

7-2002

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Repository Citation

Smith, R. (2002). Sociology and the search for architectural design solutions: Discovering that the problem might be bigger than we thought. *AIA Connections*
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SOCIOLOGY AND THE SEARCH FOR ARCHITECTURAL DESIGN SOLUTIONS: DISCOVERING THAT THE PROBLEM MIGHT BE BIGGER THAN WE THOUGHT

In previous newsletters we have been somewhat general in arguing how sociology can offer distinct perspectives and possible solutions to architectural design problems. In this article we instead give a specific hypothetical problem that might well confront the architect. In doing so we might be able to see what sociology can offer the architect in terms of possible insights and solutions, and we might also find that in analyzing one problem we may well find connections to still larger problems.

PROBLEM: Managers of a medical services company communicate to the architect that they must solve the problem of pedestrian congestion in their hallways. Visitors as well as staff have increasingly complained about this problem and it seems to be getting worse, and yet the company maintains that it does not have the funding for extensive remodeling or building a new facility.

RESEARCH: Architectural sociologists would probably begin their research by studying the attitudes of those who use the hallways as well as systematically recording the amount and direction of pedestrian traffic. After conducting personal interviews and focus groups of visitors, staff, and managers and after observing traffic flow at various times (hours of the day, days of the week, and by month) and locations (e.g., different floors, hallway intersections, high traffic office locations, restroom areas, etc.), researchers could well discover that the slow pace is due to a long list of problems. Those sampled might indicate among the most serious problems is that of a poorly designed wayfinding system. Hallway signs are frequently reported to be small-lettered, inconsistent in providing office titles, and not very descriptive of actual office functions (i.e., existing signs use bureaucratic jargon and meaningless acronyms that cannot be deciphered except to insiders). The halls are also overwhelmingly viewed by both staff and the public as narrow and congested with water coolers, news racks, cluttered bulletin boards, and the like. The staff members report dreading to enter certain hallways at peak times. The halls are described by visitors as much like a confusing maze that are almost impossible to navigate.

Of related significance to the well-being of the overall organization, the research finds that the existing pedestrian flow problem also appears to be a major factor in visitors' negative image of the larger company. The researchers then become curious if the larger company could be judged so negatively due simply to one problem (i.e., traffic flow problems in hallways). Further interviews that focus on organizational image in fact confirm that the pedestrian problem is seen as so severe that visitors generalize that the hallways are merely symbolic of a larger company that probably has no regard for the welfare of its customers. Staff members also report that they believe that management has the resources, but that the highest executives really do not care if the problem is solved. They further explain that executives fail to understand that the congestion problem is contributing to decreased staff productivity.

POSSIBLE SOLUTIONS: Architectural sociology tells us that pedestrians (as they navigate

hallways, shopping malls, sidewalks, subway tunnels, etc.) want to walk with a certain desired speed in the direction of destination, and that obstacles impeding achievement of the desired goal nevertheless increases individual desire for further acceleration. However, repulsive forces (e.g., objects in hallway pathways, other pedestrians, and confusing directions) result in rapid deceleration of pedestrians. Pedestrians may completely stop in the hallways, ask any available staff for directions, and become quite frustrated and even agitated about their lack of progress.

Architectural sociology also suggests that traffic problems as well as other “seemingly relatively minor conditions” can in fact become the primary basis on which outsiders form a negative image of a larger organization. Sociologists recognize that organizations contain cultures with core beliefs, norms, values, and missions. Further, both non-material and material artifacts are highly visible to insiders and outsiders and are seen as representing the organization’s culture. Non-material artifacts of organizational cultures could include company slogans, ceremonies, policies, employee retreats, and kind and attentive employees, whereas material artifacts could include the physical layout of meeting rooms, state-of-the-art or antiquated equipment, amount of work space, and the cleanliness and aesthetics of the physical plant itself. In short, artifacts are representations of what constitutes the larger culture. It is of little surprise, then, that spacious and well designed corridors might be seen as reflecting an organizational culture concerned with customers and focused on attention to convenience, timeliness, responsiveness, quality, and achieving results, whereas the congested and untidy corridors described in our hypothetical company could well produce an opposite and quite negative impression about the larger organizational culture.

Given the constraints put forth by the company (i.e., lack of funding and desire for a new physical facility), the research findings about the perceived and actual extent of pedestrian traffic problems, and the serendipitous discovery about the negative image of the company as related to the pedestrian traffic problem, what might the sociologist suggest to the architect as ways to solve the problem(s)? There are immediate solutions to the pedestrian traffic which would entail little extra cost. These include developing one-way lanes where pedestrians walk in the same direction, oscillatory changes of the walking direction at narrow passages, color-coded walk lanes for specific locations, formation of roundabouts at intersecting hallways, hallway signs that have large lettering and that contain consistent and understandable names for offices, and removal of hallway obstacles, such as news racks, wall posters, and bulletin boards. More costly approaches might include placing information staff members or electronic kiosks at building entrances and/or key intersections with heavy traffic flow. Management might also consider taped audio messages sent via hallway speakers that give wayfinding directions. Sociologists would advise also that earnest attempts, such as trying to make traffic flow easier for customers and staff, while not always completely successful, still send a positive cultural symbol of management’s concern for the well-being of others. After the changes are implemented, research would be conducted by the sociologist to determine their relative impact on the traffic congestion as well as company image and staff productivity levels.

