

## *Space/Less/City : Students' Perceptive Journey beyond Urban Analysis*

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The Asian Conference on Education & International Development 2015  
Official Conference Proceedings

### **Abstract**

In Architectural Design classes as in Architectural everyday practice, preliminary urban analysis is a mandatory step of the design process in the understanding of opportunities and constraints of a specific project for an urban site. Classic analysis based on the study of existing cartography and on the production of abstract diagrams is no longer appropriate. In order to fully engage the rising complexity of contemporary globalized cities, a more experiential and perceptual approach is needed in order to define new “mapping” strategies which will allow for a holistic assimilation of peculiar urban conditions.

In this presentation, I will illustrate the outcomes of the first assignment given to students for my 5th year Architectural Design Studio called “*Space/Less/City*” at the American University of Sharjah. The site for their project, a recent developed neighborhood in the outskirts of central Sharjah, shows all the issues of contemporary globalized peripheries. There is a severe lack of public spaces, community facilities, proper transportation and even sewage infrastructures. In the first week of the course, students were asked to observe and analyze the site as personal and perceptive journey to identify the complex sublime aesthetic of this peculiar area. They were free to choose the media of representation of their holistic urban analysis. Artistic performances, on-site installations, and an exciting public event involving the local community were the pedagogical outcomes of the assignment.

Keywords: Architecture, Urban Analysis, Cities, Architectural Design, Performances

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## **Introduction**

Urban analysis is a mandatory study every architect must undertake with the aim of understanding the context of a project designed on sites located within human settlements. Nowadays, cities are complex organisms. Places, or *Non-Places* (Auge', 1995) of endless transformations and adaptations. In order to be able to elaborate a proper architectural proposal, designers must become aware of peculiar conditions, opportunities, and constraints embedded within the location of their future project. In this light, the analysis (and the criticism) of the existing urban morphology has traditionally been the most important feature which architects would investigate as driving force of their future design decisions. While looking at the "form" of the city, designers records and interpret spatial structure characteristics. Rational or organic patterns of developments are recognized and measured not only in their *status quo* but also considering their growth and expansion through time.

Other data can be collected by morphological analysis which includes land use, existing building typologies, influence of infrastructure, pedestrian and vehicular circulation. Considering the raising complexity of contemporary cities, classic methods of urban analysis have soon shown their limits (Robson, 1969). The inadequate gathering of information derived solely from the observation of the city's built form provided an incomplete and often deceptive understanding of the real scenario. Therefore, in recent years, a more holistic approach was undertaken in order to achieve a more exhaustive comprehension of urban sites. Other existing factors were added as categories of analysis such as environmental characteristics, perceptual features, and social settings.

### **Urban analysis' fields of investigation:**

Every urban analysis exercise is conducted in order to understand the current urban condition of the site (which is the result of historical transformation and modern expansion), through collection of data about its social, morphological, functional, environmental, and perceptual characters in relation to both local conditions and larger scale. In detail, these categories can be further described as such:

#### *-Historical*

Development of the historic fabric, its evolution, loss and reconstruction, including the impacts of modernization, roads and services.

#### *-Social*

Analysis of the existing local community and potential for future inhabitants derived by the introduction of new functions or implementation of the existing ones.

#### *-Morphological*

Analysis of the existing urban morphology: Volumes, density, grids, typologies, roads network & hierarchy, circulation, accessibility, relationship with main city infrastructures, site levels, architectural styles.

#### *-Functional*

Analysis of the existing functions in the surroundings at local and large scale.

### *-Environmental*

Analysis of the local environmental characters: climate, prevalent winds, humidity, orientation, sun path and shade, different types of vegetation.

### *-Perceptual*

Analysis of the perceptive parameters of the area: existing and potential views, accesses, enclosure vs. openness, security, masses vs. voids, colors, materials, edge conditions, nodes, landmarks.

Even if the field of research was widened, including all the above described new factors, the way the analysis was represented did not change substantially. The main outcome of the investigation used to be, and still are, visual maps describing through a range of graphic diagrams conclusions of the study. Maps are abstract representations of the object of the analysis and can represent several issues depending on the subject of investigation. Maps are produced in order to communicate. Hence, the collection of data and the resulting representation of outcomes should be as accurate as possible. In the latest years this approach has changed. There has been an increasing awareness of subjectivity implied in any form of analysis.

Since maps or diagrams are produced by a subject (the analyzer) they are always subjective. In this sense if we make abstract representations (maps, drawings) we are not so much revealing knowledge but we are creating knowledge (MacEachren 2004). Therefore, preliminary urban analysis can be defined as “preliminary design” when designers begin during this phase their decision-making process. Even if categories of examination are now increased in order to achieve a more holistic process of analysis, I believe there is still an issue about the limitation of being always represented as an abstraction through visual maps. More and more in recent years diagrams are becoming graphically intriguing but at the same time very obscure to understand. Moreover, the whole process of exploration remains mostly based on scientific data or direct observation of existing cartography which cannot fully describe the complexity of contemporary urban areas subject to ongoing transformations. A more cognitive and perceptive approach should side (and support) classic analysis methodologies in order to include factors which were ignored before although often crucial for the completeness of the study.

### **Urban analysis assignment as perceptive journey**

The course ARC501 at the College of Architecture, Art and Design of the American University of Sharjah is the fifth year Design studio of the first semester of the academic year. From the course description: The course “employs advanced design tools to respond to complex architectural projects in a topic, capstone or collaborative studio setting” and it “addresses the discipline of architecture at various scales ranging from conceptual investigations to full-scale fabrication and urban design”. The chosen project for the semester was a community center located in a peripheral area of Sharjah. A building that would accommodate a complex of different functions for a total of 19000 square meters. The course task was to design a mix used building located within a very problematic area of Sharjah named Muwaileh, near the University City area. The neighborhood is a very recent settlement rapidly built in the last few years as the majority of the city of Sharjah. It is mostly inhabited by

newcomer immigrants. A common feature of these recent developments is the dramatic lack of essential infrastructures and services.



Figure 1: Muwaileh, Sharjah

The area is next to an industrial compound and it is nestled between high-traffic roads making it one of the cheapest neighborhoods to live in the entire region. Moreover, the quality of buildings and architectural solutions is very low, contributing to the perception of a generic and ordinary “image of the city” (Lynch, 1960) which alienates the sense of belonging to a specific place. Goal of the proposed community center was to become the crucial point of the neighborhood raising the local identity and sense of belonging. In the first week of the course, students were asked to observe and analyze the site as personal and perceptive journey to identify the complex sublime aesthetic of this peculiar area. They were free to choose media of representation of their holistic urban analysis in order to go beyond the traditional understanding of an urban context through its cartography.

The seminar Space[Less]City was a personal and perceptive journey to identify the complex sublime aesthetic of a city without urban spaces. On-site installations and the creation of a public event, such as the projection on a building blank side wall of a Bollywood movie, were used as media to represent students’ analysis. The class was divided in 4 groups. 2 groups worked inside the school building while the other two worked on site. Artistic performances, on-site installations, and an exciting public event involving the local community were the pedagogical outcomes of the assignment. In the first project “*Pace of Space*” students intended, through a documentary video, to showcase various experiences of spatial typologies found in the area.

Pathways, on each of the prevalent functional zones such as institutional/schools, residential/families, and residential /workers, were continuously walked on a trail. The aim of the video was to show the spatial composition of the area in order to have a sense of feeling in a journey of space. The three pathways started in different points but ended up at one single point which was the project site. The installation of a maze of wires on a wooden board, presented with the video, illustrated the different nodes and connectivity of the place through the mapping of their journey.

A very rational method was used for the production of the performance “*Where are you?*” At first, through a phase of investigation students found out that the site was dealing with issues of “lost space” or inadequate use of space. The existing urban grid, repetitive geometry, and lack of careful planning was noted and recorded. Students also noticed that places in between buildings, as well as the facades, were

not designed with human social needs in mind. Hence, there were very narrow and badly designed/ maintained walkways between buildings, lack of public plazas, and of balconies. As theoretical proposal, students, engaged the absence of spatial meaning they found on site. Their project was a performance/ installation that integrated light, sound, and interaction with viewers emphasizing the human need for urban space. Viewers where invited to enter a dark room where students/actors hiding behind a curtain asked questions about the relationship between the audience physical status and the space where they were immersed. Viewers were therefore forced to focus on their way to experience the specific spatial setting.



Figure 2: Lounge in Dunes

The purpose of the project “*Lounge in Dunes*” was to examine the effect of an intervention on a site lacking identity by its temporary occupation. Again students noticed how the site was a “display of predetermined incomplete grid, which guides the placement of functions and buildings”. The area of the intervention was patched, leaving behind unplanned, uninhabited leftover areas. The result was an unbalanced combination of spaces and masses all of which lacked identity, hence an area searching for a meaning.

With these prerogatives in mind, students built a circular light installation in order to define a portion of land between existing buildings. The open room created was then furnished with a carpet and pillows as a Majilis in the open desert. Music was played for that night while tea was served. The installation was visible from several buildings and from apartments even at very high floor. Thus, wondering what was going on, curious inhabitants joined the event enjoying the temporary public facility. Whole families arrived from their flats bringing children and old parents. Many asked if we could leave the installation permanently there.

The last project, “*Adaptive Spaces*” involved the community of the neighborhood at larger scale. From the description of the project: “In a land of contrast, buildings are scattered around the area in a seemingly random manner, plugged in a sandy desert, lacking important urban infrastructure elements such as roads, parks, and public squares. The urban fabric is composed of many contrasting areas, ranging from middle class residential buildings to low-rise labor housing.

The inhabitants change the leftover spaces to adapt their needs, and the use of these spaces varies according to each area. For example, a wide space is inevitably turned into a parking lot, while the same space in the labor housing area is turned into a volleyball field using locally available materials.

The intervention on site aimed at representing how usually inhabitants are the real designers of their public spaces. In other words, how users make subtle changes in the nature of their surroundings to create public spaces within the limits of what the site provides. Students organized an event, the projection of a Bollywood movie on a blank wall of a building in order to analyze inhabitant's reactions and the adaptive nature of the space – an empty sand lot turned into a public /social gathering space - used for the event. For the organization of the event students faced many challenges. The first idea was to project the final match of the cricket world championship. At that time the match India vs. Pakistan could attract thousands of viewers causing potential security issues. The police department did not allowed nor authorized the event therefore the idea was dismissed.



Figure 3: Adaptive spaces

Therefore, a more “subtle” Bollywood movie was chosen although with such strong competitor (the cricket match) the audience was way more limited. Students spent lots of time on site organizing logistics and making agreement with the representatives of the community whom were enthusiastic about the initiative and, overall, very helpful. A generator and a projector was rented and installed in the empty lot. The movie started at dusk. As result, one anonymous, undefined and un-designed left over urban space became, for few hours, the pole of attraction of the whole neighborhood. The movie was watched from the “open theater” and from the surrounding houses. The audience was so enthusiastic about the whole event that at the end of the first movie they asked for one more projection which students were happy to provide.

## **Conclusion**

Students' experience during the seminar informed directly and indirectly their final project. For instance, one student designed as main public space, of her project, an open theater due to the success of the event organized during the analysis phase. Some other students incorporated characters of existing alleys between buildings and re-design them in order to define the circulation of their own projects. Many other traces of the Space[Less]City seminar experience could be found in final students' projects.

I believe that designers and students of architecture should include in their urban analysis an experiential component. Traditional study of cartography, even if it includes environmental characters and social settings, is not enough to fully understand a complex scenario such as any neighborhood of any contemporary "global" cities. Especially if operating in different countries and in different cultures, designers cannot avoid to conduct a comprehensive and meticulous site visit and analysis in order to record personal impressions of the existing status quo. The collected information will be essential to ground the project in reality. Therefore, this method of urban analysis should be taught to students of architecture. They should develop a sensitivity toward the context that will allow a better command on elaborating proper design strategies.

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