Learning from Cultural Space: Connecting Culture and Environment in Beginning Design

Jeffrey Hou

University of Washington - Seattle Campus

Follow this and additional works at: https://pdxscholar.library.pdx.edu/arch_design

Part of the Architecture Commons, and the Art and Design Commons

Let us know how access to this document benefits you.

https://pdxscholar.library.pdx.edu/arch_design/7

This Article is brought to you for free and open access. It has been accepted for inclusion in Proceedings of the 18th National Conference on the Beginning Design Student by an authorized administrator of PDXScholar. Please contact us if we can make this document more accessible: pdxscholar@pdx.edu.
Learning from Cultural Space: Connecting Culture and Environment in Beginning Design

Jeffrey Hou
University of Washington

Introduction

In environmental design education, exercises using primary spatial forms and principles have long been a prerequisite. However, the methodology based on a singular and narrowly focused abstraction of space and spatial phenomena is inadequate in preparing the students to respond critically to the increasingly complex social and cultural processes in the production of space and the making of the everyday environment. In addition, such an approach often fails to connect to the students' own spatial experience and contextualize their understanding of space and environmental design. Furthermore, it does not recognize that the students' life experiences and cultural background are rich assets for learning about complex dimensions of space.

Contemporary studies of space, geography and cultural landscape testify to a growing understanding of the complex processes of space making. In critiquing against a singular discourse of space such as the Cartesian notion of space as absolute, Henry Lefebvre argued that the making of space requires understanding of spatial practice, representation of space and representational spaces. In addressing the complex spatial processes in an urban environment, Dolores Hayden argued that studies of urban landscape need to confront the complex economic and social forces, rapid change, proliferated layers and abrupt spatial discontinuity. Building on Lefebvre's work, Edward Soja proposed that the production of cityspace can be studied in at least three ways: first, as a set of materialized "spatial practices" that work together to produce and reproduce the concrete forms and specific patterns of urbanism as a way of life; second, as a "conceived space of imagination"; and third, as a simultaneously real-and-imagined, actual and virtual, locus of structured individual and collective experience and agency.

However, how can such complex issues and processes and the multiple and shifting spatial discourses be adequately approached at the beginning stage of a design education? How can the students' own experience and knowledge of space and place play a role in learning about the complexity of space and spatial processes? To address these questions, this paper examines a beginning design exercise assigned for the first-year environmental design students at University of California, Berkeley. In this exercise, the students were asked to each create a three-dimensional collage of the dwelling space from three generations of one's family. Using J. B. Jackson's essay "The Westward-moving House" as a reference, the project was intended to allow the students to reflect on their cultural background, experience and memory of space, and family history and incorporate the reflections in the making of a spatial artifact. The paper begins with an introduction on the background of the course, the students, and the assignment. It then introduces a selected group of projects, including the opportunities they have created for discussing the multiple dimensions of space. By examining the students' projects, the paper looks at how the exercise provides a vehicle to connect the students' life experience to design, and how the complex issues of culture and multiplicity of space can be introduced at the beginning level. The paper concludes with an observation on the multiple instrumentalities of the exercise and its broader implications for beginning design education.

The Course

The course, Introduction to Environmental Design, is the first of a sequence of required courses for undergraduate students in environmental design majors at Berkeley. The course provides an introduction to the professions of architecture, landscape architecture, city planning, urban design and environmental planning. The instruction takes on the forms of lectures, readings, discussions, field trips, and a series of hands-on design exercises. The course material consists of five major topics — "House Making and Architecture" — looking at house form as influenced by functions, meanings, technology and culture, "Garden Meanings, Machinery and Nature" — looking at gardens and buildings in their environment, "City Planning, City Design, City Making, City Living" — introducing issues of a larger urban context, including power and alternative visions, "How to Design" — looking at various ways architects, landscape architects and urban designers approach design, and "Sustainable Design" — focusing on ecological processes in design from energy efficient buildings to creek restoration. The class typically has an enrollment of approximately 150 students from diverse ethnic and cultural backgrounds. Many of the students come from families of recent immigrants. Because of its size, the class is divided into ten discussion sections, with five graduate student instructors each leading two sections.

The Assignment — The Westward-moving House

The assignment to be examined here is the first of a series of exercises aimed at tapping the students' own experiences into design and class discussion. In this assignment, the students
were asked to individually create a three-dimensional collage of dwelling spaces from three generations of one's family, e.g., the students' home, their parents' home and their grandparents' home. As a reference and inspiration for the project, an article entitled "The Westward-moving House" by J. B. Jackson, was assigned for reading. In this article, Jackson provided a fictional account of a family's history of migration on the North American continent, from New England to the Midwest, and then to Texas. Through an account of the life in the family and description of the successive environments and dwellings inhabited by each generation of the family, the article reveals the multiple changes in the underlying cultural and personal values, socio-economic conditions, relationship to nature/environment, and technological capabilities across the different generations. A discussion on the article during the class provided a starting point for the students to research and reflect on their families' history, the spaces that they inhabited, and the influences of changing cultural values and socio-economic forces on the making of their home environment. In making the model, the students were encouraged to use found objects instead of conventional model-building materials.

The Projects

In the following, I will describe the contents and approaches of a selected group of projects and the issues that were brought up during the class discussions in order to demonstrate the outcome of this exercise in bridging the students' background and experience and an understanding of the complexity of space and spatial processes.

Project A – Internal and External Changes

This project was produced by a student whose family moved from Mexico to the U.S. The student strategically chose to make a composite of the different dwellings that depicted their external and internal spaces. The exterior side of the model provided a realistic representation of the materials and details of the dwellings as they changed from one generation to another and from one spatial and social context to another. In contrast to the realistic representation of the exterior, the interior space contained a collage of images representing aspects of the family's past and present. Specifically, the lower level representing the earlier days of the family was covered with photographs of people, while the images in the upper part of the interior space were those of modern commodities such as cars and electronics. The contrast of images signaled a profound transformation between the generations. Another fascinating contrast was represented by the strong separation between the different dwellings in the exterior and the continuous flow of space in the interior.

Fig. 1. Exterior of Project A

Fig. 2. Interior of Project A
The project served as an excellent example to examine the physical and non-physical dimensions of spatial change, i.e., the forms of the actual dwelling and the collective mental space of memories, meanings, values and imagination. The model also demonstrated an effective design strategy in combining the multiple narratives and revealing the multiple dimensions of spatial and social transformation. The project presented a powerful manifestation of the process of migration and cultural change contained within the space of home.

**Project B – Vertical Past and Horizontal Present**

This project was produced by a student whose family actually took the course of East-West migration in the U.S. Started in New York City, the family migrated to New Jersey and then to California. As described by the student, the model depicted the transformation of the larger environment and the configuration of space from the verticality of the dense apartment buildings in New York City, to the suburb in New Jersey, and finally to the open landscape of the West. The transformation was expressed through a strategic combination of wooden scraps and a collage of images depicting aspects of the different environments and spatial settings. In addition, words and sentences were written on the model describing specific events in the family’s history, materials of the dwellings, and information associated with the larger contexts, that together superimposed another layer of change in the family’s history.

The model provided an opportunity to discuss the larger urban and geographical context, spatial scale, and experiences outside the immediate dwellings, and the connection between the change in the larger settings and the change in the life of a family. Specifically, it provided a chance to discuss the implications of urban development and population migration from dense urban environment to suburban and exurban contexts. The model also provided an excellent example showing the strategy of combining physical forms, images, and text to reveal the multiple layers of meanings and dimensions of personal experiences, accumulated through time and space.

**Project C – Third World Urbanization and Industrialization**

This project was produced by a student whose family emigrated to the U.S. from South Korea. The project reflected the student’s childhood experience of the urban and rural transformation in South Korea. Instead of making a composite model such as Projects A and B, he used three separate models to depict the different dwelling spaces inhabited by the different generations of his family. As a series, the three models showed a progression of change in the scales and configurations of space as they become denser and more enclosed. The first model (fig. 4, right) represented a house in the rural area where his grandparents lived. The second model (fig. 4, center) began to show the process of urbanization and spatial change, as the house of his parents’ generation sat on a subdivided lot surrounded by walls. The third model (fig. 4, left) depicting an elevator in a high-rise building represented the present condition of housing in the city. The series of models revealed the multiple changes that have occurred in the process of urbanization. On one hand, it expressed the change in term of spatial characteristics and social relations. On the other hand, using images and found objects including a bottle of wastewater in the elevator, the models also presented commentaries on the change of environmental characteristics, from the pastoral setting of countryside to the density and degradation of environment in an industrial city.

The project provided an opportunity to discuss the urbanization process in other development contexts, namely developing and newly industrialized countries. It also allowed for a discussion on the urban-rural migration and social and environmental implications of rapid urbanization, including the change in social pattern and environmental quality. In addition, the project provided a point of comparison with Project B, in terms of the different development patterns, directions of spatial changes, and the contrasting environmental and social implications of urbanization, suburbanization and exurbanization.

**Project D – From Communal Courtyard to the House of Machine**

As in Project A, this project was also produced by a student
of Mexican descent. But unlike Project A, this student chose to use three separate models to depict the distinctively different forms of space inhabited by the different generations of her family. The first model (fig. 5, front) representing the dwelling space of the earliest generation showed a courtyard with a string of figures inside. Rather than showing the individual house as the home space, the courtyard was presented prominently as the center of the family life. The second model, representing the house that the family resided in the U.S., depicts a typical suburban single-family home. In this case, the house without any color and completely enclosed was presented almost as a symbol — an emblem of American lifestyle. Finally, in the third model that represented the space where the student currently lived, the form of the house has disappeared entirely. Instead, it was shown as a container filled with mechanical systems and appliances.

The three models revealed profound cultural and spatial changes that the family has experienced in the process of migration. Specifically, the profound differences among the three models showed how the functions and meanings of the houses have differed from one cultural context to another. As in Project A, this project contained a strong social commentary on the conditions and transformation of dwelling space from a social space to the space of machine. However, while Project A focused on the space within an individual home, this project addressed the broader transformation that occurred at the scale of community and in terms of housing types.

**Project E – Separation and Hybridization**

This project was produced by a student whose family recently moved to the U.S. from Taiwan. The project consisted of three models that depict the different buildings the family has occupied over time in rapidly developing city of Taipei. Through the models, the student recalled the constantly busy street life in Taipei. Although the family moved to a newer building every few years, the bustling character of the surrounding environment has changed little, as represented by a carnival-like collage of people, merchandises and cars in the series of models. However, a closer look at the models revealed the profound difference among the spaces they represented. In the first model, the entire building was covered by a collage of images, showing little distinction of spaces and functions. In the second model showing a taller building, the presence of an elevator and images covering the entire building indicated a vertical extension of urban life. In the third model, representing a high-rise apartment building, with a concentration of regularly organized images at its bottom, one could begin to see a vertical separation of residential and commercial activities and a strong specialization of space. Shown together, the series of models effectively depicted the urban phenomena occurring in many dense cities such as Taipei in which traditional patterns of space are increasingly (though not entirely) replaced by separation of uses and specialization of space.

A closer look at the student's choice of images in the collage further revealed another significant aspect of this project. Instead of using images that would reflect local culture or characteristics typically associated with Asian cities, the student used images that are taken out of popular magazines in the U.S. However, the images are re-appropriated and re-assembled in a fragmented manner showing the effect of cultural hybridization as part of an urbanization and globalization process in the context of developing and newly industrialized countries. The project provided an appropriate opportunity to discuss the condition of globalization and the complex urban spatial and trans-cultural processes taking place in cities worldwide.

**Project F and G – Incremental and Subtle Changes**

As diverse as the student's backgrounds are, not all projects showed a dramatic transformation in the spaces occupied by different generations. Some projects showed subtler but nevertheless significant changes over time. In Project F, the student chose to produce three nearly identical models that forced the viewers to focus on their subtle differences and incremental changes through the generations. The three models effectively conveyed a more subdued transformation and a different pace of change as revealed through the details of the buildings and composition of images that represented the larger landscapes. In this project, the unchanged aspects
of the house as represented in the models were equally as powerful as the transformation, and are themselves reflection of the characteristics of spatial change in the specific cultural and social context. In Project G, the student chose a different strategy to represent the changes. Instead of showing the exterior form and structure of the dwellings, the student chose to depict the different spaces by using found objects with different materials (wood, carpet, etc.) to represent the generational changes. Rather than focusing on the distinct spatial form, the dwellings here are depicted as rooms demarcated and yet held together by the different objects and materials. As a result, the model could be read both as a series of rooms or as a collage of materials. The duality further reinforced the multiple narratives expressed in the model. Again, both projects were excellent examples for discussing the multiple dimensions of space and spatial change. In addition, they also demonstrated effective strategies in design and representation.

Observations
As described above, the projects reflected the rich cultural background and experiences that each student brought to the class. In addition, the projects served as effective vehicles for discussing the complex spatial processes and phenomena. It also allowed one to see various design strategies that could reflect and represent these processes and phenomena. In the following, I will try to summarize the multiple instrumentalities of the exercise and the themes emerged from the students’ projects.

**Multiplicity and Reciprocity of Spatial Change**

The students’ projects revealed the multiple changes occurring in the environments and societies, particularly the coupling of spatial and cultural changes in the everyday environment. In many of the projects, as the students tried to represent the changing physical conditions of the houses and their living environments, their depiction of the spatial changes often reflects the changes in cultural and social values embedded in the family’s life in the broader socio-economic context. This was most vivid for students in the immigrant families. But it was also evident in the projects with more subtle changes. These multiple changes as reflected in the students’ projects showed effectively the multiple social, economic, cultural and physical dimensions of space and their reciprocity.

**Examples of Specific Spatial Processes**

In addition to revealing the multiple dimensions of space, the projects also provided concrete examples of specific spatial processes taking place in the context of urbanization, development, migration, immigration, and globalization. The different projects provided convenient opportunities for introducing and discussing these complex contextual processes to the beginning design students. They allowed for a reflection on the impact of the broader processes on the making of space and the life of individuals and communities. Specifically, Projects B and D were both powerful expressions of the processes of suburbanization and migration. Projects C and E were both examples of urbanization particularly in the context of developing and newly industrialized countries. Project D specifically reflected the changes in the meanings and functions of home in the context of immigration. Project E provided an excellent example showing hybridization in the process of urbanization and globalization.

**Spatial Strategies and Representation**

Not only were the projects capable in revealing and reflecting the multiple changes and specific processes occurring in space, the model themselves also revealed a variety of possible design strategies to portray and represent these changes. Through various strategies of representation, many of the projects have effectively addressed the multiple changes. In fact, the strategies would not be possible if the exercises were simply ones about abstract formal manipulation. The strategies included creating exterior and interior, revealing changes through sequences and progressions, use of multiple media (images, texts, physical forms and materials), and framing of space (as in Projects C and D). The projects provided excellent opportunities to discuss various spatial and representational strategies in design. In addition, they revealed the ability of the beginning design students to address complex spa-
tial issues without significant prior knowledge of primary spatial forms and properties.

Translation and Interpretation

In addition to the making of the models, the act of translation and interpretation was also an important part of the exercise. First, the students needed to engage in an interpretation of the spaces and spatial experience in the family's history and translate their interpretation and understanding into threedimensional form. Second, the discussion during the review session provided the students with an opportunity to interpret others' work and, at the same time, to see how others interpreted their work. Because each student's experience was unique, the act of interpretation helped build a constructive dialogue during the discussion session, as the students sought to understand each other's background and formulate opinions toward the effectiveness of the models in representing the experiences.

Conclusions

Does environmental design education need to begin with abstract formal exercises based on universalistic principles? The exercise examined in this paper has proven otherwise. As evident in the students' projects, an exercise such as the one presented here is capable of cultivating a rich understanding of design and revealing the complexity of space and spatial processes, including the multiple dimensions of space and specific contextual spatial processes. It does so by tapping and connecting with the students' own life experience and cultural background. The complexity of the experience and background in turn impelled the students to explore various spatial and representational strategies in design. As a beginning design exercise, the assignment effectively bridged the student's prior experience and background with their exploration of design. It also connects the act of design to the broader social and cultural context and processes. However, the content of this paper should not be interpreted as a call against the role of formal exercises. Rather, it calls for approaches that establish a broader cultural and socio-economic context for the exploration of space and design that recognizes the complexity of space and spatial processes. An education based upon this knowledge and training would allow environmental designers to become active and effective agents in critically shaping and responding to the profound social and spatial changes facing the cities and regions today.

Notes

6 The author worked as one of the graduate student instructors from 1998 to 1999.

References