Urban Design: An Investigation into the Visual, Perceptual, and Social Dimensions of Public Space

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The authors report on a quarter-long work produced together with colleague Abby Bankson for CRP’s graduate seminar Principles of City Design in Spring 2004. The discussion of urban design concepts led to the study of some of its dimensions in the Cal Poly campus, leading to a better understanding of its role as a generator of livable places within the larger context of city planning.

Urban design is an all-embracing term used for describing the urban environment. While those who work in the design and development professions may have a more acute understanding of what urban design specifically describes, the term itself remains largely ambiguous. For a group of first year graduate students in the City and Regional Planning Department, the journey to discover a more profound understanding of urban design began with an exploration of the subtleties that differentiate one urban environment from another.

PROJECT DESCRIPTION

In the spring of 2004, students in Professor Vicente del Rio’s “Principles of Urban Design” graduate seminar were asked to engage in an investigation into the visual, perceptual and social dimensions of urban design. For this investigation the class was divided into small groups. Each chose a public area of San Luis Obispo to study. Guided by assigned readings and class discussions, each group undertook multiple methods of observation, documentation, survey and analysis in order to gain a more profound comprehension of and appreciation for the complexities of urban design within their chosen areas and within the greater city context.

AREA OF STUDY

We chose to study an area of the campus, starting at South Poly View Drive, south of the Engineering East building, and ending at the hot dog stand, northeast of the Computer Science building on North Poly View Drive. This area is rarely more than 50 feet wide, is often less, and has a length of approximately 300 yards. It takes approximately 5 minutes to walk through the space along its central pathway. We chose this area primarily because of its diversity of design elements, its secluded atmosphere and its unique meandering central pathway.

VISUAL DIMENSION

Mimicking study techniques used by notorious urban design experts, such as Cullen, Lynch, and Spreiregen, we created several maps, site plans, diagrams, and photographs that illustrated and inventoried the visual dimension of the space. We identified 9 station points along the central pathway that represented the study of ‘serial vision’, ‘existing views’ and ‘emerging views’ (Cullen, 1961) experienced by pedestrians as they traverse the space. We developed and mapped symbols depicting significant environmental and experiential features of the space. We also mapped the distinct areas of the space and created a photographic inventory of elements that contributed to the character of the space, such as reflections, textures, street furnishings, landscaping and buildings.

Unlike many spaces on campus, we found this space to be conceivable, enclosed, solely pedestrian orientated and human scaled. All of the buildings abut the main pathway and have entrances onto one or more of the paths within the space. None of the buildings stand over two stories tall, and many of them seem scaled-down amongst the many trees and plants. Though most of the buildings are old, ugly and uninviting, the extensive, lush landscaping and meandering pathways soften the hardness of those buildings and create a more visually interesting place.

The space and pathway of our study contains a huge diversity of colors and textures that combine to create a visually stimulating and intriguing place. There are many shadows and reflections (in the windows of the buildings) that add further depth to the space and extend the landscape past its immediate physicality. Despite an overall lack of continuity, we found the space and central pathway to be visually enjoyable. The courtyard may be the most balanced and appealing area of the space, but the different, distinct areas throughout the space make it interesting and unique.
PERCEPTUAL DIMENSION

This portion of our investigation was aimed at gathering and analyzing people’s impressions, expectations, and environmental preferences of public space in order to understand the perceptual dimension of our area of study and of the greater campus context. We divided our study into three parts. The first was an image survey involving a cognitive map. A one-page questionnaire asking students about their feelings toward the campus was distributed to students from several different majors. The students were also asked to draw a mental map of the campus indicating the elements they find most important.

For second part of our investigation we administered a visual preference survey by presenting three photographs of architecture and three photographs of landscaping and three photographs of architecture from our study area. We asked respondents to indicate the appropriateness of the examples for future projects on campus and to indicate which images they liked and disliked about each image.

The third portion of our study into the perceptual dimension of our study area was a memory and cognition survey, which required participating students to draw a map of the path they had traveled in the previous five minutes. The purpose of this exercise was to study the respondents’ memory of their journey through a public space.

The results of our inquiries found that most of the respondents considered our area of study to primarily be a thoroughfare from one part of campus to another. A handful of the respondents use the seating in the space to take a nap, read a book, or to sit and eat lunch. The surveys showed that most students hold a negative opinion of all the old buildings on campus, including the modernist buildings within our study area. The respondents preferred contemporary architecture and lush green landscaping. Our findings seem to indicate that the majority of students hold a positive view of campus as a whole but find more negative than positive attributes when they look at the campus’ individual areas.

SOCIAL DIMENSION

Throughout the term, our class discussed how urban design is about making places for people. We became increasingly aware of the importance of understanding how people behave in and interact with public space. Through observations, mapping, and discussions, we investigated the social dimension of our study area.

We identified opportunities to better accommodate observed behavioral patterns in the study area. For example, the elevated area of the courtyard directly in front of the Center for Engineering Excellence would be a suitable place for benches. These benches would allow people to look out over the courtyard while physically and psychologically remaining close to the building. Additional seating and thoughtful landscaping in the area adjacent to the courtyard might make it more appealing. Removing some barriers might also help make the space more social. The large bushes in front of the only lawn in the space make it inaccessible and uninviting.
With their removal, perhaps people would use the grass area in this space in similar manners that grassed areas are used elsewhere on campus.

While there are definitely opportunities for interventions that may stimulate increased social activity in the space, those amenities would not guarantee such behaviors. The existing benches are never full.

**PROJECT SUMMARY**

The most overarching impression left on us from investigating this space is one of diversity. Visually, there is an enormous variety of buildings and landscaping, hard surfaces and soft surfaces, all contained in this fairly small public space. Perceptually this variety both appeals and displeases. Some users felt a desire for a more unifying architectural theme. While many different social behaviors take place in this space, its primary function remains that of a thoroughfare – a nameless middle ground between here and there.

The space would become more inviting with several design improvements including: signage, a pathway name, a unifying theme between the buildings and landscaping, and street furnishings such as benches with views and access to the grassed area. Adding shaded areas, incorporating the second story balcony into the visual dimension, and brightening the area by the wooden A/C box with wider sidewalks, removing the blind corner, and decreasing the noise would also enhance the space. These improvements might encourage users to stay a little longer and enjoy the ambiance. However, the space is pleasant as it is. The quiet, calm, low traffic atmosphere has a distinct appeal, and making changes risks compromising the subtle niche the space now fills.

**CONCLUSION**

As students on the verge of stepping out into the world as professional planners, it is important for us to understand the different dimension of the urban environment. Soon, we will be making decisions that affect the characteristics of both the public and the private realms. While there will always be obvious consequences to our actions, it is crucial for us to realize the impact subtleties and nuances have in the creation of a place. If we want to preserve, improve, and encourage successful urban environments, we must give attention to the details and recognize the complexities of urban design.

*Figure 2. Modernist architecture is softened with good landscaping*