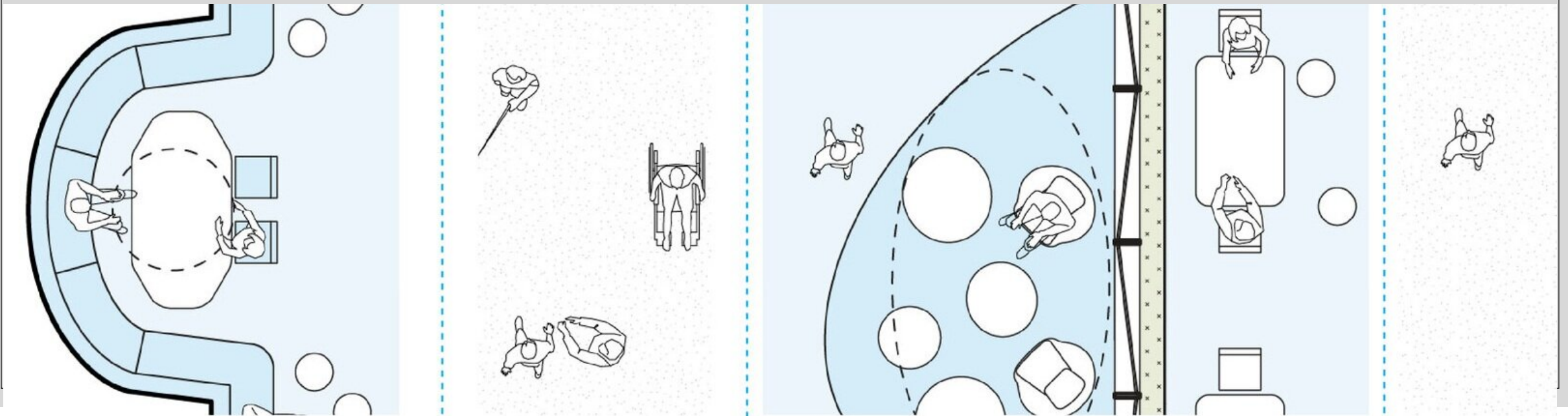


- **COVID's Potential to Reinforce Inequity:** MIXdesign cautions that COVID-19 could be a setback for inclusive design if commercial, government and institutional clients decide to **reallocate resources** from inclusive design projects to come up with **short term solutions that meet the needs of the mainstream at the expense of marginalized populations** including people of color, the elderly, women, trans/non-binary people, religious Muslims and Jews, people with ASD and caregivers.
- **Discrimination:** We must be vigilant and **not repeat past historical mistakes:** over the course of American history, public health fears were used to justify the oppression and **spatial segregation of "non-compliant bodies"** belonging to African Americans, gay men, and the disabled who were perceived as inherently contaminating.
- **COVID-19 + Social Equity:** We must design post-pandemic spaces that meet the needs of all bodies, not just ones that society considers mainstream or normal. Moving forward, clients must work with designers to invest money in the design and construction of safe, hygienic and accessible spaces for ALL in existing and new buildings. **Public health and social equity are intimately related.**

Space planning for Social Distance and Touch needs to account for the dynamics of human occupation and socialization for **bodies both in motion** (circulating from one place to another) **and at rest** (occupying a place to perform programmed and unscripted activities). These are governed by **dynamic inter-related variables** that are both **quantitative and qualitative**.

### Human Density

- 1) Density: number of occupants per area,
- 2) Volume of enclosed space,
- 3) Viral Exposure Time,
- 4) Airflow,
- 5) Time of day and season.





**Environmental Stressors:** For people to feel safe but connected, they need public spaces designed to minimize environmental stressors induced by:

- 1) **Disorientation** (confusing spaces that lead to unintended contacts with people or building surfaces, equipment and fixtures)
- 2) **Overstimulation** (triggered by noise, light, and crowds) especially for people on the autism spectrum. This can be achieved through **sensory cues that make people aware of the presence and activities of others**, especially in unfamiliar places.

## WHAT IS COVID STRESS SYNDROME?

### COMPONENTS

COVID Stress Syndrome is characterized by five related facets: danger and contamination fears, socioeconomic concerns, xenophobia, traumatic stress, and compulsive checking and reassurance seeking.



### ASSOCIATIONS

People with more severe COVID Stress Syndrome are more likely to be anxious or depressed, stockpile supplies, experience distress during voluntary self-isolation, and avoid public places or transportation.



About **16%** of adults in the general population have severe COVID Stress Syndrome. These individuals are more likely to need mental health services. A COVID Stress Syndrome self-assessment and self-care recommendations are available at [www.coronaphobia.org](http://www.coronaphobia.org).



**Touch:** MIX is researching and developing a catalogue of materials, finishes, fixtures and equipment that will allow people to have safe contact with other people and sanitary things whether by intention (choice) or unintentional (accident or necessity). Examples include choosing to sit in a lobby chair or needing to use a handrail. This catalogue will draw from researching materials and products, both existing and being developed in response to pandemic, that includes touch free fixtures and equipment including sanitizing stations, ID readers, toilet room fixtures as well as antimicrobial, easy to clean-and-disinfect wall finishes, upholstery and furniture, both built-in and freestanding.

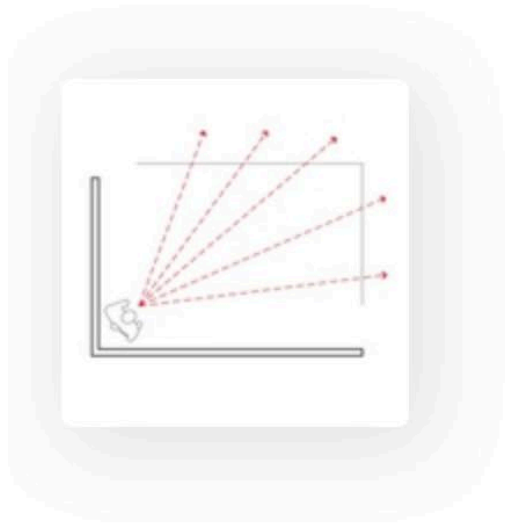




# DEAFSPACE CONCEPTS

## sensory reach

In 2005 architect Hansel Bauman (hbhm architects) established the DeafSpace Project (DSP) in conjunction with the ASL Deaf Studies Department at Gallaudet University. Over the next five years, the DSP developed the DeafSpace Guidelines, a catalogue of over one hundred and fifty distinct DeafSpace architectural design elements that address the 5 major touch points between deaf experiences and the built environment: space and proximity, sensory reach, mobility and proximity, light and color, and finally acoustics.



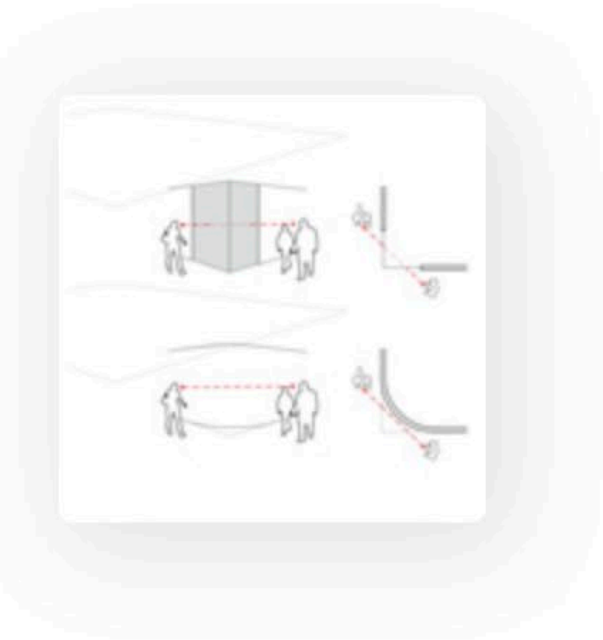
Spatial orientation and the awareness of activities within our surroundings are essential to maintaining a sense of well-being. Deaf people “read” the activities in their surroundings that may not be immediately apparent to many hearing people through an acute sensitivity of visual and tactile cues such as the movement of shadows, vibrations, or even the reading of subtle shifts in the expression/position of others around them. Many aspects of the built environment can be designed to facilitate spatial awareness “in 360 degrees” and facilitate orientation and wayfinding.

# space and proximity



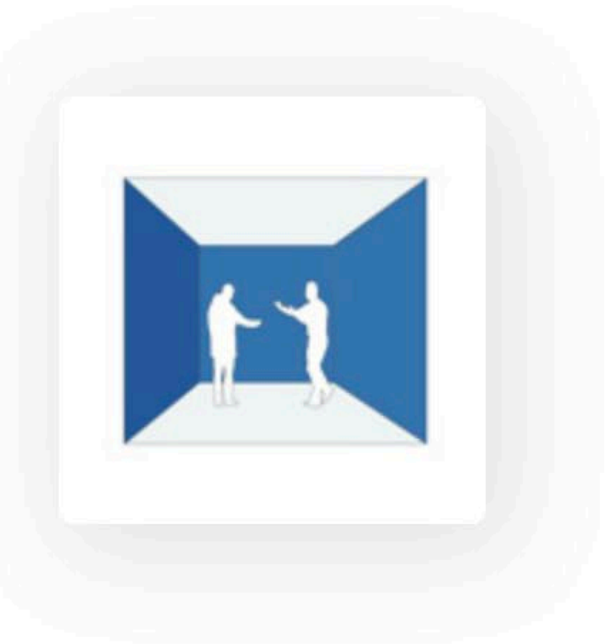
In order to maintain clear visual communication individuals stand at a distance where they can see facial expression and full dimension of the signer’s “signing space”. There space between two signers tends to be greater than that of a spoken conversation. As conversation groups grow in numbers the space between individuals increases to allow visual connection for all parties. This basic dimension of the space between people impacts the basic layout of furnishings and building spaces.

# mobility and proximity



While walking together in conversation signers will tend to maintain a wide distance for clear visual communication. The signers will also shift their gaze between the conversation and their surroundings scanning for hazards and maintaining proper direction. If one senses the slightest hazard they alert their companion, adjust and continue without interruption. The proper design of circulation and gathering spaces enable signers to move through space uninterrupted.

# light and color



Poor lighting conditions such as glare, shadow patterns, backlighting interrupt visual communication and are major contributors to the causes of eye fatigue that can lead to a loss of concentration and even physical exhaustion. Proper Electric lighting and architectural elements used to control daylight can be configured to provide a soft, diffused light “attuned to deaf eyes”. Color can be used to contrast skin tone to highlight sign language and facilitate visual wayfinding.

# acoustics



Deaf individuals experience many different kinds and degrees of hearing levels. Many use assistive devices such as hearing aids or cochlear implants to enhance sound. No matter the level of hearing, many deaf people do sense sound in a way that can be a major distraction, especially for individuals with assistive hearing devices. Reverberation caused by sound waves reflected by hard building surfaces can be especially distracting, even painful, for individuals using assistive devices. Spaces should be designed to reduce reverberation and other sources of background noise.



# The Way Forward: Multi-abled/-generational Public Space

Learning From and For Others About Physical  
Distancing, Public Uses, and Social Equity

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- <https://graphics.reuters.com/HEALTH-CORONAVIRUS/SOCIALDISTANCING/qzjvqenmyvx/>
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