Future Users, Future Cities: Dwellers as Designers

ABSTRACT
As technology advances, users become more detached from the way things work and are produced. Users end up being pure consumers and leave their positions as decision makers behind. Before the architectural and building processes were industrialized, most practitioners of so-called vernacular architecture were in fact the inhabitants of what they built, which easily met their specific personal needs because they were in total control of the building process. This paper will focus on the possibility of non-architect users of architecture as decision-makers in order to establish designs that satisfy their individual needs.

KEYWORDS: user-driven architecture, architecture without architects, architecture as interface, sustainability, user involvement.

Architecture Without Architects

“Architecture Without Architects is a book by Bernard Rudofsky originally published in 1964. It provides a demonstration of the artistic, functional, and cultural richness of vernacular architecture” (Wikipedia, 2010). Rudofsky “discusses spaces and buildings made without the involvement of architects. Rudofsky is interested in buildings produced through ‘communal enterprise’ before architecture ‘became an expert’s art’. […] Some of his examples are buildings made by builders without the direct involvement of users; others are a collaborative effort between builders and users” (Hill, 2003, p. 58). The participation of the dweller in the design and construction processes requires a leeway, and this […] “flexibility by technical means suggests two further types of user creativity: constructional, a fabrication of a new space or a physical modification of an existing form, space or object, such as removing the lock from a door; conceptual, a use, form, space or object intended to be constructed, such as a door.” (Hill, 2003, p. 58) The conceptual user creativity encourages the user to be creative mentally and provide practical data to be used in a more responsive architecture. Concerning this Rudofsky says, “vernacular architecture does not go through fashion cycles. It is nearly immutable, indeed unimprovable, since it serves its purpose to perfection.” (Rudofsky, 1964, 2)

Bernard Rudofsky was neither an architect nor a theorist in the usual sense. At the start of his career he completed a number of houses in Italy and Brazil, where he employed the formal language of the Modernists although his writings appear to indicate that Rudofsky was primarily engaged as a critic and culture theorist from the 1940s. The common element behind all of these activities, though, was the human body, and his lamentation of the loss of sensual awareness. No lifestyle should be preformed, preordained or preconceived. The interaction of the human being with the environment he has shaped has to be characterized by an individual attitude towards the life of a responsible citizen. (Platzer & Wit, 2007, n. p.).

It is obvious that not everybody has the ability to build and design; not everybody can become an architect. Yet this fact should not lead to the conception that the architect should be in full control of the entire process. There is more potential for a truer localization of architectural design if users are involved in the design process. If the architect takes control of everything, local design trends to be introduced by him / her face the danger having to be global since there are governing fashionable styles dictated by “high architecture” of the elite bourgeois or hegemonic macro trends that directly / indirectly force architects to follow:

Historically, in professional practice, many architects retained their position by servicing powerful clients and accepting their
values. When the powerful ignored, misunderstood, or repressed the needs of others in the society, the views of the less powerful did not play a role in the definition of architectural knowledge or practice. Insofar as the traditional perspective is followed, it excludes the powerless, or the “other”, and has proved unable to effectively encompass social justice, the politics of diversity, or the politics of empowerment. [...] Involving the user, the ordinary citizen, the public, not only would require more time and energy but would demand substantial changes to existing practices. [...] Clearly a culturally critical position is needed. (Piotrowski & Robinson, 2001, 76)

As a contrast:

[…] in vernacular architecture from the primitive age or even in several parts of the world nowadays, there is no segregation between the architect and the community because normally the architect is indeed a member of the community. [...] The result is usually that every part of vernacular architecture, be it its technology, connections with nature or with the social system is all culturally related. Although the typology of the building is merely simple and less dramatic, its immense level of ingenuity is beyond belief. (Paramita, 2009, 3)

Arif Hasan and Orangi Pilot Project in Karachi, Pakistan

A unique and rare example of a socio-politically aware architect who involves user participation in the architectural design process is Arif Hasan, a Pakistani architect, who managed to organize local people in improving the slums of Karachi. In the Orangi Pilot Project (OPP) approach he conceived, he emphasized the management of the improvement plan by the dwellers themselves, where the local community is fully involved in the process of planning, implementation and maintenance of the plan. Arif Hasan taught local people how to build simple precast structural elements by designing uncomplicated moulds and how to put various precast elements together in order to construct sound and relatively decent looking houses. In doing so local residents take ownership of the entire process and increase their involvement in the future and help promote the sustainability of the project. “Doing this establishes social and political continuity and gives the people of the city an identity and a pride in its history” (Husain, 2009):
The Orangi Pilot Project refers to a socially innovative project carried out in 1980s in the squatter areas of Orangi Town, Karachi, Sindh, Pakistan. It was initiated by Akhtar Hameed Khan, and involved the local residents solving their own sanitation problems. Innovative methods were used to provide adequate low cost sanitation, health, housing and microfinance facilities. With endogenous research, the community was able to make an affordable sanitation system for the treatment of sewage, which helped to reduce the spread of disease. The system was created and paid for by the local community, who would not have had access to a sewer system otherwise. The programme proved so successful that it was adopted by the communities across developing countries. After the success of the initial phase, the program was expanded into four autonomous groups. (Wikipedia, 2010)

Architecture a an Interface Design Assignment

Following the above interest in user driven architecture, the authors of this paper (one having been educated as an architect at MIT, Boston, USA), who conduct a course coded VA325 and named “Interface Design” in Sabanci University, Istanbul, Turkey decided to create an assignment in which 3rd and 4th year visual communication design students with no prior architecture education must design architectural / urban interfaces as users of those. VA325 is an introduction to the study and design of interfaces in general. Students are expected to submit various design projects in which they will be able to test themselves in developing a set of user scenarios, interaction models, navigational / flow diagrams and prototypes for interactive applications. The learning objectives are: constructing innovative ideas independent of physical, cultural, and official constraints; and integrating daily life experience into their design philosophy.

User experiences are highly appreciated in VA 325 course, in which the main focus is designing user interfaces. The term “user interface” includes the collection of methods, rules and patterns of use typical of a physical / virtual system that provides the interaction between the user and what is used. The graphical user interface of an operating system based on the desktop metaphor, control panel of a washing machine, or multitouch display of a mobile phone are just few examples that most people encounter in daily life.

VA325 aims to provide a different way of looking at architectural and urban experiences in order to create new conceptions about the usability of a city or building. Although visual communication design students taking the course are not educated in architecture or urban planning, they are asked to invent new ways of interacting with a building or the city or to improve existing ones, by taking advantage their own “non-professional” architectural and urban experiences. Without limiting students to structural regulations, in addition to prompting them to be realistic; approaching daily life experiences in a critical way was encouraged. If cross-platform thinking is encouraged during the design process, more innovative ideas can emerge using knowledge in a multi-dimensional manner. This approach increases awareness of multiple subjects and helps in stimulate ingenuity.

VA325 / Interface Design: Philosophs and Methodology of the Course

While the course is listed in the undergraduate program of Visual Arts and Communication Design (VACD) Program in the Faculty of Arts and Social Sciences (FASS), the content is arranged in such a diverse and interdisciplinary way that students of any background in the university can take the course and generate new ideas on subjects that they are not familiar with professionally, but encounter and experience daily. This is why the course does not have prerequisites and is open to any student whether he or she studies design, management, economics, cultural studies, engineering or any other field.

Figs. 3 and 4. VA 325 student work. Students: Basak Sahin, Efe Buyuk, Tunc Korap (left); Sevil Kaynak, Baris Ertufan and Ezgi Didem Dagci (right); fall 2009.
During the course, the concept of interface is presented as a notion where each physical/intellectual tool—including door handles, car dashboards, mobile devices, languages, sociology, politics, communities, networks, etc.—has ways of communicating with users and each other. Intuitive or not, the sum of all interaction methods for each tool can be considered as an interface. The success of an interface is directly related to the quality and ease of experience that it can provide, where the level of satisfaction can change from person to person. As a result, the most important and difficult part of designing an interface is to anticipate the needs of users and to create a suitable ground for the user experience.

As discussed earlier, the keyword “user experience” is at the center of the course’s objectives. Topics are not focused on graphical user interfaces or human-computer interaction (HCI) as one would expect from a visual communication design program, but rather on personal observations and perceptions, and their translation to the design platform. Along with printed city maps, information graphics, data visualizations and social web interfaces, subjects that require a different level of specialization such as urban intervention, urban design, and micro and macro scale architecture are also included in the course curriculum.

If we approach this inclusion from another point of view, considering architecture as an interface allows us to see that parties involved in the process are not only designers (architects) and users (dwellers). “In addition to the architect and user, there is another animate and creative participant in the formulation of architecture: the building, sometimes reacting to the other participants, sometimes acting independently” (Hill, 2003, 88). Some students who adopted this approach, consciously or unconsciously, ended up with designs in which buildings themselves were the main actors and were designed to evolve by themselves by taking advantage of the usage data coming from dwellers.

**Conclusion**

Architecture today need no longer be considered as a monument which smothers social life. The notion that architecture is a means of controlling and incarcerating people in solitary and inflexible permanent structures should be challenged in today’s networked and fluid societies. Tendencies for oppression through architecture must be challenged, and to be effective, resistance must remain alive and regenerative through collaboration. (Cowan, 2002, p. 20)

The architectural profession employs a restrictive visual and verbal language that ‘empties’ architecture of its inhabitants. The text suggests that the traditional language of architectural production and discourse can be dismantled and recast to include, and respond to, the signs of inhabitation. [...] The ‘illegal’ architect, who questions and subverts the conventions, codes and ‘laws’ of architecture, is most likely to value the user and transform architectural practice. (Hill, 1998, p. 10)

A very fresh example of this suggestion is the architecture designed by non-architect individuals within the Second Life environment. The main objective of making students study a topic in which they are not educated is to foster multiplatform awareness in the age of over-specialization. We do not necessarily suggest a return to the old practice of user building as a way of closing the gap between users and architecture. Instead, the idea is to make people aware that they can contribute to the evolution of architecture, which seems to be overwhelmingly controlled by technological advances. This contribution can be realized by providing user data on how architecture can be personalized and seeks to transform the user in order to transform the design process. Form follows user.

**References**


