The University of Sheffield

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Critical Reflective Essay for

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Abstract

The site, where an architectural project will grow and root, becomes the first part of this architecture. The comprehension and response of architects to the site, therefore, forms the first step of the design process. In my opinion, the objective understanding of the site is the basis of giving response to it, and the formation of an artefact is a process that the designer continually responds to the site subjectively in his unique way. In my essay, I would like first talk about how I understand the site. Secondly, I will mention data collection, mapping and model making in term of responding to the site. At last, I will try to gain my own way of reflecting to the site at the methodological level.
The interaction of a site and its environment

The interaction of a site and its environment (the street, district and entire city where the site is in the urban space) characterizes the site. In my opinion, in terms of architecture, the raison d'être of architectural space lies on the human life that happens in it. Diverse forms of life define various forms of space. Accordingly, all empty plots, open spaces or existing buildings defined by people’s lives have their independence and individuality.

On the other hand, people’s social life can be seen as a whole in which individual lives are dynamic and interactive. It determines that the space people live in can be seen as an entirety constituted by individual spaces which interact with others. Moreover, some collective characters can be found in people’s individual lives, thus different city spaces are linked by certain human actions. Apparently, the site exists in the entirety and plays as a part of it.

With respect to the site in the city, it plays different roles when people comprehend it in different scales or on different points of view. A site could be different when one looks at it from the scale of the entire city to the scale of the individual street. A site is a comparatively small spot in the scale of the entire city. But the locus of it could be or could potentially be a crucial point of the whole city network of social life or one important dot of the urban fabric. Of course, it depends both on its physical location
and the architectural project on it. The wider area one considers the site existing in, the more information he could gain from researching the site. This information forms knowledge, than the design conditions, than elements of architecture. When an architect considers his site as a part of the entire city, he has already integrated his design into the urban fabric. Consequently, it is important for architects to consider the site in a right position or to take an overall point of view that could help the site to fit in the circumstance of any scales.

As I mentioned former, the interaction of the site and the entire city is based on the links between individual lives and the whole society, and a single site is intricately connected to the urban fabric. The connection characterizes the site and one can only identify the site by exploring the complicated links between the site and its outside. As a part of the whole city, the site is dictated by the physical and virtual meaning given by the city. Conversely, the individuality of the site can interact with the surroundings and impact the whole city to some extent, and it often relays on what artefact will be constructed on the site. In other words, although the site is conditioned, it also conditions.
The evolution form a generalized place to an architectural site

The site to architects can be more understood as a piece of land where a building will be, and it is easily associated with a blank plot surrounding by buildings or by a road in the urban area. In a masterplan, the site is often abstracted as a geometric figure within a particular red line area. Besides, existing buildings, landscapes and spaces could be architectural sites with expectations of redevelopment, renovation and conservation. In this common sense, any space in the city could be the site. However, the physical and social essence of the site exists above and beyond the architectural one. When an architect is given a generalized place to set a project, it requires the architect to develop the natural and social characters of the site into architectural which means he must read the site with architectural language and view but not social or cultural. I am convinced that it is the premise to design a project.

Especially at the transitional stage from the site analysis to the formation of the architectural conception, the basic concept might not be appropriate if the site is comprehended as a general place or not architectural enough, and in such situations, the initial concepts could not convince people.
Material makes the body of a building, good space and form makes the building an architecture, and a brilliant conception of the architecture endows itself with spiritual values. So, what or where is a conception derived from? In my view, it comes from the analysis, development, deduction and evolution of the data collected from the site, and the data must be translated into architectural language. Then, the initial concept forms. Collecting data from the site seems to be everyone’s first step to start the design, and also the first step to respond to the site.

**Make data visualized and graphical**

Data collection plays a crucial role not only in the architectural field, but is also seen as a basic element in other design domains. Even though the design languages are quite distinguishing, the most effective way to process data to all designers is to make virtual data visual.

Referring to the response to the site, I think that to make data visualized and graphical is vital to extract concepts from the data. It makes conceptual and virtual data easier to read, remember and understood. More importantly, graphical data can inspire designers by visual impact. There are many examples can be found in the graphic design field, some points of view and graphics are really impressive and I think their particular approaches are helpful for all designers.
Visual metaphors are a powerful aid to human thinking. From Sanskrit through hieroglyphics to the modern alphabet, we have used ciphers, objects and illustrations to share meaning other people, thus enabling collective and collaborative thought. As our experience of the world has more complex and nuanced, the demands to our thinking aids have increased proportionally. Diagrams, data graphics and visual confections have become the language we resort to in this abstract and complex world. They help us understand, create and completely experience reality.

The information designer shapes an experience, or view, of the data with a particular aim in mind.

Simplicity – design is not just about making things simple. In fact, there is a complementary relationship between simplicity and complexity that influences design choices to produce surprising and informative data diagrams. By shaping their view on data, designer can choose to introduce a level of complexity that allows just the right amount of contrast to drive profile, focus and definition. The choices determining this delicate balance – called simplexity – are highly dependent on the context and audience for the resulting data presentation.¹

To make the data (which includes experiences, views and etc.) graphical, a particular aim forms in the designer’s mind. This is actually the formation of a particular concept. When the designer has an overview on the complete graphic, the concept will be more certain and developed.
Datascape – San Francisco Emotion Map by Christian Nold
Datascape – Minenfeld/Champs de mines$_2$
As the explanation of the word “simplicity” in the quoted passage, even though a concept seems to be simple, its support and basis must be solid and convincing. Again, the importance of data collection has been emphasized.

Accordingly, in term of the response to the site, complete and sufficient data collection of the site, and the visualized and graphical process of the data can be seen as a methodology of the response. Actually, this process is quite same as another methodology – mapping which is, I believe, the most useful and effective way to respond to the site. Of cause, mapping here refers to map information and data but not only map some geographical characters of the site.

**Mapping the site**

Maps show the situations which people might not realize. In fact, maps are not only used to show to audiences, but also to the designers themselves. Mapping the site includes many categories, mapping space, movement, relations, narratives, indeterminacy, and different experiences and expressions of people. It helps designers gain the insight into the complexity of the site. Meanwhile, the site evolves beyond its physical essence, becomes complex integration which is constituted by different senses. Then, a designer is inspired by realization of certain
senses and chooses a certain direction to develop his concept.

In addition, in my opinion, all the research about the city is actually a kind of site response. Through the research on the entire city, any site in the city has been brought into an overall study. Especially the links of the site with other spaces or buildings in the city are made clear. In the book **Urban Flotsam**, several theses can be seen which are all about understanding of the city. More importantly, the author introduced a way of mapping which I think can be understood as a methodology of responding to the site – walking.

*A city expresses the action of individuals and collectives in an environment organized by rules. It reflects the needs of individuals and collectives. It orchestrates scenarios for collective living. It exists as an expression of, and backdrop to, the physical encounters the remain so important in our lives, deposit the technical advances in communications. ... The city exists in memory, in the desire to remember, in the desire to forget, in the simultaneous construction of memory and forgetting.*

*The dynamic nature of the city calls for dynamic symbols, for traces of various things in motion – birds, money, cars, people, massages – which endure, if only temporarily, and become recognizable as urban characteristics, the realization of symbols through the making, forming and naming of land, of mass, of space, is an essential part of the maintenance of cities. The city’s dynamic nature includes the space of one’s dreams and physical encounters, of birth and death, of incessant activity and movement. It creates identity: the home, the burial plot, the*
touchstone – the things placed in one’s surroundings to ensure the reconstruction of memory, the creation of both a mimetic and an indicative space.

Architecture is a practice engaged in speculating in these emergent configurations and orders. It recognizes them, suggests mechanisms to make them instrumental, and gives them form. At the same time, it invents scenarios for built structures and their uses. As physical objects, these structures are part of the existing world; as model, they describe emergent orders, possible realities.

... This brings about new tensions between the open city, with its necessarily dynamic processes, and the seemingly closed state with its desire to perpetuate its own image of itself. Mobility and the formation of new groups and collectives constantly lead to new spatial identities. ²
1 Walk towards
The horizon in a scope of vision is a representation of an observer gazing at a range of objects. An awareness of an observer in relation to what is observed is a beginning of a fieldwork and a necessary instrument for observation/interaction.

2 Walk across
By stepping across or bumping against something invisible by chance, a hidden boundary shows itself as a resistance. An observer can deliberately or accidentally use this tactic in order to mark and to register hidden boundaries as a succession of events which otherwise remain hidden.

3 Walk along
Finding something or someone to accompany is the first instance of using an observer in order to obtain a positive feedback. Yet it is still a subtle and ambiguous means of interaction.

4 Walk into
Transgressing a boundary by agitating potential conflict, walking into trouble, is a useful instrument as long as an observer’s security is guaranteed. It is a way of integrating an observer into a system and subsequent process of change. The transgression turns a realm of observation into an intervention or a field experiment and turns an observer into an agent of change. Here the responsibility for the consequences of the observer’s action becomes the matter.

5 Walk out
Writing a history is a rhetorical operation with a territorial ambition. An observer circumscribes a boundary around the system in order to reorganize segments of facts according to his/her point of view without direct contact or integration with the system itself.

6 Walk through
The observer engages with the system in order to connect segments of it, reconstructing his/her own domain through a dynamic process of interaction. This process leads to the formation of an alternative field that will multiply and increase the complexity of the initial field.

7 Walk about
Dynamic modelling is a constructed field achieved through the interaction of an observer with the system under observation. The basic assumption is that this alternative field of reality is kept apart from the initial field of observation (a model) yet maintains a direct linkage through the observer.

Seven routes and methods of walking based on one site
In fact, collecting data by walking is one important tool of mapping, the process of walking is certainly responding to the site.

**Digital model making as tool of mapping**

Besides, digital model making in order to assist mapping is another approach I want to mention in this essay. Particularly, digital models processed by the computer could contain much data and information. It allows designers to explore the complexity of the site or the entire city with much more possibilities than ordinary maps. On the website of *Space Syntax*, many good projects can be took as examples, and their approach is a way of mapping and responding to the site.

*We show how the layout of space influences the social, economic and environmental performance of places from the scale of the entire city to the scale of the individual street and building. We measure the strength of spatial layouts, both existing and proposed and we show how spatial layout impacts fundamentally on the way that people move, interact and transact in streets and buildings.*

³
Spatial accessibility analysis

Visitors’ movement traces
To conclude

At the end of my essay I would like to summarise the methodologies of the response to the site briefly:

• Consider the site in wider areas from the scale of the entire city to the scale of the individual street
• Understand the site as a part of the entire city and focus on the links between the site and other objects in the urban fabric
• Make the data visualized and graphical in order to extract concepts (simplicity) from the complex data collection
• Use mapping as the main tool to analyse, process and integrate all the data from the site and the city
• Do more walking based on the site to collect data of subjective experiences and expressions
• Bring digital model making into mapping in order to process the data more efficiently

Although these several points could not cover the whole process of the reflection of the site and they may not address all design problems, I really wish to test them in my next design project.
Bibliography:


2 Raoul Bunschoten, *Urban Flotsam*, (010 Publisher, 2010)


Illustration:

1 *Data Flow: Visualising Information in Graphic Design*, Page 119

2 *Data Flow: Visualising Information in Graphic Design*, Page 118

3 *Urban Flotsam*, Page 80 – 81

4, 5 British Museum Project of Space Syntax,  