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IMPORTANCE OF PROXIMITY TO URBAN NATURAL AREAS

People inherently desire to have some sort of interaction with the natural environment in all of its forms. This is especially true for people that dwell in dense urban settings, as natural areas provide refuge from the hustle and bustle of city life, human activity, and the chaos and complexity of the urban landscape.

Architecture students, who spend a great deal of time indoors in their studio space, will then benefit greatly by having nearby access to natural areas. These outdoor open spaces will provide a place to relax and socialize, as well as provide psychological benefits such as decreasing mental fatigue and increasing morale. This study intended to examine the role that proximity to natural areas has on people in the workplace, by performing a survey on architecture students that investigated the student's use, value, and perception of outdoor open spaces. 36 students and 1 professor were surveyed over a couple of weeks in their classroom during the month of November. A majority of the surveys were conducted during daylight hours, with the weather outside generally exhibiting bad conditions (cold, windy, and rainy). It would be interesting to compare the perceptions and answers of the survey during the summertime, as there are more hours of daylight, more opportunity for outdoor activities, and generally better weather conditions during this time. However, I believe that the limited temporal scope of the survey doesn't hinder the results to any great extent, and the answers were still very relevant and interesting.

In the case of this survey, urban natural areas were defined as outdoor spaces such as a small park or plaza and larger, and didn't include spaces such as sidewalks or parking lots. Half of the respondents (50%) said that they spend less than two hours per week using outdoor open spaces, while 33% said that they spend more than 4 hours per week outside. However a majority of the students (89%) said that they spend less time

outdoors during the winter months, 11% said there was no change, and not a single person answered that they spend more time outside during winter. The pattern of use during this time of year doesn't seem that surprising, since 28 out of 36 people responded that inclement weather significantly decreases their use of outdoor space. Interestingly enough however, the moderately low rates of use are overshadowed by the fact that 67% rated the importance of using outdoor open space as very important to them, 27% rated outdoor use as somewhat important, while only 6% said that use of outdoor space is not important to them. This perception and intent of use corresponds with research conducted by Rachel and Stephen Kaplan, who found that satisfaction obtained from outdoor space "can be more related to the perceived availability of a natural setting than to its use" (155), and that even "areas for which residents expressed the highest preference to were those that they frequented least often" (155). Awareness in the existence of outdoor open space and the opportunity to use it becomes as important for students then as use itself. The desire for spending time outdoors was confirmed in the survey, with 94% of respondents noting that if they had more free time they would choose to spend it outdoors.

Research in the field of environmental psychology has shown that proximity to natural areas at the workplace leads to lowered levels of perceived stress, higher levels of job satisfaction, and lower instances of sick leave (Kahn 13). Being close to natural areas provides an array of psychological and physical benefits, and people value these natural areas because of the diversity of opportunities that they offer (Kaplan and Kaplan 162). The survey concluded that diversity of activity is indeed an important factor for use of urban natural areas, as 39% responded that they primarily spend their time participating in recreational activities, 28% primarily used outdoor open space for relaxation, while the remaining responses on use (33%) were split evenly between social gathering, transportation, and eating. Perceived and actual distances to outdoor spaces becomes a very important factor for the use of natural areas. Irwin Altman & J.F. Wohlwill found that if parks and outdoor open spaces are more than a 3-minute walk away, the distance becomes too overwhelming for the intended user causing a decrease in occupation and satisfaction (147). This fact was confirmed in the survey, as 78% of the respondents cited that they would only walk to use outdoor open space if it was less than one mile away.

Proximity to planted areas also plays a key role in people's pleasure of outdoor space by providing visual access to natural areas.

Observation is an important aspect of the interaction with nature, and studies focusing on the impact of views to the natural environment have shown that being close to a window reduces stress, increases attention, and improves the overall health of the individual. Peter Kahn Jr, who examined the impact of window views in a hospital setting, found that "patients with a natural window view had shorter postoperative hospital stays, and far fewer negative comment in nurses' notes (14), while Carolyn M. Tennessen and Bernadine Cimprich found that "student dormitory residents with more natural views from their windows scored better than those with less natural views on tests of directed attention" (77). The survey results demonstrated the importance that individuals place on views to the exterior environment, with 89% responding that visual access to the outdoor environment is important to them, 83% responding that they prefer to sit next to a window rather than within view of the window, and 89% responding that access to daylight at their desk is important for increasing their level of productivity. Not surprisingly, every single person answered that they would be upset if there were no windows present in their studio space. Interestingly however, access to outdoor open space was not considered an important factor for increasing students' level of productivity, as they answered split on the question: 50% yes and 50% no. Perhaps the students' emphasis on having views to the outdoor environment lie in the fact that while working at their desks, demand on their attention can cause mental fatigue, and the view outside can assist in cognitive rejuvenation. Furthermore, the view from a window can enable long-term interaction with the natural environment through the accumulation of repeated occurrences (Kaplan 540). Studies conducted by Carolyn M. Tennessen and Bernadine Cimprich concluded that once individuals become fatigued, "attentional restoration must occur in order to return to an effectively functioning state," and that "an attention-restoring experience can be as simple as looking at nature" (77).

The restorative benefits of the natural environment are key elements into people's desire to experience nature, as it enables self-reflection, relaxation, and the ability to clear one's mind. This holds especially true for wilderness areas when compared to urban natural areas, as the wilderness allows for more solitude and the ability to completely

remove oneself from the urban environment. This desire to get away was fairly evident in the results of the survey, as 50% of the respondents preferred to travel to a wilderness area that is farther away than to use an urban outdoor space that is closer in proximity (33%). 17% of the responses noted that either choice was sufficient. Rachel and Stephen Kaplan have concluded in their findings that although wilderness areas provide restorative benefits more promptly than nearby urban natural areas, the potential to perceive these benefits in an urban context is still available but is simply presented at lower intensities (195).

Interaction with the natural environment on many different levels will continue to be an important factor in providing people with psychological and physical fulfillment and overall well-being. People inherently feel more satisfied with their jobs and even with their lives when they have sufficient access to natural areas in an urban context. The implications for architectural designers and city planners to incorporate natural areas in their designs are profound, and it is imperative that they continue to provide usable outdoor space in the city fabric. Nature plays an important role in creating vibrant urban spaces by not only enhancing the beauty of the built environment, but by improving the quality of life for its occupants.

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APPENDIX A: OUTDOOR OPEN SPACE SURVEY

- How much time do you typically spend a week using outdoor open space?

< 2 hrs 2-4 hrs >4 hrs

- How do you primarily spend your time outdoors?

Recreation Social Gathering Relaxation Other _____

- Rate your importance of using outdoor open space?

Not important Somewhat important Very important

- How far would you walk from school to use outdoor open space?

< 1 mile 1-2 miles > 2 miles

- Would you give up some of your indoor space to provide for more outdoor open space?

Yes No

- If you had more free time would you spend it outdoors? Yes No

- Does use of outdoor open space make you feel happier? Yes No

- Do you spend more or less time outdoors during the winter season?

More Less No change

- Does bad weather (rain, too cold, too hot, etc) effect your use of outdoor open space?

Yes No No change

- Would you prefer to use urban outdoor open space that is close in proximity or travel to a more natural outdoor environment (forest, mountain, beach) that is farther away? _____

- Is visual access from your desk to the outdoor environment important to you? Yes No

- Would you prefer to sit next to a window or within a view of a window? _____

- Would you be upset if there were no windows in your studio room? Yes No

- Is access to daylight at your desk important for increasing your level of productivity?

Yes No

- Is access to outdoor open space important for your increasing your level of productivity?

Yes No