Abstract:

People experience buildings differently, depending on their personal cultural, social, economic, and physical circumstances; yet many buildings are designed to accommodate only a narrow slice of the human population. In some cases, inequity is being constructed into the built environment. Awareness of potential barriers to use when considering the built environment can make the difference between places that support inclusion and ones that do not welcome all users. Foundational to creating inclusive buildings is the design process itself. No one person can embody all perspectives. Creating an inclusive building requires an inclusive process. This paper demonstrates how process, flexibility, and choice can be powerful tools in the quest for equitable library buildings.

Keywords: Universal design, Libraries - Barrier-free design, Library architecture, Architectural design, Equity.

Healthy ecosystems depend on diversity and the ability to leverage that diversity for the good of the whole. They depend on inclusion. Likewise, a community’s health and that of a library as a reflection of its community depend on their capacity for inclusion. As facilities that house inclusive organizations, library buildings should be designed to support as broad a cross-section of people as possible. Each person using a library has an equal right to the space and to use it with dignity, comfort, and ease. People experience buildings differently, depending on their personal cultural, social, economic, and physical circumstances; yet many buildings are designed to accommodate a narrow slice of the human population.

In some cases, barriers to use by certain populations are constructed into the built environment. These barriers can be intentional, as famously illustrated in Robert Caro’s Pulitzer Prize-winning book The Power Broker, which describes how mid-20th-century urban planner Robert Moses intentionally kept people of color and low-income status away from many amenities such as parks and public pools in the New York metropolitan area, through his planning and design. According to Caro, Moses also had the overpass bridges along the new parkways to his new Long Island parks and beaches designed too low for city buses to
clear. At that time, city buses were used primarily by people of low incomes and people of colour (Caro 1974).

Figure 1 An example of intentional exclusion through design: Sagtikos Parkway, Brentwood, Long Island, NY (Photo: Thomas J. Campanella)

Most barriers to the built environment are unintentional, however, and relatively simple to avoid or remove. Awareness of “the differences that make a difference”, a concept popularized by anthropologist Gregory Bateson, can make the difference between places that support universal inclusion, for diverse ages, genders, mobilities, cultures, and variances in reliance on our senses, and ones that do not welcome all users. By becoming more conscious of potential barriers to use, those responsible for the built environment including building owners and managers, city and library leadership and staff involved in the design and operation of a building, and design and engineering professionals, can make decisions that create more inclusive built environments.

Foundational to creating inclusive buildings is the design process itself. Design professionals consider the built environment from multiple perspectives and by asking the right questions, help uncover potential uses not previously considered. Laws and policies guide some aspects of inclusion, particularly those related to physical mobility. Other barriers to use relate to cultural needs and other aspects that cannot be seen and cognitive, mental, or religious barriers are often forgotten. No one person or team can embody all perspectives of the people that will use a library. Creating an inclusive building requires careful intentional and purposeful design focusing on many issues other than the building and site.

It is crucial to find ways to obtain input from the people who rarely participate in public meetings, especially underserved or vulnerable communities. People choose not to participate in community engagement sessions for various reasons:
- Economic: They cannot afford transportation to the venue, or all their time is consumed by simply surviving.
- Physical: The venue is not accessible, or chronic health issues prevent people from attending.
- Cultural: Individuals may feel uncomfortable because no one else in the room looks like them, or cultural norms and individual anxieties may prevent them from speaking up in a large group.
- Discouraged: Individuals may choose not to make an appearance because they doubt that their input will be heard, based on past experience.

As part of ongoing outreach efforts, ideally, libraries should engage in building relationships and trust with marginalized communities prior to the start of any building projects. In reality, a building project often becomes the catalyst for this engagement. The first step must be to craft the stakeholder input process and timeline, acknowledging that inclusive input will require more than holding a few evening meetings. People willing and able to show up to an evening community meeting are often the people you already hear from: the regular customers or those with a complaint or an agenda of their own. A wider net must be cast, using varied methods and schedules.

While a large community meeting is effective in some situations, it leaves out people who are unable to attend because of the time of the meeting or lack of adequate public transportation, childcare, or a vehicle to drive. One method to increase participation from community members is to make it easy and convenient to participate, from varying the locations and times of the meetings to providing childcare during meetings. Coordinate the meetings to correspond with widely-attended gatherings already planned, such as farmers’ markets, fairs, community gardens, or city-sponsored events. In short, go where the people are.

Figure 2. Take advantage of community gatherings and events to expand opportunities for input (Photo: MSR).
Consider setting up a display at farmers’ markets, neighbourhood grocery stores, and schools around the city. Because people already visit these destinations, they don’t need to arrange transportation to another venue. When speaking with people in person, use active listening. Ask open-ended questions, listen deeply for new information, and ask follow-up questions. This method will help you get to the heart of the issue or suggestion. Bear in mind that often people are overburdened, overscheduled, and stressed. Be ready with one or two key questions to make the most of the engagement opportunity in an efficient manner. Some people may not feel comfortable speaking directly about their thoughts, may need more time to consider their input, or may not be fluent in the language you are using. Rather than lose the opportunity for input, bring printed cards in multiple languages with a link to an online survey and list of dates and locations for future input.

Another way to use printed cards is as the survey itself. Make using the cards as easy and accessible as possible: pre-pay the postage, pre-address the cards, accommodate both written communication and a link to provide input online for those who may prefer an online interface rather than hand-written communication. Include open-ended questions to avoid being prescriptive and to gain insights that may be left out otherwise. Use who, what, when, why, where, and how questions rather than would, should, is, are, and do you think questions. The latter type often leads to a simple yes or no response, which will rarely be rich or deep enough to help inform your building project in meaningful ways. Some cultural groups are more likely to provide input in their neighbourhoods, homes, or places of work, where they feel safe. Invite community members to host their own brainstorming sessions using a few key prompts and provide them with a method to record the input and share it with the library. Offer the cards in key languages for your community and be prepared to translate the ideas received in another language.

Figure 3. The Madison Public Library’s 2016 “Tell Us: Communities Inspiring Libraries” campaign turned underserved communities into hosts for public engagement (Photo: Madison Public Library).
Social media is another way to reach groups that may not otherwise realize they can have a voice in shaping a building project, especially youth. Diversify by using as many platforms as possible and use platforms that are popular with each age group. The number of social media users in the world continues to rise at a steady clip each year. It is estimated that by the end of 2018, 2.62 billion people worldwide will use some kind of social media (about 13% of the global population). That percentage may not sound like wide coverage, but considering that in 2017, 71% of internet users were social media users (and this percentage is expected to climb), libraries cannot afford to ignore social media as connectors (Statista 2018).

Another effective outreach tool is creating focus groups or gatherings of people with a specific perspective that may often be overlooked, or groups that have historically been underrepresented. Focus group conversations with local social services providers in Madison, Wisconsin, USA, fundamentally shaped Madison Public Library’s Central Library renovation, designed by MSR. Early in the design process, the team conducted a survey of community members to understand their hopes for the project and perceived barriers to its success. While many hopes were expressed, most of the comments underscored citizens’ perceptions of the downtown library as a hangout for the homeless population and as an irrelevant amenity for others in the community. To deepen their understanding of the issues, the design team hosted focus groups with local social services providers and law enforcement officials. The perspective of those on the front lines helped the design team better understand the challenges and needs of people experiencing homelessness and mental illness and how they intersect with a public library building. As a result, several themes emerged that ultimately influenced the project’s design: providing on-demand social services outreach; increasing actual and perceived safety of all patrons; addressing the reality that people experiencing homelessness often have lots of belongings with them; addressing ongoing problems with the toilet rooms being used in ways that violated library policies.

As the design progressed, the team focused on how to solve these issues while creating a vital, attractive, and safe destination that contributes to the vibrancy of downtown Madison. As a result, the renovation incorporates space for on-site outreach, case management, and referral services in partnership with several local service agencies to provide direct access and support for potential beneficiaries of social services who already frequent the library. Another outcome is the enclosure of a problematic courtyard outside the main entry, which had become a common hangout for people experiencing homelessness and mental illness that deterred many community members from using the building. Enclosing the space provides universal access to the building via a long gradual ramp starting at the entry. This ramp makes the area unsuitable as a hangout and creates a welcoming and accessible entry for all users with clear sightlines to the stair, elevator, and service point. A wide variety of seating dispersed throughout the building allows all building users to find comfortable places to sit to meet their individual needs. To address security and sanitary concerns expressed by patrons, staff, and law enforcement, the toilet room design features multi-user facilities with doorless entries.

Input received through outreach will make a library project more inclusive, but also may conflict with other input received. For example, the doorless ganged toilet rooms designed for the Madison Central Library solve safety concerns and prevent people from bathing in them, making them more comfortable for many community members to use. However, ganged toilet rooms are gender binary, which is unwelcoming for some library users, and may cause personal safety issues as well. It is a common issue with designing for inclusion. One size does not fit all. A solution to toilet rooms is non-gendered “roomlets”, a series of single-occupant rooms with toilet, sink, and mirror in each. Roomlets offer comfortable use of toilet
rooms for people needing a caregiver’s assistance, parents with small children, and people needing privacy to administer medication. Designating a few of the rooms as male or female accommodates cultural, religious, or comfort differences that preclude females from using a toilet room also used by men, and visa-versa.

Each person has an equal right to shape the environment to support working and learning, and libraries should accommodate this customization. The most successful building designs accommodate the greatest diversity of use by providing choice and the ability to customize one’s environment based on need. Each person using the building has different needs for comfort. Humans come in many shapes, sizes and mobility capacities. Designers of the built environment should take this variety of body types into account by including varying chair widths and degree of softness, as well as a mix of armed and armless chairs. Armless chairs better support some people’s body sizes and provide the physical space required for signing. Offering chairs with arms makes it easier for people experiencing mobility issues to get into and out of a chair. Seating should also be dispersed throughout the building: in areas with and without daylight and in groupings that accommodate gathering, as well as in configurations for private, focused work or contemplation. Twenty-first century libraries devote more space to seating than libraries in the past in order to provide variety and choice.

Figure 4. Tulsa Central Library’s Learning and Creativity Center is an example of providing a variety of seating types to accommodate wide-ranging user needs (Photo: Lara Swimmer).

Lightweight, flexible furniture that can be easily reconfigured also supports inclusion. This flexibility accommodates people who use devices like wheelchairs, scooters, walkers, and strollers to assist with mobility as well as group gatherings. Easily reconfigured furniture also supports deaf library users, who need extra room for visual communication and activities like signing and flexibility to support visual privacy or collaboration. Sit-to-stand study tables allow people to choose a working height that is most comfortable for them, including the ability to
stand. These tables also work best for people using wheelchairs or scooters and support people of all heights.

Another way libraries can remove barriers by facilitating personal choice includes providing adjustable sun shades or seating areas away from daylight for people who have sensitivities to daylight. Some peoples’ eyes require more light than others for reading and other tasks. In fact, as people age, their eyes need more light and become more sensitive to glare. Providing adjustable task lighting allows users to make adjustments for intensity level and reposition to fine-tune their visual acuity (American Optometric Association 2018)

Sometimes shapers of the built environment focus on accommodation rather than supporting full use of a building. For example, windows to the exterior may not be strictly required for someone to use a building with comfort, yet designing windows that extend to the floor, or near to it, ensures that all building users can enjoy the connectivity and views that windows provide. Installing hearing loops and other assistive technologies in meeting and study rooms enables people with impaired hearing to participate more fully in programs and meetings. Acoustic control of some areas within active public spaces increases comfort, while allowing them to be with others.

Figure 5. Windows in Madison Central Library extend to the floor ensuring all building users can enjoy views and neighborhood connectivity (Photo: Lara Swimmer).

Some library users have an episodic need for quiet and privacy that extends beyond a typical enclosed study room. Small, private, lockable comfort rooms can be used for everything from a place for nursing mothers to express milk or nurse their baby to space for meditation and prayer. People suffering from post-traumatic stress disorder (PTSD) occasionally need a break from visual and audio stimulation. People with autism or those with sensitivity to sound and
light may need a quiet place with dimmable light on occasion. Comfort rooms can also provide a private place for administering medication. Aspects that make these rooms multifunctional include a sink and counter for ablutions, drinking water, or cleaning; electrical receptacles; lightweight, movable furniture; enough space to clear the floor for a prayer mat; and dimmable lighting. Placing a small arrow on the floor pointing East can assist in orientation to Mecca.

Before one can engage with the interior environment at all, barriers to the building entry must be removed. Exteriors must be well-lit, but with lighting that does not shine into peoples’ eyes as they approach. Sidewalks and paths should be devoid of steps or deep cracks that create tripping hazards and barriers for those using devices to increase mobility. Providing a gentle incline that all people, regardless of mobility, can use creates a welcoming entry for all. Doors with automated openers assist people with limited mobility, as well as those whose hands are simply occupied. Building signage, outside and inside the building, must be of adequate font size and with sufficient contrast between the message and background for legibility. Tone-on-tone or low-contrast signage is illegible for those with vision impairments or aging eyes; high gloss signs produce glare and reflections that also compromise legibility. Some serif fonts and those with tight spacing between letters are also difficult to read. Signage with simple fonts and high contrast between the background and message lettering are easiest to read. Libraries serving communities with large minority groups should consider providing signs in multiple languages.

Figure 6. Signage at McAllen Public Library uses high contrast and simple fonts for legibility (Photo: Lara Swimmer).

Designing for inclusion means designing for people—all people. Most of the traits that create inclusive buildings improve buildings for everyone. Variety and choice are paramount in crafting an inclusive environment. Being intentional about the choices made in shaping the built environment supports the ability for the entire community to thrive.
References


https://www.statista.com/topics/1164/social-networks/