

THE POLITICS OF STAIRS

BY JOHNNA S. KELLER, AIA

A few months ago, a friend sent me an image on Facebook. It shows a wheelchair user facing an elevator confronted with the words, “Today is the day we take the stairs.”

This example demonstrates how the concept of “human-powered living” fails to include all humans, and unfortunately, this example is part of a growing trend in architecture. Stairs have been reborn as the energy-conserving and health-promoting sister to the elevator, especially in sustainable design. However, if stairs and stair users have been re-imagined as the preferred sustainable building occupant, then it appears that occupants with mobility impairments, relegated to using an energy-consuming elevator, have become marginalized as undesirable occupants. Ironically, this is occurring at a time when social equity is re-emerging as an integral part of the triple bottom line of sustainability, which inspires the question: How can we best bring together sustainability with social equity?

In a growing number of new building projects, energy conservation measures are implemented via rigorous design strategies and energy-saving programs. In a Seattle project that has been called “the greenest commercial building in the world,” the design team created the “irresistible stairway” with panoramic views of the city in the name of health and energy conservation, meanwhile locating the elevator at the back of





the building and accessible only via keycard. In addition, the tenants must abide by strict energy usage budgets and are fined for any overages. Imagine an employee in a wheelchair in a building like this, or an important client who uses a cane, or a parent with a sick toddler in a stroller visiting a doctor's office, and you begin to see how a tucked-away elevator with controlled access can be problematic.

Preferred stairways, like the "irresistible stairway," incorporate the design approach called the "pull strategy," which promotes desired behavior via information, aesthetic quality, or sensory appeal. For example, by locating the main stairway in a visually more prominent location than any motorized vertical circulation elements (i.e., elevators and escalators), providing increased lighting or sensory stimulation elements, like artwork and music, and installing motivational signage, building users are "pulled" or encouraged to use the stairs rather than hunting down the elevator. The intent of these pull strategies is to improve occupant health through physical activity and to reduce environmental impacts associated with energy consumption. Pull strategies such as these are integrated into the Leadership in Energy and Environmental Design (LEED) green building program as the pilot credit, "Design for Active Occupants," and recently introduced as a requirement for the "Human Powered Living" Imperative in the



The bottom floor of the Stedelijk Museum in Amsterdam, which offers three modes of vertical transport: an elevator, an escalator, and a flight of stairs. The designer has chosen to integrate these three into a triptych, so that each mode of transport is visible from a single vantage point on the floor. Photo © Margaret Price.

Living Building Challenge (LBC) 3.0 and the “Interior Fitness Circulation” Precondition in the newly introduced WELL Building Standard v1.0.

However, these growing programs have imagined pull strategies that benefit only one type of user—those who want to and are able to climb stairs—and in this way, have created an unequal standard of access. In such situations, architects are applying accessibility in a “check-the-box” way, that is, an effort to comply with the bare minimum of ADA Standards for Accessible Design, and nothing further. At times, this creates architectural designs that border on the nonsensical—for example, locating accessible restrooms on the second floor of a building with no elevator. The ADA Standards do not detail how to create equal access, which is why we often find the accessible entrance in the rear of a building or, as in the case of “the greenest commercial building in the world,” elevators hidden in the back. If we are not creating sustainable buildings that are equally accessible by all occupants, then there is a fundamental flaw with our sustainable

building standards and their future within our field.

The foundation of sustainability is built on best practices, rather than minimum guidelines. It is about going above and beyond to create better buildings for the occupants and our environment. For instance, the LEED rating system’s bare minimum requirements, or prerequisites, are already based on achieving percentages beyond minimum design requirements for water and energy use, and earning points towards certification requires going above and beyond that. The LBC goes even further than the LEED rating system in almost every respect, even social equity. If that is the case, then why are we “checking a box” when it comes to accessibility, especially if it marginalizes a portion of our building occupants? What might happen to the way our buildings look if we re-imagined access as the priority end use, allowing it to inspire new and creative design strategies?”

For example, what if we incorporate more passive heating and cooling strategies to accommodate less

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available energy, or if we have different user expectations of what conditioned spaces feel like? Or, what if we encourage manufacturers of elevators and escalators to use less energy, or possibly even no energy, the way we are transforming the marketplace for building materials? What if we install different vertical circulation elements, like ramps—not as an afterthought, but as a central design strategy? There are many what-if questions that we could ask ourselves as creative designers of the built environment, but perhaps, a foundational question is: what is sustainability without equity?

Architects might benefit from rethinking equal access and designing user choice among vertical circulation elements. What if, instead of signs that read, “Take the stairs!” there were signs that read, “The temperature in this building is set to x degrees in order to prioritize our energy use for access for everyone.” ■



JOHNNA S. KELLER, AIA is a registered architect specializing in sustainable design. Her deep experience with the LEED rating system has helped MARTA pursue its first LEED facility for its fleet of mobility vehicles, Brady Mobility Paratransit Facility, DeKalb County Schools build their first LEED

certified high school, Arabia Mountain High School, and has helped Emory University to be named Best of Green Schools 2013. She has worked with the USPS's ADA Assessment and Renovations Program, and provided preliminary analyses and design upgrades to USPS facilities nationwide. Most recently, she worked with Mohawk Group on what will be the first project in Georgia to achieve a certification under the rigorous Living Building Challenge standard. Ms. Keller is currently working for M+A Architects in Columbus, Ohio.



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