UNIVERSITY OF
LIVERPOOL

SCHOOL OF ARCHITECTURE

# UNDERLYING IDEAS IN UNIVERSITY DESIGN STRATEGIES

## Educational Programmes and Architectural Plans

**A Dissertation Submitted in**
**Partial Fulfilment of the Requirements for the Degree of**
**Doctor of Philosophy in Architecture**

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**2008**

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*to the memory of my father...*

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## ABSTRACT

This research tries to uncover ideas that underlie the practice of architecture in the design of Universities. It will examine how theories of knowledge and programmes of education underlie the spatial organisation and the architectural plans of Universities. The investigation will also draw a parallel between architectural plans and the educational programmes in Universities, on the one hand, and techniques of constructing subjectivity, mainly as postulated by recent French thinkers, and strategies of architectural design, on the other hand.

This investigation attempts to answer three questions: Is there a relationship between architectural plans and theories of knowledge? What are the conditions in design that cause heterogeneous elements, parts and components of a University to be organised in such a way that the resulting structure would correspond with institutional and social structures? How is the spatial structure of the building organised so that it corresponds with the way that the subject, or a group of subjects, view things?

In order to answer the above-mentioned questions, this research will study the way that the fields of epistemology, phenomenology and psychoanalysis, through their explanations of subjectivity, can help to deepen our understanding of architecture. In particular, this investigation will focus on the ideas which are proposed by, among others, Jacques Lacan and Michel Foucault. The investigation will then examine three case studies: the Rab'i Rashīdī, a Persian fourteenth-century institution of higher education, the University of Chicago, 1890s, and the University of Essex, 1960s.

## ACKNOWLEDGEMENTS

It is with pleasure that I express my gratitude to all those who made this PhD thesis possible.

First and foremost, I want to thank Professor David Dunster, who is not only my supervisor, but the person who without his initiative, comments and sustained supports, this thesis would not have been completed. I have been very fortunate to have encountered him as he offered me so much insight. Throughout the process of my PhD studies, I have valued his decent character, his substantive critiques, his thoughtful suggestions, and especially his sense of commitment.

My thanks also go to all academic members of the University of Liverpool. I have greatly appreciated the support I received from Professor Barry Gibbs, the Departmental Director of Postgraduate Research. I am also grateful to Professor Neil Jackson and Professor Jonathan Harris, from the School of Architecture, and Dr. Matthew David, from the School of Sociology, for their insightful comments on my project.

I believe I should also thank Ros Wood, Marion Winsor, Sue Wilkinson, Jenny Johnson, Ian Hunter, Craig Staples and Chris Belledonne who helped to create an environment that was supportive of research.

As this project was financed by the Iranian Ministry of Science, Research and Technology, there are many people to whom I express my gratitude. I am very thankful to members of the Iranian Students' Directory in London for supporting me during my studies in the United Kingdom. Among those who tried to make things run smoothly, I want to thank Dr. Shams and his colleagues for all the help and support I received from

them. I am also thankful to members of the General Office of Scholarship in Tehran.

None of my work would have been possible without my family. They always put my education first and trusted in me. My mother deserves my undying gratitude for all that she has done for me. Following the death of my father, a year before I started my PhD, and even long before that, when he was not in a good health condition, I was deeply concerned. I know my brothers and my sisters did whatever they could to make sure the situation would cause me as little impact as possible. I simply want to thank them for what they did in that difficult time and throughout my life. Last but not least, I want to thank my wife, Parisa, for her patience and support.

I dedicate this thesis to the memory of my father who demonstrated how the care of the self is deeply rooted in the concern for the other.

# PREFACE

Buildings are complex and multi-faceted entities. They have the capacity for transforming conceptual knowledge into a formal structure. It is hence impossible to understand architecture without taking on a variety of aspects, some theoretical and some professional. As we have seen in the last few decades, in order to study the very particular and complex structures of architecture, we should take into account how buildings are constituted by an indefinite multiplicity of determinations and possible relations including sensual, social and cultural studies as well as financial, technical and functional ones. We should also take the perceivable structure of architecture as the point of departure and go beyond it. These entail, at the same time, stretching the conventional boundaries of the field.

Since the mid twentieth century, the relationship between architecture and cultural, social and intellectual structures turned to become the locus of architecture's scholarship. The new scope consequently, created a space between cultural impressions, social needs and intellectual ideals, which is, of course, a fertile ground to explore the very nature of architecture. Likewise, this thesis will study concepts and conceptions from architecture as well as other fields of study such as epistemology, phenomenology and psychoanalysis. These two sets of ideas (architectural and non-architectural) have been treated in a manner that they will make 'the other' more understandable. In this investigation, the built form is comprehended by the synthesis of separate and often apparently incompatible parts. This investigation began with the assumption that it is impossible to create an architectural space without some conception of the social space, and vice versa.

The initial sketches of this thesis arose out of a clear thematic idea viewing the building

neither merely as a physical object nor purely as a mental image. Throughout this thesis, architecture is not viewed as a dependent practice that provides physical accommodation to ideas created outside its own intellectual borders; nor is it considered as an autonomous one generating objects only according to its own inner rules. The premise of this argument is that: the strategy is unavoidable, even for the most abstrusely aesthetic architects. The guiding belief is that architecture cannot be subsumed under the image of an aesthetic or social whole.

This investigation will not offer a generalised and universal understanding of architectural space. Nor does it give a methodological analysis of architectural forms in terms of shape, meaning or quality. Rather, this investigation will examine case studies of three Universities in relation to theories of knowledge and educational programmes. Inasmuch as any investigation like this poses significant challenges of interpretation and assessment, this research will begin with a theoretical enquiry into the way that the human subject establishes a *relationship* between things. This investigation's original contribution to the body of knowledge has mainly to do with the way it conceptualises a framework to examine the case studies taking into account the spatial structure of those buildings and the archival materials about them.

# INTRODUCTION

# INTRODUCTION

To design a building is to construct a relationship between plans and programmes. The building itself is not the instigator of the programme. But it establishes the programme in a visible way. For the moment, the programme is materialised. A building, when it is approached as a visible programme, becomes a field for the viewer to explain relationships. This explanation would be in accordance with the way that the viewer sees both the plan and the programme from his or her own perspective. At a later moment, another relationship is constructed within the building through the viewer's explanations. The former relationship between plans and programmes is a necessary condition of design; simply because we cannot design a thing without knowing what is it *for*. Nevertheless, whether or not the later relationship belongs to the set of relations, which had *already* existed within the building, is almost impossible to address. On the other hand, however, when we try to 'explain' the relationship between plans and programmes, we 'construct' a mental account of it. This is the most fundamental paradox. Any explanation is a mental construction. It depends, to some extent, on the way that we, as human subjects, look at different things through the same lens.

The programme itself is the necessary product of an idea. The more difficult challenge is to 'explain' ideas that underlie the programme. Both the programme and ideas that underlie it are free-floating entities. It is too simplistic to consider the brief of a project as the programme of the building. It is not only difficult but also problematic to think that the relationship between the idea and the programme, on the one hand, and the programme and the plan, on the other hand, is similar to the links that exist, for example, between the two sides of a simple equation, in mathematics, or between speed and time, in mechanics. Compared with these examples, the relationship between the idea, the

programme and the plan is *more* dependent on the way that we look at each of them. To reiterate this argument in more accurate words, it is more subjective rather than objective inasmuch as it depends on the viewer's position behind the camera.[1]

Why is there a relationship between philosophical ideas and practical programmes? Why does the architectural plan correspond to the programme? The answer is not because one 'follows' the other. The answer is: because there is a system of relations that arranges these things. The relevance of this key linkage should not be negated in any way. There is a connection between plans and programmes simply because there are ideas that underlie both of them. These ideas influence buildings through the human subject. Both the building and the human subject are socially produced. The proposal in this investigation is that the underlying ideas behind the programme of a building underlie, at the same time, strategically the way that the individuals who are involved in the building problem *see* the external world. It is therefore helpful, and crucially important, to examine theories from other academic fields that explain the construction of individual human and *seeing* subjectivity.

## 1. THE SCOPE OF THIS INVESTIGATION, ITS AIMS, OBJECTIVES AND STRUCTURE

### 1.1. The aims and objectives

The goal of this research is to investigate the philosophical ideas that underlie the generation of architectural forms. It will examine the relationship between educational programmes and architectural plans in the spatial organisation of a University. It uses the idea of the University as a case for examining the intellectual traditions as well as social

[1] The term 'subjective understanding' refers to the subjective account of the object. Any perception depends on the subject's way of looking at things. The subjective experience, strictly speaking, is that which belongs to one, or a number of subjects, but not necessarily to all. (See: Thomas Mautner, *A Dictionary of Philosophy* second ed. (Cambridge, Mass. : Blackwell Publishers, c1996). p. 546.) The practice of understanding presupposes the existence of a subject that does the act of cognition; because the subject is the condition of possibility of objectivity itself. What is particularly meant in this thesis by the terms subjective understanding is any understanding which cannot be achieved, determined and judged empirically. This argument is based on the postmodern epistemological critique of knowledge in which knowledge, in general, and the Humanities, in particular, are interconnected with concepts such as identity, culture, gender, ethics, etc.

and cultural influences. The study will draw a parallel between architectural plans and the educational philosophies in design of Universities, on the one hand, and techniques of constructing the subjectivity - as postulated by recent French thinkers - and strategies of architectural design, on the other hand.

With regard to the subject matter of University design, this research will attempt to answer three questions: Is there a relationship between architectural plans and theories of knowledge? What are the conditions in design that cause heterogeneous elements, parts and components of a University to be organised in such a way that the resulting structure would correspond with institutional and social structures? [2] The final question is: How does the subject 'map' himself in architecture?[3]

The key assumption is that at any given moment of time and place there are strategies that construct the buildings in terms of spatial organisation in a particular manner. This assumption is developed through discussions in philosophy and psychoanalysis in contemporary theories that regard the human subject[4] as the effect, rather than the cause, of social relations. The proposal here is that the institutional and social structures

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[2] José López and John Scott considered social structure as comprising those cultural or normative patterns that define the expectations that agents hold about each other's behaviour and that organise their enduring relations with each other. Social structure is seen by them as patterns of causal interconnection and interdependence among agents and their actions, as well as the positions that they occupy. On the one hand, institutional structure is comprised by the cultural or normative expectations that guide agents' relations with each other. (See: José López and John Scott, *Social Structure* (Buckingham: Open University Press, 2000). pp.3-5.) In this thesis, institutional relations are those that exist between the architect and the client as two sides of a contract. The term institutional relations will also refer to the governing relations within an architectural firm or the University, as an institution. Both the architect and the client act within a web of institutional relations. At the same time, the institutional relations are themselves part of, and influenced by, the social structure/order.

[3] or in a word, how is the spatial structure of the building organised so that it corresponds with the way that the subject, or a group of subjects, view things?

[4] Throughout this thesis, the term 'subject' is used to refer to the human subject. One could claim the much of contemporary continental philosophy considers the subject as the condition of possibility of objectivity itself. It no longer problematically cuts the subject off it. For Heidegger, the subject characterises only a moment in the history of being and of humanity. My stand in relation to the term subject is close to what Lacan and Foucault proposed. Interpreting Freud's primary processes in light of Saussurean linguistics, Lacan considers the subject as a linguistic being. The speaking subject, according to Lacan, is essentially a spoken subject, a subject that comes to itself in and through language, as a pre-existing treasure. (See: John Protevi, ed., *The Edinburgh Dictionary of Continental Philosophy* (Edinburgh: Edinburgh University Press, 2005). pp. 562-564.) Foucault, on the other hand, stressed the discursive structure of the subject. What is crucially important in our context is that the subject is regarded here as the effect, rather than the cause, of social relations.

programme a building during the planning phase in a way similar to other strategies structure the subject.

This investigation will also examine three case studies: the Rab'i Rashīdī (which is a Persian fourteenth-century institution of higher education), the University of Chicago (late nineteenth century) and, the University of Essex (mid twentieth century). In examining the case studies, the focus will be on the relationship between theories of knowledge, educational programmes and architectural plans in design of Universities. The research will study the spatial structure of architecture with respect to institutional and social structures, on the one hand, and the ideas and images, which are brought to a building problem by different interplaying individuals, on the other hand. The argument is that what they bring to a building site includes intellectual agendas explicitly stated in mission, programme, plan and function, on the one hand, and tacit perceptions, conceptions and more importantly images, on the other hand.

### 1.2. The University: architectural vision and intellectual image

Three major building types were considered at the initial stages of this project to focus on. The most immediate option was the residential building. In this building type, it was possible to examine the spatial organisation of a house, for instance, in relation to people's social and cultural pattern of life. This possibility was disregarded for one important reason. To study the relationship between a building organisation and the pattern of life was too far from the very initial objective of this investigation, i.e. the interrelationship between an organisation in architecture and a pattern in thinking.

This notion of *the pattern of thinking* led into considering a second choice: the religious building. There was a discussion that it might be a good idea to compare a mosque to a church with respect to the pattern of thinking that Islam and Christianity propose. This second choice had an advantage over the first one that there are more written texts about the ways of thinking that Islam and Christianity propose. But if we were to compare a mosque with a church we had to make sure that they both have the same function. An

initial consideration of this issue showed that a church is usually a place for religious services and worship whereas a mosque is historically a part of people's every-day life and it functions not only as a place of worship, but also as a gathering and more importantly as a teaching place. As places for worship, the mosque and the church were counterpart of each other. However, as an educational building the church would not normally function in the way a mosque usually does.

What led to considering a third choice were the criteria that: firstly, it is essential to focus on buildings with a certain activity. Secondly, it is important to be able to obtain enough written materials regarding the mission of the chosen building type. Educational institutions were the prime candidates, which could meet the requirement of this framework. It appeared plausible that the University, whether as a model of the ideal society (idealism) or the model of the absence of models (surrealism) or even if it is one site among others where *the question of being-together* is raised, could be an ideal setting to examine the relationship between a vision in architecture and an image in thinking.

The case studies are purposefully chosen in a way to make the commonalities shared by different cultural and social settings more apparent. The first case study is a Persian fourteenth-century institution of higher education, the Rab'i Rashīdī. This complex is located in Tabriz, the city in which I had lived for almost eight years. The Rab'i Rashīdī is now the site of archaeological investigations. The spatial organisation of the Rab'i Rashīdī was never investigated in relation to the intellectual ideas of the fourteenth century. Therefore, it was presumed that there is a high chance that the locus of this investigation may lead to a new understanding of this Persian archetype of the University.

The idea of the post-Enlightenment University owes much to Wilhelm von Humboldt's role in the foundation of the new University in Berlin in the great Prussian Reforms after 1806. Humboldt (1767-1835) believed that a University is first and foremost about *wissenshaft*, a word that according to Muthesius, 'has to be rendered in English with a number of terms, such as scientific precision (which is applied to the humanities as much as to the natural and social sciences) and 'academic' in the sense of the level achieved by

research and postgraduate studies.'[5] With this in mind, an ideal choice for the second case study would be the Humboldt University of Berlin. This choice was disregarded for two reasons. Firstly, among the European Universities, it was more appropriate to decide on a British University, because it is easier to get access to the primary data. On the other hand, most of the archival material regarding the Humboldt University should naturally be in German language, and I did not know that language.

Because it was important to examine in someway the idea of the German University, there was a discussion that it may be possible to study the area under discussion in English-speaking countries. One of the countries that followed the experience of German Universities with a great enthusiasm was the United States of America. Americans' interest in the scientific approach of the German Universities rose especially since the second half of the nineteenth century.[6] This interest joined with a cultural and economic prosperity and led to 'the academic boom of the 1890s'. The Universities founded in the United States in the late nineteenth century were highly influenced by German traditions. The University of Chicago was one of the Universities which were founded at that time. It was considered as the second case study firstly, because it embodied an American understanding of German ideals. And secondly, because the founding president of the University of Chicago, William R. Harper, had a clear vision on the mission of the University in the new world. Furthermore, the University of Chicago resulted from a wider regional ambition and a deep religious motivation.

In contrast to the German tradition, the English new Universities offered a different case. There are three categories in English Universities: the old Universities which were founded during the Middle Ages among them Oxford and Cambridge are the most notable ones. The second category includes the Universities, which are founded during the nineteenth and early twentieth century. These Universities are nicknamed as the 'Civics' and 'Redbricks'. They include, for example, the Universities of Sheffield, Leeds

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[5] Stefan Muthesius, *The Postwar University: Utopianist Campus and College* (New Haven and London: Yale University Press, 2000). p. 203.

[6] In a lecture delivered in 1967 at the Freie Universität Berlin, Sir Eric Ashby, the Vice-Chancellor of the University of Cambridge, spoke of 9,000 Americans who studied in Germany between the 1860s and 1914. Ibid.

and Liverpool. The third category of English University movements includes those Universities founded after the Second World War - the New Universities. In the shadow of the late twentieth century developments in the British University system, it seems better to call the seven Universities which were founded in 1960s Post-War Universities. It was finally decided to pick up the third case study from this later category of English Universities in order to get an understanding of a contemporary University.

Among the seven English Post-War Universities, the Universities of Essex was selected for three main reasons. First of all, Dr. Albert Sloman was the Dean of the Faculty of Arts and the Chair of the Building Committee at the University of Liverpool before he moved to Colchester to become the Vice-Chancellor of the University of Essex. So there are some archival materials regarding his background at the Special Collection of the University of Liverpool Library. Secondly, at the time that the University of Essex was still under construction, Sloman delivered the Reith Lectures at the BBC. In those lectures, he explained his thinking about the University of Essex. These lectures were later published as a book titled *A University in the Making*, which contains some key information contributing to the subject of this investigation. Finally, among the seven Post-War Universities, at the University of Essex there appears to have been the closest relationship between the architect Kenneth Capon (from the Architects' Co-Partnership) and the Vice-Chancellor.

In order to explain the specific organisation of elements in architecture, it is crucially important to look at other - usually non-architectural - discourses.[7] The first element is the background of the project accessed through examination of the relevant records which are directly relevant to that specific building. And the second one is the particularity of events and *surfaces of emergence*. They normally shape a cosmos in which both things

[7] The notion of 'discourse' is generally used in this investigation as something like 'the cultural manifestations of the trafficking of thought'. The result is a web of meaning that defines an era. Instances of cultural manifestations may be a period's literature, books, arts, or professions. Foucault believed, ways of seeing are often reified into expressions of institutional power, such as political or economic structures, a moral code, the ecclesiastical class, and so on. In his debate on the human subject, for example, Foucault suggested 'practices' such as economics, technology, or politics are 'conditions of formation' that make human subject possible. Foucault's view on 'discourse' is particularly influential on post-structuralism. (See: Linda Groat and David Wang, *Architectural Research Methods* (New York: John Wiley and Sons Ltd., 2002).pp. 149-151)

and words are floating.

As the case studies of this project are Universities, it is of particular importance to examine each case in relation to theories of education and philosophies of knowledge. These are topics which make the formation of ideas and consequently the organisation of buildings more understandable. Each case study is viewed as the embodiment of an idea. The specific focus in examining these instances is to analyse them as fields where two lines intersect. The first line is drawn by exploring each case study in relation to the previous expressions in the architecture of that region. The second line is represented by examining it in relation to thoughts appearing in other branches of culture at that time. It is the integration of such apparently discrete topic areas which can deepen our understanding of architecture.

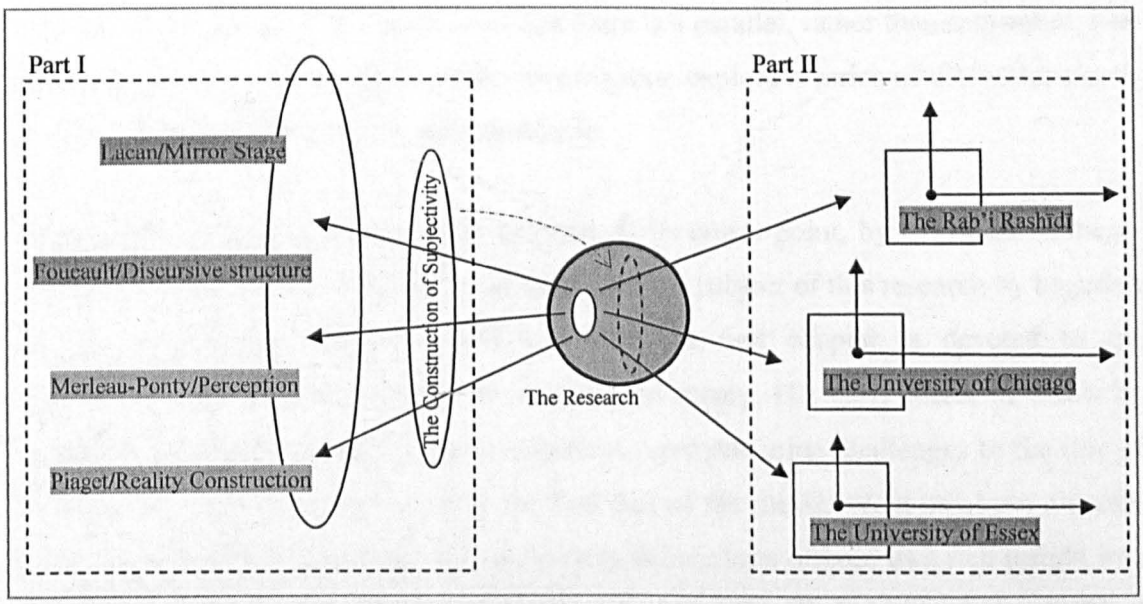


**Figure i:** The diagram of the research. As the diagram demonstrates, this study will examine recent French philosophers' explanation of the construction of the subjectivity. Their explanations will act as a *lens* through which the three case studies are *seen*. The case studies are regarded as results of social and institutional relations. They are investigated with respect to a vertical line (the relation of the building to previous expression in architecture) and a horizontal line (the relationship of architecture to what is appearing in other fields). The diagram also stresses the importance of the viewer's position behind the camera.

### 1.3. The structure of the thesis

The main body of the thesis includes two parts each consisting of a number of chapters. In the first main part of the investigation, I elaborate my perspective on the theoretical framework. Central to this part is the question of how we can use theories appropriated from other disciplines to develop an understanding of architecture. In the second part, three case studies are examined. Both the theoretical investigations and case studies developed hand in hand and because of that there is a parallel, rather than sequential, link between them. So, the two parts of the investigation explore a series of discussions each of which makes the other more understandable.

In as much as this investigation was inspired, at its outset point, by Christian Norberg-Schulz's writings and in order not to misrepresent the subject of this research by negating the phenomenological concerns which it has, the first chapter is devoted to the contribution Norberg-Schulz made to architectural theory. His early ideas, in which he was trying to make architecture more scientific, represent some challenges to the line of argument which is being followed in the first part of the thesis. What has been a useful tool to overcome such a concern is that Norberg-Schulz later offered us a rich insight into architecture as an object, which has a higher and a lower 'level'. For him a cultural object is on a 'higher level' than a physical one. Thus, he tried to place the work of art along with social groups, political parties, and even the State itself in order to work out a *higher* understanding of architecture. Ideas that underlie architecture are objects, which belong to a 'higher' level, and it is the objective of this investigation to uncover the architectural form in relation to intellectual ideas.

This work has been influenced by the recent efforts to break down objectivism; a theory which had been postulated most powerfully by Kant. Thus, in the second chapter in this thesis, I discuss the early history of the modern conception of knowledge followed by an emphasis on the mid twentieth century shift from the modern ideal of objective knowledge to the idea of knowledge which became more and more subjectively determined. Here we can see the first conceptions that structured the knowing subject and

the object of knowledge. The second chapter has a double function in relation to the thesis. First, it defines knowledge as one of the central key words of this thesis. Second, it reaffirms the kind of knowledge which this investigation aims at producing. While this chapter is written from an epistemological perspective, it is about coming closer to understanding the subjective account which will be proposed in the case studies. Reorienting the analysis towards subjectivity has had, at least, two obvious consequences for this investigation. On the one hand, it has caused a further emphasis on the author's subjectivity. And at the same time, it tends to establish the first glance of a relationship between architecture and the subject; an attempt so obvious in this thesis that it is certainly one of its key characteristics.

Through the space created by subjectivity and in a position which wishes to find some sort of objective reaffirmation, the next crucially important issue is the link between subject and object, words and things. The third chapter is devoted to examining the relationship between theory and practice. Foucault will be a key reference in an attempt to reformulate a subject which is itself objectified by social relations. This theme is not only important to my discussion of how the subject was regarded by Foucault - not as a cause of social relations but as an effect of them – but also to my understanding of the end of the duality between the body and the mind, which will be the topic of the next chapter. Some of the thinkers whose thoughts have been influential on proposing an alternative framework have been mentioned in chapter four, along with their proposals. Here again, the subject is the main point of interest. Foucault and Merleau-Ponty's theories on body are all of great importance.

As the thesis is more concerned with the time when a building is under design, this fifth chapter tries to put forward an understanding of design as a process in which cognition develops. In Lacan's theory, the most similar moment to the time that the architect develops his understanding of the building and that the building, like a subject, is being 'constructed' is when the infant develops its understanding of the world. Lacan's mirror-stage has also been compared with Piaget's theory on the child's construction of the reality. Both of them have been examined in relation to each other in order to make a

concluding account of the theoretical foundation of this thesis.

In examining the case studies, the approach is to begin with explaining the built form without considering other aspects of the context. This investigation will highlight the pattern of spatial organisation that it represents while separating it off from other aspects of the context and its function. But, this cannot be the full story. I do not want to claim that all kinds of understanding of a building can be grasped in this way. There are undoubtedly local relations between things and words and it is always necessary to know these local relations if we are to explain how different concepts move into architecture. The reason that these local relations are so important in understanding architecture is because some aspects of form can only be justified with respect to a kind of local knowledge.

The first chapter of the second part of the thesis is devoted to examining the Rab'i Rashīdī which is a Persian fourteenth-century institution of higher education. The complex was founded by the Ilkhānate statesman and vizier, Rashīd al-Dīn Fazl Allāh (1247-1318). The complex consisted of four major parts: a hospice (*dar al-diyāfa*), a *khānaqāh*, a hospital and, a *rawda* (in which the founder's tomb was located). The Rab'i Rashīdī, which is currently a site of archaeological investigations, I will endeavour to show that the rather unusual combination of elements has its own intellectually motivated reasons. What is specifically interesting in my findings is that the complex can better be understood in relation to Ghazzālī's idea of *'ilm*. After this relationship was outlined, as I will explain in more details, I realised that the relationship I had established was not the result of a chance encounter between different elements. Rashīd al-Dīn knew Ghazzālī's thoughts and in one case he had considered himself to be in a similar position that Ghazzālī was almost two centuries before that. The Rab'i Rashīdī is represented, hence, as a belated sequence of a framework put forward by Ghazzālī. Though, it was with the mediation of the Rab'i Rashīdī that Ghazzālī's thoughts were simultaneously 'presented' in a palpable way.

It is not true to believe that any University is necessarily organised in accordance with the idea of knowledge. This is because in architecture it is extremely problematic to

generalise finding about one case study to be applied to another one. The second case study, examined in chapter seven, supports such a contention. The organisation of the University of Chicago was influenced, more than any thing else, by the way it was financed by John D. Rockefeller. The University of Chicago was not the result of the demand of a group of students or tutors seeking to establish an institution of higher education; as was, for example, the case in the Universities of Bologna and Paris centuries before that. The University of Chicago was motivated by a group of Baptists who wished to have their own centre of higher education in the United States. It was mainly financed because of the desire of an American Baptist tycoon who wished to found 'a college now, perhaps a University later.' In my reading of the University of Chicago, I will trace the impact of these forces on the general organisation of building as well as on the Gothic style which was imposed on the architect, Henry Ives Cobb.

The third and final case study examines the University of Essex (1963). More than any other post-war University, the University of Essex depended on the drive of its Vice-Chancellor, Sir Albert Sloman, and its architect, Kenneth Capon from the Architects' Co-Partnership. The case of the University of Essex, in chapter eight, is a study on the operation of the 'other' in architecture. Sartre's story of a viewer in the park and Lacan's account of the mirror have been in the back of my mind in my reading of the University of Essex. Accordingly, I want to show when Sloman entered the setting of the University of Essex – which was by chance a park – Leavis was in controversy with Snow on the merit of Humanities in the University. Moreover, when Capon entered the site, Le Corbusier had left and was leaving inscriptions on Capon's mind. The eight chapter will demonstrate that the University of Essex can be better understood if we consider other spaces of intellectual production.

The final chapter of this investigation is a synthesis of theoretical and historical investigations of this thesis. In chapter nine I will try to show how a theoretical understanding of the construction of subjectivity, as proposed by different disciplines, can enable us to understand a specific architectural arrangement consisting of heterogeneous elements, parts and components. To identify how social relations move into architecture,

the case studies are represented this time in an abstract way. As will be argued, architectural possibilities are framed by the same strategies that constitute the subject's subjectivity.

## 2. THE BACKGROUND OF THIS INVESTIGATION

The goal of this research is to examine the philosophical ideas that underpin the spatial organisation of three different Universities. Three chapters of this investigation (i.e. sixth, seventh and eighth) are hence devoted to the case studies. In each of those chapters, previous researches in relation to the cases under discussion will be examined carefully. This investigation will pay particular attention to its philosophical framework. It is concerned, at the same time, with the relationship between the plan and the programme in the building.

Since the 1960s, theories of architecture have adopted different paradigms of knowledge. In 1964, Christopher Alexander dedicated his *Notes on the Synthesis of Form* to finding ways of configuring architectural forms and relationships spatially. The argument of *Notes on the Synthesis of Form* is a response to one of the most controversial questions that modernism brought to architecture that how far was it adequate to consider design as an intuitive process? The book responded to the claim of those who 'insist that design must be a purely intuitive process: that it is hopeless to try to understand it sensibly because its problems are too deep.'[8]

Alexander's response to this claim was based on considering design as a process that begins from the abstract statement of 'function' to the synthesis of a physical form. In brief, he tried to show that there is a structural correspondence between the pattern of a problem and the process of designing a physical form, which can be analysed by modern mathematics inasmuch as it deals, according to him at least, with questions of order and

[8] Christopher Alexander, *Notes on the Synthesis of Form* (Cambridge, Massachusetts: Harvard University Press, 1964). pp. 8-9.

relations as with questions of magnitude.[9]

The problem for him was how to design clearly conceived forms, which are well adapted to some given context. To give an example, he supposed that two streets of an existing town centre are to be widened at and around their point of intersection, to lessen congestion. He supposed further that the only requirement is that today's traffic can flow without congestion. The requirement diagram, basically, consisted of information about how much traffic follows in various directions at different times of day. This information should be presented numerically in what he called a 'nonconstructive diagram'. By so doing, Alexander drew a street map with arrows of various widths on it, representing the number of vehicle per hour flowing in various directions at peak hours. He called this later diagram a constructive one (Fig. ii) and he considered it as the bridge between requirements and form.[10]

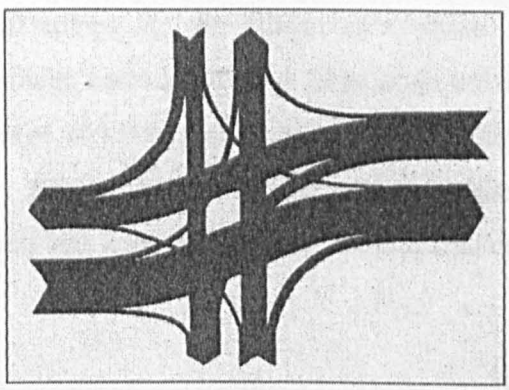

**Figure ii:** The 'constructive diagram' of two streets at and around their point of intersection. From: Christopher Alexander, *Notes on the Synthesis of Form* (Cambridge, Massachusetts: Harvard University Press, 1964).

He mentioned, of course, several models and examples to show how a constructive diagram can explain the relationship between the plan and the programme. All examples that he mentions would start from an abstract statement of function. He then tries to convince us that a concrete architectural solution could result from a process of the analysis of the problem. However, there is no attempt to use this method to analyse the relations that already exist in an actual building. In his book, there is not even a single

[9] Ibid. pp. 6-7.
[10] Ibid. pp. 87-88.

picture of a building.

The book also contained a worked example of his method: the design of an agricultural village of six hundred people in India.[11] Alexander began by listing needs and requirements that must be satisfied in a properly functioning village. Here are examples of the 141 needs he identified: 'Harijans regarded as ritually impure, untouchable, etc.'; 'Marriage is to person from another village';'fertile land to be used to best advantage', and so on. Having tabulated the links between these variables, the graph is then analysed into four 'major subsets' each of which would contain some 'minor subsets'. The subsets, both major and minor, are finally transformed into a 'constructive diagram' in order to work out how the subset of need could be satisfied by a spatial arrangement.

By doing so, Alexander claimed that he analysed needs as a source of information and ended with the synthesis of a design solution. Nevertheless, what he achieved (Fig. iii) is an outline of the spatial zoning for the village as a whole. Alexander's constructive diagram of the Indian village corresponds to a large scale urban design which looks too similar, at least at this stage, to Lucio Costa's master plan for Brasilia, 1957 (Fig. iv). But this is not the issue here. What Alexander fails to explain is this: how the information that he had listed in the subsets was then transformed into a spatial organisation.

[11] Ibid. pp. 136-173

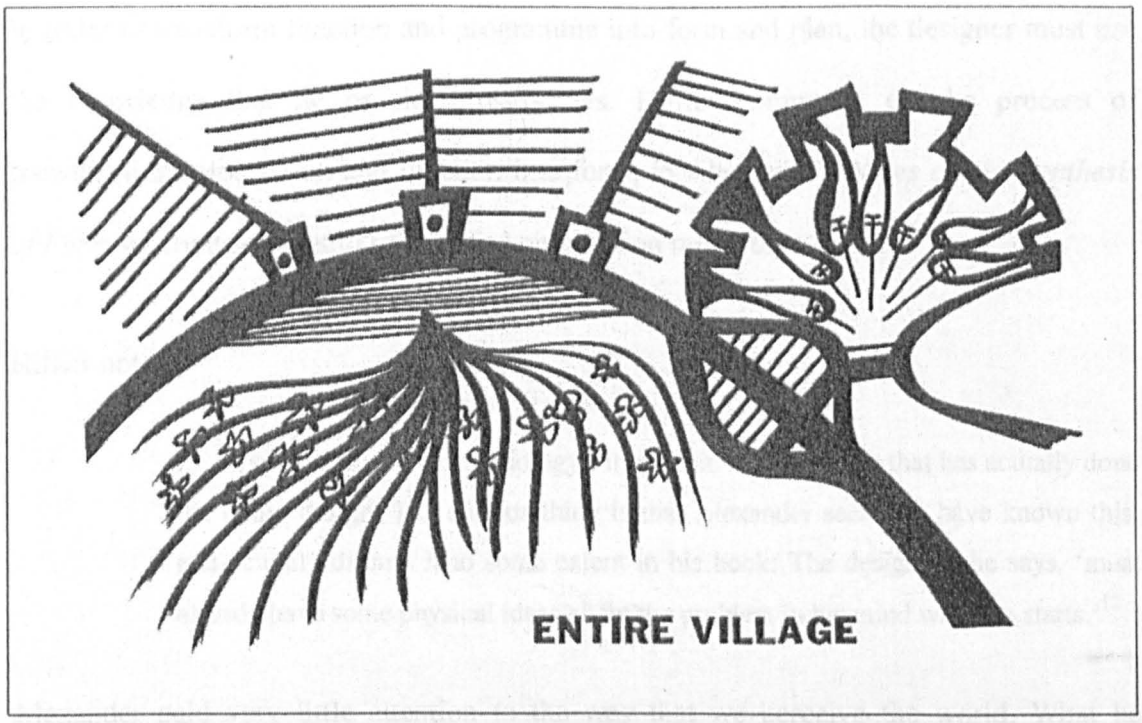


**Figure iii:** While Alexander claimed that his 'constructive diagram' of the entire village are derived from the analysis of needs as a source of information and ended with the synthesis of a design solution, what he achieved seems to be an outline of the spatial zoning for the village as a whole. It corresponds largly to the modern priciples of urban design From: Christopher Alexander, *Notes on the Synthesis of Form* (Cambridge, Massachusetts: Harvard University Press, 1964).

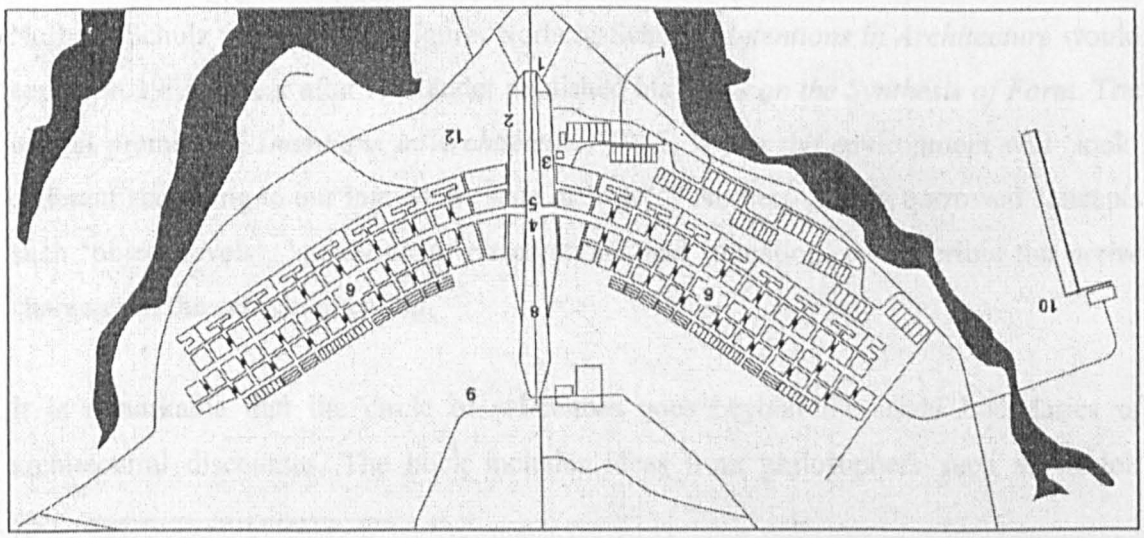


**Figure iv:** Alexander's 'constructive diagram' of the entire village is very similar to village Lucio Costa's master plan of Brasilia, 1957, This shows that even the result of his 'scientific' process is rather based on 'intuition'. From: Fraser, Valerie. *Building the New World: Studies in the Modern Architecture of Latin America, 1930-1960* London Verso, 2000.

In order to transform function and programme into form and plan, the designer must use the knowledge that he or she already has. Hillier comments on the process of transforming information and function into form, in Alexander's *Notes on the Synthesis of Form* where it seems still to be based on intuition rather than reason.

Hillier notes:

> ..., in spite of all the 'methodology', it is intuitive knowledge that has actually done the entire design. The curious thing is that Alexander seems to have known this, and actually discuss it to some extent in his book: The designer', he says, 'must already have some physical ideas about the problem in his mind when he starts.'[12]

Alexander paid very little attention to the way that we perceive the world. What he proposed is a tool that could deal the design only *after* it is conceived. If we are to understand the built form, then it is clear that we need, as a starting point, to pay a considerable attention to the way that we perceive things. Since the 1960s, this gradually became a chief preoccupation for some architectural theorists amongst whom Christian Norberg-Schulz was a leading figure. Norberg-Schulz's *Intentions in Architecture* would appear in 1965, a year after Alexander published his *Notes on the Synthesis of Form*. The central premise of *Intentions in Architecture*, 1965, is that the environment will 'look' different according to our immediate state or 'role'.[13] Norberg-Schulz borrowed concepts such 'object levels', 'condition of observation.' and 'intention' to underline the *active* character of the act of perception.

It is remarkable that the circle of references goes beyond the usual boundaries of architectural discourses. The book includes ideas from philosophers such as Rudolf

[12] Bill Hillier, *Space Is the Machine: A Configurational Theory of Architecture* (Cambridge: Cambridge University Press, 1996). p. 418.

[13] Norberg-Schulz gives us examples of psychological assumptions in which the attitude plays an important role in perceiving things. For instance, he pointed to Egon Brunswick who had shown the same coins appear larger to poor than to rich children and that we have a tendency to overestimate the size of things we consider valuable. Christian Norberg-Schulz, *Intentions in Architecture* (Cambridge, Mass.: M.I.T. Press, 1981). pp. 22-31.

Carnap (1891-1970), Susanne Langer (1895-1985), and Ludwig Wittgenstein (1889-1951) as well as Gaston Bachelard (1884-1962). Moreover, it is engaged with aspects of modern psychology particularly Gestalt psychology. Norberg-Schulz refers to psychologists among whom Egon Brunswik (1903-1955) and Jean Piaget (1896-1980) are primary. Even though Norberg-Schulz's interest in Roman artists and Renaissance architecture is evident throughout the book, there are quotations from Gropius, Mies van der Rohe and Le Corbusier showing his preoccupation with Modern architecture that he believed had entered a 'new phase' after the Second World War.

Norberg-Schulz's *Intentions in Architecture* was written under the clear influence of a project undertaken by a group of American sociologists. They had worked together at Harvard University to examine problems and concepts governing social relations. After several modifications in focus and content, the project was finally published in 1951 as a book, edited by Talcott Parsons and Edward Shils, under the title of: *Toward a General Theory of Action.*[14] The project was defined by its authors in the following way:

> The theory of action is a conceptual schema for the analysis of the behaviour of living organisms... There are four points to be noted in this conceptualisation of behaviour: (1) Behaviour is oriented to the attainment of ends or goals or other anticipated states of affair. (2) It takes place in situations. (3) It is normatively regulated. (4) It involves expenditures of energy or effort or "motivation" (which may be more or less organised independently of its involvement in action)... when behaviour can be and is so analysed, it is called 'action.' This means that any behaviour of a living organism might be called action.[15]

The theory of action presupposed that the action is *oriented* toward the achievement of certain goals. In each given 'situation', the point of reference of all terms is the action of an individual actor or of a collection of actors. They are, in one aspect, physiological organisms. In order to describe an action taken by an individual or a collection, it is

[14] Talcott Parsons and Edward A. Shils, eds., *Toward a General Theory of Action* (Cambridge, Mass.: Harvard University Press, 1951). Norberg-Schulz refers us to that investigation several times throughout his book.

[15] Ibid. p. 53.

inescapable to consider the actor's *orientation of action* toward objects including the self, other persons and cultural symbols. According to them, the actor's orientation entails 'selection' out of the choices limited by the situation.[16]

Because Norberg-Schulz's underlying logic in *Intentions in Architecture* shares presuppositions with the Parsons-Shils formulation, it is worth highlighting some problematic aspects of that theory. Theory of action is concerned with the actor's process of interaction with objects in a situation, not with the internal physiological process of the organism. Consequently, the theory focuses on the inter-action between different actors involved in the same action. It regarded the actor, either as one individual or a collection of actors, as a whole. But, it did not investigate the internal psychological structure of the actor.

As an example, Parsons and Shils discuss the following: a stream's course is determined by a 'relationship' between the properties of water and the contour of the land.[17] Thus the map-maker can accordingly chart the flow of a stream by means of relational concepts without recourse to any but a few of the properties of land and water. What this example suggests is that the stream's course has been considered as an action, land as the situation and water as an actor. Inasmuch as the direction of the flow is determined by the contour of the land alone not by the property of water, then we can argue there are at least two notable beliefs on which the theory of action was erected. Firstly in that theory, it was supposed that the actor would 'behave' in a certain way at any given situation. And secondly, the action has been imagined as an *a priori* structure which can be 'charted'. Although such a way of thinking can be applied to empirical fields, it is certainly too unyielding to consider it as a proper tool in analysing flexible fields and practices such as architecture. Both the actor's action and the situation's condition undertake a constant change in their nature and attitude as well as in their manifestations.

Partly based on this theory of action, Norberg-Schulz considers architecture as a living

[16] Ibid. pp. 4-5.

[17] Ibid. p. 62.

organism. To regard architecture as a living organism entails trying to establish a connection between the organism and its environment. He consequently puts the architect in the position of an 'actor' who is making an 'action' oriented to attaining certain goals. The goal that the architect is to attain is what he calls the 'architectural totality'.[18]

Norberg-Schulz believes a description of architecture has to be carried out by means of three basic dimensions: *building task*, *form* and *technics*.[19] The architect, according to him, has to *formulate* the building task with respect to the technical possibilities as well as utilitarian constrains. He also believed that the analysis of the architectural form should be based upon the description of relations and elements. This may look similar to what Alexander proposed earlier especially if we consider that the general theme of *Intentions in Architecture* argued for a scientific approach to architecture. Nevertheless, the main difference is that he never thought that there might be a mathematical description of relations within and around architecture.

Norberg-Schulz further distanced himself from the tradition of such a scientific approach to architecture. The next three decades of Norberg-Schulz's life were devoted to developing a phenomenological understanding of architecture. The second chapter of this investigation will review his influential works particularly those that he published in the 1970s and early 1980s. For now, I focus on a philosophical movement that began in France.

In 1975, Michel Foucault (1926-1984), the Professor of History of Systems of Thought at the Collège de France published *Surveiller et punir: Naissance de la prison*. An English translation of this book, under the title of *Discipline and Punish: The Birth of the Prison*,

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[18] Norberg-Schulz, *Intentions in Architecture*. pp. 104 -105.

[19] Norberg-Schulz himself says that this classification is not very original and they correspond to Vitruvius' categories *utilitas*, *venustas* and *firmitas*. It seems to me that this definition of words is close to the way by which the components of a behaviour were defined in Parsons and Shils' theory of action. Norberg-Schulz uses the notion of the building task to go beyond mere functional needs. He broadens the concept and argues 'the building task comprises the aspects of the environment which concern us.' (Ibid. p. 109.) He later revised the definition by saying that the building task is a 'solution' to concerns coming from the environment. Norberg-Schulz's conception of the building task has a meaning in relation to the 'anticipated state of affairs'. (Norberg-Schulz, *Intentions in Architecture*. pp. 105-131.).

was published in 1977. This year is, co-incidentally, the same year that Christopher Alexander published *A Pattern Language*.[20] By then, Alexander had rejected the use of mathematical method in analysing architectural forms. In *A Pattern Language*, he attempted to explain the nature of the relation between problems and solutions in the spatial 'pattern' of architecture. It was also in 1977 that Kent Bloomer and Charles Moore stated, in *Body, Memory and Architecture,* that architects have overlooked a realm of human spatial experience with a historic overemphasis on seeing as the primary sensual activity in architecture.[21]

In contrast to these two books, the work of Michel Foucault postulated relations within the building and considered them as much philosophical and sociological as they are architectural. Foucault's *Discipline and Punish* focused on the development of the modern prison. He examined the proposal for a panoptical prison by the English legal and social reformer Jeremy Bentham (1748-1832).[22] The Panopticon is a circular structure. Its floors are divided into cells arranged around the circumference, which isolates the inmates. At the centre of the structure is an inspection tower from which each of the cells on each of the floors can be observed. In the Panopticon, the conduct of all the inmates and all of its internal space are subjected to inspection by the directive staff. The principle of the Panopticon is that the many can be governed by the few. All that was needed, according to Foucault, is to place a supervisor in a central tower and to shut up in each cell a prisoner. By the effect of backlighting, one could observe from the tower, standing out precisely against the light, the small shadows in cells.

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[20] Christopher Alexander and et al., *A Pattern Language: Towns, Buildings, Construction* (New York: Oxford University Press, 1977).
[21] Kent Bloomer and Charles Moore, *Body, Memory and Architecture* (New Haven: Yale University Press, 1977).
[22] Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan (London: Penguin Books, 1977). pp. 195-228.

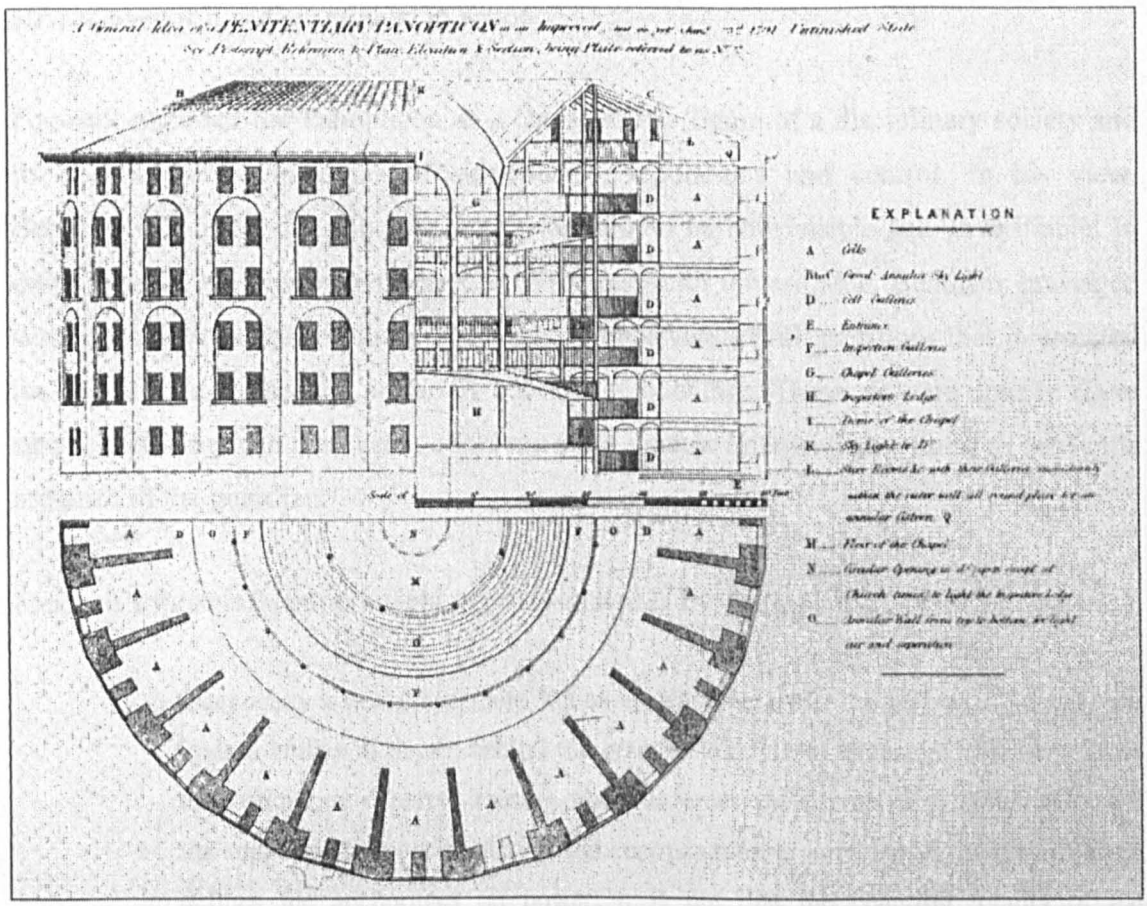


**Figure V:** J. Bentham's plan for the Panopticon. Foucault described the Panopticon as a 'diagram of a mechanism of power reduced to its ideal form … a pure architectural and optical system [abstracted from any] obstacle, resistance or friction' From: Discipline and Punish: The Birth of the Prison. Translated by Alan Sheridan. London: Penguin Books, 1977.

The Panopticon should also function as a kind of laboratory of power. It was a privileged place for experiments on men, and for analysing the transformation that may be obtained from them. Foucault regarded Bentham's Panopticon as the architectural figure of mechanisms of power. The major effect of the Panopticon was 'to induce the inmate a state of conscious and permanent visibility that assures the automatic function of power.'[23] The Panopticon was designed so that the surveillance is permanent in its effects, even if it is discontinued in action.

Foucault regarded the Panopticon as a characteristic figure of a disciplinary society and its constitutive technologies of surveillance, regulations and control. In his view, Bentham laid down the principle that power should be both visible and unverifiable. In order to make the presence of absence of the inspector unverifiable, Bentham envisaged venetian blinds on the windows of the central observation hall, partitions that intersected the hall at right angles and not doors but zig-zag openings. These all were done to make sure that prisoners, in their cells, could not see a shadow or even hear a noise to verify the presence of the guardian.

Foucault's most influential insight is encapsulated in the following:

> Our society is not of spectacle, but of surveillance; under the surface of images, one invests bodies in depth, behind the great abstraction of exchange, there continues the meticulous, concrete training of useful forces; the circuits of communication are the supports of an accumulation and centralisation of knowledge; the play of signs defines the anchorages on power; it is not that the beautiful totality of the individual is amputated, repressed, altered by our social order, it is rather than the individual is carefully fabricated in it, according to a whole technique of forces and bodies.[24]

This generates a question: what is the relationship between images and something beyond the surface structure of those images? In the light of this insight, we can realise that

[23] Ibid. p. 201.
[24] Ibid. p. 217.

architectural space can be given both conceptual as well as material resonance.

It is important to ground the work of Michel Foucault within the French tradition of studying perception.[25] For so doing, we need to look back to Sartre's account on the look and the image in *Being and Nothingness* (1943) and to Lacan's 'The Mirror Stage as Formative of the Function of the *I*' (1949). They both emphasise the importance of the other and the image in the subject's understanding the world and himself, more importantly. It is only with regard to them that we may understand Foucault's contribution to our understanding of the way that power constitutes the human subject.

In *Being and Nothingness*, 1943, and particularly in the chapter on 'The Existence of Other' the French philosopher Jean-Paul Sartre (1905-1980) attempts to make a distinction between two modes of being.[26] He explained his view using the concept of the look (*le regard*) in the story of the gazer/viewer in a park. Sartre identifies two distinguishable moments. The first moment that Sartre identifies is when the viewer enters the park. Not far away from him, there is a lawn and along the edge of that lawn there are benches. Now, the viewer has a privileged position from which all the park becomes visible to him. He is a being without distance, without recoil and without perspective which Sartre regarded as a *being-for-itself*.[27] In Sartre's description, the first moment is followed by the second one when a man enters the park. Sartre refers to it as a *being-in-itself*.[28] This potential being was not in the viewer before that, because it could not have found any place in the for-itself.

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[25] To situate Foucault, it is also important to realise his position in relation to structuralism, phenomenology, and hermeneutics. Foucault constantly sought to stay away from the structuralist analysis, which 'eliminates the notions of meaning altogether and substitutes a formal model of human behaviour as rule-governed transformations of meaningless elements.' At the same time, Foucault could not agree with the phenomenological approaches of 'tracing all meanings back to the meaning-giving activity of an autonomous, transcendental subject'. Lastly, Foucault was aware of the implicit meaning of social practices as understood by the social sciences, which would imply that social actors are not always totally conscious. See: Hubert Dreyfus and Paul Rabinow, *Michel Foucault: Beyond Structuralism and Hermeneutics* (Brighton: The Harvester Press, 1982). p. xiii-xx.

[26] Jean-Paul Sartre, *Being and Nothingness: An Essay on Phenomenological Ontology*, trans. Hanzel E. Barnes, Routledge Classic ed. (London and New York: Routledge, 2008). pp. 245-326.

[27] For Sartre being-for-itself (*être -pour-soi*) is a lack of Being, a desire for Being, a relation to Being.

[28] Being-in-itself (*être –en-soi*) is the Being of the phenomenon and overflows the knowledge which we have of it.

The appearance of the 'Other' caused this second mode of being to arise. By the mere appearance of the Other, the viewer is put in the position of passing judgment on himself to someone else. [29] Thus, the look, as it was regarded by Sartre, rests mainly on the notion of 'shame' stemmed from the sense of being potentially the object of the Other's look. The gazer is ashamed of himself as he appears to the Other. Because the appearance of the Other, as mentioned earlier, causes the gazer to be placed in a position in which it can be judged as an object. It is true to argue that this object which has appeared to the Other is not an empty image in the mind of another. Because, such an image, in fact, wholly belongs to the Other. Sartre then says there is no question of a comparison, in this scene, between what the viewer is for himself (being-for-itself) and what he is for the Other as he founds in himself (being-in-itself).[30] Hence, the Other has not only revealed to the viewer what he was; he has also established him in a new type of being which can support new qualifications. Sartre argued:

> ... the Other has not only revealed to me what I was; he has established me in a new type of being which can support new qualifications. This being was not in me potentially before the appearance of the Other, for it could not have found any place in the For-itself... But this new being which appears *for* the other does not reside *in* the Other; I am responsible for it...[31]

For Sartre, the look needs to be perceived on the object that manifests it. It is pointless to talk about the experience of looking, if there is no perception and, more importantly, no subject. Sartre believed the Other causes the gazer to believe that he cannot be an object for another object. The gazer cannot consider the look which the Other directs on him as one of the possible manifestations of the Other's objective being. The Other cannot look

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[29] There is one situation which is not properly explained in Sartre's theory of the Other. In the first moment that he had identified, he described a lawn and benches in the way that they did not cause any challenge to the being-for-itself. In as much as these objects project another For-itself, they may produce an *in-between* condition in which the gazer is neither entirely being-for-itself nor still a being-in-itself. Such an in-between condition is not a pure being-for-itself because for the viewer, this park can be associated with images he or she still has from a memory in that place. It is not a complete being-in-itself, because the viewer has not yet lost the privileged position from which all the park becomes visible to him.

[30] Sartre, *Being and Nothingness: An Essay on Phenomenological Ontology*. p. 246.

[31] Ibid.

at the gazer as he looks at the grass. Sartre's understanding of the notion of 'the look' would entail a distinction to be made between 'the eye' as object of the look and 'the look' itself. Sartre writes:

> ... neither is the look one quality among others of the object which functions as an eye, nor is it the total form of that object, nor a 'worldly' relations which is established between the object and me... The look which the *eyes* manifest, no matter what kind of eyes they are is a pure reference to myself... Thus the look is first an intermediary which refers from me to myself.[32]

Sartre asks: what do I apprehend immediately when I hear the branches crackling behind me? His answer is: 'not that *there is someone there*; it is that I am vulnerable, that I am a body which can be hurt, that I occupy a place and that I cannot in any case escape from the space in which I am without defence – in short, that *I am seen.*'[33] This explanation is crucially important. He stresses the importance of images we produce from any order, organisation and or event, as opposed to an empirical enquiry which can be taken into what they really appear to be. Sartre introduces the image of fear ('vulnerability', 'a body which can be hurt'), even though there may be no reason for this.[34]

But what exactly is the image of architecture which I am to propose in this thesis? It is not architecture for sure. Architecture cannot represent itself without the mediation of image or a group of images. So, at one level a building is nothing more than the image one has of it. One thing, which is needed to be emphasised here, is that the object cannot exist in our mind without the mediation of image or a group of images. So when we begin to understand objects, we start at the same time by reorganising the previous images we have in our minds. The question then would be: How do we establish an image of objects around us? And is it possible to deal with an object without a degree of intervention by

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[32] Ibid. p.281.

[33] Ibid.

[34] Hearing the branches crackling behind is not the fear. It is an *image* of the fear, as Sartre explained. Seemingly, what will be proposed in this investigation is the image of a relationship. The issue of this investigation is to construct a frame in which both the visible plans of architecture and the invisible programmes of education are simultaneously depicted. The resulting picture is unavoidably mental and personal, in its nature.

the images of that object?

The way that a subject understands an image can be clarified by referring to Lacan's distinguished diagrams in which he explained three alternative ways of thinking about these relationships. Jacques Lacan (1901-1981) examined the conventional ways of looking at things and proposed his own formula in a paper called: 'The Mirror Stage as Formative of the Function of the *I*'.[35] Lacan in that paper formulated 'the mirror stage' as a child's essential emerging act of intelligence when he can recognise his own image (in a mirror). We must bear in mind that for Lacan the function of the *imago*[36] is to establish a relation between an organism and reality. Thus he regarded the mirror-stage as a particular case of the function of the *imago*.

In the mirror stage, Lacan identifies three moments. The first moment is when the child considers the image of his own body in the mirror as a real thing. Because of that, he tries to touch the image. At the second moment, the child realises that the image in the mirror is not a real thing, but just an image. The child is now able to differentiate between the image and the reality of the other. Hence, he no longer tries to grab the image. Then the child in the third stage knows not only that the other reflected in the mirror is merely an image, but also that that image is his own.

In the full sense that analysis gives to the term, Lacan insisted the mirror stage should be understood as an 'identification' by which he meant the transformation which takes place in the subject when he assumes an image.[37] The entire process through which the child identifies himself is grounded in the imaginary dimension; because the optical image is not the child but something through which he re-cognises himself. Thus it is of great importance to know that the representation and the relation of the subject to the gaze is an

[35] Delivered in July 1949, at the 16th International Congress of Psychoanalysis, Zurich.

[36] In *The Language of Psycho-Analysis*, the notion of image is defined in the following way: Unconscious prototypical figure which orients the subject's way of apprehending others [...] The imago is often defined as an 'unconscious representation'. It should be looked upon, however, as an acquired imaginary set rather than as an image: as a stereotype through which, as it were, the subjects views the other person. See: J. Laplanche and J.-B. Pontalis, *The Language of Psycho-Analysis*, trans. Donals Nicholson-Smith (London: The Hogarth Press, 1973). p. 211.

[37] whose meaning, according to Lacan, has been sufficiently indicated by the use of the ancient term *imago*.

imaginary one. And consequently, as Copjec believes, the image not only perfectly represents the subject, it seems also to be an image of the subject's perfection.[38] This image is not just a pure *reflection* of the subject on a blank mind. It is, in contrast, a mental account of that reflection.

According to Lacan, this stage of imagination, which has a significant impact on the subject's formation, extends from a fragmented body-image to a form of its totality that Lacan calls orthopaedic and lastly, to the assumption of an identity which with its rigid structure will mark the subject's entire mental development.[39] Lacan characterises this shift as a shift from the specular '*I*' into the social '*I*'.[40] According to Lacan, in the moment in which the mirror-stage comes to an end the '*I*' becomes linked to a socially produced situation through the desire of the other.

Lacan fails to explain how the subject is constituted through the intervention of social images. However, it can be argued that Foucault began his theory at the point where Lacan ended. Both Lacan and Foucault would agree that a distinction should be made between the eye and the gaze. My purpose here is not to point to the crucial agreements and disagreements between them. What is important to note is that Foucault tried to examine the effects of the gaze on the subject, something that remained outside of the psychoanalytic scope. Perhaps, the Lacanian subject may be regarded as the product of a Foucauldian process.

Foucault, then again, was fascinated by the visual expression of ideas. He increasingly employed architectural instances to show how ideas are materialised and how materials are idealised. Foucault's *Discipline and Punish* was an extraordinary book in which he provided us with a concrete explanation of the 'Other space', spaces which are perceived and perceiving, conceived and conceiving. It is also worth mentioning here that the experience of being observed by an unknown 'eye' seems to compliment Sartre's

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[38] Joan Copjec, *Read My Desire: Lacan against the Historicists* (Cambridge (Mass.): MIT Press, 1994). pp. 22-23.

[39] Jacques Lacan, *Écrits : A Selection*, trans. Alan Sheridan (London: Tavistock Publications, 1977). p. 4.

[40] Ibid. p. 5.

argument of a being-for-itself. To be more precise, the Panopticon, with its hidden eye, reconstructed the idea of an invisible gazer. The Panopticon embodies in architecture the most paranoid fantasies about the 'absolute look'.[41]

On the one hand, any study that neglects the social, cultural and intellectual relations that proceed from and within architecture cannot provide us with a holistic understanding of architecture. However, any study that focuses exclusively on the cultural practice of architectural activity as a discourse dissociated from architecture's specific characteristics, would fail to take into account the fact that any product or idea has its own internal rules of operation. In this case, architecture might be left at the edge of a condition in which there would be no difference between the analysis of the creation of architecture and the creation of other visual arts, such as painting and sculpture, or any other cultural artefacts. In 1982, this criticism was raised by Roger Chartier in his paper on *Intellectual History or Sociocultural History*. 'Criticism addressed to the social history of ideas has recently aimed at another target and denounced another form of reductionism. Under attack,' as he believed, 'is no longer the reduction of an idea or an ideology to its condition of production or reception, but the assimilation of thought contents to cultural objects through a process of reification.'[42] This note illustrates that there was a struggle at the time within different disciplines to widen their boundaries. Keeping this mind, in order to continue setting out the contemporary context in which the research has been undertaken, there is a question which should be taken seriously: how are theories of other academic fields used in relation to architecture?

In 1980, Carl Schorske suggested that we need 'to establish a coherent field in which the several parts can cast their light upon each other to illuminate the larger whole.'[43] For Schorske, of course, the task of a historian is 'to locate and interpret the artefact

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[41] Martin Jay, "From the Empire of the Gaze to the Society of Spectacle: Foucault and Debord," in *Downcast Eyes: The Denigration of Vision in Twentieth-Century French Thought* (Berkeley, Los Angeles, London: University of California Press, 1993). p. 410.

[42] Roger Chartier, "Intellectual History or Sociocultural History?," in *Modern European Intellectual History: Reappraisals and New Perspectives*, ed. Dominick Charles LaCapra (Ithaca and London: Cornell University Press, 1982). pp. 29-30.

[43] Carl E. Schorske, *Fin-De-Siecle Vienna: Politics and Culture* (New York: Vintage Books, 1980).p. xxviii.

temporarily in a field where two lines intersect. One line is vertical, or diachronic, by which he establishes the relation of a text or a system of thought to previous expression in the same branch of cultural activity (painting, politics, etc.). The other is horizontal, or synchronic, by it he assesses the relation of the content of the intellectual object to what is appearing in other branches or aspects of a culture at the same time.'[44] Chartier considered Carl Schorske's definition of the task of historian as a valid statement. If we could treat different fields of study as components that each makes the other more comprehensible, Schorske believed, we may uncover different representations expressed in the spatial organisation of the building.

Hillier, on the other hand, tried to answer the question in a method rather similar to that of Christopher Alexander. The methods of spatial syntax analysis, first developed by him in 1984, tried to reveal a deep social structuring of architectural space in a positivist and reductionist manner. To develop a 'social theory of space', Hillier believed, a social theory of space should account first for the relations that are found in different circumstances between the two types of spatial order characteristic of societies: i.e. the arrangement of people in space and the arrangement of space itself. It should also show, according to him, how both were a product of the ways in which a society worked and reproduced itself.[45] From his point of view, the spatial problem is not a philosophical problem, but a scientific one. The idea that underlies Hillier's argument in *The Social Logic of Space* is that the spatial organisation of space is rational and because of that, it can be expressed in an abstract way and we can thus analyse it in a scientific manner. But the point is this: all of these premises are circumstantial.

Inasmuch as Hillier could not offer a tool to analyse architectural space, his 'scientific' model did not amount to a proper theory of space. He permitted, however, the problem of space to be re-described in such a way as to bring together various academic disciplines in a unified field. Paul Hirst's paper on *Foucault and Architecture*, 1993, was such an

[44] He continued: 'The diachronic thread is the warp, the synchronic one is the weft in the fabric of cultural history. The historian is the weaver, but the quality of his cloth depends on the strength and colour of the thread.' See: Ibid. pp. xxi-xxii.

[45] Bill Hillier, *The Social Logic of Space* (Cambridge: Cambridge University Press, 1984). p. 29. The key issue for Hillier is the depth to which users are permitted to penetrate into the building.

attempt.[46] Foucault's theory of 'discourse', Hirst believed, is relevant to architecture because it breaks down the barrier between the common-sense category of objects and that of discourse. Foucault's thinking yields the conclusive distinction between buildings as objects and words, explanations, programmes, etc., which are held to be *about* buildings. Hirst argued that Foucault's notion of 'discursive formation' challenges the common distinction between a brick and a word; both may be elements of a discourse. In this view, the building is an object or non-discursive entity around which float the words of discourse.

A successful interpretation of the built environment in a Foucauldian way appeared in Edward Soja's study of Los Angeles, 1996.[47] Soja's account of Los Angeles is no longer simple, abstract or even easy to understand. It is as complex as Los Angles itself. He took two large-scale riots that lasted six days in Los Angeles, i.e. the Watts riots of 1965 and the riots related to the Rodney King incident in 1992. The Watts rebellion of 1965 was one of the most portentous for the concatenation of crises that marked the end of the post-war economic boom and the beginning of the search for new strategies to avoid even greater social unrest.

Reflecting the spatial perspective that has informed much of his urban restructuring research, Soja summarised Los Angeles in six 'geographies', each representing an important dimension of accelerated urban change. The 'new' Los Angeles of 1992, according to him, was resulted from the restructuring of urban form (exopolises), the changing geography of production (flexcities), globalisation and world city formation (cosmopolises). These are then tightly interwoven with social hierarchies. He added to this, 'unending eyes' which is the police structure that inhabits this complex reality in order to enforce an unquiet peace. The final layer on all of this is the reality of Los Angeles in the way that it affects the everyday life of people and how they make practical sense of the contemporary world (simcities). He contended that all of these portrays can be summarised as a movement from a 'crisis-generated' restructuring to a 'restructuring-

[46] Paul Hirst, "Foucault and Architecture," *AA files*, no. 26 (1993).
[47] Edward J. Soja, "Los Angeles, 1965-1992: From Crisis-Generated Restructuring to Restructuring-Generated Crisis," in *The City: Los Angeles and Urban Theory at the End of the Twentieth Century*, ed. Allen J. Scott and Edward J. Soja (Berkeley: University of California Press, 1996).

generated' crisis.

Although all of the six geographies of restructuring, according to Soja, can be locally traced back to Watts, there is no suggestion by him that the Watts in itself was the 'cause' of urban restructuring or that restructuring would not have happened without it. For him, Watts 'exemplified the crisis of modernity.' Then again, the events, which took place in Los Angeles just before and after May 1, 1992, seem to be signalling another beginning of the end of an era. Just as Watts exemplified the crisis of modernity, this new crisis is seen by him emerging from the very practices and strategies that have proven most successful in effectively controlling social unrest over thirty years. There is, hence, an epistemological relationship between the riots and the change.

To reiterate, the question still is: how should we investigate theories of other fields in relation to architecture? In 1999, Kim Dovey published a book entitled *Framing Places: Mediating Power in Built Form* in which he tried to propose an alternative answer to this long-standing question.[48] He aimed at bridging across different academic fields and letting theoretical differences co-exist. He thus based the book on no singular methodological position or school of thought. Dovey justified this by saying that one of the most important lessons of the postmodern movement is the recognition of 'difference'.[49] What Dovey learnt from this theoretical stand is that different knowledges, soundly based within their own paradigms, may be useful to a multiplicitous understanding of built form.

In the context of analysing programmatic issues of power in architecture, Dovey argues that methods of space syntax analysis, developed from 1984 by Hillier, are useful tools. For Dovey, the syntax diagrams, on the one hand, reveal a deeper structural programme and construct experiences of space, on the other hand.[50] He tried to ground the method of space syntax analysis in a broad range of current social theories. Dovey's argument could

[48] Kim Dovey, *Framing Places, Mediating Power in Built-Form* (Routledge, 1999).
[49] This is a key starting point which was originally postulated by Jean-François Lyotard (1924-1998). The postmodern condition was characterised by him as the end of singular and privileged 'metanarratives'. See: Jean-Francois Lyotard, *The Postmodern Condition: A Report on Knowledge*, trans. Geoff Bennington and Brian Massumi (Manchester University Press, 1984).
[50] Dovey, *Framing Places, Mediating Power in Built-Form*. pp. 20-26.

lead to healing the fraction between the scientific and the social approaches in architecture. Nevertheless, in his argument there is an unresolved question: which one 'frames' which? Does the spatial construction of buildings frame the human's way of life? Or is the building framed by the way that the human subjects/agents think, live and act?

Built form would lend itself to be analysed using the method of space syntax analysis only if we presuppose that architects are the only agents who are in charge of buildings. However, the vast majority of buildings are not designed by architects. Even if the architect may design a building, the outcome is not necessarily the pure creation of the architect's mind. Clients oblige architects to recognise specific requirements in their designs. Different architects will respond differently to the interaction with the client. And although the interaction between architect and client focuses on the design project, more than the design project, the way that they communicate with each other can be involved.

Hyungmin Pai's *The Portfolio and the Diagram: Architecture, Discourse, and Modernity in America* proceeds on the basic notion that architecture is a 'discursive practice'.[51] The author did not found his enquiry into the historical conditions in which modern architecture survives to become a viable discipline as a reflection of changing styles and tastes. The book rather assumes that architecture's place in society – what it does, how it functions, and the way it is perceived – is conditioned and mediated by a specific set of discourses: drawings, books, journals, manuals, specifications, and contracts that are produced within the architectural community. We should be reminded that Paul Hirst had explained that Foucault's thinking yields the conclusive distinction between buildings as objects and words which are held to be *about* buildings. The relevance is that Pai did not regard discourses, which are *about* architecture, just as reflections of transformed minds and changing modes of production. They are themselves, according to him, what

[51] Hyungmin Pai, *The Portfolio and the Diagram: Architecture, Discourse, and Modernity in America* (Cambridge, Mass.: The MIT Press, 2002).

constitute architecture. [52]

There is finally a question of the way that 'we' see things. For Lacan, there is, of course, no antagonistic dualism between human consciousness and the world it inhabits and the anthropomorphic appropriation of that world. We are encouraged by him to rethink about the register of being in radically different ways. In his recent paper on psychoanalysis and art, Leo Bersani highlighted the fact that the world, psychoanalytically conceived, dazzles us to the degree that it contains us.[53] He noted that the relational mechanisms studied by psychoanalysis, i.e. identification, projection, introjections, could perhaps only have been theorised in a civilisation that has privileged an appropriative relation of the self to the world.

Bersani's most fundamental claim is that 'art diagrams universal relationality.'[54] Putting this in the psychoanalytic perspective of the non-existence of the world, he then states that the world is the narrator's major site of connectedness to the other. In the light of his argument, we should consider that any narrative is a way that we misidentify ourselves. This misidentification is constitutive of the human.[55] To take on a Lacanian view, there is no understanding without some subjective involvement or, in other words, without the subject being somehow implicated by the reality. The key linkage of this argument to our context is that buildings result from the way that we - as human subjects who are manipulated by social relations - see, think, and construct our relationship to, about and within the world.

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[52] Ibid. p. 3.
[53] Leo Bersani, "Psychoanalysis and the Aesthetic Subject," *Critical Inquiry* 32, no. 2 (2006).
[54] Ibid. p. 164.
[55] In his seminar on identification, Lacan asks: What is the difference between my dog and the human subject? He answers that his dog never mistakes him for someone else, while misidentification of the other is constitutive of the human. See: Ibid. p. 173.

# PART I: THEORETICAL PRELIMINARIES

# CHAPTER ONE: THE BOUNDARIES OF ARCHITECTURE

## Norberg-Schulz and Phenomenological Enquiries

### 1.1.1. Introduction

We examined earlier how Christopher Alexander tried to show that the problem of design in architecture could be tackled using modern mathematics. We also reviewed Norberg-Schulz's *Intentions in Architecture*, which was an attempt to formulate architecture as a living organism. In general, many of the metaphors that modernists used, especially in the first half of the twentieth century, came from science.[1] But, since the 1970s, the conditions that allow architecture to be studied in a scientific way were questioned. The intense questioning went in diverse directions. The criticism which is the main focus of the first part of this investigation was basically a response to one of the principles that modernism brought to architecture, i.e. the ideal of the scientific approach to architecture. The main opponents of this approach are some recent French thinkers who highlighted the historical conditions, social relations and personal experiences. I will examine their theories in the next four chapters of this thesis.

While French philosophers, such as Foucault and Lacan, opened up a theoretical ground for a social understanding architecture, another area of thought that since the late 1950s took part in criticising the ideals of modernism was phenomenology. In a number of cases, this recent movement changed the mind of thinkers who had previously advocated the scientific methods of understanding architecture. Christian Norberg-Schulz (1926-2000) was one of those who took part in developing alternative ways to understand architecture. While his *Intensions in Architecture*, 1965, analysed architecture in a semi-

[1] Adrian Forty, ""Spatial Mechanics": Scientific Metaphors in Architecture," in *The Architecture of Science*, ed. P. Galison and E. Thompson (1999).

scientific way, subsequent books employed a different tone. He distanced himself from summarising the building programme merely in functional considerations, while rather trying to show how phenomenology might widen our understanding of architecture.

This chapter will try to examine critically phenomenological approaches in architecture focusing on the books that Norberg-Schulz wrote in the 1970s and early 1980s. A part of this chapter will examine Gaston Bachelard's *The Poetics of Space*. Although phenomenology prepared a fertile ground offering architects the opportunity to see their discipline in a new way, it failed to provide a clear relationship between its concepts and to take into account the social structure of architectural spaces.

Without trying to negate the fact that the approach of this investigation is not phenomenological, Norberg-Schulz's contribution to our context cannot be disregarded. Having pointed out some problematic aspects of phenomenology, this chapter will argue that Norberg-Schulz provided us with two important insights. Firstly, in an era in which there was an intense interest to scientific methods, he opened discussions regarding the way that we perceive the built form. Furthermore, through his explanations he constantly borrowed concepts from other disciplines. By so doing, he demonstrated that other disciplines could assist architects in a better understanding of their discipline.

### 1.1.2. From *bauen* to existential space

In his search to find an alternative paradigm, Norberg-Schulz realised that Heidegger was a thinker whose philosophy could deal with the problem of meaning in architecture. Heidegger believed that only language could tell us about the nature of a thing. In *Being and Time* (originally published in 1927), Heidegger argued that building, *bauen*, and dwelling are related as end and means.[2] He referred to the Old English and High German in which the word for building, *buan*, means to dwell.[3] According to Heidegger, this

[2] Martin Heidegger, *Being and Time*, trans. John Macquarrie and Edward Robinson (San Francisco: Harper, 1962).
[3] Martin Heidegger, *Poetry, Language, Thought*, trans. Albert Hofstadter (New York: Harper & Row, 1971). p.146.

shows that to dwell meant originally to remain and to stay in a place.[4] Dwelling is not a representation of a human's existence. Heidegger believed that dwelling is what makes us *present*. It is: 'the way in which you are and I am, the manner in which we humans *are* on the earth.'[5] Likewise, *bauen*, Heidegger said, means to cherish and protect. Therefore, in order to dwell one needs to be preserved from harm and danger and to be at peace, because dwelling fundamentally implies to spare and preserve.[6]

Norberg-Schulz's interest to Heidegger's notion of *buan* began when he published *Existence, Space, and Architecture*, 1971. Central to his discussion in this book is the term existential space (in opposition to Cartesian space). He defined this term as 'a relatively stable system of perceptual schemata or 'image' of the environment.'[7] A preliminary consideration of his conceptualisation of what is called 'existential space' and its relation to architectural space makes it clear that existential space is a psychic structure which is physically concretised in architectural spaces.[8] The idea of this book is far from Heidegger's basic premises, because there was still a semiotic separation between the building and the meaning it implies.

We should be fully aware of the difficulty of using Heidegger's philosophy to develop an understanding of architecture. Even in his next book, *Meaning in Western Architecture*, 1975, Norberg-Schulz could not successfully employ Heidegger's description of *buan* as a tool in understanding architecture. The book addressed the issue of 'meaning' in general and 'existential meaning' in particular. 'Existential meanings' according to Norberg-Schulz 'are derived from natural, human and spiritual phenomena.' They are

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[4] In order to emphasis this link to place, Heidegger suggests that the real meaning of the verb *bauen* has still been preserved in the German word *Nachbar*, neighbour. The neighbour in Old English was the *neahgebur*; *neah*, near, and *gebur*, dweller. So, the *Nachgebauer* means the near-dweller, he who dwells nearby. Ibid. pp. 146-147.

[5] Ibid. p.147.

[6] Ibid. p.147-149.

[7] Christian Norberg-Schulz, *Existence, Space, and Architecture* (New York: Praeger Publishers, 1971). p. 17.

[8] A similar correspondence has been portrayed throughout the book's format in a manner which seems to be purposeful. In most pages, the text that is the author's mental structure is mixed with photos which can be seen as the concretisation of that structure. The operation of these two levels, one more abstract and non-physical and the other more concrete and physical, suffuses the book's layout.

experienced as order and character. He argued that architecture translates these meanings into spatial form.[9] The premise of this idea is the existence of something that is an *a priori* to its concrete expression in action; something that Heidegger's thinking opposed strongly.

In both of these two books, what Norberg-Schulz could not truly realise is that under Heidegger's conception of human existence, the human body is not an object somehow attached to a transcendent subject standing outside of the domain of objects. At the core of Heidegger's discussion is the distinction he outlined between two modes of the body: the body as a corporeal object[10] among others (the objective body) and the body as it emerges in pre-reflective experience (the lived body). As corporeal, the body is an object which is perceptible by the senses and occupies a volume of space. As lived, the body is neither something that can be presented to the senses nor an object within space. Instead the body as lived is the aspect of being-in-the-world that provides access to beings through its power of motility and sensibility.[11]

By 1983 when his essay entitled *Heidegger's Thinking on Architecture* was published, Norberg-Schulz had a deeper interpretation of the way in which architecture could be viewed in Heidegger's thought. He clearly recognised that Heidegger understands architecture much different from those traditions that make a division between form and meaning. He took up Heidegger's description of a Greek temple in *Poetry, Language, Thoughts*, and concluded:

> The natural and man-made things which constitute the boundaries of the between, also stand, rest and tower, to recall the terms used in Heidegger's description of the Greek temple. Thus they embody characters which mirror man's state-of-mind (*Befindlichkeit*), at the same time as they delimit a precinct which admits man's actions. A work of architecture therefore discloses the spatiality of the fourfold

[9] Christian Norberg-Schulz, *Meaning in Western Architecture* (New York: Praeger, 1975). p. 5.

[10] Heidegger acknowledged Dasein's 'bodily nature' in a seminar at the town of Zollikon, Switzerland, (*Leiblichkeit*), in 1969, by saying that being-in-the-world would not be possible if Dasein were not embodied. Medard Boss, ed., *Zollikon Seminars* (Evanston: Northwestern University Press, 2001). p. 231.

[11] Ibid. pp. 96-98.

> through its standing there. Standing there, it admits life to happen in a concrete place of rocks and plants, water and air, light and darkness, animals and men. Standing there, however, implies that what is standing must be understood as a materialised image. [12]

The question that whether or not we can employ Heidegger's theory of dwelling in an architectural theory cannot be answered in a straightforward manner.[13] What Norberg-Schulz identified is that the problem of space cannot be treated employing a social, economic or even 'scientific' approach. He believed architecture has an *existential* dimension determined by the structure of our *being-in-the-world.*[14] Taking on a Heideggerian view, Norberg-Schulz criticised modernism for creating a schematic and characterless environment, with insufficient possibilities for human dwelling. This seems to be an interesting argument. But, there is no specific suggestion by him that what the 'relationship' between architecture's existential dimension and human's structure of being-in-the-world might be.

### 1.1.3. The poetic image

Although, phenomenology was successful in its search for symbolic and ideal meanings in architecture and in its attempt to open a fresh ground within the problematic position of the culture of late modernism, it usually disregard the social dimensions of space. Phenomenologist gradually became more and more a writer, a user and a maker of words. To give an example of this, Gaston Bachelard's *The Poetics of Space* (1958) is a good example. Bachelard was a remarkable philosopher of science at the Sorbonne from 1940 to 1955. He was under the influence of psychoanalysis and surrealism. Before the Second World War he shifted his focus from objectivity and experimental evidence to the

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[12] Christian Norberg-Schulz, "Heidegger's Thinking on Architecture," *Perspecta* 20 (1983). p.67.

[13] Heidegger stated that he was thinking about 'building', not about architecture.

[14] Christian Norberg-Schulz, *Genius Loci: Towards a Phenomenology of Architecture* (London: Academy Editions, 1980). pp. 5-6.

subjective dimensions of consciousness.[15] He later argued that in order to comprehend the human phenomenon, a co-operation between psychoanalysis and phenomenology must be emphasised. *The Poetics of Space* stressed that the *image* has to be given psychoanalytical efficacy,[16] though it can never be really explained by psychologists and psychoanalysts.[17] Only phenomenology, which is regarded by him as the consideration of the onset of the image in an individual conscious, may restore the subjectivity of images.[18]

Bachelard's description of a cellar in *The Poetics of Space* is worth pointing out here. He regarded the cellar as a place into which our civilisation puts electricity. Arguing that we no longer go there carrying a candle, he then took the point that 'the unconscious cannot be civilised'[19] in the way that we can. As a part of his phenomenological agenda, Bachelard explicitly argued for the revival of 'imaginary primitive elements'. Those elements, according to him, are based upon the images, which are most firmly fixed in our memories. He introduced a particular conception about images, which is at once subjected to materiality, detached from its context, and at the same time attached to a personal experience.

How did Bachelard believe that we should deal with such a picture? What seems to be the case here is that Bachelard tried to read the image by using his personal experience of space. His understanding of objects is, of course, more personal than social or cultural. Even when Bachelard reads a poem, as Mary M. Jones argued, he does not read it as a whole, as a structure of images or as a grouping of many images. He preferred a poem to

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[15] The influence of psychoanalytical ideas on Bachelard led to the publication of *The Psychoanalysis of Fire*. See: Gaston Bachelard, *The Psychoanalysis of Fire* trans. Alan C.M. Ross (London: Routledge, 1964). The book was originally published in French in 1938.

[16] Gaston Bachelard, *The Poetics of Space* trans. Maria Jolas (Boston: Beacon Press, 1969). p. 19.

[17] Bachelard asserts that: '[Psychoanalyst] understands the image more deeply than the psychologist. But that's just the point, he 'understands' it. For psychoanalyst, the poetic image always has a context. when he interprets it, however, he translates it into a language that is different from the poetic logos.' See: Ibid. p. xxiv.

[18] Ibid. p. xix.

[19] Ibid. p. 19.

remain 'on the level of separate images'.[20] He presented the poem, which is simultaneously an image, as a personal experience. He did never examine the complex social, cultural and historical factors and their influence on the poet. This is certainly a weakness in the his way of thinking inasmuch as he limited his enquiry to the personal level of the origin of the poetic image, and leaves aside the issue of the 'composition' of the poem. In brief, because Bachelard's explanation of space is personal, it is rather impossible to judge it.

There is one remarkable argument in Bachelard's *The Poetics of Space*. He once regarded space as a tool for analysis of our mental structure.[21] To make his case clear, he refers us to C. G. Jung's description of the relationship between the building and our mental structure. As Bachelard pointed out, Jung explained a building as different layers from different periods. Jung pointed to the nineteenth-century upper story, the ground floor that dates from the sixteenth century and, the dwelling-tower of the eleventh century from which the building was reconstructed. He continues his analysis by saying that we discover a Roman foundation wall in the cellar and a filled-in cave under the cellar in the floor of which a stone tool is found.[22] The structure of our minds, Jung argued, is very similar to the structure of this building.

The fifth chapter of this investigation will deal with the relationship between the building and the mind. For now, we should continue focusing on Bachelard's personal experience of space. He developed phenomenological principles through their application to specific types of images. His description of Paris, for instance, is entirely related to his mental image of a desired space. When Bachelard gives us more specific explanation of what he would think Paris lacked, he exhibited a nostalgic image of a type of rural space. 'In Paris', he says:

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[20] Mary MaAllester Jones, *Gaston Bachelard, Subversive Humanist: Texts and Readings* (Madison: University of Wisconsin Press, 1991). p. 12.

[21] Bachelard, *The Poetics of Space* p. xxxvii.

[22] Carl G. Jung, *Contributions to Analytical Psychology*, trans. H. G. and Cary F. Baynes (New York: Harcourt, Brace, 1928). This passage is taken from *The Poetics of Space*, p. xxxvii.

> ... there are no houses, and the inhabitants of the big city live in superimposed boxes... They have no roots and, what is quite unthinkable for a dreamer of houses, sky-scrapers have no cellars. From the street to the roof, the rooms pile up one on top of the other, while the tent of a horizonless sky encloses the entire city... *Home* has become mere horizontality. The different rooms that compose living quarters jammed into one floor all lack one of the fundamental principles for distinguishing and classifying the value of intimacy.
>
> ... houses are no longer set in natural surroundings, the relationship between house and space becomes an artificial one. Everything about it is mechanical and, on every side, intimate living flees. [23]

One might agree with Bachelard that modern architecture was producing, at that time, mechanical spaces with no intimate relationship with their surroundings, but the point is that he did not limit his criticism to that case. He then indirectly criticised houses for protecting us against the unpleasant condition of outside environment by arguing that 'a hurricane in Paris has not the same personal offensiveness towards the dreamer that it has toward the hermit's house.'[24] More importantly, it is not quite clear whether this is an attempt to recapture some of the quality of a lost primitive past or it is a call to return to a primitive past itself. On the other hand, however, Bachelard seems to be unable to show a way to attain such a state at present.

To make a comparison, the theories of space, which Bachelard and Norberg-Schulz postulated, have two main differences. Firstly, the poetic image which Bachelardian space represents is independent of any relationship to the environment. It is not even subject to an inner idea. And it is not an echo of the past. In contrast to Bachelard's space of poetic act, Norberg-Schulz's space of existence is something that can be 'recognised'. The reasoning is that he defined 'existential space' as a relatively stable 'image' of the environment.[25] Secondly, although Bachelard's 'image' of a poetical space cannot be

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[23] Bachelard, *The Poetics of Space* pp. 26-27.

[24] Ibid. p.27.

[25] Norberg-Schulz, *Existence, Space, and Architecture*. p. 17.

explained by psychologists and psychoanalysts, Norberg-Schulz's 'idea' of existential space is a psychological concept. Architectural space, according to Norberg-Schulz, is a concrete 'translation' of man's personal schemata.

### 1.1.4. Problematic relations

In trying to make a relationship with his environment, Norberg-Schulz believed, man integrates its structure into personal schemata and then he concretises his schemata into architectural structures.[26] He was fully aware that when we try to create architectural spaces, which concretise our own existential space, the resulting outcome might always be a mere personal product, which cannot be judged and may not be liked by others. He also knew that architectural space must necessarily have a pronounced *public* character. But in his explanations, there is a certain ambiguity in the inter-relationship between existential and architectural space. It is impossible to create a purely individual existence space or a merely public architectural space.

Norberg-Schulz initially endeavoured to resolve the case by saying that our personally schematised architectural structure should 'become a contribution to the development of the existential spaces of others'[27]. He argued that 'public existential space' includes many private existential spaces.[28] Even though he sometimes used the notion of 'public existential space', it is not clear whether the 'relationship' between existential spaces and public spaces is personal or social. He then introduced a simple model which represents three 'levels of generalisation', which are according to him, the private or individual, the public or social, and the scientific (Fig. 1-1). As illustrated in the diagram by a feedback-arrow, individual concepts must be based on social experiences. Different individual worlds, in his view, must have common basic structural properties to enable us to become part of society with the aid of scientific insights. The environment we create – architectural space - should be adapted not to the scientific but to the public world and

[26] Ibid. p. 37.

[27] Ibid. p. 37.

[28] Ibid. p. 39.

individual needs have to be understood as a part of a public context.[29]

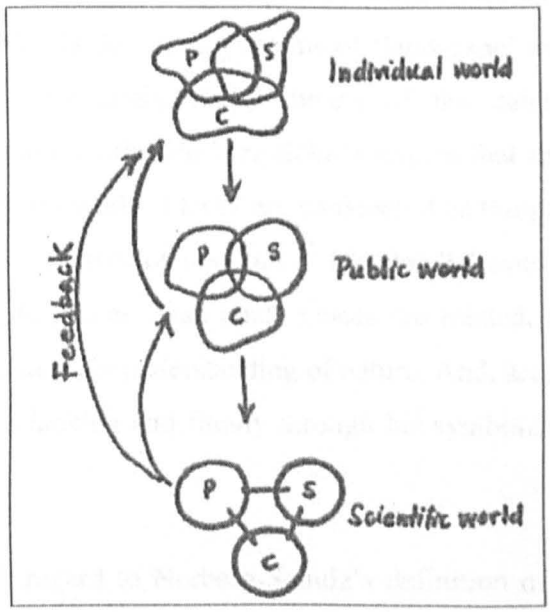


**Figure 1-1.** Norberg-Schulz schematic understanding of three levels of generalisation. From: Norberg-Schulz, Christian. *Existence, Space, and Architecture*. New York: Praeger Publishers, 1971.

Another attempt to clarify the connection between existential spaces and public spaces was made in *Genius Loci: Towards a Phenomenology of Architecture*, 1979,[30] Using Prague, Khartoum and Rome as examples, Norberg-Schulz provided us with specific descriptions of what he meant by image, space, character and genius loci. For him, it was urgent - after decades of scientific theories tending to abstract things in a quantitative sense - to revive '*genius loci*' which is the Classical Roman concept for 'the spirit of place'. The notion of existential space is there divided in terms of 'space' and 'character.' This division deals with the basic distinction between individual and public worlds. The task of architecture, then, became to create meaningful places. Places are regarded there as concrete manifestations of man's dwelling.[31] The new definition of 'existential space' is no longer a mere psychological concept. It has a poetic and metaphysical characteristic specifically corresponding to Heidegger's 'theory of being'.

[29] Ibid. pp. 38-38.

[30] The book was first published in Italian and it was translated to English a year later.

[31] Norberg-Schulz, *Genius Loci: Towards a Phenomenology of Architecture* p.6.

The question we should now reflect on is that what is the instrument through which humans may fully grasp the *genius loci*, the 'spirit of place'? Norberg-Schulz answered: 'the structure of place' which is described in terms of 'landscape' and 'settlement.' The structure of space should be analysed by means of the categories 'space' and 'character'.[32] In order to clarify this, Norberg-Schulz argues that these elements cause place to appear as a structured world. Places are considered as things that really exist in contrast to space which is a system of relations.[33] He also believed that man's identity depends on his belonging to places. Man-made places are related, firstly, to nature by human's endeavour to visualise his understanding of nature. And, secondly, to his need to complement what nature is lacking and finally through his symbolisation of his account of nature.[34]

The main reservation with regard to Norberg-Schulz's definition of existential space is that it cannot be concretised through the practice of architecture, because architectural space should be adapted to many demands including social and economic. Norberg-Schulz acknowledged, in *Existence, Space and Architecture*, that the ideal 'isomorphic' relationship between existential space and architectural space cannot be fully achieved in practice.[35] He also believed semiological analysis - which considers architecture as a system of conventional 'signs' and architectural forms as representations of 'something else' - has proved incapable of explaining the meaning of architecture.[36]

### 1.1.5. Tensions in 'object levels'

Part of Norberg-Schulz's agenda is a rich insight into architecture as an object, which has a higher and a lower 'level'. This interesting argument appeared in his *Intentions in Architecture*. There is no serious attempt to clarify what he meant by those terms, neither

[32] Ibid. pp. 10-11.

[33] Ibid. p. 16.

[34] Ibid. pp.17-18.

[35] Norberg-Schulz, *Existence, Space, and Architecture*. p. 37.

[36] Norberg-Schulz, "Heidegger's Thinking on Architecture.".

in this book nor in the following ones. In spite of that, his conception of architecture always remained a set of values, meanings and concepts, which are higher than usual. He believed that architecture, both in theory and practice, represents higher and lower levels of objectivity. For him a cultural object is on a 'higher level' than a physical one. What is remarkable is that he put the work of art along with 'social groups, political parties, and even the State itself'.[37] By so doing, he tried to work out a *higher* understanding of architecture and new directions toward a meaningful architecture.

How did Norberg-Schulz examine the building in relation to higher objects? One should consider that for Norberg-Schulz the chief question was: what does a building mean? In order to answer this, he initially used theories of psychology and linguistic. The adequacy of the theories of linguistic in uncovering the higher objects of architecture is greatly questionable. But what is the case here is the fact that in the time that architectural theories were restricted to functional consideration, Norberg-Schulz tried to transgress the traditional boundaries within which the built form was usually understood.

Later on, he became interested in existential philosophies. His use of the existential philosophy of Heidegger, on the other hand, led him to suggest intangible concepts such as 'sense' or 'spirit' of place and 'public', 'private' and 'existential' space.[38] The suggestions like these raised a sharp criticism most recently from Kim Dovey. According to Dovey, Norberg-Schulz could not stay away from the attraction of 'the idea of universal.' His essentialist explanations, according to Dovey, are dangerous because they rein to mythologies of nature and spirit. On the other hand, in his attempt to construct the myth that cities like Prague and Rome have sprung from the form of their sites, Norberg-Schulz remained silent about the construction of meaning through social struggle, Dovey argued.[39]

Both of these two critiques are key problems in Norberg-Schulz's understanding of place.

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[37] Norberg-Schulz, *Intentions in Architecture*. p. 29.

[38] And what matters most in our context is that this question could have been tackled epistemologically, in the sense that those 'higher' entities may act as the historical *a priori* that frames one particular possibility among a set of possibilities. This argument will be elaborated later on in this part.

[39] Dovey, *Framing Places, Mediating Power in Built-Form*. pp. 40-44

Norberg-Schulz's theory - specifically after Heideggerian thinking began to influence him - remains a theory of the architectural object in the classical sense. It is firmly within the traditional form of architectural theories. It seeks to define the architectural object from the standpoint of what it *ideally* is. This might be because he was too concerned with products presenting man's being-in-the-world. What Dovey did not consider, however, is the very basic proposal that characterised Norberg-Schulz's explanations. Norberg-Schulz's originality is that he demonstrated the higher content that a building may include cannot be explained, usually, within the narrow terminology of architecture. His notion of 'object levels' could open up a ground to be involved with what architectural discourse had excluded for centuries. Because it implies that architecture is the overlap of a plurality of objects each of which stems from a particular level.[40] This is why it is rather difficult to appreciate Norberg-Schulz's understanding of architecture without knowing something of other disciplines.

### 1.1.6. Conclusion

Norberg-Schulz envisioned a philosophy that is continually evolving and assists involvement in a world consisting of meaningful elements. He was not convinced that scientific theories would ensure the 'conquest' of the existential dimension that he believed the work of art brings into existence. He tried to show that there is a sort of structural correspondence between the existential meaning manifested in 'place' and human's mode of being-in-the-world. However, it sometimes appears that for him, architectural design becomes simply the process by which the ideal object is 'concretised' into architecture. As a result, what the architects do is usually subsumed into a passive action. I am not arguing that the total content of architecture results from the architect's mind. But the architect is not a passive reflector of an ideal or idealised image. More importantly, the numbers and qualities to which the architectural object is interrelated – both within itself as well as in relation to the external objects - are so incomprehensible that it is impossible to find a 'totality' justifying all of them.

[40] This final remark remained, of course, out of Norberg-Schulz's interest.

Norberg-Schulz redefined architecture in relation to other disciplines which had not been traditionally considered as a part of architectural discourses. In his effort to make buildings more understandable, he continuously borrowed concepts from other disciplines. His objective attests that mere functional conceptions of architectural form cannot cope with the active nature of the experience of perception. For this reason, Norberg-Schulz remains a model for the interpretive mechanisms that will be used later. The relevance of his theory can be summarised in two main points. Firstly, architecture contains objects, which he terms 'higher' than usual. Secondly, these objects can only be understood using concepts from other academic fields. As Norberg Schulz used phenomenology, this thesis will use later theories, which more specifically deal with how objects are perceived by the individual in the case of Lacan and within public discourse in the case of Foucault.

The University, as an architectural and physical entity, will thus be seen as the embodiment of ideas which are both intellectual and mental, private and public. These ideas, which Norberg-Schulz would term 'higher', can be understood if we look at the disciplines from which they emerge. Ultimately, the University, as a building, should be dealt with in respect to the intended permanent frame of the institution. In turn, this should lead to a consideration of the spatial organisation of the University in relation to ideas that underlie it. In short, the philosophy of knowledge and the programme of education are both guiding considerations. It is important, on the other hand, to consider that the building is a venue where different individuals, each of them with diverse needs, desires and demands are interplaying. The building is also a setting in which distinct layers of situation are inescapably directing the product in a specific way.

# CHAPTER TWO: THEORIES OF KNOWLEDGE

## The French Epistemological Tradition as a Critique to the German Objective Idealism

### 1.2.1. Introduction

Along with phenomenologists who questioned the suitability of scientific tools in understanding built form, some French thinkers in the second half of the twentieth century questioned the very basic logic of scientific thinking. They challenged the origin of the modern conception of science as formulated by the German philosopher Immanuel Kant (1724-1804). They marked a shift in the conception of knowledge by producing a well-organised body of literature on the category of the human subject.

Amongst the French thinkers, Foucault and Lacan made great efforts to formulate a new idea of knowledge, which does not find its affirmation through the verification of its object. They emphasised the centrality of the mind that perceives the objects and the importance of the relationship between different objects that the human mind creates. What they proposed changed the general conception of knowledge. This chapter begins with discussing the origin of the German ideal of objective knowledge. It will then focus on the alternative insight that was postulated in France by Foucault and Lacan, amongst others. As will be argued, through their analyses of the condition in which knowledge is produced and understood, Lacan and Foucault demonstrated that knowledge is the outcome of two modes of being: one resulting from historically determined relations. These relations come from the encounter of different elements. The other by rules that are eternal, *a priori* and almost spontaneous. They need to be 'discovered'. There is no definite explanation regarding the way that these relations interplay with each other.

For two reasons, it is important to understand the shift in general theories of knowledge. Firstly, because this investigation will explain the spatial organisation of Universities in relation to theories of knowledge. Secondly, as this part of the thesis tries to develop a conceptual framework in understanding architecture, it is of importance to realise which ideas underlie the argument.[1] This discussion will potentially help us to ground our understanding of this theoretical stand with respect to a wider epistemological background.

### 1.2.2. An objective idealism and its opponents

Over the last few decades, some French thinkers raised a great deal of debate on the way that the German thinkers of eighteenth and nineteenth centuries had formulated the notion of knowledge. Because of their criticisms, the focus of theories of knowledge has shifted from the object of knowledge to the human subject. Despite that, it seems such arguments have been limited to academic discussions. The reflection of this claim may be seen in the fact that the word knowledge is defined in the Oxford Dictionary as: 'facts, information, and skills acquired through experience or education; the theoretical or practical understanding of a subject.'[2] I believe this definition has a Kantian basis for two reasons. Firstly, it indicates a direct relationship between the knower and the reality known. Secondly, it implies the impossibility of transferring what belongs to one side of the relationship to the other.

These two characteristics stem from one argument, which was central to Kant: there is *a* kind of knowledge independent of the act of experiencing. Kant explained this by saying that knowledge is entitled *a priori*. This would imply there are *a priori* possessions of human reason which make experience possible. Kant made it clear that we shall understand by *a priori* not knowledge independent of this or that experience, but

[1] The argument here is based on the French social criticism of objective knowledge.
[2] "knowledge *noun*" *The Oxford Dictionary of English* (revised edition). Ed. Catherine Soanes and Angus Stevenson. Oxford University Press, 2005. *Oxford Reference Online*. Oxford University Press. (www.oxfordreference.com. Access date: 18 February 2009)

knowledge absolutely independent of all experiences and driven from a universal rule.[3] He believed that this idea is based on the conception of a normative concept of 'science' as prototypical 'knowledge'. Accordingly, in the preface to the *Critique of Pure Reason*, Kant resorts to the examples of mathematics and physics. Both disciplines are distinguished, according to Habermas, by what appears to be 'relatively constant cognitive progress'.[4]

Kant believed mathematics particularly can give us a shining example of how far we can progress in attaining an *a priori* knowledge independently of experience. Imagining that the statements of mathematics and contemporary physics are valid as reliable knowledge, Kant tried to transform metaphysics according to the same principle. To do this, Kant argued a particular definition of *pure reason* should be applied to all branches of our understanding. Kant said:

> ... reason is the faculty which supplies the principle of *a priori* knowledge. Pure reason is, therefore, that which contains the principle whereby we know anything absolutely *a priori*.[5]

The standpoint of the preceding criticism of Kant may be described as that of the neutral man. It means that from his point of view, the mind comes by a temporal process to apprehend or to know a real world, which exists independently of it. Kant believed the thing in itself must be retained; for it is impossible to believe that there is no reality other than what is mental. Hence, knowledge presumes that the known reality exists independently of the knowledge of it. In other words, at the core of Kantian thinking there a basic belief that knowledge is essentially uncovering what already is. For him, the very basic component of the category of knowledge consists of a knowing subject and a

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[3] Immanuel Kant, *Critique of Pure Reason*, trans. Norman Kemp Smith (New York: Random House, 1958). p.26-27.

[4] Jurgen Habermas, *Knowledge and Human Interests*, trans. Jeremy J. Shapiro (London: Heinemann Educational Books Ltd, 1972). p.14.

[5] Kant, *Critique of Pure Reason*. p. 37.

known object which can stand separately from the knowing subject.[6]

The premise of this idea, particularly as it was postulated by Kant, would suit scientists, practically, and positivists, theoretically. The most fundamental premise on which positivism was based is that the gaining of legitimate knowledge is possible only through the methods of empirical sciences. This philosophy of science can hence be reduced to methodological rules. Due to that, Habermas believed positivism marked 'the end of the theory of knowledge' as it had nothing to do with any epistemology of knowledge.[7] It adopts the basic rule of empirical sciences so that all statements 'could be analysed into suitable verification-components.'[8] This criterion would offer a strict demarcation between knowledge (which was reduced to science) and metaphysics. As positivists believed, any thing which is not verifiable was categorised as metaphysics and therefore mysterious.

The most influential and explicit advocate of positivism in the nineteenth century was Auguste Comte (1798-1857). According to him, the predominant characteristic of the philosophy of positivism is that it regards all phenomena as subjected to invariable natural laws.[9] He tacitly regarded science as the preparation the results, which could be properly systematised into formal bodies of knowledge. More recently, Thomas Kuhn's *The Structure of Scientific Revolutions*[10] disagreed with the belief that the internal cognitive structure of science is a fixed category derived from science's own rules and regulation. He showed that the internal structure of science could be an object of social enquiry.[11] He strongly challenged the assumption that invariable natural laws are the resource of the legitimacy of knowledge.

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[6] This was not entirely a new conception, as we know. But in the eighteenth century Kant revived this ancient Greek question and reaffirmed it with an empirically based way of understanding.

[7] Habermas, *Knowledge and Human Interests.*, p. 67.

[8] Oswald: Hanfling, *Logical Positivism* (New York: Columbia University Press, 1981). p. 7.

[9] Auguste Comte. "The Positive Philosophy of Auguste Comte." (Place Published: Kessinger Publishing 2000 (accessed 6/Feb/2007). p. 31.

[10] Thomas Kuhn, *The Structure of Scientific Revolutions* (Chicago: Chicago University Press, 1962).

[11] Colin Jones and Roy Porter, eds., *Reassessing Foucault: Power, Medicine and the Body* (London and New York: Routledge, 1994). p. 18.

The real challenge for this philosophy was the fact that the emergence of positivism did not bring a definite consensus over clearly worked out principles. Instead, it would show many disagreements among its proponents from Comte to Kuhn. This was a real failure for those who would think that accepting only what could be conventionally measured and disregarding all other phenomena will definitely provide a specific, exact and entirely agreeable system of communication.

It is worth noting that long before this, some German thinkers had criticised Kant's theory of knowledge. Hegel (1770-1831) unfavourably reviewed the Kantian idea of knowledge as something which exists independently of the mind that may come to know. He revealed some contradictions necessarily contained in the method of the critique of reason. Hegel insisted that knowledge which represents itself as science is principally a manifestation of knowledge. Adorno suitably explained Hegel's critique of Kant on the problem of knowledge by stating 'the problem that if everything that is known is basically nothing but a knowing reason, what we have is no real knowledge but only a kind of reflection of reason.'[12]

Hegel also problematised the second presupposition that the critique of knowledge was founded on, i.e. the *objective nature* of *cognition* which is also the assumption of a complete, fixed knowing subject. He perceived that Kant's critique of pure reason commences with a reason that is not transparent to itself purely. This meant, from Hegel's point of view, the observing subject *knows* that it itself is incorporated in the experience of reflection as one of its elements. Hegel argued the act of knowing presupposes a mind, not as something which *knows* the knowing, but as something which *does* the knowing.

Hegel's critique of Kant was followed, and simultaneously criticised by Karl Marx (1818-1883) who opposed the implicit presupposition latent in the critique of knowledge: the distinction between theoretical and practical reason. He introduced a new conception of subject as an effect of 'the mode of production'. Marx used the concept of the mode of

[12] Rolf Tiedemann, ed., *Kant's Critique of Pure Reason* (Stanford, California: Stanford University Press, 1995). p. 81.

production to conceptualise the historically variable interrelation between a particular production of material existence and a particular social order. He believed:

> In the social production of their existence, men inevitably enter into definite relations, which are independent of their will, namely *relations of production* appropriate to a given stage in the development of material *forces of production*. The totality of these relations of production constitutes the economic structure of a society, the real foundation, on which arises a legal and political superstructure and to which correspond definite forms of social consciousness. [13]

Marx challenged the attempt of objective idealism (as it was formulated by Kant) to represent the being-in-itself of nature comprehensible as a presupposition of absolute mind that has not been discerned as such by subjective mind. Marx emphasised the bodily dependence of an organism on its 'environment'. By doing so, Marx advanced our insight into knowledge at least in two ways: firstly, he took the first important step towards a social understanding of the *inter*-relation between theory and practice. Secondly he emphasised the knower (subject) as a social phenomenon, rather than a pre-existing point.

According to Marx, at the human level, it is nature that separates the subjective nature of man and the objective nature of the environment. After all, the next question would be *how* nature fulfils its task of mediation? Marx clearly answered through the *productive process of social labour*. That is why labour in his philosophy is not only a fundamental category of human existence, but also an epistemological one. The system of objective activities, according to him, creates the factual conditions of the possible reproduction of social life. At the same time, this process makes the transcendental conditions of the possible objectivity of the object of experience.

As Marx believed, this process changes not only the nature that has been worked on, but also the nature of the labouring subjects themselves. In other words, man evolves through

[1313] Karl Marx, *A Contribution to the Critique of Political Economy*, trans. S. W. Ryasanskaya (New York: International, 1970). p.20.

the transformation of nature, just as nature changes through its encounter with humans. The centrepiece of Marx's conception of knowledge is a celebrated 'unity of man with nature'. In this sense, nature is humanity's 'inorganic body'.[14] So it is arguably possible to believe that it was through the works of Marx that the mechanism of progress in the experience of reflection was disclosed for the first time.

### 1.2.3. Foucault and a new formulation of knowledge

In the 1970s, some investigations in the field of medical sciences caused a change in discourses on the link between knowledge and the extant form of social relations. For example, Waddington's analysis of the development of modern medicine[15], 1973, found a shift in medicine from client control to medical dominance. This analysis owed, of course, much to a Marxist framework, as it focused on the social relations of production. In his research, Waddington was only concerned to see the effect of medical discoveries on the social relationships. He believed that this stemmed from the reversal of the traditional dominance of the upper class patient over the doctor and from the new public hospitals that recruited patients from poor backgrounds and invited higher status physicians to treat them. Thus for him hospitals provided a locus for a new relationship between the doctor and the patient. This association, a few years later, was inverted by Waddington's colleague Jewson who examined the effect of the hospital on medical knowledge. From Jewson's point of view, the hospital acted as an instrument to establish the new biomedical model of medicine.[16] The very basic premise that these investigations would propose was that changes in knowledge were simply one face of a wider cognitive revolution.

Foucault's study of the development of medical observation was similar to those of

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[14] G. N. Kitching, ed., *Marx and Wittgenestein: Knowledge, Morality, and Politics* (Florence, KY, USA: Routledge, 2002). p. 51.

[15] I. Waddington, "The Role of Hospital in the Development of Modern Medicine: A Sociological Analysis," *Sociology* 7 (1973).

[16] David Armstrong, "Bodies of Knowledge/Knowledge of Bodies," in *Reassessing Foucault: Power, Medicine and the Body*, ed. Colin Jones and Roy Porter (London, New York: Routledge, 1998).

Waddington and Jewson. In *The Birth of the Clinic*, he focused on the rapid transformation that took place in clinical medicine from the end of the eighteenth century to the middle of the nineteenth century.[17] Central to his discussion was the way by which the medical understanding of diseases was transformed. He observed that in less than half a century, the notion of disease changed from the classical idea of disease as a pathological essence, which was considered independently of its concrete manifestations, to the modern idea of disease, as essentially expressed in the human body. This generated, according to him, a new medical gaze that attempts to ascertain the significance of the disease through an active interpretation of symptoms, rather than mapping a predetermined illness.

He also believed the transformation in a doctor's gaze indicates a transformation in the understanding of space. The expanded gaze which includes the non-visual order of touch reorganised the structures of visibility and the relationship that exists between the visible and the invisible. In his view, the notion of the body that becomes ill introduced a vertical space of hidden depths and changed the homogeneous, flat space of classical typologies.[18] Foucault argued this shift took place by superimposing the space of configuration of the disease on to the space of localisation of the illness in the human body.[19]

In order to explain the underlying forces that generate particular possibilities of existence among variety of possible things in production of knowledge, Foucault made a distinction between *savoir* and *connaissances*. '*Savoir* refers to the implicit level of knowledge which makes possible at any given moment, the appearance of a theory, an opinion or a practice (*connaissance*). *Savoir is the condition of possibility of the everyday forms of connaissance*'.[20] Foucault does not explain the move from a surface-level study of the

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[17] Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception* (New York: Pantheon Books, 1973).

[18] Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception* (London: Routledge, 1986). pp.135-136.

[19] Lois McNay, *Foucault, a Critical Introduction* (Cambridge: Polity Press, 1994). pp. 49-50.

[20] Ibid. p.53.

empirical content of specific knowledge (*connaissance*) to an analysis of deep-level epistemic structures (*savoir*) in terms of an enlightened positivism.[21] Instead, he understood that this change was based on the transformation of the relations of visibility and spatialisation. To explain distinction between surface-level knowledge and underlying governing structure, Foucault mentioned a precise historical analysis:

> The access of the medical gaze into the sick body was not the continuation of a movement of approach that had been developing in a more or less regular fashion since the day when the first doctor cast his somewhat unskilled gaze from afar on the body of the first patient; it was the result of a recasting at the level of epistemic knowledge (*savoir*) itself, and not at the level of accumulated, refined, deepened, adjusted knowledge (*connaissance*).[22]

While Foucault was always interested in the interference between word and image, discursive and formal are all of interest, he later regretted that he had employed the term 'medical gaze' in *The Birth of the Clinic*; inasmuch as it might be interpreted as a weakening of his visual concerns.[23] So towards the end of his career, he became more and more interested in images which transcribe the materiality of space. This idea is evident in *The Archaeology of Knowledge* when Foucault wrote:

> [The painting] is discursive practice that is embodied in techniques and effects. In this sense, the painting is not a pure vision that must then be transcribed into the materiality of space... It is shot through – and independently of scientific knowledge (connaissance) and philosophical themes – with the positivity of knowledge (savoir).[24]

Elsewhere, Foucault studied the development of modern thought from the late

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[21] Ibid. p. 51 .

[22] Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception*. p.137.

[23] Jay, "From the Empire of the Gaze to the Society of Spectacle: Foucault and Debord." p. 407.

[24] Michel Foucault, *The Archaeology of Knowledge*, trans. A. M Sheridan Smith (London: Routledge Classics, 2002). p. 214.

seventeenth century to the present. He prefaced *The Order of Things*[25] with an unusual categorisation of animals in a 'certain Chinese encyclopaedia' quoting from Jorge Luis Borges (1899-1986). They are classified in an incomprehensible and bizarre way, for example as being belonged to the Emperor, as being innumerable, as being stuffed, as being fabulous, and as being included in the present classification. Foucault then focused on *Treatise on the Serpent*, as something comparable to the Chinese encyclopaedia by the Renaissance naturalist Ulisse Aldrovandi, in which snakes have been treated along with griffins, dragons and other sorts of mythological beasts in the same register. Again, from Foucault's point of view, these differences stem from different conception about objects, their existence and their interrelation.

Foucault employed the term *episteme* to explain why different objects and different themes do appear at one time but not at another. The episteme is the condition of possibility of discourse in a given period.[26] It is an *a priori* set of rules of formation. An episteme includes the tacit assumptions underlying the effort to establish order among phenomena that allows discourses to function. There are unconsciously shared presuppositions that allow different objects and different themes to be spoken at one time but not at another. This means that there is a significant connection between the formal and the informal types of knowledge and therefore things generally considered unrelated are found to be connected and vice versa.

Foucault's definition of episteme may open up the ground for a wider understanding of architecture. This idea was influential on this investigation from the beginning, because it shows that there is a relationship between words and things. But this should not negate the fact that words follow linguistic rules and things may have a material body which can be touched by hands. This should not also generate a conception of architecture purely in terms of the role it plays in the reproduction of relations of domination. Architecture has an internal logic, which is not entirely reducible to the social conditions of its existence.

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[25] Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (New York: Pantheon Books, 1970).

[26] McNay, *Foucault, a Critical Introduction*. p. 52. The *episteme* should not be confused with epistemology or other forms of reflective knowledge.

What is crucially important in this thesis, is to stress the fact that words and things can both contribute to the formation of an entity which is regarded here as architecture. This concept is, at any rate, derived from the connection that Foucault formulated between 'words and things.'[27] In his word, they both can be parts of a *discursive formation.* Foucault regarded discursive formation as:

> 'the principle of dispersion and redistribution, not of formulations, not of sentences, not of propositions, but of statements... the term discourse can be defined as the group of statements that belong to a single of system of formation.'[28]

He calls the basic element of each discourse *statement.* Foucault described the notion of statement in a way that it is distinguished from either a sentence or a proposition. He defined it in the following way:

> We will call statement the modality of existence proper to [a] group of signs: a modality that allows it to be something more than a series of traces, something more than a succession of marks on a substance, something more than mere object made by a human being; a modality that allows it to be in relation with a domain of objects, to prescribe a definite position to any possible subject, to be suited among other verbal performances, and to be endowed with a repeatable materiality.[29]

This definition implies two interrelated ideas. Firstly, it shows that a statement is not limited to the narrow sense of the linguistic. There is no duality between an object and the existence proper to its being, because both of them can be part of the same discursive formation. Secondly, statements are not free products of the mind. They stem from 'surfaces of emergence', which are the institutional conditions of knowledge within which it is possible for statements to appear. If that is the case, then it will be possible to presume that the formation of discourses takes place through 'an event that can always be

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[27] *Les Mots et les choses.*

[28] Foucault, *The Archaeology of Knowledge.* p. 121.

[29] Ibid. p.120.

located by its spatio-temporal coordinates.'[30]

Foucault continues by saying that this means that knowledge is the space in which the human subject may take up a position and speak of the objects with which he deals in his discourse. This way of thinking about the issue of knowledge breaks down the barrier between the common-sense category of objects and that of discourse such as words, explanation, programmes, etc., which are about objects. It is because knowledge is also the field of coordination and subordination of statements in which concepts appear, are defined, applied and transformed. Foucault's definition of knowledge is:

> [A] group of elements, formed in a regular manner by a discursive practice; and which are indispensable to the constitution of a science, although they are not necessarily destined to give rise to one.[31]

Viewed in this way, Foucault outlines a system of understanding based on his own definition of concepts. It can take in the majority of the interlocking factors that are involved in the production of knowledge as well as its conception and comprehension. However concepts are so pure in Foucault's theory of knowledge that they sometimes seem rather fragile; they provide us with a workable understanding that can explain the relationship between the object of knowledge and the subject that produces it in a clear way. Foucault has had a vital importance in developing the conceptual framework of the thesis. His account on the relationship between discourses and practices will be examined in the next chapter. For the current discussion, it is necessary to know that despite all of these, Foucault's theory leaves at least one significant presupposition: a subject is the effect rather than the cause of social order. It can never be determinate.

### 1.2.4. Lacan trapped in the image

There are three diagrams (Fig. 2-1) in *The Four Fundamental Concepts of Psycho-*

[30] Ibid. p.120.

[31] Ibid. p. 201.

*Analysis* (pp. 91 and 106) which are very significant. I stress that these diagrams are so fundamental because they are very dense expressions of different ways that the subject's understanding of the world has been formulated in the last two centuries. It is now appropriate to focus on Lacan's diagrams to study different ways of looking at things.

Diagram 1 in Figure 2-1 (page 81) is the diagram of the Eye/Look. The subject is positioned at the apex of the triangle watching the object, which is at the far end. The image is between the subject and the object. In diagram 1, Lacan articulated the field of vision from the point of view of the one who looks. Thus, in this diagram, the site marked as 'geometrical point' is also designated to the looking subject. In this diagram, the eye emerges from what Lacan calls the 'function of *seeingness*'[32]. Thus the visual pyramid could pass through it, placed at a definite distance with definite lights and a definite position of centre in space and in a definite place in respect to the observer.'[33]

Diagram 1 seems to be a very familiar diagram perfectly based on the traditional descriptions of geometrical perspective (Fig. 2-2). The 'geometrical point' would appear to be the point from which the artist would survey the object to be painted. It could be imagined that Alberti deployed exactly the same diagram when he wrote that painters 'should only seek to present the form of things seen on [the picture] plane as if it were of transparent glass. Lacan, however, did not regard the perspectival model as a perfect expression of the relation between the vision and the image. He hinted at this issue by saying that the geometrical point is only a 'partial dimension' in the field of the gaze.[34] He further reduces the importance of the Albertian paradigm by suggesting that it has so little to do with vision that it could be understood by a blind man. He went on to argue that despite what the model shows (by placing the spectator *outside* the spectacle), the vision and the image are not separable.

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[32] Jacques Lacan, *The Four Fundamental Concepts of Psycho-Analysis* (London: Penguin Books, 1994). p. 82.

[33] Leon Battista Alberti, *On Painting*, trans. John R. Spencer (New Haven: Yale University Press, 1966). p. 51.

[34] Lacan, *The Four Fundamental Concepts of Psycho-Analysis*. p. 88.

Lacan's diagram 1 is a vehicle for articulating the viewer's relation to 'reality' as well as the image by which we apprehend it. It refers to the directly-experienced world of empirically measurable phenomena. Kaja Silverman argues that Lacan does not clarify whether diagram 1 should be regarded primarily as a mapping of the viewer's visual relation to the object or as a mapping of his or her relation to the image.[35] He speculates that if we would reconsider the fact that according to Lacan it is impossible to see the object except through the image, both ideas are presumably at issue.

The kind of space which is closely associated with this way of viewing the world is the perceived space. Edward W. Soja in *Thirdspace: Expanding the Scope of Geographical Imagination* coined this kind of space, in definition, as *Firstspace*.[36] Soja's description of *Firstspace* is epistemological on the one hand and originally concerned with the geographical dimensions of space on the other. If we try to read his description more architecturally, then we can say that the perceived space is materialised. Perceived space should be seen as providing the architect's primary substance. It is, according to Soja, the only objective or 'real' space worth studying from an empirical point of view, because it can be measured and observed.

While the subject was regarded, in diagram 1, as the viewer who is standing at the site of the gaze, diagram 2 (in Fig. 2-1) represents the subject as the object of the gaze. So, diagram 2 may be regarded as the diagram of the Gaze. The second triangle is necessary to show that in Lacanian theory, it is impossible to occupy the first of these triangles without being involved at the same time in the second. In contrast to triangle 1 in which the subject has been placed at the 'geometrical point', in the second one he or she is situated at the wide end of the triangle. In putting the subject at the site of the 'picture', Lacan would indicate that the subject is now a *spectacle*.

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[35] Kaja Silverman, "Fassbinder and Lacan: A Reconstruction of Gaze, Look, and Image," in *Visual Culture*, ed. Norman Bryson, Michael Ann Holly, and Keith Moxey (Hanover and london: Wesleyan University Press, 1994). pp. 288-299.

[36] Edward W. Soja, "Thirdspace: Expanding the Scope of Geographical Imagination," in *Architecturally Speaking: Practices of Art, Architecture, and the Everyday* ed. Alan Read (London ; New York: Routledge, 2000).

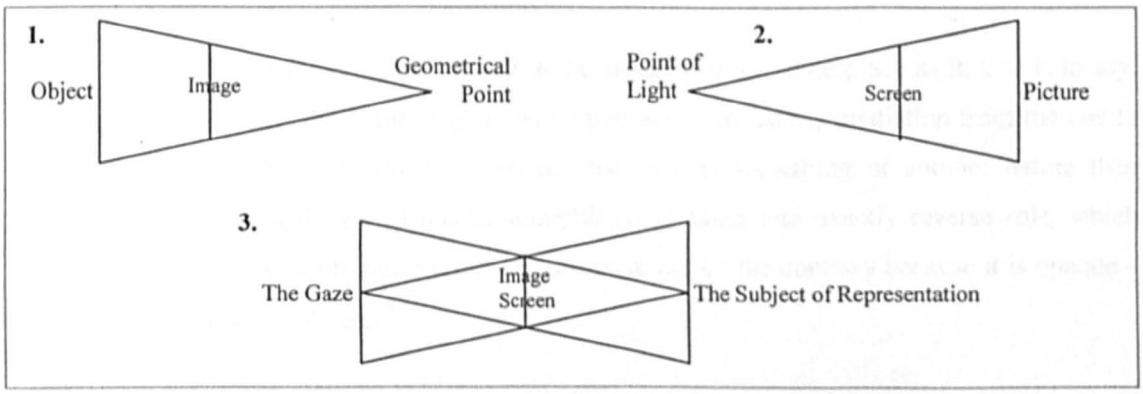


**Figure 2-1:** These three diagrams are very dense expressions of different ways of understanding the subject's relationship to the world. The first diagram seems to be a very familiar diagram perfectly based on the traditional descriptions of geometrical perspective. In the second diagram the viewer is the object of the gaze. The third diagram shows Lacan's account on the subject's imaginary relationship with the object and the screen. From: Lacan, Jacques. *The Four Fundamental Concepts of Psycho-Analysis*. London: Penguin Books, 1994.

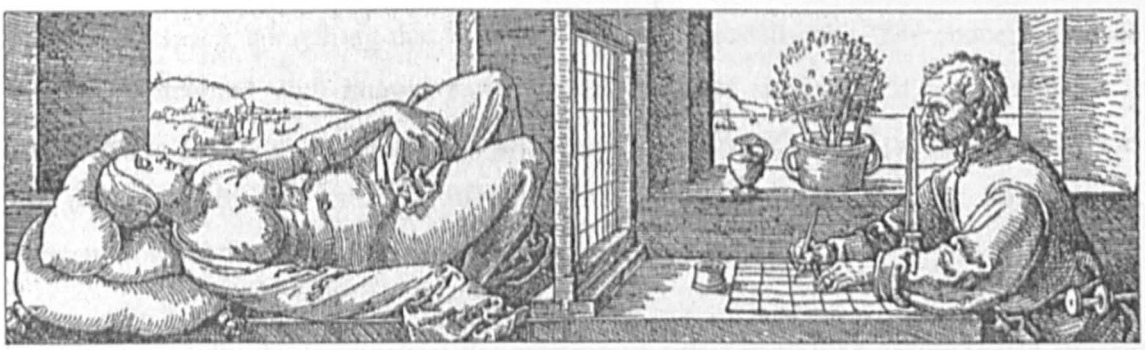

**Figure 2-2:** A woodcut by Albrecht Dürer (1471-1528). As a graphic illustration, it shows the separation between the subject, the object and the image. From: Willi Kurth, ed., *The Complete Woodcuts of Albrecht Dürer* (London: W. & G. Foyle, 1927). This copy is reproduced from: Linda Groat and David Wang, *Architectural Research Methods* (New York: John Wiley and Sons Ltd., 2002).

The subject who gazes from the 'point of light' and the subject whom is spectacled as a 'picture' have each been mediated (and simultaneously intervened) by the 'image' in diagram 1 and the 'screen' in the diagram 2. What Lacan lays at the heart of his theory is that the screen in diagram 2 predetermines the form of the subject. He argued:

> The correlative of the picture, to be situated in the same place as it, that is to say, outside, is the point of gaze, while that which forms the mediation from the one to the other, that which is between the two, is something of another nature than geometrical, optical space, something that plays and exactly reverse role, which operates, not because it can be traversed, but on the contrary because it is opaque – I mean the screen.[37]

By saying that the screen is opaque, Lacan means that 'if [the subject] is anything in the picture, it is always in the form of the screen.'[38] Lacan then developed the predominant position of the screen as an 'imaginary' mapping that causes the subject to have no choice but to become a picture.[39]

To reiterate, the space which is close to such a description can be regarded as the Conceived Space, something that Soja considered as Secondspace. The conceived space is more concerned with images and representations of spatiality. It is 'imagined'. It concentrates on cognitive, conceptual and abstract worlds. While the perceived space was too rigidly materialist and scientific, it is in the Secondspace that, as Soja argues, epistemological discourse received the greatest attention.[40]

Architects usually do not work at the extreme of either perceived or conceived spaces. Perhaps this is because we do not know where the class of image begins and ends. This investigation is not an exception to this claim. What I will propose throughout the thesis is an *imaginary recognition*, but I have also tried to justify it by objective facts. Similarly,

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[37] Lacan, *The Four Fundamental Concepts of Psycho-Analysis*. p. 96.

[38] Ibid. p.97.

[39] Ibid. pp. 106-107.

[40] Soja, "Thirdspace: Expanding the Scope of Geographical Imagination." p. 19.

our understanding and knowledge are not entirely based on the material properties of the object nor are they mere pictures of the researcher. We normally work somewhere in between. Lacan responded to the need to have an in-between mode of being by proposing Diagram 3 (in Fig. 2-1). It superimposes the two triangular systems that Lacan had introduced earlier – the first is that which, in the geometrical field, puts in our place the subject of representation and, the second is that which turns the subject into a picture. In the third diagram, Lacan obviously combined the 'image' in diagram 1 with the 'screen' in diagram 2.

In diagram 3, he tried to represent on the one hand the way by which the science of optics understands the emission of light and the way its rays become refracted on the other. Hence, instead of taking the single triangle that geometrical perspective draws as an accurate description of its own operation, he used two interpreting triangles. What he added to the ordinary perspectival diagrams is the second triangle which cuts through the first. It diagrams the subject's mistaken belief that there is something behind the space set out by the first.[41] Therefore, it is arguably true to believe that the Lacanian subject may doubt the accuracy of even its most 'scientific representations'.

Lacan did not propose a Platonic idealistic stance that the object is split between its real being and its semblance. He was pushed by a question to be clear on this point. So he declared during Seminar XI: 'beyond appearance there is nothing in itself, there is the gaze'[42]. Therefore his diagram shows both the way science of optics understand the emission of light and the way its rays become refracted. While the first triangle creates an imaginary space, the second triangle cuts through and diagrams the subject's mistaken belief that there is something behind.[43] This third triangle shows that beyond the signifying network, beyond the visual field, 'there is nothing in itself, there is the gaze.'[44]

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[41] Copjec, *Read My Desire: Lacan against the Historicists*. p. 33.

[42] Jacques-Alain Miller, ed., *The Seminar of Jacques Lacan: Book Ii : The Ego in Freud's Theory and in the Technique of Psychoanalysis 1954-1955* (New York and London: Norton). p. 103.

[43] Copjec, *Read My Desire: Lacan against the Historicists*. p. 33.

[44] Miller, ed., *The Seminar of Jacques Lacan: Book Ii : The Ego in Freud's Theory and in the Technique of Psychoanalysis 1954-1955* p. 103.

As Joan Copjec notes:

> Contrary to the idealistic position that makes *form* the cause of being, Lacan locates the cause of being in the *inform*: the *unformed* (that which has no signified, no significance shape in the visual field) and the *enquiry* (the question posed to representation's presumed reticence).[45]

In answering the question why the speaking subject cannot ever be totally trapped in the imaginary, Lacan claims that: 'I am not simply that punctiform being located at the geometrical point from which the perspective is grasped.'[46] He depicted this interrelation using two *interpenetrating* triangles. At this point, Lacan provided us with a clear understanding of the interrelation between the three central terms that he introduced i.e. subject, screen and gaze. We should bear in mind that according to diagram 2, the gaze is merely a 'point of light.' The gaze intervenes in shaping subjectivity merely by projecting the opaque screen onto the object. It is through the intervention of an external image that the subject can see himself or herself.[47] But, Lacan does not explain whether or not there is a relationship between the image that constitutes the subject and the screen through which the gaze can 'photograph' the object.

It seems that the screen is the result of different socially generated images through which the subject is constituted.[48] The screen then acts as a framework through which the subject sees an imaginary reflection of his own subjectivity. What opens up the ground for an architectural implication of Lacanian theory is the possibility of isolating the function of the screen and playing with it. Architecture can take up the function of the screen. In other words, the subject 'maps' himself in architecture. This expression is not unsuitable, because the subject needs a locus of mediation and architecture can mediate

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[45] Copjec, *Read My Desire: Lacan against the Historicists*.p. 35.

[46] Miller, ed., *The Seminar of Jacques Lacan: Book Ii : The Ego in Freud's Theory and in the Technique of Psychoanalysis 1954-1955* p. 96.

[47] It should be considered that the gaze is what the subject does not see, because as soon as the subject can see it, the gaze disappears.

[48] If we keep in mind that Lacan speaks of 'playing' with the screen rather than replacing it with a new one, then we might be convinced that the screen could be resulted from socially intelligible images. It should be regarded as a social phenomenon, because its existence is dependent on the Other.

between the subject and the gaze. The function of architecture in relation to the spectator[49], to whom the architect, literally, offers his representation to be seen, 'has a relation with the gaze', if I may borrow a phrase from Lacan. The subject is dependent upon definition through the *image screen* and also can be simultaneously *within* the picture.

### 1.2.5. Where is the object?

In Lacan's way of conceptualisation, the gaze is merely the imaginary apparatus through which light is projected onto the subject comparable to a camera. This metaphor, may suggest that architecture can be seen as a picture of the social and cultural scene with respect to its dependence on the viewer's position behind the 'camera'. This is a key idea in Lacan's diagrams. In one of the paragraphs of *The Four Fundamental Concepts of Psycho-Analysis,* he pointed out:

> the subject – the human subject, the subject of the desire ... - is not, unlike the animal, entirely caught up in [his] imaginary capture. He maps himself in it. How? In so far as he isolates the function of the screen and plays with it. ... [50]

This passage makes it clear that the subject is constantly photographed by the gaze. Furthermore, it would suggest that the subject is generally both the spectator and the spectacle, inasmuch as 'in the picture, something of the gaze is always manifested.'[51] Despite that, we should keep in mind, with regard to Diagram 3, that the subject cannot see anything without the intervention of the image screen.

In Lacan's radical insight, firstly, the subject is regarded merely as a representation and secondly the real has a paradoxical position.[52] This paradox can be better understood if

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[49] The spectator may be a client, a user or merely a passenger-by.

[50] Lacan, *The Four Fundamental Concepts of Psycho-Analysis*. p. 107.

[51] Ibid. p. 101.

[52] This issue will be discussed latter when Lacan's understanding of the notion of body is examined.

we see that in the third diagram there is no object. Lacan realised that he needed to clarify his position about this question: what is the gaze's own object? In order to answer this question Lacan introduced the notion of 'desire' to become the object of the gaze and the concept of *Objet Petit a* as the unattainable object of desire. According to him, the subject overcomes its sense of incompleteness through identification with the object of its desire. Lacan says:

> ... the interest the subject takes in his own slip is bound up with that which determines it – namely, a privileged object, which has emerged from some primal separation, from some self-mutilation induced by the very approach of the real, whose name, in our algebra, is the *objet a*.[53]

David Macey, in an introduction to *The Four Fundamental Concepts of Psycho-Analysis,* tries to make a distinction between Freud's notions of need and demand on the one hand and, Lacan's concept of desire on the other.[54] According to him, a need refers to a biological level; while a demand may be expressed in a request or appeal for love. In contrast, desire is irreducible to either. In order to simplify his account greatly, Macey says that neither the need for nutrition nor the verbal demand for food can explain a desire to eat caviar.

### 1.2.6. The imaginary, the symbolic and the real

The paradoxical place of the 'real' in Lacanian *perspective* can independently be investigated. Moreover. Lacan's contribution to the theoretical stand of this investigation will be discussed in chapter five, of course, at the price of some repetition. What I want to outline here is a challenge that Lacan may cause to Foucault's theory by putting forward the image of a decentred subject that cannot be determining. Foucault believed the subject is constructed by a multitude of different discourses, rather than by one

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[53] Lacan, *The Four Fundamental Concepts of Psycho-Analysis.* p. 83.

[54] David Macey, "Introduction " in *Four Fundamental Concepts of Psycho-Analysis* (London: Penguin Books, 1994). p. xxviii.

monolithic discourse. But in Foucault's theory, it seems impossible to determine the outcome that may result from the encounter of various discourses.

In this regards, the practice of architecture does not provide an exception. A subject of a technical discourse might be in conflict with a subject of a financial discourse. Obviously, these conflicting interests may produce a solution that could not be anticipated before. At the same time, the resultant solution may find itself in conflict with a subject of an aesthetics discourse. Despite the fact that the solution cannot be anticipated by either of the contributing discourses, each of them has predetermined interests derived from their own internal relations. This case shows that, like knowledge, the building is the outcome of two modes of thoughts. One resulted from the chance encounter of the various discourses that are historically determined. These are imagined in a human mind and they need to 'emerge'. The other by rules that are eternal, *a priori* and almost spontaneous. They need to be 'discovered'.

To determine the final outcome of a process through which subjectivity is constituted is extremely difficult for Foucault. But the issue is even more complicated for Lacan. To mark the key difference between Foucault and Lacan, it is helpful to note how Lacan considered medical scientific understanding. According to Lacan, medicine either has to explain the phenomena of the bodily life in scientific terms, or it would not be able to explain them at all.[55] Lacan characterises any scientific understanding of things as *symbolic*, because science basically consists in symbolising the real. Although the body, for instance, is completely transformed by the epistemological grids of modern science, phenomenology according to Lacan tends to *idealise* it.

Because of that Lacan started his investigation from the moment when the child develops an *image* of his or her body as a meaningful whole through what he refers to as the 'mirror experience.' The imaginary body – the body as a visual unity, a 'Gestalt' – as stated by Lacan, is constituted through an identification with the image of the body as a

[55] Miller, ed., *The Seminar of Jacques Lacan: Book Ii : The Ego in Freud's Theory and in the Technique of Psychoanalysis 1954-1955*

whole that we initially gain a sense of identity and self-mastery.[56] At the first glance, the 'standard' Lacanian theory challenges our imaginary or symbolic understanding of phenomena. Its entire effort, as Zizek argues, is to make us see the pure contingency on which the process of symbolisation depends, i.e. to "denaturalise" the effect of meaning by demonstrating how it results from a series of contingent encounters, how it is always "overdetermined".[57]

Besides the imaginary and the symbolic, the third mode of experience is what Lacan considered to be the 'real' that is never experienced immediately. We originally experience our body, as he believed, as scattered and chaotic, in itself. The real is something like a void revealing itself unexpectedly in the folds, gaps and margins of the symbolical and the imaginary. We cannot describe it without transforming or obscuring it into an imaginary or symbolic manner. By this way, Lacan attempted to bring attention back to absence, or the unconscious (in contrast to the metaphysical emphasis on presence). As mentioned earlier, images may be based on the object of perception and that they themselves are unreal. Therefore, imagination is, in a view, that active function of conscious, which goes beyond the reality of the perceived world.[58]

Finally, the category of the imaginary that Lacan proposes can take part in the process of the historical construction of the subject that is regarded by Foucault as the *effect* of historical determinations. [59] In brief, the subject's existence takes place through the imaginary relations which are conceived by Althusser as ideological representations.[60] As Hirst argued, the 'imaginary', is not the *imagination* of the subject; as if the subject were

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[56] Hub Zwart, "Medicine, Symbolization and the 'Real' Body - Lacan's Understanding of Medical Science," *Medicine, Health Care and Philosophy* 1 (1998).

[57] Slavoj Zizek, *Looking Awry: An Introduction to Jacques Lacan through Popular Culture* (Cambridge (Mass.): MIT Press, 1991). p. 39.

[58] Martin Jay, "Sartre, Merleau-Ponty, and the Search for a New Ontology of Sight," in *Modernity and the Hegemony of Vision*, ed. David Michael Levin (Berkeley: University of California Press, 1993). p. 152.

[59] In his article on *Althusser and the Theory of Ideology*, Paul Hirst argued that this insight was originally theorised by Louis Althusser. According to Hirst, Althusser posited that the imaginary provided the form of the subject's lived relation to its condition of existence. See: Paul Q. Hirst, "Althusser and the Theory of Ideology," *Economy and Society* 5 (1976).

[60] In a sense, as Hirst says he conceives ideology itself in terms of the concept of representation.

prior to the 'imaginary', imagination being an action of the subject.[61]

### 1.2.7. Conclusion

Lacan and Foucault rethought the way by which the *gaze* takes place. A comparison between Foucault and Lacan can propose one basic agreement. That is that in both theories the gaze is *form*ulated in different ways but within a particular framework. Foucault implies that the gaze may be reducible to the effect of the institutional condition of the practice of observation. Lacan's perspective proposes that the gaze and the subject are parts of the same entity. It precisely means: *the gaze is the subject-in-action.*

It is important, on the other hand, to note that knowledge cannot be regarded as wholly imaginary or historically determined. There is also a positive condition of the scientific itself that prevents such a reduction from taking place. However, sciences present many correspondences to their institutional condition, it is rather problematic to say that the scientific subject is merely constructed by the institution of science. This means that science always surveys itself, its own content, not subjectively - because of the privileged access that subject has to the process of introspection – but objectively, from the position of the scientific institution.

With regard to Lacan's distinction between the 'real' and the 'reality', we need to consider that to understand architecture is nothing other than identifying images that are associated with buildings and establishing, at the same time, a connection between those images/ideas.[62] In architecture, the building is an object, which can only be present for us as an image and as a real experience. This means that the building is presented externally and internally at the same time. Externally, because we observe it, we touch it; internally, because when we walk into a building we observe *what* it is *and* we carry in our minds an *image* of the exterior. The image that a consciousness produces of a building is not that building; it is something *of* that building. It is impossible to attain any kind of

[61] Hirst, "Althusser and the Theory of Ideology." p.398.

[62] An idea is an image in thinking and reasoning.

understanding of a building unless we construct an image of that building.

Moreover, the crucially important distinction that Foucault drew between surface-level knowledge and underlying governing structures (*savoir* and *connaissance*) is of relevance to this investigation. Foucault believed the most fundamental assumption for making this distinction is that in each given period there is an *a priori* set of rules of formation that allows different objects to be appeared at one time and not at another. Seemingly, it is important to make an epistemological enquiry on architecture in order to explain: how buildings are structured, what principles their organisations follow and why, in each given time and place, a particular order between elements of the building has been established. What is important in our context is to study the conditions in human's way of life that make possible, at any given moment, the appearance of buildings with particular spatial structures.

# CHAPTER THREE: THEORY AND PRACTICE

## Framing Possibilities by Social Relations

### 1.3.1. Introduction

The previous chapter provided the groundwork to identify two trends in theories of knowledge. Kant argued, both implicitly and explicitly, for a normative concept of science as prototypical knowledge. He clearly affirms that there is an *a priori* world. According to his theory, it is possible to suppose that there is a reality independent from human mind and mentality. In the twentieth century, Foucault and Lacan criticised the ideal of a pure objective knowledge. According to them, knowledge is affected by the social condition of human existence. It is dependent on man's mode of being. In my view, Foucault and Lacan's proposals are more convincing, because they have the capability of taking into account a variety of non-objective factors that underlie knowledge. They are also useful paradigms that can deepen our understanding of buildings as socially produced objects phenomena.

If buildings are socially produced, then what is the relationship between a brick and a word? When we come across recent French philosophers, we see that they no longer try to explain relationships between things on the basis that one is the 'cause' and the other is the 'effect'. They rather believe that things (*les choses*) are not objects standing on their own. They are depended on words (*les mots*) about them. This may provide us with a useful framework to examine the relationship between the buildings and the ideas that are about them.

This chapter will try to show how the thinking of Michel Foucault undercuts the simple

cause and effect premises of functionalist interpretation. It will focus on the way that Foucault formulated the relationship between theory and practice. With regard to Foucault's notion of 'discursive formation', it will be argued that any kind of statement, written, oral and rhetoric included, is related to the professional aspirations. Within the context of our discussion, knowledge theories and educational programmes have the same influence on the spatial organisation of building, as thoughts within architecture do. For this reason, architecture, in return, become firmly linked, during the design process, with the polarity of non-architectural structures.

### 1.2.2. Discourses in practice

As mentioned in the previous chapter, central to Foucault's analysis of knowledge is the concept of discursive formation: a *system of dispersion* of statements. Foucault extended the concept of statement and discourse from their confinement within the realm of ideas. The systems of dispersion are regulatory principles, which make it possible to distinguish one discursive formation from another and are governed by the rules of formation. For Foucault, discursive formations are complex structures of discourse-practice. In his analysis of human sciences, Foucault noted:

> Is it not possible to make a structural analysis of discourses that would evade the fate of commentary by supposing no reminder, nothing but the fact of its historical appearance? The facts of discourse would then have to be treated not as autonomous nuclei of multiple signification, but as events and functional segments gradually coming together to form a system. The meaning of a statement would be defined not by the treasure of intentions that it might contain, revealing and concealing at the same time, but by the difference that articulates it upon other real or possible statements, which are contemporary to it or to which it is opposed in a linear series of time. A systematic history of discourses would then become possible.[1]

[1] Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception*. p. xvii.

Foucault's main achievement is that he showed us visual instances of a subject, which is being constituted, rather than the subject that constitutes. For him, as Martin Jay argued, the gaze postulated by psychoanalysts should be understood in a phenomenological way taking into account the lived spatial experience that emerged from the body's intertwining with the world.[2] Jay supported Gilles Deleuze's argument that Foucault's works are a dual investigation of articulable statements and field of 'visibilities':

> [Foucault]... continued to be fascinated by what he saw as much as by what he heard or read, and the archaeology he conceived of is an audiovisual archive ... Foucault never stopped being a *voyant* at the same time as he marked philosophy with a new style of statement.[3]

Moreover, Foucault successfully provided us with an 'audio-visual' account of the phenomena. In his early works,[4] Foucault was concerned with the institutional expression of concepts. He explored how the meaning of concepts such as insanity, sexuality and punishment changed during the eighteenth and nineteenth centuries. He then concentrated on the medical practice of the gaze. He believed the practice of gaze which emerged from the nineteenth-century clinical practice 'is no longer reductive, it is, rather, that which establishes the individual in his irreducible quality.'[5] In fact, what the gaze sees is an epistemic field. The idea of this newly emerged gaze is based on the ideal of 'a speaking eye' that 'authorises the transformation of symptom into sign and the passage from patient to disease and from the individual to the conceptual.'[6] It is thus comprehended both linguistically and visually. The eye, therefore, is institutionally established.

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[2] Jay, "From the Empire of the Gaze to the Society of Spectacle: Foucault and Debord." p. 386.

[3] Gilles Deleuze, *Foucault* trans. Seán Hand (London: Athlone, 1988 ). p. 50. The statement is quoted and emphasised in: Jay, "From the Empire of the Gaze to the Society of Spectacle: Foucault and Debord." p. 384.

[4] Especially in *Madness and Civilization* which was originally published in Paris in 1961 under the title of: *Folie et déraison: Histoire de la folie à l'âge classique.*

[5] Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception.* p. xiv.

[6] Ibid. p.114.

### 1.3.3. A philosophical interest in madness

*Madness and Civilization*, 1961, is the first and perhaps Foucault's most successful attempt to explain the relationship between theory and practice. Although the book explored how the perception of insanity had changed after Renaissance, it is not a mere study of cultural history by a historian of science. Habermas notes that throughout this book, there is a philosophical interest in madness as a phenomenon complementary to reason.[7] Foucault compared the difference between the ways of encountering the mad in the Middle Ages and our own days. He remarked that a 'shift in treatment of madness from the act of embarkation to practices of confinement took the form of rupture or a sudden transformation which was, in part, a response to the economic crisis affecting Western Europe during the seventeenth century.'[8]

Foucault's description of insanity is to a great extent architectural, as well as philosophical and historical. He demonstrated that the modern category of insanity, for instance, was predicated on the dissolution of the medieval and Renaissance unity of world and image. He showed that there is a connection between the spatial expression of insanity in the birth of asylum and the shift from the classical idea of madness as *nothing* to the modern conception as *something that can be seen*.

He argued that in 'the classical period', the essence of insanity was either *blindness* or *dazzlement*. The term blindness refers 'to the night of quasi-sleep which surrounds the images of madness, giving them, in their solitude, an invisible sovereignty.'[9] In this sense madness is something that joins vision and blindness, sleep and waking, day and night. The word which can summarise this experience is, according to Foucault, *Unreason*. The second essence of insanity may generate *dazzled reason*. Dazzlement is night in broad daylight:

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[7] McNay, *Foucault, a Critical Introduction*. p. 239.

[8] Ibid., p.19.

[9] Michel Foucault, *Madness and Civilization: A History of Insanity in the Age of Reason* (Routledge, 2001 2007]). pp. 99-100.

> to say that madness is dazzlement is to say that the madman sees the daylight, the same daylight as the man of reason (both live in the same brightness); but seeing this same daylight and nothing but this daylight, he sees it as void, as nothing.[10]

Foucault demonstrated that what seems nowadays like an enlightened and human application of scientific knowledge is, in fact, a new form of social control. The book argued that madness is not a self-evident behavioural or biological fact but is the product of various socio-cultural practices. He concluded that there is a particular relationship between scientific discourses and the social practices within a structuralist framework.

The question is then: how are the internal paradigms of sciences and the conditions external to science related to each other? In *The Archaeology of Knowledge* Foucault answered:

> what made it possible at the time it appeared, what brought about this great change in the economy of concepts, analyses, and demonstrations, was a whole set of relations between hospitalisation, internment, the conditions and procedures of social exclusion, the rules of jurisprudence, the norms of industrial labour and bourgeois morality, in short as whole group of relations that characterised for this discursive practice the formation of its statements; but this practice is not only manifested in a discipline possessing a scientific status and scientific pretensions; it is also found in operation in legal texts, in literature, in philosophy, in political decisions, and in the statements made and the opinions expressed in daily life. The discursive formation whose existence was mapped by the psychiatric discipline was not coextensive with it, far from it: it went well beyond the boundaries of psychiatry.[11]

As this quotation implies, discourses exist in written and oral forms of the social practices of everyday life. Some of them may be part of common sense, and some may be latent in libraries or stately homes. On the other hand, however, there are silent structures that

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[10] Ibid. pp. 101-102.

[11] Michael Foucault, *The Archaeology of Knowledge*, trans. A. M. Sheridan Smith (London: Tavistock Publication Ltd, 1972). p. 179.

sustain practices and discourses. Accordingly, while in *Madness and Civilization* Foucault studied the meaning of discursive practices and their relative dependence on social institutions, in *The Birth of Clinic* he sought to avoid meaning by emphasising the structural conditions of the possibility of both practices and discourse.[12]

Foucault analysed the underlying forces influential on the archaeological *transformation* in scientific discourses in *The Birth of the Clinic*, 1963. He focused on practices, such as medicine and psychology, which enable human beings to treat themselves as objects in the purest sense. With regard to the shift that took place in clinical medicine in less than half a century, in the late eighteenth century and early nineteenth, he stressed the social practices that attempt to 'make sense of and control the deep subjective universal experience of madness.'[13] Over this period of time, the medical understanding of disease was transformed, according to Foucault, from the classical notion of disease as a pathological essence that could be conceived independently of its concrete manifestations to the modern conception of disease as necessarily expressed in the human body.[14]

In order to understand the forces that underlie discourses Foucault stressed that on the one hand we should combine erudite knowledge and local memories, which allows us to establish a historical knowledge of struggles. On the other hand, we should make use of this knowledge tactically.[15] The combined product of these two paradigms of knowables is expressed in Foucault's definition of *genealogy*. He relabelled his later historical writings, which are based on this methodology, 'genealogy'. Genealogy, according to him, is a kind of historical writing that integrates into a single investigation the tasks of the history of institutions and conceptual history'.[16]

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[12] Dreyfus and Rabinow, *Michel Foucault: Beyond Structuralism and Hermeneutics*. p.16.

[13] Ibid. p.15.

[14] McNay, *Foucault, a Critical Introduction*. p.49.

[15] Michael Kelly, ed., *Critique and Power: Recasting the Foucault/Habermas Debate* (Cambridge, Massachusetts: MIT Press, 1998). p.22.

[16] Ibid. p.159.

### 1.3.4. The mediation of power

Foucault studied the concept of practice in relation to both scientific and non-scientific discourses. His early books involved isolating various orders of discourse which formed surfaces for the emergence of thoughts and ideas. In this period, he studied the conditions within which scientific discourses, presuppositions and statements have been made up. From the late 1960s, under the influence of Nietzsche (1844-1900), he employed a genealogical method to investigate the non-scientific discourses influential on the practice of power. To attain such a goal, he made detailed discourses of the way people would see the world and acted within it.[17]

For Foucault, socially constructed categories generated by a variety of discourses such as psychology, philosophy, law, literature, etc. provide the means of making the subject visible. In order to provide a brief survey of Foucauldian theory, it should be noted that Foucault's discussion is traversed by the following theme:

> ... power relations can materially penetrate the body in depth, without depending even on the mediation of the subject's own representation. If power takes hold on the body, this isn't through its having first to be interiorised in people's consciousness. [18]

With respect to human sciences, Foucault had reached this conclusion that the possibilities of different practices are framed by means of which power relations generate discourses in the way in which they constitute and govern individual subjects. His fundamental conceptual representatives are the rules that reactivate particular ongoing discursive practice from a spectrum of possibilities. According to Foucault, discourses are not merely ways of thinking and producing meaning. They are 'ways of constituting knowledge, together with the social practices, forms of subjectivity and power relations which inhere in such forms of knowledge and relations between them. They constitute the

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[17] The manifestation of these two different modes of knowing is latent in the concepts of *connaissance* and *savoir* that we examined in the second chapter of this investigation.

[18] Michel Foucault, *Power/Knowledge: Selected Interviews and Other Writings* (Brighton: Harvester, 1980). P.186.

'nature' of the body, unconscious and conscious mind and emotional life of the subjects they seek to govern'.[19]

Power is the practice that underlies the formation of discursive formations. He argued that knowledge and the subjects who reproduce it are connected with specific institutional conditions and forms of power through which both knowledge and subject are framed in a particular way. Foucault demonstrated that the practice of power is not a fixed quantity of physical force, but rather is a stream of energy flowing through every living organism and every human society; its formless flux harnesses various patterns of behaviour, habits or introspection and systems of knowledge.[20] In *The History of Sexuality*, he made a detailed description of the characteristics of power. He finally concluded that power is:

> ...the multiplicity of force relations immanent in the sphere in which they operate and which constitute their own organisation; as the process which through ceaseless struggle and confrontations, transforms, strengthens or reverses them, as the support which these force relations find in one another, thus forming a chain or a system, or on the contrary, the disjunctions and contradictions which isolate them from one another; and lastly, as the strategies in which they take effect, whose general design or institutional crystallisation is embodies in the state apparatus, in the formulation of the law, in the various social hegemonies.[21]

Although Foucault embodied notion of power as the generator of the emergence of knowledge, his term of power is 'theoretically underdeveloped.' This issue caused a criticism from Habermas. He argued, rightly, that in Foucault's theory there are no rules that could govern their own sphere. '... these rules can make a discourse comprehensible only as regards its conditions of possibility; they do not suffice to explain the discourse practice in its actual functioning' and thus 'a rule-governed discourse cannot itself govern

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[19] Chris Weedon, *Feminist Practice and Poststructuralist Theory*, Second ed. (Cambridge, Mass: Blackwell Publication, 1997). p.105.

[20] James Miller, *The Passion of Michel Foucault* (London: Harper Collins Publishers, 1994). p. 15.

[21] Michel Foucault, *The History of Sexuality*, vol. 1 (London: Penguin Publication, 1979). pp. 92-93.

the context in which it is implicated'.[22] He mentioned this in the following:

> When I wrote *Madness and Civilization*, I made at least an implicit use of this notion of repression. I think indeed that I was positing the existence of a sort of living, voluble and anxious madness which the mechanisms of power and psychiatry were supposed to have come to repress and reduce to silence. But it seems to me now that the notion of repression is quite inadequate for capturing what is precisely the productive aspect of power.[23]

The concept of power which Foucault advanced has been regarded as a mediator to complete the discourse-practice relationship. Without analysing the mediating function of power in framing the possibilities of actions, it is not feasible to come to a coherent understanding of this relationship.[24] But Foucault simplified the relation between philosophical space of discourses and the social forms of practices. In spite of his attempt to abandon privileged principles at the beginning, in some of his later works, without being unjust to Foucault's project, it is possible to substitute the word 'power' for the word 'production'.[25]

### 1.3.5. Conclusion

Foucault believed that the possibilities of different practices are framed by social relations. He included, within his notion of discourse, objects which are not simply verbal. Buildings themselves can thus be understood as part of discourse, not merely as

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[22] Kelly, ed., *Critique and Power: Recasting the Foucault/Habermas Debate*. p. 81.

[23] Foucault, *Power/Knowledge: Selected Interviews and Other Writings*. p. 42.

[24] Foucault's always-present from of power which is a structural feature of human societies has been employed in different way in comparison with Marx. While his perspective tries to address the forms taken by economic power relations and their importance in maintaining social power, he did not make his narration with determining and privileged presuppositions which had played in Marx's theory. See: Weedon, *Feminist Practice and Poststructuralist Theory*.

[25] Because of that Dreyfus is convinced that 'if Foucault had restricted himself to following his own methodological principles [archaeological] he would have given us a valuable description of the discursive practices he set out to study.' Dreyfus and Rabinow, *Michel Foucault: Beyond Structuralism and Hermeneutics*. p. 83.

the product of discourse. With respect to the institutional structure of knowledge, what Foucault's thinking may yield for the context of this investigation is that the University is the overlap of the possibilities which are selected out of a variety of alternatives. In this view, both the architectural plans and educational programmes may be considered as components of a 'discursive formation.'

Discourse deals with the way any kind of statement, written, oral and rhetoric included, is related to the professional aspirations. They may include technical, functional and economic considerations. But what matters in this investigation is the fact that educational programmes are pervasive issues in planning Universities. Although discussions about the educational programmes are commonly characterised as a kind of talking, speaking and writing about the mission of the University, these theories and policies usually make 'surfaces of emergence' that give direction to the practice of architecture.

It is therefore important to integrate into a single investigation the idea of the University, as an institution, and the design of the University, as an architectural practice. The kind of writing that would result from these principles is close to what Foucault had labelled 'genealogy'. It will study changes in the buildings programme and the consequent repositioning of architectural designs in response to changes they may cause in the brief. Changes in the brief of the project, as will be examined in the case studies, can sometimes be signs of the change in wider institutional-social factors.

Within the context of University design, the 'other spaces' find their way into architecture, naturally, through the individuals who are involved in the project. It is hence important to see how reality is understand by those human subjects: whether he or she constructs the reality or the reality constructs him or her? The next two chapters of this thesis will propose how institutional discourses leave their influences on the individual. Although Foucault will remain one of the key references throughout this thesis, the theories, which mainly deal with the developmental process of understanding the reality, are in the fields of psychology and psychoanalysis.

# CHAPTER FOUR: THE MIND AND THE BODY

## Merleau-Ponty and Foucault's Proposals on the Body-Mind Duality

### 1.4.1. Introduction

In the Western philosophy, from Descartes on, there has been a long-standing duality between body and mind. We should not disregard the fact that the body-mind duality was not particularly limited to the West. For centuries, in the Middle East, the body and mind have been in separation from, and even in opposition to, each other. As an instance, Hafez [1] - a Persian fourteenth century poet - in one of his verses complained that he does not deserve to be a prisoner in the body cage. It is not difficult to show that the idea of the body as a cage - which prevents us being as we *should* be - has a long history in Persian culture, because a rather similar meaning was stated by other philosophers and poets such as Ghazzālī (eleventh century)[2] and Rūmi (thirteenth century)[3].

In the twentieth century, the German philosopher Martin Heidegger (1882-1976) questioned the conventional division between the mind and the body. Later on, some French thinkers followed Heidegger in developing theories in which between the body and the mind there is no generic duality. In order to examine their arguments more closely, this chapter will make a brief detour into the concepts of embodiment used by Foucault and Merleau-Ponty.

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[1] (خواجه شمس‌الدین محمد حافظ شیرازی) Khawjeh Shams al-Dīn Muhammad Hafez-e Shīrazī .

[2] (امام محمد غزالی or ابو حامد محمد ابن محمد الغزالی)Abū Hāmid Muhammad ibn Muhammad al-Ghazālī.

[3] (مولانا جلال الدین محمد رومی) Mawlānā Jalāl-ad-Dīn Muhammad Rūmī.

The relationship between the building and the body is much talked about.[4] As architecture necessarily has a bodily nature, the difficulty is to describe the relationship between the building and the system of thought that generates architectural forms. This chapter tries to rethink the stubborn distinction between the plan and the programme, in the light of what Foucault and Merleau-Ponty proposed. As will be argued, architecture is constituted out of buildings (physical objects), its images (photograph, drawing, model and mental pictures we create of buildings) and its words (the brief of the project and discourses presented by architect, client or critic). Words and ideas that underlie the processes and buildings, as will be argued should not be considered as separated entities. While there are ideas underlie the spatial organisation of buildings, this means that architecture had concretised those ideas in a physical way. To adopt an idea from Merleau-Ponty, an idea exists as long as it is physically expressed.

### 1.4.2. I am my body

Although Heidegger did not focus the issue of the body intensively, his idea of Dasein was an original solution to end the duality between the mind and the body. He believed that what makes understanding of something possible is the condition of the possibility of its intelligibility. This condition of possibility is beyond the domain of beings, as the meaning of being is not itself a being.[5] For him, an important philosophical problem has been concealed by the apparent self-evidence of 'being'. To know these possibilities entails an analysis of human existence (*Dasein*). This is a practice that Heidegger terms an 'existential analytic'[6]. It is through this process, he believed, that the way of relating to beings constitutive of any human existence whatsoever will be uncovered. Dasein is an everyday German word for 'existence'. Heidegger emphasised its components, *Da* (there) and *Sein* (being) and argued that human existence is 'there-being'.

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[4] See: George Dodds and Robert Tavernor, eds., *Body and Building: Essays on the Changing Relation of Body and Architecture* (Cambridge: MIT Press, 2002).

[5] Heidegger, *Being and Time*. p. 371.

[6] Ibid. p. 34.

The relevance of fundamental ontology for the problem of mind-body emerges when one considers Heidegger's interpretation of human existence as Dasein. What Heidegger had proposed in Germany before the Second World War influenced many thinkers in France after the War. In early 1950s, Maurice Merleau-Ponty (1908-1961) was trying in his Sorbonne course, to answer this question: how the other comes into being for a child and how the relation between the child and the other is established? His conclusion was that this question cannot be answered because its answer requires the notion of 'coenaesthesia' to be explained. Nevertheless, the difficulty of explaining that concept is that it is concerned with purely individual experiences of one's own body.

The alternative way of tackling the question is, as he argued, through the notion of a body schema or a postural schema. This body schema, in contrast to the concept of coenaesthesia, is a system in which different perceptual modalities are integrated and which contains information about the relation between the body and its environment.[7] The difference between body schema and coenaesthesia is precisely that the body schema has some connection to the environment. It could be explained, in fact, due to that connection. This meant, for him, that the body cannot be thought, explained and even experienced apart from the environment. In other words, he organised the bodily experience on the basis of the interaction between the body and the environment.

Understanding the importance of the idea that the body is inseparable from the environment requires distinguishing some well known theories of the mind. The first theory would have appeared in materialistic philosophy. According to that view, a person is a highly complicated physical object and all of the supposed mental facts are really physical, or rather logically dependent upon physical facts. This idea has radically been denounced through the doctrine of idealism. This second position argues that a person is a non-physical mind whose physical facts are really mental facts, or at least are logically dependent on mental facts. The third ontology which is worth mentioning here is a dualist account that a person is essentially a non-physical mind and contingently a non-mental

[7] Helena De Preester, ed., *Body Image and Body Schema: Interdisciplinary Perspectives on the Body* (Amsterdam, Philadelphia: John Benjamins Publishing Company, 2005). p.260.

body.[8] Merleau-Ponty stands in the third category. The mind-body problem, for Merleau-Ponty, is the problem of stating correctly the relationship between the mental and the physical.

Merleau-Ponty's account about the physical world in relation to the mental world and vice versa, can provide us with a useful tool in understanding architecture. There are, of course, a number of differences between the experience of one's own body and that of any object in the external world. But the relation is compelling at this point. His *Phenomenology of Perception* (1945) is almost entirely devoted to arguing that the body cannot be viewed merely as an object or material entity of the world. To clarify these differences Merleau-Ponty set some instances, which can direct us to his conception of the experience of perception. He says:

> It is particularly true that an object is an object only in so far as it can be moved away from me, and ultimately disappears from my field of vision. Its presence is such that it entails a possible absence. Now the permanence of my own body is entirely different in kind: it is not at the extremity of some indefinite exploration; it defines exploration and is always presented to me from the same angle. Its permanence is not a permanence in the world, but a permanence from my point of view.[9]

A clearer distinction between my body and objects in the external world, he argues, is that 'I cannot array it before my eyes'[10]. This shows that his concept of body has an undeniable physical dimension, which is under perception constantly. But the problem is that it would empirically be difficult to prove his claim that the body is 'constantly perceived'. To be sure, it is right to say my own body is *more* often perceptually presented to me than any other object in the external world. For Merleau-Ponty, there is no question that, any object needs to be perceived by a subject, practically, to exist. Every

[8] All of these theories have been critically discussed at: Stephen Priest, *Theories of the Mind* (London: Penguin Books and Houghton Mifflin, 1991).

[9] Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Colin Smith (London: Routledge & Kegan Paul, 1962). p. 90 .

[10] Ibid. p. 90.

physical subject entails to be subjectively perceived. Things, in a broader sense which includes the body, may be categorised on the basis of their level of independence from the subject.

Merleau-Ponty's originality, as Stephen Priest argues, lies in the idea that *subjectivity is physical*. He does not doubt that objects are physical, as Lacan implied, but he doubted that we are objects. This led him to posit the concept that I am a subjective object or a physical subject.[11]

*Phenomenology of Perception* is united by the claim that 'I am my body', and that 'there is no meaning which is not embodied'[12]. This does not mean that Merleau-Ponty is in favour of a physicalist or behaviourist type of position. Instead, he concludes that it is impossible to imagine a mind that could exist without a body and external world, or a body that could exist without a mind or an external world and, an external world that could exist without a mind and a body.[13]

In the light of what Merleau-Ponty proposed, I would say it is impossible to have an understanding of an image (or an idea, which is a mental image) unless it represents a manifestation that can stand in front of a camera, for example, or a mirror. Inasmuch as architecture is tied to the destiny of the body, Merleau-Ponty's phenomenological answer to a philosophical question offers us basic concepts that allow understanding a building not solely as a physical object. The main inference that can be taken from his body-mind relation to be used in architecture is that: the way by which the mind represents architecture is one of the modes through which the mind realises or actualises itself. Architecture, in accordance with Merleau-Ponty's concepts, could be regarded as a physical subjectivity.

For sure, architecture does not have the same level of subjectivity that the body has. Its

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[11] Stephen Priest, *Merleau-Ponty* (London and New York: Routledge, 1998). p. 57.

[12] Nick Crossley, *The Politics of Subjectivity: Between Foucault and Merleau-Ponty, Avebury Series in Philosophy* (Aldershot: Ashgate Publishing, 1994). p. 14.

[13] Priest, *Merleau-Ponty*. p. 69.

existence is dependent on the mode of existence the subject who stands in front of a building. If that is the case, then the next question would be regarding the way that subjectivity is presented physically especially in social domain. As far as I know, Merleau-Ponty did not try to explain this question in the way Foucault intensively tried to do. There is a more precise explanation of the case that Piaget and Lacan put forward which has been left to be discussed in the next chapter.

### 1.4.3. The political technology of the body

Following Merleau-Ponty who had tried psychologically to answer such a grand question, Michel Foucault initiated his considerations on the 'disappearance of the sick man' and the emergence of the patient and also on the biomedical roots of modern thinking of the body. The interesting point, for Foucault, was the process through which the reality of the body is created, rather than invented. For him, in the history of medicine it is not the doctor who has dominated, subjugated and objectified the patient; rather it is the power mechanism coupled to an anonymous gaze which has had a major impact in celebrating and sustaining the physical nature of the body during the nineteenth and twentieth centuries.[14]

Foucault attained this understanding by focusing on particular institutions such as the clinic, the prison, the hospital, and the asylum which make visible, as he believed, particular aspects of modern subjectivity. These were the sites where various forms of knowledge and power were practiced on the body. What he intended to highlight was the fact: '... the body is also directly, involved in a political field; power relations have an immediate hold on it; they mark it, train it, force it to carry out its tasks, to perform ceremonies, to emit signs.'[15]

In *The Birth of the Clinic*, for instance, Foucault made an historical account on the category of the body and the development of the clinical 'gaze' at the end of the

[14] Jones and Porter, eds., *Reassessing Foucault: Power, Medicine and the Body*. p.24.

[15] Foucault, *The Order of Things: An Archaeology of the Human Sciences*. p. 25.

eighteenth century. For Foucault, the body is not simply a *natural* object. It is also a *discursive* object. Abstracted from the structures and processes enclosed by the skin into distinct domains, he demonstrated how man was represented by the modern medical practice in the way which was unknown prior to that. In previous medical systems, man was considered in a space of humours and harmonies. In such a space, disease was predominantly perceived as a function of the environment and the mode of life.[16] Consequently, the body was merely the representation of these complex determinations. He regarded the observational 'gaze' of the clinical medicine not merely as a result of scientific achievements. It was a product of definite discursive and institutional conditions, which isolates and observes bodily states and processes.

Foucault was convinced that even purely empirical facts are dependent on institutional relations. This is, of course, a remarkable way of thinking. His *Discipline and Punish: the Birth of the Prison* is again about the transformation of a concept by social relations. He pointed out that in the 'ancient' regimes of punishment the central aim had been the infliction of unbearable pains. He notes that in the seventeenth century, the physical punishment was staged as a public spectacle. Later on, the relations between the punishment and the body of the condemned underwent a radical change. The replacement, as Foucault argues was the adoption of imprisonment as the main penalty. Punishment became then the suspension of civil rights. This shift is, according to him, the result of a new mode of power for which Foucault introduced the concept of disciplinary power. While the ancient form of power would reply on repressive force, such power relies on surveillance as a way to transform the subject.

To show an archetypal form of such a power, Foucault took up Jeremy Bentham's scheme for a model prison, the Panopticon. The Panopticon, as discussed earlier, was a circular structure whose floors were divided into cells arranged around the circumference, which isolate the prisoners, and at the centre of the structure an inspection tower from which each of the cells on each of the floors could be observed.

[16] Hirst, "Foucault and Architecture." p.53.

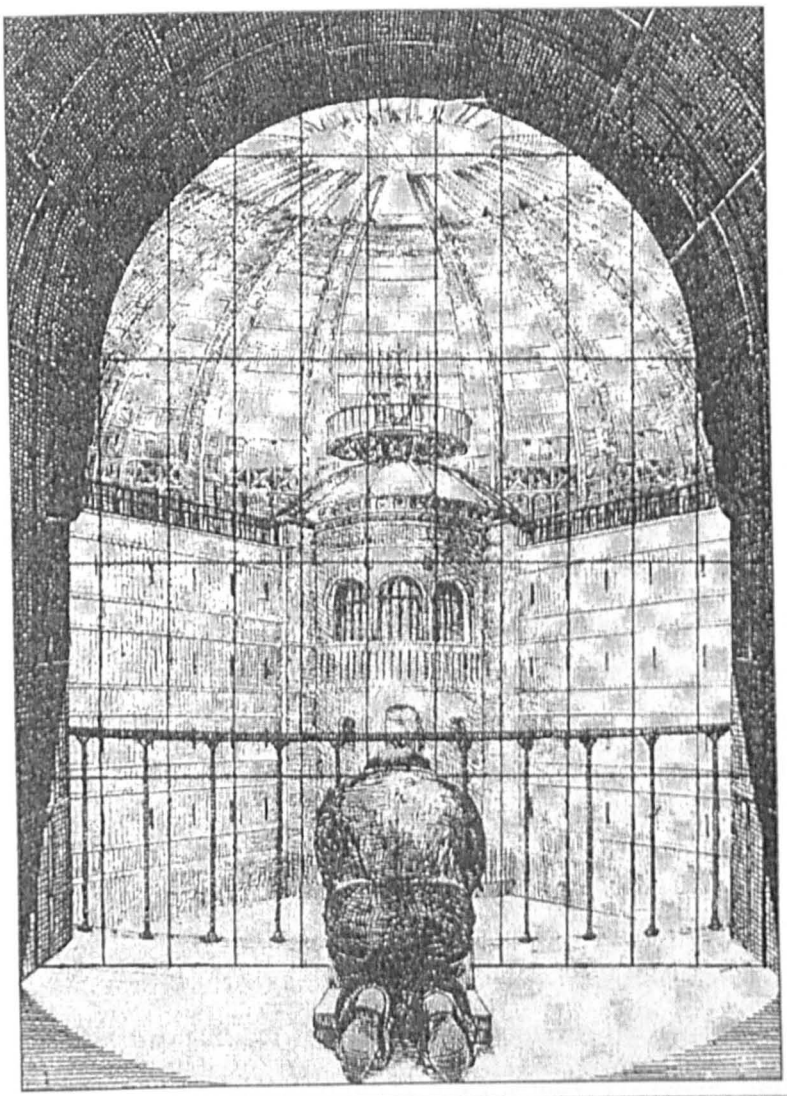

**Figure 4-1:** Plan for a penitentiary by N. Harou-Romain, 1840. This plan is not an 'expression' or a 'reflection' of the reality of institutional life. It is a paradigm, a model, in which many disciplinary strategies are concentrated. From: *Discipline and Punish: The Birth of the Prison.* Translated by Alan Sheridan. London: Penguin Books, 1977.

Here Foucault formulated the model of a body that finds itself inscribed by its political situation. The reason that Foucault regarded the Panopticon as exemplary is because he believed it embodied principles and techniques which were increasingly influential on the social practice of the body. He describes the Panopticon as a 'diagram of a mechanism of power reduced to its ideal form ... a pure architectural and optical system [abstracted from any] obstacle, resistance or friction'.[17] For Foucault, Panopticon is not an 'expression' or a 'reflection' of the reality of institutional life; rather it is a paradigm, a model, in which many disciplinary strategies are concentrated. The ultimate product of these strategies is a subjected 'docile body'. He believed:

> Through this technique of subjection a new object was being formed; slowly, it superseded the mechanical body – the body composed of solids and assigned movements, the image of which had for so long haunted those who dream of disciplinary perfection. This new object is the natural body, the bearer of forces and the seat of duration; it is the body of susceptible to specified operations, which have their order, their stages, their internal conditions, their constituent elements ... It is the body of exercise rather than speculative physics; a body manipulated by authority, rather than imbued with animal spirits; a body of useful training and not of rational mechanics ...[18]

What Foucault found in Panopticon is not a divine harmony between an idealised body and its world (as was desired particularly by Renaissance architectural theorists). In the circular symmetrical form of the Panopticon, he found evidence of an institutionalised programme practicing on the prisoner's body. Therefore, the Panopticon is one of a series of structures that embody the surveillance principle.

### 1.4.4. Foucault versus Merleau-Ponty

The socially produced body in the way Foucault proposed is formed from the exterior by

[17] Foucault, *Discipline and Punish: The Birth of the Prison*. P.205.

[18] Ibid. p. 155.

its relation to the complex and constantly changing network of cultural relationships and discursive practices. Robert McAnulty argued that Foucault's understanding of body in terms of its *exteriority* (versus the interiority of humanism) and its position of engagement *within* the world (versus a position of perspectival distance) is the one with which architecture must be confronted.[19] The tension between the body and the power structure, which is trying to fabricate it, as Foucault posited, requires a geometrical or relational paradigm.

Foucault' thinking may highlight the institutional aspects of the practice of architecture. But the work of architecture cannot be reduced to a merely relational structure, in the way we can consider concepts such as gaze and punishment. There are in architecture inescapable structural regulations, for instance, that prevent such a reduction from taking place. The object of architecture is not merely, at the same time, a realisation of the social order. Nor is it a pure outcome of architecture's inner interrelations. The work of architecture should be considered as a double model of subjectification: 'a privileged representation, in its contents, of subjectifying strategies as well as an exemplification, in its structural and stylistic enunciations, of the artist's subjectifying resources', as Leo Bersani proposed in *Psychoanalysis and the Aesthetic Subject.*[20]

Merleau-Ponty, on the other hand, tried to explain the inter-relationship between the physical world in relation to the mental world. The question for him was *how* does subjectivity presents itself physically? In his proposal there is a system in which different perceptual modalities are integrated. He called this system a body schema. Moreover, he argued that it contains information about the relation between the body and its environment. The originality of this idea is that the body schema has some connection to the environment. To summarise, Merleau-Ponty's proposal is that to understand the body is to establish the relationship between the body and the environment.

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[19] John Whiteman, Jeffery Kipnis, and Richard Burdett, eds., *Strategies in Architectural Thinking* (Cambridge (Massachusetts), London: The MIT Press, 1992). p. 184.

[20] Bersani, "Psychoanalysis and the Aesthetic Subject."

### 1.4.5. Conclusion

This chapter concentrated on those theories which explained the physicality of the mental objects and vice versa. Merleau-Ponty remarked 'there is no meaning which is not embodied'. This means that it is pointless to imagine that there is a mind if there is no body that embodies that mind. This shows, on the other hand, that the body could not exist without a mind or an external world. The external world's existence, according to this view, is dependent, at the same time, on the mind that perceives and the body that embodies this perception.

None of these theories can deal with any detailed architectural concern. Rather they can offer us here is a useful framework. University design may be tackled from this perspective. The University, as a set of buildings and more importantly as a part of the 'external world', is the physical embodiment of institutional-social ideas. It is also involved, directly and indirectly, in a political field. At the same time, social relations have an immediate impact on the practice of University design.

Finally, the utmost attention should be given to the way that we draw the relationship between the apparently differentiated fields that influence the physical and non-physical characteristics of the University. The architecture of Universities embodies institutional-social ideas. Merleau-Ponty, Foucault and Lacan argued against understanding that embodiment as simply cause and effect. Their insights begin to unravel the interrelationships between brief and design as precisely a complex relationship. For now, it is important to consider that buildings are physical ideas.

# CHAPTER FIVE: DESIGN AND PROGRAMME

## Understanding the Concept of Design within a Psycho-Analytical Framework

### 1.5.1. Introduction

So far, I have distanced myself from the view that regards buildings as the outcome of a scientific process and also from the behaviourist perspective that implies buildings frame our actions. It should have been clarified by now that buildings are considered in this project as the result of institutional and social structures. Although, it is commonly believed that architects design buildings that did not exist before, the architect is not considered, in the context of this investigation, as an agent with a high level of creativity. The particular historical situation applies to the human subjects who act as architects (in the same way that it applies to what they design).

This chapter will examine some perspectives about design. It will study the emergence of the notion of *disegno* in Italy as a practice of drawing plans and perspectives of buildings on the paper. It will state that later on, in France, with the establishment of the Académie Royale d'Architecture, design became the foundation of a rational programme of architectural education. Design introduced a new conception of the architect, as designer, who needs not be present at the building site. In the nineteenth century, the practically impossible direct relationship between the designer, the building and the constructor was viewed with pessimism in the eyes of some advocates of Marx's analysis of capitalism.

We should make a distinction between the rationalisation of building production and the abstract representation of this production process that was regarded as an 'alienating' activity. This chapter will assume that design is not a means which annihilates the human

subject's practically impossible direct relationship with the product. It is as essential to the integration of architectural space in all the structures of the human institutional-social space, as is the establishment of the reality in the subject's relationship with the external world. In order to develop a theoretical framework in understanding design, this chapter will focus on Piaget's account on the child's development of the reality and Lacan's mirror-stage. It will be contended that the relationship that we construct between the plan and the programme result from the way that we understand the reality that tries, at the same time, to construct us.

Although this argument might look rather complicated at this point, it can properly explain that how the spatial organisation of the building is organised so that it corresponds with the way that the subject, or a group of subjects, view things. This proposal will not lead to a radical condemnation of any inescapable division in the way by which duties and responsibilities are divided. Neither does it inherit confusion between alienation and separation. Conversely, it redefines alienation in terms of the establishment of the reality that is a process causing the subject to look at things, objects and his own subjectivity through a reality which is socially constituted.

### 1.5.2. The emergence of the Italian notion of 'disegno' in Renaissance

Vitruvius' thought had never been entirely forgotten during the Middle Ages. His manuscript was copied many times. In 1415, Poggio Bracciolini (1380-1459), the Florentine scholar who recovered a great number of classical texts, found a manuscript of Vitruvius' (born c. 80–70 BC, died after c. 15 BC) treatise on architecture in the library of the monastery of St. Gall (Switzerland). At that particular moment when classical texts were being eagerly collected this finding, as Ettlinger argues, only helped to enhance Vitruvius' reputation.[1] I am not going to make a detailed examination of Vitruvius' account about architecture. But I want just take a note of Book VI in which he stated men

[1] Leopold D. Ettlinger, "The Emergence of the Italian Architecture During the Fifteenth Century," in *The Architect: Chapters in the History of the Profession*, ed. Spiro Kostof (New York: Oxford University Press, 1977).

who are 'uneducated' and 'unskilful' are far from being acquainted with architecture.[2] He implied that the scope of architecture goes beyond material aspects of the building has a long history, because believed an architect must know something of everything. By saying that, he emphasised that architects need to know theories which are 'common to all scholars.' They also need to have a practical ability to know about 'doing the work.'[3] Vitruvius argued:

> ...architects who have aimed at acquiring manual skill without scholarship have never been able to reach a position of authority to correspond to their pains, while those who relied only upon theories and scholarship were obviously hunting the shadow, not the substance.
>
> But those who have a thorough knowledge of both, [...] have the sooner attained their object and carried authority with them.[4]

According to Vitruvius anyone who is to become an architect must be something of a scholar before he can design. Vitruvius' architect is a practitioner and a theoretician, 'a walking encyclopaedia' who is not only a draftsman, geometrician, arithmetician, but also an historian, a philosopher, and a scientist, with a good understanding of musical theory, of painting and sculpture, of medicine, jurisprudence, astronomy and astrology, as Krautheimer argues.[5] It would alternatively suggest that for him to be an architect entails having a certain amount of theoretical knowledge.

Perhaps, because of Vitruvius' influence on Renaissance thinkers, Alberti revived the ideal of an architect who literally knows everything. In 1550, Giorgio Vasari (1511-1574) published the first edition of *The Lives of the Most Excellent Painters, Sculptors, and Architects*. He praised Leon Battista Alberti (1404-1472) in a way which was based on

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[2] Vitruvius, *The Ten Books on Architecture* trans. Morris Hicky Morgan (Cambridge (Mass.): Harvard University Press, 1914). P.25.

[3] Ibid. pp. 11-12.

[4] Ibid. p.5.

[5] Richard Krautheimer, *Studies in Early Christian, Medieval, and Renaissance Art* ed. James S. Ackerman and others, trans. Alfred Frazer and others (London: University of London Press, 1971). p.325.

the Vitruvian conception of an ideal architect. Writing on the life of Alberti, Vasari stated:

> When [theory and practice] chance to come together, there is nothing that is more helpful to our life, ... because art becomes much richer and more perfect by the aid of science, and because the counsels and the writings of learned craftsmen have in themselves greater efficacy and greater credit than the words or works of those who know nothing but mere practice, whether do it well or ill.[6]

One thing is remarkable in these interesting sentences. There is an explicit insistence that architecture is not a mere practice. Words about a building have an equal and even a greater importance than the building itself. This notable way of thinking was revived in theory and employed in practice by Renaissance writers and architects.

It is hence important to distinguish between two historical concepts of design before and after the Renaissance. We should consider that, in the Middle Ages, there was no clear separation between theory and practice. Architecture was classified as a manual art and architects were educated in a vocational manner on the building site. Although drawings and models were used before Renaissance, the autonomous concept of design/*disegno* was not known in the medieval tradition. In practice, this concept resulted from the need to manage construction in a different way.[7] So, in the Renaissance, design emerged as a practice and it later became the only characteristic of the formal training of the Renaissance architects. Later on, some art theorists developed the notion of '*disegno*' as the foundation of art. Filarete (1400-1469), for instance, invested in the notion of '*disegno*' as a characteristic of an occupation seeking to join the liberal arts.[8] He

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[6] Giorgio Vasari, *Lives of the Most Eminent Painters, Sculptors and Architects.*, ed. Philip Jacks, trans. Gaston du C. de Vere, Modern Library Paperback ed. (New York: Random House Publishing Group, 2006). p.167.

[7] Because of the high volume of construction in the Renaissance era, it became essential to make a separation between theory and practice.

[8] Catherine Wilkinson, "The New Professionalism in the Renaissance," in *The Architect: Chapters in the History of the Profession*, ed. Spiro Kostof (New York: Oxford University Press, 1977).

considered design as a work of hand and mind.[9]

At this point, a knowledge of what was called *disegno* can come to our aid. For Renaissance architects, to design meant essentially preparing drawings and perspectives of the building, which was to be built. One of the earliest instances in which theoretical considerations of design and practical requirements of construction were not thought and executed by a single mind was the first Trevi Fountain (Fig. 5-1). The construction of the Trevi Fountain in the mid fifteenth century was an important step toward the rationalisation of the city as it was desired by Pope Nicholas V (1397-1455). The fountain consisted of a flat façade with three simple spouts for delivering the water. The significant visual effect of the fountain as a form of 'urban spectacle' was clarified by its inscription. According to Tafuri, this project is unanimously attributed to Alberti. who 'designed' it, but it was executed by Bernardo Rossellino (1409-1464).[10]

To manage construction in this way was not a successful experience in the case of the Trevi Fountain. This Fountain would 'hardly seem worthy of Alberti.'[11] One reason is that there was certainly no detailed planning from the outset. In spite of that, Alberti should have been interested in the role he had taken. One must consider that in 1436, in the prologue to his treatise *On Painting* (*Della Pittura*) Alberti had pointed to the architectural works of Brunelleschi and considered his buildings - along with the works accomplished by Florentine sculptors and painters such as Bramante and Masaccio – not as a matter of manual skill but as an intellectual achievement.[12]

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[9] At the same time, as Adrian Forty argues, the turning of 'design' from being a category within architecture into an activity of its own was substantially assisted by arguments of philosophers. See: Adrian Forty, *Words and Buildings: A Vocabulary of Modern Architecture* (Thames & Hudson Ltd., 2000). pp.137-138.

[10] Manfredo Tafuri, *Interpreting the Renaissance : Princes, Cities, Architects*, trans. Daniel Sherer (New Haven and London: Yale University Press, 2006). pp. 29-31.

[11] Ibid. p.31.

[12] It is now essential to make a distinction between Vitruvius and Alberti's conception of architecture. While Vitruvius' had imagined the architect as an encyclopaedist draftsman who loves orders and techniques of construction, Alberti's explanations in *De Re Aedificatoria* sketched the impression of an architect who 'masterminds' the techniques of construction in order to create buildings. (Krautheimer, *Studies in Early Christian, Medieval, and Renaissance Art* ) Consequently, his conception of architecture was different from the conventional manner which architecture had being practiced by that time.

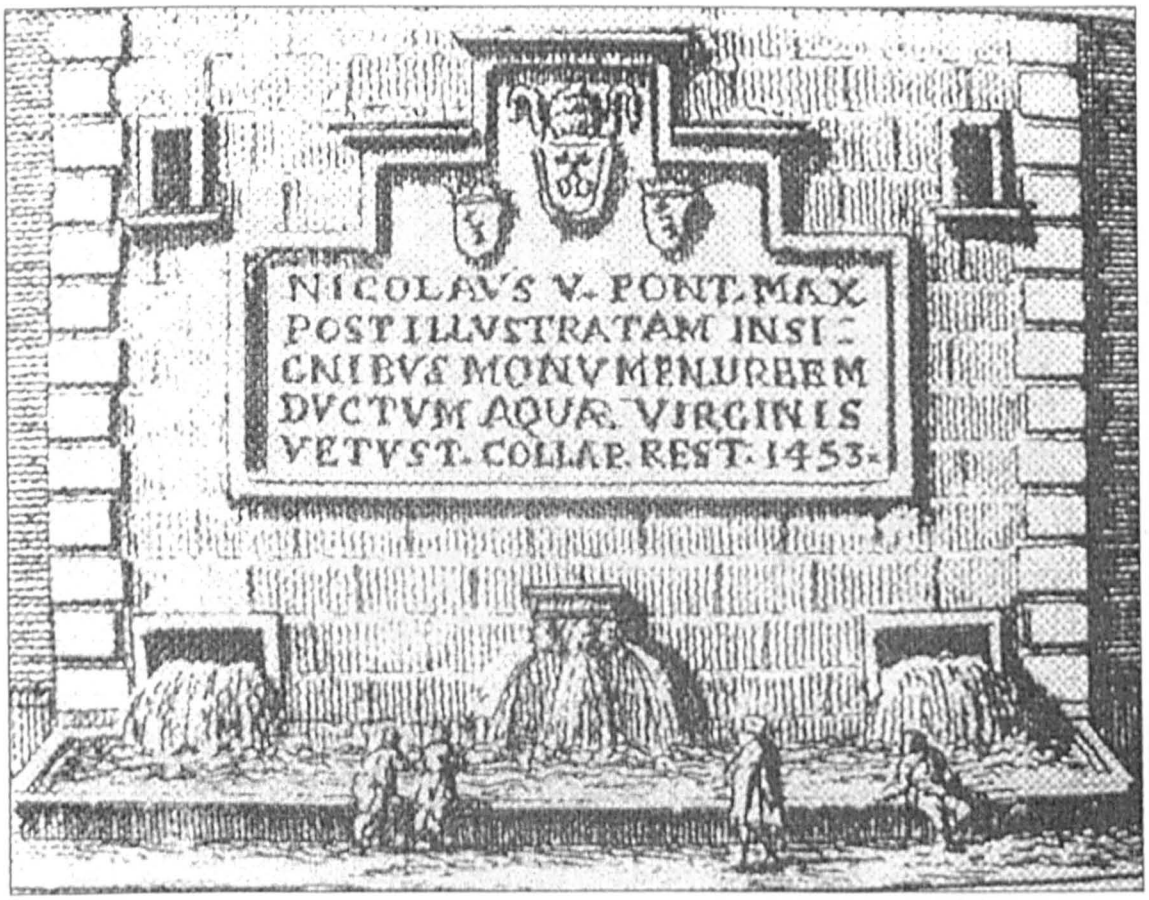


**Figure 5-1:** The Trevi Fountain, as it appeared in the fifteenth Century, was one of the earliest instances in which theoretical considerations of design and practical requirements of construction were not thought and executed by a single mind. From Manfredo Tafuri, *Interpreting the Renaissance : Princes, Cities, Architects*, trans. Daniel Sherer (New Haven and London: Yale University Press, 2006).

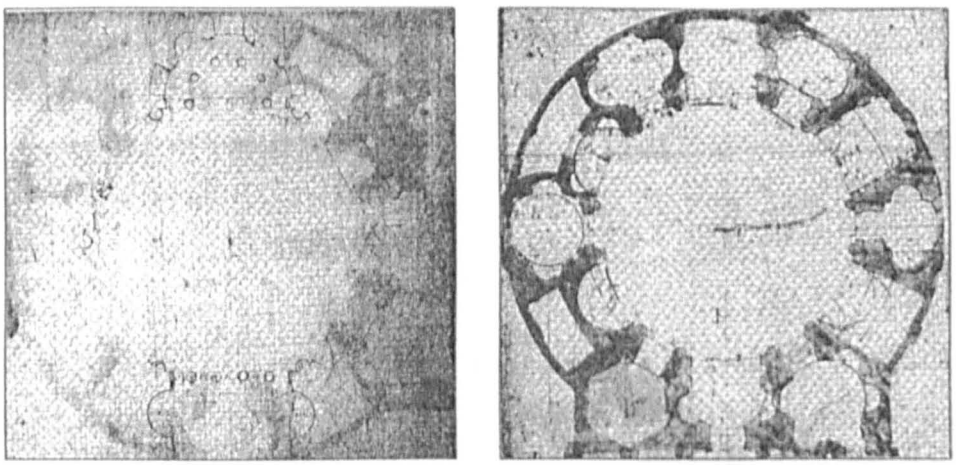

**Figure 5-2:** Studies for San Giovanni dei Fiorentini in Rome (1518-19) by Baldassare Peruzzi. This is a fine example of the outcome of the practice of 'disegno' at the time. From Manfredo Tafuri, *Interpreting the Renaissance: Princes, Cities, Architects*, trans. Daniel Sherer (New Haven and London: Yale University Press, 2006).

### 1.5.3. Design, an autonomous subject in France

The need to make a formal distinction between the manual and intellectual content was felt for the first time in sixteenth century France. Imbued with the spirit of the Italian Renaissance, it was the demand to construct buildings, gardens, urban initiatives, and military constructions provided for the practical and symbolic requirements of the King of France which led to a gradual reorganisation of the royal building administration. The French enterprise was directed initially by Francis I who reigned from 1515 to 1547.[13]

When Francis I (1494-1574) announced his intention to carry out alternations and additions to the castle of Fontainebleau as he wished to spend more time there, a Parisian master mason called Gilles Le Breton was commissioned by the king to execute the building.[14] What is notable in this project is that the castle of Fontainebleau was not designed by Le Breton himself. Rather, the king had appointed Serlio to provide Le Breton with architectural design and to give advice on the interior decoration of the castle.[15] Francis I divided the royal building tasks between three administrators: the Inspector General who would deal with financial matters of buildings, the Royal Architect who would design and supervise the project, and the Master Mason who would execute the construction. While in the Trevi Fountain, Alberti was not involved in executing his design, the castle of Fontainebleau is one of the earliest instances in which the architect is not involved with administrative, financial and executive duties as well.[16]

During the reign of Francis I, his Finance Minister, General Philibert de la Bourdaisière,

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[13] The association of architecture and kingship was not unusual at the time. Francis I's counterparts such as Henry VIII in England, Charles V in Spain and Popes in Rome all were involved in building construction of an unusual volume. See: Robert W. Berger, *A Royal Passion: Louis Xiv as Patron of Architecture* (Cambridge: Cambridge University Press, 1994). pp. 3-4.

[14] Robert Jean Knecht, *Francis I* (Cambridge: Cambridge University Press, 1982). p.257.

[15] This was not an exceptional case in which design was considered as a distinct profession. Serlio was paid by the King to visit royal buildings and to supply the king with design for several other projects such as the renovation of Louvre and plans for military camps in Flanders and Piedmont.

[16] This was not something typical before. During the Middle Ages, the architect was the only person who was in charge of the building task which meant that he would design and execute the project and he should also deal with financial issues.

was appointed to be Inspector General[17] and Gilles Le Breton, as pointed out earlier, was the Master Mason. Later, on 27 December 1541, Serlio was officially given the title of 'paintre et architectteur ordinaire du royal.' Under the terms of the appointment, Serlio was to receive a fixed salary of 400 *livres tournois* annually. In addition, he had a daily expense allowance of 20 *sols* for inspection of other royal buildings. Considering he had free accommodation at court, it can be concluded that his finances were unquestionably comfortable.[18] The fact that in the following years he could publish his treatise was itself an indication that he had remained excluded from practical tasks. Serlio was the first whose career caused the theoretical part of architecture to be formally established as a distinct profession.

Following the death of Francis I, Serlio's circumstances along with the position that he had held changed very quickly. Shortly after that, he was excluded from the life of the court. Even though he still received commissions from important patrons, his financial situation became unstable. For several reasons including political and economic conditions, poverty and bitterness saddened Serlio's old age. More importantly, his once flourishing career did not recover until 1661 when Louis XIV (1638-1715) began his personal rule in France.

The era of Louis XIV was precisely the time when French royal architecture attained an international prominence. The king was unusually active and involved in the building arts in all senses: he approved specific designs, and sometimes established international competitions and chose the winning project.[19] What is exceptionally notable is Louis XIV's close attention to all details of design and the progress of construction.[20]

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[17] As Rosenfeld argues, the position of Inspector General was originally established by Louis XI in 1461. See: Myra Nan Rosenfeld, "The Royal Building Administration in France from Charles V to Louis Xiv," in *The Architect: Chapters in the History of the Profession*, ed. Spiro Kostof (New York: Oxford University Press, 1977).

[18] Sabine Frommel, *Sebastiano Serlio Architect*, trans. Peter Spring (Milano: Electaarchitecture, 2003). p.26.

[19] Berger, *A Royal Passion: Louis Xiv as Patron of Architecture*. pp.7-9.

[20] In 1672, for instance, when he was asked by Jean-Baptiste Colbert whether he preferred short or long details on buildings, the King answered: 'Long ones. Details about everything.' Ibid. p.11.

Louis XIV's interest in knowing details about buildings initiated a further separation between theoretical and manual parts of architecture especially after the rise to the power of Colbert who became a minister of state in 1661. Having reformed the entire financial system of France, Colbert doubled the Crown's net income between 1661 and 1671. Accordingly, the King was provided with sufficient revenues to embark on an extensive programme in art and science. Many of the French royal academies had been initiated by Louis XIV[21] and more were founded later due to the initiatives of Colbert: the French Academy of Rome (1666), Sciences (1666), and Music (1669)[22] followed by the establishment of the Académie Royale d'Architecture in 1671.

The appointment of a mathematician and engineer, François Blondel (1705-1774), as the first professor and director of the Académie Royale d'Architecture clearly shows that the newly emerged rational and systematic belief in teaching doctrines and universal truths overcame the intellectual conception which had developed earlier in Italy. Speaking on behalf of Colbert, Blondel stated on December 31, 1671, that the Academy's main duties would be firstly to formulate principles of architecture and secondly to teach doctrine based on them. Having implicitly acknowledged that these two duties are dependent on the way in which things are judged, Blondel devoted the second and third sessions of the Academy to address the problem of *bon gout* (good taste). His explanation that there are rules for recognising things of good taste would clearly correspond to Aristotle's idea of 'universals.' Blondel believed that Aristotle would have supported this idea that good design is a rational formulation of the Aristotelian principles of order, symmetry, harmony, and proportion.[23] The theory of design was therefore to be based on a conception of good taste which was regarded as good always and everywhere and hence more important than particularities, whether utilitarian requirements, materials, time and

[21] Including the French Academy (1635) and the Royal Academy of Painting and Sculpture (1648).

[22] Berger, *A Royal Passion: Louis Xiv as Patron of Architecture*. pp. 19-22.

[23] The supporters of this conservative trend who were often called the 'Ancients' were criticised by the 'Moderns' who would stress on the developmental character of architecture since classical times and even since the Renaissance. They also believed that the principles of architecture were at least partly relative. Although the Academy tended to synthesise the two points of view, that of the 'Ancients' usually dominated. See: Donald Drew Egbert, *The Beaux-Arts Tradition in French Architecture*, ed. David Van Zanten (Princeton: Princeton University Press, 1980). pp. 101-102.

place.[24]

Prior to the establishment of the Académie Royale d'Architecture in France, there was no single institution entirely devoted to promoting architectural design. But even there, design was associated with the notion of *bon gout* (good taste) which appeared at one point to refer to a concern about the presentation and impression of a building.[25] In brief, this grounding of design as a method of representation was initially institutionalised at the Académie Royale d'Architecture in the seventeenth and eighteenth centuries and flourished in the École des Beaux-Arts particularly in the nineteenth century.

Although the establishment of the Académie Royale d'Architecture caused France to attain an international stature, it took more than a century for its tradition to be well-institutionalised. The full-time course was launched in 1743, more than seventy years after its establishment. Half a century later, after the French Revolution's reaction against monarchical institutions, revolutionaries dissolved the Academy. Shortly after that, the Academy was revived in 1795 with the founding of the Institut de France to replace the old Academies. The Academy soon became known as the École des Beaux-Arts which flourished through the nineteenth and up to the mid twentieth century.[26]

The Beaux Arts adopted classical ideas inspired by Italian Renaissance architects into a coherent rational educational programme. Architecture was regarded as a fine art in which principles of formal composition stemming from classical architecture were considered as the main foundation of the training.[27] As Cunningham argues, one of the methodological characteristics of the École des Beaux-Arts is that design was exercised

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[24] Ibid. pp.99-117.

[25] Similar to the idea of good taste which had an Aristotelian background, the second concept which clearly shows the Academy's concern over visible signs, impressions and type of the building was the term *caractère*. See: Lily H. Chi, "On the Use of Architecture: The Destination of Building Revisited," in *Chora: Intervals in the Philosophy of Architecture*, ed. Alberto Pérez-Gómez and Stephen Parcell (Montreal: McGill-Queen's University Press, 1996). P.24.

[26] Allen Cunningham, "Notes on Education and Research around Architecture," *The Journal of Architecture* 10, no. 4 (2005). & Arthur Drexler, ed., *The Architecture of the École Des Beaux-Arts* (New York: Museum of Modern Art, 1977).

[27] Usually a distinguished architect, the *Patron*, was invited by the students to act as their guide and critic. Students were divided into ateliers each would include 50 to 100 students.

as the core of educational programme.[28]

The conception of design on which the École des Beaux-Arts was founded was not limited to the Renaissance drawing or the later French rationalism. It embodied the notion of representation as a key linkage between the two. The highest manifestations of that tendency were the competitions for the Grand Prix de Rome – an architectural competition which began as an annual event at the Académie Royale d'Architecture in 1720 and followed later into the École des Beaux-Arts. The competition consisted of a threefold process. In the first step, the designer should prepare freehand *esquisse* to record the essence of the design. Then the competitor was expected to make more carefully detailed studies of the various parts of his design. The works of the competitors were finally judged based on the final design drawn with a ruling pen which must not diverge from the initial freehand conception of the *esquisse*.[29] It must be considered that these drawings were never intended to be built. They were merely exercises by the students, in which no attention had to be paid to the utilitarian considerations (Fig. 5-3).

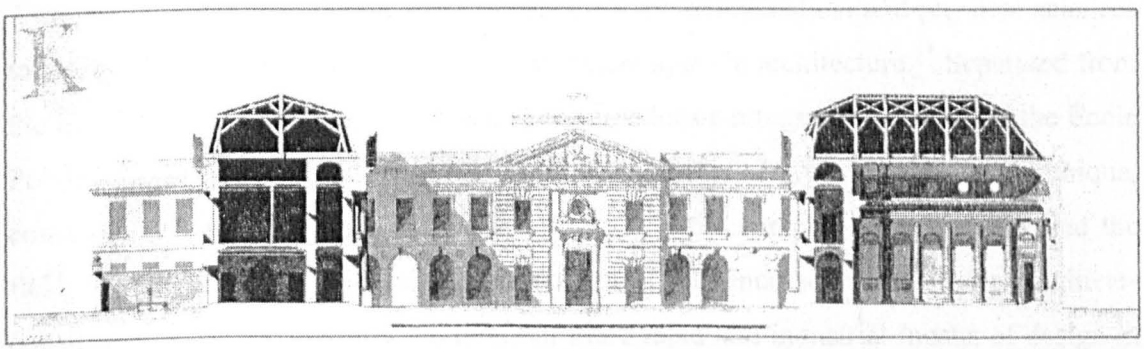

**Figure 5-3:** Antoine Leroy, Riding Academy, Premier Prix, 1759. From: Egbert, Donald Drew. *The Beaux-Arts Tradition in French Architecture*. Edited by David Van Zanten. Princeton: Princeton University Press, 1980.

### 1.5.4. Is design an 'alienating' activity?

To make a summary of the argument so far, it should be mentioned that the merit of

[28] Cunningham, "Notes on Education and Research around Architecture." p.417.

[29] Egbert, *The Beaux-Arts Tradition in French Architecture*. p.115.

design as an independent activity was implicitly theorised by Vitruvius. The Renaissance artists revived and revised the Vitruvian understanding of an architect. They later considered the ability to produce plan, sections, elevations and perspectives of the building as an undeniable professional ability that each architect should have. The Italian idea of design was institutionalised in France through the Académie Royale d'Architecture and later at the École des Beaux-Arts.

It is undeniably true to argue that the establishment of the École des Beaux-Arts caused changes in the internal organisation of architecture. In a word, it brought a shift in division of labour within the practice of architecture. But at the École des Beaux-Arts, the study of architecture was not based on technical considerations. One should consider that the nineteenth century is, in fact, characterised as a century in which an institutionalisation of the split between art and technology was witnessed to degree previously unknown to history. The most obvious manifestation of this shift can be seen in the establishment of the *École Polytechnique*.[30]

As a centre which intended to apply advances in the mathematical and physical sciences to the every-day life, it tried to use scientific techniques in architecture.[31] Separated from the École des Beaux-Arts which was a centre to educate artists and decorators, the École Polytechnique would train constructors and engineers. In the École Polytechnique, construction was considered in a different way and the engineer increasingly ruled the field of the architect. And as Giedion argued, the encroachment of the engineer-constructor in France signifies the threat of more rapid and industrial means of design in the nineteenth century.[32] The key point is that the need to representing architecture on paper brought new ways for architects to get involved in producing buildings. As a result, the division between mental and material activities within architecture along with other

[30] During the French Revolution, at the time of the National Convention, Lazare Carnot and Gaspard Monge founded the *École Centrale des Travaux Publics* (1794). It was renamed "*École polytechnique*" one year later.

[31] Sigfried Giedion, *Space, Time and Architecture: The Growth of a New Tradition*, 5th ed. (Cambridge (Mass.): Harvard University Press, 1967). pp.213-214.

[32] Sigfried Giedion, *Building in France, Building in Iron, Building in Ferroconcrete*, trans. J. Duncan Berry (Santa Monica: Getty Center for the History of Art and the Humanities, 1995). p.94.

sectors of social and cultural production was believed to be associated with 'a shift in division of labour.'

This issue indirectly brought design, as a means of production, to the heart of the analysis of capitalism by Karl Marx, which dominated nineteenth century intellectual debates. Marx was not particularly concerned with the emergence of the École des Beaux-Arts or the École Polytechnique as a centre in which design was the core of their educational programme. What he was concerned with was a wider picture of events. He considered industrialised mass production as a phenomenon widening the gap between mental and practical lives. Marx's theory generated suspicions about the way by which design has separated man from the object that he produces.

Scepticisms over design's consequences were not limited to philosophical debates. Some of the proponents of the Arts and Crafts movement, Philip Webb (1831-1915) and W. R. Lethaby (1857-1931), for example, saw in it both the cause and the symptom of the social degradation of manual labour.[33] Correspondingly, we see that in the nineteenth century, the central point of concern shared by many disciplines was the link between man and the industrial process.

What should be stressed in advance is that we know of course that Marx did not work out any coherent theory of architecture nor of either aesthetics or space. We should also bear in mind that Marx's theory has broadly been characterised as a compound of three elements of philosophy, economy and politics. Hence it is not surprising to argue that his theory has found much architectural implications.[34] Left-wing theorists such as Benjamin, Lefebvre and Jameson have developed widespread conceptual frameworks about spatial culture which are mainly based on Marx's premises. At the very least, I should acknowledge that the literature about Marx's contribution in promoting our understanding of space is unquestionably rich though it has never been simple.

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[33] Forty, *Words and Buildings: A Vocabulary of Modern Architecture*. p.138.

[34] A useful account on Marx's contribution to architectural theory can be found at the following article: David Cunningham and Jon Goodbun, "Marx, Architecture and Modernity," *The Journal of Architecture* 11, no. 2 (2006).

Marx's conception of 'alienation' – a key concept which underlies Marx's account of social reality - seems to be connected to the way by which design changed the architect's relationship to the building. According to Marx, the modern world has made a situation in which man can no longer recognise the object which he has produced. Because of the increased distribution of labour in the modern capitalist community, man has become a stranger to himself and to the world around him. This state is because any social production is associated with a certain social order:

> In the process of production, human beings work not only upon nature, but also upon one another. They produce only by working together in a specified manner and reciprocally exchanging their activities. In order to produce, they enter into definite connections and relations to one another, and only within these social connections and relations does their influence upon nature operate – i.e., does production take place.[35]

Centred on the acting individual, the theory of alienation is Marx's critique of the devastating effect of capitalist production on human beings, on their physical and mental state and on the social process which binds them together.[36] It is based on this theory of production that Marx considered the history of social production as the alienation and production of reason in unreason, of the true man in the alienated man. According to him, the alienated man tries to realise the essence of himself in the alienated products of his labour.[37] As Ollman demonstrated in Marx's theory of alienation:

> Man is spoken of as being separated from his work ... - a break between the individual and his life activity. Man is said to be separated from his own products ... – a break between the individual and the material world. He is also said to be

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[35] Karl Marx, *Wage-Labour and Capital & Value, Price and Profit* (New York: International Publishers, 1976). p. 28.

[36] Bertell Ollman, *Alienation: Marx's Conception of Man in Capitalist Society* ed. G. R. Elton Maurice Cowling, E. Kedourie, J. G. A. Pocock, J. R. Pole, W. Ullmann, 2nd ed. (Cambridge: Cambridge University Press, 1976). p.131.

[37] Louis Althusser, *For Marx*, trans. Ben Brewster (London: Allen Lane The Penguin Press, 1969). p.226

separated from his fellow men ... – a break between man and man.[38]

If we accept that design, in general, changed the relationship between one man (architect), his activity (architecture) and product (building), then as a grand summing up, the theory of alienation could be regarded as a critique of the way by which design, as a means of production, changed relations within architecture under capitalism. Thus according to this viewpoint, design is an activity contributing to man's alienation in his product; because it creates a situation in which there is no direct link between the architect and the building.

Although similar points can be made when we look at the effect of design on the individual within the architectural process, there is one difficulty which should be considered seriously. The essence of the theory of alienation is that the whole has been broken up into numerous parts whose interrelation in whole can no longer be ascertained.[39] So, if we reinterpret design once again in relation to Marx's conception of human production, then it could be said that before the introduction of 'disegno' as the foundation of the practice of architecture, builder's relation to the building was intimate. When man's 'powers exist in one real object, himself, and can only be expressed in others equally real', Marx says of man that 'he is nature' and of object that 'they reside in the very nature of his being.'[40] In this state, the relation between man and object or between architect and building is an internal one. As the means through which the architect interacts with nature, design was regarded as the medium through which they are objectified. The production process in architecture is subjected to a division of labour in which, on the one side, there is a mass of unskilled 'hands' who know nothing of the process in which they are engaged, and on the other hand, a small group of architects and engineers who design, plan, organise and supervise the whole operation. In this condition, it may be argued that buildings exist outside of those 'hands', independently, as something alien to them. It is arguably true to say that a building worker is alienated from

[38] Ollman, *Alienation: Marx's Conception of Man in Capitalist Society* pp. 133.134.

[39] Ibid. p.135.

[40] Ibid. p.142.

the building, but it will be a serious mistake to say an architect is alienated from the building which he produces, because an architect has expertise, skill, power and control over what he produces, though it is not unlimited.

### 1.5.5. Borrowing from other disciplines

Explaining his concept of existential space, Norberg-Schulz once pointed out that 'even if psychology is a young science, it offers useful insight.'[41] Norberg-Schulz used psychological theories to explain the structure of existential space. He particularly referred to Piaget in order to advance his own argument that existential patterns and existential space are interconnected.

> Piaget demonstrated that it is not possible to arrive at any cognition without having an emotional relationship to the object, and without understanding it in a spatial and temporal context... In other words, man gradually constructs the image of a structured world, in which the notion of space, that is, *existential space*, forms an integral part. For Piaget the process of cognition is therefore first of all a process of 'conservation.'[42]

What seems evident in this passage is that Norberg-Schulz's reading of Piaget is based on the way by which man learns to *recognise* a world that is 'structured'. Needless to say, Piaget's approach obviously implies this meaning. But, there is one aspect which although it has not been properly respected by Norberg-Schulz, is of great relevance to the current subject of discussion: the *developmental* side of Piaget's theory of cognition. In examining Piaget's *The Child's Construction of Reality* (1955), our attention has been drawn by Hamlyn to the title. Does the child *construct* the reality by himself?[43] This is a fundamental question because we must bear in mind that according to Piaget, objectivity

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[41] Christian Norberg-Schulz, *Architecture: Meaning and Place (Selected Essays)* (New York: Rizzoli International Publications, 1988). p.29.

[42] Ibid..

[43] D. W. Hamlyn, "Epistemology and Conceptual Development," in *Cognitive Development and Epistemology*, ed. Theodore Mischel (New York, San Francisco, London: Academic Press, 1971). p.11.

'is constructed on the basis of, and in proportion to, the activities of the subject.'[44]

Piaget explained the development of 'understanding' in four stages. The first stage that Piaget identifies is 'The Development of Object Concept'. Piaget clarified that the child does not conceive and perceives things as objects that have substance, that are permanent and of constant dimensions. The basis of Piaget's explanation is that the child at this stage builds up the idea of an object (object concept). The problem of explaining how such an idea is constructed, according to him, is closely connected with that of space.[45] The world, Piaget argued, is on the one hand both stable and external and on the other hand relatively distinct from the internal world. The relationships between things in a world composed of permanent objects obey the principle of casualty. This duality between the internal and external worlds is a key concept which is challenged by Lacan. What is of vital importance here is that Piaget identifies a world 'in which the subject places himself as one particular term among all the other terms.'[46] The conclusion that Piaget believed his analysis of object concepts can provide us is that in the course of his first twelve to eighteen months the child reaches the construction of a universe, which includes himself as an element.

Starting from a space completely centred on his/her own activity, the child, at the second stage, manages to locate himself in an ordered environment which includes himself as an element. The child's transition from the first stage of understanding, i.e. 'The Development of Object Concept' to 'The Spatial Field' is mediated by the concept of 'group.' In Piaget's theory of cognitive development, the group is 'the expression of the process of identification.'[47] Thus, there is a mutual dependence between group and object on the one hand and group and space on the other. The space which is postulated in this view is 'the product of an interaction between the organism and the environment in which

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[44] Jean Piaget, *The Mechanisms of Perception* trans. G.N. Seagrim (London: Routledge & Kegan Paul, 1969). p.364.

[45] Jean Piaget, *The Child's Construction of Reality* trans. Margaret Cook (London: Routledge & Kegan Paul, 1955). p.3.

[46] Ibid.

[47] Ibid. p.100.

it is impossible to dissociate the organisation of the universe perceived from that of the activity itself.'[48]

In the first stage of the newborn human subject, an external universe presents itself to a subject's ignorance of himself. In the second stage, the subject places himself consciously as an element in that universe. Piaget identifies the third stage as 'The Development of Causality.' He argued that the initial universe is not a web of causal sequences but, a mere collection of events arising in extension of activity itself. In the second stage the universe becomes a coherent whole in which it is the effects which follow causes. In the third stage, object and space 'are at last conceived as interconnecting external events or objects and as governing the subject who has become conscious of himself.'[49] The reason that Piaget did not speak of causality to describe the characteristics of the first two years of mental life is because he believed that during that period the child's action is never to understand for the sake of understanding, but merely to modify reality to suit his action. The child's development of causality, as he implies, is associated with the need for 'explanation' with regard to the phenomena which surround him.

Although we can already guess that Piaget's theory has a Kantian basis, his description of the fourth stage makes the case more obvious. Parallel to that of space and complementary to that of objects and causality, Piaget finally emphasised the child's consciousness of time as 'The Temporal Field.' It is temporal, because in every elementary perception, every perception lasts, according to him, just as every perception is extended.[50] Time presupposes space; because according to Piaget, it is nothing other than 'the forming of relationships between the events which fill it and those which require for their formation the concept of object and spatial organisation.'[51]

It is worth noting that any understanding of design should be capable of addressing it as a moment in which nothing lasts forever. Design is continually associated with states which

[48] Ibid. p.217.

[49] Ibid. p.220.

[50] Ibid. p.320.

[51] Ibid.

are in change. What certainly is not my claim in this chapter is that any idea, concept and/or word in Piaget's developmental theory, has its own precise architectural counterpart. What remains my particular interest throughout this chapter is to examine how discourses from other disciplines can provide us with useful insights to comprehend architecture. If in architecture, for instance, design is a process in which the architect's cognition of his emerging building develops, then is this paralleled to the child's development of understanding?[52]

In Piaget's study of concepts of object, space, causality, and time, there are two fundamental concepts, which lie beneath the development of intelligence: assimilation and accommodation. For Piaget, 'assimilation is essentially the utilisation of the external environment by the subject to his hereditary or acquired schemata.'[53] Accommodation is 'any modification of an assimilatory scheme or structure by the elements it assimilates.'[54] As pointed out before, in the earliest stages the child perceives things as a self that is unaware of itself as subject. Thus, in children, accommodation to the environment is undifferentiated from the assimilation of things to the subject's schemata. Step by step, with the coordination of his intellectual instruments, he discovers himself in placing himself as an active object among the other active objects in a universe external to himself. Hence, in contrast, an adult can distinguish between the accommodation of multiple schemata from their assimilation.[55] Piaget believed:

> In their initial directions, assimilation and accommodation are obviously opposed to one another, since assimilation is conservative and tends to subordinate the environment to the organism as it is, whereas accommodation is the source of changes and bends the organism to the successive constrains of the environment...it is precisely the role of mental life in general and of intelligence in

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[52] The child's development of understanding is a transition from the state in which objects are centred around a self which is unaware of itself as subject to the state in which the self is placed at least practically in a world which is stable.

[53] Piaget, *The Child's Construction of Reality* , p. 351.

[54] Jean Piaget, "Piaget's Theory," in *Carmichael's Manual of Child Psychology*, ed. Paul H. Mussen (New York: Wiley, 1970). p.708.

[55] Piaget, *The Child's Construction of Reality* pp.350-352.

particular to intercoordinate them.[56]

This shows that assimilation and accommodation are intentionally introduced by Piaget to explain the interaction between the organism and the environment. These two concepts are not dissociable from each other, because as Piaget argued, '...accommodation of mental structure to reality implies the existence of assimilatory schemata apart from which any structure would be impossible.'[57] On the one hand, assimilation is no less opposed to any new accommodation; and on the other hand, any new accommodation marks the start of new assimilations.[58]

A diagram will make the interaction between the organism and the surrounding universe comprehensible (Fig. 5-4). For Piaget, the organism is represented by a small circle inscribed in a large circle which corresponds to the environment. The contact between the organism and the environment takes place at point A, as well as all equivalent points. The point A is the most external to the organism and to the environment itself. The reasoning for that, according to Piaget is because knowledge of the external world begins with an immediate utilisation of things.[59] In other words, the first knowledge that the subject can acquire is knowledge relating to the most external and material of his being. Concluding his argument, Piaget said:

> ... knowledge is simultaneously accommodation to the object and assimilation to the subject, the progress of intelligence works in the dual direction of externalisation and internalisation , and its two poles will be the acquisition of physical experience (→ Y) and the acquisition of consciousness of the internal

[56] Ibid. p.352.

[57] Ibid.

[58] The characteristics of such a moment represents a great deal of similarity to those of design in which any awareness of the constrains, conditions and possibilities of the project entails a new organisation of architectural elements, while at the next step this newly emerged state marks the beginning of a new assimilation of awareness.

[59] Piaget, *The Child's Construction of Reality* p.354.

operation itself (→ X).[60]

It is in the notion of 'the dual direction of externalisation and internalisation' that Piaget's theory of cognitive development can define its own method of investigation. The meaning implied by his notion is not entirely subjective, nor purely objective, but both objective and subjective. Thus, any cognition presupposes a reality outside the subject; that is the environment (the outer circle). The specific interaction between man and the environment is the point of departure for any mode of understanding.

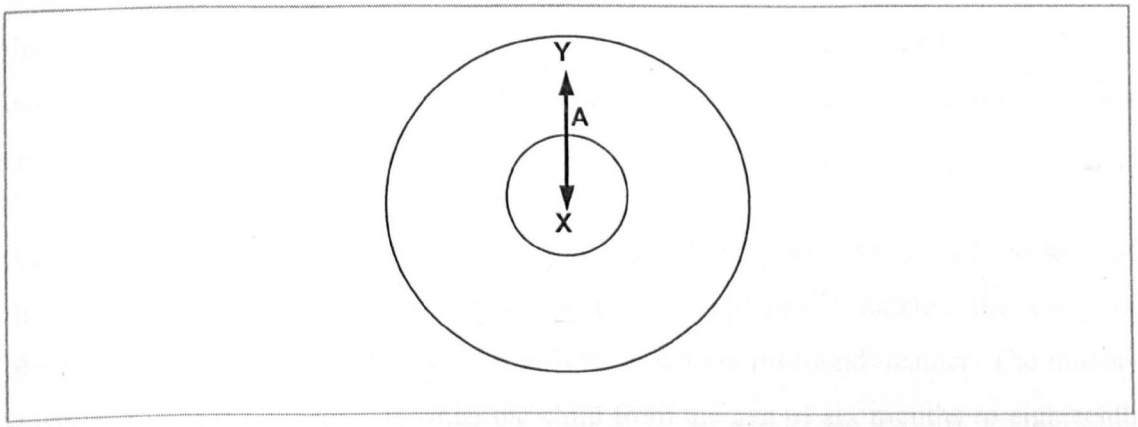


**Figure 5-4:** Piaget's diagram on the interaction between the organism and the environment. The contact between the organism and the environment takes place at point A, as well as all equivalent points. The point A is the most external to the organism and to the environment itself. This shows, according to Piaget, the first knowledge that the subject can acquire is knowledge relating to the most external and material of his being. From: Piaget, Jean. *The Child's Construction of Reality*. Translated by Margaret Cook. London: Routledge & Kegan Paul, 1955.

What can Piaget's theory contribute to the issue of design? Design can be characterised as an unstable moment suspended between subjective schemata and objective entities. The point, which is of great importance to our discussion, is that reading Piaget can propose two alternative insights. One the one hand, thoughts, sketches and plans of a building can be considered as an incomplete building - as a child that is an incomplete adult. It may also propose that the development from the child to an adult understanding corresponds to the architect's development of understanding during the process of design. Nevertheless, the issue which is surely of vital importance is that Piaget has explicitly provided us with a useful insight to design as such.

[60] Ibid. p.356.

### 1.5.6. A theoretical framework: the construction of reality

Piaget's theory implicitly explains one of the basic premises of this thesis; the very tacit assumption that there is a relationship between words and things, between mental and physical worlds.[61] The grand idea on which Piagean theory is founded derives from the question how the child *constructs* reality. In the light of his theory, we can better understand how the architect *constructs* his understanding of building in the way that the built space deals with the world outside the limits of architecture. But, one problem will result from Piaget's deep-seated belief: *the child* constructs the reality. He is so confident that the child is the source of all actions that he never examined the alternative. That is why Figure 5.1 has become a simplistic account of the child's pure interaction with the environment.

As an alternative way of viewing the issue, Lacan's 'The Mirror Stage as Formative of the *I*: Function as Revealed in Psychoanalytic Experience'[62] tackled the complex phenomenon of the construction of subjectivity in a more profound manner. The mirror-stage, as Lacan examined it, is when the child from the age of six months to eighteenth months recognises his own image in a mirror as identification. For Lacan, it suffices to understand the mirror stage *as an identification*, in terms of the transformation that takes place in the subject when he assumes an image.[63] Since then, the subject assumes an image of his ideal *je* as separate from the mother. These images are ideal, because at the mirror stage the child is a quite unorganised jumble of sensations and impulses, the mirror image presenting a unified surface appearance.[64]

At the mirror-stage, the child is also aware of the loss of the mother and has a desire to

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[61] In a similar way, Piaget believed that discoveries in the realm of exact sciences and progresses of reason are companied by each other - though it is impossible to determine which one precedes the other. See: Ibid. p.356.

[62] Jaques Lacan, *Écrits*, trans. Bruce Fink, Héloïse Fink, and Russell Grigg (New York, London: W. W. Norton, 2006). pp.75-81 The essay was originally delivered in 1949 as a paper in Zurich at the Sixteenth International Congress of Psychoanalysis.

[63] Ibid. p.76.

[64] Bruce Fink, *The Lacanian Subject: Between Language and Jouissance* (Princeton, New Jersey: Princeton University, 1995). P.36.

become one with the mother (the lost object which Lacan refers to as *l'object petit a*). When the child recognises his own body as a separate entity, he enters, according to Lacan, into the Symbolic Order that is the Order of Language. This notion of the 'symbolic order' is borrowed from Lévi-Strauss and Lacan accepted it with a somewhat different emphasis.[65] The relations emphasised in the Lacanian Symbolic Order are clearly social and cultural. Lacan argues that:

> It is this moment that decisively tips the whole of human knowledge [*savoir*] into being mediated by the other's desire, constitutes its objects in an abstract equivalence due to competitions from other people, and turns the *I* into an apparatus to which every instinctual pressure constitutes a danger, even if it corresponds to a natural maturation process. The very normalisation of this maturation is henceforth dependent in man on cultural intervention,...[66]

In the light of Lacan's contribution to the understanding of the child's development of subjectivity, Piagean theory in its attempt to address the notion of 'the dual direction of externalisation and internalisation' poses at least two problems. The first problem is that his theory is founded on an unverified assumption that there is a reality outside, or at least independent of, the subject. Another problem is generated because of the moment which is *excluded* in Piaget's investigation. It is interesting to note that Piaget began his explanation of the child's development of understanding from the moment when a baby is born. These two issues are particularly well-addressed in Lacan's psychoanalytical theory, though it was not raised as a response to Piaget. Fink who tried to provide a view of several of Lacan's concepts implied that for Lacan, the baby is born in a world of discourse that precedes our birth and that will live on after our death. He argued:

> Long before a child is born, a place is prepared for it in its parents' linguistic universe: the parents speak of the child yet to be born, try to select the perfect name for it, prepare a room for it, and begin imagining what their lives will be like with

[65] For further reading on the contribution that Lévi-Strauss made to Lacan see: William J. Richardson, "Lacan and the Subject of Psychoanalysis," in *Interpreting Lacan*, ed. Joseph H. Smith and William Kerrigan (New Haven and London: Yale University Press, 1983).

[66] Lacan, *Écrits*. p.79.

> an additional member of the household. The words they use to talk about the child have often been in use for decades, if not centuries, and the parents have generally neither defined nor redefined them despite many years of use.[67]

This reading of Lacan in relation to the structure of language is not specifically the subject of this thesis. What this passage highlights is the incompleteness of the Piagean theory. It postulates an idea of the child, not as the agent that constructs the reality, but as an object which is constructed by the reality. Thus, if I am to re-read Piaget's theory based on the core idea that Lacan offers us, I should articulate: the child *imagines* that he is constructing the reality. In fact, it is the reality that is constructing him. This way of looking at the child's interaction with the world does not contradict Piaget's theory, because it does not necessarily find its validation in negating the basic idea that the child constructs the reality. Rather, it is an attempt to take on the Lacanian view that there is no understanding without some subjective involvement, in other words, without the subject being somehow implicated by the reality.

Lacan's remarks on the gaze, vision and screen are all of great importance. In spite of that, his thought has remained less popular within architectural discourses. One possible reason that his thoughts have not been so welcomed in architecture is that Lacan's concepts, as Jean-Michel Rabaté implies,[68] have themselves been more attractive than their conceptual dimension. The Lacanian concepts are introduced in the most successful way by Zizek who attempted to explain his thoughts by using Hitchcock, Hollywood and popular culture.[69] Through the works of Zizek, the important magazine *October* (The MIT Press), the British Journal *Screen* (Oxford University Press) and influential theorists such as Kaja Silverman and Laura Mulvey, Lacan's models have been applied to film theory, gender studies and cultural studies. These are certainly the most immediate effects of Lacanian theory.

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[67] Fink, *The Lacanian Subject: Between Language and Jouissance*. p. 5.

[68] Jean-Michel Rabaté, *Jacques Lacan : Pschoanalysis and the Subject of Literature* (Basingstok: Palgrave, 2001). p.12.

[69] See: Slavoj Zizek, *Everything You Always Wanted to Know About Lacan : (but Were Afraid to Ask Hitchcock)* (London Routledge/Verso, 1999). & Zizek, *Looking Awry: An Introduction to Jacques Lacan through Popular Culture*.

Todd McGowan argues, for traditional Lacanian film theorists, film, like the mirror stage, is an imaginary deception blinding us to an underlying symbolic structure. The task of the film theorist becomes combating the illusory mastery of the gaze with the elucidation of the underlying symbolic network that this gaze eliminates.[70] A remarkable attempt in drawing a link between film language and architectural space was taken by Guiliana Bruno in *Atlas of Emotion: Journeys in Art, Architecture and Film.*[71] She identifies Renaissance perspective, colonial tourism and cartography as a construction of the self at the expense of others from an implicitly male point of view. Bruno regards the history of representation as a particularly vital part of cultural investigation. In contrast to the traditional Lacanian readers who are obsessed with concepts such as spectacle and gaze, the book's central theoretical concern is to explore spatiality and motion and the relation of the moving image to other visual sites, e.g. architecture, travel culture, and the history of the visual arts. In spite of that, Bruno still carries an unspoken tendency to reduce architecture to an image, a rootless moving image.[72]

When it becomes obvious to the child that the image on the screen is nothing but an illusion and a system of signs, the reverse angle shot, according to Lacan, will structure the subject back into the earlier stage of the imaginary relationships. It is imaginary - not illusionary that does not *really* exist – because the Lacanian subject is the crystallisation of images on an individual's own body and of self-images reflected back to him. Hence, Lacan characterised the mirror-stage as an *imaginary* stage. His conception of the child's imaginary relationship with the image led him to make a distinction between the real and the reality in connection with the symbolic.

Lacan argues that if the subject thinks about the symbolic order, it is because he is first caught in it in his being.[73] He then makes a case that it is an illusion that the subject has

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[70] Todd McGowan, "Looking for the Gaze: Lacanian Film Theory and Its Vicissitudes " *Cinema Journal* 42, no. 3 (2003). p.28.

[71] Guiliana Bruno, *Atlas of Emotion: Journeys in Art, Architecture and Film* (New York: Verso, 2002).

[72] This tendency is less challengeable in the case of her book as it does not intend to produce a theory about architecture. In contrast, its objective was to look at the history of cinema from a viewpoint that emphasises geographic and architectural space.

[73] Lacan, *Écrits*. P.40.

formed this order through his consciousness. For that reason, the real is that which comes 'before the word' for example an infant's body 'before' it comes under the influence of the symbolic order. In contrast to the real which has not yet been symbolised and even resists symbolisation, the reality is named by language, it can be thought and talked about, and it thus has a social construction.[74] Now, it should be more understandable why Lacan implies that the birth of symbols means the death of things.

> When we want to get at what was before the serial games of speech in the subject and what is prior to the birth of symbols, we find it in death, from which his existence derives all the meaning it has.[75]

This idea is a key concept in understanding Lacan's distinction between the real and the reality and of course, such a distinction will bring about a challenge to the Piagean way of thinking which is neither deniable nor completely reconcilable. The most obvious one is that, in Lacanian theory of the formation of the self, the real does not *exist* - because it precedes language. While in Piaget's *The Child's Construction of the Reality*, reality has been depicted as an independent entity that the subject has the burden of constructing an account of it. For the reason that Piaget leaves us with a question regarding the very nature of the kind of understanding resulted from the child's interaction with the environment, it can be said that Lacan's focal point of analysis is an interpretation that follows that of Piaget.

In order to localise it in relation to its cultural and social structures expressing themselves in the symbolic, Lacan emphasised the child's imaginary understanding of the *reality*[76]. Sean Homer followed the development of the Lacanian notion of the real from the 1950s, when it was a relatively undeveloped concept, to the early 1970s, when Lacan used the concept to formulate his understanding of the relationship between the imaginary and the

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[74] Fink, *The Lacanian Subject: Between Language and Jouissance*. p.25.

[75] Lacan, *Écrits*. p. 264.

[76] as it was pointed out at this paragraph, Lacan's conception of the reality has generic differences with that of Piaget.

symbolic.[77] As he argues, the real, in Lacan's early papers, was conceptualised in opposition to the imaginary of the mirror phase. It was essentially a philosophical concept designating 'absolute being' or, 'being-in-itself', in a similar way that Sartre has postulated. The real was thus closely associated with the body prior to its symbolisation. Since the late 50s, the real loses the sense of 'thingness' which his earlier conception had retained and it then became the *unknown* that exists at the limit of this socio-symbolic universe and in constant tension with it. Hence, one fundamental sense in which we can understand the Lacanian real is interconnected with the constant sense we, as subjects, have that something is lacking or missing from our lives.

The 'reality', as Lacan proposed, is no more than the 'real', which is *alienated* by 'the symbolic'. The mirror stage, according to him, is a drama which manufactures the human subject from a fragmented body-image to a form of its totality and, lastly, to the assumption of an alienating identity that will mark his entire mental development with its rigid structure.[78]

### 1.5.7. Conclusion

While Piaget's theory opened up a new prospect to think about the process of design, in his theory there is an ambiguous concept of 'mental structure' that appears problematically to be an *a priori* condition of cognition, because Piaget began his analysis of the child's development of understanding from the time that the child is born. Lacan, on the other hand, considered that long before a child is born, its parents prepared a place for it in their universe. His significant proposal shows that the subject's mental structure is constructed by social structures. The subject is, according to Lacan, constructed by a socially produced images.

In order to draw this discussion together, we should consider the very fundamental assumption that: to design is to create a new image. But how do we create new images?

[77] Sean Homer, *Jacques Lacan* (London and New York: Routledge, 2005). pp.81-94.

[78] Lacan, *Écrits*. p. 78.

To answer this question, this chapter concentrated on Piaget's influential theory of cognitive development. According to him, to create a new image is to accommodate different mental structures and to assimilate new schemata. The mind can conceive an image from one schema of ideas, and applies it to another, previously unrelated, schema. What we should now consider is that it is impossible to create any image without having a mental structure and without establishing a relationship between the previously unrelated schemata. These considerations are all of relevance to the context of design. In Universities, the construction of architectural forms from the needs to embody an idea of a University is particularly explicit. During the design of a University, the architect and the client accommodate different mental structures in order to assimilate new schemata. In addition, as human subjects, their mental structures are constructed by the reality, which is itself socially produced.

This is the lens through which the case studies will be *seen*. In examining the case studies, I will not be concerned with the quality of architectural spaces, nor will I try to analyse architectural forms. My concern will be the process through which the idea of a building is conceived. I will try, firstly, to uncover the built form in relation to the baggage that different individuals bring to a building problem. I will demonstrate that they bring to a building problem images from different schema of ideas, e.g. philosophical and educational as well as architectural. I will consider, secondly, the institutional and social structures that enable those human subjects to function as architect or client.

# PART II: CASE STUDIES

# CHAPTER SIX: THE RAB'I RASHIDI

## The Influence of Ghazzali's Thought on am Architectural Complex

### 2.6.1. Introduction

The previous part of this investigation examined explicitly the ways that recent theories can be used as a lens through which we *see* the built form. First, buildings are no longer viewed as objects standing on their own. They are socially produced phenomena which are generated by the way that the human subject understands reality. In chapter five, we cited Lacan's work showing that the subject is constructed by reality. In this view, buildings are not designed from scratch in as much as they are generated from the mind of socially produced subjects. Second, architecture is constituted out of buildings, its images and its words.

I also argued that discourses about buildings are hence part of what constitutes architecture. The question would be then, where can we find those discourses? As mentioned earlier, Foucault believes that discourses can be found in legal texts, in literature, in philosophy, in political decisions, and in the statements made and the opinions expressed in daily life. This chapter will try to examine architecture through this Foucauldian framework. It will concentrate on the conditions and procedures of social exclusion, the rules of jurisprudence and the philosophies of knowledge to uncover ideas that underlie the spatial organisation of the building. The question is: what is the relationship between architectural plans and theories of knowledge? To answer it, this chapter will focus on a Persian fourteenth-century institution of higher education with the goal of showing that the spatial organisation of the complex corresponds with the rules of jurisprudence, political relations and intellectual ideas. This chapter will ultimately show

that the spatial structure of this complex deals with the intellectual idea of a book which was written almost two century before that. To take on a view from Foucault, the book and related literatures created 'surfaces' whose primary function to give 'emergence' to a set of previously disparate factors. The book does not end in itself. Its entire mission seems to be to frame logical conceptual systems that, once framed, interconnect previously known elements in relevant ways.

Having explained the relationship between architectural plans and theories of knowledge, there would finally be a question that *why* does this relationship exist? Answering this question entails a synthesis of the theoretical views that were examined in the first part of this investigation and the historical account that will be explained in this chapter. This question will be answered in the concluding part of this investigation. The suggestion is that the Foucauldian theory of discursive formation has nothing to do with this question. This later question can be answer with regard to theories of psychoanalysis. But for now, the aim, as we already noted, is to examine the relationship between the building and the word through the framework that Foucault proposed.

### 2.6.2. The organisation of a building

Located on a hill at the suburb of Tabrīz – the city which was the capital of a Mongol dynasty around 700 years ago (Fig. 6-1) – the complex of the Rab'i Rashīdī[1] is currently no more than an archaeological site (Fig. 6-2). What may still attest to the greatness of its past are only a few crumbling masonry towers and faience shards. The complex was established during the Ilkhānate dynasty (1256-1336 AD) which was founded by Hūlegū Khān around thirty years after the first Mongol invasion of Persia. The first invasion took place in 1219-23 and it was almost the last phase of Genghis Khān's conquest. During that invasion, the northern and eastern parts of the country were conquered. Between 1256 and 1260, Hūlegū extended the Mongol empire as far as the borders of Egypt. The kingdom founded by Hūlegū and his descendants, known as Ilkhānate, ruled Iran for

[1] ربع رشیدی.

about 80 years.[2]

The Rab'i Rashīdī was founded by the Ilkhānate statesman and vizier, Rashīd al-Dīn Fazl Allāh Hamadānī (1247-1318).[3] He was born in Hamadān, in western Persia, between the two invasions of Persia by Mongols. Though he was of Jewish background, he may have been converted to Islam as late as the age of 30.[4] Rashīd al-Dīn was not a member of an old-established administrative family. His fame rests mainly on his *Jāmi' al-tavārīkh*, 'vast historical encyclopaedia' as called by Bartol'd.[5] He was trained as a physician (*Tabīb*)[6], and this ability caused him first to enter the service of Mongols. He then became deputy vizier, in 1298, under the monarchy of Ghāzān Khān and kept the position until the death of Ghāzān Khān's successor, Öljeitū, in 1316. During most of the period between 1298 and 1316, Rashīd al-Dīn remained the most influential figure in the government who initiated a major financial reform that stabilised the country's economy.[7]

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[2] A general account of the Mongol period can be founded at: John Joseph SAUNDERS, *The History of the Mongol Conquests* (London: Routledge & Kegan Paul, 1971).

[3] (رشیدالدین فضل‌الله همدانی). On Rashīd al-Dīn's life, see: Rashid al-Din (1247 1318) Tabib and John Andrew Boyle, trans., *Jāmi' Al-Tavārīkh: The Successors of Genghis Khan* (New York and London: Columbia University Press, 1971). pp. 3-13.

[4] According to Minovi, it was probabelt at that time that, his name was changed from Rashīd al-Dawla to Rashīd al-Dīn. Iraj Afshr and Mujtabl Minovi, eds., *Waqf Nāma-I Rab'i Rashīdī* (Tehran: Intishārāt-i Anjumān-i Athār-i Mellī, 1350/1972). p. 32.

[5] Vasilii Vladimirovich BARTOL'D, *Turkestan Down to the Mongol Invasion* (London: Luzac, 1928). p.46.

[6] because of that he was also known as Rashīd al-Dīn Tabīb.

[7] To study an aspect of his economic reform see: Sheila S. Blair, "The Coins of the Later Ilkhanids: A Typological Analysis," *Journal of the Economic and Social History of the Orient* 26, no. 3 (1983 ).

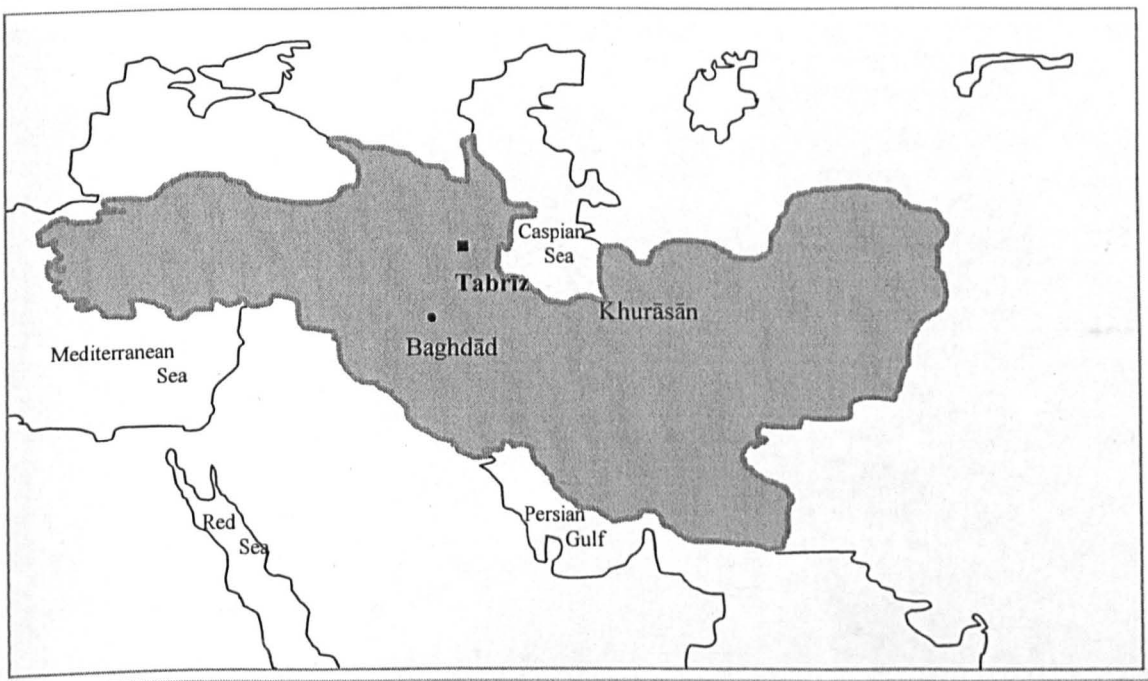


**Figure 6-1:** Ilkhānate dynasty (1256-1336 AD), Based on a map from *www.wikipedia.org*. Access date: 9 February 2009.

**Figure 6-2:** A satellite view of the complex of the Rab'i Rashīdī. When the complex was built, it located outside the city walls. The city of Tabriz has now expanded and the complex is currently surrounded by the city. From: Google Earth, Access date: 3 February 2009.

**Figure 6-3:** Photo of one of the pages of the Rab'i Rashīdī's endowment deed. The endowment deed included a very detailed description of the complex's organisation and its activities. From: Archival Resources of Tabriz Central Library at *www.tabrizcentlib.ir.* Access date: 3 February 2009.

After the death of Öljeitū, Rashīd al-Dīn's colleague, Tāj al-Dīn Alī Shāh, began intriguing against Rashīd al-Dīn. He initially accused Rashīd al-Dīn of not being faithful to Islam and that his commentary of Qur'ān was based on Jewish beliefs.[8] Though, he could defend himself against such an accusation by demonstrating his knowledge, he was later accused of poisoning Öljeitū when he was his personal physician. Rashīd al-Dīn was ultimately executed, aged 70, on the charge of poisoning the monarch.

While the Rab'i Rashīdī was the culmination of Rashīd al-Dīn's architectural patronage, many other public buildings were also funded and founded by him. For instance, in the newly created capital of Sutlāniyya founded by Öljeitū, Rashīd al-Dīn added a school and a hospital.[9] He also established a medical complex in his native town of Hamadān and a school in the town of Yazd.

As pointed out, the complex of the Rab'i Rashīdī is now an archaeological site. What caused researchers to be able to reconstruct the complex's buildings is the text of the endowment deed (*Waqfiyya*)[10] mostly written by, with some parts under the supervision of, Rashīd al-Dīn himself (Fig. 6-3).[11] Although there is not a detailed description of the physical aspects of the building in the text, there is a relatively useful account of the relationship between parts. The endowment would explain the way in which the buildings were used. More than that, it defines the titles and describes the duties as well as the salaries of those who were in charge of the complex.

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[8] Afshr and Minovi, eds., *Waqf Nāma-I Rab'i Rashīdī*: p. 34.

[9] Abbas Eghbal, *The History of Mongols, Seventh Edition* (Tehran: Amīr Kabīr, 2000).

[10] In order to study *waqf* and its history in Persia, see: Ann Lambton, "Awqāf in Persia: 6th-8th/12th-14th Centuries," *Islamic Law and Society* 4, no. 3 (1997).

[11] The text of endowment deed can be find at: Afshr and Minovi, eds., *Waqf Nāma-I Rab'i Rashīdī*., the description that I have provided from the text is mainly based on a paper by Sheila. S. Blair, see: Sheila S. Blair, "Ilkhanid Architecture and Society: An Analysis of the Endowment Deed of the Rab'-I Rashidi," *Iran* 22 (1984).

According to the endowment deed, the enclosure (*raqabāt*) of the complex of the pious foundation (*abwāb al-birr*) consisted of two main areas that both had ramparts (*bārū*). The one in front was built as a gateway (*dargāh*) with minarets attached to its sides; the one in the back had another entrance (*darvāza*). These two areas were attached by Rashīd al-Dīn who designated the whole complex as the Rab'i Rashīdī.[12]

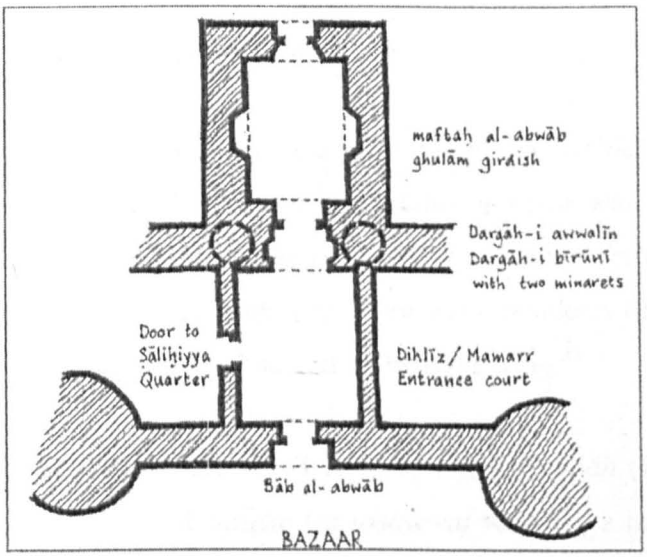


**Figure 6-4:** Schematic reconstruction of the entrance of the complex. Form: Blair, Sheila S. "Ilkhanid Architecture and Society: An Analysis of the Endowment Deed of the Rab'-I Rashidi." *Iran* 22 (1984): 67-90.

The Rab'i Rashīdī could be accessed from below via an entrance gate called *Bāb al-Abwāb* (Fig. 6-4) that would led to a large entrance court.[13] To arrive at this gate, one should pass through the bazaar, site of the poor house (*dār al-masākīn*).[14] The entrance court of *Bāb al-Abwāb*, according to the endowment deed, would lead to *dargāh-i avalīn* (the first portal), a two-storey monumental portal.[15] This combination of entrance court leading from bazaar to a monumental portal, despite some differences in terms of style,

[12] Afshr and Minovi, eds., *Waqf Nāma-I Rab'i Rashīdī*. p. 41.

[13] Before the establishment of the Rab'i Rashīdī, *Bāb al-Abwāb* had given access to the garden of *Rashīdābād*.

[14] Afshr and Minovi, eds., *Waqf Nāma-I Rab'i Rashīdī*. pp. 168, 189.

[15] Ibid., p. 178.

has been a common pattern in Iranian traditional architecture.[16]

At the back of the portal of the Rab'i Rashīdī, there was a place for opening of the gates called the *maftāh al-abwāb*.[17] This sequence of spaces would lead to a courtyard (*sahn*) surrounded by a two storey veranda or covered way (*ghulām-ghardish*). It consisted of four platforms (*suffas*)[18] and it was also used to accommodate distinguished visitors.[19] The *maftāh al-abwāb* functioned as an access to the rest of the complex which contained four main elements: a hospice (*dar al-diyāfa*), a *khānaqāh*, a hospital and, a *rawda* in which the founder's tomb was located.[20] (See Fig. 6-5)

The hospice was one of the major components of the Rab'i Rashīdī which had direct access from the *maftāh al-abwāb*.[21] It seems that the hospice was a closed building symmetrically designed. At the hospice, the left wing was reserved for travellers, whereas residents would accommodate in the right wing. For those residents of the complex who lived in *khānaqāh* and *rawda*, food was served in the right wing.[22]

The second major component of the Rab'i Rashīdī was *khānaqāh* (Fig. 6-6). It was a place designated to the practice of Sufism (or *tasawwuf* which is a mystical tradition at the heart of traditional Persian culture, literature and even philosophy). Consisting of three storerooms and a space for the doorman behind the door, the arrangement of the entrance of the *khānaqāh* of the Rab'i Rashīdī had some similarity to the main entrance of the complex itself. The *khānaqāh* at the Rab'i Rashīdī, included a big *iwan* (where

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[16] This pattern can also be seen in congregational mosques of Yazd and Isfahan.

[17] Afshr and Minovi, eds., *Waqf Nāma-I Rab'i Rashīdī*. p. 160.

[18] However, my specific point of concern is not the terminology of architectural elements of the complex; I think platform is a suitable translation of the notion of *suffa*. Because, in Iranian architecture, any raised part of the ground can be regarded as a *suffa*. Despite that, Sheila Blair believes that *suffa* can refer to something best translated into English as niche or recess. Her reason for this claim can be read at: Blair, "Ilkhanid Architecture and Society: An Analysis of the Endowment Deed of the Rab'-I Rashidi." p.69.

[19] Afshr and Minovi, eds., *Waqf Nāma-I Rab'i Rashīdī*. p. 142 & p. 147.

[20] Needless to say, there were also other service buildings such as bath, storerooms and fountains that could not be considered as major components, as little attention was accorded to them.

[21] Afshr and Minovi, eds., *Waqf Nāma-I Rab'i Rashīdī*. p.140.

[22] Ibid. p. 138.

special feasts and dances were held), a winter room (*tabkhāna*) and a summer room (*tanabī*)[23]. Each of these spaces had a place called *shāhneshīn* where the *mutawallī* could seat guests to observe the ceremonies.[24]

The *khānaqāh* consisted of a court (*sahn*) with rooms (*sarāy*)[25] and also residential quarters. The sheikh, five Sufis and eight of the twenty four Qur'ān reciters would be accommodated in the residential quarters which were divided into summer and winter rooms. It is worth noting that in Iranian traditional architecture, it has been a common pattern to allocate winter and summer rooms in both public and residential spaces. Based on this pattern, in some buildings such as houses, mosques, and *khānaqāhs*, rooms were organised around a central court so that the building could be adapted to seasonal changes. However in the endowment deed of the Rab'i Rashīdī, there is no clear description of the spatial organisation of the *khānaqāh*, it might be concluded, as Sheila Blair did, that the same pattern was employed at the *khānaqāh* of the Rab'i Rashīdī.

There was a vaulted passage called *sābāt* near the door that led from the *khānaqāh* to the third major component of the Rab'i Rashīdī, i.e. the hospital (*dār al-shifā'* or the house of cure, as the term could be translated).[26] There is no clear architectural account of the hospital. But its function clearly seems to be treatment and housing of the sick as well as teaching physicians.

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[23] Ibid. pp.167 & 194.

[24] Ibid. p.196.

[25] Ibid. p.194.

[26] Ibid. p. 43 & 177.

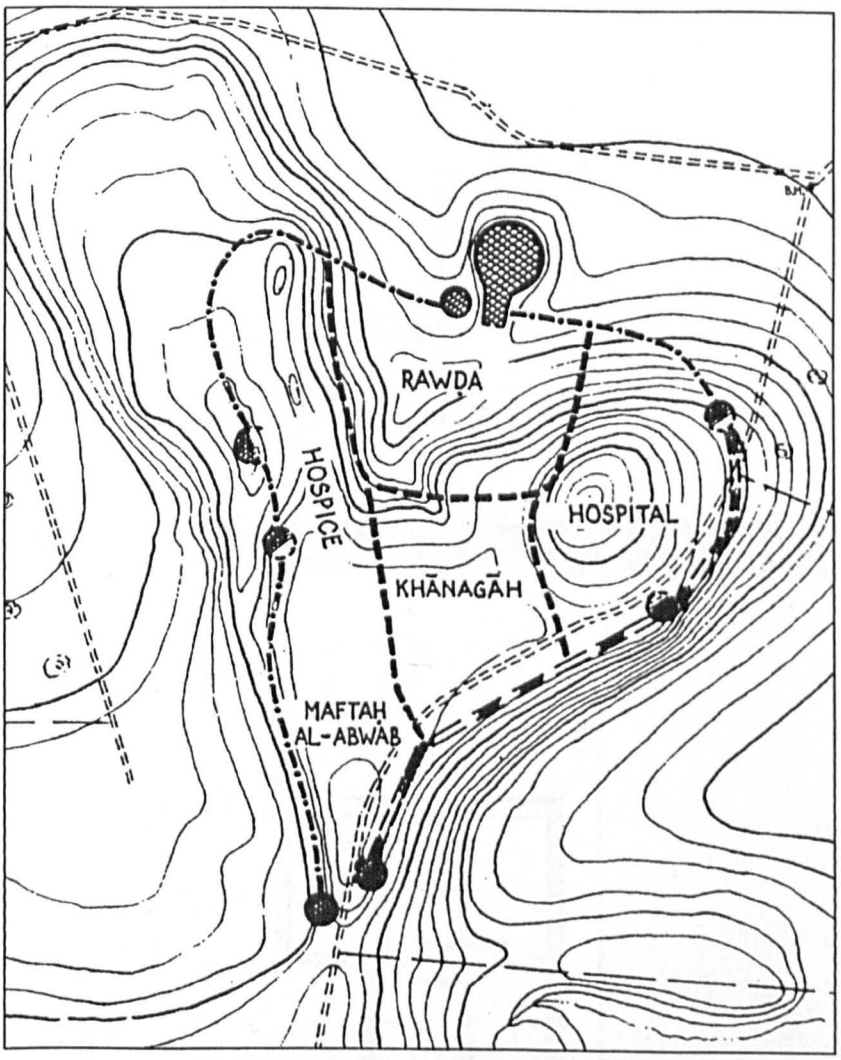


**Figure 6-5:** Schematic reconstruction of the site plan. The complex consisted of: a hospice (*dar al-diyāfa*), a khānaqāh, a hospital and, a rawda in which the founder's tomb was located. The most interesting aspect of the spatial organisation of the complex is the fact that the rawda and the khānaqāh are attached to each other. Form: Blair, Sheila S. "Ilkhanid Architecture and Society: An Analysis of the Endowment Deed of the Rab'-I Rashidi." *Iran* 22 (1984): 67-90.

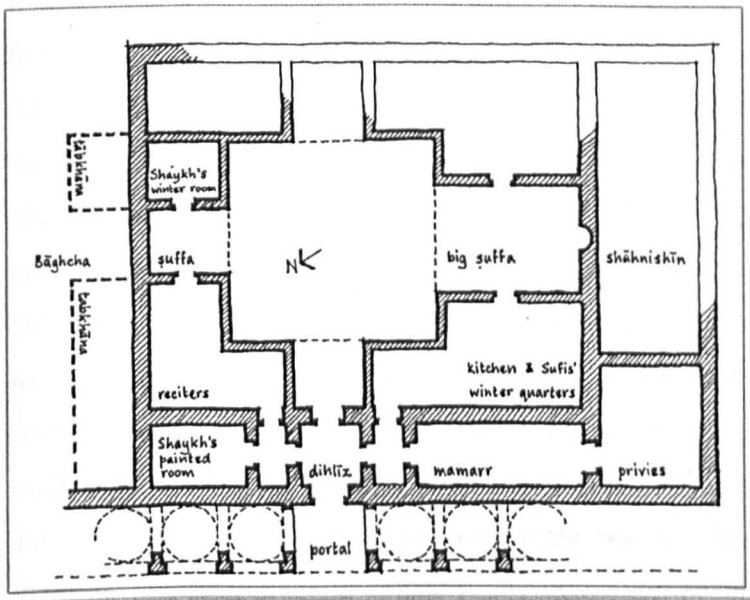


**Figure 6-6:** Schematic reconstruction of the *khānaqāh*. Form: Blair, Sheila S. "Ilkhanid Architecture and Society: An Analysis of the Endowment Deed of the Rab'-I Rashidi." *Iran* 22 (1984): 67-90.

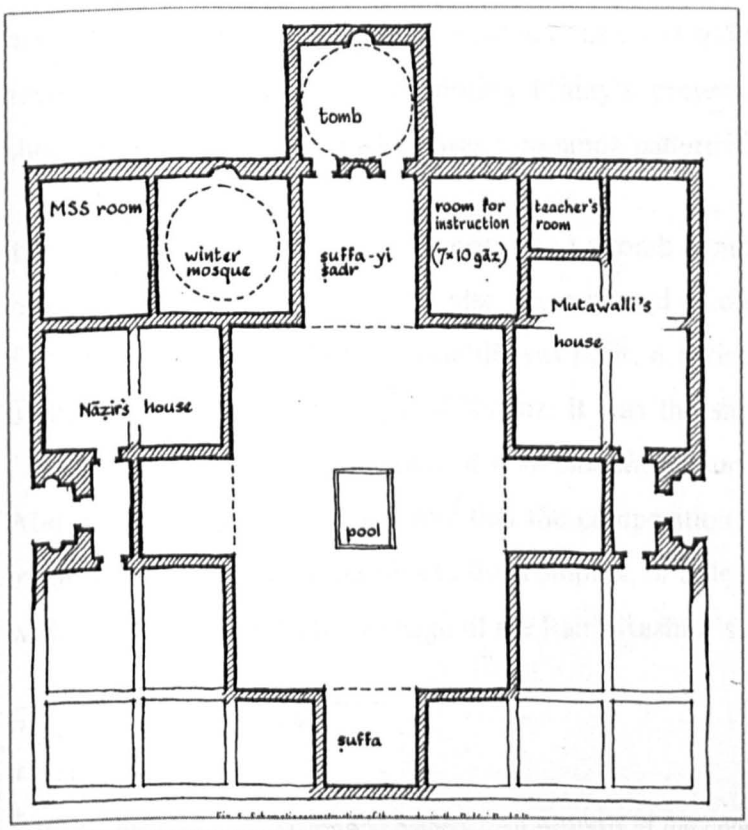


**Figure 6-7:** Schematic reconstruction of the *rawḍa*. Form: Blair, Sheila S. "Ilkhanid Architecture and Society: An Analysis of the Endowment Deed of the Rab'-I Rashidi." *Iran* 22 (1984): 67-90.

Literally meaning garden, the *rawda* was the fourth major part of the Rab'i Rashīdī (Fig. 6-7). The word *rawda* subtly hints at heaven which is considered, in Qur'ān, as a garden. At the Rab'i Rashīdī, *rawda* consisted of a court (*sahn*), winter mosque (*masjid-i shatawī*), summer mosque (*masjid-i sayfī*), a library, a classroom, residential rooms and a domed tomb intended for the burial of Rashīd al-Dīn and the sons who would succed him to be in charge of the complex as *mutawallī*.[27] By the winter mosque, there was a place called the *suffa-i sadr* that would act as congregational mosque for Tabriz. The *suffa-i sadr* was located on the south of the *rawda* and it was a covered platform facing the central court from the north. It would have access to the tomb from the south. In Iranian traditional architecture, a place with such characteristics is called *iwan*. We know that at the *rawda* opposite to the main *iwan* there was another one which could be used in summer for teaching the orphans who were to become Qur'ān reciters, and then undertake further Islamic trainings such as Qur'ānic commentary (*tafsīr*), theology (*kalām*) and jurisprudence (*fiqh*). [28] Sheila Balair correctly argues that inasmuch as it has been mentioned in the endowment deed that the court and the *other iwans* may be used to accommodate overflow crowds during Friday's prayers, then the plan of the *rawda* should be a four-*iwan* type which was a common pattern at the time.[29]

The arrangement of a four-*iwan* mosque and a tomb behind, as it can be imagined in the *rawda* of the Rab'i Rashīdī, may also be examined in other fourteen-century buildings. For instance, when the Rab'i Rashīdī was built, a shrine complex was simultaneously under construction at the town of Natanz. It was the shrine complex of *Abd al-Samad* (1307-25).[30] The shrine consisted of a *khānaqāh*, a four-*iwan* mosque and the tomb of Abd al-Samad (Fig. 6-8). It seems that the composition of *rawda* of the Rab'i Rashīdī might have had some similarities to that complex, or at least that complex may provide us with a tentative architectural image of the Rab'i Rashīdī's *rawda*.

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[27] Ibid. pp.42, 128 & 195.

[28] Ibid. p.194.

[29] Blair, "Ilkhanid Architecture and Society: An Analysis of the Endowment Deed of the Rab'-I Rashidi." p.74.

[30] An excellent description of the complex can be found at: Sheila S. Blair, "The Octagonal Pavilion at Natanz: A Reexamination of Early Islamic Architecture in Iran," *Muqarnas* 1 (1983).

Moreover, the *rawda* included houses assigned to the *mutawallī* and the *nāzir*. The *mutawallī* was the most important person in the complex and probably because of that he had the biggest house in the complex. His house consisted of two interconnecting rooms[31] and a storeroom where money and accounts were kept.[32] The house of the *nāzir*, who would assist the *mutawallī* and would oversee things at the complex, was located in the corresponding opposite side of the *rawda*.

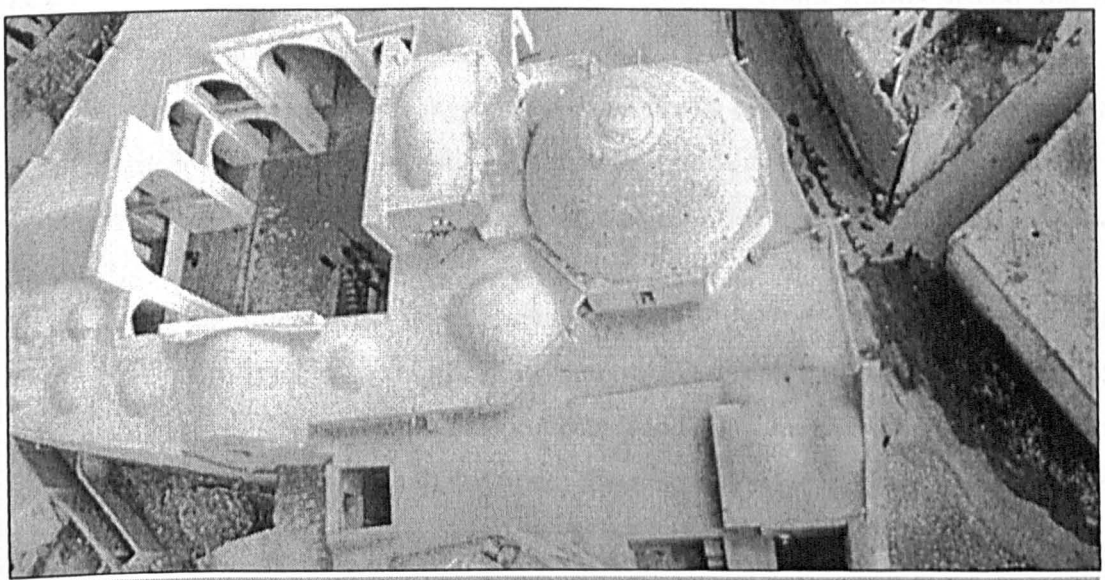

**Figure 6-8:** Shaykh 'Abd al-Samad Shrine Complex. The Rab'i Rashīdī's *rawda* should have been similar, in terms of spatial organisation, to this complex. From: Sheila S. Blair, "The Octagonal Pavilion at Natanz: A Reexamination of Early Islamic Architecture in Iran," *Muqarnas* 1 (1983).

### 2.6.3. The conflicting ideas of Sufis and *fuqahā*

At first glance, it seems that the complex of the Rab'i Rashīdī might be seen as an unproblematic combination of different components. Despite that, if we examine the complex based on the fundamental presupposition that architecture is an inherently theoretical practice then, some contradictory aspects are manifested. The first question is: for what purpose the complex built? First of all, it seems rather difficult to find a fitting name for the complex. Even though the Rab'i Rashīdī would include a mosque that was

[31] Afshr and Minovi, eds., *Waqf Nāma-I Rab'i Rashīdī*. p. 175.

[32] Ibid. p.195 & p. 197.

used as a congregational mosque of Tabriz, the complex was not entirely devoted to religious ceremonies. It was probably for that reason that Rashīd al-Dīn had considered the annual salary of the *imām* much less than what he had advised to be paid to the teacher of Qur'ānic commentary and traditions (*mudarris-i tafsīr va hadīth*) and the professor of other sciences (*mudarris-i sāir-i ulūm*). In the same way, the *khānaqāh* of the Rab'i Rashīdī was devoted to the training of Sufis as well as the practice of Sufism. Similarly, while the hospital was planned to be a centre for treatment, it was also intended to be a place for educating trainee physicians. Overall, it seems Rashīd al-Dīn aimed to build a community of teachers and scholars which was in service of the society. In Europe, such a community was regarded at the time, by definition, the *stadium generale*. It was an institution that gradually developed and it is currently known as the University.[33]

Around three centuries earlier than the establishment of the Rab'i Rashīdī, Sufism existed at the margins of Iranian social life. This was mainly due to opposition it received from the Islamic scholars (*ulamā*) and jurisprudents (*fuqahā*).[34] As a result of such criticisms, during the late tenth and eleventh centuries, some Sufis tried to justify Sufism's existence within Islam. For example, Abu Nasr Sarrāj devoted his tenth-century book, *Kitāb al-luma'*, to outlining Sufism's doctrine arguing that the Prophet had a transcendental authority over members of the Muslim community and because of that he provided patterns for practice worthy of imitation.[35] Another instance may be Abd al-Rahmān Sulamī who in the eleventh century wrote various books to defend Sufism against its many critics and to spread knowledge of Sufism among the people, as Kohlberg argues.[36] Considering such a historical background, Sufis should have received great opposition

[33] For instance, Rashdall defined the University as a scholastic guild, whether of masters or students engaged in higher education and study. See: H. Rashdall, "The Origines of the University of Paris," *The English Historical Review* 1, no. 4 (1886).

[34] A general account of the contemporary status of Sufism in Iran can be found at: MATTHIJS VAN DEN BOS, *Mystic Regimes: Sufism and the State in Iran, from the Late Qajar Era to the Islamic Republic* (Leiden: E. J. Brill, 2002).

[35] Margaret Malamud, "Sufi Organizations and Structures of Authority in Medieval Nishapur," *International Journal of Middle East Studies* 26, no. 3 (1994).

[36] Etan Kohlberg, *Al-Sulamī: Jawāmī Ādāb Al-Süfiyya Wa Uyüb Al-Nafs Wa Mudāwātubā* (Jerusalem: Hebrew University of Jerusalem, 1976).

which caused them to defend their position within Islam. So, the very basic question is: why the Rab'i Rashīdī consisted of places for two historically conflicting groups, i.e. *ulamā* (at *rawda*) and Sufis (at *khānaqāh*), as well as a hospital? In order to address these questions we need to focus on the social, political and intellectual ideas of the society to which the complex belonged.

Sufism has been regarded, in the West, as an 'esoteric' or 'mystical' thought and practice, the question of what it means for an idea or an action to be 'esoteric' or 'mystical' seems to remain unanswered. In Persian language, the terms Sufism does not imply any such concepts as the word 'mystical'. In order to understand the meaning of the word, it may be helpful to know that words such as: *tasawwuf* (Sufism), *irfān* (knowledge), *'ishq* (love), *sulūk* (travelling), *tarīqah* (path), *bātin* (inward) ... all have some relationship with the idea and the practice of Sufism. Furthermore, the term Sufi has sometimes been used to refer to a mid-level saint, as did *Ibn 'Arabī*, but generally as a general term for anyone who follows a *shaykh* and practices in a particular path. The most general practice of Sufis has been the invocation (*dhikr*) of divine names, dance, singing and intensification of normal religious practices through fasting, praying and being in constant state of ablution (*wodū*).

Even though we may consider Sufism as a 'mystical' theory and practice, what really matters is the meaning. The very basic belief which is shared by all groups of Sufis is that within the human subject, there is a potential ability to reach an un-mediated understanding of the Absolute. Such an understanding, according to them, is higher than a rational understanding achieved through reason. Considering that, it should not be surprising to know that Sufis criticised philosophers who would rely on rational reasoning to understand the world.[37]

On the other hand, one can argue that there was a shared belief between jurisprudents

[37] Although Sufis denied the supremacy of rational reason over intuition, their approach should not be considered as irrational, but rather as non-rational. It might be for that reason that Sufism and Deconstruction have some shared beliefs and metaphors. See: Ian Almond, *Sufism and Deconstruction: A Comparative Study of Derrida and Ibn 'Arabia* (London, New York Routledge, 2004).

(*fuqahā*) and Sufis regarding the existence of the immaterial, non-physical and invisible world derived from and based on the Islamic texts. But even this common idea did not prevent jurisprudents from challenging the Sufis' attitude. The fate of a Persian Sufi, i.e. al-Hallāj who was executed in Baghdād in early tenth century being accused of having a theological error,[38] can be regarded as a manifestation of the extreme nature of the conflict between Sufism and Islamic rules as they were postulated by Islamic jurisprudents (*fuqahā*). Islamic jurisprudents believed, there are beliefs, traditions and rules derived from Qur'ān and the Prophet's way of life that cannot be breached.

### 2.6.4. The development of educational organisations

The conflicting ideas between Sufis and *fuqahā* had experienced a calmer period in Khurāsān, a region in east Persia in which they both could develop their own structure of education. By the middle of tenth century, Khurāsān was the first area in which the power of the Abbasid caliph of Baghdād was replaced by local governments. The first of these governments was established by the Ghaznavid dynasty (Fig. 6-9). This dynasty and its successor (i.e. Saljūqs) relied mostly on Khurāsānian elites to govern their territories. It was perhaps due to Khurāsān's political independence that over centuries, jurisprudents and Sufis developed their own organisations that were independent of the State.[39] For that reason, Khurāsān has usually been regarded as an important place in which Sufism was institutionalised for the first time.[40] Particularly during the eleventh century, Sufis in Khurāsān found an opportunity to outline their own doctrine. For instances, 'Abd al-Rahman Sulāmī embarked upon writing a Sufi commentary on Qur'ān;[41] Abu Nu'aym Isfahānī wrote a ten-volume book entitled *Hilyat al-awliā* in order to explain Sufis'

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[38] Some aspects of Al-Hallāj's beliefs have been examined at: James S. Helfer, "In Defense of Al-Hallāj," *Journal of the American Academy of Religion* 35, no. 2 (1967).

[39] For further studies on the relationship between the state and religion, see: Ira M. Lapidus, "The Separation of State and Religion in the Development of Early Islamic Society," *International Journal of Middle East Studies* 6, no. 4 (1975).

[40] Some aspects of Sufism's development in Khurāsān have been examined at: Richard W. Bulliet, *The Patricians of Nishapur: A Study in Medieval Islamic Social History* (Cambridge, Massachusetts: Harvard University Press, 1972).

[41] Called *Tabaqāt al-sūfiyya.*

premises; Abu al-Qāsim Qushayrī wrote the book of *Tartīb al-Sulūk* to explain the importance of invocation (*dhikr*) as a spiritual exercise. All of these efforts along with the suitable political condition of the eleventh century caused Sufism, which was a marginal phenomenon a century earlier, to become more popular throughout the territory of Ghaznavids, east Persia.

While Sufis found a remarkable opportunity to develop and transmit their ideas in Khurāsān, Islamic scholars (*ulamā*) and jurisprudents (*fuqahā*) continued expanding their own structure of education. It is worth nothing that from the beginning, the mosque has been not only the place of prayer, but also a centre of religious instruction and political discussion (and as we observed earlier, this pattern was also employed in the Rab'i Rashīdī). Hence, *fuqahā* have usually had, a teaching place that could be used as a centre for publicising their beliefs. On the other hand, Khurāsān, provided a proper setting for the scholars of other branches of science, such as medicine and philosophy, to study their own field, perhaps, in less organised way compared with that of *fuqahā*.

Following this early stage which may be called mosque-college, a later phase which initiated during Ghaznavids in Khurāsān was the introduction of special teaching centres, *madrasas*. Like other educational centres that existed before then, *madrasas*, in general, originated as endowments, were housed in permanent buildings, and had salaried staff. Furthermore, the significant characteristic that differentiated *madrasas* from the preceding patterns of educational centres was that *madrasas*, by and large, were devoted to the study of Islamic jurisprudents (*fiqh*). While educational centres before that time were centres to study sciences, in a general sense, *madrasas* later became centres of religious sciences (*ulūm al-Dīn*). Obviously, this would mean that non-religious sciences, particularly philosophy (*falsafah*), were no longer taught at *madrasas*;[42] and Sufism, was to be regarded as a science that could be an elective educational option.[43]

### 2.6.5. An epistemological shift

[42] To study the origin of madrasas and their organisation, see: A. L. Tibawi, "Origin and Character Of "Al-Madrasah"," *Bulletin of the School of Oriental and African Studies* 25, no. 1 (1962).

[43] Malamud, "Sufi Organizations and Structures of Authority in Medieval Nishapur.".

By the time these changes were institutionalised in Khurāsān, the Ghaznavid dynasty was replaced by Saljūqs, in eleventh century, and the territory stretched from Khurāsān (east Persia) to Baghdād (Fig. 6-10). This caused the idea of the *madrasa* (as practised in Khurāsān) to be spread across the region and to become a widely accepted pattern. The development of the *madrasa*'s pattern finally led to the foundation of the *Nizāmīyya* colleges, founded in Baghdād and some other cities[44] in late eleventh century. These colleges were founded by the Saljūqid minister, Nizām al-Mūlk (1018-1092) who devoted the colleges mainly to the study of *fiqh*.[45]

To summarise the shift that took place in educational organisation, I think one can arguably say that Ibn Sīnā (980-1037)[46] may show the broadness of scientific fields in Khurāsān at the earlier stage which I have referred to as mosque-college. He was a physician, astronomer, chemist, logician, mathematician, philosopher, physicist, poet, theologian and statesman who can be regarded as an extraordinary figure emerging from that period. This initial phase was replaced by Abū Hāmed Mohammad al-Ghazzālī (1058-1111)[47] who, in contrast, coined an epistemological shift which was started earlier by the emergence of *madrasas* and culminated in the foundation of the *Nizāmīyya* colleges.

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[44] Such as: *Nīshapūr, Balkh, Isfahān, and Herāt.*

[45] George Makdisi, "Muslim Institutions of Learning in Eleventh-Century Baghdad," *Bulletin of the School of Oriental and African Studies* 24, no. 1 (1961).

[46] Also known as Avicenna. Ibn Sīnā's life and works were examined in 2001 at the First Conference of the Avicenna Study Group, Yale University, see: David C. Reisman and Ahmed H. Al-Rahim, eds., *Before and after Avicenna: Proceedings of the First Conference of the Avicenna Study Group The First Conference of the Avicenna Study Group* (Boston: Leiden, 2003). To examine Ibn Sīnā's philosophical thoughts see: Lenn Evan Goodman, *Avicenna* (London: Routledge, 1992). And to examine his medical investigations and their impact on European medicine, see: Nancy G Siraisi, *Avicenna in Renaissance Italy: The Canon and Medical Teaching in Italian Universities after 1500* (Princeton: Princeton University Press, 1987).

[47] (ابو حامد محمد ابن محمد الغزالی or امام محمد غزالی) Abū Hāmid Muhammad ibn Muhammad al-Ghazālī.

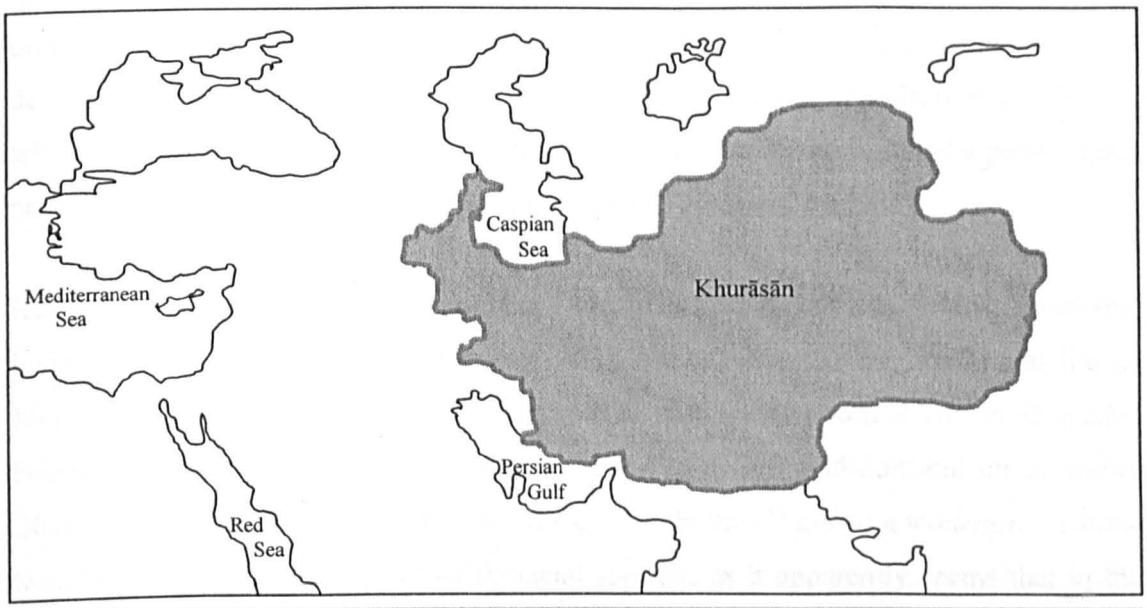


**Figure 6-9:** Ghaznavid dynasty 975-1187. This dynasty relied mostly on Khurāsānian elites to govern their territories. The conflicting ideas between Sufis and Fuqahā had experienced a calmer period in Khurāsān. Based on a map from *www.wikipedia.org*. Access date: 9 February 2009.

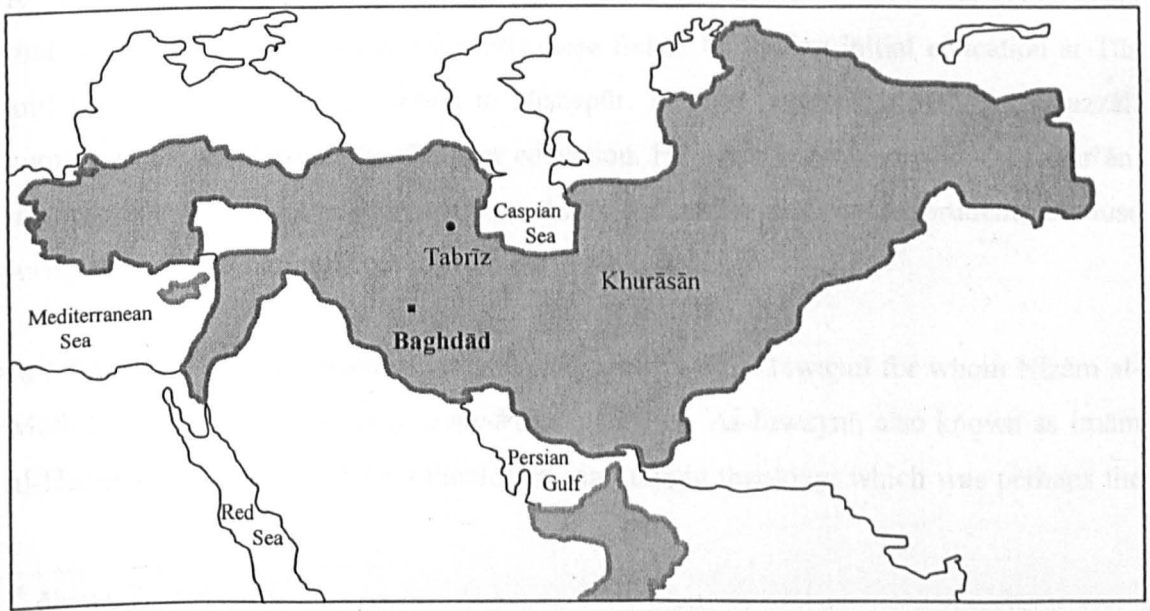


**Figure 6-10:** Saljūqs Dynasty upon the death of Jalāl al-Dawlah Mālikshāh in 1092. The Saljūq dynasty pushed borders of its predecessor dynasty, Ghaznavids, further to the west. The Saljūqs Dynasty included Baghdād, the city in which caliphs ruled the Islamic Ummah (Islamic community). For centuries after Islam, the caliph's authority was approved by the Shari'ah. During the Saljūqs Dynasty, the ideas that were developed earlier in Khurāsān, during the Ghaznavid dynasty, became widely accepted within the Islamic world.Based on a map from www.wikipedia.org. Access date: 9 February 2009.

In order to understand the new trend and the way by which it can cause a better understanding of the complex, we need to examine Ghazzālī's life and ideas with some details. His life will show the development of the educational organisation of the time which was pointed out earlier. And as will be discussed later, his ideas had a great impact on both educational and architectural organisation of the Rab'i Rashīdī.

Respected by the jurisprudents, theologians and Sufis alike, largely due to his remarkable lucidity of thought and power of expression, Ghazzālī oriented the intellectual life of Muslim in a direction which was different from its past. He was born at Tūs, in Khurāsān. Following the death of his father, who belonged to a Sufi tradition and under whom Ghazzālī had started the early education, he and his brother[48] joined a *madrasa*. To some extents this was due to the lack of financial support, as it apparently seems that in the *madrasa* students would get free food. Noting later on how he and his brother first turned to theology (*kalām*) and jurisprudence (*fiqh*), Ghazzālī said that: 'we became students for the sake of something else than God.'

It was due to that his engagement with *fiqh* and *kalām* was mainly on an economic basis that he later revised his attitude towards these fields. Following initial education at Tūs and Gurgān, Ghazzālī then moved to Nīshapūr. In these cities of Khurāsān, Ghazzālī completed the standard study of higher education. He had predominately studied Qur'ān, the tradition and the commentaries on these.[49] Thus he was a jurisprudent, because jurisprudence was mainly derived from these basic fields. [50]

In Nīshapūr, Ghazzālī became an outstanding student of al-Juwaynī for whom Nizām al-Mūlk had founded the *Nizāmīyya madrasa* (colleges). Al-Juwaynī, also known as Imām al-Haramayn,[51] was primarily a theologian, and taught theology, which was perhaps the

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[48] Ahmad Ghazzālī.

[49] Needless to say, there were some other subjects such as Arabic grammar that should be completed as preliminaries.

[50] W. Montgomery Watt, *Muslim Intellectual: A Study of Al-Ghazali* (Edinburgh: Edinburgh University Press, 1963).

[51] Meaning the Imam of two sanctuaries (Mecca and Medina).

most difficult of the Islamic sciences, to Ghazzālī. After the death of al-Juwaynī, in 1085, Ghazzālī was invited to the court of Nizām al-Mūlk. The vizier was so impressed by him that he appointed Ghazzālī, in 1091, to teach in the *Nizāmīyya* College at Baghdād.[52]

Despite enjoying a successful career as a teacher at the *Nizāmīyya*, Ghazzālī, almost four years after his appointment, abandoned teaching as well as all his property (except so much as was necessary for his own support and that of his children). He began a journey to Damascus and Jerusalem. He then felt himself drawn to make the pilgrimage to the Holy cities of Mecca and Medina. After these journeys and except for a short period spent on teaching at Nīshapūr, Ghazzālī stayed in Tūs, until the end of his life. There he continued writing books and was in charge of a *madrasa* and a *khānaqāh*.[53]

When Ghazzālī arrived to Baghdād, he aimed to study logic, physics and philosophy. By 1095 he completed two books both containing criticism of philosophers the first called *Maqāsid al-Falāsefah* (The Aims of the Philosophers) and the second called *Tahāfut al-Falāsefah* (The Inconsistency of the Philosophers)[54]. Ghazzālī's criticisms were not limited to philosophy. Although he was a jurisprudent and a theologian, he criticised jurisprudence and theology repeatedly.

### 2.6.6. The Rab'i Rashīdī and Ghazzālī's idea of *'ilm*

Ghazzālī has found such an important role in my narrative of the events because he shifted Muslims' conception of science in a quite different way. It would be out of the scope of this thesis to provide a detailed description of Ghazzālī's life. What needs to be pointed out here is that he always continued to comment on sciences (such as philosophy, theology, jurisprudence, and Sufism) based on their subjects, and outcomes as well as the contribution they could do to making man closer to the God.

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[52] Duncan B. MacDonald, "The Life of Al-Ghazzālī, with Especial Reference to His Religious Experiences and Opinions," *Journal of the American Oriental Society* 20 (1899).

[53] Ibid.

[54] Ghazzālī, *The Incoherence of the Philosophers: Tahāfut Al-Falsasifah: A Parallel English-Arabic Text* ed. Michael E. Marmura (Provo, Utah: Brigham Young University Press, 1997).

As a part of his comment on sciences, he developed the concept of knowledge (*'ilm*) in a distinct way. This concept influenced the Rab'i Rashīdī's structure of architectural spaces. In examining Ghazzālī's idea of *'ilm* along with rendering the architectural characteristics of the Rab'i Rashīdī, it is my objective to show that the architectural organisation of the complex corresponded with the intellectual thoughts of the time. To attain such an insight into the way by which both architectural and educational aspects of the complex would correspond together, it would be helpful to examine the meaning of *'ilm* (pl. *'ulūm*), as Ghazzālī postulated it in a chapter of his important book on *The Revival of the Religions Sciences* (*Ihyā' 'ulūm al-dīn*)[55].

The notion of *'ilm* means both knowledge and science. Ghazzālī defined his mission to revive that notion, because he believed that *'ilm* had had a high religious meaning which was ignored intentionally. Consequently, it was reduced erroneously to *fiqh* (jurisprudence) and *kalām* (theology). Hence, Ghazzālī wrote *Ihyā' 'ulūm al-dīn*, to reclaim *'ilm* from jurists and theologians (*ulamā* in general) who, from his point of view, had detracted from *'ilm*'s true value. He blamed *ulamā* for causing the community to believe that *'ilm* is no more than legal rules and regulations (*fiqh*) and theological debates (*kalām*).

Therefore, as the title of the book suggested, his objective was the *revival* of the religious sciences which were intended to act as a true path to the other world. As can be seen from the way Ghazzālī defined the problem, he intended, from the beginning, to revive religious sciences by reorienting them toward the other world, rather than this world as do the concepts of *fiqh* and *kalām*. Thus, at the beginning of the book, Ghazzālī made a distinction between this world (*al-dunyā*) and the other world (*al-ākhira*). He supported his contention by several references to the Qur'ānic verses and to quotations from the Prophet.

Especially in an important chapter of *Ihyā' 'ulūm al-dīn*, called *The Book of Knowledge*[56]

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[55] Ghazzālī, *Ihyā''Ulūm Al-Dīn*, ed. Sedqī Jamīl al-'Attār, 5 vols. (Beirut: Dār al-Fikr, 1999).

[56] Ghazzālī, *The Book of Knowledge*, trans. N. A. Faris (Lahore: Sh. Muhammad Ashraf, 1962).

(*kitāb al-'ilm*), this distinction became central to his division between the worldly science (*'ilm al-dunyā*) and the otherworldly science (*'ilm al-ākhira*). He sought a unified theory of knowledge as opposed to one divided between law and religion. According to him, the worldly sciences are all engaged with the affairs of this world. Although they may have religious significance, they are of secondary importance. In contrast, the otherworldly sciences are of higher status as they make man closer to God. Despite the fact that, as mentioned earlier, Ghazzālī himself was both a jurist and a theologian, in *Ihyā' 'ulūm al-dīn* he regarded *fiqh* as a worldly sciences. He believed that *fiqh* originally dealt with otherworldly affairs and then it was gradually restricted to jurisprudence.

Let's look again at the general organisation of the complex. The complex consisted of the *rawda* in which students were taught *fiqh* and *Kalām*, the *khānaqāh* devoted to the practice of Sufism, as well as a hospital. Further to what was discussed before on the development of Islamic education, I can now argue that *The Book of Knowledge* which was the first chapter of the *Ihyā' 'ulūm al-dīn*, makes a significant contribution to understanding the complex's specific organisation.

Bearing in mind that one of the most important components of the Rab'i Rashīdī was the *rawda* which was mainly devoted to the teaching of *fiqh* (a science that Ghazzālī opposed so clearly), it may seem challenging, at the first look, to find any correspondence between Ghazzālī's conception of knowledge and the organisation of the complex as a whole. But the point is that throughout *Ihyā' 'ulūm al-dīn*, Ghazzālī tried to redefine commonly accepted terms. He believed *fiqh* originally meant 'knowledge' and 'understanding' and that it had a wider meaning which was later changed. In *The Book of Knowledge* (the first chapter of the *Ihyā'*) he revealed *fiqh* should be redefined as a science that shows us the path to the other world, *fiqh tarīq al-ākhira*.[57] Furthermore, an underlying idea on which Ghazzālī's attitude toward *fiqh* and *Kalām* was based is that they are the first not the final stage of the realisation of the ultimate goal of the religion. Although *fiqh* and *Kalām* have a vital status in defining the foundation of proper belief and practice, the ultimate realisation according to him may be achieved through a direct experience of the truth and

[57] Ghazzālī, *Ihyā''Ulūm Al-Dīn*. p.19.

it could be revealed through the practice of Sufism.

The very basic concept that makes the complex more understandable is the idea of the *fard kifāya* as it was formulated by Ghazzālī. This concept was an expression used in *fiqh*. In the Islamic jurisprudence, some rules are obligations upon every Muslim. These obligations are regarded as *fard 'ayn* and they include some beliefs such as faith to the God, worship such as daily prayers and actions such as financially providing for the family. In contrast, there are some obligations which are *fard kifāya* which according to the Islamic jurisprudence should be fulfilled by a few people on behalf of all members of the community.

As pointed out earlier, *Ihyā' 'ulūm al-dīn* was written with the aim of reviving religious sciences as Ghazzālī advocated otherworldly sciences. We also know, however, that he made indirect hints that Sufism was a perfect instance of a science that makes man closer to God. Furthermore, we examined that from his point of view *fiqh* and *Kalām* had originally been religious sciences diverted by social needs from their true task. Ghazzālī regarded his mission partly to reorient these sciences so that they can be classified as otherworldly sciences.

Ghazzālī divided worldly sciences into three branches: praiseworthy (*mahmūd*), blameworthy (*madmūm*) and permissible (*mubāh*). Praiseworthy science is a science essential to the welfare of the community. While all religious sciences are praiseworthy (some *fard 'ayn* and some other *fard kifāya*) Ghazzālī regarded only some worldly sciences as praiseworthy. The acquisition of those kinds of worldly sciences which are praiseworthy is *fard kifāya*. In an interesting comment, he regarded medicine specifically as a praiseworthy worldly science. He also regarded the acquisition of *fiqh*, *Kalām* as praiseworthy. He asserts that the community should make sure it has a reasonable number of people whose profession is related to this science. While Ghazzālī advocated sciences that he categorised as *fard kifāya*, he persuaded the community to be wary of blameworthy sciences. They are sciences like magic that may harm people and the health of the community. Moreover, he discouraged people from sciences such as history and

biography that have no benefit despite having no harm.[58]

### 2.6.7. Conclusion

The question we should finally reflect on is that can we put the relationship that I proposed here in some kind of chronological order? In investigating the Rab'i Rashīdī, this question was raised after it was concluded that Ghazzālī's idea of *'ilm* and Rab'i Rashīdī's organisation are in someway related to each other. If we consider this relationship in terms of what was unknown at the time, the argument of this chapter may turn out to be slightly less straightforward. But in this case, there is a very interesting text that proves that Rashīd al-Dīn was not only aware of Ghazzālī's thought, but he also considered himself similar to him.

During the last years of his life Rashīd al-Dīn knew that his opponents strived to accuse him of not being a Muslim, but a Jew. He knew that this accusation may put his life at risk, because of the rules of jurisprudence. In response to the accusation, Rashīd al-Dīn tried to prove his knowledge of religious sciences. Consequently, he wrote a comment on one of Ghazzālī's treatises.[59] His comment was more than three times longer than Ghazzālī's treatise. More interestingly, in that comment, he stressed similarities between himself and Ghazzālī who had faced similar accusations two centuries before.[60] This may explain properly that why the Rab'i Rashīdī accumulated worldly and otherworldly sciences that Ghazzālī had considered them as *fard 'ayn* and or *fard kifāya*. The complex included sciences which were essential, from Ghazzālī's point of view, to the well-being of the community. We may also be able to understand why the complex excluded sciences such as mathematics, geometry, logic, metaphysics, natural sciences, politics and

[58] Ghazzālī, *The Book of Knowledge*.

[59] Abbās Iqbāl, *Makātīb-I Fārsī-I Ghazzālī Ba-Nām-I Fadā'il Al-Anām Min Rasā'il Hujjat Al-Islām* (Tehran: 1333/1954).

[60] To study the case see: Flix Klein-Franke, "Rashīd Al-Dīn's Self-Defence through His Commenting on Al-Ghazzālī's Reply to the Opponents of 'the Proof of Islam'," *Le Muséon* 115, no. 1-2 (2002).

ethics.[61] Ghazzālī considered all of these sciences either as useless or harmful. He believed they do not make man closer to God. Keeping this in mind, the spatial organisation of the Rab'i Rashīdī will become more understandable with regard to Ghazzālī's theory of knowledge.

To sum up, what has been suggested so far is that the structure of the Rab'i Rashīdī is not just due to architectural considerations, but also because of other ideas, which are rooted in social structures. Part of the strength of the framework, which was developed in the first part of the thesis, lies in approaching structures and relationships as entities that stem from social orders. In this view, buildings are not free products of an empty mind. The premise of this contention is that the subject borrows an image from one schema of ideas, and applies it to another, previously unrelated, schema.

[61] Interestingly in *The Book of Knowledge*, Ghazzālī regarded philosophy not as a single discipline, but as a science that covers mathematics, geometry, logic, metaphysics, natural sciences and politics and ethics.

# CHAPTER SEVEN: THE UNIVERSITY OF CHICAGO

## An Unaccomplished Vision of the University of Chicago

### 2.7.1. Introduction

The previous chapter examined the discursive structure of architecture. It concluded by noting that the relationship that was drawn between Ghazzālī' idea of *'ilm* and the building did not result from a chance encounter of elements. Neither the complex nor the relationship between its parts were considered as pure creations of the mind of the actors. The reasoning is that social objects, such as books, buildings and even human subjects, could not come into existence independent of the discourses, which have surrounded them. This implies that we should remove the barrier between the common-sense category of objects and that of discourse, which are *about* objects.

But, if there is no distinction between object and objective discourse, then how are they related to each other? As discussed earlier, Foucault believed social objects are abstracted from historically specific discourses. His remark can be employed as a useful paradigm in our context. It suggests that if we are to examine the relationship between the building and discourses about it, then we need to examine the institutional effects of discourse and their roles in the constitution of individual subjects. Further consideration ought to be given to this contention. For now, the question is: what are the conditions in design that cause heterogeneous elements, parts and components of a University to be organised in a way that the resulting structure would correspond with institutional and social structures?

In order to answer this question and to examine that contention, this chapter will focus on the institutional relations in the case of the University of Chicago. The reason for

choosing the University of Chicago is that it did not stem from the mind of one single individual. The University of Chicago was the convergence of broader ambitions, regional developments and financial support from local urban industrial elites, as well as gifts from one of the wealthiest American businesspersons. In this case, individuals interacted with each other within their institutional affiliations, rather than their own individual positions. Closer consideration suggests that those institutional relations that exist among individuals involved in a building problem influence the spatial structure of architecture. For instance, the choice of Gothic as the architectural style of the University of Chicago reveals the structure of institutional relations.

### 2.7.2. A view on the paper

The University of Chicago was planned by Henry Ives Cobb (1859-1931). Cobb's bird's-eye perspective of the University founding plan (Fig. 7-1) is still the best known image of the University of Chicago, however his coherent vision of the campus was only partly realised and hence the place that he intended to create does not exist. The architectural style, as proposed in Cobb's plan, was precisely what Cobb called the very latest English Gothic. Buildings were then organised around quadrangles and fitted into the existing city grid. What we know for sure is that the choice of Gothic used in the University of Chicago was neither unusual nor unusually conservative at the time. It was not unusual because, in late nineteenth century Gothic was employed at Princeton and Yale Universities as well as many other American campuses. Moreover, it was not unusually conservative to design the campus in a Gothic style. Within a few years in Chicago, it was preferred twice to repudiate the new architectural movement which was developing in the city. The other time the city turned back to its home-grown innovative style was during the World's Columbian Exposition (1893) on a site adjacent to the University. In spite of this, the Gothic Revival of the late nineteenth century resulted from a broader cultural shift, as will be demonstrated shortly.


**Figure 7-1:** Henry Ives Cobb's eye-bird view of the University of Chicago. Cobb's bird's-eye perspective of the University founding plan is still the best known image of the University of Chicago; however his coherent vision of the campus was only partly realised and hence the place that he intended to create does not exist. The most important aspects of Cobb's plan were the use of the very latest English Gothic and the individuality of the buildings. From: Archival Photofiles, image number: apf2-02712, Special Collections Research Centre, University of Chicago Library.

The second feature of Cobb's plan of the University of Chicago is the individuality of the buildings. Obviously, the collegiate organisation of the academic structure would make it a proper way of planning to design each building as an autonomous unit. What seems to be particular is the fact that the buildings in Cobb's plan were envisioned in such a way that it looks as if each one was designed by a distinct architect. What I believe can make such an organisation more comprehensible is the space of uncertainty in which the University of Chicago was programmed, and more importantly financed. The organisation of buildings at the University of Chicago has not been yet examined from this point of view. I will focus on the way by which the University was financed by the founder and planned by the founding president to show the contribution that the architectural organisation, in term of the individuality of the buildings, could make to their situation and, at the same time, to the architect's professional condition when Chicago was experiencing an intensive physical and economic growth.

### 2.7.3. 'a college now, perhaps a University later'

In 1887, Henry L. Morehouse (1834-1917), the corresponding secretary of the American Baptist Home Mission Society,[1] pointed out in his annual report that although there was a feeling at the time that each Christian denomination should have its own educational institutions, the Baptists had no such organisation and no comprehensive plan.[2] In that report he also pointed out that such an institution could be established by a co-operative, rather than individual, action. Consequently, at the annual meeting of the Society in 1887, Morehouse suggested forming an American Baptist Education Society. His suggestion was approved a year later. Subsequently, Frederick T. Gates (1853-1929) was recruited by Morehouse to serve as corresponding secretary of the newly formed society.[3]

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[1] The American Baptist Home Mission Society had been supporting Baptist missions and promoting Baptist education since 1832.

[2] "Reports of the American Baptist Home Mission Society," (New York: American Baptist Home Mission Society, 1883-1889). pp. 71-73, quoted from: Richard James Storr, *Harper's University, the Beginnings: A History of the University of Chicago* (Chicago: Chicago University Press, 1966). p. 9.

[3] Storr, *Harper's University, the Beginnings: A History of the University of Chicago* pp. 9-11.

One of the Baptists who was probably an obvious choice from the beginning to assist the Society to finance their educational institution was John D. Rockefeller, a Standard Oil Company magnate.[4] So, the society began to seek his support. On May 15, 1889, Rockefeller wrote to Frederick T. Gates, in which he agreed to contribute $600,000 for the establishment of the new college provided that an additional $400,000 could be raised on or before 1st June 1890. The initial proposal had been a University to be open only to college graduates and to be located in New York.

The initial proposal of a University in New York became the obsessive dream of Augustus H. Strong, the President of the Rochester Seminary who was also personally acquainted with John. D. Rockefeller. Although at the beginning Chicago was not considered as an option for such an institution, the city immediately attracted the attention of Gates. He then decided that Chicago, the city which had trebled in size in two decades and had become the second largest city in the United States, was the best location for the educational institution which was to be established by the Society. Because Rockefeller would not fund two such institutions, Gates was the catalyst which caused Chicago to win the honour.[5]

One question had a great impact on the architectural organisation of the University of Chicago. There was a great uncertainty regarding how much money could be raised for the institution. As a result, a very crucial question regarding the character as well as the size of the institution generated much disagreement at the beginning and influenced the architectural planning of the University. There were many speculations regarding the future educational institution which was to be built in Chicago. In order to get an understanding of the case, it is necessary to know that Rockefeller was initially recommended by Thomas W. Goodspeed (1842-1927), who was involved in incorporating the University of Chicago, to give $1,500,000 and to join in further effort to build the institution when $500,000 had been raised from others. He was also recommended at that time to contribute another $200,000 for every $100,000 secured

[4] To know more about Rockefeller and his company see: Ida M. Tarbell, *The History of the Standard Oil Company* (New York: W. W. Norton & Company, 1966).
[5] Storr, *Harper's University, the Beginnings: A History of the University of Chicago* pp. 11-12.

from others until a total amount of $4,000,000 had been reached.[6] The size of the initial gift was lowered from $1,500,000 to $1,000,000 and then to $600,000 which, as pointed out earlier, was conditional.

Furthermore, Goodspeed was uncertain that such an amount of money could provide from the outset a solid foundation for the enterprise, considering he doubted that Baptists would subscribe enough money which was needed for a 'great University'. Thus in a letter to William Rainey Harper (1856-1906) who then became the founding president of the University, Goodspeed pointed out that there was no intention to establish a great University consisting of postgraduate departments only, but a college to begin with.[7] That comment obviously disturbed Harper who answered the institution is 'not a college, but a University'[8]. Although in the first letter, Goodspeed had not denied the possibility that the college may grow into something more. In his next letter, he again emphasised that 'we want a first-class College with certain graduate departments, a western Yale'[9]. Many letters were exchanged between Goodspeed, Gates and Harper they finally agreed on the 'idea of a college *now*, perhaps a University later'[10]. Rockefeller agreed with that idea because he did not, as he wrote to Harper, 'really need a University to absorb his surplus.' Moreover, he added: 'I had rather come to feel that if Chicago could get a College, and leave the question of a University until a later date,... that this would be more likely to be accomplished'[11].

Having put off the question whether or not the college would expand into a University for the future, Rockefeller's endowment would pay for the current expenses of the college, and it was expected that the fund for land, buildings, or graduate programmes would come from the $400,000 raised by the American Baptist Education Society as well as

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[6] Ibid. p.21.

[7] Goodspeed to Harper, Nov. 24, 1888, quoted from: Ibid. p.24.

[8] Harper to Goodspeed, Nov. 28, 1888, quoted from: Ibid. p.25.

[9] Goodspeed to Harper, Nov. 30, 1888, quoted from: Ibid. p.25.

[10] Harper to Rockefeller, Jan. 13, 1889, quoted from: Ibid. p.26.

[11] Rockefeller to Harper, Jan. 15, 1889, quoted from: Ibid. p.26.

future fundraising.[12] In order to raise the $400,000 fund, the Baptist Education Society first appealed to Chicagoan Baptists. Within two months the Society had raised close to $200,000 from the Chicagoan Baptists. When the Society members realised they could not expect more from Chicago Baptist community, they appealed to Baptist communities throughout the West and subsequently Gates issued an appeal in the American Baptist Journal. By February 1890 they had raised around $300,000, but still needed $100,000. The members then brought their appeal to the business community of Chicago. By this way, they could raise the necessary money from Chicago elites before Rockefeller's deadline for subscriptions.[13]

As a co-educational college, the University of Chicago was incorporated on September 10, 1890 with the support of the American Baptist Education Society. In order to meet Rockefeller's concern over the possibility of control of the University being wrested from the Baptist Education Society into the hands of Chicago's merchant elites, it was mentioned at the Article of Incorporation: at all times two-thirds of the twenty-one members of the board of trustees and the University President should be members of Baptist churches. Soon after that, additional donation from leading Chicago business people came in. This was followed by Rockefeller's additional gift of one million dollars in late 1890 and a gift of ten acres of land along the Midway from Marshall Field, the founder of the Chicago-based department stores who had hired H. H. Richardson in 1885

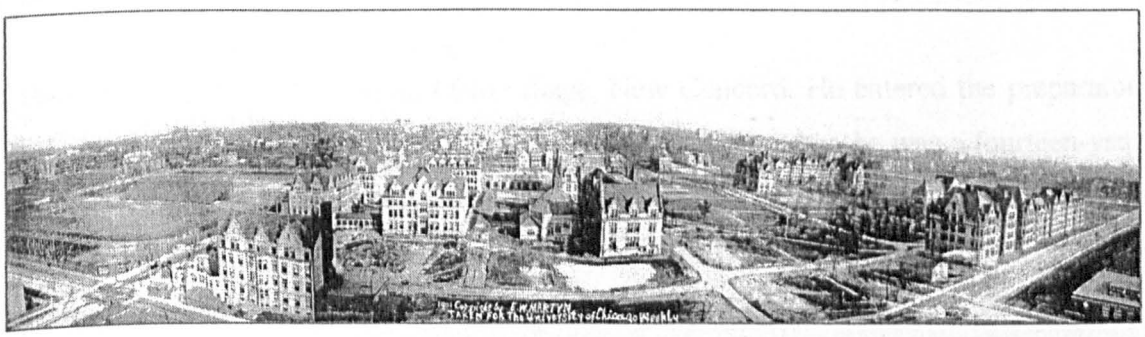

**Figure 7-2:** The University grounds as seen in 1901 from the top of the new heat, light and power plant of the University of Chicago. From: Archival Photofiles, image number: apf2-02563, Special Collections Research Centre, University of Chicago Library

[12] Robin F. Bachin, *Building the South Side: Urban Space and Civic Culture in Chicago 1890-1919* (Chicago and London: The University of Chicago Press, 2004). pp.31-32.

[13] Ibid. pp.32-33.

to design his famous warehouse.[14]

I highlight these events in order to show firstly that the founding of the University of Chicago from the beginning was tied with uncertainty and secondly that it represented the convergence of broader ambitions, regional developments, financial support from local urban industrial elites, and gifts from one of the wealthiest American businessmen. At the same time, the University of Chicago did not stem from the mind of one single person and was not merely the result of one tycoon's philanthropy or one particular education philosopher's desire. In contrast, it was the result of a complex interaction between non-academic interests which are partly examined so far and academic ideas and ideals which will now be pointed out. In an important sense, the University of Chicago was a hybrid of programmes and contingencies, communal actions and individual ambitions.

### 2.7.4. Harper's University ideal

Once the University was incorporated, the next concern was to find a person to become the head of the institution. From the beginning William Rainey Harper (1856-1906) who was a Baptist Professor of Biblical Literature at Yale University was the first choice. Harper was a biblical scholar who admired German scholarship. He was unanimously elected by the Board of Trustees as the first president of the University of Chicago.

Harper was born in 1856 in an Ohio village, New Concord. He entered the preparatory school of Muskingum College at the age of eight. In 1870, when he was a fourteen-year-old he was awarded the bachelor's degree from the local Baptist college. Three years later he entered graduate studies at Yale University, and in 1875, at the age of nineteen, as the youngest student ever to be awarded such a distinction, Harper received his PhD degree.[15] After teaching in Tennessee and also Denison University in Graville, in 1879, Harper left Ohio to join the Baptist Union Theological Seminary in Morgan Park, Illinois, as a

[14] Robert Twombly, *Louis Sullivan: His Life and Work*, vol. Viking (Elisabeth Sifton Books, 1986). p.157.

[15] Thomas W. Goodspeed, *William Rainey Harper: First President of the University of Chicago* (Chicago: Chicago University Press, 1928). pp. 3-11.

professor of Hebrew and cognate languages. It was through his enterprises at Morgan Park that Harper had, within just a few years, came to a potentially far more radical conception of academic profession than he had held at Yale and Denison. It was an ideal based on rigorous critical scholarship and intensive instruction.[16]

For Harper, the University teacher would be an instructor in the classroom, on the lecture platform, in the graduate seminars, and through correspondence courses. The scholar would be an administrator as well as teacher, organising the varied programme of instruction. In 1886, at the age of thirty, Harper was called back to Yale where he was named, in 1889, the first Woolsey Professor of Biblical Literature. This honour was quickly overshadowed in 1890 when William Rainey Harper was offered the presidency of the University of Chicago. This led him, a year later, to be formally appointed as the first President of the University of Chicago.

As an administrator, Harper was characterised by Laurence R. Veysey as a non-ideological administrator who was basically untouched by the power of abstract ideas.[17] I may agree with Veysey that Harper did not organise issues on the basis of a normative thought process. He believed that a University should provide an equitable foundation for all variety of endeavours playing their role within a single institution. But it is difficult to believe that Harper was untouched by abstract ideas. At the time of his nomination as the President of the University of Chicago, Harper's beliefs caused him some trouble. The story goes back to a letter by Augustus H. Strong who had for some time pressed Rockefeller to fund a New York University. Strong wrote to the philanthropist accusing Harper of heterodoxy. His contention was based on Harper's publication of a paper for Crawford Howell Toy. In his early Chicago career, in 1880s, Harper edited a scholarly journal called *Old Testament Student* promoting the study of the Old Testament. In that journal, Harper would publish papers containing progressive views, including the particularly troublesome paper by Harvard Professor David Gordon Lyon, the Protégé of

[16] Daniel Lee Meyer, "The Chicago Faculty and the University Ideal, 1891-1929" (University of Chicago, 1994). pp.40-48.

[17] Laurence R. Veysey, *The Emergence of the American University* (Chicago and London: The University of Chicago Press, 1965). pp.368-369.

C. H. Toy. Lyon believed biblical criticism does not differ from the critical study of any other ancient writings.[18] Reactions to Lyon's paper were different, and Harper took a favourable view of Lyon's conclusion and published it as he felt that divergent views should be published in his journal. So when Harper's fame as a scholar was spreading, there was also a growing concern over his progressive views even among some University constituency.[19]

After much correspondence between Strong, Harper, Rockefeller, Gates and Goodspeed, in the end Strong curtailed his criticism of Harper and offered mild support for the new school. It was not because he was convinced that the Chicago school would be an orthodox one, but because his plan for a New York school was suspended by Rockefeller who made it clear that he would not fund it. However, Harper did not gravitate toward orthodoxy as some had hoped and continued to promote critical views, and sometime his progressive views were the subject of public concerns.[20] To be sure, if Harper was discredited before Rockefeller and public philanthropists, then his ambitious plan would fail.[21]

By the time Harper finally accepted to act as the President of the University of Chicago, because of his constant preoccupation with the operational details of his various enterprises and responsibilities, he had not written or published any thought on an ideal University. He should have envisioned the University of Chicago after he was appointed as the founding president. The University that Harper planned was to be a comprehensive institution providing instruction in every discipline of the higher education. It would

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[18] David Gordon Lyon, "The Results of Modern Biblical Criticism," in *The Second Annual Baptist Autumnal Conference* (Boston: 1883). pp.60.

[19] Jeffrey Paul Straub, "The Making of a Battle Royal: The Rise of Religious Liberalism in Northern Baptist Life, 1820-1920" (2004). pp.208-212.

[20] Ibid.p.218.

[21] There was also some opposition to Harper from the public. Before the University opened its first classes, Harper went to Germany to gain a more intimate knowledge of German Universities and also to purchase books for the library. Following that, it was claimed that Harper went to Germany, apparently to purchase a theological library, but really to advance his teaching of defective views. Having been impugned for catching the spirit of Harvard and the German rationalistic Universities, he was publicly accused by A. C. Dixon that he will fill pulpits of their churches, 'with men of Unitarian views in regard to Bible and the way of Salvation.' See : Ibid. p.221.

organise its activities in three main divisions: the University Proper (including all regular work of academies, colleges, affiliated colleges), the University–Extension work (an organic part of the University which would consist of lectures, evening and correspondence courses as well as the library extension) and, the University Publication (consisting of bulletins, catalogues, official documents, journals, scientific reviews, and the purchase, exchange, plus sale of books for University use). Harper's initial plan for the University of Chicago was approved by the trustees in December 1890, and was published as *Official Bulletin No. 1.*

The University structure would be held together by a group of strong department heads, Head Professors with an extraordinary salary of $7,000[22], who would direct and control academic affairs in their areas.[23] This was an idea derived from the German system in which the full professor or *Ordinarius* was the principal representative of his academic field in the institution. In America, each faculty member represents a distinct specialisation within a discipline. The head professors, in Harper's plan of the University, found such predominant position that many junior members of the faculty would characterise them sarcastically as Greek gods, dwelling on an academic Olympus, 'in real apart from ordinary mortals'. This led in 1898 to a change in title from 'Head Professor' to 'Professor and Head of Department', a well-intentioned gesture proposed by Harper and approved by the board of trustees.[24]

Harper's University plan would respond to many issues troubling academic institutions. Every academic activity in the University Proper could be accessed publicly through the learning offered by the University Extension and the wide dissemination of printed materials through the University Publication division. These divisions would properly meet Harper's concern regarding the relationship between the University and the world beyond its walls. It could also represent the image of a University in which the

[22] using the nominal GDP per capita, $7,000 in 1892 has the relative value of around $1,290,000 in 2008, (source: *www.measuringworth.com/uscompare* , Access date: 6 January 2009).

[23] It is worth noting that at that time the full professors who were head professors' immediate subordinate would receive $3,000 or less.

[24] Meyer, "The Chicago Faculty and the University Ideal, 1891-1929". pp.157-158.

production of knowledge through the authority of scholarship would be intimately linked to teaching and publication, and therefore to the social fabrics.[25]

In order to meet the needs of the new generation of academic professionals mostly graduating from Germany, the University of Chicago, in its content, was oriented towards the ideal of investigation as it was practiced in German Universities. On the other hand, for the reason that the University of Chicago was established under the support of the American Baptist Society, it should obviously be Christian in character. To draw an understanding of the University of Chicago from this point of view, I will focus on the German notions of *Bildung* and *Wissenschaft* in order to demonstrate that Harper's plan can be characterised as a way by which the scientific enquiry into the world was rendered as practice of searching for the truth, that is, in a religious sense, searching for God.

### 2.7.5. *Bildung* and Protestant practice

Throughout the early nineteenth century in Germany, the concept of *Bildung* expanded as an identity maker transcending the traditional definitions of class, occupation or religious affiliation. Despite difficulties in specifying the exact group of people which ranked from educated and even workers that in some fashion can be classified as *Bildungsbürger*, there are consistent values derived from secularised ideals such as self-discipline, social conscience and manners to distinguish this group. What is currently known as *Bildungsideal* is a diverse body of German ideals with social, moral, and cultural values.[26] To be sure, these new values unfolded against a traditional map of norms and laws and originated from the revolutionary traditions of Lutheran Reformation and the revolving ideals of Pietism.

Like *Wissenschaft* and many other modern conceptions, the notion of *Bildung*, as an

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[25] Ibid., 58-60. pp. 60-80.

[26] Perry Wayne Myers, "The Double Edged Sword: The Cult of Bildung, Its Downfall and Reconstitution in Fin-De-Siècle Germany (Thomas Mann, Rudolf Steiner, and Max Weber)" (The University of Texas, 2002).pp.16-20.

intellectual concept, was mainly developed by Kant. In his 1784 essay *An Answer to the Question: 'What is Enlightenment?'* Kant characterised the era as 'man's emergence from his self-incurred immaturity'. The Enlightenment meta-narrative of maturity, from the moral point of view, consists in the use of reason in all matters of conscience. The mature adult which is in a sense the objective of *Bildung* consists in the use of reason. *Bildung* was a response to one of the great promises of the European Enlightenment, i.e. the education of the human race. In both broad and narrow sense, *Bildung* means 'education'.[27] The very basic characteristic of *Bildung* which was influential on the organisation of higher education in the young countries of the world in general, was its *organic* process through which one learns to recover what one is in essence: man can only become Man by education.[28]

The ideals of this German trend were developed in the notions of *Bildung* meaning cultivation through a harmony of cultural, rational and scientific education.[29] In the pedagogical domain, *Bildungsideal* had more shared interest with the protestant notion of merit and self-cultivation intended to educate human beings as a means of promoting individual usefulness in society.[30] It was believed that an individual would contribute directly to the community through his attainment of knowledge. Therefore while *Bildung* would imply 'self-formation' which had a personal content at the beginning, it later became integrated with bourgeois community interests and became a much less personal, more public concern by the mid nineteenth century.[31] The emphasis on the communal aspects of knowledge was also one of the Protestant ideals which opened up the possibility of thinking and acting in a scientific and modern way.

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[27] Jacqueline Ann Helsop, "Subjectivity, Bildung, Pedagogy: 'Coming of Age' in Modernity" (University of Saskatchewan, 1986). pp.1 -11.

[28] Ibid. p.93.

[29] Timothy Bahti, "Histories of the University: Kant and Humboldt," *MLN: Modern Language Notes* 102, no. 3 (1987).

[30] Myers, "The Double Edged Sword: The Cult of Bildung, Its Downfall and Reconstitution in Fin-De-Siècle Germany (Thomas Mann, Rudolf Steiner, and Max Weber)". p.21.

[31] Daniel Tröhler, "The Kingdom of God on Earth and Early Chicago Pragmatism," *Educational Theory* 56, no. 1 (2006).

In brief, the major influence of *Bildungsideal* on the protestant movement was that it caused the relatively secular and liberal practice of the new conception of science, which was in no way a departure from religious values, could be regarded instead as a more sublime form of transmitting those values.[32] Accordingly, Harper's ambition was centred on the well-being of the communities of faith and science. It was directed towards the preservation of their integrity by synthesis of new structures and methodologies.

At the same time, it should not be surprising that the University of Chicago was founded because of an act of philanthropy, as practiced by a network of wealthy Americans of mostly protestant origin, by John D. Rockefeller for example, who was a deeply religious Baptist.[33] As will be discussed later, in nineteenth-century American University architecture, the shift of attitude towards science which was pointed out here was associated with and probably reflected by a change in style from Classicism to Gothic.

Following the reorganisation of Prussian administrative bureaucracy (the 'Prussian Reform'), and the philosophic writings on and for the University, from Kant and Schelling, these ambitions flourished in 1810. In that year, Wilhelm von Humboldt (1767-1835), the Prussian minister of public instruction, founded the University of Berlin. In organising the University, Humboldt argued for the University as an institution maintained around the unity of teaching and research, one embodying the *Bildung*'s ideal of elevation of culture through the training of youth, and the other one representing the *Wissenschaft*'s principle to investigate new fields of learning.

### 2.7.6. An American account of *Wissenschaft*

In a noteworthy comment, Michael Sorkin writes that the initial architectural view of the University of Chicago as it was presented by its founding architect (See: Fig. 7-1) is

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[32] Ibid.

[33] The Baptists were a group emerged from the Puritan movement in the early seventeenth century. Their underlying conviction was that only true believers, i.e. those who have personal faith in Christ and confess their faith through baptism as adults, comprise the true church.

striking for what it does not show. The perspectival image is drawn within the context of continuous street grid, each block filled with greenery. What is missing in that view of the University of Chicago is any idea of the community beyond its walls. It represents, according to him, a portrait of the ivory tower, flourishing in its isolation.[34] Such a contention is partly true; because we argued earlier that Harper was very much concerned with the way by which a University is connected to the public.

From the beginning there was a principle dilemma for the Board of Trustees and the President which can be defined in terms of the opposition between the traditionally bound teachers with an organic relation to the society versus the ideal of unrestricted empirical research aiming at promoting a culture of elitism. The long history of this controversy can be traced back to the time when the University was still a *studium generale,* i.e. a medieval legal corporation and social institution devoted to the practice and transmission of a recognised body of expertise.[35]

By the mid nineteenth century the two dominant academic cultures that would strongly influence American higher Education were those of England and Germany. The English University pattern was embodied by the foundation of Oxford and Cambridge. The main characteristic of these two Universities was based on autonomous colleges each governed by their resident fellows. When Americans visited English Universities in mid nineteenth century, while the similarities of culture and language were attractive, they found it less stimulating than what they expected. The English Universities were still locked in conservatism associated with their aristocratic origins. Because of that, it should not be unexpected to tell that the first movement towards creating a modern University in America came about in Germany.

As a result of these encounters, shortly after the middle of the nineteenth century, in the United States the meaning of the word 'science' began to change considerably. Before

[34] Michael Sorkin, *Other Plans: University of Chicago Studies, Pamphlet Architecture 22* (New York: Princeton Architectural Press, 2001). p. 9.

[35] The initial development of studium generales took place in Italy (Bologna) and France (Paris). See: Alan Balfour Cobban, *The Medieval Universities: Their Development and Organization* (London: Methuen, 1975). p. 21-25.

that, 'any well-organised body of principles concerning any area of knowledge or speculation had been called a science.'[36] The scientific method applied to any topic was not considered to be empirical. Empiricism was regarded as an undesirable randomness of effort, and it was the task of science to overcome this unhealthy approach in the name of science. This older meaning of science undertook the first change with the age of Darwin in which the word 'science' came to be associated with specific evidence observed in nature.

This English-based movement changed the academic curriculum in United States mainly by introducing natural history and natural philosophy. But, the most fundamental trend which changed Americans' conception of 'science' as well as their University academic structure was the ideal of scientific research as formulated in Germany.[37] This new spirit of the Germanic University was based on dual ideals of *Bildung* and *Wissenschaft* which emerged following the reorganisation of Prussian administrative bureaucracy in early nineteenth century. I explained earlier the German concept of *Bildung*. For now it seems helpful explain the second concept which was developed in Germany that was also influential on American Universities, i.e. the notion of *Wissenschaft*.

The concept of *Wissenschaft* was basically developed by Kant, in *Conflict of the Faculties* (1798). Kant's major contribution was to differentiate the real world from the world of phenomena, as discussed in the second chapter of this investigation. He argued for the underlying rationality of the universe. This rational approach to the 'real' and the 'phenomenal' was known as critical method. Therefore, the main interest of *Wissenschaft* is the truth which, for Kant, is the product of reason's free judgment. These premises led German scholars to the hypothesis of the fundamental unity of all branches of knowledge. So, the key characteristic in understanding German *Wissenschaft* is latent in the fact that the German version of *Wissenschaft* itself was, in a word, the only interest of the philosophy faculty, because it was the task of philosophy to formulate any overall laws.

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[36] Veysey, *The Emergence of the American University*. p.133.

[37] The image of this ideal was first symbolised in the Johns Hopkins University, 1876.

However, it was Kant's grand contention that reasoning towards truth should be the mission of the University, the idea of the centrality of *Wissenschaft,* for the whole University, was transformed in American Universities in quite different way. In America, the scientific spirit, rather than speculative enquiry into the nature of truth came to shape the American students' conception of *Wissenschaft.*[38] By the late nineteenth century, the first characteristics of an American University, and perhaps the most important one, had come into existence. It was a balanced concern for both scientific facts and human values. This balance was depicted in the academic organisation of Chicago University where there was a proportionate attention to both sciences and humanities.

The University movement of the late nineteenth century clearly represented a different character using the revival of Gothic architecture. In order to comprehend the underlying force behind the change, it is vital to know that 'the academic boom of the 1890s' according to Laurence Veysey was part of a larger social and political reform movement led by Protestant reformers. In the religious milieu of the nineteenth century, what caused the idea of *Wissenschaft* to flourish in America was sharing common ground with the Protestant movement, in which religious practice was more important than theological speculation. More importantly, the American protestant movements of the nineteenth century shared interests with the Germanic ideal of *Bildung.*

In America, the initial step towards a Germanic University was taken by Charles Eliot, an industrial chemist who became the first non-clergyman President of Harvard in 1869. With the help of practical-minded trustees he succeeded in reforming the classical curriculum at Harvard by introducing a research-oriented academic practice. This was aimed at educating elites that could, as he believed, lead America to a democratic and secular salvation. His reforms were supported by scientists and academics who wanted to introduce the German University research ideal to America.[39] Eliot's German-inspired reform was a successful pattern. It was later followed by other American's higher

[38] Jurgen Herbst, *The German Historical School in American Scholarship: A Study in the Transfer of Culture* (Port Washington, N. Y./London: Kennikat Press, 1972). pp.53-71.

[39] Edward Schaffer, "The Protestant Ideology of the American University: Past and Future Prospects," *Educational Theory* 40, no. 1 (1990).

education institutions.

The first to crystallise the full German conceptions of scholarship (*Wissenschaft*) into a viable institutional form was Johns Hopkins University founded in 1876.[40] Very similar to the German model, the faculty was organised into three ranks: the permanent Professors, men of acknowledged reputation in their field of study, the Associates or Assistant Professors. Below these two groups were the Assistants or Instructors. However Johns Hopkins was based on a German-style University, but it had a collegiate organisation largely in response to community pressure. It was through the academic practice of Johns Hopkins that PhD as the higher standard of graduate education and the basic credential for academic career was widely recognised. During its early years, Johns Hopkins University had a small but selected body of graduate students. 'To look through the list of first students at the Johns Hopkins University', W. C. Ryan asserts, 'is to obtain a preview of the men who were to become the distinguished members of the faculties of American Universities in the thirty or forty years that followed.'[41] Harper would acknowledge the important role of John Hopkins University in promoting American higher education. He once declared that there was no institution in America performing real University work until the establishment of Johns Hopkins University.[42]

At the University of Chicago, the tensions within American higher education were openly visible. Harper was focused to concretise the conception of a research-based comprehensive academic community of scholars organised in separate academic departments. In 1892, Harper listed twenty one departments that he intended to establish. Humanities were to be represented by Philosophy, History, Social Science, Political Economy, and Political Sciences which came alongside departments devoted to language and literature studies including Greek, Latin, English, Romance, Germanic, Semitic, and Comparative Philology. Physics, Chemistry, Biology, Geology and Mineralogy, and

[40] Roger L. Geiger., *To Advance Knowledge: The Growth of American Research Universities, 1900-1940* (New York: Oxford University Press, 1986). pp. 7-8.

[41] George Dykhuizen, "John Dewey at Johns Hopkins," *Journal of the History of Ideas* 22, no. Jan. - Mar. (1961). p.103.

[42] Thoma Lloyd Malone, "A History of the Doctor of Philosophy Dissertation in the United States 1861-1930" (Wayne State University, 1981). p.54.

Mathematics and Astronomy represented Sciences, whereas Engineering was to be divided into Civil, Mechanical, Electrical, and Mining.

Harper was clear about the division between Humanities and Sciences and the sub-division between pure and applied branches of study. From the beginning, the idea of the department was essential to Harper's disciplinary conception of academic education. Although there were several divisions such as faculty, school and college within the University of Chicago, the *Official Bulletin, No. I*, described the departments implicitly as units of government.[43] In practice, departmental organisation would provide specialised studies which were a matter of principle for Harper. More importantly, it allowed Harper to make necessary changes in the University organisation while the various works of framing and financing the University was under way.

### 2.7.7. The architect as an organiser

After the University was chartered, the Committee on Buildings and Grounds was the first subcommittee established in 1890. Once again, in April 1891, it appealed to Chicago's elites to raise funds for campus buildings. With an overwhelming response, the board raised over one million dollars in ninety days. At the first meeting on July 10, 1890, Martin Ryerson sketched out the immediate needs of the University. Committee members then asked six of the leading architectural firms in Chicago to put forward their plans. Among them, the firms of Patton and Fisher, Flanders and Zimmerman, and Henry Ives Cobb responded with plans.[44] Because trustees would prefer an individual architect rather than a firm so that the members of the board could work more directly with the architect, on June 4, 1891, the committee selected Henry Ives Cobb (1859-1931, Fig. 7-10) as the architect.

Unlike many architects of the Chicago School such as Daniel Burnham, Louis Sullivan, William Holabird and Martin Roche, Cobb had not worked in the office of William Le

[43] Storr, *Harper's University, the Beginnings: A History of the University of Chicago* , p.94.

[44] Bachin, *Building the South Side: Urban Space and Civic Culture in Chicago 1890-1919.* p.43.

Baron Jenney (1832-1907). Cobb completed his architectural education in the Massachusetts Institute of Technology and obtained his practical experience in the Boston-based firm of Peabody & Stearns.

The main influence on Cobb was Henry Hobson Richardson (1838-1886) who had studied for a while in Paris in the Ecole des Beaux-Arts. Richardson was a successful architect in Boston since his return from Paris in 1866. He was familiar with the latest English and French architecture from his years abroad. When he was still a beginning practitioner, his buildings reflected his early interest in continental styles, particularly in the first three years of his practice in Boston. From 1869 to 1872, Richardson distanced himself from the stylistic ideals of his contemporaries and tried to find his own sources within the architecture of the past. Subsequently, in 1872 Richardson won the competition to design Trinity Church in Boston's Back Bay, a project which according to James F. O'Gorman, not only marked the architect's emergence as one of the foremost designers in the country, it was a turning point in American cultural history as well.[45]

Cobb moved to Chicago, because he won the Union Club Completion in 1882.[46] Soon after his arrival in Chicago, Cobb made a partnership with Charles Sumner Frost who had also worked for Peabody & Stearns. Before the partnership was dissolved in 1888, they undertook many projects including, the Potter Palmer Mansion, 1882-83, the first Chicago Opera House, 1884-85, and the Owings Building, 1887.[47] The early years of the 1890s were the busiest for Cobb who was working independently after his partnership with Frost ended. He completed important projects including the Chicago Historical Society, 1892, and the Newberry Library, 1887 (Fig. 7-4), as well as the Fisheries building for the Exposition. Remarkably, during these years, Cobb was working with no

[45] James F. O'Gorman, *H. H. Richardson: Architectural Forms for an American Society* (Chicago: The University of Chicago Press, 1987). pp. 55-70 .

[46] It might be interesting to note that, four years Cobb's arrival to Chicago , Richardson designed the Glessner house (1886-1887) in Chicago.

[47] Karin M.E. Alexis, "Henry Ives Cobb: Forgotten Innovator of the Chicago School," *Athanor* 4 (1985).

partner at his firm although he had around 100 office staff.[48]

Shortly after that the University of Chicago was conceived, and largely due to his fame as a Chicago architect of great talent, Cobb was commissioned to design a building at the World's Columbian Exposition. The fair was to celebrate the 400th anniversary of Columbus's discovery of America. Directed by Chief of construction Daniel H. Burnham, Frederick Law Olmsted's firm was responsible for the overall plan of the grounds. In December 1890, Burnham, his partner John Root (1850-1891), and a panel of consultants decided to ask ten prominent American architectural firms including Chicagoans Adler & Sullivan, William Le Baron Jenney, Henry Ives Cobb, Charles S. Frost, and Burling & Whitehouse, along with New Yorkers Richard Morris Hunt, George B. Post, and McKim, Mead & White, Peabody & Stearns of Boston, and Ware & Van Brunt of Kansas City to design the buildings. The fair was envisioned by Burnham to have a classical character while Root would imagine a series of more fanciful buildings in Romanesque style. After Root's death, it was decided to build the fair in the way it was formulated by Burnham.[49] Along with Louis Sullivan, Henry Ives Cobb's Fisheries building was generically Romanesque, although they both departed significantly from the architectural style as well as principles they had developed in Chicago over years. Thus Cobb was distinguished by historians due to the way he had designed the Fisheries Building at the fair.[50]

When Cobb was in Boston he became quite familiar with Richardson's way of design. There should be no surprise that the earliest schemes proposed by him for the University of Chicago consisted of Romanesque buildings grouped around formal quadrangles (Fig. 7-5). Cobb's initial plan for the University of Chicago recalls the then recently completed campus of Stanford University which was master planned by F. L. Olmsted (Fig. 7-3), who also designed the overall plan of the World's Columbian Exposition, and designed by Shepley, Rutan & Coolidge, Richardson's successor firm. Likewise, the University of

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[48] "Description of Offices of Henry Ives Cobb," *Inland Architect and News Record* 15 (1895).

[49] Alexis, "Henry Ives Cobb: Forgotten Innovator of the Chicago School." p. 45.

[50] Twombly, *Louis Sullivan: His Life and Work.* P.262.

Chicago which was funded by one of the wealthiest men of the late nineteenth century, John D. Rockefeller, Stanford University was also shaped by a personal motive for its founding. It was financed by Leland Stanford (1824-1893), President of the Central Pacific Railroad and ex-governor of California, in the memory of his son who died in 1884 while the family was touring Europe.

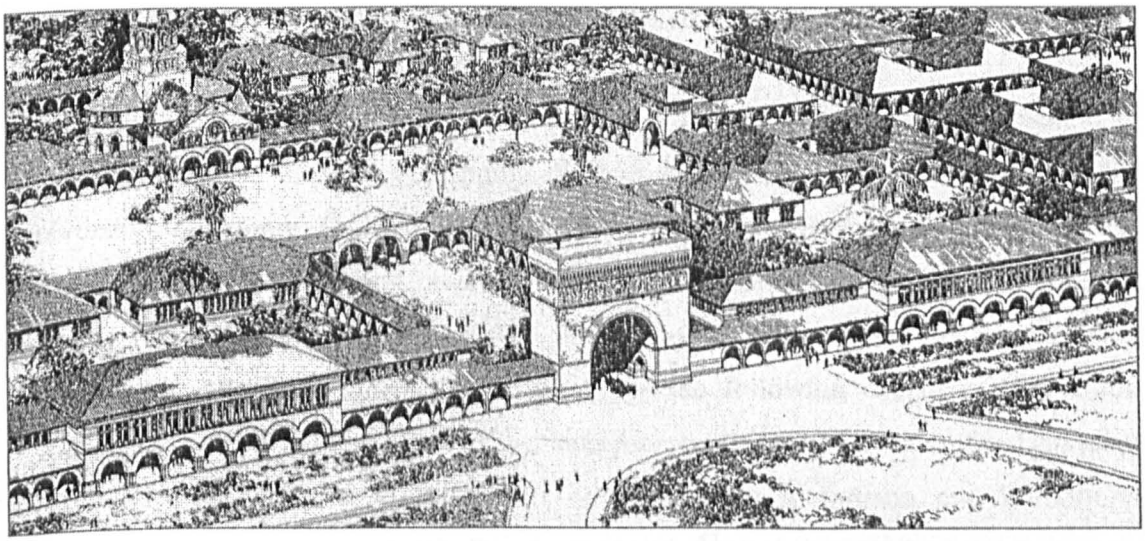

**Figure 7-3:** A part of rendering of Olmsted and Coolidge's master plan for Stanford University, 1888. Cobb's initial proposal for the University of Chicago had some similarities with this project. From: Paul Venable Turner's *Campus: an American planning tradition.*

On June 25, 1891, Cobb submitted his sketch for a campus laid out on a quadrangle with a Richardsonian Romanesque building design (Fig. 7-5). His layout divided the University into seven quadrangles, a main quadrangle surrounded by six smaller quads, three on the north and three on the south. It was not the first time that Cobb employed a quadrangle pattern to organise the space. He had used a similar layout in designing the Newberry Library maybe because he believed that the plan permits easy expansion.

If the architect's first vision had been actualised, the University of Chicago should have been built in the Romanesque style. It did not happen. The University of Chicago was built in Gothic style. The reason which prevented this from happening may seem to be so simple that Martin Ryerson (1856-1932) - the President of the Board of Trustees and a member of the Committee on Buildings and Grounds - favoured a Gothic design. He believed Gothic would help the University to be identified with European institutions.

From the point of view of progressive and secularly oriented education, the choice of Gothic style used at the University of Chicago represents some challenges. In the early decades of the nineteenth century, the cultural leaders of America held the view that the ancient classic world of Greece and Rome should be the cultural inspiration for America. Following the American Revolution, there were obviously political reasons for such a tendency. One of the early buildings which represented the classical ideal in America was the Union College designed by Joseph-Jacques Ramée (1764-1842) in 1813.[51]

Four years later, in 1817, Thomas Jefferson who tried to promote the idealisation of classic antiquity in America both politically and architectural, proposed a plan for the University of Virginia (Fig. 7-6) which shows many similarities with the Union College (Fig. 7-7). The design of the University of Virginia consisted of a grass mall lined with buildings, with a central structure (the library) as a focal point. This was a major influence on American University planning for the following decades. With a few exceptions, several campuses in mid and later nineteenth century such as the University of Wisconsin at Madison, the University of Notre Dame in Indiana, and Wilberforce University in Ohio, employed a similar plan and style.[52]

One should consider that Harper wished to show that the University is the prophet of this democracy and, as well, its priest and philosopher, as he told an audience at Berkeley, California, in 1899.[53] It was hence important to employ an architectural style that reflects the University's broader cultural and educational goals. Ryerson convinced Harper to visit Trinity College in Hartford, Connecticut, and also to obtain Yale's plan for Gothic buildings.

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[51] Talbot Faulkner Hamlin, *Greek Revival Architecture in America: Being an Account of Important Trends in American Architecture and American Life Prior to the War between the States* (London: Oxford University Press, 1944).

[52] Paul Venable Turner, *Campus, an American Planning Tradition* (Cambridge, Massachusetts, and London: MIT Press, 1984). pp. 76-87.

[53] William Rainey Harper, *The Trend in Higher Education* (Chicago: Chicago University Press, 1905). p.12.

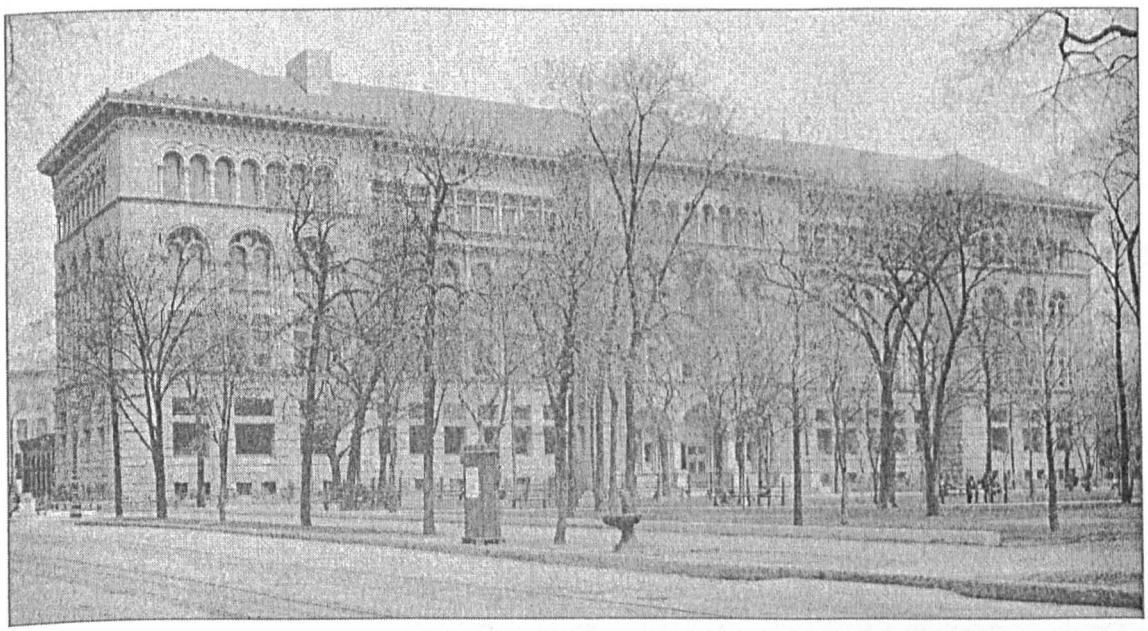

**Figure 7-4:** The Newberry Library built in 1892 from a design by Henry Ives Cobb. The initial proposal for the University of Chicago was similar to this building. From: Harold M. Mayer and Richard C. Wade, *Chicago: Growth of a Metropolis* (Chicago: University of Chicago Press, 1969).

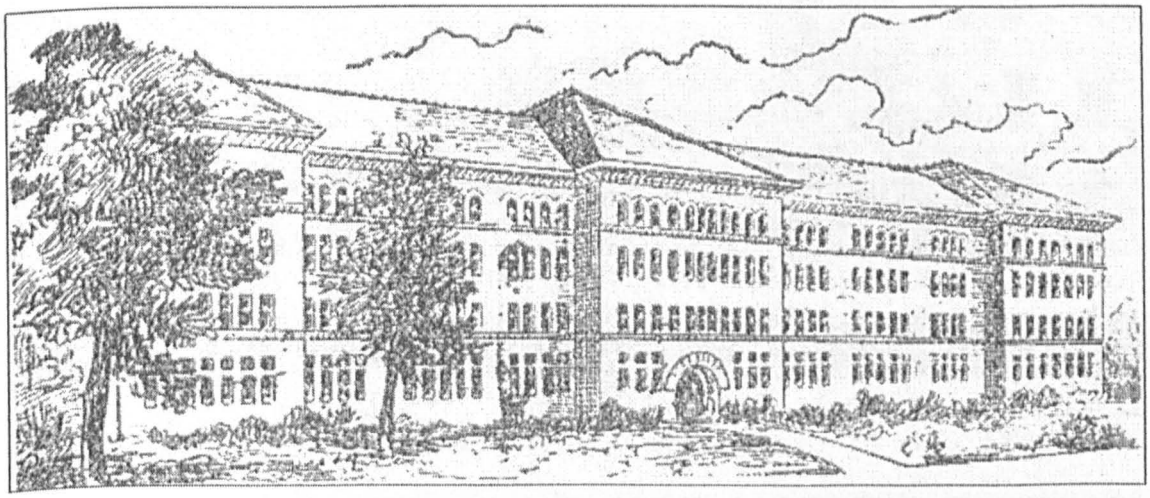

**Figure 7-5:** Henry Ives Cobb's initial Romanesque-style sketch for the University of Chicago. From: Michael Sorkin, *Other Plans: University of Chicago Studies*, Pamphlet Architecture 22 (New York: Princeton Architectural Press, 2001).

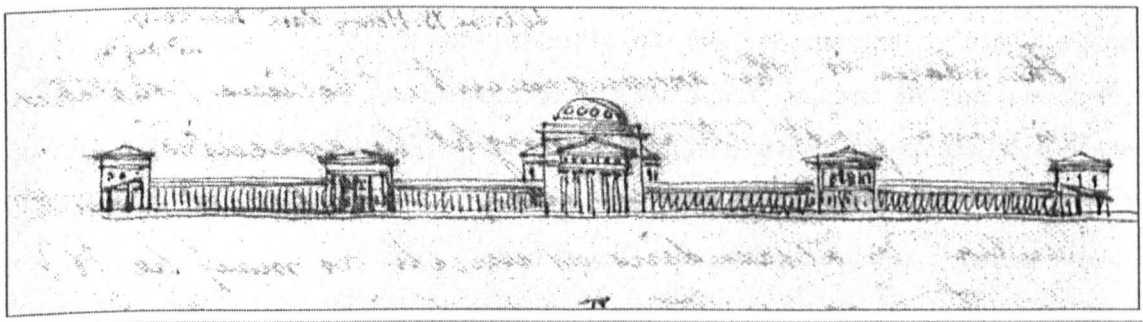

**Figure 7-6:** A sketch proposed by B. H. Latrobe for the University of Virginia. This sketch was drawn by him in a letter to Thomas Jefferson. From: Mary N. Woods, "Thomas Jefferson and the University of Virginia: Planning the Academic Village," *The Journal of the Society of Architectural Historians* 44, no. 3 (1985).

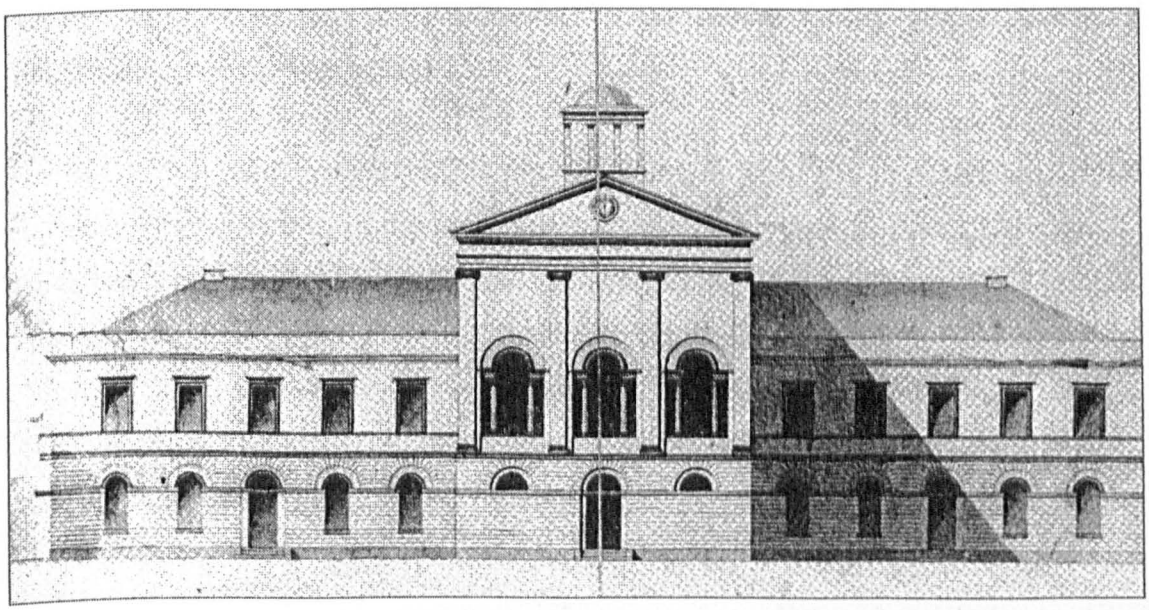

**Figure 7-7:** Union College designed by Joseph-Jacques Ramée. From: Venable Tuner, *Campus, an American Planning Tradition* (Cambridge, Massachusetts, and London: MIT Press, 1984).

The most obvious feature at both Yale and Trinity College was the use of quadrangles as a tool in organising space. It was basically an English tradition to use enclosed quadrangles or courtyards at colleges. There were several reasons for the use of the quadrangle pattern in England. The most widely accepted reason was the tradition of the cloistered monastery which was later employed in English Colleges.[54] The second reason was that the enclosed quadrangles could function as defence against potential threats from the townspeople as well as the outside armies.

This was an important issue in English Universities, because students were constantly involved in brawls with the townspeople and were often at odds with each other.[55] Furthermore, because a college could be closed off at a few gate-points, quadrangles provided college authorities with a more rigid control over the students. This last reason was not the main reason that the quadrangles were employed in the United States. Because, unlike their English counterparts, the quadrangles usually used in American Universities were open on one side.[56]

The English enclosed quadrangles had not played an important role in American campus planning. In spite of that, in the late nineteenth century there were several Universities, which are exceptions to this contention.[57] Among them, there are two cases of campus planning that directly influenced the architectural organisation of the University of Chicago. The first one was a series of buildings erected at Yale College from the late 1860s to 1900. The arrangement of buildings finally led to a relatively quadrangular enclosure around its 'Old Campus'. Further to an interest in the traditional collegiate

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[54] However from an architectural point of view, the English colleges and monasteries were patterned on the basis of a rather identical model, Robert Willis demonstrated the complex development of the English colligate plan. See: Robert Willis, *The Architectural History of the University of Cambridge and of the Colleges of Cambridge and Eton*, ed. John Willis Clark, vol. 3 (Cambridge: Cambridge University Press, 1986). pp.247-282.

[55] Vivian Hubert Howard Green, *A History of Oxford University* (London: Batsford, 1974). p. 19.

[56] In the United States, the best instance for such a quadrangle was expressed in early nineteenth century at the University of Virginia designed by Jefferson.

[57] By Paul. V. Turner for example, See: Paul Venable Tuner, *Campus, an American Planning Tradition* (Cambridge, Massachusetts, and London: MIT Press, 1984). pp. 215-253.

principles,[58] the main reason behind Yale's quadrangular organisation was practical problem of Yale's crowded position in the middle of New Heaven.[59]

The second one was the plan proposed for Trinity College in Hartford, Connecticut designed by an English architect William Burges (1827-1881). Even though largely inbuilt, the plan that Burges had envisioned for Trinity then influenced campus designers in America. A decade later, the master plan for Stanford University designed by Olmsted who was involved in Trinity College planning, exhibited a somewhat similar arrangement of quadrangles, although its buildings were in Richardsonian Romanesque.

As mentioned before, in a sort of genealogical change the University of Chicago was not built in the Romanesque style, because Martin Ryerson had insisted the University to be built in Gothic style. Thus, the University of Chicago was built in the way that Yale and the Trinity had been constructed.

The University of Chicago is also very similar to Glenalmond College in Scotland (Fig. 7-11). I do not want to imply that this happened by chance. Trinity's first president, Abner Jackson (1811-1874), had travelled to England in the summer of 1872 to study English Universities and to choose an architect. When he was at Oxford, he was advised[60] that Burges was the right person who could design the University he intended to build. With Burges as guide, Jackson then visited several colleges[61] in England as well as Scotland. When Jackson returned again to England in the next year, 1873, to work with Burges on the plan, it was above all the impression of Glenalmond College which he took as the model of the University he was to introduce to America. He was highly impressed by Glenalmond College, which he described it as 'a most noble pile of buildings.' Consequently, Burges's plan was an impressive quadrangle complete with chapel, library,

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[58] Yale's president during most was this period was Noah Porter who was an advocate of the traditional collegiate principles.

[59] Tuner, *Campus, an American Planning Tradition.* p. 217.

[60] By J. H. Parker who was Burges's friend.

[61] Including: Brasenose, Pembroke, All Souls, Butterfield's Keble, Glasgow University, St Augustine's College, Canterbury, Cambridge.

museum, dining hall, art gallery, theatre, observatory, and blocks of rooms for students and professors. His final plan consisted of four quadrangles in extent surrounded by buildings in 'early French Gothic'[62].

The executive architect was a local architect[63] who visited England in 1873 to work on the plans with Burges, who supervised the project from distance when construction started. Foundations were begun in 1875 and Frederick Law Olmsted was asked to lay out the grounds. Trinity College was intended to be bigger than any University building in America. Needless to say, such an ambitious ideal needed a huge amount of money which was never raised in full, to some extent due to Jackson's early death in 1874. As a result, only one third of Burges's plan was drawn in detail and less than one sixth of his master plan was constructed.

In 1893, by which time a number of buildings had been built or were under construction, Cobb presented his final vision of the University of Chicago. His plan exhibited a great deal of similarity with Yale University (Fig. 7-9) and Trinity College (Fig. 7-14). Unlike the initial sketches that he had presented almost two years earlier, the buildings were in Gothic style rather than Romanesque. In spite of that, Cobb's initial intention to use as much space as he can was intact in both sketches.

[62] According to *New York Herald Tribune*, 21 Aug. 1875. quoted from: J. Mordaunt Crook, *William Burges and the High Victorian Dream* (London: John Murray, 1981). p. 244.

[63] F. H. Kimball who was assisted by another local man, i.e. G. W. Keller.

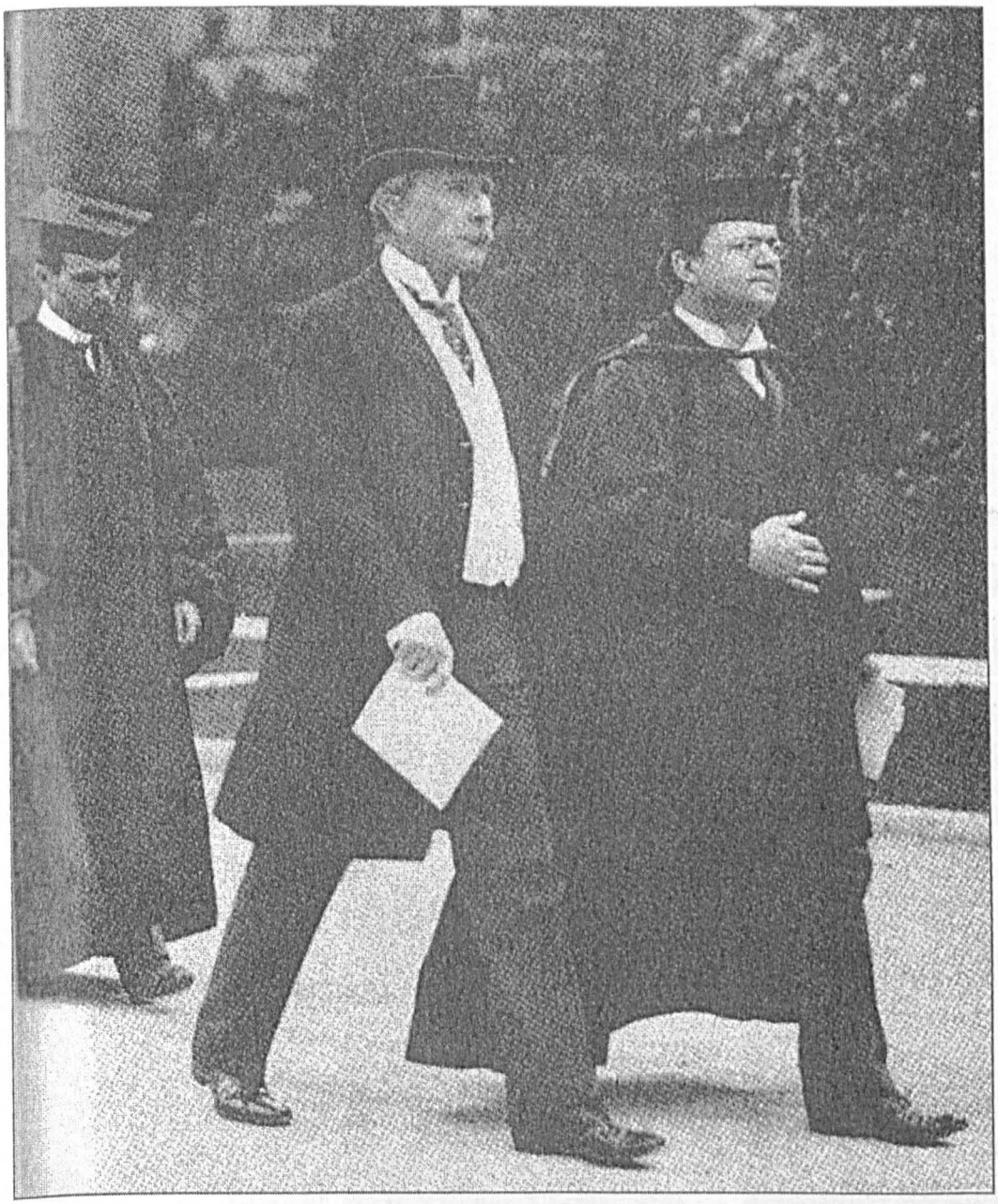

**Figure 7-8:** Martin A. Ryerson, President of the Board of Trustees, follows Rockefeller and Harper (right). This photo was taken in 1901 during the decennial celebration when Rockefeller made his second visit to the University of Chicago. Ryerson favoured a Gothic design. He believed Gothic would help the University to be identified with European institutions. He convinced Harper to visit Trinity College in Hartford, Connecticut, and also to obtain Yale's plan for Gothic buildings. From: Richard James Storr, *Harper's University, the Beginnings: A History of the University of Chicago* (Chicago: Chicago University Press, 1966).

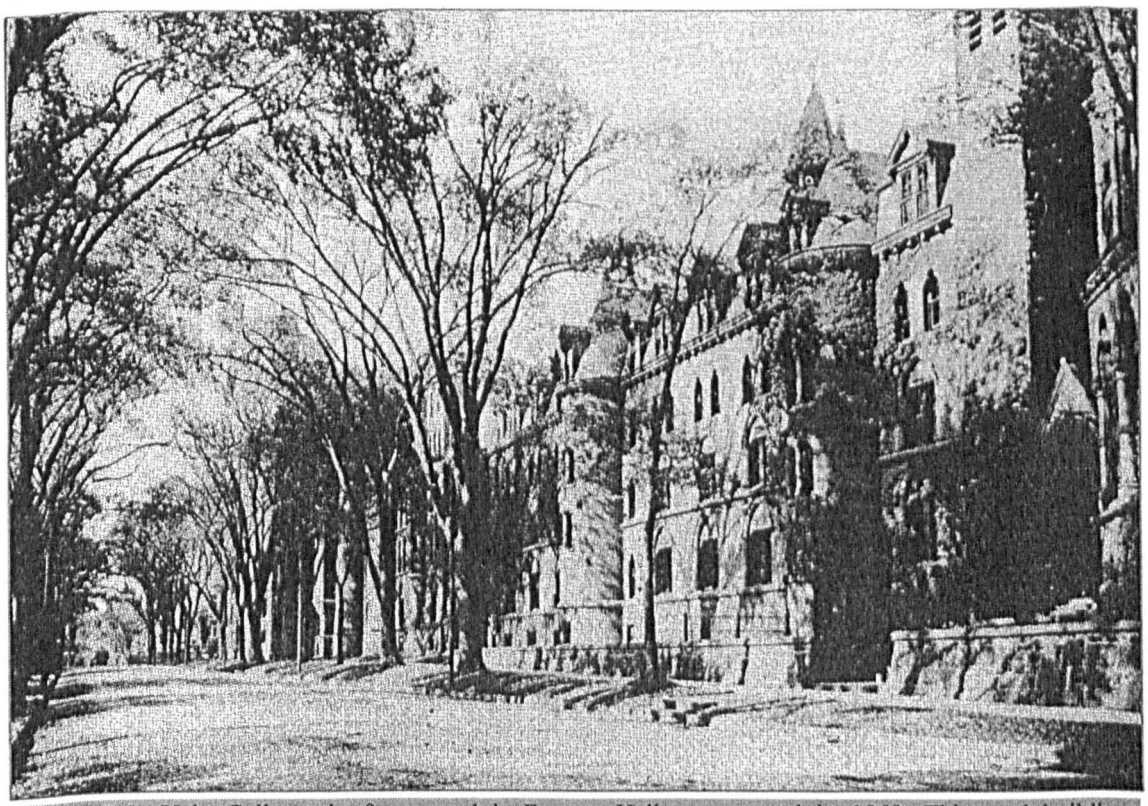

**Figure 7-9:** Yale College, in foreground is Farnam Hall, constructed in 1869. This, and buildings subsequently erected along the street, enclosed the Old Campus. Both Yale University and the University of Chicago had a similar problem. They were large Universities on relatively small sites. From: Paul Venable Tuner, *Campus, an American Planning Tradition* (Cambridge, Massachusetts, and London: MIT Press, 1984).

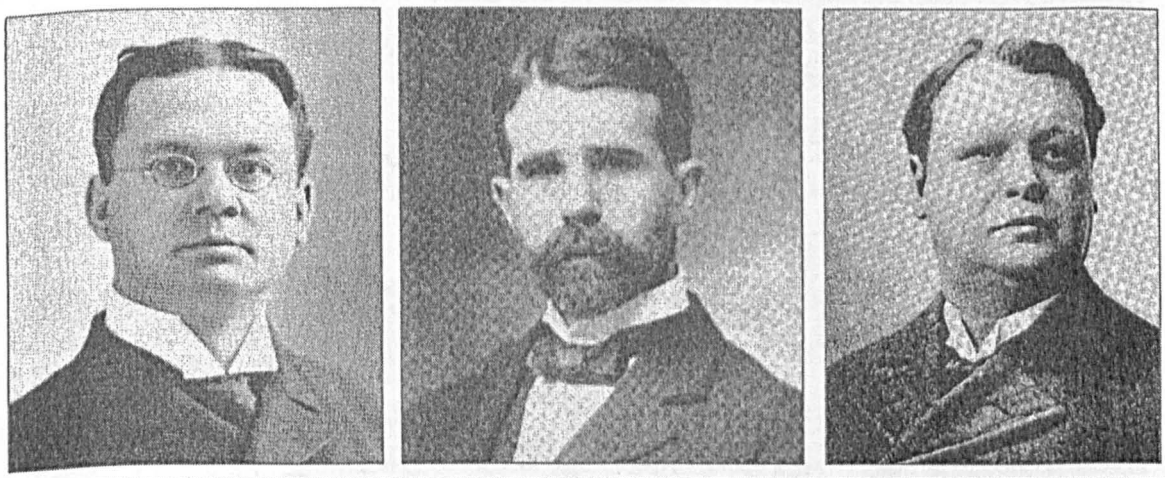

**Figure 7-10:** William R. Harper (left), Martin A. Ryerson (middle), and Henry I. Cobb (right). From: Richard James Storr, *Harper's University, the Beginnings: A History of the University of Chicago* (Chicago: Chicago University Press, 1966).

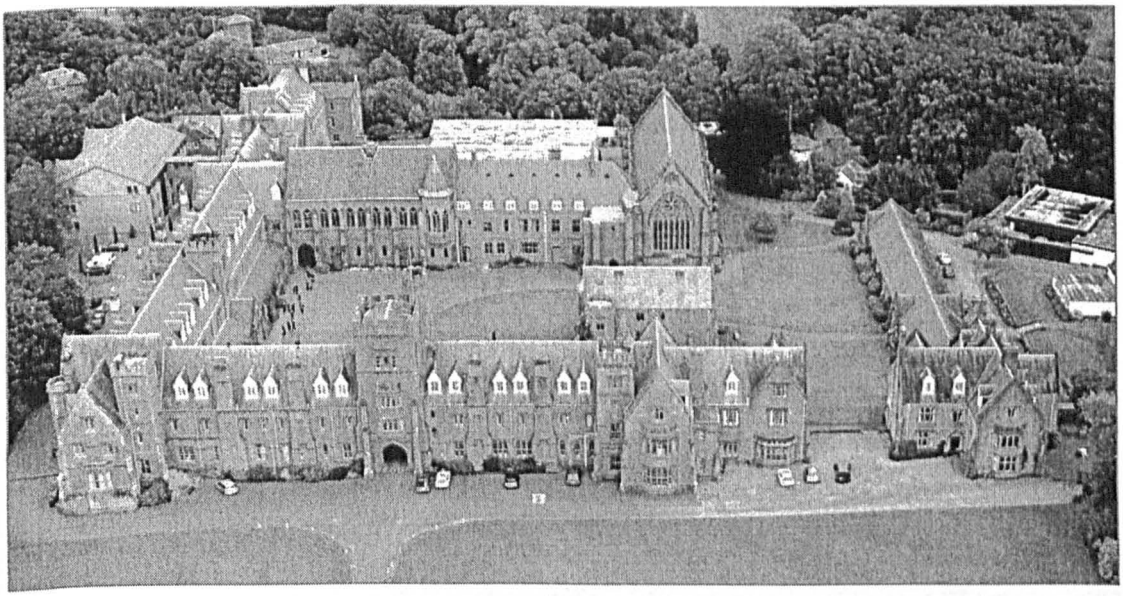

**Figure 7-11:** Recent aerial photograph of the front of Glenalmond College which shows a great deal of similarity with the plan of the University of Chicago. In his visit to England, Trinity's first president, Abner Jackson was highly impressed by Glenalmond College. He described it as 'a most noble pile of buildings.' We should remember that Ryerson asked Harper to obtain Trinity College's plans. From: the website of Glenalmond College at *www.glenalmondcollege.co.uk*, Access date: 3 February 2009.

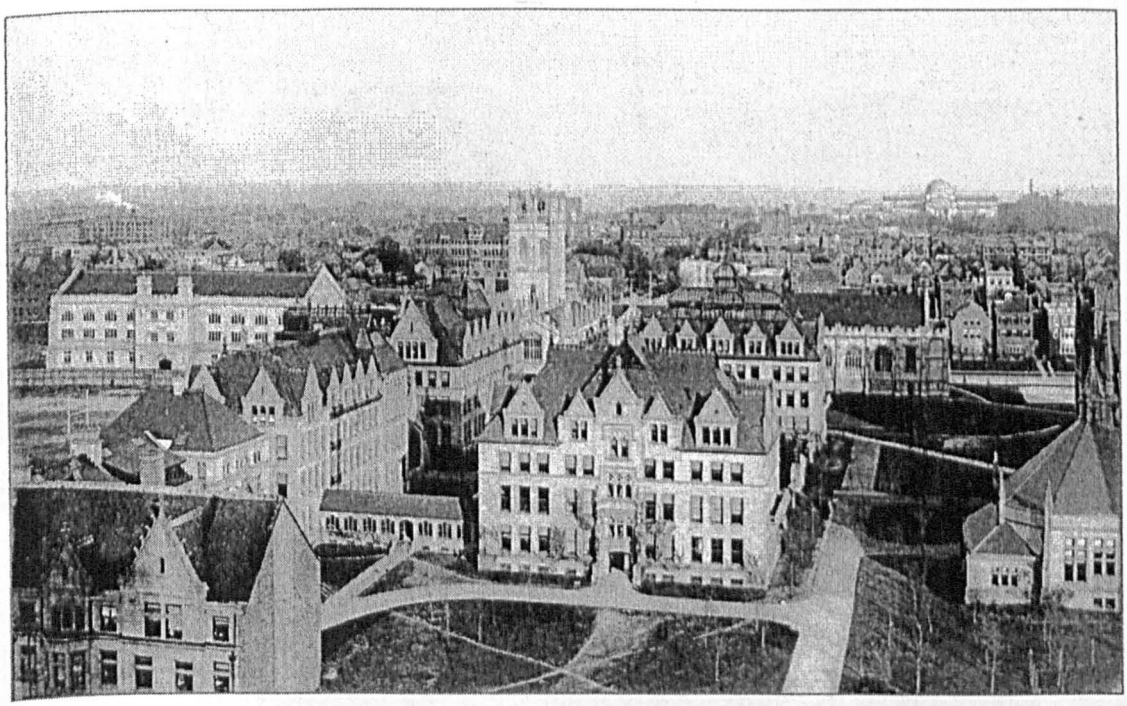

**Figure 7-12:** An Aerial View of the University of Chicago in 1910. The University of Chicago is similar to Glenalmond College in terms of both general organisation and architectural style. From: Archival Photofiles, image number: apf2-02568, Special Collections Research Centre, University of Chicago Library.

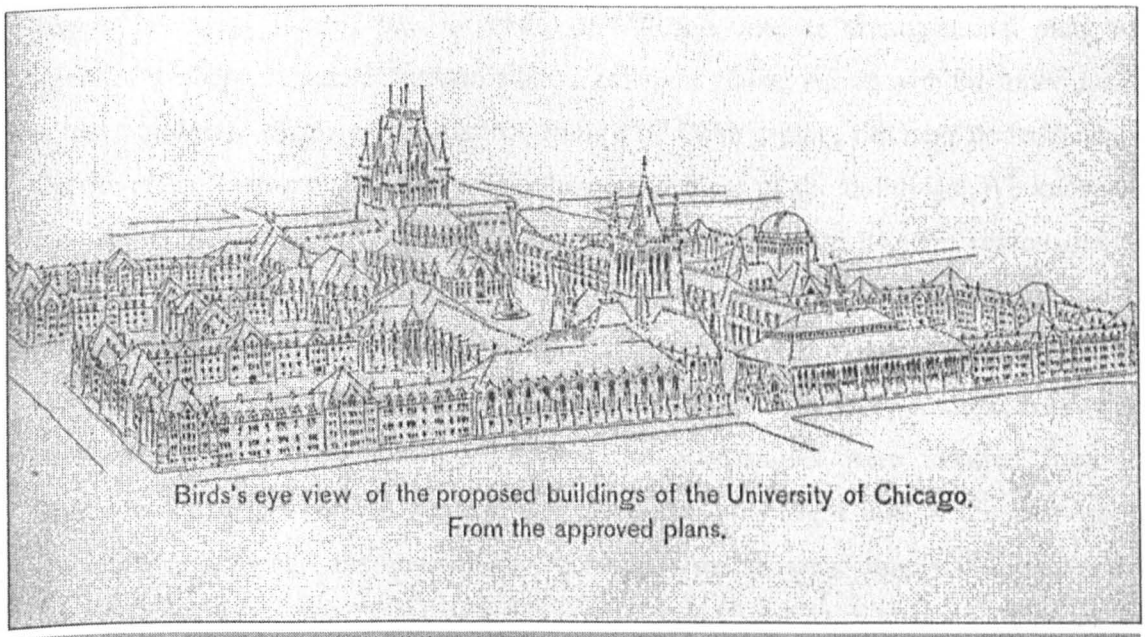


**Figure 7-13:** The organisation of buildings in the University of Chicago. From: Archival Photofiles, image number: apf2-02712, Special Collections Research Centre, University of Chicago Library

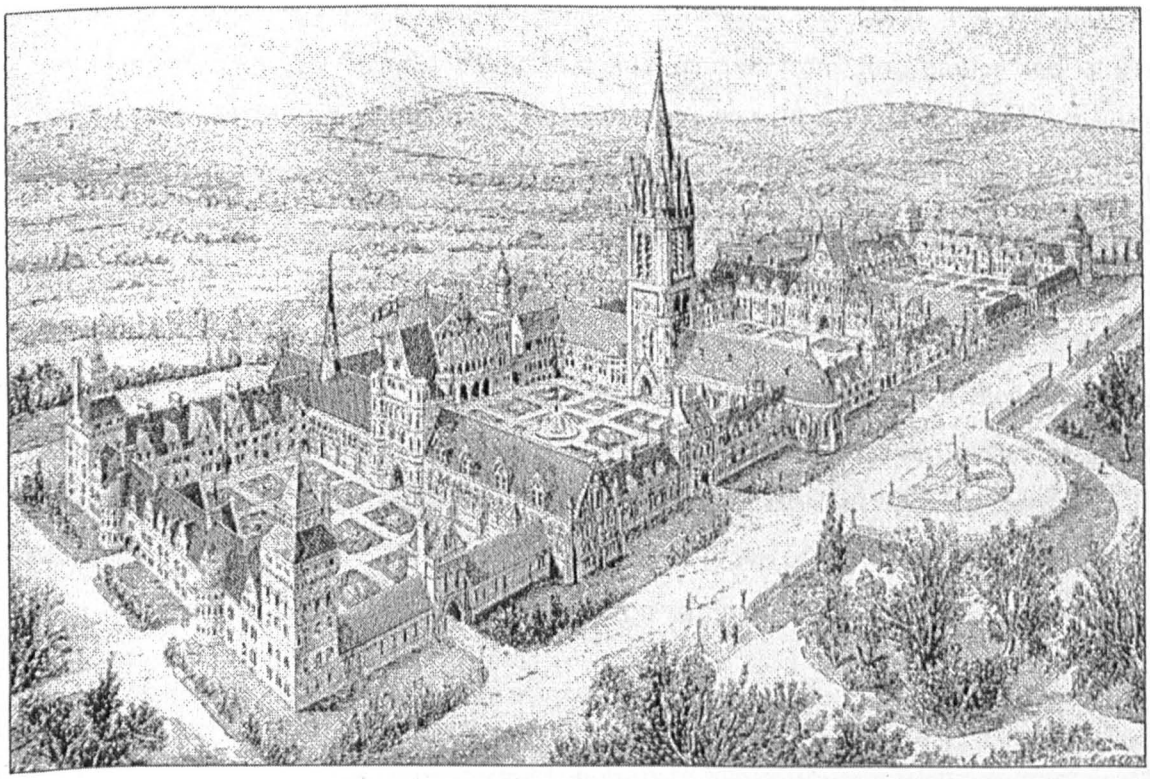

**Figure 7-14:** Trinity College in Hartford, Connecticut designed by an English architect William Burges From: Paul Venable Tuner, *Campus, an American Planning Tradition* (Cambridge, Massachusetts, and London: MIT Press, 1984).

The architectural plan of the University of Chicago, like its organisational plan, was intended to shape disparate fragments into a coherent whole. Along with the individuality of the buildings, which was a distinct feature of Cobb's plan, the next understandable feature of the University of Chicago is the compactness of the buildings. We know that the quadrangle pattern could make the maximum building space. It seems reasonable that this pattern was used at the University of Chicago because it was supposed to be laid out on four urban blocks. Julius Lewis, rightly, conceived the plan in terms of the street front. He then argued that the internal organisation of the University was fitted in after the outside elevations were put together and the quadrangles were resulted from the development of the outside elevations.[64] He is certainly right that in the case of the University of Chicago, the quadrangle organisation makes sense simply in terms of land use.

The individuality of the buildings, the other feature of Cobb's vision for the University of Chicago, enabled the fund raisers of the University to build the campus in correspondence to the finance that they would receive from Rockefeller and others without loosing the sense of cohesion. Moreover, it is most likely that another reason was behind such an organisation. During the early 1890s, Chicago architects had many projects under construction. Chicago was experiencing physical and economic growth and because the city was to host the World's Columbian Exposition in 1893. In 1890, total construction volume in Chicago reached $47 million, surpassing for the first time the record set after the Fire. In 1891, the figure reached $54 million. It then reached a new high in 1892 of $63 million.[65] Thus, as mentioned earlier, the early years of 1890s were the busiest for Cobb who was working independently after his partnership with Frost ended. Planning the University of Chicago as a group of individual buildings would most likely enable Cobb to hold the commission while he would provide detailed plans gradually.

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[64] Julius Lewis, "Henry Ives Cobb and the Chicago School" (University of Chicago, 1954). pp.26-27.

[65] Robert Bruegmann, *The Architects and the City : Holabird & Roche of Chicago, 1880-1918* (Chicago: University of Chicago Press, 1997). p.37.

### 2.7.8. Conclusion

This chapter examined the University of Chicago with regard to institutional structures that resulted from the broader ambitions, regional developments and, in this case, financial supports from local urban industrial elites and an act of philanthropy from one of the wealthiest Americans. It explained the structure of buildings considering broader educational developments, during the nineteenth century in the United States. The notions of *Wissenschaft* and *Bildungsideal* well represent the academic shift that influenced the structure of American Universities, architecturally and academically. More importantly, this chapter has demonstrated that the spatial organisation of buildings in the University of Chicago is consistent with the structure of financing the University.

In this case, the individuality of buildings, as a design strategy, enabled the architect to accept more commissions from other clients. This also enabled the founders of this University to construct buildings based on their available funds. Viewed in this way, the design that Cobb proposed was a sort of compromise among the involving individuals. On the other hand, however, the change of building style from Romanesque to Gothic was because of an institutional structure. Martin Ryerson, as the President of the Board of Trustees, had the official position that allowed him to convince Harper how the University should look. He was also in a position to dictate his idea about the future University of Chicago to the architect. This clearly shows that buildings are not pure, detached objects that result from the architect's mind. Institutional relations influence buildings through the human subjects that take part in designing buildings. Those who are involved in a building problem try to protect their individual or institutional interests.

This chapter revealed that institutional structures can constrain the design options available to the architect. They strategically affect the spatial organisation of buildings. The relationship between the architect and the client is a key component of the institutional structure that governs the practice of architecture. On the other hand, both of them are tightly interwoven within a web of social and institutional structures. There is usually a horizontal separation of power and responsibility among members of each institution, which may include the separation of executive, legislative, and supervision

parts. This means that any decision is subject to review by multiple centres of decision-making within institutions. It also means that the modifications that the architect applies to plans of a building are sometimes signs of broader struggles that put pressure on a designer to organise things in the most fitting manner.

# CHAPTER EIGHT: THE UNIVERSITY OF ESSEX

**A Building Floating in the Words**

## 2.8.1. Introduction

The previous two case studies demonstrated that the spatial structure of a building corresponds with the social and institutional relations. It has also been explained that buildings result from the way that a subject, or a group of subjects, view things. This means, according to the Lacanian view, that the subjects 'map' themselves in what they create. But the question is: *how* are buildings organised in the way that the human subjects see, understand and even 'construct' the world?

As mentioned earlier, buildings (physical objects) are linked through institutional relations to words which are about them. The idea of buildings develops as soon as the architect and the client begin exchanging images (photograph, drawing, model and mental pictures we create of buildings) either with each other or within the institution they belong to. One way to appreciate how crucial images can be is to say that any idea in thinking is an image inasmuch as it consists of elements and relationships between them. The proposal here is that architectural plans correspond with educational programmes, because in both cases we are dealing with images. One should bear in mind that one image can lead to another.

Individuals do not come to a building site empty-handed. What they bring to a building problem includes intellectual agendas explicitly stated in mission, programme, plan and function, on the one hand, and tacit perceptions, conceptions and more importantly images, on the other hand. Viewed on this basis, this chapter tries to explain the

architectural arrangement of the University of Essex in relation to images that the architect and the client brought to the building site.[1] The goal of this chapter is to focus on the underlying forces influential on architecture in the case of Essex University, designed by the Architects' Co-Partnership (ACP). It tries to get to know the web of social, intellectual and political conditions within which architecture takes place. The University of Essex, as a set of building, shows the certain shared preoccupations underlying the formation of the Architects' Co-Partnership (ACP), and the University of Essex, as an institution. This chapter will uncover the idea of this University in relation to the intellectual controversy between Frank Raymond Leavis (1985-1978) and Charles Percy Snow (1905-1980) and to the architectural discourses that modernism generated in Britain at the time.[2]

### 2.8.2. The idea of a 'big' University

Less than five years after the University of Essex was launched with an enthusiasm, which was exceptional among the Britain's post-war Universities, the student revolt at Essex University suddenly caused the University to capture the headlines of international News. Since then, a University that had been envisioned to concretise the integration of intellectual and ordinary life, as an ideal, turned into despair. It was criticised vehemently and fervently. In this investigation it is not intended to dig into those criticisms and they could be a subject of an independent investigation.

A very insightful analysis about the campus was presented by John. M. McKean in the

[1] It will be noted later that the building site is not like a blank page. It strategically frames certain images among a set of possibilities.

[2] It is certainly not the goal of this chapter to find an idea that may justify all characteristics of the University of Essex. This is a predominant point in understanding architecture considering the rising number of fields which are influential on architectural practices and the growing aspects which the architect should resolve. On that basis, in this chapter other ideas and discourses which have been influential on the University of Essex have been taken into consideration. For instance, the architectural approach of ACP, which was defined by the members as 'a corporative way of looking at things', as well as the social, intellectual and political ideas shaping Essex University cannot fully be comprehended unless we know that both had the same ground. It is crucially important now to examine shifts in intellectual discussions after the Second World War.

*Architects' Journal* in 1972.[3] McKean's paper - which was originally his master's thesis at that University - tried to trace the beliefs, images and intentions which went into the University of Essex's inception and growth. He rigorously gathered together issues and events which shaped the University of Essex in a specific manner. Thus, McKean's practical reading and functional criticism of the University of Essex remains unquestionably one of the key resources on the subject.

After the Second World War, the case for government intervention - which before the war had been predominantly the cause of the left - was increasingly accepted by both Labour and Conservative politicians. Largely, post-war social conditions had put this burden on the government in order to regulate priorities, allocate resources and promote the social justice between different groups.[4] We know that the role of the state in reorganising the University, as a modern institution, and the University's indirect or functional task for the state is not something unusual. What seems to be notable is that after the World War II the British government took a direct role in establishing seven new Universities: Sussex (1961), York and East Anglia (1963), Essex and Lancaster (1964), Kent and Warwick (1965).

These new Universities were not politically or even merely intellectually motivated. Instead, as Beloff argued, they were inspired by statistical forecasts.[5] There were an unprecedented number of babies born after the War who were reaching maturity. Consequently, in the early and mid fifties it became clear that the demographic demands and pressures for the University expansion in the next decade would exceed the capacity of the existing Universities.[6]

Later, under the chairmanship of Sir Keith Murray, the University Grants Committee

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[3] John Maule McKean, "University of Essex, Case Study," *The Architects' Journal* 156, no. 36 (1972).

[4] Nicholas Bullock, *Building the Post-War World: Modernist Architecture and Reconstruction in Britain* (London: Routledge, 2002). pp.9-10..

[5] Michael Beloff, "The Plateglass Universities," *Encounter* 30, no. 5 (1968).

[6] Michael L. Shattock and Robert O. Berdahl, "The British University Grants Committee 1919-83: Changing Relationships with Government and the Universities," *Higher Education* 13, no. 5. pp. 474-475.

(UGC) took the lead in urging the government to provide more University places. The committee was a peculiarly British device by which the government distributed public money to the Universities. It grew out of a series of committees set up from 1889 and it actually dates back to 1919 when it was constituted as a standing committee of the Treasury to distribute the much enlarged grant required for the post-war expansion. The committee was awarded a full-time chairman in 1934.[7] Murray's chairmanship on the UGC, since 1953, had a great impact on Britain's Higher Education. As the result of his ambitious plan for University expansion, between 1957 and 1960, he encouraged the government to increase the salaries of University staffs as well as their supplementary grants. He also revised the previous target of 135,000 students 'by the mid-sixties' to be raised to a maximum of 175,000 'by the late sixties or early seventies'.

More remarkably, Sir Keith Murray advised the Treasury to approve the designation of seven new Universities. The UGC also strongly supported the establishment of the new Universities and was extremely active in selecting the sites.[8] In the light of the UGC's role in masterminding the New Universities, it should now be understandable that they have more in common with each other than they do with the rest of the Universities in Britain, though they obviously differ considerably in details. Harold Perkin believed that there are two most important common characteristics in the New Universities. Firstly, they were founded and financed by the State. And secondly, they had the power from the beginning to confer their own degree and to determine their own curricula and methods of teaching and examination.[9]

Because the UGC believed there already were enough Universities and colleges of advanced technology in the large industrial cities, the New Universities are all in the suburbs of small or medium-sized towns. The University of Sussex was built on 208 acres of parkland at Falmer, four and a half miles from Brighton. The University of York

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[7] Walter Harry Green Armytage, *Civic Universities: Aspects of a British Tradition* (Benn: Ernest Benn Limited, 1955). pp. 235-6, 273, 284-5.

[8] John Carswell, *Government and the Universities in Britain: Programme and Performance 1960-1980* (Cambridge: Cambridge University Press, 1985). pp.17 -18.

[9] Harold James Perkin, *New Universities in the United Kingdom* (Paris: Organization for Economic Co-operation and Development, 1969). pp.25-33.

had a first instalment of 190 acres at Heslington, one and a half miles from the city. The University of Kent stands in 270 acres of grassland on a hill overlooking the City of Canterbury. The University of Warwick was constructed on 417 acres of farmland two and a half miles from the City of Coventry. The University of Lancaster was built on a 450 acres site, two and a half miles from Lancaster. The University of East Anglia had a site of 272 acres at Earlham, two miles and a half from the City of Norwich.[10] Among the New Universities, the University of Essex did not have an exceptional site either. It stands two miles from Colchester and 54 miles from London in 204 acres of Wivenhoe Park, an eighteenth-century landscape garden. It was the common characteristic of all the New Universities. They were 'campus' Universities built on large and self-contained sites.

In the case of the University of Essex; following Sir Keith Murray's rather informal discussion on new foundations, it was formally suggested, in July 1959, at a meeting of Essex County Council that a University be founded in Essex.[11] There was an unopposed suggestion made by one of the County Councillors that: 'it should be built as one great unity in one of the great parks of the county'[12]. It was perhaps this first discussion before its construction that accompanied the University to the end. This gesture towards 'unity', as will be argued, merged with the intellectual ideas and led possibly to conceptualise the future University as a 'one self-contained unit' at that meeting. Later and before a single stone had been laid, the University of Essex was envisioned by its Vice-Chancellor as 'a self-governing academic community'.[13]

Prior to all of these speculations, suggestions and activities, there was no single debate in Parliament. Even the Robbins Report[14] on Higher Education, which was accepted by the

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[10] Ibid. p.27.

[11] McKean, "University of Essex, Case Study." p. 639.

[12] Ibid. p. 639.

[13] Albert E. Sloman, *A University in the Making: The Bbc Reith Lectures for 1963*, ed. David Daiches (London: BBC, 1964). p. 11.

[14] Baron Robbins, "Higher Education, Report of the Committee Appointed by the Prime Minister under the Chairmanship of Lord Robbins," ed. Committee on Higher Education (Her Majesty's Stationery Office, 1963).

Government in October 1963, was in its early stages of deliberation in 1961. So, despite the fact that the post-war Universities have sometimes been referred to as 'The Robbins Universities' they were not the consequence of findings and proposals of this report. They were actually conceived initially by Murray and the UGC. But, the Robbins report gave the New Universities an 'establishment benison'[15] and as we will see it reflected an increasing concern over the size of the New Universities.

The Robbins report properly, if not completely, caught the mood of the time. It appeared at a critical moment when there was tacit consensus among politicians and scholars that the higher education should be expanded. Consequently, the report left a great impact. Because of some political concerns, the original idea that the report should take the form of a Royal Commission – which is the most prestigious of government-appointed inquiries – was abandoned. It was finally decided the report should be commissioned by an inter-departmental committee appointed by the Prime Minister.[16]

The report had initiated a number of surveys and statistical inquiries. It first set out the principles of higher education which guided the investigation. It then described the structure of higher education in Britain and compared it with some other countries. The report went on to investigate the probable demand for higher education in Great Britain in order to set two specific targets in terms of full-time student numbers; one for 1967, and the other for 1980. By 1967, the number of students in higher education was to increase by 50 per cent. These meant adding 112,000 full-time students within just four years ahead at the time of the report was published. By 1980, it was to rise by two and a half times the 1962 figure. Hence the total number of students was targeted to be 558,000 in 1980, compared with 216,000 in 1962.[17]

> The Report concludes by drawing attention to an educational emergency now confronting higher education because of an arrival at the ages of seventeen and

[15] Beloff, "The Plateglass Universities." p. 14.

[16] Carswell, *Government and the Universities in Britain: Programme and Performance 1960-1980.* p. 27.

[17] Robbins, "Higher Education, Report of the Committee Appointed by the Prime Minister under the Chairmanship of Lord Robbins." See: Table 44 (p.160) and 59 (p. 258) .

> eighteen of the very large numbers of children born immediately after the Second World War.
>
> ..., this is an emergency of the same importance as the emergency produced by demobilisation after the last war and demanding the same type of extraordinary measure to meet it.[18]

The report's core and final recommendation was a call for a radical expansion in the British higher education as a matter of emergency. It advised the government to provide sufficient resources to enable the Universities to offer more places by 1967. It also warned the government that if the needs of this situation were not adequately met immediately, many plans for long-term expansion would be seriously endangered. The Robbins report's most important demand for a vast increase in student population justified Sloman's plan for making a 'big' University. Until the early 1960s, the New Universities were conceived as relatively small institutions.

In the University of Essex, there was a discussion from the beginning regarding the size of the University. There was a feeling that 3,000 students after ten years would be a reasonable target. The idea of going to 6,000 had been contemplated in late 1961 by Sir Noel Annan, chairman of the Academic Planning Board, but the UGC hesitated and waited for the outcome of the report. Since his appointment as Vice-Chancellor, Albert Sloman[19] insisted on a big University with 'more than 6,000'. Coincided with the publication of the Robbins report in late 1963, when the University of Essex presented its plan publicly in the Grocers' Hall in London, it revealed the plan for 10,000 students, with the possibility of going up to 20,000 students (Fig. 8-1), though it never reached that size (Fig. 8-2).[20]

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[18] Ibid. p.276.

[19] Sir Albert Sloman is still alive but unable or unwilling to answer questions.

[20] Muthesius, *The Postwar University: Utopianist Campus and College*. p. 150.

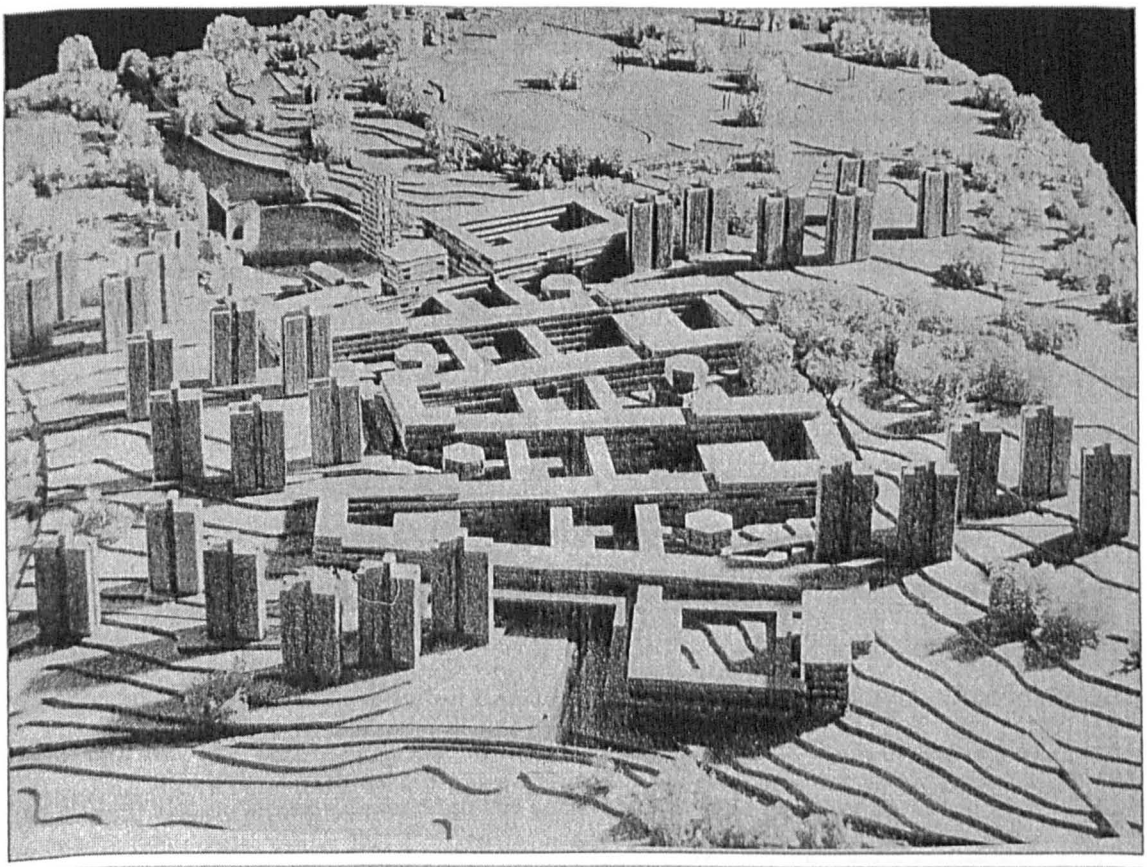

**Figure 8-1:** A model of the University of Essex by Kenneth Capon, 1963. The University of Essex was planned to be a 20,000 student University. From Albert E. Sloman, *A University in the Making: The BBC Reith Lectures for 1963*, ed. David Daiches (London: BBC, 1964).

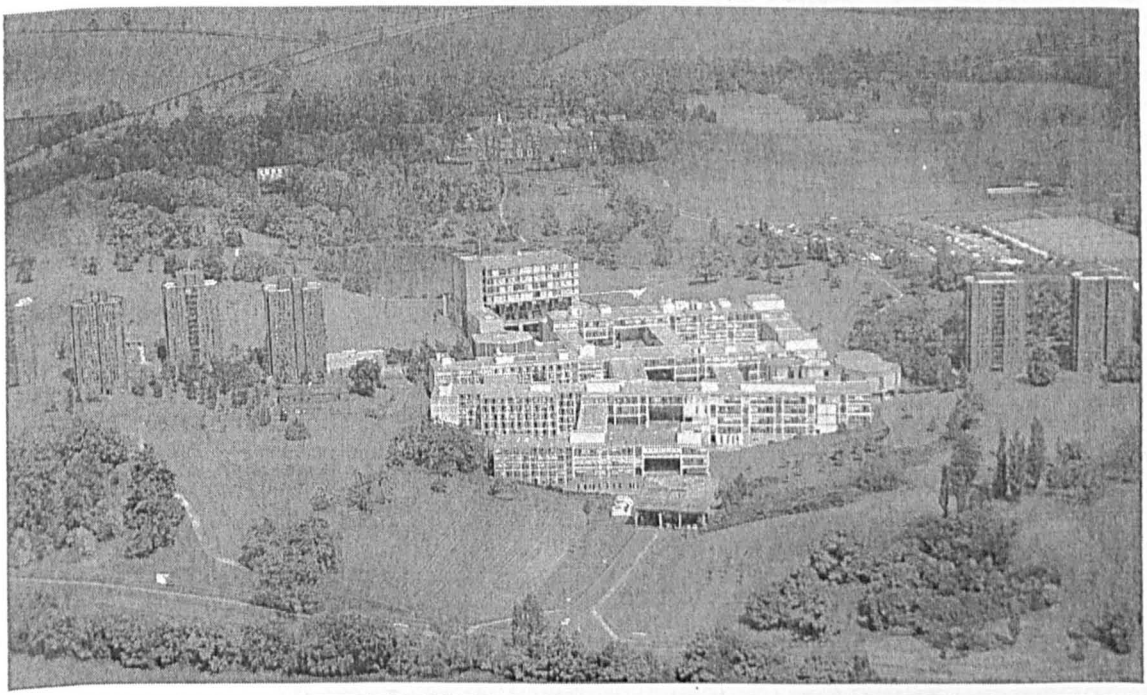

**Figure 8-2:** An air view of the University of Essex (1964-1965). The ambitious plan of the University of Essex (for 20,000 students) was never actualised. From: Stefan Muthesius, *The Postwar University: Utopianist Campus and College* (New Haven and London: Yale University Press, 2000).

The Vice-Chancellor of the University of Essex believed:

> ...the University of Essex is going to be big, as though bigness were important. I believe it is important. While Universities of 20,000 and 30,000 students are found in other countries, those of this country have traditionally been small. The project size of Essex marks a departure from that tradition.[21]

It has been rightly hinted by Stefan Muthesius that in Sloman's emphasis on a University with an unprecedented size of 10,000, let alone 20,000, which far exceeded any University in Britain, except London, the undertone of providing a University for the masses should not be forgotten.[22] Whether Sloman had some personal motives in envisioning a 'big' University to be built in Essex, or if he had a political tendency pursuing the ideal of the 'Welfare State', or even if his goal was to meet social interest and 'national needs' is nothing, but a matter of speculation. At any rate, what really does matter in this investigation is that the Sloman's ideal of 10,000 students led to another strongly distinguishable character of the University of Essex: tower blocks.

A University of 10,000 students would obviously require a very large structure to accommodate people that may exceed that number in total. The architect's solution to the issue was familiar in public housing in those decades. Those residential tower blocks on the one hand stand close together to reflect once again the firm conviction of an impressive and dense massing planning. Practically, the proposal for such a big University must be thoroughly cost-conscious. Sloman was convinced that compactness and thoughtful distribution of social facilities can fulfil this social and political aim economically.

Architecturally, compactness and high density meant that functions were layered on top of each other and as close to each other as possible. This idea will make the platforms, the most important design character of Essex University, more understandable. These platforms stand as the roof of the vehicle area and have constituted the very centre of the

[21] Sloman, *A University in the Making: The Bbc Reith Lectures for 1963*. p. 9.

[22] Muthesius, *The Postwar University: Utopianist Campus and College*. p. 152.

University of Essex. Vehicles only are permitted on the ground whereas all pedestrian circulation was designed to be on the roof.

### 2.8.3. ACP and modernism movement in Britan

In 1962, over three months, twelve architectural firms were interviewed. Finally, Kenneth Capon from the Architects' Co-Partnership (ACP), an internationally minded architect whose focus of interest – like other members of the ACP - was the United States 'just emerged', according to Sloman. It was important for Sloman, from the beginning that both academic and architectural plans go hand in hand. On that basis, in the interview, all the architects were asked by him: what will the University look like? Later he commented it was important for him that Kenneth Capon answered: 'I have not had an opportunity of talking to the Vice-Chancellor, I have no idea what the academic plans are, therefore I have no idea that the University will look like.'[23]

The ACP was founded in the spring of 1939. Its ideal was team working and they regarded it as an architectural means to serve society as a whole. Because they wished to work without office hierarchies and on projects of a predominantly social character, they found a reputation in some quarters for being communists. The choice of the group's name, which was at the beginning Architects' Co-operative Partnership, would reflect their concern with the changing role of architectural practice within a modern society.[24] It should be mentioned that this concern about the social role of architect was reflected in TECTON Partnership which exemplified the classical images of modernism in Britain and stressed the commitment of architect to promote social change. Not a surprising premise for a group, whose original partner, Berthold Lubetkin, was born in Caucasus and studied in Moscow.

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[23] See the *interview of Albert Sloman*, 21st February 1996, by J. Lubbock, C. Gould and C. Towson, pp.12-13.

[24] Victoria Perry, *Built for a Better Future: The Brynmawr Rubber Factory* (Oxford: White Cockade Publishing, 1994). p. 31.

The original partners of the ACP were eleven graduates from the Architectural Association (AA).[25] Their training was influenced by a major shift in the wake of the appointment of E. A. A. Rowse, in 1935. As a new Principal of the Architectural Association, he shifted the education system of the AA from Beaux Art System, with its emphasis on the classical orders and the formal qualities of architecture, to the concentration upon the social role of architecture. Another influential trend on the 'scientific approach' of the ACP partners was the ideas of modernist architects, [26] especially their acknowledged hero Le Corbusier whose impact on the University of Essex is evident in towers, façades and squares. (See Fig. 8-3, 8-4 & 8-5)

ACP partners were most interested in the works that were required by local authorities or central government. Some months after the 'Rebuilding Britain' exhibition and while five of the partners were still in the forces, they agreed that provided the work was 'socially useful' –which to them meant principally housing, health and education[27] - they should stick together and continue their aim of architectural quality combined with technical and administrative efficiency.[28] They had a tendency towards team construction and collaborative professional work which was a response to the rise of professionalism during the modern period and the increased complexity involved in the production of contemporary buildings.

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[25] Kenneth Capon, Peter Cocke, Michael Cooke-Yarborough, Anthony Cox, Leo De Syllas, Michael Grice, Arthur Nichol, Anthony Pott, Greville Phodes, Michael Powers and John Wheeler.

[26] Modernist ideas began to enter into British architecture after the 1920s. The coverage of the works of Continental modernist architects by the Architectural Review, for instance Bruno Taut (1922), Erick Mendelsohn(1923), Hans Poelzing(1923), and particularly Walter Gropius' works introduction as 'passionate search for the naked form, the primal form that would also serve as the ultimate'[26] (1924) were just a beginning. This trend was followed by 'Behrens' Basset Lowke House in Northampton (1923-26), translation of Le Corbusier's *Vers Une Architecture* (1927), publication of *The Modern House* (1934) and *The Modern House in England* (1937) by FRS Yorke. See: Sibel Dostoglu, "Modernist Discourse," *UIA-International Architect*, no. 5 (1984). p. 11.

[27] Such as: Richard Lee primary school, St. Albert and Mid-Herts hospital development plan, Chemistry building of Leicester University, housing at Lambeth...

[28] Architects Co-Partnership, 1989, *Architects co-partnership: the first fifty years*, Hertfordshire.

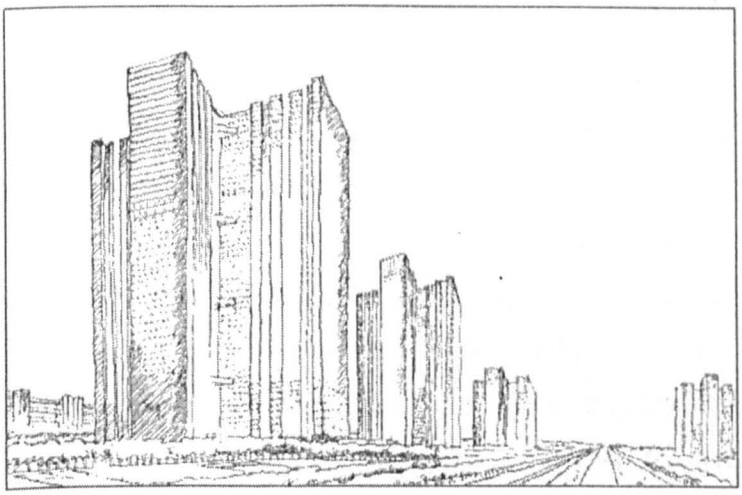

**Figure 8-3:** Le Corbusier's proposal for towers in the centre of Paris. A re-interpretation of these towers could be visible at the residential blocks of Essex University both formally and structurally. From: Le Corbusier. *Towards a New Architecture*. Translated by Frederick Etchells. London: Architectural Press, 1981.

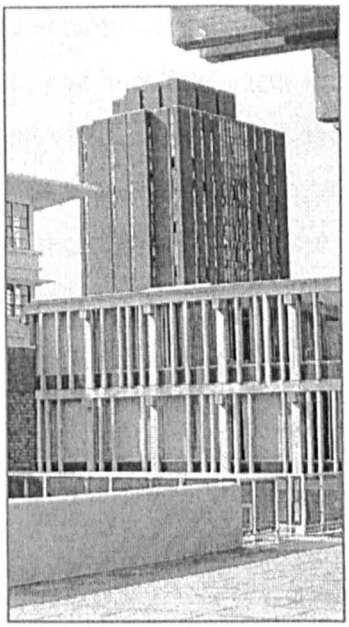

**Figure 8-4:** Residential towers at Essex University. No low-rise schemes were considered by the architect.

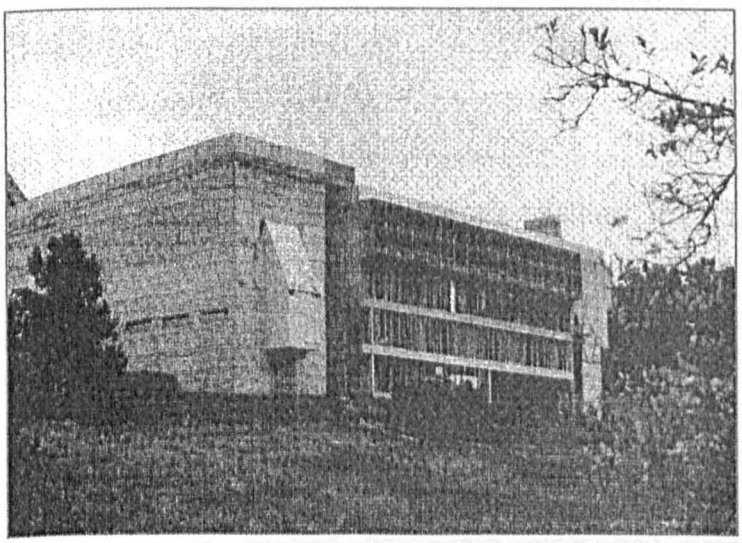

**Figure 8-5:** Le Courbusier's La Tourette Monastery (1957-1960). ACP's design of the University of Essex presents a great deal of similarity with Le Courbusier's La Tourette Monastery. The interplay between building and site, the use of materials, openings, corridors and façade are remarkably comparable. From: Curtis, William J R, *Le Corbusier : Ideas and Forms*, Oxford: Phaidon, 1986.

### 2.8.4. Sloman's intellectual baggage

The Vice-Chancellor of the University of Essex did not consider the academic-social ideas and the layouts and shapes of the buildings at the University of Essex as two issues which could be thought of and planned separately. His Reith Lectures were written while he walked the site with his architect and before scarcely a stone had been laid. Ideas seem thus to be mixed together from the start. After the appointment of Kenneth Capon, about twice a week they would meet each other and would walk over the site together to 'toss ideas'. They thought of it as 'a small town' and the architect reckoned 'it would not be built of red brick' – which was 'meaningless' for the ACP partners - and would not be scattered over the whole extent of the parkland.[29] This *walking and talking*[30] was a determining experience in the case of the University of Essex as it enabled the Vice-Chancellor to gradually transform his ideas into architecture. Thus, the University of Essex depended, more than any other post-war University, upon the drive of its Vice-Chancellor and its architecture.

Both architecturally and intellectually, the University of Essex, from the beginning, was an entity floating in the words of unity, bigness, radical innovation, interdisciplinary, University town... through which the practice of construction took place. It is important to take a note of these concepts because in their own ways they influenced the practice of architecture at the University of Essex. Sloman strongly believed that the need for bigness is not only because of expanding numbers but also of rapidly expanding knowledge. Hence, he was convinced that the radically different plan of the University of Essex could meet this two-fold demand. He had the opinion that it is only by 'radical innovation' that the threat of these demands can find a solution.[31] But he had realised that this solution itself may lead to some problems. In particular, he identified bigness and intimacy are in conflict with each other and thus they must be reconciled.

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[29] Sloman, *A University in the Making: The Bbc Reith Lectures for 1963.*

[30] *Walking and Talking* was also the title of an exhibition held in November 2004. It owes its inspiration to the founding Vice-Chancellor, Sir Albert Sloman and architect of the campus, Kenneth Capon.

[31] Sloman, *A University in the Making: The Bbc Reith Lectures for 1963.* pp. 9-10.

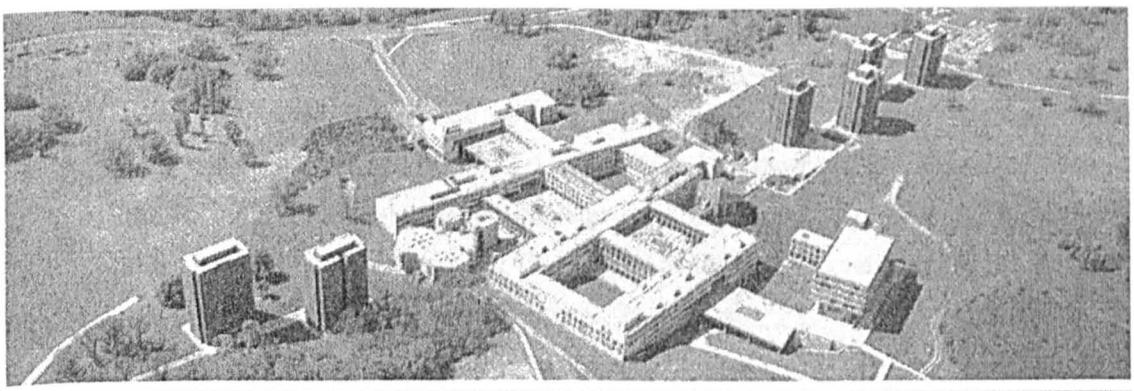
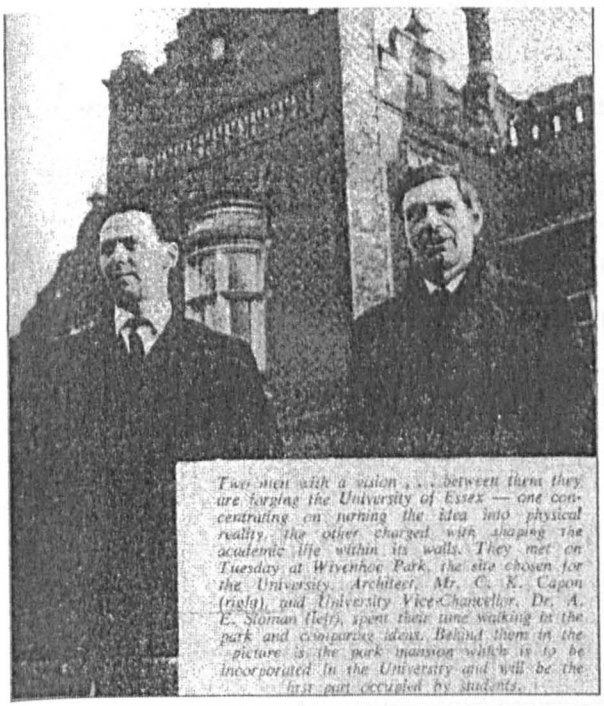


**Figure 8-6:** The University of Essex, air view, the library at the right end of the central complex, six residential towers and academic department showing a preoccupation with an inter-disciplinary education. From: Muthesius, Stefan. *The Postwar University: Utopianist Campus and College*. New Haven and London: Yale University Press, 2000.



Two men with a vision . . . between them they are forging the University of Essex — one concentrating on turning the idea into physical reality, the other charged with shaping the academic life within its walls. They met on Tuesday at Wivenhoe Park, the site chosen for the University. Architect, Mr. C. K. Capon (right), and University Vice-Chancellor, Dr. A. E. Sloman (left), spent their time walking in the park and comparing ideas. Behind them in the picture is the park mansion which is to be incorporated in the University and will be the first part occupied by students.

**Figure 8-8:** The Vice-Chancellor Albert Sloman (left) and the architect Kenneth Capon (of the Architects' Co-Partnership) in front of Wivenhoe Hall 1962, (*Colchester Express*, 6-12-1962). The University of Essex depended, more than any other post-war University, upon the drive of its Vice-Chancellor and its architecture. From: Muthesius, Stefan. *The Postwar University: Utopianist Campus and College*. New Haven and London: Yale University Press, 2000.

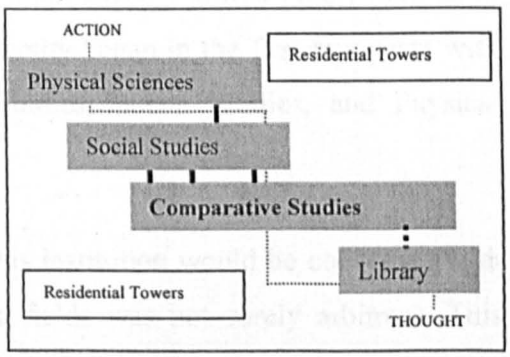



**Figure 8-7:** A schematic view of the academic organisation of the University of Essex.

Sloman noted:

> ... a University is not just a place of research and teaching. It is, or should be, a self-governing academic community. Universities are people, not places, people with different interests living and working together. But the cohesion of an academic community is threatened by sheer size. ... Bigness has to be reconciled with intimacy. Students and staff must not feel lost. This calls for revolutionary thinking, particularly about the physical setting of a University, to allow the intermingling of different subjects, and to integrate its social and working life.[32]

It important to take on the episodes that formed Essex University in the way that may not come to our attention at the first glance. These episodes, in this particular case, certainly reside deep at the core of the idea of knowledge, a key concept which can direct us to different underlying forces behind the formation of the ideas. The first time I reached to this conclusion was when I realised that the University began in the first few years with only three fields of study: the Comparative Studies, Social Studies, and Physical Sciences.

The Vice-Chancellor of the University believed his institution would be concerned with the problems of life, this selection of academic fields was not surely arbitrary. This specific combination of fields, which contains 'pure' practical and theoretical ingredients, represents the idea of knowledge which must be neither totally undetermined nor empirically determined in its application. It restructures, on the other hand, the medieval opposition between the active life and the contemplative life. Moreover, the premises underlying this view, is one the key characteristics of the modern University, which *must embody thought as action*, Readings propounded.[33]

It should be considered that this is not something unusual on its own. The New Universities were focused on science and humanities in general. But what is particular in Essex University is the way in which things have been organised both academically and

[32] Ibid. p. 11.

[33] Bill Readings, *The University in Ruins* (Harvard University Press, 1996). p.69.

architecturally. At the first glance, the University is a 'great unity' without any collegiate division. As argued, there are surely functional and economic reasons for the manner in which the University was planned. I have no intention to undermine that possibility. What I am trying to propose is that the general organisation of the University of Essex represents, spontaneously, a preoccupation with an interdisciplinary education to promote the informal intercourses within the University.

### 2.8.5. Snow-Leavis controversy and Sloman's formation of ideas

In the same year that Sir N. Annan, chairman of the Academic Planning Board in 1961-2 appointed Dr. Albert Edward Sloman as the first Vice-Chancellor to initiate making the University of Essex, in the Richmond Lecture at Downing College in February 1962, the literary critic F. R. Leavis from Downing College clashed with the scientist-turned-novelist C. P. Snow. The dispute was over the relative merits of science and literature. The origin of the controversy went back to three years before that date. Snow, in his Rede Lecture on 7 may 1959, had criticised the literary intellectuals for never understanding the benefits of science, technology and industry. Snow enforced his intention by reporting the failure of his literary friends to describe the second law of thermodynamics. As this example and similar ones imply, he postulated a one-way bridge promoting the scientific culture within the University. Leavis' Lecture was basically a response to that comment.[34]

Since the controversy had started, it was clear that it is an important event. Shortly after that, in June 1962, Lionel Trilling from Columbia University compared the debate with the nineteenth-century debate between T. H Huxley (1825-1895) and Matthew Arnold (1822-1888).[35] Snow's lecture was the latest comment in a long tradition discussing the relationship between science and humanities. It lamented the mutual incomprehension

[34] In order to read a very useful account of Snow-Leavis controversy, see: Guy Samuel Ortolano, "The "Two Cultures" Controversy: C. P. Snow, F. R. Leavis, and Cultural Politics in Post-War Britain" (Evanston, 2005).

[35] Lionel Trilling, "Science, Literature and Culture: A Comment on the Leavis-Snow Controversy," *Higher Education Quarterly* 17, no. 1 (1962).

that divided scientific and literary intellectuals into 'two cultures.' He started his lecture by pointing out that:

> ... the intellectual life of the whole of western society is increasingly being split into two groups... Literary intellectuals at one pole – at the other scientists, and as the most representative, the physical scientists. Between the two a gulf of mutual incomprehension ... They have a curious distorted image of each other.[36]

The reason for the existence of the two cultures, according to Snow, are many, deep, and complex, some rooted in social histories, some in personal histories, and some in the inner dynamic of the different kinds of mental activity.[37] What Snow believed was worse is that there was no place where the two cultures could meet. At the same time, the clashing point of two subjects, two disciplines, two cultures and two galaxies, as he believed, ought to produce creative chances.[38]

The lack of mutual comprehension between the two poles is not just an English phenomenon. Snow believed, this cultural divide seems at its sharpest in England in 'recent' times.[39] Snow noted that British Prime Ministers at the turn of that century such as Lord Salisbury and Arthur Balfour had a serious interest in natural sciences. The interaction between the two cultures had recently become impossible. The widening gap between them, as he claimed, threatened to make it stay that way, even in Oxford and Cambridge. Education was thus the lecture's focal point. Snow's core idea was that there is only one way out of this situation: by rethinking the education to produce and expert more scientists and experts. Snow's argument consists of three stages. First that between scientists and non-scientists, there is mutual failure of comprehension. The second point is that this failure is unfortunate and even dangerous. Thirdly, Snow claims that it is possible to find way of bridging the gap between the two cultures. This was a tacit premise in Snow's argument.

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[36] C. P. Snow, *The Two Cultures*, 3rd ed. (Cambridge: Cambridge University Press, 1962). pp. 3-4.

[37] Ibid. p. 22.

[38] Ibid. p. 16.

[39] Ibid. p.17.

When the undergraduates of Downing College selected Leavis, who was set to retire at the end of 1961, to deliver the annual Richmond Lecture, this Cambridge's leading critic finally replied to *The Two Cultures*. The lecture which Leavis delivered was little more that a personal attack upon Snow. He declared that Snow was 'intellectually as undistinguishable as it is possible to be.'[40] He continued that although distinguished minds are themselves, of course, *of* their age, Snow's relation to the age is of a different kind. Snow's mind, Leavis said, was characterised not by insight and spiritual energy, but by blindness, unconscious and automatism. 'He doesn't know what he means, and doesn't know he doesn't know.' [41] So, it was clear from the beginning that Leavis had no hesitation in disapproving Snow. Leavis stated 'the argument of Snow's Rede Lecture is at an immensely lower conceptual level, and incomparably more loose and inconsequent.'[42]

Later on, in the Richmond Lecture, it appeared, in one point, as if Leavis established the first agreement between himself and Snow: there is something that is alien to either of Snow's cultures, Leavis asserted. Having admitted that the advance of science means rapid changes to the human future, Leavis took the point:

> I haven't chosen to say mankind will need all its traditional wisdom; that might suggest a kind of conservatism that, as far as I am concerned, is the enemy. What we need, and shall continue to need not less, is something with the livingness of the deepest vital instinct; as intelligence, a power [...] of creative response to the new challenges of time; something that is alien to either of Snow's cultures.[43]

In the rest of his lecture, Leavis outlined his own conception of the University and education, opposed to Snow's design on the University. He started his argument by stressing the fact that without the creation of the human world, including language, the triumphant erection of the scientific edifice is impossible. As a literary critic, he

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[40] F. R. Leavis, *Two Cultures? The Significance of C. P. Snow* (London: Chatto & Windus, 1962). p. 10 .

[41] Ibid.

[42] Ibid. p. 15.

[43] Ibid. pp. 26-7.

considered language as a prior achievement of collaborative creation, a more basic work of the mind of man which lives in the living creative response to change in the present.[44] Leavis ended his lecture by outlining a University in which language had a central role to play:

> Like Snow, I look to the University. Unlike Snow, I am concerned to make it really a University, something (that is) more than a collection of specialist departments – to make it a centre of human consciousness: perception, knowledge, judgment and responsibility. And perhaps I have sufficiently indicated on what lines I would justify my seeing the centre of a University in a vital English School...
>
> It is assumed, I believe, that work in the scientific departments must be in close touch with the experimental-creative front. In the same way, for the University English School there is a creative front with which, of its function and nature, the School must be in closet relation.[45]

The Richmond Lecture was not, of course, the first time in which Leavis stressed the relationship between culture and civilisation and mapped out a conception of the University in which literature performs the task of unifying knowledge. He had put forward this proposal in 'The Idea of a University', 1943, which was a chapter of his book on *Education & the University*.[46] Leavis complained that in the field of knowledge, the dominance of the ancient Universities of the United Kingdom, Universities located in the heart of cities has been challenged by the specialisation of American campus Universities in which knowledge is an autonomous pursuit with no immediate link to the culture as a whole.[47] This opposition, as Leavis agued there and stressed again in the Richmond Lecture, can be overcome by situating the study of English Literature as the centre of the University.

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[44] Ibid. p.27.

[45] Ibid. p. 29.

[46] F. R. Leavis, "The Idea of a University," in *Education & the University* (London: Chatto & Windus, 1948).

[47] Ibid. p. 17.

The most important concept in Leavis thought was 'life', a creative act at the core of what it meant to be human. It was through the complicated notion of life that Leavis would evaluate everything. Both life and language are growth and change in response to changing conditions. Leavis considered 'thought' as the supremely creative response to the inevitable changes of life. Inasmuch as thought was only possible through 'language', he argued that language became the most telling index of life at any time. Therefore, literature played an essential role in human culture and therefore should be the core of the University.[48]

In *The Idea of a University*, Leavis was influenced, as A. Samson argued, by two American writers: Brooks Otis and Alexander Meiklejohn. Leavis quoted Otis as seeing the need for an educated class that can combat the divisive effects of specialisation because of the shared knowledge of its members. More importantly, Leavis used a passage from Meiklejohn on the importance of education to the society. Meiklejohn had published *The Experimental College*, 1932, in which he described an attempt in Wisconsin to provide a coherent liberal education which would prepare students to be good citizens. Leavis reviewed the book favourably in the same year.[49]

In brief, the first characteristic of the Leavis's idea was the centrality of English Literature, in a narrow sense, and Humanities, in a wider conception, in the University. Leavis believed Language still has some residual meanings which have not been wholly incorporated into debased modern commercial culture. So, it can be regarded as a medium through which governments may manage different communal values and traditions in society. For this reason, Literature, as 'the synthetic power of culture in action' found an important place in Leavis's vision of *The Idea of a University*.

Having situated the study of literature as the centre of the University, Leavis argued that it is crucially important to heal the opposition between knowledge and culture and between the science and the humanities replaced by the mechanical specialisation of

[48] Ortolano, "The "Two Cultures" Controversy: C. P. Snow, F. R. Leavis, and Cultural Politics in Post-War Britain". p.137.

[49] Anne Samson, *F. R. Leavis* (Hemel Hempstead: Harvester Wheatsheaf, 1992). pp. 77-78.

American campus Universities, in which knowledge is a profession.[50] For Leavis, the most vital challenge in the University education is 'to explore the means of bringing the various essential kinds of specialist knowledge and training into effective relation with informed general intelligence, human culture, social sciences and political will.'[51] He did not undermine, however, the importance and the inevitability of specialism. The problem which he identified is to bring the special sciences and studies into significant relation. For him, the problem is to produce specialists who are in touch with the human centre. The University should then be a centre for specialists to be in touch with the human culture and with each other.[52] This is the second characteristic of the kind of the University that Leavis had postulated.

The third and final key aspect put forward in *The Idea of a University* is a problem rather than a solution. For Leavis, it is crucially important to devise a way to perpetuate the continuation of the University's life in the manner that specialists remain in contact with each other, within the University, and with the culture. The practical problem of such an inter-disciplinary organisation of the University is to maintain the 'centre' which sustains the actual functioning of the University which is 'to produce specialists who are in touch with a human centre', through informal intercourse.[53] He did not answer, in a clear way, how to maintain some kind of formal academic provision to bring specialisms into communication. He was well-aware that his writing is about the 'idea' of a University and for that reason it should not be too clear. He also declared that contemplation of the idea does not necessarily lead to satisfaction with the actual.

In spite of this, there is a hint that appears to imply that the Social Sciences can promote such intercourse across the departmental and specialist frontiers to bring specialisms into communication. He once referred to a remark from 'a distinguished war-time migrant' who had found Cambridge surprisingly content to be an agglomeration of departments

[50] Readings, *The University in Ruins*. p.81.

[51] Leavis, "The Idea of a University." p.24.

[52] Ibid. pp.25-28.

[53] Ibid. p. 29.

and special studies. In spite of many opportunities for intercourse across the departmental and specialist frontiers, he found little evidence that they were actually used. As Leavis stated, the lack of communication and a failure in general intellectual life was attributed, by that distinguished migrant, to the neglect in Cambridge of his own field of work, the Social Sciences.[54] If, by saying this remark Leavis wanted to imply that the Social Sciences can make a contribution to promoting formal and informal intercourse in the University, then the third aspect of Leavis's idea of a University has come to light, though vague and arguable.

The idea of 'a real centre in the school of the humanities' - as it was formulated by Leavis - is perceptibly restructured in Essex University. This claim shouldn't be surprising if we know that the Vice-Chancellor of the University of Essex, who was a professor of Spanish Language at the University of Liverpool, had deep concerns about the link between the University and its neighbouring city, Colchester.[55] The suburban site of the University, according to him, would present 'enormous problems'. Thus, when Sloman regularly travelled to Oxford and Cambridge to select professors for his University, the Cambridge-based controversy between Snow and Leavis could have also been the source of inspiration for him. The study of language logically could find a significant function as the animating principle that gives academic study a historical continuity, as Leavis had proposed. Accordingly, the two central squares of the University are assigned to humanity fields, e.g. literature, government, language and linguistics; and the Social Sciences are placed mainly in the second square, between Humanities and Physical Sciences - perhaps to promote the general intellectual life within the University.

Leavis's account of Language was narrowly summarised in English Language, whereas, in the University of Essex there was a wider scope for the study of language. Sloman believed, 'instead of Greece and Rome, France and Germany' the University 'shall begin with Russia, with North America and Latin America, and may go to the Far East. These

[54] Ibid. pp. 30-31.

[55] See the *interview of Albert Sloman*, 21st February 1996, by J. Lubbock, C. Gould and C. Towson, p.8.

are areas of importance in the modern world.'[56] At the same time, he started the Humanities school with two departments: Literature and Government; with the hope that this 'unusual combination of subjects' could gain by association with each other. This particular focus on specific languages with a political attitude towards them is not something derived from Leavis.

In following that line of argument, it will be helpful to take into account that such a political approach to the field of language was not unusual at the time that the University of Essex was founded. One possible reason to support this contention is that the time in which Sloman was contemplating his University coincided with the emergence of Cultural Studies in the Britain. Cultural studies was the product of the transitional 'new left' encounter with the explosive culture of the sixties, as Michael Denning defined.[57] As a new field, it emerged, in the early sixties.[58] A glance at the circumstance in which the field came to existence and the debates it generated shows that there was a link between this interdisciplinary subject and the ideas formed Essex University. Leavis was at the same time one of the sources of inspiration for both of them.

It seems reasonable to assume that both the academic organisation of the University of Essex and the intellectual premises of Cultural Studies should have common causes emerging from Britain's post-war condition. Arguing that all disciplines are inter-disciplines, the consensus among those who came to the field of Cultural Studies early was that it ought to remain outside the discipline constrains which restrict the variety of topics, interests, positions, contexts and methods that the field can accommodate. Therefore as they believed, in order to prepare students for the skills required to embark on particular 'careers' - which was a self-organised concept to be replaced with the old category of labour – and productively to participate in the 'everyday life', disciplines should be downgraded in the University systems.[59]

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[56] Sloman, *A University in the Making: The Bbc Reith Lectures for 1963*. p.33.

[57] Michael Denning, *Culture in the Age of Three Worlds* (London and New York: Verso, 2004).

[58] From a centre (at the University of Birmingham) funded by the owner of Penguin Books.

[59] Denning, *Culture in the Age of Three Worlds*. pp.10-15.

As a professor of Spanish and Dean of the Faculty of Arts at the University of Liverpool, the Vice-Chancellor of the University of Essex was aware of these ideas and trends. The same tendency towards the intellectual and social life at the University can evidently be seen in his University which was in the making. He once declared that a student as 'a member of academic community' must find this chance to think and argue about over his or her intellectual and social life at the University. He then stated that inter-disciplines are 'the growing points of knowledge' and for that reason. Sloman also argued that the distinctive features of the plans for the University of Essex became a lack of any colleges and halls of residence; instead, groups of rooms were arranged in towers and formed a 'University town'.

### 2.8.6. Conclusion

This chapter tried to trace back the spatial organisation of the University of Essex to the previous images that the architect and the client had in their minds. Both the architect and the Vice-Chancellor brought mental images to the building problem. The baggage that Sloman brought to the building site included intellectual ideas and academic programmes, which was influenced by the controversy between Leavis and Snow. On the other hand, what I deliberately postponed to say is that the architect had entered the site not only with some modern ideas about architecture but also with a plan for the University. The fact is that the Architects' Co-Partnership had put an entry for Cambridge Churchill College Competition (Fig. 8-9) a few years before that. Their entry did not win that competition. When one looks at the overall structure of the University of Essex, it seems that the architect adopted that proposal so that it fits the expectations of the Vice-Chancellor of the University of Essex.

It should not be difficult now to understand why there is a relationship between plans and programmes. The architect plays with the images that the client brings to the building site and tries to imagine architectural plans so that they match the programme. We discussed this in the chapter five of the investigation. As mentioned there, it is impossible to create any image without having a mental structure and without establishing a relationship

between the previously unrelated schemata. It is therefore important to uncover the framework *through* which the individual who are involved in design process looking *at* things. Terms such as 'looking at' and 'looking through' implies a strong relationship between the way that we think and the reason that we think in that way. It is because when we think about an object, we think about it by the intervention of similar objects, ideas and structures that we have in our mind.

The centrality of representation should not be undermined in any way. Any development in understanding takes place only insofar as the subject is integrated into a system of representations (or 'the Symbolic Order', as Lacan described it). In the context of University design, it is worth noting that each individual creates a mental picture of the external world and brings his or her mental baggage to the building problem. The University, as an institution and as a set of buildings is the accumulation of different mental images on the one hand and interrelationships among them, on the other hand. Ultimately, we should not forget that to uncover ideas that underlie the design of the University entails an attempt to come across the mental images that each involving individual brings to the project. More notably, it also necessitates an endeavour to 'explain' those images and to 'construct' a relationship among them.

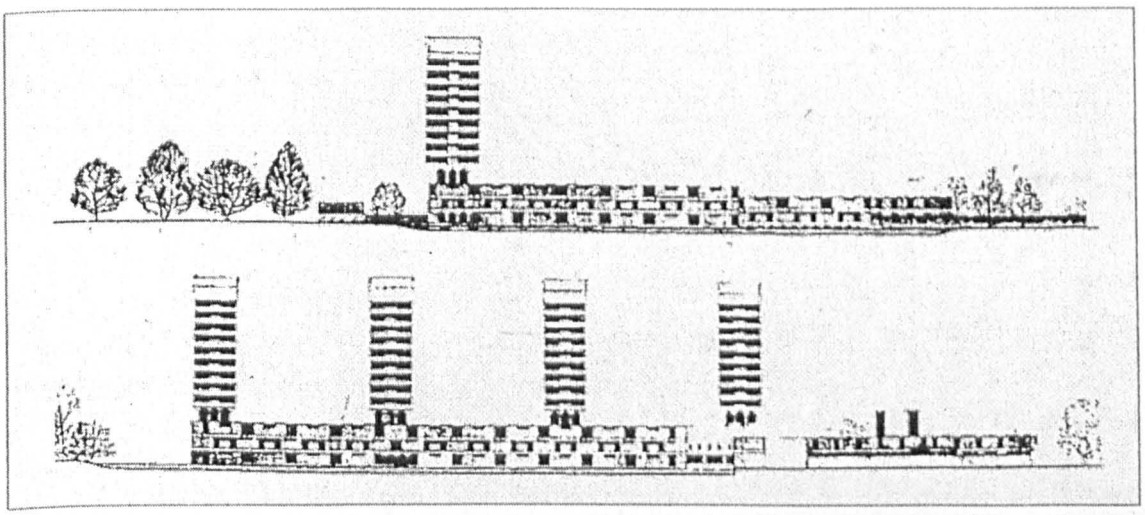

**Figure 8-9:** The Architects' Co-Partnership entry for Cambridge Churchill College Competition in the later 1950s. This proposal did not win the competition. It could, however, be imagined that when the firm was selected to design the University of Essex, there was a tacit assumption amongst the partners that they could adopt the idea of the University that they had proposed earlier. (There is no comprehensive monograph about the Architects' Co-Partnership.) From: Muthesius, Stefan. *The Postwar University: Utopianist Campus and College*. New Haven and London: Yale University Press, 2000.

# PART III: CONCLUSION AND DISCUSSION

# CONCLUSION AND DISCUSSION

## I.

Throughout this thesis, a parallel was drawn between architectural plans and educational philosophies in the design of three Universities, on the one hand, techniques of constructing the subjectivity - as postulated by recent French thinkers - and strategies of architectural design, on the other. In my analysis of the architectural scene, it appeared that even 'traditional' architects were programmed in the way that their buildings can be seen as a site in which different socio-cultural forces interplay. It is because the architect and the client usually consider as much visual and mental images as possible, and they examine as many possibilities as they could.

This investigation demonstrated how tensions from variety of disciplines 'outside' the traditional boundaries of architectural discourses penetrate 'inside' the practice of architecture. It is hence too problematic to regard any stubborn idea as 'the core' of architecture. The reasoning is firstly that architecture takes place within the conditions which are absolutely influential, associated with contextual constrains and functional necessities.[1] And secondly, because the architect acts as an organiser of different relationships.[2] We hence need to examine the built form in relation to different images (architectural, intellectual, philosophical, etc.) that the individuals bring to a building

[1] Architecture is always linked with multi-layered discourses and the architect does not act in vacuum. These individual conditions make usually it problematic to generalise facts of a research about a particular building to be used in the future designs. It is also of crucial importance to consider that the same contextual condition can be seen, analysed and interpreted using different perspectives.

[2] Even an artist who interacts more with abstract elements should organise things in a certain manner. It is perhaps on that basis that Stravinsky (1882-1971) argued that isolated natural sounds such as 'the murmur of the breeze in the trees, the rippling of a brook, [and] the song of a bird' are not music, but 'promises of music.' He then discussed that 'tonal elements become music only by virtue of their being organised.' See: *Poetics of Music* (1942), quoted from: William John Mitchell, *The Logic of Architecture: Design, Computation, and Cognition* (Cambridge (Mass.): MIT Press, 1990). p. 37.

problem. To study the role of an image in thought is, hence, to seek the place of a being among a collection of objects. The building, given both as an image and as imagined, would be a synthetic form that organises itself with other forms of consciousness.

To say that the building is an image, which human subjects create, will consequently cause us to understand it in relation to the similar invisible structures created by them. This entails making a narrative of architectural spaces with respect to other spaces, which are resulted from a conscious activity. The plan and the programme are both images we created to 'mis-identify' ourselves.[3] There are underlying relations that frame one possibility among a diversity of possibilities. In this sense, a building is like a human subject. They both are dependent on the particular condition of architecture and the human subject's mode of existence. Architectural possibilities are framed by the same strategies that structure the subject's subjectivity. It is constituted through intervention of the social images that constitute the subject. The socially constituted image - or group of images - acts as a screen through which the subject sees its own subjectivity. Architecture is thus a screen image among the others in which the subject is mapped.

**II.**

Why is there a relationship between architectural plans and theories of knowledge? In the case of the Rab'i Rashīdī, the relationship between the spatial organization of the complex and Ghazzālī's thought can be explained in different ways. The first one is that '*I*', as a human subject, see the complex in the same way that I read Ghazzālī's writings. To some extents, this is unavoidable. However, Ghazzālī's relation to the complex is not like his relation to any other building. Although one cannot see Ghazzālī within the Rab'i Rashīdī, his presence is strongly felt. In the Rab'i Rashīdī there was a *khānaqāh* joined to a *rawda*, with a hospital attached to them. The unusual combination of the *khānaqāh* and the *rawda* suggests a comfortable companionship between Sufis and Islamic jurisprudents. This organisation can only be understood with regard to what Ghazzālī had postulated centuries earlier.

[3] This 'mis-identification', as Lacan proposed, is what connects us to the world.

The second reason is that Rashīd al-Dīn used Ghazzālī's thought purposefully to work out how the complex should be arranged. This is a possibility which cannot be disregarded. Nevertheless, I really doubt that he once began reading some of Ghazzālī's writings simply to construct the complex on that basis. The story is much more complicated than this simplistic account. In order to get a more concrete understanding, we should recall why the complex was built. It could be said: the Rab'i Rashīdī was a donation from Rashīd al-Dīn to the society. It was established to promote knowledge and worship with the community. It was built to perpetuate the name of the founder after his death. More reasons like these can also be mentioned. But there is a personal dimension which should not be disregarded.

In the last years of his life, Rashīd al-Dīn was accused of not being faithful to God. As stated earlier, Rashīd al-Dīn wrote a commentary to defend his religious beliefs. In that commentary, he stressed similarities between Ghazzālī and himself.[4] Long before his accusation and even though Rashīd al-Dīn was a powerful statesman, he was aware that he has enemies in the King's court. He was the author of *Jāmi' al-tavārīkh* (the vast historical encyclopaedia). He thus knew the fate of some of his predecessors. Rashīd al-Dīn was familiar with what happened to Ja'far Barmakī (767-803); he was beheaded by the order of the Abbasid Caliph. He should also know that Amir Hasanak-e Vizīr (about 997-1077) was stoned due to a politically motivated charge. Nizam al-Mulk (1018-1092), as another instance, was assassinated by followers of a religious sect. Therefore, it was not difficult for him to speculate, even when he was still in power, that his religious background and even his power can make him vulnerable anytime in future. On this basis, the organisation of his complex in accordance with the widely accepted thought of Ghazzālī could secure Rashīd al-Dīn's life.

We are finally able to explain why there is a connection between the spatial organisation of the Rab'i Rashīdī and the intellectual explanation of Ghazzālī's idea of *'ilm*. It is because the Rab'i Rashīdī is a level of physical subjectivity. This is a Lacanian view on the work of art, which is reaffirmed by Merleau-Ponty from whom we learnt that

[4] This obviously shows that Ghazzālī's thought was regarded at the time as the true explanation of 'the word of God'.

subjectivity is presented physically. In that particular moment of time, the influential books of Ghazzālī had generated discourses that constitute Rashīd al-Dīn and consequently his complex.

When we talk about Ghazzālī's books, we have to know that they are not merely the accumulation of separate texts. They were linked to a culture. The book declares that 'there is a memory that transmits things.' The book also shows 'there is a system of relations that arranges things.' Ghazzālī's books are expressions of a social relation. They manipulated human subjects, including Rashīd al-Dīn, to think about the world in a particular way. In a word, the Rab'i Rashīdī is the map of Rashīd al-Dīn himself. It is precisely the image of a man standing in front of a mirror.

## III.

What are the conditions in design that cause heterogeneous elements, parts and components of a University to be organised in a way that the resulted structure would correspond with institutional and social structures? The case study of the University of Chicago can provide us with enough material to answer this question. As discussed, the University of Chicago was dependent upon and even conditioned by broader religious and regional supports.[5] Although it was mostly funded by Rockefeller, the University of Chicago was not intended to be Rockefeller's University. It was to be the University *of* Chicago.

In addition, the location of the site represents the University of Chicago's dependence on regional supports. The University of Chicago was laid out on four urban blocks which were mainly a gift of Marshal Field. The size of the setting led to the University of Chicago being constructed somewhat like a chain of interconnected quads from inside and in terms of the street front from outside. In Cobb's design proposal for the University of Chicago there are several interlocked quads instead of one central open space. The campus covers all the blocks with all buildings facing either the streets or the quadrangles

[5] Even though the establishment of the University of Chicago was initiated by the American Baptist Education Society, its president of the Board of Trustees, Martin Ryerson, lacked Baptist affiliation. It was a clear gesture to other non-Baptists to take part in supporting the University of Chicago financially.

for the benefit of lighting, ventilation and maximum use of land. This brings to mind the image of English Universities such as Cambridge and Oxford that American visitors, including the founding president of the University of Chicago, William R. Harper, found interesting. The quadrangles of the University of Chicago have some parallels with the American tradition of campus planning best expressed in the University of Virginia, designed by Jefferson in the early nineteenth century.

In the relatively small campus site of the University of Chicago, there were, however, strictly limited alternatives to design differently and Cobb's idea of planning in terms of interlocked quads remained unchallenged. Instead, all of the playful imagery is focused on the street elevations in terms of style. Cobb had long been a master of Richardsonian Romanesque style buildings. He had employed Romanesque Revival in projects such as the Newberry Library, Chicago, 1887, Northwestern University's Dearborn Observatory in Evanston, 1889, and the Fisheries building for the Exposition, 1893. On June 25, 1891. when Cobb submitted his sketch for a campus, he laid out buildings on quadrangles with a Romanesque style.

In spite of this, some individuals argued that the choice of Romanesque style needs further consideration. There are facts and remarks that justify the change in style from Romanesque to Gothic style. American Baptist Education Society initiated the establishment of the University of Chicago. It thus should have a clear religious tone. On the other hand, we also know that 'the academic boom of the 1890s' was part of a wider protestant movement which led to an American understanding of some ideas stemming from the academic tradition of England and the scientific culture of Germany. This movement would seek to cultivate the society (*Bildung*) by spreading the values of a scientific scholarship (*Wissenschaft*). The quest was for the new image of the University as an institution that defines its scholarship with respect to social values. It is not the architect's desire but the image that his design would produce that usually determines the stylistic enunciations of a building. Gothic was intentionally used in the University of Chicago to convey this image among the public.

The person who took the lead to ensure that the architectural style of the University of

Chicago properly articulated its broader cultural mission was Martin A. Ryerson. As the president of the Board of Trustees and a member of the Committee on Buildings and Grounds, he served as a key spokesperson for the University. He knew that the University of Chicago had been envisioned to be 'a western Yale'. He believed the choice of Romanesque style would not represent, by the look, the religious causes of the University. Ryerson believed Gothic could help the University to be identified with European institutions. He thus convinced Harper to visit Trinity College in Hartford, Connecticut, and to obtain Yale's plan for Gothic buildings. What finally became one of the characteristics of Cobb's revised proposal was the use of Gothic as a medium to exemplify the mission of the University which was about to be built in Chicago.

The second change that Cobb applied to his initial plan was a further stress on the individuality of buildings. It should be remembered that Rockefeller conditioned the establishment of the University of Chicago, from the beginning, to the financial supports of other Baptists and Chicagoan elites. This meant that any progress in academic organisation and architectural construction needed an improvement in raising money. The person who was asked, on July 10, 1890, to make the first sketch of the immediate needs of the University was again Martin Ryerson. He was familiar with both academic programmes and financial processes of the University. He normally dealt with the constant annual budget deficits run up by Harper. Cobb's clear stress on the individuality of the buildings in his second proposal seems to be a response to this concern. Designing the University of Chicago as a set of separate buildings opened the hands of the fund-raisers to construct buildings taking into consideration the money they would receive in stages.

The University of Chicago shows that a building programme is potentially an instrument to conditions of design at a given place and time. In University design, clients have varying individual levels of institutional, economic and academic leverage to gain project approval. A building programme constitutes the contingent circumstances that architects making decisions in their professional work. The architect thus experiences a multitude of institutional frameworks that help identify the physical designs appropriate to them. This

may cause some conflict between the architect and the client. We should always consider that design is a sequence of individual, communal and procedural processes. In designing buildings, architects have to develop alternatives that broaden their understanding of the project. As soon as their mental images of a building becomes physical – in the beginning through developing drawings and models - architects make their project open to communicative processes of criticism and sense making. This process is unavoidably a discursive practice. Individuals who are involved in the design, the architect, the client and a variety of people who may act on their behalf, protect their personal, political and, in our context, intellectual demands through argued reason, but just as important, through the hierarchy of power relations.

**IV.**

With regard to the subject matter of University design, how does the subject 'map' himself in architecture? I mentioned earlier in this thesis Sartre's story of the viewer in a park.[6] It now seems that we can answer this question by referring, once again, to that intriguing story. Sartre had argued that when a human subject tries to look *at* something, he constructs its existence as a mode of *being-for-itself* for himself. This is an unstable mode of being, as his mental image suddenly disappears when he tries to *explain* it for someone else. By a mere attempt to explain his way of looking at things, the subject is trapped in what Lacan later termed as the order of language. Now the unstable moment of being-for-itself no longer exists.[7] The challenge is that the subject caused the moment of looking-at to disappear - by using words to explain that mode of being which is imminent to him - but he is not even aware of that. The subject's second vital mistake is not considering that the person, to whom he or she explains an idea, is not an object. There is a total space which is grouped around him. And now *they* are in the start of a new regrouping, something which did not start, and will not stop, there.

This suggestion may be too complicated at this point. To explain it, we may read the University of Essex in this way: Sloman entered the Wivenhoe Park. He did not visit the Park in the way in which a public park is visited by many viewers every day. The Park

[6] See pages: 41-43.
[7] The experience of looking-at always finds its existence in non-presence.

was something, which waited for him inasmuch as it was envisioned to be the site of the future University of Essex. When I say that it was envisioned, we understand that the Park is the presence of a group of subjects. The Wivenhoe Park was the point where the past, the present and a particular future would at least cause the University of Essex to arise as an existence standing there. The future University of Essex was programmed in a way to meet the *need* of an unprecedented number of babies born after the Second World War who were reaching maturity. The Park was selected outside Colchester, because the size mattered. The idea of a big University was waiting for Sloman. We remember how he insisted that the future University of Essex should be a 'big' University. What we now recognise is that he uncovered the idea that was waiting from him. Even before his appointment as the Vice-Chancellor, the future University of Essex was envisioned as 'one great unity'. Later on, Sloman insisted it should be 'one self-contained unit', as if it was his own idea. Again, Sloman *realised* what was already waiting from him to be uncovered, most likely without being aware of it. He thought that he was constructing reality, but in fact it was the reality that constructed Sloman. He adopted himself to the socially produced reality which was waiting to be concretised in the Wivenhoe Park. The University of Essex was not a University in the making, as Sloman titled his book. It was a University in the waiting.

Nonetheless, Sloman had not entered the site empty-handed. As a part of his baggage, he brought an intellectual idea to the building problem. His ideal was an intimate link between the University and the City. But his thought was obviously in conflict with the ongoing idea of a University which was due to be physically located outside the City. Trying to find a fitting image for his University, Sloman was offered, by Leavis in particular, the image of a University that could assist him tackling one of his worries. He grasped Leavis's look at the very centre of his act as the solidification of his own possibilities. In this scene, Leavis presented the University of Essex to Sloman. In a better word, he revealed Sloman to himself in the way the he was not before that.

The next important moment was when the architect entered the Park. By the mere appearance of Capon, Sloman was put in the position of being-under-view as an object.

The architect and the Vice-Chancellor *walked* in the Wivenhoe Park and *talked* to each other. Capon dealt with Sloman's image of the future University of Essex (which consisted of a group of images) in relation to architectural images he had in his mind. During their discussion, Sloman framed the University of Essex as a big University. He emphasised interdisciplinary education. He believed the buildings of the University of Essex should promote the informal intercourses within the University.

Sloman's conception of the University of Essex existed outside as an object for Capon. Reading Sloman's image of the University of Essex, it became apparent for Capon that compactness was one of the key characters of the future University of Essex. On the other hand, however, in a similar manner that a group of images surrounded Sloman, there is a total space, which was grouped around the ACP. For instance, the ACP was clearly under the influence of Modernist architects (Le Corbusier specifically). Modernism solidified the ACP's image of the University of Essex in a similar way that Leavis offered Sloman a fitting image for his plan of an academic order. With an image in his mind,[8] Capon successfully convinced Sloman that the University 'would not be built of red brick'. It was a determining victory in the rhetorical battle between the architect and the client. The University of Essex was agreed to be built in Modernist concrete. The Wivenhoe Park was at the beginning of a transformation. It was no longer a being-for-itself. The Wivenhoe Park was gradually to be established as a being-in-itself and also as a being-for-others.

This is, of course, an abstract description. But it can help us to recognise how the idea of a buildings is conceived through the intervention of images. We must not undermine the centrality of images. It is through images that the building and the subject are constituted by institutional and social structures. The word 'images' could indicate the relation of the conscious to the object. It is a certain way in which the object appears to consciousness. It is also, in a word, a certain way in which consciousness presents to itself an object. An image is nothing but a relationship. It is meaningless to imagine an image, which has no relation to an object or to the mind.

[8] which I guess was the Architects' Co-Partnership's entry for Cambridge Churchill College Competition

V.

This thesis has evidently shown that the end-product of any design inheres views, ideas and ideals of many. It might appear that in this piece of work I attacked the prevailing idea of individual creativity as the source of architecture. It is undeniably true to say that there are good architects as well as bad ones. To be sure, there are exceptional individuals that are capable of designing profound works. The suggestion is that as much as their aptitude, there are yet reasons - underlined in architectural education, the relationship between the client and the architect, relations within firms, etc. - that enable those human subjects to function as architects. Although this investigation demonstrated that architects are far from being able to 'design a building from scratch', I am unwilling to rule out this possibility. I might sympathise with those who would dethrone creativity as an idea before such an argument could be mounted. But the history of the idea of creativity, of the individual genius touched by the divine and inspired to work in marvellous and even miraculous new ways, needs to be put into some kind of chronological order. When did this idea of the individual genius arise? How did it emerge? What are the forces which make us persist in using this historically determined idea?

But, that is for another day...

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