VOL II

Research in Architectural Education

Part II

Teaching of History of Architecture

Carlos Vera Guardia

D. Phil. 1975

Supervisors Professor Robert Macleod Stuart Sutcliffe

INSTITUE OF ADVANCED ARCHITECTURAL STUDIES, UNIVERSITY OF YORK

ACKNOWLEDGEMENTS

My deepest thanks by their indirect or direct support and/or help to:

University of Zulia

Stuart Sutcliffe

Professor Robert Macleod

University of York

I.A.S.S. staff and members

Staff and students interviewed in the following Faculties:

- Faculty of Architecture and Urbanism. Universidad Central de Venezuela.

- Faculty of Architecture. Universidad de los Andes.

- Faculty of Architecture. Universidad del Zulia

Alfonso Vanegas

Graziano Gasparini

Sonia Martínez

and Sonia and Carla

CONTENTS

INTRODUCTION

INTRODUCTION

Part one of this work was finished after two years of research, largely based on the retrieval, analysis and synthesis of data, and on conclusions about that information. The information gathered pertained to architectural education in Great Britain. The introduction to Part One mentioned the intention of the author to relate the research and conclusions to the Venzuelan reality, however there was no attempt to do so in that work.

Part Two, is essentially an intellectual exercise, not a new piece of research. It is based on the findings of Part One, and is to be presented in partial fulfilment of a Doctor of Philosophy degree. Part Two is dedicated to delving more deeply into one of the areas mentioned in Part One, the teaching of the history of architecture, which is of major interest to the author.

The reasons for choosing history are several and varied the author has ten years of experience teaching the subject in Venezuela; history of architecture is, of the three subject of interest, the subject in which then exists more experience in architectural education in Venezuela; there are possibilities to use a proposal for Part II as a new programme for the subject in the Faculty of Architecture at the University of Zulia, Venezuela; and, the proposition of the supervisors that the subject has a practical application.

After several months of research in the schools of architecture in Venezuela I feel that the choice was right. There seem to be many indication that the work may be useful.

About Part II

Once was decided the subject for part II of this work, some more reading was necessary. The bibliography in Venezuela is scarce in English as well as in Spanish. Two months were devoted to the collection and perusal of all that was available, and pertinent.

The main objectives here are to study what a course of history of architecture for architects should be, and to present a proposal applicable to the School of architecture in Maracaibo*, Venezuela.

To be able to decide about how and why a course of history of architecture must be taught to architectural students, and to determine the content of such a course -should it be approved- I considered it appropriate to start by studying the nature of architectural history.

Knowing something about the nature of architectural history, it should be easier to understand the possibilitis of, such a course being useful, or necessary, to architectural students. The course or courses can be considered as means

---

(*) *Officially named Faculty of Architecture*

or ends, or both.

If the courses prove beneficial, according to the nature of the subject, and the consideration given to them as ends or means, general objectives, and specific, contents can be decided, and methods selected.

Considerations then have been made about a course, or programme, of history of architecture for architectural students, and following that considerations the proposal for a programme for Maracaibo, Venezuela.

Research about courses of History of Architecture in Faculties of Architecture in Venezuela.

As one of the main objectives of this part of the work is to propose a programme for teaching history of architecture in one of the Faculties of Architecture in Venezuela, it seemed natural that all the experience gained in those schools should be used and considered.

An investigation, whose main conclusions are presented within the work, was made, taking all measures and goin to any necessary length and depth to make it comprehensive.

As architectural education is a relatively new experience in Venezuela, the research was based on the period between the creation of the first School of Architecture, and 1974.

The results of that research have been so enlightening, for the author at least, that I have considered convenient

to introduce it as Appendix I of a special Appendix, volume that was not intended when this Part was started. The research has been written in Spanish as a contribution to architectural education in Venezuela.

Volume I of Part II contains the work itself, and a second volume, Appendices of Part II contains the above mentioned research of Faculties of architecture in Venezue la.

chapter 1

THE NATURE OF HISTORY OF ARCHITECTURE

CHAPTER 1

1. THE NATURE OF HISTORY OF ARCHITECTURE.

CHAPTER 1

1. THE NATURE OF HISTORY OF ARCHITECTURE.

Objective: Study the nature of history of architecture to obtain better understanding of the usefulness and educational value of history of architecture courses for architectural students.

1.1. Introduction.

As we have seen in Part I of this work, history of architecture courses have in the past, gone through significant changes as to their importance, objectives and contents, and there was a time when even the necessity of the material was seriously debated. The later situation is no longer in question, although discussions about the course material are still going on, and If found that to be a very healthy, and stimulating sign for architectural education and the courses themselves.

History of architecture may be taugh in schools of architecture as means or as ends, and in view of that, there are many possible course objectives and content alternatives as we have already seen in Chapter.....of Part I.

The study of the nature of history of architecture

is intended here to aid in determining the kind of values, objectives and contents applicable at the present time, and what methods could be best used to teach history of architecture to architectural students, so as to make it an asset to their education.

I do not pretend that this study will finish the old disputes about the courses, but certainly it gives a clearer basis to the arguments, relating them to the very nature of the subject. I have tried to this study with as little bias as possible concerning the relationship between the nature of history of architecture and the curriculum.

The nature of history of architecture is rather complex and requires for its understanding the study of the nature of history and the of nature architecture. Both subjects lead us towards a discussion of what art and science are.

After reviewing those concepts, we shall relate their nature to possible objectives, course contents, and scope, and evaluate their contribution to architectural studies, towards the end of the chapter.

1.2. The nature of history.

Let us consider first the nature of history itself before we deal with history of architecture whose

nature wil be influenced by what we determine about history and architecture separately.

> *"Since everything in the past is history, and since everything we know is already past, all knowledge is in a way historical".....(1)*

This is a very broad definition of history, and it is in some ways opposed, or a least qualified by Carr, when he says:

> *...."But history is meaningless in a static world. History in its essence is change, movement or if you do not cavil at the old fashioned word-progress". (2)*

What is past can hardly be change unless we consider the re-enactment of history a change.

The same Carr defines history as a social process and explains his views of how the present helps to understand the past, offering a possible way to change not the past, but the interpretation of it.

> *"History, then, in both senses of the word meaning both the enquiry conducted by the historian and the facts of the past into which he inquires -is a social process, in which individuals are engaged as human beings; and the imaginary antithesis between*

society and the individual is no more than a red herring drawn across our path to confuse our thinking....

... History is Burckhardt's words, is "the record of what one age finds worthy of note in another" (3)

The past is intelligible to us only in the light of present; and we can fully understand the present only in the light of the past. To enable man to understand the society of the past and to increase his mastery over the society of the present is the dual function of history" (4)

According to this the knowledge of history is the only way to understand the past and the present, and considering that the historian is in the present, he answers the question about what history is saying:

...*"My first answer, therefore, to the question, What is History? is that it is a continuos process of interaction between the historian and his facts, an unending dialogue between the present and the past".* (5)

He stresses the importance of relationships between the historian and the facts again when he says that

"history is concerned with the relation between the unique and the general. As a historian, you can no more separate them or give procedence to one over the other, than you can separate fact and intepretation" (6)

A. L. Rowse in his book "the use of history" states that history has two different levels:

..."We might say that if certain events had not taken place in our history -if Richard I had not been defeated and dethroned, If Edward IV had lived or Edward VI or Henry Prince of Wales, if Queen Anne had had a son to succeed her -the whole surface pattern of our history would have been different; and yet it is probable that the underlying story of England would have been much the same, its fortune not so very different, for that depends upon more profound forces at work -its geopgraphical position and character the economic endowment of the island, nature of the people, their social structre and so on.:There is the issue, simply stated. The point is whether we mean by history the surface story which is capable of infinite variation, or the underlying story which

is profoundly conditioned" (7)

Relating this concept to the generally accepted opinion that we can not separate history from its interpretation, would mean that there are two different levels of interpretation. Taking the concept of interaction and interrelationships, the socalled 'underlying story' must have an important relation to the surface story, which normally occupies most of our study.

To clarify the subject of interpretation and the meaning of history, we refer again to Carr:

> *..."In place of the theory that history has no meaning, we are offered here the theory of an infinity of meanings, none any more right than any other -which comes to much the same thing. The second theory is surely as untenable as the first. It does not follow that, because a mountain appears to take on different shapes from different angles of vision, it has objectively either no shape at all or an infinity of shapes" (8)*

Objeftivity appears here in relation with interpretation. Both concepts can be defined in their relationships, according to Carr, as follows:

..."The facts of history cannot be purely subjective, since they become facts of history only in virtue of the significance attached to them by the historian.

Objectivity in history -if we are still to use the conventional term- cannot be objectivity of fact, but only of relation, of the relation between fact and interpretation between past, present and future...But the concept of absolute truth is also not appropriate to the world of history -or I suspect, to the world of science". (9)

Let us now bok at Collingwood's ideas about history and interpretation, or re-enacting, as he calls it.

> "My historical review of the idea of history has resulted in the emergance of an answer to this question: namely, that the historian must re-enact the past in his own mind. What we must now do is to look more closely at this idea, and see what it means in itself and what further consequences it implies". (10)

And analysing the value of historical sources in relation to the historian's interpretation he says:

> ..."Now, anyone who read Vico, or even a second hand version of some of his ideas, must have known that the important question about any

statment contained in a source is not whether it is true of false, but what it means. And to ask what it means is to step right outside the world of scissors -and-paste history into a world where history is not written by copying out the testimony of the best sources, but by coming to your own conclusions". (11)

Both quotations give importance to interpretation and to relationships between fact and history as we know it.

Collingwood's view of history which essentially emphasizes the importance of individual actors in shaping history, is refered to by Carr as:

"One of the serious errors of Callingwood's idea of history which I discussed in my last lecture was to assume that the thought behind the act, which the historian was called on to investigate, was the thought of the individual actor. This is a false assumption. What the historian is called on to investigate is what lies behind the act; and to this the conscious thought of motive of the individual actor may be quite irrelevant". (12)

There is no doubt that Carr's statement has validity and the same criteria should be applied to the

historian at the moment of interpretation. Even working individually, he will be incorporating in his work many influences of his own environment which should be, considered when studying his writings.

The concept of interpretarion in history seems to be generally agreed upon, and it is also agreed that it requires a tremenelon amount of scholarship to be able to understand the complexities and the interpretation of history, at this point there is little more to add to this thus we continue with some other related concepts of history.

> ..."*Arrived at that view-point, history is the most synoptic and unifying of all studies. But it implies, and demands, education, fortunately also it provides it. The process is a dual one*". (13)

This, is an important point that my own experience teaching history confirms completely Good students of history of architecture are usually the best all around students, and the better educated ones.

Collingwood criticising Toynbee, giving some important clues about the nature of history as studies.

> "*Toynbee has failed to see this because his general conception of history is ultimately*

naturalistic; he regards the life of a society as a natural and not a mental life, something at bottom merely biological and best understood on biological analogies. And this is conected with the fact that he never reaches the conception of historical knowledge as the reenactment of the past in the historian's mind. He regards history as a mere spectacle, something consisting of facts observed and recorded by the historian, phenomena presented externally to his gaze, not experiences into which he must enter and which he must make his own. This is merely a way of saying that he has not taken any philosophical analysis of the way in which his historical knowledge has been attained".....(14)

Hištorical studys, then, requires from historians not only "experiences .... he must make his own" but a philosophical analysis of "the way in which his historical knowledge has been attained" as well. This coincides with what we saw considering Carr's conception about interpretation (12).

1.2.1. History as Art.

In defining historical studies, Rowse and Collingwood are, very helpful.

....*"How shall we proceed in the matter? My answer is by two methods, which dovetail in with one another: one is intellectual and scientific, the other is intuitive and aesthetic. They do not conflict; they complement each other, they illuminate each other. There is the whole secret of history, of historical writing and study: it lies in its duality of vision, and intimate and constant twomindedness, or, if you like, duplicity of mind. It does not study the world through a microscope or a telephone; it has two eyes always upon the subject, one analytical and scientific, the other selective and aesthetic"....*[15]

....*"The scientist and historian and philosopher must go to school with the man of letters, and study to write as well as writing can be done. The literary man msut go to school with the scientist and his likes, and study to expound a subject instead of merely exhibiting a style. Subject without style is barbarism; style without a subject is dilettantism. Art is the two together".* [16]

Both quotations ~~u~~rate history as a science and an art. Taking first history as art, we come to the

conclusion that history is art not only in content, but also in its essence.

"Art is not indifferent to truth; it is essentially the pursuit of truth. But the truth it pursues is not a truth of relation it is a truth of individual facts". (17)

History, interpreted not, must be based more on what is truth, than on what is not, and although the relationships are important in historical truth, more than in art, the historian as an individual must be an artist.

1.2.2. History as Science.

"Science is finding things out: and in that sense history is a science". (18)

This very short statement is enlarged upon by the same author, saying...

....."*Every historian would agree, I think, that history is a kind of research or inquiry. What kind of inquiry it is I do not yet ask. The point is that generally it belongs to what we call the sciences: that is, the forms of thought whereby we ask questions and try to answer them. Science in general, it is important to realize, does not consist in*

collecting what we already know and arranging it in this or that kind of pattern. It consists in fastening upon something we do not know, and trying to discover it"...(19)

The view that history is a science has support from many important authors, although differences are to be found about how exact or what kind of science it is.

...."History should be the scientific study of all these sources. It should yield a science of progress, though not necessarily an exact science, like physics, nor a abstract descriptive science, like anatomy. It should, in other words, disclose, if not mathematical laws or a static general scheme, an order, in its own way as intelligible as that of astronomy or anatomy". (20)

A "science of progress" to reveal an order not ruled by exact laws, seems to be the underlying idea of Gordon Childe.

...."For we must remember that in the simplest and most fundamental way historical method and scientific method are one and the same. In both you proceed from the assembling of particular facts to generalisations, and from generalisations back to the facts. In

both science and history you do not start from nothing: you begin with common sense and with a working hypothesis; as you go on you modify your hipothesis in accordance with the evidence. And so generalisation is built up and theories which illuminate the facts, to the light of which they may be interpreted and often gain significance, but always, in both science and history, the generalisation is subject to revision in the light of new evidence: it is constantly being molded and remoulded in keeping with the facts". (21)

The resemblance of methods explained by Rowse is certainly an important common factor to science and history, and it does not matter how exact a science history is at the end. Jacques Ellul, speaking of the relationship between science and technique, gives us a good argument for the classification of as a science.

"When we speak of technique in historical science, we mean a certain kind of preparatoy work: textual research, reading collation, study of monuments, criticism and exegesis. These represents and ensemble of technical

operations which aim at historical synthesis, the true work of science. Here again, technique comes first". (22)

Independent of the argument about science and technique, for Ellul the true work of science is coincident with historical synthesis.

After speaking of methods and technique, it may be useful to bring in another of Collingwood's opinions, this time as to what the scientific study of history must involve.

...."*It was a correct understanding of this truth that underlay Lord Acton's great precept "Study problems not periods". Scissors -and- paste historians study periods; they collect all the extant testimony about a certain limited group of events, and hope in vain that something will come of it. Scientific historians study problems: they ask questions, and if they are good historians they ask questions which they see their way to answering"....*(23)

The point about periods or problems will be raised again when we come to discuss contents. Currently there seems to be a special interest in historical education towards the study of problems, instead of a certain set of

of chronological events.

1.2.3. History as Social Science.

Accepting that history is a science (and a science that is not ruled by mathematics or exact rules) it is very appropriate to examine opinions about what kind of science it is.

"History is then a social science. In that lies its flexibility, its variety and excitement. It is so much less rigid than physical science, more subtle and appealing to the imagination, for it deals with human beings in all their complexibility and incalculability. It is always alive and can be thrilling". (24)

.."Scientists, social scientists and historians are all engaged in different branches of the same study: the study of man and his environment, of the effects of man in his environment and of his environment on man"..... (25)

History is then a social science, in that it is concerned with the human race and its environment. But not all opinions are concurrent...

....."a fundamental distinction can be drawn between these sciences (mathematical and natural) and history, and that this distinction makes it misleading to call history -and perhaps also the other so called social -sciences- by the name of science. These objections -some of them more convincing than other- are in brief: 1) that history deals exclusively eith the unique, science with the general, 2) that history teaches no lesson, 3) that history is unable to predict, 4) that history is necessarily subjective, since man is observing himself, and 5) that history unlike science, involves issues of religion and morality".....(26)

It not being the purpose of this work to discuss one author's opinion, let me simply say that of all these 5 arguments, the last one seems the most difficult to reject. The other four are easily arguable, recognising the fact that history is not necessarily a social science by tradition, nature, in methods or objetives. It is the study of man however it is becoming more and more accepted and acceptable to call it a science.

1.3. The Nature of Architecture.

Architecture has been most commonly defined as the art and science of building. In recent times however, the term 'building' has been reexamined, emphasizing both the fact that architect is a designer, and that his responsibility goes beyond the building to the built environment.

The actual responsability to the environment varies from one country to another, depending, among other considerations, on how the building industry is organised and how many kinds of professionals take part on it.

Independent of the disucssion of architecture as a social science, there seems to exist an argument that architecture is art and science.

1.3.1. The Nature of Science.

In number 1.2.2. "History as Science", we mentioned some of the main characteristics of science, its methods and techniques, in relation to history.

Science, as a search for truth and the guest for general principles and laws has been gaining importance in higher education during this century. This has affected architecture,

which was considered before as more an art than a science.

In a very broad classification, science can be divided into physical sciences and human sciences, and it is interesting to note that architecture must use both to be feasible.

Even recognising that physical sciences are more exact, although not absolute, and human sciences, because they depend on human behaviour, are more subjective, both must be deeply considered in architecture to provide for the right (if there is any) environment for man.

This subjectivity of certain aspects of sciences, human or social, was at the roots of the discussion when 'design', the main task of architects, was first systematised.

The nature of science itself, the physical as well as human affect, influence in different ways the main task of the architect, which is designning for the environment.

1.3.2. The Nature of Art.

Many definitions have been given to art, it was decide to put forward one given by

architect and historian Allsopp, that is very useful for our purpose.

"Art is the conscious creative imaginative activity whereby we express our emotions. It is an activity of the artist whose subject is to express his emotions". (27)

"The activities of our mind may be roughly divided into thought and feeling. There may be other activities but these two are the most obviously important and they are frequently contrasted, head and heart, reason and emotion, thinking and feeling. Neither could exist whithout the other. Emotion provides the reason for thought, the desire and need to the think and most of the subject matter of thought".....(28)

Architecture needs reason, and if "emotion provides the reason for thought" certainly the nature of art and architecture are very much the same.

"Art we must admit, is not the expression in plastic form of any one particular ideal. It is the expression of any ideal that the artist can realize in plastic form. And though I think that every work of art has some principle of form or coherent structure

I would not stress this element in any obvious sense, because the more one studies the structure of works of art which live in virtue of their direct and instinctive appeal, the more difficult it becomes to reduce them to simple and explicable formulae"....(29)

....."This means that a work of art is fairly adequately defined as pattern informed by sensibility"....(30)

"What the artist is striving to do is to express: to express not necessarily himself, but everything in relation to himself. His art is his means of expression"...(31)

Expression is, then, inherent to the nature of art but not only, or necessarily, individual expression, and this is something important to insist upon, because architecture is not individual but social.

"No one wil deny the profoond inter-relation of artist and community, the artist depends on the community -takes his tone, his tempo, his intensity from the society of which he is a member.... The ultimate values of art trascend the individual and his time and circumstance".....(32)

The artist is always influenced by his commnunity, It's effect depends on how strong the artist himself is, Collingwood denies emphatically the theory of individual artistic creation.

"I shall try to show that the individualistic theory or artistic creation is false (1) as regards the relation between a given artist and those fellow artistis who in terms of the individualistic theory are said to "influence" him; (2) as regards his relation with those who are said "to perform his work"; and (3) as regards his relation with the persons known as his "audience". In each case, I shall maintain, the relation is really collaborative". (33)

This strong view point is not completely shared by Frankl, although he uses some of the same arguments in regarding creation as if not an entuin individual creation, at least as the product of the originality of the artist.

...."We shall find no artist whit creates entirely from within. He grows under the stimulus of existing works of art, lives in close communication with other artist, his

teachers, and his fellows strugglers. But it is also true that every artist is capable of creating something new for himself, of .. adding or pouring something new into his work. Tradition and originality are conceptually opposites of another kind than the polarities of stylistic history, for it is certain that we never find the one without the other. No creation is absolutely new, and anything that follows tradition exclusively is a copy and is therefore not art". (34)

The influence of what Frankl calls tradition is very strong in architectural creation, and Allsopp warns very justly about the dangers of artists striving to be original and because of that, not being sincere, and losing, therefore, the quality of art in their work. This has happened and continues to very often in architecture now a days.

"There is only one standard we can apply to a work of art when criticize it: Is it a sincere and articulate expression of the emotions of the artist? In fact, Is it art? (35)

As we suggested before, the influence of commnunity and the environment depends on

the personal strength of the artist, and no doubt many artists have been in the fore front of their community.

"*.... But it is very significant that great artists seem to have broken with tradition a little. I think it is true to say that no great artist has left a tradition as he found it. Great artist have been in the forefront of their tradition*". (36)

In this sense, architects, being artists as they are, have a very different kind of artistic, scientific and professional responsability.

:!."The architect cannot designa solely to fulfil a social need because he is designing a building purely as a building and as means of expressing his own feelings about buildings because every building has its social purpose which must also be imaginatively expressed. If the building can be conceived as having no social significance but simply as a means of expressing the artist's feelings about shapes, then it is a kind of sculpture, not architecture". (37)

Before we leave the subject about the nature of art, I must declare that the reason for

dedicating this much space to Art is not because I myself believe that the art component of architecture is extremely important. On the contrary after more than twenty years as an architect, I find myself in doubt as to how important it is for an architect to be an artist, compared with the social responsabilities he has towards his community, and the environment (natural and built).

1.4. The Nature of History of Architecture.

So far, we have seen that history is art and science (social science) and that its method and techniques are very much the same as that of science. Furthermore we saw, that architecture is, as well, art and science, It's art component is very socially oriented as well as scientific side, and both depend on physical sciences and human sciences.

Before we try to draw any conclusions about the possible relation between the nature of the subject, and the studies of history of architecture, we shall examine some opinions related to it.

Profesor Allsopp looks at architecture, in relation to history, saying:

> *"With music I have taken the case of an art in which the historical element is at least*

diract and least essential. At the other end of the scale is architecture, the most historical of the arts, where history is at its most obvious: one might even regard architecture as history arrested in stone, the movement of time congealed into plastic form. For at every point a building expresses the needs, the character, of its age. And old and complex building will bear the signs upon it various ages which it has lived thourgh! (38)

Certainly, architecture, because it must "have some utilitarian purpose", as Read says, and because it is not the work of one single person, is the most historical of arts, and as art, the most compulsory ?

The extent to which the different forces which shape architecture have effected its development has been discussed by architectural historians Anderson believe that:

...."historical invevitable is an unnecesary restraint in understanding architecture: the reason for the design of a building may be more the personal decision of the architect or the institutional clients than the product of cultural forces of the particular era. It

is important that the architect or the historian be selfcritical, aware that he is not forced to move in a particular direction. Meredith Neil called for an architectural history that takes account of the psicology of perception: why people build the way they do at a certain time and place, and the original builder's and subsequent user's sense of space"...(39)

Depending on the building and on the institutional client or patron, the design was in the past generally a result of the individual decisions of the architect. That trend has been changing through history, and it occurs less and less now. The above reference to considering the users, and the psicology of perception is now, generally accepted. It has developed since 1970, into one of the main concerns.

Regarding architectural education, it is important to see how history relates to architectural studies.

"In architectural education, it is clear that a student must learn how to make himself understood. He must, in fact, learn the ways of doing things that are understood. That is one aspect of his technique. Obviously history will be the most important

technical subjects he has to study"...(40)

"The first problem of architectural education is to show architecture to the student. This can be done in many ways, but in some schools no attempt is made. (even history lectures do not come within a thousand years of our time until the second year)....(41)

According to Allsopp, teaching the history of architecture, is the best possible way to make students aware of what architecture is. It must be presented well, and early in their studies. Architecture being the most historical of all arts, the best way to 'show' architecture to students is to give students an historical awareness, of architecture as an art and a science. This concept is being confirmed even with many new courses of history architectural which study modern not ancient buildings. Thus history of architecture courses are still a very valuable instrument.

From the above we can also conclude that history uses methods and techniques that are scientific, and in that interpretation and writing are art, architecture, itself, is both art and science.

1.5. History of Architecture Courses and Architectural Education.

Taking into consideration the nature of the history of architecture, and the arguments brought forward here, we can observe that the courses may be considered more as means than as ends in architectural education, in that what we want is to train architects and not architectural historians.

Agreeing that the first thing to do with new architectural students is to make them aware of what architecture is, history of architecture courses are the best possible way to do that, teaching them to understand the present through the past, and to interpret the past through the light of the present, and seeing waht happened to man and his architecture over the ages. As in history, in architecture it is important to find out the differences and the reasons for those differences, between surface history and underlying history. It is very important for an architect to be able to see which of influences are superficial and which both, in the past and the present.

The awareness that is required in history as to the interaction between the historian and the facts, is must be developed in architectural students, to make them aware of the interaction that effectively exists between history and architecture, and between the architect himself and the built environment.

This will help architects to see themselves in their true and responsible position within their environment, and in history, making them understant that there are historical reasons for the architecture of the past, and, that their buildings will outlive them an represent their epoch.

The point of objectivity is always questionable in architecture. Architectural students must learn through the lessons of history, that it is more important to know if a building or the thought given to it is good or true. It is important to discern about the objectivity of the relation between a certain architecture and its time, and between our architecture and past architecture.

Concerning interpretation, which we already mentioned very lightly independent of the argument as to whether history has no meaning or an infinity of meanings, the architectural students may learn through the history of architecture that even the most individualisti

Interpretation has a certain, usually strong, influence from the environment, both physical and cultural. The architect, no matter how individualistic he may be, must produce architecture as a answer to his environment, and his answer, which is his interpretation, should be reasoned and clear enough to show both the environment and the individual

participation.

As to methods, we come to the point where history of architecture is mot clearly a means, and an excellent one; to contribute to architectural education. The use of scientific and aesthetic methods, (which are those that architecture must use) in history of architecture courses is an easy and naturally transferable experience to any other subject including design itself. Although this is, perhaps, more easily perceptible in scientific than in asthetic methods, this is the one that relates more closely to some stages of design when the rigour, of scientific mehtods seems not applicable or not reliable enough.

History of architecture is a search for truth, and of relations, trying to discover or to disclose an order. It is the typical practice of architectural design going from programme to design stage. Programming being the basic truth or statement, considering physical and psichological requirements to be fullfiled; finding things out being the process, and the order the final design even if it is not more than a particular order.

Although apparently more related to contents than anything else, the orientation toward the study of problems instead of periods, is in fact a current

tendency in education, and has clear educational values, as it emphasiees the contact between reality and the motivation. The contact with reality of problems is a necessary component of architectural education, as architecture is a social responsibility. Motivation need not be discussed here, but its universal acceptance is basic to any kind of educational process.

The relation between individual and community, is one of the main concerns of architects who must design for their community, even when they design the least significant of buildings. Architects must consider their social responsability not only towards socio-economic aspects, but as well towards socio-psychological aspects, and should consider human behaviour as a main factor in design. Design participation is not excretly a new concept and it is certainly a growing concern.

In the history of architecture, emotion is a reason for thought. In architecture it is a reason when in some stages of design, influences decisions, and the knowledge or discovery of this relation, and its results through on history, will influence the future architects position when doing his own design.

The sincerity of the emotion, considered its

appropriate moment during the design, as opposed to a deliberate search for originality, which is not sincere, or may not respond to the real design variables, will contribute to produce better or worse architecture. It is this kind of understanding that history of architecture courses can transfer to architectural students.

All these aspects give support to the idea that there are, in the nature of history of architecture itself, characteristics that leads us to think that history of architecture courses have a great deal to offer to architectural students.

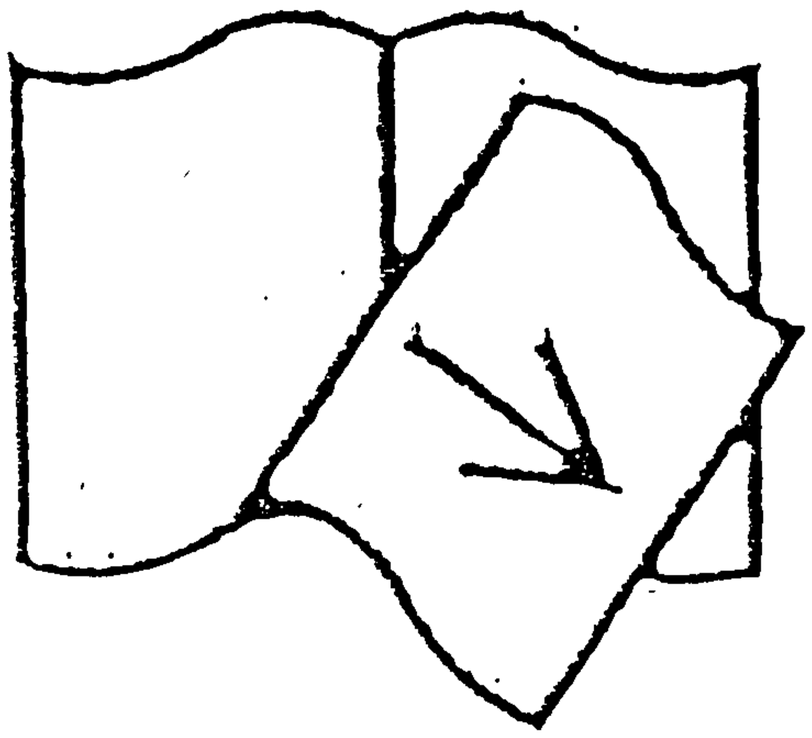
It is necessary to remark that some of these arguments are not considered as the objectives for the courses of history of architecture presented by Schools of Architecture as we shall see in chapter

1.6. Summary.

History of architecture, by its nature, depends on the nature of history and architecture.

History is a social process. Through it we can better understand the past and the present, and the interaction between both as well as between the historian and his facts.

Pages Missing not Available



Through history we can know the relation between unique and general, starting from a historical fact and trying to find its general consequences.

There is a surface history that can be altered by some events, in which some individual actors play an important role, but there is also an underlying history that depends on more profound roots like physical environment, race and other factors. Underlying trends probably change over a long period of time, but cannot be easily altered, and we must discover and study them.

Depending on how we consider it, history has no meaning, or diverse meanings.

Considering objectivity and interpretation what matters is not if a certain historical fact is really true or false, but what it means, and how objective are the relations we are considering. In interpretation, as in objectivity, individuality is relative, because all historians, like all human beings, ~~are~~ *are* continuously influenced *by* and influenc~~ing~~ *e* their environment.

History must not be studied as biological facts, but through a philosophical analysis, to attain historical knowledge.

History is art and science, and as such, uses scientific and aesthetic methods. The historian a man of science and at the same time a man of letters.

History as science is a search for truth, and for inter relations, in order to find out things that may help to disclose an order. Lately the tendency to study problems and not periods makes the resemblance closer.

According to the nature of art, emotion is reason for thought, and requieres an _____ for _____ expression. This expression, like interpretation, is always influenced by tradition and environment and must be sincere, not false originality, to be true art.

All great artists inspite of those traditional and environmental influences, have introduced changes in tradition and its means of expression, although some of them were not understood in their time.

History of architecture like history and architecture is art and science. Architecture is the most historical of all the arts.

According to its nature the history of architecture can be a very useful tool which will contribute to

architectural education, even when the subject is not considered as an end in itself. It has value as a science and an art. It is important, nevertheless to find out the best way to assure the right transfer of its values to students by lecturers.

1.7. Conclusion.

The study of the nature of history of architecture has proved deeply interesting and it has been very helpful to determine whether history of architecture courses must be considered in School of Architecture curriculum.

Independent of contents, methods used, and other considerations, history of architecture, is an important subject because it is the best possible way to make students aware of what architecture is and what forces interact to shape it. This makes possible a real understanding of past and present and mutual dependence.

The experience of working in history through search, analysis and interpretation is most valuable to architects, and it must be thoroughly employed. In this sense,the use of scientific and aesthetic methods are important tools to architectural students.

The real social responsibility of architects, today can be better understood through recognicing the influence of tradition, community and individual participation in the past. The results reached by studying not only good but bad buildings, as well, and human perception and behaviour towards architecture, make possible the real consideration of all variables (human and technological) in present design.

1.8. References.

1. Daniels R.V., Studying History. How and Why Practice Hall, N.J. 1966, pp. 29.

2. Carr E.H., What is History? Macmillan & Co. Ltd., London 1962, pp. 126.

3. Burckhardt J., Judgements on history and on historians. 1959, pp. 158 quoted in Carr, E.H. Op. Cit., pp. 49.

4. Carr E. H. op. Cit., pp. 49

5. Ibid, pp. 24

6. Ibid, pp. 59

7. Rowse A. L. The use of history. English University Press, London 1963, pp. 110.

8. Carr E. H., op. cit., pp. 21.

9. Ibid, pp. 114.

10. Collingwood R. G. The idea of history. Oxford University Press, Clarendon 1966, pp. 260.

11. Ibid. pp.

12. Carr E. H. op. cit. pp. 46

13. Rowse A. L. op. cit. pp. 138

14. Collingwood R.G. op. cit. pp. 163

15. Rowse A. L. op. cit. pp. 84

16. Collingwood R. G., op. cit. pp. 299

17. Ibid. pp. 288

19. Ibid. pp. 9

20. Gordon Childe V., History, Colbett Press, London 1948, pp. 3.

21. Rowse A.L. op. cit. pp. 94

22. Ellul J., The technological society. Trans. Wilkinson J., cape, pp. 7-9, as quoted in Richmond W.K., The concept of educational technology, Cox and Wyman, London 1970 pp. 7.

23. Collingwood R. G., op. cit. pp. 281.

24. Rowse A.L. op. cit. pp. 15

26. Ibid pp. 56

27. Allsopp B., The art and nature of architecture. Pitman and Sons, London 1952, pp. 49

28. Ibid. pp. 17

29. Read H., The meaning of art. Faber, London 1972 (rep.), pp. 23.

30. ibid, pp. 35

31. Allsopp B., op. cit. pp. 10

32. Read H. op. cit. pp. 268

33. Collingwood R. G. op. cit. pp. 318

34. Frankl P., Principles of architectural history. Trans. and Ed. O'Gorman J. M. I. T. Press 1968, pp. 192.

35. Allsopp B. op. cit. pp. 113

36. Ibid. pp. 53.

37. Ibid. pp. 25

38. Rowse A.L. op. cit. pp. 183

39. Architectural historians question their methodology. Progressive Architecture. News Report, March 1970, pp. 42.

40. Allsopp B., op. cit. pp. 93-94.

41. Ibid, pp. 102

chapter 2

OBJECTIVES

CHAPTER 2

2. OBJECTIVES

2.1. Introduction.

2.2. Objectives studied in Part I.

2.2.1. General objectives of Schools of Architecture

2.2.2. Objectives of History of architectural courses

2.2.3. Objectives studied in Chapter 10 of Part I.

2.2.3.1. Objectives on general education

2.2.3.2. Objectives on higher education

2.2.3.3. Objectives on architectural education

2.3. Objectives and the nature of history of architecture.

2.4. Other opinions

2.4.1. General objectives

2.4.2. Objectives of history of architectural

2.5. Objectives in history of architecture courses in the Faculties of architecture in Venezuela.

2.6. Objectives for history of architecture courses in architectural education.

2.6.1. General objectives

2.6.2. Specific objectives

2.7. Summary

2.8. Conclusion.

2.9. References.

CHAPTER 2

2. OBJECTIVES.

Objective: Study the objectives of history of architecture courses found in Schools of Architecture in Great Britain and in Venezuela. Propose objectives for a course for architectural students.

2.1. Introduction.

As we have seen in Part I of this work there are many possible objectives for courses of history of architecture. In this chapter we shall try to summarize the objectives found in that Part, in Chapter 7, as well as some other that are consequence of chapter 1 of Part II, related to the nature of history of architecture. Then we shall have a look at some quotations that seem appropriate to the emphasis or to the discussion of course objectives.

As the final chapter Of Part II is a proposal for a course or courses of history of architecture for Maracaibo, Venezuela, we must consider the objectives found in the research done about history of architecture courses in Faculties of architecture

in Venezuela from their founding, until 1974. The results of that research are contained in the Appendix of this work.

Finally, we shall try to select the relevant objectives basis of the final proposal for a course.

2.2. Objectives Studied in Part I.

In Part I, of this work we considered objectives at different levels. First, in chapter 3, we studied the objectives of the selected Schools of architectural education. Then in Chapter 7 we revised objectives of history of architecture course. Finally in Chapter 10 we considered the objectives at general education, higher education, and architectural education.

We will not try to repeat or insist on those considerations here, but instead will bring them in as a summary.

2.2.1. General objectives of Schools of Architecture.

In a very general and broad way, the objectives of the Schools of Architecture studied are:

-Integral development of the human being towards becoming architect.

-Concern for the environment -physical and cultural.

-General broad education, based on sound scientific knowledge, to prepare for problem solving activities.

These objectives, as we shall later on, are in fact objectives valid for education in general. It is no wonder that some specialists are proposing architectural education as a general educational basis.

2.2.2. Objectives of History of architecture courses.

History of architecture used to be a basic subject for architectural design, but that has changed during this century, especially rapidly during the last tew year, as we have seen in Chapter 7 or Part I. Nevertheless, these courses have been maintained with a varied degree of importance in the different Schools.

The objectives mentioned by those Schools were:

-As a cultural background.

-As a basic knowledge to understand architecture

-As analysis and interpretation of periods and or architectural facts.

-As a way to develop a methodology for analysis and study.

-As basis for conservation.

-As a way to develop research.

Some of this objectives consider history of architecture within architecrural education as ends, and other as means.

We can consider the first mentioned, cultural background, as an end, not having a useful purpose as a prime interest. The others, although not on the same level, are means, direct or indirect, to architectural education.

2.2.3. Objectives studied in Chapter 10 of Part I.

As we have already said in chapter 10 or Part I, we studied objectives at different levels: general education, higher education, and architectural education. The following is a summary of that rather lengthy chapter.

2.2.3.1. Objectives of General Education.

The main objectives detected as important to general education are:

-Furtherance of the individual.

-To create and awareness of the relation between the individual and the society to which he belongs.

-To insure that the principal motive for study is not to acquire a better job.

-Learning to work in a group.

-Learning how to learn.

-To emphasize the use of knowledge more than the knowldege itself.

-To make clear the difference between education and training and provide for both.

Clearly the emphasis is on learning instead of teaching, and knowledge for knowledge's sake is a secondary worry in education nowadays.

The first objectives mentioned above coincides with the first one mentioned by the Venezuelan Schools considered in this work.

2.2.3.2. Objectives of Higher Education.

Naturally the majority of the

objectives of higher education would coincide with those of general education, nvertheless, we will mention some of them here.

-The Robbins' Report states four main objectives:

. To develop skills for work.

. Develop general powers of the mind.

. Contribute to the advancement of learning.

. Transmit culture and develop the sense of citizenship.

-The R.I.B.A. considers continuing education as a main concern of higher education.

-Development of a critical mind.

Again the accent is on learning, and on the responsabilities of education, more than on adquisition of knowledge.

2.2.3.3. Objectives on architectural education.

There are several points concerning the objectives of architectural education that are important to mention

here, because they are based on quotations and experiences and they are not just personal conjecture.

-Freedom in education without looseness.

-Development of wide range of talents to stretch the mind.

-To learn to recognise, identify, analyse, evaluate and find solutions to problems.

-To relate education to reality and use it as a feedback.

-To develop attitudes of study and work.

-To learn to cooperate with other disciplines.

-To provide a universal education.

-To provide an asthetic education.

-To give the students concern for human beings, and for their social responsibility.

To give the students an awarenes of the learning process and to learn how to learn.

-To teach design.

-To instill a care for integration of theoretical knowledge and design in project or problem solving work.

-To develop a scientific approach to problems.

-To find the right balance between theory, architectural education, and, the practice of the profession.

-To develop a methods or methods for learning.

-To develop critical thinking.

-To impart an awareness of the importance of continual learning.

-To insist on a pluridisciplinary approach to problems.

-To stress the importance of environmental considerations.

Several of these objectives are the samen as those already mentioned for general and higher education, and that is only logical, but several of them are more specific to architectural education. The

scope of the latter being in general, universal education, with an emphasis on problem solving. It is designed with a pluri-disciplinary approach in mind, based on group work, utilizing a scientific method, and showing asthetic and environmental awareness.

2.3. Objectives and the Nature of History of Architecture.

In Chapter I of Part II we have -briefly- discussed the nature of the history of architecture, and its relation to the objectives and contents of history of architecture courses for architectural students. Now we wish to enummerate the objectives that are a consequence of that chapter.

-To show architecture to students and facilitate understanding of present and past and their relations

-To create an awareness of architecture as a social process, and to emphasis the relation bethween man and his environment (considered this as physical natural, and as cultural) and between the environment and the community.

-To teach students to discern between surface reality and deep reality.

-To develop one's own interpretation of architectural facts.

-To learn to consider objectivity as depending not only on facts but on their relations and on the interpretation made of them.

-To give a general education.

-To learn philosophical analysis.

-To use scientific methods and techniques in research, and aesthetic methods for expression and interpretation of emotions.

-To give an awareness of architecture as art and science, physical and human.

History of architecture, through those objectives, emerges as an excellent tool in architectural education, although some of them will not have the possibility of being directly used in relation with architectural design.

2.4. Other opinions.

Although we have already reviewed many possible objectives, from the broad scope of general education to the narrower aspecto of history of architecture courses, it is necessary to express some further opinions that have been discovered during Part II of this work, through a more

orientated reading.

2.4.1. General Objectives.

Some of the objectives to be considered are not specifically applicable to history of architecture, but they will be revised because history of architecture courses must, in order to be useful, be established within a frame of reference, established among other things, by more general objectives common to education or set by the educational institution themselves.

"What I look for from the universities is the development of an education which turns out individuals of the highest intellect and broadest outlook, able to understand man and machine and live creatively both.. Education in the cybernetic revolution would not be directed towards "earning a living" but towards "total living". (1)

There is an interesting mention in that quotation about creativity that we have not seen before, excepting as a probable part of interpretation and artistic or aesthetic awareness

"The rising tide of population, the rising tide of expectations, and the great increase in knowledge have posed new problems for education which have caused more changes to occur in most countries in the last twenty years than have ever before occurred.

We see the application of the techniques of the natural and social sciences and of technology to the educational process as a result of the fuller understanding of what is happening in education. We are seeing the whole system changed:what is taught, how it is taught and in what circumstances it is taught, have all changed fundamentally as a result of this new knowledge". (2)

That is an important statement for my work, because although changes are occuring all over the world because of the increasing of knowledge and of students, population, this latter factor is on a completely different scale in Latin American countries The same author, John Vaizey, recognised that in his book, when mentioning the third world educational problems. In reality, this is our main problem in our University in Maracaibo.

"According to R.F. Mager, there is a universal objective appropriate to all instructions; that 'at the very least' it shoulg be intent of the

instructor to send the student away from the instruction with an attitude towards the subject matter at least as favorable as that with which he arrived.

Objectives then need not be purely cognitive. Lewis and Pask envisage them as a-hierarchical structure with lower -and higher- order objectives". (3)

The opinion earlier stated, about the existence of general objectives wich need not be cognitive, is here reinforced by Mager's opinion.

"If asked to define their aims university teachers usually include general aims such as encouragement of 'scientific attitude', capacity for critical thinking, independence on the part of students and so on. Evidently what these teachers hope to achieve is transfer of attitudes and skills developed in tehir own field to other situations in life; but sutdies in America suggest that this may be rarely achieved".....(4)

The creation of a scientific attitude, critical thinking, and independence, have been mentioned before as important objectives. The problem of transfer of knowledge or attitude is, in fact, one of the main problems faced when trying to make

history of architecture courses useful.
Consequently it is a problem requiring care when using the subject as a means.

"Questions concerning the objectives of a program are apparently meaningful for those who answer such questions before writing a program. They should be able to take the next step with me. Questions regarding the aims or objectives of an educational system are like those regarding a specific program. They are questions in the area of philosophy of education. No matter how much scientific information we acquire about the control of human behavior, there are important non-scientific questions concerning who should exercise control and the purposes to be realized by that control". (5)

This kind of questioning I consider important, before objectives for a course are defined. Nevertheless, in our case, as we have said before, we are concerned with history of architecture courses for Schools of Architecture, and their objectives must be fixed within the scope of the Schools' objectives.

"Critical thinking", "scientific thinking" or "understanding" are terms which come readily to the minds of teachers when they are asked to outline

their chief aims in teaching. However, it is commonly added that many students are very limited in their capacity to think critically"....(6)

We have to agree with this aseveration, according to our experience, and add that it is the kind of problem we confront in trying to stimulate interpretation on the part of o-ur students. It is difficult to interpret something you do not understand.

It is necessary here to cite some quotations that establish the relation between objectives and achievement.

"The behavioral techonologist equates 'knowledge' and 'understanding' with behaviour. He argues that there need not be any concern as to whether knowledge is basically behavior or not. The significant consideration is that the only tangible evidence of 'knowledge' is behavioral evidence".....(7)

"In teaching any subject, clarification of aims is essential for two main reasons: firstly, in the majority of subjects there are many possible objectives so that if time and resources are not to be wasted, a choice must be made between them; secondly, it is nor possible to determine whether

teaching and learning have been effective if it is first decided what they should achieve. Aims need to be defined at a number of different levels" (8)

"My message in this chapter has been: state your objectives in 'concret' terms. 'Specify' the 'behavior' that you require from your student. Tell him what you want in terms of 'observable', 'measurable performance'. Give him actual examples of the kind of situation he'll be able to deal with successfully....." (9)

"So before you write a word of your programme, you must decide on your subject and your student, and you must stipulate what he can do when he finishes it. Until you've decided where your student is going, you can't honestly decide how to get him there". (10)

'A statement of an objective is useful to the extent it specifies what the learner must be able to DO OR PERFORM when he is demostrating his mastery of the objective. Since we cannot see into another's mind to determine the state of his intellect or skill by observing some aspects of his behaviour ~~to mean overt action~~ or performance (we are using the term behavior to mean overt action) ....Thus, the important characteristic of a useful

objective is that it identifies the kind of performance' which will be accepted as evidence that the learner has achieved the objective". [11]

The message is clear, objectives are important but they are useful only if they are concrete and precise enough to demand from students a certain behavior as a result, and if that behavior can be measured. In any case, what needs to be stressed is not the kind of knowledge that is memorised, but the kind of behavior that use the acquired knowledge. I have not found objectives so stated excepting in Portsmouth and in the University of Zulia in Maracaibo, but in both Schools it is done in a very general way.

The same kind of objectives can be considered for design problems, according to Beard and Bligh:

..."*Analysis of the work of designers led to discarding the traditional subject-based course in favour of one aimed to develop abilities in solving design problems, to provide a knowledge of the context in which designers work and to enable students to learn to establish relationships with management. The aims of the course are described, therefore, in operational terms, showing what students should become capable of doing at*

various stages....."(12)

2.4.2. Objectives of history of architecture.

Now some quotations about objectives of history of architecture courses.

"The experience of historical research can give you intensive training in how to think, if you survive the usual sink-or-swim assignment. Research is especially good in teaching a person how to find, sift classify, and generalize about any king of information."....(13)

"Research is a keystone of historical study. For the student it is the most difficult and demanding aspect of the subject, but also the most rewarding in the interest and training it affords. For the subject of history as a whole, research is the source of truth, though a truth that is only approximate and always subject to the challenging insights that may come from new research".....(14)

Although the importance of research as an objective, that requiers transfer in the history of architecture has been stated before, the warning about the risks of

'sinking' during research is a clear and interesting warning to be given to lecturers and students.

Before we leave the point of research let us follow some other of Daniel's ideas:

"Historical writing is, first of all, the production of records as part of the events themselves. These first-hand documents- the writings and utterances of leaders; the notes of eyewitnesses; the letters, diaries, and recollections of participants; the reports, by journalists for readers who want to know inmediately what is going on, are the primary sources of history. Next come the efforts to compile and systematize the record in chronicles and yearbooks and articles written on the basis of intensive research to find out how and why events happened as they did.... Finally there are works written specifically for reference or instructional purposes... These are the tertiary, or third-hand sources useful, but hardly the final word. No student will have a reasonable appreciation of a given segment of history if he does not read a

few secondary works of research and have at least some contact with primary source material". (15)

We agree with this final remark, but in the teaching of history of architecture in Venezuelan Schools of architecture, we are unable to find, primary sources other than those for Venezuelan architecture since the nineteenth century. Nothing is available for any other previous period,or occidental civilization which occupy the main part of our course material. We are not saying that the argument is not valid, but rather that we must look for alternative contents in our history courses.

"The purpose of courses in history is not encyclopedic factual knowledge, but understanding and an ability to think historically". (16)

Once again more importance is attached to understanding and to the use of knowledge, than to the knowledge itself.

"Historical study teaches the recognition of legitimate differences of view point

and the difficulty of final judgements in human affairs. Historical thinking appreciates the mixture of motives and the balance of wisdom and error in any human situation".....[17]

"Historical thinking teaches judgement. It does this both by supplying a knowlegeable background and by training in the technique of criticism and reasoned conclusions..."[18]

In the appreciation of difference of view-point, of the balance of wisdom and error, and in judgement training in the technique of criticism, there are several qualities that an architect need posses to a high degree, and the study of history can provide them.

"This outward-looking emphasis on the broad range of human affairs does not exhaust the value of history. The study of history is important not only for what it tells about our world, but also for its value in developing our powers of thinking. Successful historical study forces us to train and exercise all the essential aspects of intellectual activity". [19]

History then contributes to the main objective of general education mentioned before; to develop the mind.

"Historical study is also fundamental in developing attitudes of mind that distinguish the educated man -the habits of skepticism; of thinking with perspective and objectivity; of judging the good and the bad and the in-between in human affairs of weighing the pros and cons and discerning the different shades of gray that lie between the white and the black. Historical study leads toward, though it does not guarantee, the attainment of the greatest value that the philosophers have held up for us - wisdom". (20)

Even though not necessarily in full agreement with the conditions put forward for an educated man, there is no doubt that wisdom and education are two conditions that the architect needs to be able, as he must, in his professional life, to deal successfully with different problems in each new work.

"History as a discipline it was justified when: the purpose of practice was to produce

artifacts; the purpose of teaching was to produce people to produce artifacts; and the purpose of reaseach was to produce information to condition the production of artifacts, and feed teaching... this is not so any more and at any rate history had no relation to that objective of education...Schools now are producing people for more general objectives and consequently history has even ceased to be a cultural background.....(21)

Professor Macleod, a historian himself, is questioning history of architecture as a discipline in itself in Schools of Architecture and making important statements about the changes taking place in architectural education,that certainly will influence objectives of history of architecture courses.

And later on in the same lecturer, he defined what to teach the students through history:

"....Teach the students the development of the profession relations with other professionals through their history....see through history what has been the objectives and the end-products...." (22)

His proposal at first sight seems to be the elimination os history of architecture, but is, in fact, a new more integrated approach which. Looks at the history of architecture not in isolation but in relation to the different social and technological aspects that influence architecture.

2.5. Objectives in history of architecture courses in the Faculties of Architecture in Venezuela.

In Chapter 2 of the Appendix volume of Part II of this work, the research done about the history of architecture courses in the Faculties of Architecture in Venezuela, form their founding up to 1974 is presented. Here we will enumerate the objectives stated for those Faculties.

-To understand problems, past and present in architecture.

-To develop critical thinking and apply it to design.

-To develop social sensibility in students.

-To increase humanistic knowledges.

-To create basis for design, relating the socio-political with the technological functional.

-To create a basis for urban design.

-To specialixe in the discipline.

-To create a method to analyze reality.

-To understand cultural background.

-To give the basic knowledge necessary to understand the cultural, environmental influences in architecture.

-To promote a methodological analysis of architectural facts.

-To critical analysis and self-criticism of architecture.

-To learn to work in team.

-To create awareness of architecture's social responsibility.

-To learn to do research.

-To create on awareness of historical continuity in architecture.

-To develop a basis for the theory of architecture.

-To develop an ideological position.

-To establish a method for assessing architectural problems.

-To teach how to think.

-To create a basis for urban design.

-To specialixe in the discipline.

-To create a method to analyze reality.

-To understand cultural background.

-To give the basic knowledge necessary to understand the cultural, environmental influences in architecture.

-To promote a methodological analysis of architectural facts.

-To critical analysis and self-criticism of architecture.

-To learn to work in team.

-To create awareness of architecture's social responsibility.

-To learn to do research.

-To create on awareness of historical continuity in architecture.

-To develop a basis for the theory of architecture.

-To develop an ideological position.

-To establish a method for assessing architectural problems.

-To teach how to think.

-To undestand the ideas behind architecture.

-To form a consciousness of real problems in present reality.

-To develop a theory for Venezuela architecture.

-To contribute to the formation of architects of a higher scientific quality.

-To develop an instrument to promote methodic and intensive work.

Most of these objectives are coincident with those seen so far, and most of them consider history of architecture more as a means than as an end,, the only exception being to specialize in the discipline.

This very ambituous list of objectives it is not backed up by clear performance requieirements, for the students, This is partly explained in that in Venezuelan's Faculties of Architecture, theory of architecture is given within history programmes, and methodical analysis is taught mainly through those courses.

The main emphasis of the objectives stated, seems to be towards the awareness of social responsability. This is in practice directed towards a certain political ideology, and towards analysis and criticism of past and present architecture, self-

criticism included. There is, even outside ~~at~~ the history courses; a deep socio-political concern in all Faculties of Architecture, but there does not seem to be a transfer of methodological analysis to design situations. At least it is not seen in the end product of project work.

2.6. Objectives for history of architecture courses in architectural education.

Considering all the objectives discussed in Part I and in this chapter of Part II, it is appropriate now to present an opinion of what the objectives should be for history of architecture courses in a School of Architecture, for the time being, we won't consider their application to the proposal for a course that we are going to present in the last chapter of Part II.

We are perfectly aware that any objective must include consideration as to the continent, country, place, and time where it will be applied, and what we are proposing are objectives considering the nature of the subject and of architecture as we have seen it through Part I of this work and in Chapter I of Part II.

At the same time it is good to note that objectives

are not the only factors contributing to the development of history of architecture courses. Their application and success will depend as well on: the place and importance within the curriculum, the contents, the methods used, the transfer of knowledge and attitudes, and the evaluation of performance by students and lecturers.

We do not intend to enter here, into managerial or economic considerations, but only to discuss academic aspects of the problem, even though we recognize that these aspects are equally important and some times a priority.

Objectives will be presented as general and specific. The general ones cover those related to general and higher education. The specific ones correspond to architectural education and the history of architecture itself.

2.6.1. General Objectives:

Although we are considering the general objectives in the broadest possible sense, we are perfectly aware that history of architecture is only one subject, and, therefore, we are not pretending that it will in and of itself take care of education

as a whole, What we want to say is that these objectives must be kept in mind, and not curtailed when we talk of specific objectives, contents, methods, and evaluation.

The general objectives we consider important are:

-Integral education for the development of man towards total living.

-Furtherance of the individual through education with reasoned freedom, creativity, and a clear consciousness of social responsibilities.

-General broad education with a sound scientific basis and with due concern for physical and cultural environment and the development of an open, critical mind.

-Education for continuous change, providing for consciousness of physiological and psychological learning procedures, the adquisition of basic knowledge, the learning process and the use of knowledge to modify behavioural attitudes.

-Education through team or group work,

using a pluridisciplinary approach on problem solving experiences for the development of educational and training skills.

-Education for advancement of knowledge, trasmision of culture and enhancement of citizenship.

2.6.2. Specific Objectives:

All stated general objectives are important, but we must insists that some of them are more directly applicable to architectural education, and, although, to avoid repetition, we will metion them again. The second third, and fifth objectives are especially valid, and in some respects may be considered as specifics.

Within the specific objectives, we believe it is necessary to differentiate those that are consider history of architecture courses as means, and those that consider them as ends.

Those specific objectives that take history of architecture as ends are:

-Cultural background

-Specialization.

Certain people feel that learning something only for culture's sake, seems to be a waste of time. Some architectural students argue that to study mathematics or memorize historical dates is equally useless. However, I sincerely believe that an architect must have a well rounded education, and a sense of culture, to become a good architect, and to understand his world and solve problems at the same time. The nature of architecture itself demands both an educational and cultural approach.

Concerning specialization, although there are some reservations about the convenience or possibility of specialization at the under-graduate level, as I have stated on Appendix 1 of Part II, it is quite probable that more specialists are needed, and therefore I consider it a valid objective.

The objectives with which the history of architecture courses as a means, may be considered are:

-To provide students with the right under-standing and awareness of what architecture

is. It must enhance existing between society and human being, physically and psychologically and must also contribute to the enhancement, the total environment physical and cultural, as its presence is comulsory.

-To help is understanding past and present architecture, the interactions existing between them, the real value of objectivity and interpretation considering the surface and underlying facts of history.

-To consider history and architecture through philosophical analysis and not merely as facts or events.

-To contribute to solving problem through prior experience: to recognize and identify problems: to analyse, synthesize, evaluate and solve them with a pluridisciplinary approach; and to provide the necessary feedback from reality considering all its variables.

-To provide scientific and aesthetic education of the highest intellectual quality, with adequate methods and techniques.

-To contibute to architectural and urban

design, providing basic knowledge and methods for analysis of past and present reality, and considering all physical and human variables, included the need for their participation.

-To give students a sound skill for methodological analysis, for criticism, for self-criticism, and for assessemnt for architectural designs, providing for the due transfer of those skills, to project work.

-To establish, at different levels, performance goals to be attained by students in doing research; methodological analysis, project criticism, and self-criticism; with an open mind to the ideas of others, balanced criteria, and historical culture.

This last point clearly needs more development in order details to become useful as a course objectives, but this can not be done here as we are talking in a general way. History of architecture courses will always be spread over several years, and it is necessary to set different requirements for different years, for different schools,

and different course contents.

The important thing to establish here is that objectives must lead to performance goals and requirements which are desired or expected from students as we said during the chapter more than once.

2.7. Summary.

In this chapter about objectives we have summarised the objectives found in Part I of this work which contained in Chapter 3 general objectives for Schools of Architecture, in Chapter 7 objectives of history of architecture courses in those Schools, and in Chapter 10, a broad analysis of objectives in general education, higher education, and architectural education. We found many different objectives but the more important ones are coincident, with those of the Schools of Architecture.

Later we examined possible objectives, considering the nature of history, architecture, and history of architecture, stating that history and architecture are both, by nature, art and science Thus they have many useful characteristic in common, particularly in then methods for research,

which are systematic work, and analysis.

The research presented in Appendix 1 of Part II about history of architecture courses in faculties of architecture in Venezuela, produced another set of objectives, on which the emphasis was on social awareness, methodological analysis, and relation to design.

Using all these sources we have proposed objectives for history of architecture courses applicable in a general way to architectural students, including the mention of what we feel are some other, important variables to consider when establishing objectives.

2.8. Conclusion.

It is very important to define, clearly and precisely objectives for a course and the objectives must be considered on the one hand in relation to the placement of the courses within the curriculum, its contents, its credit units, or importance and, methods of teaching and assessment on the other hand, they will depend in part on general education objectives, higher education objectives, the institutional objectives, and of architectural education objectives,

Objectives will depend on the nature of the subject itself; in this case history and architecture in their direct relation, and art and science in their indirect relation.

Objectives must be defined as general and specific, considering whether the subject is taken as an end or as a means in contributing to architectural education. We found two of the former and several of the latter kind of objectives.

The definition of objectives must include the kind of performance goals that are to be expected from students and which will be useded to evaluate them.

2.9. /References:

1. Seaborg G.C., Education in a computerised Society, New University, April 1969, in Richmond W.K., The concept of educational Technology, Cox and Wyman, London 1970, pp. 243

2. Vaizey J., Education in the modern world. World University Library, London 1967, pp. 238.

3. Richmond W.K. op. cit.

4. Beard R.M., Bligh A.D., Research into teaching

methods in higher education. S/RH.E., 1971, pp. 4.

5. Richmond W.K., op. cit., pp. 91

6. Beard R.M, Bligh A.D., op. cit., pp. 47

7. Richmond W.K., op. cit., pp. 90

8. Beard R.M., Bligh A.D., op. cit., pp. 2

9. Richmond W.K., op. cit., pp. 96

10. Rowntree K., Basically branching, Macdonald 1966, pp. 85/6, in Richmond W.K., op. cit. pp. 97.

11. Mager R., Preparing instructional objectives. Fearon 1967, pp. 13/14, in /RIchmond W.K., op. cit., pp. 86.

12. Beard R.M., Bligh A.D., op. cit., pp. 8

13. Daniels R.V., Studying history. How and Why, Prentice Hall, N.J., 1966, pp. 82.

14. Ibid, pp. 93

15. Ibid, pp. 66/67

16. Ibid, pp. 34

17. Ibid, pp. 8

18. Ibid, pp. 7

19. Ibid, pp. 6

20. Ibid, pp. 6

21. Macleod R., R.I.B.A. Forum: The four Function model. I.A.A.S. York, 1-3 May, 1974.

22. Ibid.

chapter 3

COURSES CONTENTS

3. COURSES CONTENTS.

Objective: Study the contents of history of architecture courses found in Schools of Architecture in Great Britain and in Venezuela, in order to propose contents for a course for architectural students.

3.1. Introduction.

There are several factors influencing the selection of the contents of a history of architecture courses. We have already discussed objectives and their importance. Others factors are: the place, geographically and historically, where the School of architecture is located (antecedents will be different from occident to orient and even from one country to another within the same continent and culture); the level, within the studies, at which the course will be given, which weighs the students maturity and the need, or not, for other related studies: general purpose of the course an (end or means); teaching and assessment methods to be used; and the performance goal required form the students.

As we did in Chapter 2, we wish to present the comments made in Part I of this work in summary form, without lenythy commentary so as not to repeat has already been said. Then we will lock at some new contents coming out of the discussion in Chapter 1, where we considered the nature of the subject followed by a look at those course contents studied in Appendix 1 of Part II form the study of faculties of architecture in Venezuela.

Towards the end of the chapter, we shall present what we believe to be the general content guidelines for history of architecture courses in architectural education, leaving the more specific considerations for chapters 5 and 6, where we shall present actual proposals for courses.

3.2. Contents Studied in Part I.

In Chapter 2, about the Schools of Architecture, and in Chapter 7,about history of architecture teaching, we studied the course contents of the seven Schools considered in that study. They are:

- History of architecture must be considered from inside -from an architects point of view- and good as well as bad architecture must be studied.

- Holistic approach with full environmental considerations.
- Periods or civilizations must be considered as socio economic realities and not only aesthetic ones.
- History of architecture must consider human life in all its totality and multiplicity, with all its social components, and of recent importance, will man's attitude toward technology.
- Selection of periods or civilizations must include other than occidental civilizations.
- Stress on the XIX and XX centuries, beginning with general history.
- Studies.
- The classic period.
- The renaissance.
- The XIX and XX centuries in England.
- Emphasis on the last decades.

David Anstis, believes that the study of civilizations other than the occidental one are important, and he proposes the inclusion of Aztec and Japanese architecture. He asks as well for parallel courses on fine arts, social history, aesthetics, and

philosophy, as a necessary complement. What is consequent with his idea that students must be able to interpret history for themselves.

3.3. Contents and the Nature of History of Architecture.

Although most of the concepts handled when we studied the nature of history of architecture were more applicable to objectives, some of them relate to contents.

-The influence of art and science on different periods must be considered in its right values.

-History of architecture must consider the importance of relations between the individual and society, and of artist -architect- and community, when analysing, interpreting, or judging architecture.

3.4. Other Opinions.

As we did in the previous chapter we will present some further references that have been found while studying Part II, and which we consider useful to clarify what the course content should be.

Starting with the more general considerations:

> *"The first problem of architectural education is to show architecture to students. This can*

be done in many ways, but in some schools no attempt is made. (even history lectures do not come within a thousand years of our time until the second year) Many students do not start to realize what architecture is until the end of their course. It would be much better if they were encouraged to comprehend architecture in their first year" (1)

The content must have an emphasis on modern architecture, which could be placed at the beginning of the studies, according to Allsopp. This does not mean necessarily that earlier periods should not be studied, in fact in his books he usually stresses the values of classic and renaissance architecture.

"The reader now knows what to expect, and what not to expect. I restrict myself to post-medieval architecture in this work because it is provisional. I am investigating older epochs using the same method and hope eventually to achieve insight into the organism of stylistic development by comparing all epochs and their development. I have no doubt that my subsequent studies will be made easier

because of this one and that this one will need correction once I have completed them".

(2) .....

Frankl likewis believes, in the importance of studying older epochs (older than post medieval) and in the importance of comparative studies which aim at establishing some general values, using a given methods.

> *"If architecture is the molded theater of human activity, of the joys and sorrows of a society, and architectural style can begin only when a culture has reached a state of maturity, philosophy, religion, politics, and science, the whole of Renaissance culture, had to be ready before the fine art could, the expression 'Renaissance man', preceded the Renaissance artist".....*(3)

Without considering the influence of 'style' on that quotation, it is important to include in courses contents that architecture must be considered as a mirror of all kinds of human activities.

> *"However, it is true that history as a subject for study is expanding in terms*

of chronology, geography and analysis, and it is certainly becoming more difficult. I have tried to suggest that this expansion is not something that 'traditional' historians need fear or attack".....(4)

This remark is equally true for history of architecture, which is also expanding and becoming more difficult as a subject, even when periods or civilizations selected for the courses are restricted because of the holistic approach.

> *"Some historical element should therefore be present in all science teaching in order to give perspective. There are, however, other potent reasons for its inclusion, not the least of which is the desirability of presenting science as an aspect of human endeavour"...(5)*

This opinion coincides with Macleod's proposal to place history within the context of all subjects. The reference here is to science.

> ...."*To be truly historical, an explanation must set a situation or event in its particular historical context of time and place, and recognize that even the most*

strikingly similar events -two revolutions for instance- may be widely different in their motivation, their effects and their significance". (6)

Historical explanation must have due consideration for the context of time and place, and history of architecture course contents need to give that context to architecture.

Normally it has been difficult, if not impossible, for history courses in Schools of architecture to cover all the history of architecture, and with the increasing difficulties just mentioned, this is becoming more and more difficult. Therefore, a selection of some periods or civilizations is indispensable, and there are many differing criteria for selection.

> ...."*The classifications may be of three sorts, corresponding to the three dimensions fo historical study -chronological, geographical limits of the subject are restricted, as in studying one country in a brief period*"....(8)

Of the three possible classifications, the chronological and geograhical are presently given

preference over the topical, which is considered more limited.

> *"Now no chronicler or historian can attempt to record all events; from the superfluity of happenings he must select what he regards as memorable. His selection is determined to a very small extent by his personal idiosyncrasies, but on the whole by tradition and social interests"....(9)*

In history of architecture courses, the criteria for selection should depend mainly on courses objectives.

> ...."*The course of studies undertaken during the First three years should provide the student with a foundation of knowledge of the whole field of building... until the student has a sound knowledge of basic principles it is not appropriated to consider specialization in his studies"....(10)*

Ritter is not speaking of history of architecture courses, but his ideas are equally valid as they pertain to general content for them.

> ..."*Study that is to any degree detailed must therefore be divided into periods of*

time. These dividions do not have to be arbitrary ones, such as centuries. Actual turning points can be found, where the system of life or the political organization has rapidly changed"....(11)

Time is the criterium proposed, which seems to oppose the topical or problems criteria suggested by others authors.

> *"So long as its limitations are understood, the division of history in periods must be employed as a framework for detailed inquiry".....(12)*

Periods must be considered only as a framework for inquiry, being aware of their limitations. This seems a very sensible statement, that again focuses on the time criterium.

> ..."*Civilizations have been regarded by the more speculative and philosophical historical thinkers as the primary unit of historical study. Numerous intriguing theories have been devised to explain the cyclical rise and fall of civilizations".....(13)*

"The history of a foregoing civilization must be approached first by taking the

entire civilization as a unit, complex though it may be".....(14)

Civilization or national history is another criteria that can be used, and it has been frequently considered as appropriate for history of architecture courses, especially when they correspond with a style.

...."The history in technological universities is emphatically modern and even 'contemporany' and is almost invariable in a specialized form...."(15)

This trend towards modern history is not only common in technological universities but as well in Schools of Architecture in Great Britain as we have already seen.

"The critical system establishes four categories of the analysis of architectural monuments:

1. spatial composition

2. treatment of mass and surface

3. tratment of light, color, and other optical effects

4. relation of design to social functions".

(16)

Frankl, proposes a 'critical system' for analysis of history of architecture, that in fact corresponds to a very specific objective and content.

> *"There is much more chance of students of all ages enjoying history if they study problems, not periods. Perhaps, it might be fair to substitute project for problem in relation to younger pupils...."* (17)

The study of problems instead of periods, one of Lord Acton's precepts for education, seems a good way to motivate students, to recognise the value of history. This is especially true if they are architectural students whose main task is to solve problems. It is interesting criterium that will influence course content and will require a well prepared and open minded lecturer.

3.5. Contents of History of Architecture Courses in Faculties of Architecture in Venezuela.

History of architecture course contents in Venezuelan schools do not differ greatly form those in Great Britain, excepting for the logic and natural differences emerging from the study of national architecture.

The contents we have found are:

- Theory of architecture
- Modern architecture
- Universal architecture
- Pre-Columbus architecture
- American architecture
- Scientific knowledge
- Aspects of society
- Conservation
- American Barroque
- Art and architecture
- Ancient to Barroque architecture
- 1750 to 1930 architecture
- Renaissance architecture
- Colonial architecture in Latin America
- Urban evolution
- Landscape architecture
- Architecture and engineering in Venezuela
- North American architecture

There are two distinct tendencies among the Faculties we have studied in Venezuela; one,

represented by two schools, does not follow a chronological order, and courses are normally one lecture a week with parallel practical work; the other, follows a chronological order, and courses are 5 hours a week, with some lectures spread through out the year, and most of the time devoted to practical, supervised work. This latter is the case of our Faculty in Maracaibo, Venezuela. The latter system has the draw back (see Appendix 1) that students have no choice at all.

History of architecture, as we can see by the contents listed in Venezuelan Faculties, covers theory, Art, and Scientific knowledge, as those subjects do not exist as such in the Schools. History is, as well, the subject where the use of methodological analysis is presented to students, with the purpose of transfering it to other disciplines within the studies this transfer is not always achieved.

Considering the time devoted to the various courses, the order of emphasis is; architecture from 1750 on, modern architecture (XX century), architecture in Latin American countries, Renaissance and Barroque, periods theory of architecture, and to a lesser

degree classic (Greece and Rome) architecture, graphics..., belonging to Appendix 1, show the courses and their position within the studies.

3.6. Contents in History of Architecture Courses in Architectural Education.

Starting with the objectives we have defined in 2.6 of Chapter 2, we are rendy to propose the contents, but not without some previous, and, we think,necessary comments.

Concerning the old, continuing dispute as to whether to teaching history chronologically or not, we consider that this question may not have one unique answer. It will depend on the students previous historical background and maturity. If the main facts of history are not fresh in their minds or if they are not aware of periods, and are not able to place civilizations in order and in relation with one another, it may be confusing to star with modern architecture. This is our experience in Venezuela. After beginning with modern architecture, it is difficult to motivate student to go back to ancient times, which in our case have a very remote relation to the Venezuelan reality.

CENTRAL UNIVERSITY OF VENEZUELA

FACULTY OF ARCHITECTURE

CONTENTS

	1	2	3	4	5
1960					
1961					
1962					
1963					
1964					
1965					
1966					
1967					
1968					
1969					
1970					
1971					
1972			Crit.Arch.I Mod.Arch.I Des.Prob. Hist.Thought		
1973	Crit. Arch.	Hist. I 1760 - 1920 Hist. II		Crit. Arch II Cont. Soc/Pers. Barroque Inf.	
1974	Theo. Arch.	World Arch. Amer. Arch. Pre-columbus	Mod. Arch. I	Mod.Arch. II Cont. Ven. Arch. Conservation Barroque Inf.	Arts Arch.

UNIVERSITY OF ZULIA

FACULTY OF ARCHITECTURE

CONTENTS

	1	2	3	4	5
1960					
1961					
1962					
1963					
1964			Ind.Rev.XX C (Art.) Egypt.Mesop. (Const.)		
1965			Egypt M. Ages		
1966			Egypt M. Ages	M. Ages Barroque (XII -XVIII C)	
1967			Preh. Renaiss.	XVII - XX C Anal. Arch.	
1968			Egypt Renaiss.	XVII - XX C Anal. Arch.	
1969			Egypt /Renaiss.	XVII - XX C	
1970			Ancient T. Rennaiss.	Barroque XX C	
1971			Ancient T. Barroq. Build/Town	XVIII-XX C Ind.Rev. XX C 1945	
1972			Ancient T. Barroq. Build/Town	XVIII-XX C Ind. Rev. XX C 1945	
1973			Greece - XIX C Town Space	XX C Cult. Env. Crit. Anal.	
1974			Greece - XIX C Town Space	XX C Cult. Env. Crit. Anal.	

UNIVERSITY OF LOS ANDES

FACULTY OF ARCHITECTURE

CONTENTS

	1	2	3	4	5
1960					
1961					
1962					
1963					
1964					
1965					
1966					
1967	Anal Arch I Man/st Arch. Preh. Greec.				
1968	Mod.Arch.I Theo. Arch. Space Perc.	Anal Arch.II (1750-1930)	Anal Arch.III (Preh.Barr.)		
1969				Anal. Arch IV (Amer.1500-XX)	
1970	Anal Arch.II (1750 -1930) Theo.Cont.Arch.			Anal. Arch IV (Amer.1500-XX)	
1971	Mod. Arch. (1750 - XX) Ins.Hat.Arch.		Renaiss. Col.Arch Urb. Evol.	Theo Arch.I Theo.Arch.II Arch &Eng.Venez.	
1972			Landsc.	N.Amer. Arch. Conservation	
1973			Renaiss. Colonial Urb.Evol.	Theo.Arch.I Theo.Arch.II Arch & Eng. Venez.	
1974			Landsc.	N.Amer. Arch. Conservation	

Like Professor Allsopp we consider a course more as an exploration than a definite and fixed program, and with this understanding in mind we can propose the contents.

We believe with Anstis that an architectural student should study other complementary subjects, such as those he mentioned, within or, preferable, out of the course itself, to avoid confusion about disciplinary borders.

The contents we believe necessary for history of architecture courses in architectural education are:

- General historial training, providing and asking for education, to place architecture in its correct context, early in architectural education.
- Civilizations that are antecedents to our country's history and architecture, discerning main influence and possible relations to other civilizations.
- Use of other civilizations -Orient- only as comparative studies, and for cultural background.
- Emphasis on architecture from 1750 onwards and paricularly the XXth century, selecting the periods or the problems criteria, whichever is more appropriate, and using in practical.
- work, existing buildings, and the methodological

analysis."

- Vernacular and national current architecture, showing relations with international architecture and its own physical and cultural environment, and assessing it through critical analysis.
- To horizontally relate history of architecture to other subjects studied concurrently, and to integrate it vertically, as a necessary background for the following years work, particularly project work, when possible.

Considering that history of architecture courses, as we have seen on Chapter 2, are mainly considered and developed as a means in contributing to architectural education, they must be offered throughout a students education, from first to last year.

Accepting, in some measure, [12] Macleod proposal, we consider that one responsability of history of architecture lecturers is to promote the introduction of the use of historical precedents in other subjects, and to relate them in one way or another, in time, or through problems, to history of architecture courses. This would make history more meaningful.

In Chapters 5 and 6 we shall go into more details about the more precise contents.

3.7. Summary.

Contents on history of architecture courses in Schools of architecture of Great Britain deal mainly with occidental civilization, with emphases on the last two centuries in Europe and specially in Great Britain, Classic and Renaissance architecture in Europe, and Medieval architecture both in Europe and Great Britain also receive emphasis.

Contents cannot cover the complete history of architecture, and a selection is necessary. Criteria for selection are many, the most commonly considered being: chronological, civilizations, periods, problems or topical.

The chronological criterion seems to be recommended as a general framework within which one of the others can be applied, leaving the topical or problem criteria for short periods of more specific aspects of architecture.

In Venezuelan Faculties of architecture contents are deal as well with occidental civilization, with emphasis form XVI th to XXth century, and with architecture in America and Venezuela, and its relation to european precedents. There does not

seem to be enough Venezuelan and XXth century architecture available, probably for lack of more research. Classic Renaissance and Barroque architecture are given importance as well in Venezuela.

The proposed contents, at the end of the chapter are contained in the following conclusions.

3.8. Conclusion.

Contents for history of architecture courses depend on several factors, among, the most important being: the civilization, the country and the place where the institution is located; the course objectives; the methods, used for teaching and assessment; and the performance goals required from students.

History of architecture courses should, provide general historical knowledge, and promote an awareness of architecture within history and its relation with -individuals and communities.

The courses should also trace the line of historical precedents in the civilization to which the architecture belongs,isolating and stressing the communities contribution.

Further goals are to give emphasis to XXth century

architectural, to use existing buildings as a basis for methodological and critical analysis, and to transfer the experience to present architectural design.

The contents of history of architecture courses, should be, as much as possible, related to other subjects within architectural studies, to make them meaningful to students.

3.9. References.

1. Allsopp B., The art and nature of architecture Pirman and Sons, London 1952, pp. 102.

2. Frankl P., Principles of architectural history. Trans., and Ed., O'Gorman J., M.I.T. Press - 1968, pp. 3

3. Ibid, pp. 2

4. Hopkins A. G., History of the universities. Change without decay., History. The journal of the Historical Association. Volume 54, 1969, pp. 331 - 337.

5. Woodall A.J., Science history. Physics Education Volume 2, 1967, pp. 297 - 305

6. Daniels R.V., Studying History. How and Why., Prentice Hall, N. J. 1966, pp. 52.

7. Ibid. pp. 43.

8. Ibid. pp. 44-45

9. Gordon Childe V., History, Colbett Press, London 1948, pp. 2.

10. Ritter P., Educreation, Pengamon Press 1966 pp. 30.

11. Daniels R.V., op. cit., pp. 17

12. Ibid, pp. 17

13. Ibid, pp. 16

14. Ibid, pp. 16

15. Buchanan R.A., History at the Technological Universities, Universities Quarterly, Volume 24 Nº 1, Winter 1969 pp. 60 - 67.

16. Frankl P. op. cit., Foreword By Ackerman J.S. pp. vii.

17. Jones G.E., Towards a theory of history teaching, History. The Journal of the Historical Association, Volume 55, 1970, pp. 54-64.

chapter 4

TEACHING AND ASSESSMENT METHODS

CHAPTER 4

4: TEACHING AND ASSESSMENT METHODS

4. TEACHING AND ASSESSMENT METHODS.

Objective: Study the teaching and assessment methods used in history of architecture courses in Schools of architecture in Great Britain and in Venezuela, to propose methods for a course for architectural students.

4.1. Introduction.

Teaching and assessment methods, as we have seen in Part I of this work is one of the aspects of higher education that has changed profundly in the last few years, therefore although we already devoted considerable time to them in that Part we feel obliged to include some further arguments at this point.

> *"Changes in teaching methods have come from two sources. The first most obviously is the changing psychological knowledge of the child, and the teaching process teachers and others come to have. The second has been enforced by the cumulative and by the increase in the content of existing subjects".* (1)

This kind of pressure is increasing in architectural education requiring more scientific knowledge, social responsability and environmental awareness, three important factors, capable of placing a heavy demand on course contents and teaching methods.

> *"Perhaps scientists whose subject have a sound theoretical foundation do not feel at home with a subject which lacks a theory. For, not only is there no ~~theore-ma~~ theory of teaching to turn to when the problems arise, but theories of learning are too numerous and too little concerned with human learning to provide a framework for action. Teachers cannot design courses taking into account the numerous variables in learning and personal interactions, but must introduce innovations largely on the basis of induction from their observations. Nevertheless, we should expect that scientists, if not other university teachers, would appreciate the need to experiment to determine the effectiveness of innovations introduced in teaching".* [2]
>
> *....."What is needed is a concerted effort in studying each method, collating information already available, and experimenting with*

variations of the methods to see which ones are most effective and under what circumstances. Since, for various reasons, small group discussions are used increasingly this is one area in which well-designed experiments in a cross section of schools would be particularly rewarding. Other investigations which are likely to prove most rewarding are those into higher mental abilities and students' methods of studying. Such knowledge will enable teachers to gain more insight into students' difficulties and to devise more flexible methods of teaching which take account of their differences". (3)

Beard and Bligh, emphasize the need for more, research and experiments in teaching methods, and point out the non existence of a theory of teaching, proposing some areas for research they consider potentially rewarding. We must say that in our case the field is completely wide open and there does not seem to be an interest on the part of Universities in Venezuela to close the gap.

Considering, as we do that teaching and assessment methods are very important, for the success or failure of a course, we wish to reemphasize some

points we have already made, by saying that methods must be related to objectives, to contents, to student maturity, and to the intellectual level, lecturer capabilities, and special knowledges of new methods, among other factors. Methods by themselves cannot decide or form an educational experience.

The point of lecturer preparation is an important one, and many methods are never used because teachers are simply not familiar with them.

In this chapter we shall follow the same general layout of preceding chapters, summarising what we have seen in Part I of this work, and then bringing in more considerations before we conclude with our proposal about the teaching and assessment methods relevant to a history of architecture course.

4.2. Methods studied on Part I.

In Part I, we discussed teaching and assessment methods in Chapter 2 about the Schools of Architecture, in Chapter 5 about teaching and assessment methods: and in Chapter 10, conclusions.

4.2.1. Methods in Schools of Architecture:

In Chapter 2 we found out that in Schools of Architecture the teaching methods most used were:

-Lectures

-Projects

-Seminars

-Exercises

-Block-courses

-Hand-outs

-Set-books

-Visits

-Discussions

-Tutorials

-Essays

Of these methods lectures is still the most common in about 80 per cent of courses; followed in second term by: project, seminars, exercises, block-courses, hand-outs, set-books, and visits. Other methods are introduced in the third term.

Exercise include in this case all kinds of laboratory, practical and theoretical

exercises.

Although by definition some of the above mentioned 'methods' are not really methods in themselves, they have been considered as such in the listing because they are used consistently and with some follow up, which makes them appear as such.

Concerning assessment methods used, they were:

-examination

-projects

-essays

Examinations specifically written examination continue to be the main assessment methods, followed by projects second and essays third.

On page 79, figure 21, of Appendix 5, in Part I, we find all teaching and assessment methods used in Schools.

4.2.2. Methods studied in Chapter 5 of Part I:

Teaching methods may have general or special objectives, and assessment methods must be adjusted accordingly.

According to Bligh they may: Provide information, promote thought or change attitudes; and according to Morris they may duplicate or discover knowledge. These concepts do not differ greatly, the first being a category of the same nature.

Besides the methods listed on 4.2.1., above in Chapter 5, the teaching methods most used, in the opinion of the lecturers of the Schools of Architecture, were:

-Group and individual tutorial

-Lectures

-Small group discussions.

-Seminars

-Educational models

-Block-courses

-Team design

-Team work

-Project work

-Laboratory

-Hand-outs

-Exercise

-Field studies

-Games and simulation

-Programmed learning

As we said in that chapter, some of these methods were used only in certain courses, the most frequently being those listed above in 4.2.1.

On pages 179 we presented a list containing the methods used in higher education according to three authors, and on page 206, figure 32 reproduced on the next page is a list showing the teaching methods studied and grouped by their nature, and showing the kind of group size most suited to each one of them.

In general there are many methods useful for work in small groups, and individual study, including visual aids or machines, for stimulating ideas, games, and simulation.

Concerning assessment methods, the main tendency was towards the use of a working jury instead of final critics with a jury that can not appreciate the full development of a project work.

4.2.3. Methods studied on Chapter 10 of Part I:

In Chapter 10 on page 387, number 10.3.2.3.1

"How to learn", some considerations are presented that although they are not properly teaching methods may have an influence in deciding about methods, they are as follows:

-Teach how to learn

-Make conscious the processes of learning

-Not to teach knowledge but a method of attack

-Teach to solve problems

-Provide an educational environment

-Learn to learn

-Develop an analytical mind, sensitiveness, ,and a dedication to quality.

-Stretch the mind

Most of these ideas, in fact, point towards the kind of teaching -learning process that Morris recognises as discovery and ask for methods that are more suted to stimulate thought instead of provided information. This is exactly the purpose of the so called new methods.

4.3. Other opinions.

Although we have examined many teaching and assessment methods, and arguments have been presented about their usefulness, we consider

the subject so broad and so important that we want to put forward some further opinions, even at the risk of making this chapter unnecessarily long.

4.3.1. About teaching methods:

The usefulness of one or another method will depend on perception possibilities, so let us start with perception....

....."*from Thurstone's investigation, suggests that there is no such thing as an all-round perceptual efficiency or inefficiency, but rather that people tend to be relatively more efficient in some types of perception and in some perceptual situations than others*". (14)

...."*Nevertheless, our capacity for continuous perception is limited. We cannot maintain prolonged awareness of relatively uninteresting and featureless environment, and sooner or later awareness lapses and we are distracted by irrevelant events or by our own thoughts*". (5)

Our capacity for perception is limited and varied. This should be taken into consideration when methods are chosen for

a certain purpose or for a certain group. Individual learning could best be adapted to each one's capacity of perception, and that is precisely why several new methods have been developed for individual learning.

....."*The whole trend is moving away from classroom instruction towards a learning environment in which pupils are left to work on their own, either individually or in groups*"....[6]

Individual or group work in the appropriate environment is the new trend according to Richmond, and that trend is being followd by Schools of Architecture.

Let us now examine some references to lecturers.....

...."*The dialogue lecture mertis wider use since differences of opinion can be expressed and contrasting voices maintain students attention. At the same time one may question the widespread practice of obliging such large audiences to listen to the same content despite a very wide range in ability and prior knowledge*". [7]

The dialogue lecture, not contained in our list, is a new variation to make lectures more effective and to keep them lively. What will happen, apparently no matter how many efforts are made to bury them is that they will assume a different level of importance than what they used to have.

Beard and Bligh have presented some important considerations about lectures.....

"Observation suggests that a lecture given a suitable speed in mathematics or certain science topics, in which a logical presentation is written on the blackboard, provides constant opportunity to the student to obtain feedback on his understanding of the topic....." (8)

"Most of them (university teachers in Britain) believe that students are too immature to study independently and that lectures are the most economical way of communicating information to them"...(9)

...."The principal desiderata are fewer and better lectures, closer staff-student relations, and more teaching by tutorial and seminar".....(10)

Fewer lectures to communicate information, closer relations and careful prepartion and delivery of lectures, are very sensible points that sometimes are neglected, specially the latter case.

Now, some students opinions about lectures.

"When asked to rate teaching methods for effectiveness, 58 per cent of the students rated lectures as effective, but other types of teaching were more likely to be rated 'very effective', indicatin a preference for smaller groups and personal teaching".....(11)

"In the N.U.S. report of 1969 (Saunders et al.) students thought the major function of lectures were to impart information (76 per cent), to provide a framework for the course (75 per cent), to indicate methods of approaching the subject (64 per cent), to indicate sources of reference (47 per cent) and to stimulate independent work (41 per cent)".....(12)

Lectures can have several purposes and are considered effective even for students who prefer~~ring~~ small group work. This corresponds

with our experience in Great Britain and in Venezuela with architectural students.

John McLeish (13) in a very interesting study, found that students and lecturers rated lectures, very low giving twice as much preference to seminars and tutorials, the latter being some what higher in ranking.

Speaking about seminars, a method that is taking more and more importance in higher education, we wish to mention the aspects that are important according to Denis Rice (14), make it a good teaching method: mechanics and dynamics, whether they are compulsory or voluntary, methods of assessment, authority, and environment. All these aspects differ in the case of seminars as opposed to lectures, and likewise in small group discussions. These aspects must be clearly defined and controlled.

Broady proposes certain conditions as necessary for conducting a seminar....

...."*Some conditions for doing this seem to me to be: a) every student must do*

some work for the seminar: he must not only have read something but also written something which can be read on request.

b) the students may be required to read something in common; or various articles or books provided that the author knows how he wishes to use this material in discussion.

c) the writing (in my view) should be of two kinds; a precis of what is read, and a critique of the same.

d) students who have not done the required work should not normally be admitted to the seminar". (15)

All these points, seem to me, to be very sensible and would contribute to make the seminar a fruitful experience, although in our case -Venezuela- I do no know if we could actually enforce the last one.

...."Students consulted for the N.U.S. report regarded seminars as important for interchange of ideas, stimulus of creative thinking and improvement of self-expression but less suitable for consolidation of learning and study in depth".....(16)

One would think that the kind of seminar that could foster all those qualities mentioned here it is not the same method about which Rice and Broady are speaking, but in spite of that, it is important to admit that the seminar of the right size can be a very valuable educational experience for both lecturer and students.

Similar to seminars in method, are discussions group.....

"The value of discussion between students in the absence of a lecturer does not apperar to be recognised generally in university courses. Students consulted by Marris (1965)said that they frequently discussed their work with each other and could be less inhibited with staff absent."

Teachers who have organised work so that students discussed questions together in pairs, or small groups, before raising further questions with them have found the method very successful (Beard, 1967 b)" (17)

That brings up an important point: the problems of student inhibition in open discussion with members of the staff.

We believe it is a problem that must be solved, and discussion in the absence of staff could be a way to do it. ?

"The discussion section -the group of perhaps ten to thirty students into which a lecture class may be divided once a week or so - has an often unrealized potential"..

The discussion in a history course should be a real conversation among the students and the instructor, not a recitation by one student at a time in a sort of dialogue with the instructor....." (18)

It does not seem easy, in our experience, to organise a live discussion with as many as thirty students. In our courses in Venezuela we are confronted with problems of 200 students in one group, which would make the organization and operation of a discussion a complex task,even though we recognize the value of the method.

Speaking of objectives and contents we touched, more than once, the point of methodological analysis in the history of architecture, that is in fact one of

the methods most used in our courses in Venezuela, and has been basic for some scholars such as Frankl.

"*My most important tools were the analysis of buildings according to four basic elements: space, corporeality, light, and purpose, and the conception of the Renaissance and Barroque as polar opposites!!* [19]

"*Of the many innovations in architectural criticism put forth in this book, two of special importance may be mentioned here. The first is the new empahses Frankl gives to the social purposes of architecture and the changing cultural context of individual buildings, and building types, down through the years. The second is the new feeling for space and mobility the feeling for the sequence and combination of spaces experienced by the observed as he moves around and within the building. A single total impression is developed through the integration of a series of three dimensional impressions. In this connection, it is worth noting that*

Gestalt Psychology was being developed in Germany during the years that Frankl was writing this many sided work"...(20)

Obviously Frankl's position in regards to analysing a building is quite different from that of any student, particularly a Venezuelan because Frankl's deep knowledge of the time and the place where the building was constructed. Our frame work for analysis is completely different, and we must first understand the cultural circumstances of place and time, before going to the building itself.

"A theoretical analysis of this kind is open to many practical objections Perhaps the most serious might be that this approach could easily degenerate into mere antiquarianism that the means might become the end. One can only reply by asserting that this must depend on the skill and judgement of the individual teacher in adapting the interpretative questions which are the stuff of history to the age group which he is teaching. At least the questions will not be dictated by the false criteria endemic

in the utilitarian approach" (21)

Any method may become an end in itself, as happened temporarily with design method, and is happening in some places with the use of audio visual media. The observation is correct although in our experience in Schools of Architecture the danger of antiquarianism through analysis -usually critical- is not great.

Individual study, with all its draw backs form an economic point of view is being employed more and more at all educational levels.

...."As a result of this pilot study alone, the authors consider that staff time spent early in a course on individual tutoring, encouraging students to examine their learning processes, could save time later and increase the students' range". (22)

"If machines are widely used, the student may learn to study by himself and to play and work with others; thus an important separation will be achieved. After all, what symphony was written by a group? What

scientific theory was the product of a group?... Might it not be better for the students to study alone and use what he has learned in a group setting?" (23)

With or without machines, individual study permits free advance for good students, and more individual help for those with problems.

Programmed learning is worth some attention being a new method and individually oriented.

"A number of studies show that programmed learning is at least as effective as traditional teaching"....(24)

..."This is not to deny that programmes can help in the formation of concepts, in changing attitudes, in fostering critical thinking, and even in ~~x~~efening aesthetic awareness but simply to make the point that the vast majority of programmes do none of these things".....(25)

...."He concludes that programmed learning must be part of a system of instruction which allows for human interaction"....(26)

Programmed learning is effective and provides

for all learning objectives, the only 'but' seems to be the lack of human interaction, which makes the method, only a complement or part of a system.

updating programmes ?

We shall not get into the complex question of whether programmed learning must be a branching, linear, sequencial, or intrinsic programme, or fully mechanical or not, because we consider that the degree of sophistication shall also depend on factors outside of the realm of methods, such as students maturity and intellectual level, lecturers, economics, etc.

Richmond in his boook 'The concept of Educational Technology' discusses several kinds of programmed learning situations and when there they may be automated or not, insisting in their potential as an aid for individual study.

Beard and Bligh also stress the possibilities of these methods, though they note the relative lack of experience as in the case of computers use.....

"*The use of computers in British higher*

education is still in its early infancy. Flood Page (1970 b) reports that 15 to 20 institutions of Higher Education are considering or trying out, the use of computers for teaching purposes"....(27)

Concerning the use of educational media, there are different opinions about its usefulness, and some of these opinions are based on the differences of perception existing from one persona to another, specially visual and aural perception.

"In summarizing a variety of studies over a period of thirty years, as to whether material is learned more effectively and rapidly when presented visually or orally, Carpenter concluded: "The differences in amounts learned through the different sense modalities have been small and irregular in direction. No one sense modality or mode of presentation can be said to be generally most advantageous".....(28)

'Such an approach to the preparation of instructional material quickly reveals how meagre is our knowledge of how and what to present to a set of learners. In

the case of visual aids, for example, there is virtually nothing but intuition and the rule of thumb to guide the instructor". (29)

No

In some cases visual aids are only a sort of motivation that replaces important experiences that can not be presented to students in another way, but without the real impact of the experience, such as visits to actual buildings for history of architecture courses.

The use of television is a new trend in teaching methods. Its value has been exagerated some what in our country....

"Comparisons of teaching by television with traditional lectures or other conventional methods do not, at the present time, give a complete picture of their relative advantages".....(30)

It is doubtful that television provides a better communicational quality. The relative advantages that we believe are more within the realm of possibility are lessons being repeated by video tape for students in small groups, or individually when studying.

"possible the greatest contribution to the efficiency in teaching is that of <u>film and film strip</u>; for they can be sent to groups who lack teachers or be used to private study".....(31)

This is the kind of use we were thinking of for T.V. video-tape reproduction.

For architectural students it is particularly important that methods to improve creativity and stimulate ideas be considered, for there seems to be a deficit in this area.

...."The incredible waste of abilities and capacities that result, for one and all, as a result of our traditional education should be our chief concern. A radical improvement through educreation, of the deductive, inventive and emotional aspects, of life is of primary importance" (32)

...."Although ability to think creatively is increasingly required, no British investigation into teaching methods to encourage it has been traced; nevertheless there are many innovations in teaching. In both pure and applied sciences research projects and open-ended experiments for

undergraduates are becoming fairly common".

(33)

...."The teacher who believes that a student creates a work of art by exercising some inner, capricious faculty will not look for the conditions under which he does in fact do creative work, he will also be less able to explain such work, when it occurs and less likely to induce students to behave creatively". (34)

This last quotation although refering specifically to Art, no/ architectural students, makes, in fact, a very important point of what actually happens in schools of architecture with some lecturers that do not understand what creativity is.

Games and simulation when well presented, contribute to the stimulation of creative ideas.

"A techinque increasingly used in America and beginning to be used in Britain is the 'simulation technique! Tests or 'games' are used to stimulate situations in which it would be unsafe or impracticable for students to take charge in reality, such

as diagnosing and treaing diseases, deciding land uses, replanning a town and so on (Taylor and Carter, Taylor and Madison, 1967)" (35)

"From reports by individual teachers it is evident that 'games' involving role playing influence attitudes by increasing insight into other people's problems".... (36)

Finally a look at Ritter's thinking which places methods in their relative context....

"We will differentiate between different kinds of learning, but first we must remember that the relevance of a subject and the desire to study it, can arise from a student interest or from staff inspiration. And this is, of course, the talent of a good teacher, to inspire interest. The present curriculum and syllabusbond, examination orientated kind of teaching does not give the teacher a chance. Let us further bear in mind that unless learning springs from interest it will be inferior" (37)

We must agree with Ritter, but insist that well chosen and correctly applied teaching methods might be one of the right ways to

develop interest.

4.3.2. About assessment methods:

Assessment methods, like teaching methods, depend on several factos. We have mentioned the relation that must exist between objectives and assessments, specially now that the trend on education is towards promotion of thought and changing of attitude, rather than acquisition of knowledge. Teaching methods and assessment methods must be considered at the same time, and the course will be content partially influenced by how the course is to be assessed.

The need for better assessment methods is obvious in the eyes of the students, and we believe that the need for lecturers to prepare themselves for using better teaching methods isless of a problems that their lack of preparation in assessment methodology.

"*The usual response of teachers to failure by large numbers of students in examinations is to criticize the examination itself or to demand that selection of students should*

be improved. It is rare that modification of teaching methods is advocated, or even considered; although evidence exists that these, and the curriculum, may equally be causes of failure"....(38)

"Since one of the chief objectives of students in entering university is to obtain a qualification, the form of assessment employed has a considerable influence in content and methods of study. The effectiveness of teaching and of teaching methods is therefore influenced by the ways in which students are assessed". (39)

Traditional examinations are now being questioned as to their ineffectiveness, but even so we still found in Part I that the written examination is the most common assessment methods in use presently.

"In the past the only universal evaluation technique was the terminal, or final, examination which was used to rank students and to determine whether they had attained an 'agreed standard', numerous inquiries during the last thirty years or so have shown hoq ineffectively traditional exams,

employing essay questions, oral and practical tests, achieved these objectives (Beard, 1970 Cox, 1967); There is a demand today for more varied types of assessment to meet the variety of aims in teaching as well as for more evaluation of learning and teaching during courses"....(40)

This cry for more variety seems to be getting some response, if we can judge by this example:

"A development towards greater diversity in examining in the arts is described by Brockbank (1969). Staff of the English department at York have retained the three hour paper to test alacrity, rapid command or material and good recall, but they have introduced a variety of other forms of assessment. These include a 14 day paper limited to 1200 words, to encourage refinement of thinking and expression and a keen sense of relevance. Five tutorial essays are also submitted at the end of term for formal assessment, following rewriting after discussion with the tutor. Students may choose to be assessed, in oral work in delivering, defending and

discussing a paper. In addition, long essays of seven to ten thousand words are assessed, some with subsequent tutorial guidance and others without, and an ancillary viva may be used in conjunction with any written form of assessment. It is of interest that about two thirds of the students achieve comparable grades by any method, one sixth each do better in papers written at leisure or in traditional papers, while one tenth of these do either better or worse than by continuous assessment". (41)

This experience looks interesting and maybe applicable to the teaching of history of architecture, except for the importance of using illustrations, which would be difficult to apply to large groups in the absence of a very well compenetrated teaching team.

Continuous assessment would probably solve the problems of late evaluation and the consequent lack of feedback, that are some of the important concerns in assessment.

"Assessment of course work has not yet been studied in any detail. Commonly used methods such as exercises, essays, problems, etc.,

which are marked some time after the student completes the work are being increasingly criticized because they often fail to detect causes of students' difficulties, tend to be marked uninformatively and provide corrections, if any, too late to influence learning at the critical time". (42)

...."the evidence is that, in any learning, prompt feedback leads to greater efficiency. This is of course, one of the advantages of programmed learning" (43)

As we saw in Part I, one of the problems is the lack of rationalization or systematization in assessment procedures, and although some efforts have been made, such as those we mentioned for project work, most of the real work still reamins to be done.

Hidle Himmelweit (44), in a study about assessment methods, found the following being used: Terminal assessment by tutors; continuous assessment; seminar papers; more traditional three hour examinations; objective type tests; tests ranking from

ten scripts; term long questions; and fortnight long questions. The study presents the methods, and discusses advantages and disadvantages, but does not present final conclusion, because as we said before, assessment methods must be judged according to their defined goals.

"A common conclusion of any research work is the need for more research and this survey of examinations is no exception. It is, however, of special significance here, since although examining is an important and time consuming ocupation, very few of those who are actively engaged in it regard it as a field for experiment and research....Plainly there is still a great deal to be learnt about the relationship between examinations and educational aims what is their effect and motivation in learning". (45)

4.4. Teaching and assessment methods in history of architecture courses in Faculties of Architecture in Venezuela.

One of the clear conclusions of the research done on his history of architecture courses in Faculties

of Architecture in Venezuela, is that teaching methods, like assessment methods, are rather traditional, and very little change is observed.

On graphics 8, 9, 10 and 11 of Chapter 4, of Appendix 1 of Part II, of this work we can see all, the methods used.

4.4.1. Teaching methods:

The teaching methods used are:

-Lectures

-Practical work

-Seminars

-Discussion

-Students presentation

-Methodological and critical analysis

-Group work

-Visits

Lectures, which are the main method used, are, almost without exception, accompanied by slides.

Practical work is of several kinds: bibliographic research; field studies, building analysis.

Seminars and discussions are seldom used

because of students population problems.

Visits to historical sites are not very common, largely because there are not many in the country. These that exist only date back two or three centuries.

4.4.2. Assessment methods:

Assessment methods used are:

-Examinations

-Practical work

-Essays

Examinations is the main assessment method; practical works are considered secondary to examination although in the last 3 years there is a tendency to replace examinations by work assessment.

Essays are not very common as teaching or assessment methods, byt occsionally they have been used in history of architecture courses.

4.5. Teaching and assessment methods for history of architecture course in architectural education:

Considering the objectives and the course contents

proposed in previous chapters, as well as the methods mentioned here, we wish to now select those methods which could be incorporated into history of architecture courses.

4.5.1. Teaching methods:

The teaching methods proposed are:

Access to study material!

-Lectures with use of audio visual aids, complemented with hand-outs and set-books, to provide information and guidance.

-Practical work based on bibliographical or field research, using methodological analysis for critical assessment of architectural facts studied, in groups and individually.

-Seminars and discussion, specially case discussion, using lectures, set-books and work themes as subjects.

-Fields trip and visits, carefully planned and whenerver possible related to work subjects.

-Game and simulation with history subjects or other disciplines with a historical background.

?

-Individual study, as a complement, to

previously mentioned methods, with use of films, radio, tape, slides, T.V. and programmed learning, automated and otherwise.

-Essays short and long, with free or imposed subjects.

-Block course.

In reference to the last method mentioned, history could be part of block courses specially when there is the possibility of contributing to the integration of a subject with other disciplines (specially with project work), by the study of historical precedents.

The proportion of time devoted to lectures, seminars and practical work would depend on other factors already mentioned. But in a general way, lectures could be used as an introduction to subjects (at most once a week). Seminars and discussions would take place when necessary; probably fortnightly.

? Other methods would be used depending on the course development and the individual interest of students and tutors.

4.5.2. Assessment methods:

The assessment methods proposed are:

-Examinations

-Practical work

-Seminars

-Essays

Examinations should not be final, but step by step, to avoid the pressure of such an examination. They should be devised to measure the students own judgement in using his knowledge, rather than in recalling the knowledge itself.

Practical work assessment must be continuos, provide feedback, and evaluate students capacities to do research, analysis, and methodological criticism.

Seminars must be assessed as a whole by term, or academic period, without any stress during the seminars themselves, but through outside meetings between students and lecturers. The criteria for assessment must be based on the adeptness in changing attitudes during discussion, in promoting ideas, and in expressing himself, using

his acquired knowledge.

Essays would be assessed by evaluating, the methodology, presentation, imagination in illustrating, expression, data organization, analysis, and synthesis. Subject selection should also receive some consideration.

4.6. Summary.

In Part I of this work teaching and assessment methods were considered in three different chapters, and a summary of those consideration was put forward, in order to come up with a proposal for methods adequate for history of architecture courses.

On Chapter 2 of Part I, Schools of Architecture, we found that lectures were the main method used, followed by projects, seminars, exercises, hand-outs, set-books, block courses and visits. Discussions, tutorials and essays were used to a much lesser degree. Assessment was based mainly on examinations and essays.

On Chapter 5 of Part I, teaching methods, used in the Schools considered in the work were presented, and about 40 methos were examined and presented in a list, grouping them as to their nature:

educational media; lectures; small group seminars or discussions; project or problem solving with tutorials or; individual study; team or group work; and teaching. They were considered as to whether they served for large groups -30 to 60, small groups -4 to 12, or individual study. The majority of methods was adaptable to small groups in seminars and discussions.

In Chapter 10 of Part I, "Conclusions", in discussing 'how to learn', the advantages of methods necessitating an awareness of the learning process, were stressed.

In analysing additional opinions about teaching methods, most of the methods were re-examined, resulting in a wide variety of methods being considered as useful. The question is how to combine them and provide for the best facilities for individual study and group work. Perceptual awareness and environmental conditions should be carefully considered when selecting and using any method.

The research presented on Appendix 1 of Part II of this work, concerning Faculties of Architecture in Venezuela, shows that the teaching and assessment methods use are the more traditional ones, with no

research done, so far, into the use of new methods in history of architecture courses. The methods used are mainly lectures, practical work, and seminars. Examinations and practical work are used in student assessment.

The proposal about methods adequate for history of architecture courses, in general, suggests a combination of several of them, supplying information in large groups; working experience and discussing in small groups; and studying and researching at the individual level.

4.7. Conclusion.

There exists a great variety of teaching methods none of which is unique in ists comprehensiveness, thus suggestivy, the need to use a combination of them to get the best possible results.

Lectures adequately prepared and well delivered can provide basic information about the subject, good bibliographic and other reference sources, methods of work, and learning motivation with appropriate use of educational aids.

Seminars and discussion in small groups are useful to deepen the study and stimulate new

ideas about methods, and group work. Decisions or conclusions based on individual study can also be presented.

Individual study, using several other methods, is the best way to advance ones knowledge, better define the concepts and prepare students for active participation in small groups work. It gives them the opportunity to use their knowledge, to test opinions and adapt or change attitudes, as well as express themselves.

As we have seen in previous chapters the history of architecture course is more a means than an end in architectural education. Methods must be selected having in mind that historical knowledge is only a basis to develop intelligence, and to use methodological analysis to understand and criticize with authority, architecture. Assessment, consequently, must measure this kind of ability and understanding.

4.8. References.

1. Vaizey J., Education in the Modern World. World University Library, London 1967, pp. 190

2. Beard R.M, Bligh A.D., Research into teaching Methods in higher education. S.R.H.E., London 1971, pp. 1

3. Ibid, pp. 76.

4. Vernon M.D., The psycology of perception, Penguing 1962 (Rep. 1973) pp. 221.

5. Ibid, pp. 218

6. Richmond W.K. The concept of educational technology, Cox and Wyman, London 1970, pp. 183

7. Beard /RI M. Bligh A.D., op. cit. pp. 29

8. Ibid, pp. 28

9. Ibid, pp. 26

10. Ibid, pp. 68

11. Ibid, pp. 68

12. Ibid, pp. 26

13. McLeish J., Lecture, tutorial, seminar: the students view, Paper for S.R.H.E., 1966

14. Rice D. How should lecturers teach? Education and training, May 1971, pp. 160-163

15. Broady M., The conduct of seminars, Universities Quarterly, Volume 24, No. 3, Summer 1970, pp. 273-284

16. Beard R.M., Bligh A.D., op. cit., pp. 69

17. Ibid, pp. 47

18. Daniels R.V., .Studying history, How and Why. Prentice Hall, N.J. 1966 pp. 33.

19. Frankl P., Principles of architectural history trans, and Ed., O'Gorman J., M.I.T. Press 1968 pp. xiv.

20. Ibid. Foreword by Ackerman.

21. Jones G.E., Towards a theory of History teaching, History. The Journal of the Historical Association Volume 55, 1970, pp. 54-64

22. Beard R.M., Bligh A.D.op. cit. pp. 43

23. Stolurow L.M., Teaching by machine, U.S. Department of Health Education and Welfare, 1961 pp. 144, in Richmond W.K., The concept of Educational Technology, Cox and Wyman, London 1970, pp. 147.

24. Beard R.M., Bligh A.D. op cit. pp. 21

25. Richmond W.K., op, cit. pp. 105

26. Beard R.M., Bligh A.D., op. cit. pp. 21

27. Ibid. pp. 38

28. Richmond W.K. op. cit. pp. 215

29. Leith G.O.M., Developments in programmed learning, pp. 47-49 in New Media and Methods in Industrial Training (Eds) Robinson J., and Barnes N., B.B.C. 1967, in Richmond W.K. op. cit., pp. 85.

30. Beard R.M., Bligh A.D., op. cit. pp. 37

31. Ibid, pp. 38

32. Ritter P., Educreation, Pergamon Press, 1966 pp. 287-288

33. Beard R.M., Bligh A.D., op. cit. pp. 54

34. Richmond W.K. op. cit. pp. 103

35. Beard R.M., Bligh AJDL op. cit. pp. 51

36. Ibid., pp. 59

37. Ritter P., op. cit. pp. 310

38. Beard R.M., Bligh AJ L, op, cit. pp. 61

39. Ibid, pp. 63

40. Ibid., pp. 63

41. Ibid, pp. 64

42. Ibid, pp. 65

43. Ibid, pp. 66

44. Himmelweit H.T., Towards a rationalization of examination procedures, Universities Quarterly, Volume 21 No. 3 June 1967, pp. 359-372.

45. Cox R., Examinations and higher education: a survey of the literature, Universities Quarterly, Volume 21 No. 3 June 1967, pp. 292-338.

chapter 5

IDEAS FOR A HISTORY OF ARCHITECTURE

COURSE IN ARCHITECTURAL EDUCATION

5. IDEAS FOR A HISTORY OF ARCHITECTURE COURSE IN ARCHITECTURAL EDUCATION.

5.1. Introduction.

5.2. Objectives

5.2.1. General objectives

5.2.2. Specific objectives

5.2.2.1. Objectives as ends

5.2.2.2. Objectives as means

5.3. Contents

5.4. Teaching and assessment methods

5.4.1. Teaching methods

5.4.2. Assessment methods

5.5. Other aspects

5.5.1. Time and place

5.5.2. Coordination

5.6. References

5. IDEAS FOR A HISTORY OF ARCHITECTURE COURSE IN ARCHITECTURAL EDUCATION.

Objective: Present ideas for a history of architecture course in architectural education.

5.1. Introduction.

We have repeatedly said that in order to design a course in any subject, many factors must be considered, depending, the majority of them, on the particular national educational policy. It is helpful to remember Warren Piper's diagram on page 113, and ours in figure 30, on page 115, of Chapter 3 on Part I of this work. Both are valid and relevant, and establish the general setting for our ideas which follow.

Let us think in terms of a School of Architecture in Great Britain, first in which there is not a professor or master who has too much personal influence, and consequently there is some freedom for experimentation.

Previous chapters in Part II have in fact presented the basic proposals for these ideas about a course, and we shall try no to repeat

unnecessarily.

We consider the ideas presented as minimum to define a course, but allowing considerable freedom as to particular details.

5.2. Objectives.

Again we refer to page 114 of chapter 3 in Part I, to insist that the objectives as established in Warren Piper's triangle, must consider students, subject and society, to be correctly defined.

5.2.1. General Objectives:

All general objectives presented in Chapter 2 of Part II, in 2.6.1.,are valid and can be well complied with in a history of architecture course, if they are kept is mind.

5.2.2. Specific Objectives:

When we proposed specific objectives in Chapter 2, we separated them in to those that could be considered as means, and those that are ends. Here we want to further our consideration of that separation.

5.2.2.1. Objectives as ends:

We said that objectives as ends could be used to give a cultural background, and as a material for specialization.

To develop a cultural background is an important objective for history of architecture as a subject and for architects. In Britain, conservation is practiced, and old buildings and monuments are permanently presence within the built environment, so no architect can walk out to the street without receiving, through observation, an excellent historical background.

Concerning specialization we must say that we agree entirely with professor Allsopp, when he says that more architect historians are needed, instead of historians of architecture or art-historian in order to re-write the history of architecture.

Specialization to become an architect-historian would require preceeded by undergradual architectural studies,postgraduate studies.

Undergraduate studies in a School of Architecture should manifest a concern for social sciences, aesthetic studies and environmental studes, in order form a broad base for further study.

During the first three years of study there is not really much need for specialization, because what we are presenting is primarity an over all architectural orientation.

During the years devoted to outside practiced the fourth and seventh years, following the normal pattern, practice should be obtained in offices dedicated to the conservation of architectural structures, and the work duly supervised, in order for the student to get a glance at the practice of the profession and at

the importance of historic buildings and sites.

Year fifth and sixth year, spent at the School, should be in a discipline with a stron/history option. The historic option should be the principal option, complemented occasionally by other allied subjects.

Finally post-graduated studies and research should complete the historical education, probably in a certain area of specialization. It is impossible for one single person cover the whole field of history of architecture. ✓

5.2.2.2. Objectives as means:

Concerning the other specific objectives proposed, we insist that although the attempt to stress them is ambitious in a one or two hour a week course, they are fully valids and should to be attempted. Therefore, we want

to maintain them in the model asserting that a good hardworking School of Architecture in Britain can make them a reality.

5.3. Contents.

Although we ventured to express some ideas for other levels of education, when we spoke of specialization in 5.2.2.1., we will propose here only the contents for the undergraduate level. Even so it is possible that in the fifth and sixth years some kind of diversification or even specialization could be included.

If we are to follow strictly the ideas behind the objectives propose/ we should conclude that all history of architecture should be considered as the necessary background study for the development of a cultural understanding also, on the other hand,that any historical study could be used as a means to stretch the mind or to exercise methodological analysis. But that is not so, because the whole history can not be covered with sufficient depth, and that obliges us to select material and when selection occurs, there are some periods, civilizations or problems

that must be determined as more relevant than others.

The content of history of architecture courses the/ must cover all history of architecture at a general level so as to allow the students to order periods, and civilizations properly according to their time, place, and circumstances, and to identify the main cultural characteristics which influenced buildings and building programmes. Good reference sources must be provided to allow for further reading.

The criterion for selection must be oriented toward the study of the civilization, which directly influenced that of the country where the School is located in this case the occidental civilization.

> *"Before beginning the book proper with Norman architecture it is necessary to consider the architecture of the ancient civilizations of Greece and Rome. This had, and still has, a great influence on that of England".....(1)*

This authorized opinion of Sir Frederick Gibberd indicates the necessity to include in the curriculum (for British School) Greek and Roman civilization

the /RRomanesque, the Norman, the /DDanish and the French influence, the Gothic, the Transitional, the /RRenaissance, the Barroque and the Classic, and of course the Georgian, the /RRegency, the Edwardian, the George V, ant the Revials. The Industrial /RRevolution -being British born- had its decisive influences, although retarded, on British Architecture, and must be studied as the final step which brings us up to Modern Architecture.

We find useful the study, on comparative basis, of one or more ancient civilization. In our experience Egypt, with its stylistic consequence and absolutist characteristic, is a very useful example. The use of other civilizations like primitve American or Oriental, may also be considered, although they are more difficult to relate to occidental styles.

The above mentioned content, starting with Greece, does not say how the time should be devided, or to wath depth, the study must go but we consider that most of the tim e must be devoted to post industrial revolution architecture, with emphasis on the XXth century in Europe and particularly in Great Britain.

There is the problem of giving to students too

early a contact with moder/movements and current architecture, which would make a later chronological approach uninteresting, therefore we suggest that in the first year, after a term or two of a kind of introductory general course of the history of architecture from ancient times to the industrial revolution or modern movements, XXth century architecture should be studied in some depth.

In the second year, through lectures, seminars, practical work, analysis, and discussions, post revival architecture should be carefully examined, Essays on any period or subject from anglo-saxon to modern architecture, with themes aproved by lecturers and with free elected tutors, should be presented towards the end of the second term, and discussed during third term.

JDUring third year, subjects should be discussed between lecturers and students using the last 30 years or so of actual architectural experience to be submmited to a thorough methodological analysis and a final critical assessment by students, using as much as possible primary sources.

General important considerations for all three years should include: to take as frame work for

architecture the whole environment, (physical and cultural) with due importance for human phisiological and psychological welbeing; to consider good and bad architecture alike, that is, not only considering well known and preserved buildings, but the whole range of existing structures at a given time and place; to use the building, places or towns as primary sources instead of published opinions. Concerning 'bad' architecture, we know that information is scarce, but the real fact is that is any time in history, all kinds of architecture existed, and all must be considered and studied. This may be a new area for research which will have prising results. For example, we know for sure that in our case, Maracaibo, what has been destroyed for urban renewal was in fact 'good' architecture, considering our environment, and what has been preserved because of its size, religious, political or even dubious 'aristocratic' importance, is not worth the ground it stands on.

A last essay in third year of a subject should be submitted a controversial nature, within the period described.

5.4. Teaching and assessment methods.

Teaching and assesment methods are many and varied

as we have seen and some of them require of lecturers some special skills or knowledge. For the benefit of study, we shall suppose that lecturers are well prepared and familiar with all methods, and that students are mature enough, in spite of some reserves we have quoted previously.

5.4.1. Teaching methods:

In spite of all the criticism, we still believe that the best start for any course is with lectures (one or more if necessary with use of all necessary aids). Lectures should have not only the purpose of providing knowledge, but also of giving an introduction and the pertinent information about sources, methods of work, assessmet methods, and the student performmance expected.

Boring for students ?

As a complement, immediately after hand-outs and set-books are distributed, a list should be provided, with the exception of the first one for each term, indicating supplementary reading which could be advantageous for students. ?

Following the lecture, two different possiblities should be available, depending

on the subject and circumstances one being siminars ot discuss in some depth, as a follow up, what has been proposed throuth the lectures the other individual study projects.

Individual study with tutorial assistance, and outside reading, the use of instructional aids such as films, slides, tapes, video tapes, and programmed learning, etc., should provide material for seminars and small group discussions, or for visits or trips, and for any kind of practical work.

Seminars and discussions in combination with lectures and individual study, should take different forms, using when possible methods for stimulatin/ideas such as games and simulation. The purposes should be to motivate and promote thought, to study and discuss in some dept and to feed the working hypotheses. Staff participation may or may not be convenient in every ocassion.

? Practical work of any kind, mainly architectural factor analysis, syould be done in small groups first, and then individually, so as

to allow student to gain some insight in to methods and group work, before they do it individually.

Study trips and visits must be an important part of the learning experience, they must be carefully planned. The preparation should include some readings, discussions, viewing of graphic material, and clear definitions of objectives and aims. They must not necessarily be exclusive for history of architecture students, but rather with a more comprehensive purpose which would allow for the integration of students from other disciplines.

To provide for the best possibilities of individual study, the School should gather as much information as possible on all kinds of instructional aids and media, ideally covering the full history of known architecture although we are not abel to suggest all the posibilities we propose the following kind of media: slides, slide-tapes, tapes, films, film-strips, vedo-tapes, programmed lessons, handouts, charts, maps, game and simulation kits, computer aided programmes, essays, and

practical work.

Practical work in methodological analysis should be based, depending of the period, civilization or problems, on building analysis, building types, towns, settlements, or architects works. The best methodology for each situation should be determined.

Individual study, besides the purposes and uses already proposed, should have the objective of serving as research for the essays we mentioned when defining contents with tutorial help. As a general rule it is preferable to do the essay on a different theme, so the student gets used to handling more than one subject with different methods, at different levels, and under different working conditions.

The wide variety of methods proposed would mean, permanent motivation and the best use of the perceptual abilities of every student, with, of course, considerable pressure from staff.

Whenever possible the courses should be given on a pluripersonal basis, to allow

different opinions to influence the student and to provoke an interest allowing the students form his own opinions.

5.4.2. Assessment methods:

Assessment methods will depend not only on the teaching methods used, but also on the performance expected from students in relation with objectives and contents.

In accordance with the teaching proposed assessment should take different forms in different stages. It should be as a learning, more than a 'measuring' experience.

Seminars as a whole, should be assessed, in order to determine the students ability to express himself, his understanding of the reading material or knowledge acquired his adaptability to the ideas of others, his disposition to group and team work, his individuality, his analysis, and his synthesis ability. As we stated before in chapter 4, the assessment should be discussed between the student and the lecturer, and not be a one-sided decision.

Practical work should be assessed as a group or individual performance, considering the subject, sources, methods, data retrieval, analysis, synthesis, feedback, and the presentation, as well as the actual knowledge about the subject. Comparison with other similar architectural experiences should be made to test conceptual understanding and generalization.

Individual study should be assessed through tutorials and essays, to test the progress, intellectual dispostion to research and study, architectural understanding and historical awareness of the student.

Study trips and visits should be assessed through reports presented, responding to carefully selected aspects of the visit.

All these aspects of assessment should be considered in the final evaluation of students.

When possible, and depending on staff resources, assessments, excepting for tutorials, should be made by a working jury or teaching team. Assessment can be

continuous through out the academic year.

Finally, student assessment and performance should be taken as indicators to assess the course itself, and lecturers abilities to transmit information, guide students, promote knowledge and thought, and use new teaching and assessment methods, all of which is more easily done working as a team, instead of trying to teach individually.

Lecturers need to be open to self-criticism and tean assessment, to better themselves as teachers, if not as scholars, which would probably result as well.

5.5. Other aspects.

We do not care to go back over what has been said about the definition of courses within national or institutional policies. That has been mentioned at the beginning of this chapter. We do, however, want to mention some other aspects we consider important in giving some more precision to our ideas.

5.5.1. Time and place:

In 5.3., we suggested some ideas about the

time to be devoted to different parts of the course, mentioning the general introductory courses in particular.

Taking into consideration the fixed timetable that is the normal situation in Schools of Architecture (10 to 14 hours a weeks) of which one hour a week seems to be the traditional ammount of time allocated to history of architecture courses, we belive that this pattern will continue, but we consider one and a half hours the appropriate time for one session, so as to allow for a lecture plus a discussion, or a good seminar to take place.

Of this time, one lecture every two or three weeks would provide the information needed for seminars or individual study for the following one or two weeks. The rest of the time would be devoted to organized seminars or groups discussions.

Concerning the inclusion of History of Architecture Courses in the curriculum, we consider that they must be included in all three years at the first level, and at least one of the two years after the first

year out, probably the fifth.

5.5.2. Coordination:

One of the biggest problems in architectural education, as we have seen in Part I, is the difficulty in coordinating what are normally called theoretical subjects with project work, and between subjects, themselves. Normally subjects run parallel to project work, with very little contact or no contact at all, excepting for block-course periods.

We consider that coordination between history and other subjects, and with project work, is possible in several different ways, such as in more use of block-courses, projects, study trips, visits, problem analyciss and community action.

Block-courses represent a good opportunity to introduce history in two ways: one, through the subjects that are contributing to the courses; two, as historical backgroung to the project itself.

In projects, some historical backgroung can be given as we said through block-course, but this would be only a motivation to study

all historical antecedents to the site, problem, or people involved, so as to consider them when proposing a design.

Study trips, or visits, in England or anywhere in Europe, may be utilised to introduce an historical component. The component should be presented in advance, as preparation, and then developed during and after the experience,making it, more interesting and alive.

Problems of any kind, presented to the students, may be approched and place in a better perspective, starting with a well planned historical study, thus helping to indicate the best solution through a better understanding of the nature or the problem cause, and the circumstances that provocked the problem.

Community action is sometimes undertaken by Schools of Architecture as the preparation or the consequence of a project with profound social implications, and provides an excellent example in which the use of a historical approach, as mentioned in the previous case, can contribute to a

better understanding of a situation and its solution.

The operational way to provide the right integration and coordination of the above, is not only through directing the students and modifying the work or the courses themselves, but in the active participation of history lecturers in helping to remodel the various activities. This would have the advantage that other lecturers would see this participation on the part of history lecturers, as a kind of cooperation, and not as a new weight on their shoulders, due to the need to reform their courses.

Obviously this requires an especially cooperative attitude from lecturers and a good group spirit, but we believe that the results would prove the experience worthwhile for students and lecturers alike.

5.6. References.

1) Gibberd F., The Architecture of England,

chapter 6

COURSE OF HISTORY

OF ARCHITECTURE FOR THE FACULTY

OF ARCHITECTURE OF THE UNIVERSITY

OF ZULIA, MARACAIBO .VENEZUELA

6. COURSE OF HISTORY OF ARCHITECTURE FOR THE FACULTY OF ARCHITECTURE OF THE UNIVERSITY OF ZULIA, MARACAIBO, VENEZUELA.

6.1. Introduction

6.2. Historical background

6.2.1. Faculties of architecture

6.2.2. History of architecture courses

6.2.3. Objectives

6.2.4. Contents

6.2.5. Place and time

6.2.6. Compulsory and elective courses

6.2.7. Teaching and assessment methods

6.3. Conditioning environment

6.3.1. Previous education

6.3.2. Universitary education

6.3.3. Environment

6.3.4. Student population

6.3.5. Lecturers

6.3.6. Research

6.3.7. History of architecture

6.3.8. Study sources

6.4. Course proposal.

6.4.1. New curriculum

6.4.2. Objectives

6.4.2.1. Faculty objectives

6.4.2.2. Course objectives

6.4.2.21. General objectives

6.4.2.22. Specific objectives

6.4.3. Contents

6.4.3.1. Chronological

6.4.3.2. Selection

6.4.3.3. Analysis

6.4.3.4. Compulsory and elective contents

6.4.4. Time and place

6.4.5. Teaching methods

6.4.5.1. Lectures

6.4.5.2. Individual study

6.4.5.3. Seminars and discussions

6.4.5.4. Practical work

6.4.5.5. Study trips

6.4.5.6. Essays

6.4.6. Assessment methods

6.4.6.1. Individual study

6.4.6.2..Seminars and discussions

6.4.6.3. Practical work

6.4.6.4. Study trips

6.4.6.5. Essays

6.4.6.6. Through other subjects

6.4.7. Other aspects.

6.4.7.1. Coordination

6.4.7.2. Staff

6.4.7.3. Research and study sources

6.5. References.

6. COURSE OF HISTORY OF ARCHITECTURE FOR THE FACULTY OF ARCHITECTURE OF THE UNIVERSITY OF ZULIA, MARACAIBO, VENEZUELA.

Objective: Propose a course of history of architecture applicable to the Faculty of Architecture of the University of Zulia, Maracaibo, Venezuela, based on the experience of this work.

6.1. Introduction.

The possibilities that the course proposed in this chapter be actually considered in the Faculty of architecture in the University of Zulia of Maracaibo, Venezuela, would be under normal conditions very slim, because of the traditional conservativism of the Universities all over the world, to which Latin American universities are no exception. Fortunately enough, at this very moment, the Faculty is engaged in a curricular recualuation which it has been undergoing for about a year, and which must be finished before July 1975.

This rather exceptional opportunity may turn this work, which otherwise would have been merely an intellectual exercise, in to a valuable and useful

experience.

No doubt this kind of responsability conditions, in some ways, the proposal, which must accomodate some compromises or sacrifices, in order, to make it more acceptable an plausible.

Anyway the reality of Venezuela is so extremely different from that of Great Britain that some special considerations must be made prior to the proposal. They are contained in points 6.2. historical background, and 6.3. conditioning environment.

These special considerations affect, no doubt, the proposal the same way whether the course could be applied or not, but now in light of the possible application of the proposal, they become more important.

We hope to be able to define what kind of sacrifices or compromises we are accepting to make the course more applicable, and what ideas are proposed in ~~then~~ stead, which we consider to be the best for the course in its reality.

6.2. Historical background.

We are taking a very direct approach to historical

background, referring only to history of architecture courses in Faculties of Architecture in Venezuela using. For that purpose research was specially done for this work and is contained in Appendix 1 of Part II as we mentioned in Chapter 1, and the introduction.

That is not to say that we consider that only other historical background is not important, but that we consider that a proper historical study would lengthen this work considerably and unneccessarity. My personal experience of more than 12 years as lecturer and architect, allow me to say that the main facts that could be of interest shall spring from this study -6.2. historical background- or from point 6.3. conditioning environment or are already described on the very short Notes that from Appendix 2 of Part I.

6.2.1. Faculties of Architecture.

Until 1972 there existed in Venezuela only three Faculties of Architecture. In 1973 a fourth one started and during 1975 and 1976 four new ones brought the total number to 8, for a country whose population is 12.000.000, and which has not made any a

previous study as to the manpower needed.

The first Faculty of Architecture belonging to The Central University of Venezuela (*), started as a department within the Faculty of Physical Sciences and Mathematics in 1944, becoming a School in 1946 and being recognised as Faculty in 1953. It is to day the largest one in the country, with over 2.400 students.

In 1961, as a department of the Faculty of Engineering of the University of Zulia, (*1) architectural studies commenced in Maracaibo. The School of Architecture was formed in 1962, and in 1963 was recognised as Faculty and became independent. It is now the second largest Faculty in the country, with a pupulation of....?

During the same year, 1961, architectural studies were started in the University of The Andes (*2) within the Faculty of Engineering. The School was formed in 1962, but remained within the Faculty of Engineering

---

(*) La Universidad Central de Venezuela
(*1) La Universidad del Zulia
(*2) La Universidad de los Andes

until 1970, when it was given independence and recognised as a Faculty, it is at present the third in size with about.... students.

The process of accepting the curriculum, and recognition as a School and later a Faculty, depends on the National Council of Universities (*3).

6.2.2. History of architecture courses.

History of architecture courses have been a permanent part of the curriculum since the beginning of all Faculties of architecture in Venezuela, and although they have changed in objectives, contents, and importance, their existence has never been discussed more than that of any other subject. ?

The deep european controversy of the fifties and sixties never had any echo or influence on the courses in Venezuela.

Changes have been introduced everywhere except Maracaibo, as a consequence of the

---

(*3) Consejo Nacional de Universidades

interpretative trend, and by the personal influence of certain lecturers that have been doing post-graduate studies, abroad, mainly in Italy.

In Maracaibo the courses have changed from an informative -1964 to 1967- to a more analytical pattern with greater emphasis on considering architecture within the broadest possible context - physical and cultural.

6.2.3. Objectives.

All the course objectives, found through the research, were enumerated, briefly, in 2.5. of Chapter 2.

These objectives cover most of the educational possibilities, and seem to place too much hope or responsability on history of architecture courses. They are expected to have some kind of effect that will produce certain types of student behaviour that could as well be developed through other disciplines such as theory of architecture or design. The reason for that being that history of architecture courses have been, by tradition, the only

ones to provide for a wide variety of educational aspects, within the Faculties.

Most of the objectives use history of architecture as a means not to acquire historical knowledge, but to again architectural awareness, to establish methods of study, and to develop a critical mind.

Objectives in Maracaibo, have been mainly, to understand modern architecture, to relate between architecture and all the forces shaping society, to develop the students' capacity for methodological analysis, and in general to transfer historical knowledge and awareness.

6.2.4. Contents:

Course contents are listed on 3.5. of Chapter 3, and they reflect what we just said about covering some areas that apparently do not belong to history of architecture.

For example, we have for some course contents material such as: theory of architecture, scientific knowledge, and

aspects of society, which have no other conexion with the subject of history than the orientation they are given to justify their place within it, and architecture.

Of the other course contents, there is one group that is not different from that of any other School in any country. It follows the line of western civilization, such as: universal architecture, ancient to barroque architecture, renaissance architecture, 1750 to 1930 architecture, modern architecture art and architecture, urban evolution, and landscape architecture.

Other contents have a more direct relation with architecture in America and they are: pre-Columbus architecture, American architecture, colonial architecture in Latin America, American Barroque, North-American architecture, architecture and engineering in Venezuela, and conservation.

Accepting the time (number of hours) devoted to different contents as a indicator, the emphasis is on architecture from 1750 on, and specially modern movements. A certain importance is given to classic architecture

(Greece and Rome) and Reanissance and Barroque.

Contents in Maracaibo have been following a chronological order since 1965, and they pretend to cover all history of architecture, selecting different civilizations, and giving emphasis to modern movements and the ideas behind them although in a rather inadequate way.

6.2.5. Place and time:

History of architecture courses have been placed with the exception of Maracaibo from first year to fourth year (*). The time devoted to them is one or two hours per week, plus the time needed to do practical works.

In Maracaibo, courses have always been placed in the third and fourth years, with a time-table of four or five hours per week, in which students are supposed to do all necessary work for history, including lecturers, seminars, and practical work.

(*) *For an explanation about architectural studies general pattern in Venezuela, see 6.3.2. on this Chapter.*

In reality, students work very little in these five hours, and devote considerable time to do their practical work, mainly due to a lack of organization and the difficulties encountered in working in groups.

6.2.6. Compulsory and electives courses:

Some of the courses are considered basic, and must be taken by students. Others are considered as complementary, on two grounds, diversification or deeper knowledge, and they are electives within a certain number of units or credits to be taken.

Compulsory courses are modern architecture, and theory, plus at least one course on Latin American architecture.

In Maracaibo there are no elective courses.

6.2.7. Teaching and assessment methods:

As said in 4.4. of Chapter 4, teaching and assesment methods are the traditional ones, and there have not been any great changes. The only remarkable thing is the big emphasis on critical and methodological analysis.

In Maracaibo, lectures are reduced to a few a year, just to introduce a new period or problem, and most of the time is spent in practical work in groups, using methodological analysis of buildings or towns. Assessment is done through the works that are presented by students to the class, and by examination. Seminars are organized, with difficult because of the number of student, three or four times per academic year,but results have not been fully satisfactory.

6.3. Conditioning environment.

In Appendix 2 of Part I of this work, we established the factors that we think differentiate Great Britain from Venezuela and deeply influence architectural education. Those factors are: historical reasons,cultural environment, physical environment, stage of development, and political influences.

We again insist on the importance we attach to those factors and in order to set the right framework to make our proposal understandable, we want to make some further remarks which are, fully

valid and basic to the ideas which follow.

Let us first define what we are talking about when we say 'cultural' and 'physical environment'

Cultural environment is defined as the combination of all social, psychological, political, religious, economic, technological, educational, artistic and of course architectural segment of a society, or in this case a country, with all its historical precedents.

Physical environment is defined as the combination all geomorphic, hidro graphic, climatic, and biological aspects of the territory or region where the cultural environment has developed.

The historical precedents -from Great Britain and Venezuela- the physical environments, the cultural environments, the peoples, the degree of development and even the expectations are so tremendously different between Venezuela and Great Britain that we have considered it necessary to stress the point.

Probably some of the following consideration shall contain value judgement. In an effort to make these points as brief as possible, we can only ascertain that these value judgement are not intentional. Why not

6.3.1. Previous education:

Education prior to the university in Venezuela consists of 6 years of primary schools, (from the ages of 7 to 12), and 5 years of secondary school, (from 13 to 17). It is not an open education, but rather obligatory in the sense that students must take all subjects given and all the examinations years after year. Only primary education is compulsory, however about 20 per cent of boys in that group age don't comply with the law.

Secondary education is studied by about 55 per cent of youngsters in the respective age group, and there are two branches within it; humanities and sciences. Architectural students must study sciences.

All students finishing secondary education, no matter what grade level, but with, all the subjects approved, have the right to go to the university, without examination or other entrance requirement.

6.3.2. University education:

Universitary education is free in Venezuela

excepting, for three private universities. It is actually, for most of the students, more than a way to learn a profession or improve the intellect, in that it is the surest way to gain status, both socially and economicaly.

In the last two years, a system for national registration has been enforced, with no clear results so far. Considering that there is no system of grants, (like Great Britain or Sweden has for example), students must be given a place in the University in the town where they live or the closest possible.

There are at present, about 200.000 universitary students in Venezuela, the student population ratio 1 to 60.

The ratio of student of staff used to be about 1 to 12 during the early sixties, has deteriored considerably, being now more like 1 to 25 or 30.

Academic organization is still by Faculties in the old Napoleonic way, with feudalistic approach towards independence, but it is

moving towards the department system on the american model. In some cases it is being copied, but without the same kind of resources, and with variation so as to respect in some ways the faculties and present school structures and so as not to hurt anyone.

Universitary education has no formal links with the professions, but as Universities give titles, professional bodies accept the graduals and register them in their association without any check on their abilities. as we European (Continental)

Architectural education is completed within the universities in five years, by semesters. There is no such thing as years-out, and practical experience is scarce if any. It depends on the students interest to work part-time during studies, which is only possible in Caracas because opportunities exist there and the timetable is fixed so as to allow some day time for working. In Maracaibo there are few oppor tunities, the timetable -36 hours per week- does not allow time for work, and very few students get any experience before they

actually start to work with full professional responsabilities.

6.3.3. Environment:

Physical and cultural environment were briefly defined in the above mentioned Appendix. What we now want to stress are the environmental conditions for architectural education itself.

..."*In almost any English town of any antiquity one moves easily from the Middle Ages in the parish church, elevated high above the houses around it, to the present day with its contrast between the public buildings put up by goverment departments -post-offices or employment exchanges- with their good standards of design, traditional or modern, and the apalling confusion of modern commercial buildings: the multiple concerns, the shops and petrol-filling stations, the meanness of the houses- all without conscience or neighbourliness, vulgar, garish, uncivilised. How much of contemporary life that reflects*". (1)

..."*The young architect does not grow up*

in a place where there is no architecture. He grows up surrounded by architecture. Let us assume for the moment that he grows up in some place where all the buildings are works of art, sincere expressions of the emotions of the designers. There are such places. The local tradition has grown gradually from the time the first building was erected there and it has been subtly formed by local materials and climate, by local habits of life and thought, and by the feelings of generations of local artists"...(2)

These two quotations note very clearly the influence of the environment, even by mere presence of architecture over people and architects. In Maracaibo, and most places in Venezuela, we have not the kind of environment that Rowse and Allsopp are describing, excepting for the "vulgar, garish, uncivilised..... contemporary life" mentioned by the former.

We have not the slighest possibility of using an ancient building as a source for our studies, we are strictly limited to

XXth century 'international style' architecture, because the very nice vernacular housing from the XIXth century, that existed in Maracaibo,has been brutally destroyed for the sake of 'modern' developments -by those who were our students a few years ago-.

Of course that is our failure, of histoty of architecture courses and of the Faculty of architecture in general.

The problem is not only lack of old buildings, good or bad, but as well, of mental conditioning. Only new and shiny things seem to interest authorities, intellectuals and common people.

There is no historical awareness, except for the celebration the history of the war of independence. All other historical things are considered as just old, architecture included.

And so throughout history in all ages for all 'common' people

6.3.4. Student population:

The student population increases in Universities at a rate of about 25 to 30

per cent per year due to: the population growth of the country (3.5 per cent per year), the age distribution of the population (over 52 per cent are less than 18), education is free, and there are no entrance requirement to the universities.

This very high growth percentage reflect directly on: resources needed, study group size, teaching and assessment methods, and the dropout problem.

"Few countries, if any, have passed through the process of economic development without social and political tension and disturbance. Few countries have been through the process of attaining national self-government without similar pressures being builtup. It is, therefore, inevitable that education will be involved in the tensions of the developing societies, and because, the educated are one of the 'élites' of the society (and frequently form the 'élite' which wishes to take power from the property owners or the army officers) who rule at present. It is inevitable that the schools and universities will be center of revolutionary enthusiasm

This is the case virtually whatever the schools teach".....[3]

Some of the considerations of this quotations do not applied to Venezuela, in the last 15 years or so, such as who rules the country and who wishes to take power. Others do not apply at all, such the problem of attaining self government. Vaizey describes very well the kind of unrest provoked mainly due to student population growth, that cannot be matched by university organization, building facilities and even budgeting. Above all political parties find universities to be the most fertile of grounds for their propaganda

..."*Thus the basic fact of education in an emergent country is rate of growth, in the enrolment of pupils and the consequent catastrophic decline in standards of all but the most carefully nurtured private schools. Since education is in many instances a major item in the budget of goverment at national and local levels the careful provision of facilities and the improvement of quality is a matter of*

the highest concern, lest states be driven into bankrupcy by the weight of inefficient instruction". (4)

In fact, these are the real problems in the Venezuelan universitary education, and although I have not had an objective way to prove it, my own experience durign this last 12 years (studying not only, architectural education, but universitary education in Latin American countries and all disciplines in the University of Zulia), leads me to believe that educational standards have been declining since 1964 (5)

"In the latest developments in educational technology the trend towards mass instruction is countered by a trend towards individual instruction".....(6)

This is an actual problem in universities in Venezuela, because there is a pressing need to cater to larger groups of students each year, while all good educational reason is asking for more individual education. The problem is, neither problem is being, so far, rightly tackled. Only timid attempts are being initiated such as

educational T.V., short courses for lecturers, and general studies for first year students at the university. These attempts are still too young to be evaluated, but the response seems to be negative to all of them.

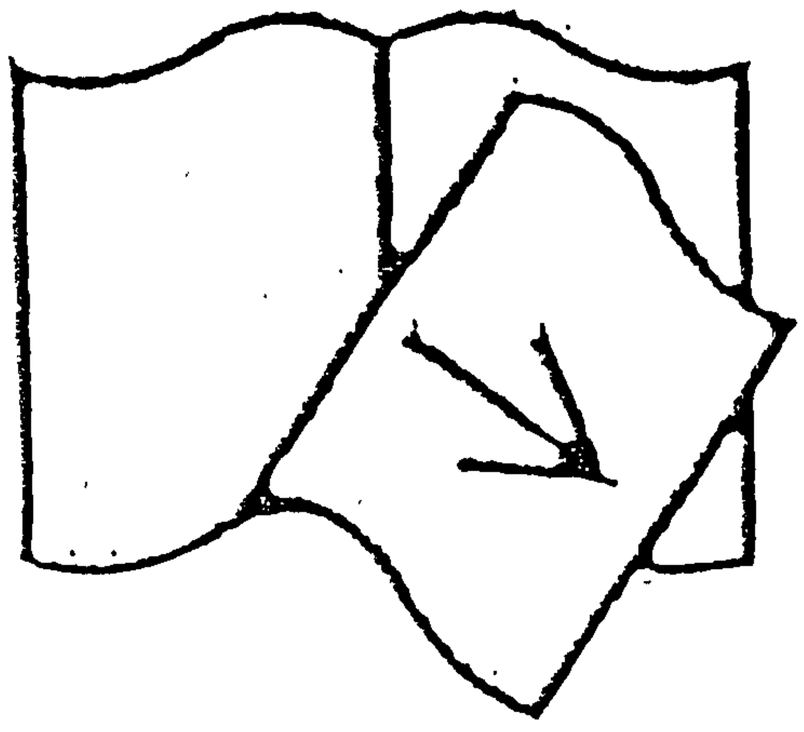
Dropout at Venezuelan universities is tremendous. Let us take the University of Zulia as an example, where the latest figures show the rate at about 84 per cent. Only 16 of each 100 students finish their studies, and most of them in a longer period than the studies themselves by one or two years.

Let us say that architecture, fortunately, in Maracaibo, has grown, at a rate below the average population growth rate. Even so the growth has been considerable as the figures on the next page clearly show.

6.3.5. Lecturers:

Lecturers in our universities,and architecture is no exception, are professionals, interested in universitary education, who become lecturers without any previous pedagogical

Pages Missing not Available



STUDENTS POPULATION

Date	Y.1	Y.2	Y.3	Y.4	Y.5	Total
60-61	46	—	—	—	—	46
62	66	17	—	—	—	83
63	43	26	11	—	—	80
64	57	28	22	1	—	108
65	52	37	25	9	—	123
66	57	35	28	21	10	151
67	69	46	21	22	18	176
68	79	46	19	21	22	187
69	82	59	24	21	21	207
70	77	53	40	22	20	214
71	120	67	41	27	23	278
72	164	66	60	32	23	345
73						
74						
75						

preparation. They do not know about perception, communication, teaching and assessment methods, methods of study, or even about universitary education, more than any non-academic professional.

The fact is that even with an interest to overcome this limitations, because of the acute shortage of lecturers, and the growing number of students, they become involved in direct teaching immediately, and most of them never find or have the energy and interest to specialize themselves.

6.3.6. Research:

Research within the universities has developed considerably compared with what it used to be until the mid-sixties. Even so, it is still scarce and not well formulated, the money destined to it is around 2 per cent of the budget varying from one university to another and from one discipline to other. Medicine or better still health, is the leader in this aspect.

Research is more the product of the individual interest within each Faculty, than the result

of a programmed effort, and most of it, it is not related to teaching.

Architecture in Maracaibo is no exception, and research is practically non existent.

The only research centre of the Faculty has been too busy doing contract work, until now.

6.3.7. History of Architecture:

History of architecture as a discipline is quite a new field in Venezuela. Most of what has been done has been the personal effort and enterprise of some of the history of architecture lecturers in the Faculty of Architecture in Caracas (The Central University of Venezuela).

Although compared with other Latin American countries, like: México, Guatemala, Perú, Bolivia, Ecuador, Colombia, Argentina and Brasil, old architecture in Venezuela is not very rich, there is a considerable amount of work to be done, first is research, and then in preservation and conservation work.

Modern architecture, since the oil boom, is a good and interesting area for research as well.

History of architecture courses in the universities should be the best and, so far, are the sole vehicle for developing interest in the subject. But not much is being done to promote the interest, and nothing to prepare the manpower needed. There is a proposal for a Masters degree on history of architecture starting in 1975 or 1976 in Caracas, but we consider this effort as too mild for the real needs.

It is fair to say the same time, that if manpower existed at this moment, it would probably be unemployed.

We need to stress the point which we made about the lecturers lack of special preparation. This is true as well, from a historical point of view,for most of us who are trying to teach history of architecture and design, and building, at the same time.

The need for specialized people, perhaps architect historians as we proposed in the

last chapter, is clear for history of architecture courses.

6.3.8. Study sources:

In 6.3.4. above, we mentioned the acute shortage of ancient buildings and the inadequacy of our built environment to serve as a source for study.

There are other sources that we lack as well. Compared with other languages - English, French or German - the amount of good bibliography we can find in Spanish is very poor. Our students are very seldom able to read other languages, which barrs their access to good books and magasines. Primary sources such as archives, notes and original texts are rare and there is almost no organized collection of them. We do not even know if they exist or not. The only notable exception is that of newspapers which are class fred for the last fifty years or so.

Again, this inadequacy calls for more research to be done. It could be an excellent task for history of architecture

Physical support for students

courses undertake research in some of these almost virgin fields, but with two or three exceptions, it is not being done.

6.4. Course Proposal.

At last we seem to be ready for our proposal, bearing in mind that what we have expressed about the conditioning environment, the historical background and the 'Notes' of Appendix 2 of Part I, is merely and effort to syntethize factors we consider influence the course, and give the necessary weight to all findings contained in our research about history of architecture courses in Venezuela, Appendix 1 of Part II.

6.4.1. New curriculum:

To place our proposal within the reality of the new curriculum, let us state the main points of it.

Studies shall be organized around four areas of knowledge, and one application field which is project work. The four areas of knowledge have been defined as: human sciences, building sciencies, environmental sciences (new in the studies), and form and

communication. Within each of these areas, an effort should be made to coordinate, as much as possible, the many subjects existing trying to develop a more holistic approach.

-The studies are divided in three stages, called cycles. The basic cycle corresponds to second, third and fourth years; and the professional cycle corresponds to the fifth year. Because the university has established general studies for all first year students, the basic cycle has been lost, and a one semester cycle called first cycle has been introduced to cope with some subjects and study contents lost in general studies. All studies are organized in semesters.

-Project work shall be done with team teaching instead of studio tutors exclusively, as in the past. Each team is formed by one or two studio tutors, depending on the year and one lecturer from each of the four areas, the teams will deal with groups of about 36 to 48 students.

-In an effort to relate and coordinate theoretical subjects with project work, all lecturers shall form a permanent seminar

to feed information and to counsel project work in all areas external assessors will be brought in when necessary.

History of architecture belongs to the human science area, and within that area there will be a comprehnsive seminar related to project work, its objectives, content and timetable. The emphasis on this will change according to the project. Besides its participation in this seminar, history of architecture shall provide some compulsory and elective courses, whose content is not contained in the seminar, and is considered important. This means that this courses content shall change each time that project work changes, surely every year.

Natural criticism to the new curriculum are: first, with the university general studies we have lost contact with first year students and we have no control over their education (one advantage we have within the faculty about two hundred fewer students); second, even without first year students our population shall this year

reach more than 500 students, making seminar organization, and the desired coordination of it difficult.

6.4.2. Objectives:

Course objectives shall be defined, starting with faculty objectives, because there are no fixed university objectives, except those established in the university law for national universities.

6.4.2.1. Faculty objectives:

In summary, the faculty objectives are to prepare, to the highest possible level, architects for development. ?

At this point it is important to clarify that in Venezuela there are no planning schools or faculties, nor quantity surveyors, no construction studies. Architects serve usually as planners and architects, and the task of construction and quantity surveyors is commonly performed

by engineers.

'Architects for development' leaves the field wide open as to what kind of architect we must prepare.

6.4.2.2. Course Objectives:

As we have done before we shall present general and specific objectives.

6.4.2.21. General objectives:

General objectives should be to:

-Contribute to general education for the development of man towards total living.

-Contribute to the furtherance of the individual through education, with reasoned freedom, creativity, and clear social responsibility as an architect.

-Provide general broad education with sound scientific and aesthetic bases and with due concern for

physical and cultural environment, and development of an open critical mind.

-Educate for continuous change, providing a consciousness of physiological and psychological learning procedures, a basic knowledge, and understanding of how to learn, and a concept of how to use knowledge to modigy behavioural attitudes.

-Prepare for team and group work in a pluridisciplinary approach to problem solving. This experience provides for the development of educational and training skills.

-Educate for advancement of knowledge, transmission of culture and enhancement of citizenship.

Comments: These are almost the same objectives we stated in chapter 2, that we consider to be basic for architectural students in Maracaibo.

We do not believe that these objectives must be a matter of detailed consideration during the history of architecture courses, being so general, but they must be communicated to students and permanently kept in mind by lecturers.

6.4.2.22. Specific objectives.

Specific objectives as both ends and means shall be presented together.

Of those objectives we considered as ends: specialization and the development of a cultural background in our case in Maracaibo, we do not believe that there is any possibility in thinking of specializing within the Faculty of Architecture, and, therefore, we propose to keep only cultural background as a suitable objective.

The objectives we propose are:

-To provide a good general historical knowledge about the development of

civilizations form the first settlements to the present, with a clear understanding of periods, civilizations, and their respective architectures as a consequence of their total environment.

-To give the students full understanding and awareness of what architecture is, what the forces are shaping it, and their interactions.

-To understand how the relations existing between society and the individual (community and artist) influence architecture which, as a compulsory presence, must contribute to the enhancement of life, physically and psychologically, with due consideration for the cultural and natural environment.

-To understand past and present architecture, their interaction and the real values of objectivity and inter pretation, considering the surface and underlying facts of history.

-To contribute to the scientific and aesthetic education of the

Techniques materials? Building Technology

highest intellectual quality, with adequate methods and techniques, considering the nature of architecture to be art and science.

-To provide problem solving experience (recognition, identification, analysis synthesis and evaluation), in a pluridisiplinary approach, with the necessary feedback from reality considering, if possible, all its variables.

-To provide the necessary knowledge of preceding civilizations in direct line with our own historical reality and our historical background in architecture.

-To give students a sound skill in methodological analysis, criticism, self-criticism, and assessment of architectural designs, providings for the due transfer of the skill to project work in architectural and urban design.

-To establish in different years, performance goals to be attained by students, concerning knowledge,

research skills, methodological analysis, self-criticism, balanced criterio, and group and team work disposition. For details see 6.4.4. time and place.

Comments: Specific objectives as defined shall necessarily influence methods (teaching and assessment) and the lecturers prepartion and attitude toward the teaching of history of architecture, We believe that in our Faculty, there is now a good disposition to accept this kind of orientation.

6.4.3. Contents:

At this point we shall define contents, and in the next section 6.4.4. time and place, we shall distribute them year by year.

First we shall explain our criteria in selecting contents, and then get into more details. We are generally in agreement with Allsopp when he says that contents should be exploratory. We believe that, like education itself, they must change to

provide for motivation and excitement on the part of lecturers and learnes, and to provide for some study options for students.

...."The most common mistake is to give students too much conceptual material too soon,.... and then not enough later on...." (7)

This is one of the dangers of objectives of the kind we have proposed, and a balance must be found between too much conceptual learning too early, and the necessary awareness of architecture too late to be useful, as has happened in our Faculty in Maracaibo.

Our following proposal for contents is a combination of natural chronology and careful selection of certain periods.

6.4.3.1. Chronological.

We propose first a course of general history of architecture from first the human settlements to the present, in strict chronological order, for one

semester.

Comments: This is necessary due to the complete lack of historical knowledge of students coming into the Faculty.

This course should be placed in the first year during the second semester of general studies, but this has not been possible.

6.4.3.2. Selection:

Most of the courses should be decided on through a selection criterion, considering the direct civilizations preceding and influencing ours, and the main civilizations that could provide useful examples for comparison:

...."*Even those who have determined to learn nothing from professor Arnold Toynbee must have acquired under his influence a certain regard for the importance and the potentialities of the comparative study of civilizations. Such a field of scholarship may have its dangers when it is too*

encyclopaedyc in its range; but it may prove a more practicable enterprise to try to compare, in the various cultures of the world, just the differing types of historical mentality, the varying attitudes to the past, and the effect of these things on the character of a culture as a whole".

(8)

> Civilizations provide for a certain continuity of studies. For example, the western civilization is for Latin American countries a necessary precedent. On the other hand, periods, for instance colonial architecture, offers us a broad horizontal panorama with many comparative aspects. We can study what happened at the same time, in different countries, under similar european influence, that even to day characterizes our architecture in many respects.
>
> Using various criteria we propose the following contents:
>
> -World architecture from 1750 onwards.

-XXth century architecture.

-Venezuelan architecture

-Architecture in Maracaibo

-World history of planning

-Greece to Middle Ages

-Renaissance and Barroque

-Industrial Revolution to the XXth century

-Modern Architecture in Latin American

-Planning in Latin America

-Pre-Columbus architecture

-Colonial architecture in Latin America

-Colonial architecture in Venezuela

-Architecture in Venezuela from 1940 onwards.

-Planning in Venezuela.

Comments: Some of these courses are electives. Students must take all compulsory courses and some of the electives. See 6.4.4. Time and place.

6.4.3.3. Analysis:

All the contents determined above, with the exception of the general

chronological ones, shall be presented as a study leading to methodological and critical analysis.

Concerning the quality of the analysis, we have already mentioned some of the limiting factors of the environment and study sources. Even so, the analysis must be as comprehensive as possible, starting with the natural and cultural environment as defined before, and ending with a critical synthesis of the facts (building, town, architect work) studied. For that purpose we have developed two basic methodologies, one for buildings and one for towns that we have been using with fair results for the last six years. It was thought to be comprehensive enough, but now it must complemented with the environmental aspects which were lacking.

The kind of basic help in methodological analysis, is important

for students to have, even if it is not thoroughly applied, because it provides a very useful tool to use as a reference frame to the practical work. We are convinced that the methodological formal itself may, and must be changed following the expirience obtained and its application must not become and end in itself. Its use has proved, beyond any doubt, that our students need that kind of methodological aid.

Sista - do they understand the fundamentals of this approach?

6.4.3.4. Compulsory and elective course contents.

As said before, some of the contents proposed correspond to a one semester elective course and others, to compulsory course.

We consider as compulsory the following contents:

-General history of architecture course

-World architecture from 1750 onwards

-XXth century architecture

-Venezuelan architectural

-Architecture in Maracaibo

-World history of planning

The reason for including the last course disted is that during the fifth year, all the emphasis in our Faculty (wrongly in my opinion) is placed on planning, and some background is needed.

As elective courses, we propose two lines, first:

-Greece to the Middle Ages

-Renaissance and Barroque

-Industrial revolution to XXth century

Literature in Spanish

-Modern architecture in Latin America

-Planning in Latin America.

We consider this line the 'european' one, taking some contents from what may be considered important as a precedent to Latin American architecture. Of the five contents, only the first three are really european and the last two latin-

american, because we consider the emphasis must be on our architecture.

We have selected in this line Greece to the Middle Ages because we believe it is important, but other examples could be chosen. This applies as well for Renaissance and Barroque.

The second line, the latin-american line is constituted by:

-Pre-columbus architecture

-Colonial architecture in Latin America

-Colonial architecture in Venezuela

-Architecture in Venezuela from 1940 onwards.

-Planning in Venezuela

Students should be free to chose from one or the other line, one or even two electives per semester.

6.4.4. Time and Place:

One important consideration which we have made before, concerning the time and place where the history courses should be

No mention to Content & General Studies in 1st Year

included within the studies, was that history of architecture course should start in the first year and be offered thouthout the remaining years. Unfortunately this is not possible for the time being, and it will probably never be, with the general studies system.

We must, therefore, place our courses where we are allowed to. During the first cycle of one semester, within the Faculty, there is no time to introduce a history course as such, but some historical content is being introduced through a few (2 or 3) lectures.

For our purpose, we consider that our real start is in fourth semester with our general chronological course, that must take all the time allowable for history, without any elective at this level.

In the fifth semester, the compulsory course should be the one on world architecture from 1750 onwards; and the electives courses offered could be: Greece Middle Ages, or Pre-Columbus architecture.

In the sixth semester the compulsory course should be: XXth century architecture; and

the electives Renaissance and Barroque, or Colonial architecture in Latin America.

In the seventh semester the compulsory course should be Venezuelan architecture, and the electives, Industrial revolution to XXth century, or Colonial architecture in Venezuela.

In the eighth semester as the compulsory course, Architecture in Maracaibo and as electives, Modern Architecture in Latin America, or Architecture in Venezuela from 1940 onwards.

In the ninth semester, as a compulsory course, World history of planning, and as electives, Planning in Latin America, or Planning in Venezuela.

During the last two semesters, the professional cycle, there is no possibility to introduce any history course, because the main task is a comprehensive planning project,and all considered theoretical subjects must be finished during the formative cycle.

Regarding the time devoted to the courses,

if they keep the existing timetable, which seems possible, the compulsory course should be two hours per week, and each one of the electives one hour per week. Students taking only one elective should be given an additional task in the compulsory course so as to have four hours per week.

On the next page we have a chart with the proposed contents and the timing we suggest as appropriate, although we insist that students should be free to chose their electives as they like.

Before we leave the timing question, we consider it necessary to insist that ideally, the general chronological course should be placed durign the first year, and all the other contents should start in third semester, allowing for historical awareness and actual knowledge about modern architecture to be received as early as possible by students.

6.4.5. Teaching methods:

Our proposal for teaching methods considers those we believe more appropriate, even

COURSE PROPOSAL

		Compulsory	Electives	
General Studies	Sem. 1			
	Sem. 2			
First Cycle	Sem. 3			
	Sem. 4	General Chronological		Course
	Sem. 5	1750	Greece-M.Age	Pre-Columbus
Formative Cycle	Sem. 6	XX C	Renaiss. Barroque	Col. Lat. Amer.
	Sem. 7	Venezuela	Ind. Rev.	Col. Venezuela
	Sem. 8	Maracaibo	Mod.Arch. Lat.Ame.	Venezuela 1940
	Sem. 9	World Plan.	Plan. Lat. Amer.	Plan. Venezuela
Prof. Cycle	Sem.10			
	Sem. 11			

though at present they are not applied because the lecturers and the material are not sufficiently prepared and, the instructional or special aids are not available. We are convincent that our Faculty coudl overcome in rather short time both problems if it was willing.

"In Africa, Asia and Latin America, there is an acute shortage of teachers, by western standards; and big classes need very different techniques of teaching"... (9)

Vaizey who has studied education in developing countries, points out very clearly, and correctly one of the main problems of our education and the difficulties in using certain methods.

"An important objective of the teacher is to increase the interest, or motivation, of the majority of students. We have already mentioned some of the factors which contribute to promote them: clear definition of goals with intermediate and inmediate objectives prompt feedback as to success, active, rather than passive, methods of learning

and variety in teaching methods. In addition, open-ended problems, dissertations or 'research' projects can arouse considerable enthusiasm". (10)

This very authoritative opinion about methods and the sort of teaching - learning qualities to be developed in higher education points out, our main problems, a large student population and the lack of preparation for lecturers in the use of new methods.

All theses considerations made, we propose the use of several methods that, combined in the right doses, may produce satisfactory results.

6.4.5.1. Lectures.

Lectures should be used in all courses proposed, but with different importance from one to another and in general diminishing emphasis from the fourth to the ninth semester.

For the general introductory course, lectures should take most of the time, excepting, probably,for a

monthly seminar. The purpose in this course should be to provide not only guidance about study sources, methods and practical work, but as well to give the necessary historical information and knowledge.

During other courses, both compulsory and elective, lectures should be used sparingly, to provide information about methods, study sources, guidance to practical work, and as an introduction opening to new subjects for discussion.

JDUring the lectures themselves, all possible teaching aids should be used, not only to maintain students interest, but to show students that there are instructional aids available, and to instruct them in the way they may be used.

6.4.5.2. Individual study:

Because of the nature of primary,

secondary and universitary education in Venezuela, our students are not used to individual study, and it is, therefore, important to stress the advantages of it by using it as much as possible.

As a complement to lectures, and using the information provided in them, individual study should be the way to get into more depth within a subject area. It provides the necessary knowledge to be used late seminars and discussions, in practical work, and in essays. It is important not only that individual study feed these three lines of work, but that the students become consciousness of the use of their knowledge as well.

The purpose of individual study then are clear: to get more knowledge about the subject, to prepare for seminar and discussions, to provide information for practical work, and to serve as a basis for essays.

We propose that within individual study, many different methods and educational media can be used. Tutorials, films, film-strips, tapes, slides, tape-slide packages, video-tapes, and programmed learnings (linear and sequencial) are among the possible ones.

6.4.5.3. Seminar and discussion:

As a follow up to lecturers, depending on the subject, seminars and discussions should be organized to probe the sutdents understanding.

Depending on the numbers (fortunately groups after third semester are not too large because of dropout), seminars and discussions should be organized every three or four weeks.

Group teaching, has been one of the characteristics of our approach to teaching history, as we have seen in Appendix 1 of Part II. This will allow us with the help of assistants to organize small groups, probably

of 15 students each, for seminars. Assistants are senior students who help lecturers research and prepare material for courses.

Subjects for discussions should come from the lectures, the practical work, individual study, essays, study trip programmes, or from special problems introduced by students or lecturers.

When considered convenient, and possible, games and simulation should be employed within seminars and discussions.

6.4.5.4. Practical work:

Practical work should provide for the application of the knowledge obtained in lectures, individual study, seminars and discussions. It also provides opportunity to develop research abilities and interest, and to put into practice all the methodological knowledge.

A further purpose of practical work should be to critically analyze the architecture facts and works studied. Even the selection of the subject studied muest be considered as a point for assessment in viewing, the students criterion and/or knowledge of the subject.

Practical work should be developed first in groups, and later individually, in order to develop and test the students ability to work in a team situation and alone.

It should be of various types including bibliographical research, methodological analysis, and field research.

Students should expose their works to fellow students for criticism, criticize others work and answer questioning about their works.

6.4.5.5. Study trips:

Even with all the inconveniences

mentioned about the lack of examples of historical architecture in Maracaibo, study trips should be organizaed to see the very few ones that do exist, and to acquaint students with the kinds of modern architecture existing in Venezuela, and if prossible in some other Latin American countries.

Trips and visits should be organized one per semester, in relation with course subjects. They should be carefully planned and defined as to purposes. Tasks to be accomplihs by each student, the performance expected, reports to be submitted and assessment criteria should also be carefully predetermined. Student participation should be encouraged through previous reading and discussions.

6.4.5.6. Essays:

Essays of different length and depth should be prepared by students, under tutorial supervision, with subjects discussed on the basis of

previously assigned reading.

The purpose should not only be to study a different subject per semester, but to test the research interest, method of work, and the communication abilities of the student as well.

Essays should start in the fifth semester, considering that in the fourth semester all efforts should be devoted to the general chronological course.

Tutors for the essays could be selected from other areas within or outside the Faculty with the approval of lecturers.

Essays, in some special cases, may be more than one semester long.

Emphasis should be given in essays to good writing style as well as to graphication, and methodological approach.

6.4.6. Assesment methods:

Assessment methods should be carefully studied in advance, so as to make them a useful teaching learning experience, instead of just a measuring examination.

Ideally, (and that shall probably always be possible in our Faculty), all assessments should be made by groups of lecturers, and all the criteria transmitted to students at the beginning of the course.

6.4.6.1. Individual study:

In individual study, through tutorials, the purpose should be to appreciate acquired knowledge to use it in further reading or research, and to take advange of all the educational aids available.

Tutors should be continually informed by students of their progress, and discuss with them the assessment in detail.

All stages of individual study should be assessed partially

during the work, and later a final assessment should be discussed.

6.4.6.2. Seminars and discussions:

In seminars and discussions, assessment criteria should be: include use of knowledge, expression of ideas, attitude toward the ideas of others, disposition to group and team work, and degree of participation.

All seminars should be assessment in discussion with students in small groups, at the end of the course.

Feedback should be generated as frequently as possible, probably once a month, or every two seminars, so as to allow students to strengthen their participation. Lecturers should inform students if their lack of success in seminars is due to attitude or to insuficient individual study.

6.4.6.3. Practical work:

The purpose of assessment of practical work is to judge one's knowledge about a subject, one's methodological analysis ability, one's presentation and communication skills, one's interpretation and one's objectivity towards a historical architectural fact.

Each practical work should be assessed separately, and a final assessment made considering the progress and the maturity of the students.

Partial assessment should be made with immediate feedback, and explained to the students.

6.4.6.4 Study trip:

The purpose of study trip assessment should be to test architectural awareness, critical attitude and analysis, observation abilities, synthesis, and

interpretation capabilities.

With that purpose in mind each, student should be asked to draft trip proposals and a final report, including graphs and pictures as well as a critical analysis of the visit as an educational experience, with suggestions for improvement.

All these drafts and reports should be discussed and then assessed.

6.4.6.5. The purpose of essay assessment is to evaluate, criterion for subject selection, written and graphic expression, method of work, ability to classify and use information, analysis and synthesis capacities, interpretation, and conceptualization.

Each essay should be assessed separated. When an essay in more than one semester long, tutors should produce a partial assessment per semester.

6.4.6.6. Through other subjects:

Considering the interest for coordination and integration with other fields which exist in the Faculty, it should be possible to relate history to other subjects or study problems (i.e. project work) and in this case the same kind of assessment should be made, with the participation of the other subject lecturers.

6.4.7. Other aspects:

Besides the aspects already considered, there are some others that we wish to mention as important and influential in the courses. Some of them are apparently external, but deeply interrelated.

6.4.7.1. Coordination:

The search for coordination, within architectural studies, between project work and theoretical disciplines, is an important one. Although we do not believe that in our case, a thesis like the

one suggested by Macleod would function, we believe that history of architecture should in some way be related to all subjects.

It is not possible to ask lecturers from other disciplines to become competent history lecturers, however they should prepare one or two introductory lectures for each course where they give an introduction with the double purpose of placing each discipline within a historical context and of giving more relevance to history by its conexion with practically any existing discipline.

which disciplines?

This would require the participation of history of architecture lecturers, and, it would be, a very valuable experience for everybody

This applies perfectly well to project work, where no matter what theme you work on, there is some historical background that can

provide useful considerations.

Even in something as new as nuclear energy, or space flight, there are previous experiences connected, in the fields of research.

6.4.7.2. Staff:

"Teacher training is one of the nerve centres of the education system. More can be done to raise standards of education and at less cost through teacher training than any other activity. But in underdeveloped countries relatively little attention as been paid to this urgent task".(11)

In fact although mentioned before, it is important to insist on this point, although bassed on my own observation most of lecturers in architectural education in Great Britain, like ourselves, are professionals doing their best to become teachers.

The point we want to make now is

that we are conscious that the course we are proposing is demanding of the lecturers. They must be ready to study teaching and assessment methods, besides their own subject, but this must be done one way or another sooner or later, whether our proposal is accepted or not.

Staff must in fact be prepared to use methods providing for individualized education and mass education at the same time, because both these aims are our reality. Large groups are coming into the Faculty, and architecture, by its nature of being a problem solving discipline, asks for individual tutorial study.

Our proposal requires more staff than what history of architecture course normally would require. We are perfectly aware of what we have said before as to how scarce well prepared people are, but we insist on this need considering the student population growth.

The increase demanded by this proposal is not of major proportion considering the increase in instructors needed to combat the student population growth.

In what concerns the kind of preparation the staff requires, there are two levels: one is the new methods, and the other is history specialization. The new methods courses for lecturers of all disciplines should be organized within the Faculty. For history specialization, the right thing to do is undertake postgraduate studies abroad.

This is true for all countries

6.4.7.3. Research and study sources:

The faculty must find the resources both economics and human, to undetake a comprehensive programme of research to feed teaching and the kind of information we are asking for on which to base individual study.

Again we are optimistic in this respect and we believe that this is possible. What is lacking is the setting up of a good programme, but this could be done in a short time making possible our proposal, and thus influencing not only history of architecture courses within the Faculty, but the conservation and respect for the heritage that has been so enthusiastically destroying by some of our former good students.

Not all the responsibility lies with architects.

6.5. References:

1. Rowse A. L., The use of History, English University Press Ltd., London 1965, pp. 183-184

2. Allsopp B. The art and nature of architecture Pitman and Sons, London, 1952, pp. 40

3. Vaizey J. Education in the modern world, World University Library, London 1967, pp. 104.

4. ibid, pp. 106

5. Studies by the author: University of Zulia, Latin American University; Development plan for the Faculty of Medicine. 10 years as senior

architect of the planning office of the Univeristy of Zulia.

6. /RIchmond W.K., The concept of educational techonolgy, Cox and Wyman, London 1970, pp. 231.

7. Daniels R.V. Studying history. How and why, Prentice Hall, N.J., 1966, pp. 39

8. Butterfield H. History and man's attitude to the past: their role in the story of civilization, School of oriental and african studies, London 1961.

9. Vaizey J., op. cit. pp. 97

10. Beard R.M. Bligh A.D., Research into teaching methods in higher education. S.R.H.E.,LOndon 1971.

11. Vaizey J., op. cit. pp. 97