NATIONAL TRENDS IN THE NEW ARCHITECTURE

by

Cestmir Slavoj John

A thesis submitted to the Postgraduate School, Ahrnadu Bello University, in partial fulfilment of the requirement for the degree of Doctor of Philosophy.

Department of Architecture
Faculty of Environmental Design
Ahmadu Bello University, Zaria

June, 1983

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"IT IS MORE IMPORTANT TO UNDERSTAND THE EVENTS THAT ARE EMBODIED IN ARCHITECTURE THAN TO BECOME ACQUAINTED WITH A COUNTLESS NUMBER OF MONUMENTS WHICH NEVER CAN BE COMPLETE."

Quotation from the Preface to the book
"ARCHITECTURE - TESTIMONY OF THE TIMES,"
B. Syrový and Co-authors.

Translated from the book
B. Syrový and Co-authors, Architektura - Svědectví dob, Architecture - Testimony of the Times, SNTL - Publishing Corporation for Technical Literature, Prague, (1977).

ACKNOWLEDGEMENTS

I wish to express my profound gratitude to the Authorities of the Ahmadu Bello University in Zaria that enabled me to work on my Thesis in the field that I found in my professional life, to be the problem of contemporary Architecture.

In particular I am indebted to my supervisor Professor E.A. Adeyemi, Head of the Department of Architecture of the Ahmadu Bello University for his valuable advice, help and encouragement in all the stages of my work.

My thanks belong also to other supervisor Professor S. Juchnowicz, Head of the Department of Urban and Regional Planning and to Dr. U.G. Benna, Senior Lecturer in the Department of Urban and Regional Planning of the Ahmadu Bello University in Zaria who were prepared any time to help me with their advice and comments.

My special thanks are due to Arc. A.D.C. Hyland, Associate Professor in the Department of Architecture of the University of Science and Technology in Kumasi in Ghana for photographs of buildings from Ghana and Ivory Coast, relevant to my thesis.

I am very grateful to Mr. M.D.S. O'Brien, Senior Lecturer in the Department of Industrial Design of the Ahmadu Bello University for his help and language correction of the Thesis.

ABSTRACT

SUMMARY OF FINDINGS ORIGINAL CONTRIBUTION OF THE THESIS ON THE "NATIONAL TRENDS IN THE NEW ARCHITECTURE"

The subject of "National Trends in the New Architecture" has not been tackled before as a world-wide phenomenon and has not been published in the literature, to the knowledge of the author, either at the time of the beginning of this Thesis or till the time of its completion. The whole Thesis therefore is an original work.

In the frame of the Thesis still some parts of it can be emphasized as being the,original findings and original contribution in their specific field or of a specific kind. Among the most relevant, in the author's opinion, are the following:

1) The "New Architecture" or "Modern Architecture" is considered as being already a historically distinct architectural style and is treated consistently as any other historical style.

2) A comparison of the "New Architecture" with historical styles leads to the conclusion that the "New Architecture" has had a similar evolution to other historical styles and explains why the "New Architecture behaves as any other historical style".

3) In the course of this comparison stages in the evolution of the "New Architecture" were found and fixed, the peak period being in the first half of the fifties of the twentieth century.

4) The present stage of the "New Architecture ", i.e. at the beginning of the eighties emerges as being the advanced stage of the late period (or of the "Baroque period")of the "New Architecture" with the signs already of the search for a new style.

5) Concerning the "National Variations" in the architectural styles, it has been found that there are two, qualitatively different kinds, one of them related to the evolution of the styles, the second not related. The first kind is the spontaneous national variations appearing in all the historical architectural styles as a part of their natural evolution. The second kind is the conscious or deliberately created national variations which set out to be the expression of the ' national character. This kind can be found only in some styles.

6) It was realised that the spontaneous national variations begin to be distinct in the later part of the early stage and develop further to a still more distinct form, sometimes having a very specific character. Consciously created national variations can appear in any stage.

7) Causes were found for the rise of these conscious national variations:

- Nationalist movements in the countries, in particular in the periods of success or glory (positive periods) or in the periods of the oppression or danger (negative periods) and still some time thereafter.

- Requirements of the official decisive client, leading to "Official styles" (term used by the author).
- Other reasons aiming to express the national identity e.g. buildings and facilities for the tourist trade, for cultural purposes etc.

In the case of conscious national variations there always has to be some need for the expression of the national character.

8) In the case of "Official styles" required by the decisive client the basic reason was found for either the continuation or disruption of the style, when the official demand for it ceased to exist. The findings were applied to national variations which are "Official styles" and the explanation for their abrupt end was found.

9) Ways and architectural means for the expression of the national character in the architecture were studied and classified. Attention was paid to the national variations and means of expression of national identity in the architecture of the countries South of Sahara in particular in Nigeria, using examples from some of these countries.

10) The reason was found why in some countries national trends in the architecture appear strongly, in some of them less strongly, while in some countries they do not appear at all.

11) The reason was found why national trends in architecture are not apparent in some countries having similar conditions to others where these trends are strong (as e.g. Brazil and Venezuela in comparison with Mexico) and the "causa sine qua" was defined.

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1.00 CHAPTER I - INTRODUCTION

1.10 PROBLEM DEFINITION

The architecture of the last decades usually described as "Modern Architecture" or the "New Architecture" has a cosmopolitan character. This cosmopolitan character is so strong that even the different requirements of buildings from the climatic view point are often not sufficient to differentiate basically the appearance of buildings constructed in different climatic zones.

In some countries however there have been buildings constructed which belong clearly to "Modern Architecture" or the "New Architecture", whatever name is used, but which bear at the same time specific signs of the national character of the architecture of the country and which give to these buildings an expression of the national identity. In some countries this trend is strong, in some countries weak, and in some it cannot even be recognised till now.

In every case this trend, to give a specific national appearance to the buildings, exists in several countries. It has therefore to be taken as a phenomenon in the evolution of the "New Architecture".

1.20 AIMS AND OBJECTIVES

The aim of this study is to tackle the phenomenon of national variations in the "New Architecture" as a world-wide phenomenon.

Within this framework an attempt is made to find out the causes and conditions which favour the evolution of national stylistic variations generally, and why they appear only in some countries in particular.

An investigation is made further into the means used in the expression of national character in architecture with a view to using the results of the study in the education of students of architecture in general but more especially in the teaching activity of the author at the Department of Architecture of the Ahmadu Bello University in Zaria, Nigeria.

The author also follows a personal aim: In his professional practice the architects of his generation had a challenge to create the "New Architecture" but having the national character of his country Czechoslovakia after the 2nd World War. This attempt was not successful. The architects in some countries such as Japan and Mexico succeeded in this. To find an answer to

the question about the reasons for the failure on one side and for the success on the other is one of the author's aims even if it is of secondary importance.

1.30 METHODOLOGY

National trends having the form of national variations appear in historical architectural styles.

The basic method used in this study is the comparison of the evolution of selected historical styles with the evolution of the "New Architecture". It is hoped that this will reveal possible analogies which could lead to the explanation of National trends as a phenomenon in the "New Architecture".

These comparisons will take account of

1) The stages of evolution.
2) Stylistic variations, in particular national ones.
3) The relation of variations to the stylistic evolution.
4) The underlying causes of the evolution of national stylistic variations.
5) Means used in the expression of national character.

The aim is to isolate the causes which give rise to "National trends in the Architecture" and

in the "New Architecture" in particular and to relate national variations to the evolution of styles.

This study is based on three hypotheses:

A - "New" or "Modern" Architecture has already become an architectural style.

B - National trends in the form of deviations from the main stream of evolution may be related to the evolution of the styles.

C - Comparison and possible analogy of the "New Architecture" and of the Historical architectural styles may be helpful in the explanation of National trends in the "New Architecture".

The methodology is explained graphically on the Figure I

FIGURE 1

METHODOLOGY USED IN THE STUDY



HYPOTHESES:

"A": "NEW" OR "MODERN ARCHITECTURE" HAS BECOME ALREADY AN ARCHITECTURAL STYLE

"B": NATIONAL TRENDS IN THE FORM OF VARIATIONS FROM THE GENERAL STREAM OF EVOLUTION MAY BE RELATED TO THE EVOLUTION OF THE STYLES

"C": COMPARISON AND POSSIBLE ANALOGY OF THE "NEW" ARCHITECTURE AND OF THE HISTORICAL ARCHITECTURAL STYLES MAY BE HELPFUL IN THE EXPLANATION OF NATIONAL TRENDS IN THE "NEW ARCHITECTURE"

1.40 PLAN OF STUDY

As mentioned in Chapter 1.30 this study uses the hypothesis that the "New Architecture" has become an architectural style already. The intention is to tackle the "New Architecture" as any other architectural style, or, more exactly expressed, consistently as any historical architectural style and to use the method of comparison with the historical styles whenever possible or useful for the purpose of this study.

Special attention will be paid to national trends which evolved in the architectural styles of the past. They have to be observed as phenomena that have appeared (or respectively that may appear) in the evolution of the styles.

The evolution of historical architectural styles as well as the evolution of the "New Architecture" will therefore be studied with the aim of finding out the similarities and the possible analogies in appearances that occured in the historical styles and in the "New Architecture" as well.

This study is meant neither to be a history of architecture nor a history of national variations in architectural styles and there is no intention to even reveal the impression of such an aim.

National variations are supposed to be tackled as the phenomenon. The architectural styles of the past will therefore be observed only in an attempt to relate relevant events of such past to the evolution of the styles generally, with special attention given to the evolution of variations in them in their lifetime, possibly with the reasons that lead to their evolution, in particular to the evolution of the variations having national character.

In this broadly based study the examples will be selected and treated as representatives in the way "pars pro toto".

The aim to find analogies in the evolution of historical architectural styles will be considered as follows:

1) Evolution of the historical architectural styles generally with the symptoms characterizing different stages of evolution.
2) Evolution of variations of different kinds, in particular of variations of a national character.
3) The time of occurance of different variations in the course of the evolution of the architectural styles, related to different stages of evolution, from their early stage to the end of the style.

4) The factors that lead to the evolution of variations (if possible to identify them).
5) The architectural means used that characterize developed national stylistic variations in the historical architecture of some selected countries.

The evolution of the "New Architecture" will be studied in a similar way, despite the fact that this architectural style (my hypothesis) is still in existence:

1) Evolution of the "New Architecture" generally, fixing the stages of its evolution as an architectural style.
2) Evolution of variations, in particular of variations having a specific national character.
3) Dating these variations in relation to the stages of evolution of the "New Architecture" as an architectural style.
4) The reasons and factors (real, supposed or probable) that favour rise of deviations from the main stream of development in particular of those of a specific national character, and if possible to recognise them.
5) The architectural means used which characterize the national variations in the "New Architecture" of some selected countries.

6) Comparison with similar appearances in historical styles to find any possible analogy. This relates to all above mentioned paragraphs.

Notes:

Ad 1) The appearances and changes which occured in the "New Architecture" will be used to establish the stages of its evolution and the stage reached at the beginning of nineteen-eighties. The work of some leading architects of the "New Architecture", Le Corbusier and Mies van der Rohe in particular, will be taken into consideration.

Ad 5) The analytical part will be accompanied by a study of examples of buildings. Representative examples will be taken from countries where important or interesting architectural developments have taken place. Specific attention will be paid to examples from African countries south of Sahara, particularly from Nigeria.

Intended general procedure to be kept in the study:

The analytical parts of this study will be restricted and related to the main topic, i.e. to the "National Trends in the New Architecture". The essential content of each part will be contained in the "Summary" that will follow the part concerned. Where appropriate for support or explanation, quotations from the literature will be used in the text or as notes.

The first part of the work will have the general character of a study of "National Trends in the New Architecture" as it has evolved up to date.

This first "General Part ", which will form the larger part of the study, will be followed by an "Applied Part". Possible ways to express national identity in the "New Architecture" and their architectural means will be explored in the "Applied Part", based on the examples discussed in the "General Part" and on the findings resulting from the analysis. This will concern the expression of the national identity in the "New Architecture" as the architectural style generally, with respect to the new Nigerian Architecture.

The aim will be to give a practical character to the study, so that the results can be used in the education of architecture students in Nigerian Universities and in the professional practice.

1.50 LITERATURE REVIEW, DEFINITION OF TERMS

1.51 LITERATURE REVIEW

The contribution of this Thesis on "National Trends in the New Architecture" is original, for as far as the author knows, there is no literature available which tackles the subject and this hightens it's value.

Several books exist containing the history and the evolution of the "New or Modern Architecture" in general terms[2]. Some of them are specialised, dealing solely with the work of outstanding representatives of the "New Architecture[3]. The others are books on the History of Architecture in which the history of the "New Architecture" is incorporated in a wider context[4]. Specialised books about the "New Architecture" in single countries are available and were helpful to the author. About some countries these books are more numerous (e.g. about the Japanese architecture) than about others (e.g. about the New Architecture in Mexico)[5].

Books on the History of architecture therefore were the main source of information for this study, be it the general history of architecture or a specialised history limited to a period or to a country. The books used are listed in the Refe-

rences and the parts related to the study are mentioned in the text or indicated in the notes.

In discussing the topic of the thesis "National Trends in the New Architecture" the evolution of national variations from a unified architectural style is accepted as a normal phenomenon[6]. Some authors referred to them as "national styles" and "regional styles".

Their causes are mentioned in Sir Banister Fletcher's book "A History of Architecture" (University of London, The Athlone Press, Eighteenth edition 1975) which is probably the world's best known book in its field. The recurring influences are: Geographical; Geological; Climatic; Historical, Social and Religious. There can be no doubt about the role they have played in the evolution of national variations in architectural styles, or, using B. Fletcher's term, of "National Styles" but they do not account for everything. The climatic conditions and the geological conditions related to the use of specific building materials are the most basic influences. In the history of architecture it can be observed that styles were taken over from the country of their origin firstly in an unchanged form. The first adjustment to the conditions of the new country was in the use of the usual local material. The adjustment to different climatic conditions came

later. This adjustment did not take place till in the second phase. However the influence of Geology alone is not sufficient to explain the transition from one building material to the other. It does not explain for example the use of more permanent materials such as replacement of timber by stone or sun dried by burnt bricks or materials developed more recently. The evolution of technology which plays a substantial role is not included. The Historical, Social and Religious influences, despite their crucial importance, do not comprise several other factors, some of which can be expressed as the cultural influences, some of them cannot be described easily e.g. the way of thinking, the changing fashion etc., i.e. the complexity of factors that are included in the term "Spirit of the period", Spirit of the time", "Changing spirit of the age". These expressions can be found in works by several authors.

The influence of the hardly definable specific atmosphere of different places and towns, described only by a few authors as "Genius loci" or "Genius of the place", plays its role in the formation and the evolution of the architecture to variations[7].

Another influence is the eternal dissatisfaction of the people with existing achievements which leads to the phenomenon of the permanent evolution in the

architecture. Related to this phenomenon is fashion. It is difficult to define this factor which is related to human nature and to state the role it plays in the evolution of the architecture.

During some periods the client also has been an important influence: if he has been sufficiently powerful his opinions and wishes have been decisive. As examples from different periods in the history of architecture some names can be mentioned: The pharaohs; Abbot Suger; Centralist governments. The decisive role of the client can even lead to the appearance of an architecture which is different from the architecture of the period. The author uses the term "Official architecture" or "Official style" for such appearances.

The property of architecture to reflect the period as the "Mirror of the period" and to be its most important "unwritten record" is recognised by several authors[8].

Different influencing factors have been mentioned that give rise to national variations within the evolution of architectural styles. The question arises about the value of the contribution and the importance of each of the factors. Some factors such as climate or availability of building materials

can be described as objective and generally stable, but there are also changing factors. It can be observed that in different periods the emphasis has to be laid first on one factor than another. The influence of the religion can be taken as an example. Its importance has changed not only in different periods but even in their content, and it changed from one country to the other (e.g. in the Baroque period). A similar phenomenon can be observed at the present time, when in different countries the main emphasis may be the politics, the religion, the nationalism, the economy, social security and welfare, human rights, law and order.

It is therefore not possible to enumerate the different influences in the way usual to exact sciences e.g. in the alphabetic or numerical order. Architecture is a synthesis of art and science. In architectural work it is necessary to observe several components: function, material, structure and technology, aesthetics, economy, etc. However it is not possible to enumerate them exactly giving a value to each of them.

This consideration leads to the conclusion that the assessment of architecture in all its fields needs a more comprehensive approach, which would respect the components, influences and factors but which would not

take them into consideration separately, one by one, but place them in a wider context and in mutual relationship. The author thinks it is quite significant to follow such an approach in this study.

In the literature on the history and evolution of the architecture, authors differ in their opinions on periods and stages in the evolution and in the time of their occurence. These differences are more frequent in the evaluation of the architecture of older periods. However they are not significant for the topic of this study. More significant are the differences in opinion on the evolution of the Renaissance, in particular whether the Baroque and the Classicism are to be observed as separate architectural styles or as further stages of the Renaissance, the latter being the opinion of Sir Banister Fletcher. The author ascribes to the prevailing view of separate styles. For the topic of this study such differences of opinions amongst historians of architecture are not of a substantial importance.

Some errors can be found in the literature. Among them is the erroneous use of terms "Post Modern" and "Late Modern Architecture"[9]. They are used in a way which does not correspond to the stages of the evolution of "Modern" or "New Architecture". This matter is discussed in the later part

of this study[10].

1.52 DEFINITION OF TERMS

In this study of "National Trends in the New Architecture" several terms are used as working definitions. Some of them were mentioned in the "Literature Review". The clarification of these terms is relevant to avoid their misinterpretation.

1.53 ARCHITECTURAL STYLE. NATIONAL VARIATIONS

The term "Architectural Style" is related to specific periods in history, i.e. to the architecture of certain limited time-periods with characteristics that are specific and typical for the architecture of the period[11,12,13,14].

In Chapter 1.30 - Methodology, the hypothesis was expressed that the "New Architecture" has become an architectural style.

In specific conditions of the countries architectural styles can develop to national variations.

National variations in historical architectural styles that have a strongly defined, specific character related to a country or a nation (e.g. the English Gothic) are, in the literature, sometimes called "National Styles".

In this study the term "Style" is kept to the prevailing architecture of the periods. Where appearances in architectural styles have national character, the term "National Variations" is used.

1.54 "NEW ARCHITECTURE" - "MODERN ARCHITECTURE", "NEW ARCHITECTURE" AS AN ARCHITECTURAL STYLE

This study accepts as the hypothesis that the "New Architecture" has in fact become an architectural style.

The definite name to this most recent, still existing and unfinished architectural style will be given by the future generation or generations. At this time terms are in use the "New Architecture"[15] and the "Modern Architecture", sometimes even abbreviated "Modern"[16]. The term "International Architecture" or the "International Style" is also used occasionally[17,18,19,20].

Some of the buildings constructed in the early years of the "Modern Architecture" do not appear to be modern, in the real meaning of this word which is "of present or recent times"[21] with some aspect of the fashion involved in the term "modern"[22,23,24].

To avoid the contradiction of the "not-modern"

buildings being classified as "Modern Architecture", it seems to be preferable to use the term "New Architecture" for the contemporary architectural style.

The author is aware even the term "New Architecture" does not express its characteristics. In his opinion probably the best term would be the "Twentieth Century Style" (which could be expected to lead to the abbreviation "Twentieth") but at this time, being still in the twentieth century, it is too early to try to use this term.

1.55 ARCHITECTURE AS ONE OF THE FINE ARTS. "MIRROR OF THE PERIOD". "SPIRIT OF CHANGING AGES".

Architecture has always been considered to be one of the fine arts, together with painting, sculpture, music and poetry. In some periods the question was raised whether architecture is an art or a science. These doubts were expressed about the "New Architecture", whether the buildings from this period can be included in the fine arts, because of their technical and functional character.

Architecture is the part of the culture of the nation. The culture generally and the arts in particular always reflect their period. Architecture is the "Mirror of the period" and the

"Witness of the epoch" reflecting the period in its own specific way[25].

Every epoch, even the contemporary, has its indefinable "spirit" - the term which can hardly be explained and which comprises a complex of components, the reached stage of civilisation, of science, of technology, the way of thought, political conditions, religious aspects, social conditions, way of life, traditions, etc.

The terms used in this respect are e.g. "Spirit of the age", "Spirit of changing ages", "Spirit of the times". In the course of evolution and the changes that occur in the aspects which together form the "Spirit of the time", the spirit also changes, sometimes within a nation, sometimes on a wider scale throughout a continent or the world.

Because of the way the arts and the architecture reflect the "Spirit of the period", some further clarification of the above themes would be desirable, using the opinions of specialists in the field of architecture.

Returning first to the question of whether the architecture is an art or science, the author of this study uses his right - and duty - to express his opinion: Architecture is a synthesis of both, of art as well as of science, thus being one of the fine

arts of a specific character. From two basic views on fine art, whether the art should be "L'art pour l'art" or "L'art pour la vie", architecture, because of its functional component, is always the "Art for the life" and never can be the "pure art", "art for art's sake"[26].

The question "art or science" has been discussed at various times in history:

M. Levey in his "History of Western Art" talking about the Renaissance said that The mediaeval formula "Ars sine sciencia nihil est" (used during the discussions about the building of the Gothic cathedral at Milan towards the end of the fourteenth century), now became applicable in a quite different sense[27].

The quotation of Jean Vignot from Paris "Ars sine sciencia nihil est" (1398) is also mentioned by Louis Hautecoeur in relation to the creation of the Academies in France in the seventeenth century[28].

In his "Architecture, an art for all men" T. Hamlin says: "For architecture is the science as well as an art, and the architect must not only build beautifully but must also see that his buildings are strong and durable and efficient, that they are proof against the weather, and that they fulfill all practical purposes for which they were built"[29].

The contemporary American architecture critic A.L. Huxtable described architecture as "the art and science of building the entire man-made environment in terms of the way it works as much as the way it looks"[30].

A. Whittick's opinion is expressed in "European Architecture in the Twentieth Century": "According, then, to its original definition, architecture is the work of the architect or the masterbuilder. In modern aesthetic philosophy, however, architecture has been given a more exclusive meaning. It is here classified with painting, sculpture, music and poetry as one of the fine arts and is regarded as building which has some degree of beauty, or, in other words, building that has aesthetic interest"[31].

The property of architecture to contain and to reveal the "spirit of the period", to be its "mirror", has been expressed by different authors in ways, which are basically similar:

John Gloag: "The Architectural Interpretation of History": "Buildings reveal so much, directly and by implication, about the character and quality of civilisations, past and present.

Architecture cannot lie; what it records is undistorted by religious, social or political preju-

dices. The history of a country comes alive through its buildings, whether they are ancient, in ruins or aggressively up-to-date. They have much to say, and what they say may be understood without acquiring a mass of detailed technical knowledge"[32].

"Architecture is the most permanent and illuminating of unwritten records"[33].

T. Hamlin: "Architecture, an art for all men": "Architecture is a key to history when this side of it is rightly appreciated and understood"[34].

J. Sawage wrote in his "Observations on Style" in 1836 that "just as literary style reflects the character of the writers who create it, so the architectural style of a particular epoch should reflect the character of that epoch"[35].

And, last in this respect, the idea of Le Corbusier: "Town planning expresses the life of an era. Architecture reveals its spirit"[36].

Pier Luigi Nervi expressed his idea that the architecture reflects also the technological level of the nation and period: "Nevertheless, what has struck me most, on studying the architecture of the past and present, is the fact that the works which are generally regarded by critics and the general

public as examples of pure beauty are also the fruit of exemplary building techniques, once one has taken into account the quality of materials and the technical knowledge available. And it is natural to suspect that such a coincidence is not entirely casual"[37].

The property of the architecture to be the "Mirror of the period" reflecting the "Spirit of the Age" is of vital relevance to the hypotheses of this study concerning the reasons for the occurance of "National variations" in historical architectural styles and in the "New Architecture".

1.56 "SPIRIT OF THE PLACE" - "GENIUS LOCI"

Countries, towns and even places have a specific character. This means not only the visual appearance. It is this, that makes e.g. Paris different from London and both from New York, Zurich, Amsterdam etc. Each of these towns has its specific, unique atmosphere, a spirit which hardly can be defined - the "Genius loci" - "Spirit of the place"[38].

Everybody who lives in the place is influenced by it, particularly the artists with their sensitive creative mind.

In this respect it can be observed that artists, even if foreigners, coming into a place, work after

some time in a quite different way (sometimes entirely different way) from the way they worked at the time of their arrival. They were influenced, it can be said overwhelmed by the "Spirit of the place" and began to create in conformity with it. This affects architects as well[39]. There are examples of architects of foreign origin who, after a time, became the authors of buildings that have been designed in conformity with the "Genius loci" so that they became the part of the national cultural heritage of their host country.

The example the Italian architect Sebastiano Serlio can be taken: "And in his more elaborate designs for French buildings it is the true French character that shines through the classic pilasters and entabulatures. Serlio was too true an architect to attempt to make French buildings look like Italian Renaissance palaces; he designed freely in accordance with French needs, French traditions, and the French climate"[40].

This sensitivity to "Spirit of the place" is consistent with the generally recognized influence of the environment on the man, as expressed by Sir Winston Churchill: "We shape our buildings and they shape us"[41].

1.57 PHENOMENON OF PERMANENT EVOLUTION

It can be observed in all the human activities,

that the phenomenon exists that can be described as the phenomenon of permanent evolution. No stage reached in evolution can be declared to be final and permanent. Despite the perfection achieved, no matter whether genuine or not, in no case it is the permanent final stage, but it is subject to further evolution and to further changes. Sometimes the next stage, that follows, can be in some respect less perfect than the previous one, but the evolution does not stop at any achievement.

Everything, of every kind, even the most interesting or exciting at the beginning becomes, in the course of the time, ordinary or common and people look for something else.

It can be taken as the matter of fact, that it is in human nature always to aim for something new. This phenomenon undoubtedly plays a role in the evolution of the architecture as well.

In those human activities, which are related with aesthetical feelings, this phenomenon can be regarded as being a form of fashion, as in the case of clothing, in handicrafts - particularly in jewellery, but also in some other fields e.g. in some respect in the appearance of cars, in the form of furniture, household appliances etc.

This phenomenon of permanent evolution appears

in architecture as well: No stage is permanent. Even when the peak of the evolution of an architectural style has been reached and the principles of the style brought to the perfection, it does not last and is followed by the next stage of the evolution[42].

Whether and how far some kind of the fashion also plays a role in the evolution of the architecture, can hardly be stated in a definite way and can be the matter of subjective opinion[43].

Another factor, that has to be included in the phenomenon of permanent evolution in architecture, is the quite natural opposition of the younger generation to the older one. As the example of this the idea of Sir John Summerson, expressed after the 2nd World war, can be quoted, (that at the end of the fifties) "the rebellious young men of the pre-war years would in due course be veterans of fifty with as much work as they could handle and matured ways of handling it; and that in the course of nature a new generation of rebels would be asking rough questions on the doorstep"[44].

All these factors contribute to the steady evolutionary changes in the architecture that never cease.

1.58 OFFICIAL ARCHITECTURE, OFFICIAL STYLE, ROLE OF THE CLIENT

The terms "Official Architecture" and "Official

Style" are used by the author to denote architecture built at the request or the order of the official client, having the decisive power.

The "Official Architecture" or the "Official Style" can be limited to those countries which are under the influence of decisive official clients.

In the architecture, it is not only the architect who determines the appearance of the buildings, but to a smaller or bigger extent, it is the client, with his wishes, his opinions and his taste, as the "consumer" of the architectural work. In some cases and in some periods the role of the client is the decisive one.

In the course of history we can observe different examples of clients. In ancient monarchies it was the monarch who was practically only decisive "client". In the hierarchy even the highest members, being under him, followed his example. Similarly in more recent monarchies, the monarch - be he the emperor, king, tsar or any other title used for him - was always either entirely decisive or, at least as a member of the nobility, followed later by other people. This phenomenon was however related to the kind of society in different countries. A comparison of African and Western societies in this respect is contained in "African Sculpture, an anthology", William Fagg and Margaret Plass (1973): "Apart from

such rare cases (referring to the Benin court), African society is not stratified in the manner characteristic of Western societies, in which the art of aristocratic or the wealthy level filters down after a period and is reinterpreted and implified by the 'folk' "[45].

The importance of the personality of the client can be seen in the role of Abbot of St. Denis Sugger at the beginning of the Gothic style, even though his role is still not entirely clarified.

The evolution of mankind was accompanied also by the changes in the decisive client. The client changed from the single person to be a body,[46] particularly in the field of large projects, although the occasional individual client still exists. But in general it can be said that nowadays it is the Public that has become the "consumer" of the architecture and influence its evolution.

In those of actual monarchies, where the monarch has the decisive power, the national trends in the "New Architecture" have to be regarded having this fact in mind. In every case the role of the client was always of a great importance, as the architect has to follow his wishes[47].

A specific role in the history of architecture has been played by strongly centralised governments.

The decisive person or body had the power to determine the particular architectural appearance of building in the form of a directly declared "Official style", or by expressed wishes or order the commissioned buildings to be built in the desired way. The architecture of Ancient Egypt (with the particular deviation in the Akenathon's period) is a prime example. Further examples: French National Convention (1789) declared the Classicism as the architectural style of the French Revolution. "Empire" was the style of the Napoleonic era.

In the period of the "New Architecture" official styles have appeared as well, as for example at the time of the dictatorships in Germany and in Italy between the thirties and the end of the 2nd World War.

Socialist realism has to be regarded as the official style in the U.S.S.R. from the thirties and in the Socialist countries of Eastern Europe from the end of forties till mid fifties.

Official architectural styles have ceased as soon as the official demand for them ceased though not in those cases when they were in conformity with the general evolution of feelings and taste i.e. with the "spirit of the time" of the country concerned.

The consideration about the role of the client, which can be decisive, results in the possibility to meet eventually the "Official National Trend" in the

countries having a strongly centralised government. For keeping the objectivity it seems therefore to be preferable to concentrate the attention in the further part of this study to the "National Trends in the New Architecture" in the countries that do not have the government of a strongly centralised kind, to avoid the eventuality of meeting the "Official Style".

1.60 NOTES TO CHAPTER I

1 The note of one of the external examiners at the Master of Science in Architecture examination at the School of Architecture at the Ahmadu Bello University in Zaria in Nigeria can be taken as having general validity: "The work of your students is good, but the buildings they designed can stand anywhere in the world".

2 Sharp, D. (1972),
Smith, G.E. Kidder, (1962)
Scharoun, H. et al (1957)

3 Le Corbusier et al (1910-65, Vol.8)
Jencks, Ch. (1973)
Drexler, A. (1960)
Altherr, A. (1968)

4 Fletcher, B. Sir (1975)
Pevsner, N. (1961)
Syrový, B. et al (1977)
Hoar, F. (1967)

5 Dannatt, T. (1959)
Blijstra, R. (1960)
Bylinkin, N.P. et al (1957)
Altherr, A. (1968)
Stierlin, H., Preface Kaspé, V. (1968)

6 So e.g. N. Pevsner expresses his opinion that all "healthy styles" in the history began internationally as unified international styles and inevitably became "national" in the course of their evolution. Pevsner, N. (1961), p. 687. See Chapter 2.46 of this study.

A similar idea that "architectural styles grew up inevitably national" is contained in Hamlin, T. (1947), p. 212

7 The author of this study met this term to have been used by two authors: Prof. Štech, V.V. (Lectures) and Gombrich, E.H. (1970), p. 237. See Chapter 1.55 and 1.56 of this study.

8 E.g. The Quotation from Syrový, B. et al (1977), p.7, used as the Motto of this study, p. ii

"Architecture is the most permanent and illuminating of unwritten records". - Gloag, J. (1975), p. 2

"Architecture is a key to history when this side of it is rightly appreciated and understood". - Hamlin, T. (1947), p. 200

"... the architectural style of a particular epoch should reflect the character of that epoch". - Quotation from Sawage, J.: Observation on Style (1836) mentioned by Germann, G. (1972), p. 68

"Town planning expresses the life of an era. Architecture reveals its spirit". - Idea of Le Corbusier quoted in Jencks, Ch. (1973), p. 133

9 Ch. Jencks uses the terms "Post Modern" and "Late Modern" as names of the streams in the "Modern Architecture" in the late seventies and beginning of eighties. - Jencks, Ch. (1980), pp. 6, 8. Among the results of this study is, that the actual stage of the "New or Modern Architecture" at the beginning of eighties is the late stage of it as of the architectural style, i.e. the "Late Modern" is the stage of its evolution. The term "Post Modern" should be used till for a period after the end of the "Modern Architecture" as the style. This time is still to come.

10 See Chapter 3.10 of this study

11 Style - "Manner of doing anything, esp. when it is characteristic of an artist or of a period of art". - Hornby, A.S. (1974), p. 876

12 Le Corbusier in "Towards a New Architecture", 1927: "Style is a unity of principle animating all the work of an epoch, the result of a state of mind which has its own special character. Our own epoch is determining, day by day, its own style". - Le Corbusier (1976), p. 9

13 The word 'style' in the actual sense "became fully established in the mid-eighteenth century". Till this time the word 'order' was used not only for the various types of Vitruvian architecture - Doric, Ionic and Corinthian, but also for the mediaeval architecture, but e.g. "the term 'gothic order' was felt to be inappropriate". - Op cit Germann, G. (1972), p. 181

14 "We call such a law, which all creations of people seem to obey, a 'style'. It is very difficult to explain in words what makes a style, but it is less difficult to see". - Gombrich, E.H. (1970), p. 41

15 Le Corbusier et al, Vol. 1910-1929, September, 1929, in French: "L'architecture moderne est à ses débuts, elle est née". In the English translation: "The New Architecture is only at its outsets, for as yet it has been barely more than born". Op cit Le Corbusier (8 Vol.)

16 Walter Gropius uses in 1935 in his book "The New Architecture and the Bauhaus" the term "New Architecture" for the description of the architecture of our period.

17 Sir B. Fletcher speaks in his book "A History of Architecture" about the "International Architecture since 1914". - Fletcher, B. Sir (1975), pp. 1245-1309

18 B. Syrový is using the term "International Style" to describe the architecture from the thirties. - Syrový, B. et al (1977)

19 "... the basic principles which lie behind what is generally termed 'modern architecture' have established their validity". - Hamlin, T. (1947), p. viii

"... One entire school of modern architecture has founded upon it a new style, the so-called 'International Style'..." (speaking about the functional expression). - Ibid p. 96

20 The term "International style" is mentioned also by Jencks, Ch. (1973), pp. 65, 137

21 Hornby, A.S. (1976), p. 553

22 Webster (1978), p. 1155:
"Modern: of the present time
1) of or characteristic of the present or recent times; not ancient, ... etc.
2) up-to-date; not old fashioned ... etc."

23 The term "modern architecture" was used to describe the contemporary buildings in the past periods as well, e.g. J. Savage (1779-1852) speaks in relation with the debate on the design of the new Houses of Parliament in London about "the degraded state of modern architecture".- Op cit Germann, G. (1972), p. 9

Even earlier the architect E. Martellange (1569-1641) referred to his project of the reconstruction of the Cathedral in Orleans as an "ouvrage à la moderne". - Ibid p. 17

Ch. Perrault (1613-88) was "one of the leading protagonists in the 'Querelle des Anciens et des Modernes', an academic dispute as to the merits of contemporary and Antique architecture, in which the 'Modernes' tried to establish specific spheres in which their own period - the period of the Sun King - was superior to the Antiquity". - Ibid. p. 21

24 Ch. Jencks expresses in 1980 his view concerning the use of the term 'Modern Architecture' : "There have been major shifts in architecture since, roughly, 1960 that have to be distinguished from the coherent body of practice that was known variously as the International Style and Modern Architecture. One cannot use the word 'Modern' for what is happening today if that word is to have any meaning - if it is still to apply to what architects faught for in the twenties. There are not the same beliefs now nor the same styles and sense of space. One may use the term modern (lower case) to mean anything contemporary ..." - Jencks, Ch. (1980), p. 6

25 See the "Quotation", p.ii

26 Doubts were expressed about the periods of uncertainty in the History of architecture, that cannot be considered as strong periods, whether the architecture from their time can be observed as one of the Fine Arts. Such a period was e.g. the beginning of "Purism", one of the streams of the early "Modern", with Adolf Loos as its representative: "Loos also felt that architecture should not be regarded so much as an art rather as the craft of building". - Whittick, A. (1950), p. 52

27 Levey, M. (1974), p. 115

28 Hautecoeur, L. (1950), p. 120

29 Op cit Hamlin, T. (1947), p. 9

30 Huxtable, A.L. (1981), "Architecture at the Crossroads", Dialogue, No.53

31 Op cit Whittick, A. (1950), pp. vii, viii

32 Gloag, J. (1975), p. 1

33 Ibid p. 2

34 Op cit Hamlin, T. (1947), p. 200

35 Op cit Germann, G. (1972), p. 68

36 Op cit Jencks, Ch. (1973), p. 133

37 Lloyd, S. et al (1974), from the Preface written by Pier Luigi Nervi, p. 6

38 Term "Genius loci" has been used by Dr. V.V. Štech, Professor of the History of Arts at the Caroline University in Prague. The term "Genius of the place" can be found at op cit Gombrich, E.H. (1970), p. 237

39 "... the Library of San Marco (in Venice). Its architect was a Florentine, Jacopo Sansovino (1486-1570), but he completely adapted his style and manner to the genius of the place, the brilliant light of Venice, which is reflected by the lagoons, and dazzles the eyes by its splendour". Ibid p. 237

40 Op cit Hamlin, T. (1947), p. 211

41 Quotation used e.g. in "Nigeria's New Federal Capital Study" (1972), p. 79 or in Prussin, L. (1959), p. vii

42 The architecture critic A.L. Huxtable expressed the view that architecture is continually "in a state of metamorphosis and revolution". Op cit Huxtable, A.L. (1981), "Architecture at the Crossroads", Dialogue, No. 53, p. 2

Note of the author of this study: The use of the term "revolution" in this respect is not correct, it should be replaced by "evolution". With the term "revolution" only sudden basic changes in the history of architecture can be described, as e.g. the replacement of the historical by a new decor in the time of Art Nouveau - Secession or the beginning of the ornamentless early "Modern".

43 "Fashions in architecture have always affected the form and ornament of rooms and furniture". - Gloag, J. (1975), p. 306

44 Dannat, T. (1959), p. 12

45 Fagg, W. and Plass, M. (1973), p. 142

46 The change in the role of the client in the "New Architecture" was expressed by N. Pevsner: "Changing first of all are the conditions under which architecture is operating. One major change has already been referred to. ... It is the change from the personal to impersonal client. ... That the anonymity of the committee, whether municipal or commercial, tends to discourage individual enterprise, and indeed genius, is equally patent. ... That finally the personal client can still exist, even if only as a manufacturer or manager, was proved between the wars by Frank Pick in England and after the war by the late Adriano Olivetti in Italy. As the client ceases to be a man and becomes a committee, so the architect is on the way from being a man to being a partnership or firm". - Pevsner, N. (1961), p. 686

47 As an example from the past, the advertisement of the architect James Malton in London in 1802 can be taken: "From his acquaintance with the various styles of architecture, Mr. Malton will alter any sound old building, to any particular style desired, that it may be capable of being converted to; or he will extend any structure, strictly keeping, if desired, to the original style of construction". - Op cit Germann, G. (1972), p. 9

A - GENERAL PART

2.00 CHAPTER II - HISTORICAL ARCHITECTURAL STYLES

2.10 SELECTION OF HISTORICAL STYLES FOR THE STUDY

The contemporary world civilisation, which has a global character, is the last member in the chain of the evolution that began even before the ancient civilisation[1]. In this evolution the impact and influence of the oldest civilisations of Mesopotamia has still not been finally clarified, nor has the impact of the civilisation of Ancient Egypt[2] on the Aegean civilisations been entirely resolved.

A clear chain of evolution can be traced from the Aegean civilisations that began with the Minoan period in Crete, through the antique civilisations of Ancient Greece and Ancient Rome, the later the civilisation of the Mediaeval Europe to our present world civilisations.

This evolution of civilisations found its reflection in the culture of its times and in architecture as the part of the culture. Architecture is the "mirror" of the period in its field.

On the Figure 2, following this Chapter 2.10, those architectural styles, which are more important in the history of the human civilisation, are indicated.

Certain styles have been omitted: Those of short duration, of too narrow or restricted regions of use, of a little impact or generally insignificant in the evolution

that led to our contemporary world civilisation. The styles that are to be studied from the point of view of variations in their evolution are those that covered a wider area than only the country of their origin and at the same time that had a sufficiently long time of duration for the possible evolution of variations from the original style.

The architectural styles having the above characteristics are:

Ancient Egypt

Antique Greece

Antique Rome

Romanesque style

Gothic style

Renaissance

Baroque

Classicism and Empire style[3]

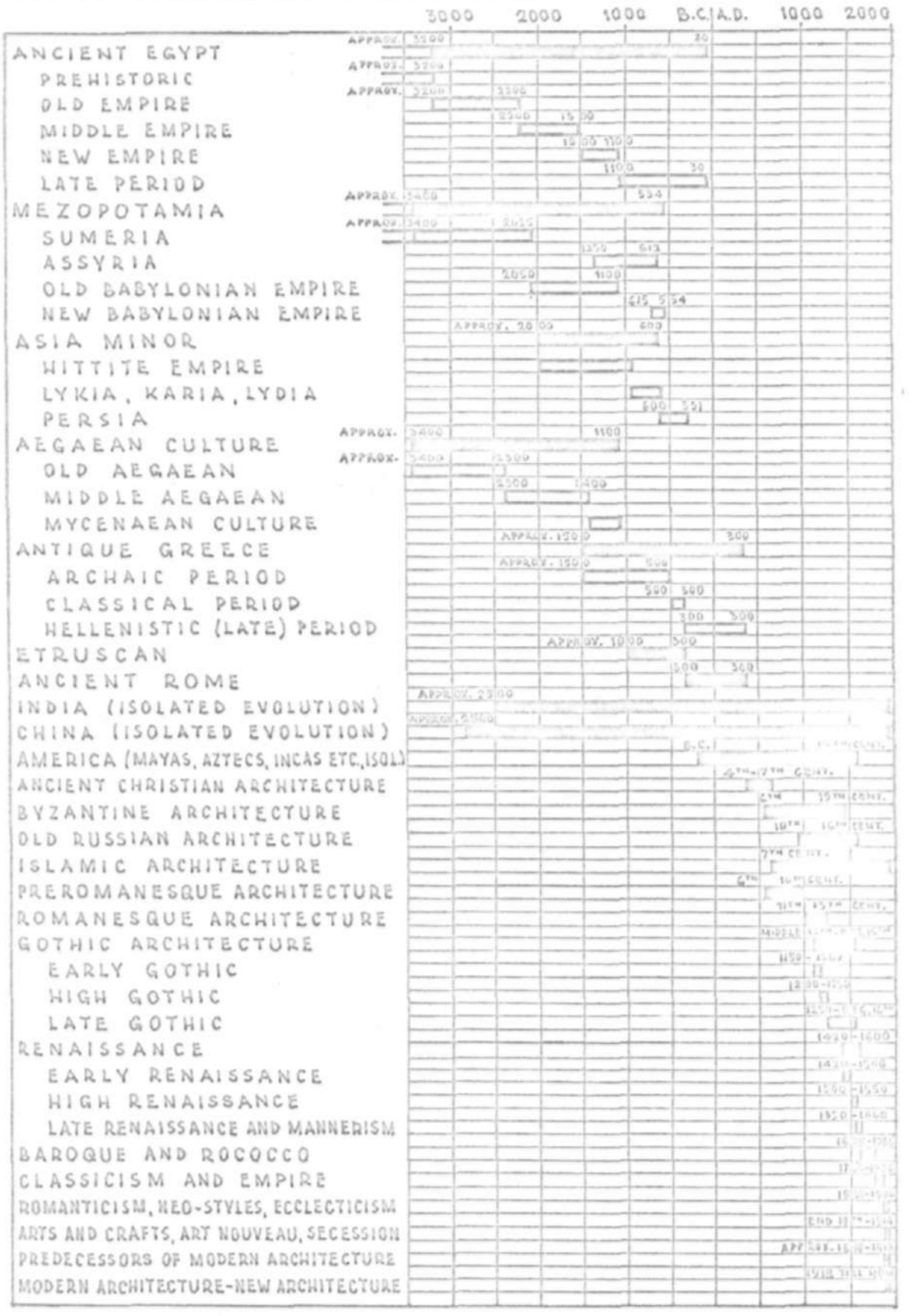
Neo-Styles (Romanticism) and Eclecticism[3]

Art Nouveau (Secession, Jugendstil)

The brief study and review of selected historical architectural styles is limited only to events in them relevant for this study. It is not the intention of the author to write a History of Architecture in the frame of this study, not even a brief one.

FIGURE 2

ARCHITECTURAL STYLES



NOTE : COMPILED FROM THE FOLLOWING SOURCES : LAKOMÝ (1967), PEVSNER (1961), HOAR (1967), SVROVÝ (1977), LLOYD (1974)

2.20 VARIATIONS IN THE EVOLUTION OF THE HISTORICAL STYLES

2.21 ANCIENT EGYPT

The culture and the art of Ancient Egypt can be described as art for eternity and for the afterlife. Life on the Earth was considered only as a necessary temporary prelude to the eternal life. The buildings for the people were built therefore from non permanent material while the graves, observed as buildings for the deceased, were constructed to last for ever[4].

The civilisation of Ancient Egypt was restricted generally only to that country which was a quite narrow strip of fertile land along the river Nile, surrounded from both sides by desert.

In this relative isolation the people of both Egypts (Lower Egypt - Memphis and Upper Egypt - Thebes) created a specific and in general unified architecture[5] despite the fact that they "remained geographically and culturally distinct, even when joined politically in the Kingdom of the Two Lands"[6].

In the architecture of Ancient Egypt, the phenomenon of "official architecture" can be observed, i.e. an architecture ordered by the official client with decisive power[7], in this case pharaoh.

Ancient Egyptian architecture took centuries

to evolve. Its characteristic was expressed by Levey: "Like the Egyptian climate, its art hardly changed"[8].

In this respect however, one deviation from the way of an art, unchanged for centuries, can be noted. It is described by Levey: "Only once during the course of thirty centuries were Egyptian politics, culture, religion - and hence art - drastically changed. The king Akhenaten (1378-1360 B.C.) moved his capital from Thebes to a newly-built city, broke the domination of the priests of the god Amon, and introduced a less rigid and immobile style of art. His revolution did not outlast his reign, and under his weak son-in-law Tutankhamen (disproporcionately famous to us, because of the intactness of his tomb) the old religious and artistic forms were re-established"[9].

The same event is mentioned by Syrový: King Amenhotep IV (1424-1388 B.C.), who gave the name Aton to his "new" god of the Sun, changed his name trereafter to Akhnaton. He was forced to resign by the priests of the god Amon in favour of his nine years old brother Tutankhaton, who changed this name to Tutankhamon as the sign of the return to the cult of the god Amon[2]".

Müller mentions the construction of sanctuaries and temples of the day-star (solar disc) Aten, the cult introcuced by Amenhotep IV - Akhenaten, in particular the construction of the Aten temples in the new capital Akhetaten i.e. the "Horizon of Aten" (now Tel el Amarna)[11].

The period of Amenhotep IV - Akhenaten and of his successor Tutankhamen witness the decisive role of the client generally and of the pharaoh as the ruler and the decisive personality in the country in particular.

The loosening of the strict rules governing the arts under Akhenaten lead to the evolution of the beginning of some kind of naturalism. This survived partly into Tutankhamon's period which was however the time of the return to power of the priests of the god Amon and to their decisive position and at the same time the return of a strict control of the arts.

This event indicates the role and the impact of the "official client", having the decisive power, on the fine arts and on the architecture as one of the arts.

From the point of view of this study, there are some further remarkable facts to be mentioned:

There are differences in the architecture of buildings in different areas of Egypt. They however can hardly be observed as deviations from the main stream of the style.

In the course of the evolution of the style, the transition from the non permanent materials, used in the prehistoric period (till 3200 B.C.), to the stone as the building material used in the Old Empire, took place.

The evolution of the style was from the very heavy, massive appearance to a relatively lighter one, accompanied by the evolution from simple to more complicated forms. This

can be followed particularly on the evolution of the form of the obelisk[12] and of the columns and of their capitals. In the later periods the architecture has a more decorative character.

In the late period of the style, foreign influences can be seen. This relates in particular to the Ptolemaic period which followed after the conquest and reign of Alexander the Great[14].

The style ended abruptly with the occupation of Egypt by the Romans in 30 B.C.

Summary for the purpose of this study:

- Evolution from the non permanent materials in the early periods to permanent materials.
- Evolution from simple forms to more complicated forms and from the heavy to a relatively lighter appearance.
- Foreign influences in the late period.
- The "official style" with pharaoh as the decisive client. This concerns also the only real deviation in the form of the loosening the rules under the pharaoh Akhenaten (1378 - 1360 B.C.) and the return to old strict rules under his successors.
- End of the style abruptly with the occupation of Egypt in 30 B.C.

2.22 ANTIQUE GREECE

The importance to art and architecture of the antique civilisations of Greece and of Rome is expressed in the following two quotations:

"From Greece and Rome and from the philosophies that guided the two great Classical civilisations, European art derives the basis of its existence and its composition"[15].

"With its forms and rules of composition, antique architecture became the basis for the whole successive creative period of two thousand years of European architecture"[16].

The following events in the evolution of the architecture of Antique Greece can be considered important for the subject of this study:

The buildings were units built in proportions, related to a basic dimension, the module, which was the radius of the column (the lower, upper or the medium radius).
The buildings of the early period are of a heavier impression than in the peak period, for which a lighter appearance is characteristic as the result of changed proportions of the buildings.

In the oldest period wood was used as the building material which gave origin to certain architectural forms. About 600 B.C. the change-over to stone took place. The timber forms were taken over and used in stone as the new permanent material.

Timber as a building material gave rise to the Doric and the Ionic orders, the later more decorative Corninthian order developed as the result of the artistic creation.
In the early and peak periods single orders were used on

one building. In the late period more orders were used at once[17].

The late, "Hellenistic"[18] period, is characterised by the loss of purety of style. The rules of composition were loosened and the style became more decorative. The arc and vault became the part of the "Hellenistic repertory"[9]. "The Classical forms and motifs tend to become dry and impoverished and lose their strength and vigour, but one should not overlook the luxuriance and diversity of their many themes"[20]. "The influence of Greek culture penetrated far to the East, at the same time however a reciprocal influence on the Greek culture occured. Its architecture was distorted by foreign elements and lost the cleanlines of the orders and its unique character"[21].

Summary:

Transition from timber as the building material to stone in the early stage, using the original timber forms in the new permanent material.

Evolution of the style from the massive to a lighter appearance in the mature period.

A more decorative character in the late period.

In the late period, particularly in the Asia Minor loosening of architectural rules, distortion of forms, foreign influences ("Hellenistic style").

2.23 ANTIQUE ROME

The following three quotations can be used to characterize the Roman civilisation and architecture:

"Physically, the Romans had conquerred Greece, artistically, it had conquerred them"[22].

"Where Greek civilisation was artistic and cultural, the Roman, which followed the Etruscan, was practical and disciplined"[23].

"Roman architecture is an amalgam of diverse elements, some borrowed from the Greek tradition that supplied the forms, orders and decoration, others derived from Italic structures developed by the extant civilizations of Italy"[24].

The Romans made a synthesis of Greek trabeated style with the Etruscan knowledge of the vault and adjusted both to their own style.

The antique Roman architecture expresses the large resources of the Roman Empire, its splendour and its prestige as the world power. "The characteristics of Roman architecture are the grandeur of planning, buildings of great complexity and brilliance of execution and construction"[25].

Some facts about the evolution of the Roman architecture interesting from the point of view

of this study:

Increased sizes of buildings in the course of the evolution.

More complicated buildings in the later stages as well as increased spans of vaults and domes, based on the experience gained.

Decorative use of columns in association with the arc. The combination of the column and of the vault had its evolution from the bearing function of the column in connection with the wall, to the decorative position of the free-standing column detached from the wall in the late period.

In later periods superimposed orders were used in the construction of large buildings, e.g. Roman Doric or Tuscan order, used in the lower part of the building, is topped by the Ionic and the Corinthian orders in upper parts.

The strictly centrally governed Roman Empire used the same architectural means in buildings constructed throughout the Empire: "During the centuries the massive walls, arches, vaults, niches and apses of Roman palaces and public buildings with their grossly inflated decorations rose all over the vast Empire"[26].

As a consequence of the strict central government real deviations in form from the main stream of the style

could not develop. The variations, eventually deviations, concerned the use of different kinds of materials, e.g. stone, bricks, mixed stone and brickwork, the first use of concrete from the natural cement "pozzolana" of volcanic origin, combination of brickwork and concrete, the use of a rough load-bearing wall surfaced with a more valuable and more decorative material etc.

In the peripheral parts of the Roman Empire buildings of an inferior architectural quality can be found, due to the apparent lack of high quality artists and workers, as for example in Roumania, which was then the province Dacia of the Roman Empire.

The centre of the late Roman style was the eastern Mediterranian: Egypt, Syria, Asia Minor, i.e. the countries where the Hellenistic style flourished in the last century B.C. : "The Late Roman Style is indeed the successor to the Late Greek or Hellenistic"[27].

Some authors call the style of the late Roman period the "Roman Baroque" [28].

Summary:

Evolution to larger and more complicated buildings in the later periods of the style.

Evolution to larger spaces as the result of the use of bigger spans of vaults and domes without internal supports.

Variations in the use of different kinds of material.

No real deviations in the style of the architectural form due to the strictly centralistic government. The architecture of Antique Rome is therefore to be seen to some extent as a kind of "Official Style" built to the order of the official decisive client.

2.24 ROMANESQUE

The predecessor of the Romanesque architecture was Protoromanesque architecture. This comprises the architecture of Western Europe from 6th to 10th centuries. Due to the limited area and a quite low number of preserved monuments, the architecture of this period is observed to be not too relevant in the history of architecture and therefore is not considered in this study[29].

Romanesque architecture is one of the "Great Styles" of the architecture. It comprises the architecture of Western, Southern and Central Europe from 10th to 13th centuries. In Eastern Europe the Byzantine architectural style was used in this period.

This architecture, despite its name, is not the exclusive achievement of the Roman nations and countries[20]. All the cultural nations of Europe, the Germans, the Anglo-Saxons, the Slavonic nations contributed to its evolution. The unifying force in this process was Christianity[31].

At the beginning, in the early period, it is possible to speak about the uniform character of the style. Later it developed to a quite large number of variations. Single countries and even regions adjusted Romanesque architecture to different local materials, made changes in the structure, in the general concept of buildings as well as in the details. The style therefore became differentiated. In the countries of Central Europe Romanesque architecture is the first architecture in stone.

The evolution of the Romanesque style and its artistic quality is not equal in different countries. The main reason was the lack of building tradition in some countries by comparison with those where the tradition was already well established.

The countries, that had a closer contact with the antique culture, took lead in the evolution.

So on the territory of what is now France, seven "Romanesque schools" developed, each of them having a specific character. On the British Isles the English Romanesque originated from one of them, the Norman School[33]. In Germany the style is influenced by the Lombardic Romanesque architecture, due to commercial and political ties in this period. In Italy different influences can be observed, Moorish in Sicily and Byzantine in Venice.

In all the countries the evolution of Romanesque architecture from the simple, rough, heavy buildings of the early stage to more detailed, more elaborated and

complicated buildings with richer forms in the peak period can be traced. This process is accompanied by an increase of the height of the buildings, as the builders gained experience.

In different countries variations developed, which bear specific signs and in some countries regional variations of the style developed.

The Romanesque architecture ends in its peak period being replaced by the Gothic style. This event is extraordinary and unique in the history of architecture. Romanesque architecture is the only significant style that has no late period. Gothic cannot be considered as the continuation of the Romanesque style. The period from the end of 11th till middle of 12th century is the transitional period to the Gothic[34].

The international character of the Romanesque style was expressed by Sir N. Pevsner:

"The Romanesque style had been international, though regionally subdivided, just as the Holy Roman Empire and the Church of the 11th and 12th centuries had been international forces. Then, in the 13th century, France became a nation and created the Gothic style"[35].

Summary:

The structure changed from the simple and heavy to a lighter and more sophisticated.

Further changes in the style from the early to the peak period: Composition of spaces from simple to more complicated. Increase of the height of the buildings. More decorative character in the peak period.

Variations in the use of different building materials.

Variations in the appearance developed in the course of the evolution of the style in different countries and even in regions (as e.g. 'schools' of the Romanesque architecture in France).

The Gothic replaced the Romanesque style in its peak period. There is therefore no late style, but the transitional period (end 11th and first half of 12th centuries).

The time of the introduction of Romanesque architecture differs from one country to the other as well as the quality of architecture achieved. In some countries of Europe the Romanesque architecture was the first architecture in stone.

2.23 GOTHIC

The Gothic can be characterized as the architecture of the pointed arc.

In gothic buildings every part had to fulfil a dual function: structural and aesthetical. "The French twelfth or thirteenth century cathedrals present a perfect example of the unity of the structural technique and

artistic appearance. The builders were engineers as well as architects and artists to whom only the term 'masters' can adequately be applied"[36].

It was the gothic structural system which created the new forms for larger and lighter spaces with larger windows and more light[37].

The origin of the Gothic took place in the Abbey St. Denis near Paris in the construction of the new choir under Abbot Suger in 1140[38].

Despite the certainty of the time and place of origin of the style, the use of the pointed arch is the subject of controversy. The possibility was expressed, that the idea of the pointed arc was brought to Europe from Eastern countries and that the Crusades may have played the part in this respect. "However it actually originated, it remained basically the creation of France"[39].

From France the Gothic spread to other countries. In nearly all of them it was adapted to the conditions of the countries concerned. It evolved through the normal sequence of stages from the early stage to the mature stage with the peak period, followed by the late stage, each of them bearing significant marks. At the same time, in the course of its evolution, national variations of the Gothic style developed in different countries. Each has its own specific appearance and has become a part of national cultural heritage of that country. In some countries regional and even local variations can be found.

This phenomenon of the evolution of national variations can already be traced in the later part of the early stage with the increased differentiation in the further stages.

In France, the country of origin, the development of the style can be described briefly as the style:

Primaire, 12th century,'à lancettes' with geometric traceried windows.

Secondaire, 13th century, 'Rayonnant', characterised by circular windows with wheel tracery.

Terciare, 14th, 15th and 16th centuries, 'Flamboyant' with flam-like window tracery[46].

As an example of a different opinion about the clasification of both Romanesque as well as Gothic architecture, the proposal of A. de Caumont from 1823 can be mentioned:

Romanesque: First stage: from the departure of the Romans from Gaul to the 10th century.
Second stage: end of the 10th and first part of the 11th centuries.

Transitional: End of the 11th and the first half of the 12th centuries

Gothic: First stage: end of the 12th and the first half of the 13th centuries.

Second stage: end of the 13th and
the 14th centuries.
Third stage: 15th and 16th centuries[41].

In other countries than France, the evolution of variations followed different paths. One kind of variations was based on the use of different building materials: Different kinds of stone were used, particularly of sandstone; bricks were the prevailing building material in the Netherlands; in Northern Gothic, wood was used as well as the stone, in particular in Scandinavia.

Another kind of variations was the development of different forms: In practically all the countries variations in this respect developed in the course of the use of the style, particularly where the evolution continued on its own, without outside influences. The result is national variations of the Gothic which played an important role further, in the period of nationalist feelings in the Romanticism of the 19th century.

The best known and undoubtedly the most creative national variation was the English Gothic with its stages of evolution: Early English, Decorated, Perpendicular[42].

The Gothic style in the British Isles developed Regional variations with specific Local differences[43,44].

Another evolution of a Gothic national variation under specific conditions of the country, can be observed in Germany. The result is the German 'Sondergothic'.

For the purpose of this study the not too widely known evolution of the Gothic style in the former Kingdom of Bohemia in Central Europe has to be mentioned. The evolution of the Gothic in Bohemia can be followed not only in the stages Early, High and Late Gothic, but also in the evolution of regional variations and even local differences - being in this way similar with the evolution of the Gothic in the British Isles, although the brilliance of the 'Perpendicular' was not achieved.

The South Bohemian and the South Moravian Late Gothic can be taken, as the most specific of the national and regional variations with the vaults constructed in bricks, placed in the direction 45° and forming thus 'folded' fans or decorative cells called (in translation) 'cellars', with edges emphasised in mortar.

The characteristic features of the late Gothic style in Bohemia can be seen in the royal oratory built in 1480 in the Prague Cathedral. The central part of its vault is suspended, and the bearing ribs were changed to the decorative form of roots[45].

A similar kind of the late Gothic ornamentation "with its leafless branches"[46] appeared in several countries.

In Spain and Portugal also the evolution of the Gothic resulted in specific national variations.

The only country, where the Gothic was never properly established, was Italy[47]. The Gothic spirit of the countries north of the Alps was entirely alien to the Italian temperament. The Gothic style, that developed in these countries with the colder climate, was adjusted to the Italian spirit, to the traditions of the country and to other influences. Thus e.g. antique columns with capitals were used to support vaults constructed on pointed arcs or the Byzantine dome was modified to suit the Gothic form. Even the name 'Gothic' originated in Italy. It was the nickname used in Italy during the Renaissance for the style that had come to Italy from the country of the Goths, whom were the Italians looked down on as a barbaric German tribe[48]. Up to that time the term 'modus gallicus' was used.

The evolution of the Gothic style in general can be characterised as follows:

Early period: Heavier appearance of the buildings. The walls are recognised in their bearing function. The ribs are fully structural though serving at the same time also an aesthetical function, particularly in the ribbed cross vaults.

High (peak) period: Lighter and taller buildings. More decorative character. This concerns in particular the pattern used for ribbed vaults. Walls are treated in a decorative way. Structural principles are perfected.

Late period: Ribs are used in a decorative way, sometimes even contrary to their structural function, in the form of suspended ribbs or ribbs changed to the decorative form of branches or roots. In this period the form of the pointed arc was changed and window tracery known as 'flamboyant' was given a flame-like decorative form.

Summary:

The development of the Gothic style was from the heavier to a lighter appearance.

The late style is decorative, the decorative value of ribs is exploited to the full and ocassionally they are even used on a non functional way.

At the beginning the style was uniform. In the course of the time variations developed in the countries where the Gothic style was used. In some countries these national variations split into regional or even local differences. These variations had a spontaneous character of evolution.

The time of the introduction of the Gothic style and the periods of evolution differ from country to country.

2.26 THE RENAISSANCE

The name 'Renaissance' means the Rebirth. In this case the aim was the revival of the Antique

culture, in particular of the culture of the Antique Rome.

This movement originated in Florence at the beginning of the fifteenth century ('quatrocento'), in the cultural atmosphere of that flourishing city with wealthy families patronizing the arts and science in the spirit of the Humanism.

In architecture, the Renaissance was the Italian reaction against the Gothic, which was foreign to the Italian spirit and which was considered to be the feature of the 'barbaric' Northern countries[40]. Bramante's opinion, expressed in 1510, can be quoted: "The pointed arches of Gothic architecture are not so powerful as the round arches of Roman architecture"[50].

Two further quotations characterize the Renaissance architecture:

"That phenomenon in the arts, which we term the Renaissance, commenced in Italy and spread thence to all the countries of Europe. It was natural that Italy should lead the reaction against the Gothic, for this foreign style had but a tenuous hold upon a country of vast Roman remains where the classical spirit still lingered"[51].

"The salient characteristic of Renaissance architecture, in Italy and elsewhere, was the employment of the Classic Roman 'Orders', which were now re-introduced, after lying in abeyance for nearly a thousand years.

These Orders - Tuscan, Doric, Ionic, Corinthian and Composite - were standardised by Renaissance architects, such as Palladio, Vignola and Scamozzi, and used both rationally and decoratively"[52].

At the beginning Renaissance architecture had a uniform character, as had all architectural styles of importance. Apart of the cultural heritage of Antiquity and the contemporary spirit of Humanism, other influences incorporated in the early Renaissance architecture were the influence of the warm Italian climate and Italian construction methods inherited and developed from the time of Ancient Rome.

Renaissance architecture spread to other countries and was applied at first in the original Italian form[53]. So in Central Europe, i.e. in the countries with a cold climate and winters with snowfall, the early buildings - palaces and castles - were constructed with courtyards surrounded by open arcades[54]. Later the most of these open arcades were either glazed or provided with wall fillings, or windows, to adjust them to the local climatic conditions.

In the course of the later evolution Renaissance architecture differentiated and developed national variations that were influenced particularly by different climatic, economic and cultural conditions and the use of different building materials. These variations differentiated even within national boundaries, Italy

being no exception:

"In 15th century the Renaissance took by steps the whole Italy. The local differentiation of the Renaissance is characteristic. It is different in Florence, in Venice, in Rome. And a still stronger local influencing occured in 16th century when the Renaissance spread across the Alps into other parts of Europe"[55].

The deviations from the original style have a specific character in different countries:

Birtish Isles: The Renaissance was introduced later than in other parts of Europe. Due to the strongly developed Gothic tradition, Gothic influence can be seen in the early Renaissance buildings.

France: "France followed quickly after Italy in adopting the ordered architecture of the Renaissance adding to it a peculiar and national significance"[56].

The Renaissance was brought to France by Italian architects and artists on the invitation of Francis I. Renaissance architecture was adjusted to the French climate, French traditions and to the French customs and needs, so that the French Renaissance, emerging from this process, is strongly national. Even the Italian architects working in France, as Sebastiano Serlio, designed the buildings "in the manner of France", so that "the true French character shines through the

classic pilasters and entablatures"[57].

Among the typical signs of the French Renaissance are large windows, high, steep roofs and developed chimneys, in conformity with the French climatic conditions.

Leading architects of the French Renaissance were Pierre Lescot (1510 - 78), Philibert Delorme (1515 - 70), Jean Bullant (1510 - 78) and Jacques Androuet Du Cerceau (1500 - 1584). "From these new minds was born a new architecture. In many respects it remained faithful to the national tradition, refusing in particular to substitute the Italian flat roof for the pitched roof; it accepted only the dome, which was later developed so successfully in France"[58]. Even the Italian Renaissance decoration was "translated into the French language"[59], influenced by the late Gothic period ('flamboyant' style) in France.

Germany: At this time Germany was divided into a number of kingdoms and small sovereign states. Therefore no unified national variations of the style developed. But despite this fact, it is possible to speak about the "German Renaissance" bearing some common marks and having a specific character influenced particularly by the tradition of construction in wood.

Austria: In the Renaissance period, apart of Austria itself, the countries of the kingdom of Bohemia were

incorporated into the monarchy under the rule of the Habsburgs. In the early Renaissance period the original Italian version was adapted. The buildings were mostly designed and their construction supervised by Italians.

Later a specific variation developed in Bohemia and Moravia, i.e. in the country of the former kingdom of Bohemia. Instead of constructing stone walls in the'rustica' manner, walls were built of bricks and the 'rustica' effect imitated in plaster made of mortar in two colours, as 'sgrafitto', forming typical decorated rectangles with diagonals, resembling 'letters' and also called by this term. Among other typical marks of this variation called the "Czech Renaissance", is the wide use of 'sgrafitto' generally for the wall decorations with human figures as their subject, or with decorations of an ornamental character taking their inspiration from the nature. Further characteristics of the "Czech Ranaissance" are e.g. quite steep gables divided horizontally and treated in a typical way, or large protruding cornices of a characteristic form. This national variation developed spontaneously in the conditions of the country and later played an important role in the architecture of Bohemia in the period of Neo-styles and Eclecticism in the nineteenth century and after 2nd World War in the period of the search for national character in architecture[60].

The Netherlands: The national variation of Renaissance in this country is based on the traditional use of bricks as the prevailing building material, in combination with stone cladding around the windows and doors.

Scandinavian countries: The Renaissance in these countries is influenced by the tradition of building in wood and by the use of wood as building material.

Specific national variations of the Renaissance developed also in other countries of Europe, as in Spain, Portugal, Poland, Hungary.

The common signs of the Renaissance buildings in the countries north from Italy are steeper roofs to throw off the snow and rain, more prominant chimneys and larger windows to let in the light[61].

The evolution of the Renaissance in Italy, the country of origin of the style, can be divided into periods:

1. Early Renaissance 1420-1500 (quatrocento). This period is characterised by individual search and experimenting.
2. High Renaissance 1500 - approx. 1550 (cinquecento). Characteristics: More plastic appearance of buildings, stepped-up elevations. Tendency to grandiosity and to the monumental character in buildings. Introduction of rhythmical bays.
3. Late Renaissance and Proto-Baroque approx. 1550-1580 (1600) (cinquecento, second part). Characteristics:

Loosening of strict rules of composition. The logical composition of the architecture was replaced by the artistic composition, as the transition to the Baroque[62]. Architectural design changed from a static system, formed by repeated rhythmical parts having predeterminated proportions, to a dynamic, searching system.

Some architects were influenced by Mannerism, using proved methods and forms without any deeper creative activity[63] and for the first time eclecticism appeared[64].

From the author's experience, the general evolution of the Renaissance can probably be followed the best in Florence, the town of its origin. The uniformity of the style in its earliest stage is striking. Many palaces from the early period have flat facades, with the 'rustica' decoration expressed only by quite shallow grooves. Their elevations are similar, their designs as it were taken from a catalogue of type drawings - using the contemporary comparison. This is not meant in any way to diminish the value of achievements of the masters of the early Renaissance.

In the later period differentiation is apparent. Apart of diversified designs, the palaces have strongly or very strongly developed plastic rustica facades. The best example is the Palazzo Pitti. This plastic kind of expression was apparently still not adequate to satisfy the changed "spirit of the time" and the changed feeling for the space in the latest stage, which required the space in three dimensions to be expressed still more strongly.

As the result, two lower wings, at right angles to the main facade, were added, creating with the original Pitti Palace a semiopened courtyard, which introduces the palace and supports its monumentality.

Summary:

The Renaissance was the creation of Italy. At the beginning the style was uniform. The spread to other countries of Europe was firstly in the original, unchanged form.

During the course of the Renaissance, variations developed in the countries, where the style was used. Some of them reached very specific forms with regional and local differences similar to the evolution of the Gothic style.

These variations, developed spontaneously in the specific conditions of the countries and became the part of their culture.

General signs concerning the appearance of buildings: Development from simple to more complicated, from quite flat to more plastic and decorated elevations in the High and Late periods. In the Late period loosening of the rules of composition, distortions of forms, free artistic creation, transition to Baroque.

The introduction of the Renaissance did not occur simultaneously in the different countries of Europe and it evolved in some countries faster than in others.

2.27 BAROQUE

The term "Baroque" is of the Portuguese origin. 'Barucca' means an irregular pearl with protruding round shapes on its surface.

In the wider sense, the name "Baroque" is used for the late phases of the evolution of architectural styles of different periods, when the original creative principles were changed, the forms transformed or even distorted. So the Hellenistic period is often called the Baroque period of the Antique Greece or the term "Roman Baroque" is the expression for the late phase of the Ancient Roman architecture.

In the narrower sense, the term "Baroque" means the architectural style that developed in Italy from the Renaissance to the end of 16th century, spread to other countries and was used from 17th century in the whole Europe till the middle of 18th century (approx. 1760)[65].

The Italian Baroque is usually divided into three periods:

Early Baroque 1580-1630. This period is influenced by the late Renaissance and Mannerism.

High Baroque 1630-1730. This is the most creative period of the Baroque with the loosening of the rules of the Renaissance, a free artistic creation

of spaces and a free use of architectural orders and of other architectural means. In the peak period, Baroque achieved a unity of the architecture, sculpture and painting.

Late Baroque 1730-1800. This period saw the return to the classical rules of architecture of Antiquity in which the balance of forms and a quiet harmony was achieved[66,67].

From the beginning of the evolution of the Baroque, two main streams can be discerned:

i. The classicist stream which appears as the direct successor of the Renaissance. It had its roots in Mannerism and towards the end used the vocabulary of antique forms and orders as a formality.

ii. The dynamic stream or radical stream which makes use of all architectural means in the free creative way [68]. In this stream the heritage of Michelangelo was developed further[69,70].

The Baroque spread from Rome first to northern Italy, then to Spain and Portugal towards the west, to Germany and to Austria to the north and then to other countries. The last European country that accepted Baroque was England[71].

In all the countries, including the land of its origin Italy, national variations developed spontaneously in the course of the time. These variations were partly the expression of the different conditions of the countries, but mainly of the 'spirit of the time' in them. So in the countries with the high religious enthusiasm the dynamic Baroque flourished, while in the countries with a cooler approach and a more rational spirit, the dynamic Baroque was never accepted and the classicist stream predominated[72].

Specific national variations of the Baroque style developped in different countries, each having a distinct character.

In Germany and Austria, including the former kingdom of Bohemia, the dynamic stream was followed. The peak of this stream was reached in Bavaria and in Bohemia.

Because of the significance of these variations in the history of architecture as well as for this study, it seems appropriate to dedicate more space for their consideration.

The St. Nicholas Church in Prague (1703-1755) is considered the peak of the dynamic baroque style. The architects were Christopher Dientzenhofer and his son Kilian Ignatius Dientzehofer. "In its proportion this is the most ambitious Jesuit Church of Bohemia, and perhaps of all Central Europe"[73]. It is possible to say

that the whole space of the interior makes the impression of being in the dynamic movement, including the posture of the statues and even the flowing forms of the marble supporting the pulpit.

The most important and best known buildings of the dynamic Baroque period in Bavaria is the Abbey church of Vierzehnheiligen and the church in Neresheim built by the architect Balthasar Neumann (1687-1753)[74].

In the late stage of the Baroque in Bohemia a specific variation appeared, known as the Baroque Gothic. This variation is associated with the name of the architect Giovanni Baptista Santini - Aichel (1667-1723), born in Prague, from the family of immigrant Italian masons. "He had established himself as one of the most immaginative and original architects of the eighteenth century in Europe. Yet only in the last few years, has his name crept into the standard histories"[75]. "In Santini we must see a great imagination striving to go beyond the ideas and means of expression of his contemporaries"[76]. In the reconstruction, completion and extension of Gothic monasteries in Sedlec, Želiv, Ždár and Kladruby he used Gothic detail, transformed in the Baroque way. Based on these works, he created a synthesis of the dynamique Baroque with the Gothic forms and used these elements on some Baroque churches in Bohemia. He also built several new churches and chapels (as Rajhrad, Ždár, Panenské Břežany) and other buildings in the Baroque Gothic

style[77]. Among his works are also buildings created in the pure Baroque style, for example the churches in Křtiny, Mariánská Týnice, castle in Chlumec n.C, and the palaces of Morzin and Thun-Hohenstein in Prague etc.[78].

Baroque Gothic cannot in any way be seen as the result of a spontaneous evolution. The question therefore arises about the reasons that lead to its origin. It appeared only in a part of Santini's works, built between approx. 1700 and his death in 1723 and in the work of some of his followers. It seems that none of the available sources gives a satisfactory explanation: B. Knox mentions: "As in Germany and England, Gothic ideas lingered on in Bohemia into the middle of the seventeenth century; but in the same way, they appear only in small country buildings, the expression of craftsmen's tradition, not of scholarship". "There seems to be no convincing explanation of the revival of the use of Gothic detail except that one supremely gifted architect decided to employ it in the reconstruction of mediaeval buildings and that his example was followed by others, such as Broggia and Kaňka. Santini was not attempting to recreate the original of the great abbey churches he restored". "Perhaps, it was Benedict's treatment of another fourteenth-century plan that inspired either Santini or his patrons"[79].

B. Syrový writes about Santini's reconstruction of

Gothic churches: "He created the synthesis of the dynamic Baroque idea with the Gothic way of expression and the Gothic structure. He adjusted Gothic elements and used them in the changed form on pure Baroque buildings"[80].

The opinion of V.V. Štech is, that it was the Abbot of the Sedlec Abbey who asked that the reconstruction of the Gothic church, partly destroyed in the Hussite wars, would be done in the way conforming with the still lingering Gothic tradition in the country[81].

The most acceptable explanation for the origin of the Baroque Gothic as a deviation from the dynamic Baroque style in Bohemia seems to be the synthesis of all the above mentioned views:

- The Gothic tradition in the country was still alive.
- Abbot of the Sedlec monastery, as the architect's client, desired the reconstruction in character with Gothic remains.
- A highly talented architect fulfilled the requirements of his patron, but in a creative way, and at the same time in accordance with the spirit of the Baroque period.
- The success of the first Baroque Gothic construction resulted into further commissions placed by other Abbots and was followed by other architects.

The Abbot of the Sedlec monastery seems to have played the decisive role in the origin of the Baroque

Gothic, which is the deviation from the main stream of dynamic Baroque as the architectural style in Bohemia in that period. Baroque Gothic can be observed as the regional variation developed and used in part of Bohemia at the beginning of the eighteenth century.

Despite the limited time and area of the use of the Baroque Gothic, in some respect the similarity may be expressed with the role (still not entirely clarified) of Suger, Abbot of St. Denis as the decisive patron at the origin of the Gothic style.

Spain and Portugal. In these countries the dynamic Baroque flourished luxuriantly: "Popular taste in Spain has always favoured the bizarre and the ostentatious. The Baroque movement found therefore a ready welcome and willing patrons in the great religious orders"[82]. The independant evolution of the Baroque in Spain lead to the Churrigueresque style[83], a fantastic and extravagant style from late 17th to 18th centuries[84].

The synthesis of the Spanish Baroque with the local traditions in the then Spanish territories in Central and Southern America gave rise to an extremely specific variation of the Baroque[85]. Two quotations can be helpful. "In Mexico and in Central and South America generally, the Spanish Colonial architects, priests, and builders outdid even the mother country in the size and fantastic poetry of their great doors, as for instance in the church of La Santissima in the City of Mexico or

the front of the cathedral at Tasco"[86]. "It is in fact in Mexico that the Spanish architects celebrated the wildest of all orgies of over-decoration" [87].

France. Despite the influence of Italy - even the French architects used frequently to study in Rome - the French rational way of thinking could never accept the dynamic stream of the Baroque. It was strange to the French spirit. "France resisted"[88]. The characteristics of the French Baroque are of dignity and sobriety, the subordination of all the parts of the building to form a unity of the whole. The ornament was reasonably restrained. Influences from Italy and other countries were "tempered by French taste"[89]. "The Baroque is chiefly of importance in imparting grandeur of ideas in architecture and civic design and in garden planning"[90]. "The extreme forms of Baroque are rare"[91].

England. In England the Baroque took the classicist form. The dynamic Baroque was entirely foreign to the English national character and to its cool rational way of thinking. In England "the repudiation of rule of tyranny has diverted the flow of architecture into more sober and less tumultuous channels"[92].

The second largest church in the world, St. Paul's Cathedral was built in the classicist Baroque. During this "Wren" phase of the period "the national character of English architecture was becoming more finaly established"[93]. The English Baroque was quite brief and was

replaced by the "Palladian" phase[94].

ROCOCO

At the beginning of 18th century the Baroque turned into the decorative style known as Rococo, in France as 'Rocaille'[95].

The middle of 18th century was the period of the turn to the Classicism[96]. This evolution was influenced partly by romantic tendencies, partly by the discoveries of Herculaneum and of Pompei and by the studies and the research of the antique architecture, particularly in Athenes (Rewett and Stuart)[97] which lead to a "growing respect for the monuments of the antiquity"[98].

The late period of the Baroque generally is influenced by France. "For the Paris of Richelieu, Colbert and Louis XIV had become the centre of European art, a position which until then Rome had held unchallenged for well over 150 years"[99].

Summary

The Baroque originated in Rome. From the beginning two main streams prevailed:

i. The classicist stream being the further evolution of the Mannerism.
ii. The dynamic stream (radical stream) continuing the evolution begun by Michelangelo.

At the beginning the Baroque spread from Italy to

other countries and the style became international. In all the countries, where the style was accepted, in the course of the time national variations developed in a spontaneous way from the original Italian Baroque.

The dynamic stream was accepted in Germany, Austria, Spain and Portugal. The most decorative form of dynamic Baroque developed in the Spanish territories in Central and in South America.

Other countries, particularly France and later England followed the more sobre classicist stream.

The development of national variations of Baroque was of a spontaneous character, differing according to the conditions of the countries, in the same way as this phenomenon had occured in previous historical architectural styles, particularly in the Gothic and in the Renaissance. These variations already began to evolve in the course of the early stage. In the High period of the style, the national variations of the Baroque style were well established.

In Bohemia however, apart of Bohemian dynamic Baroque, a variation appeared which cannot be accepted as the result of a spontaneous evolution of the Baroque style. This variation is the Baroque Gothic. The reason for its origin was probably primarily the demand of an enlightened patron made to a highly talented architect (G.B. Santini), who was a strong personality with a highly

developed creative ability. The supporting factor for the successful result was the still lingering strong tradition of the Gothic in the country. The Baroque Gothic found several followers. - This specific regional variation was not used generally in the whole country, but only in some buildings in the first part of 18th century.

After the decorative phase known as Rococo, the late period of the Baroque is marked by the turn to the Classicism.

CLASSICISM AND EMPIRE, ROMANTIC MOVEMENT, HISTORICISM AND THE BEGINNING OF THE MODERN MOVEMENT, 1760-1914.

2.28 EARLY AND HIGH CLASSICISM AND EMPIRE (1760-1830)[100].

The Classicism as an architectural style is related to Rationalist philosophy of the period.

The leading countries in the world in this time were France and Britain. Their power gave them their position of leadership in the evolution of the Classicism, which can be seen particularly in their capitals Paris and London.

The extension of the Eastern part of the Louvre is considered to be the predecessor of the Classicism. It was built to the design of Claude Perrault, who reacted against the too pompous Baroque design of

Bernini - which was foreign to the French spirit of the time[101].

The most important building of the Early period of French Classicism, which affected the further evolution of the style, was Jacques Germain Souflot's Pantheon (formerly church Ste. Geneviève).

The further evolution of Classicism reflected the French political history of the time:

The National Convention declared Classicism as the style of the Great Revolution[102], expressing the highly valued Roman virtues of simplicity and patriotism[103].

Napoleon I made Paris the Capital of a vast French Empire. Apart from that, he was indifferent to anything past which was not related to him and his dynasty. He initiated the replanning of the city with large scale demolition and reconstruction[104]. Paris changed to a city with straight wide Boulevards in the second half of the eighteenth century.

The Empire style representing Napoleon's period is associated particularly with the names and work of two architects, Charles Percier and P.F.L. Fontaine. The main characteristic of this style was the new décor, based on Pompeian discoveries and on forms and details of Egyptian origin, adopted during Napoleon's Middle-East campaign. "The sphinx and the Roman eagle, laurel leaves and acanthus decoration, interspread with Napoleonic

emblems, were used with good taste"[105]. The characteristics of this period of architecture was expressed by Sir B. Fletcher: "Classicism however chiefly gained the day in the 'Empire' phase, when a frigid formality was the keynote, Greco-Roman coalescing with Egyptian motifs to produce a distinctly French national decorative style"[106]. - This phase, which produced the French national variation of the Classicism is relevant for this study. There are several different factors which may have been influential in its evolution. However it is hardly possible to analyse which of the following factors contributed to the evolution of the 'Empire' style or to what an extent namely Napoleon himself as the decisive client, members of his entourage with their natural desire to please the Emperor, French nationalism of the time which aimed at imposing the unmistakable characteristic appearance of the period on the buildings, or other factors that could have played a role. In every case, the architecture of the Napoleonic era supports the validity of the opinion that architecture is the "testimony of the times".

In this sense, the French Classicism reflects in succession the pomposity of the French Royal Court, the pathos of the French Revolution and later the same characteristics of the Napoleonic era.

In England the architecture of Classicism was based on the protestant sobriety of the society of this parliamentary monarchy. The focus of the architectural activity is in the residences of the nobility and the

welthy inhabitants of the towns. The interiors, including even furniture, reached the highest standards (Chippendale, Adams, Sheraton) and influenced European interiors for a long period. A sobre and noble form can be found on a large number of buildings of a different character, e.g. Buckingham Palace and the houses on the Regent Street (John Nash). The architecture of the High Classicism is represented by the Royal Arts Society Building (Robert Adams) and by the Bank of England (Sir John Soane). From the period of the Late Classicism are the buildings of the National Gallery (William Wilkins) and the British Museum (Robert Smirk)[107].

In Germany, the architecture of Classicism is the closest to the original examples of the Ancient Greece, due to the research and scientific work of German archeologists in Greece. Building activity was concentrated mainly in Berlin under Friedrich Wilhelm II and later in Munich in the reign of Ludwig I. From this period the following buildings are of a particular importance: The Brandenburg Gate in Berlin (Gotthard Langhans), National Theatre (Friedrich Gilly) and the work of Karl Friedrich Schinkel: Neue Wache, Old Museum etc.

In Austria, Hungary and Bohemia, under a strong central government in Vienna, early Classicism did not have the strength of the late Baroque period, mainly as the result of the activity of architect-officials in the

governmental services. The buildings of architectural importance are quite scarce, more of them being in Budapest than in Vienna.

Classicism was also adopted in Russia, under Catherine II. The characteristic of the Russian Classicism was the use of bright colours, a direct influence of the tradition of the Old Russian and the Byzantine ideas which were still alive.

The diminished importance of Italy economically and artistically was reflected also in the architecture. Only some few buildings of a higher architectural value were constructed in this period, notably some theatres e.g. San Carlo in Naples (A. Nicolini), Della Fenice in Venice (G.E. Selna) and the Opera La Scala in Milan (Giuseppe Piermarini)[108].

French architects took Classicism to the American continent. The Capitol in Washington (B.H. Latrobe) is the most important building in the U.S.A. of this period.

2.29 LATE CLASSICISM AND EARLY ROMANTICISM (1830-1860)

In Europe, Late Classicism and Early Romanticism can be dated by the fall of Napoleon, which reflected the victory of European monarchies and the revival of the feudalism. The ideas of the French Revolution "Liberté, Egalité, Fraternité" were replaced by the

"fatherly care of Sovereigns"[109, 110].

In philosophy and in art these political events were reflected as individualism, romanticism, nostalgia and even pessimism.

The period from the end of 18th till the end of 19th centuries was the period of nationalism in Europe. In this spirit "until the end of nineteenth century repeated attempts were made through Europe to extend the architectural repertoire by the creation of the new national styles".[111]

The increased nationalism in the countries of Europe was expressed during this period in the form of architectural revival taken from the national past, i.e. as national variations that developed in the historical styles in different countries. H.R. Hitchcock, using the term 'Continental nationalism' to characterise this period: "To be Roman in architecture, to be Greek or even to be Italian, one need not to cease to be English or French or German. But to be Tudor one must be English as to be François I one must be French, or so seemed to most architects and their clients in the forties"[112].

The cult of the past and the negation of the rigid rules of the Classicism lead to more freely creative manner in its late phase. At this time, contrary to the sobriety of the Classicism decoration was used to a wide extent, so that in some cases

'overdecoration' is the only description, which can be used[113].

Romanticism in the architecture had its predecessors in 18th and even 17th century. In the work of some outstanding architects in different countries elements of the Gothic in the then Baroque style appeared; even in Italy Gothic details in the work of F. Borromini can be traced. In some other countries the Baroque was fused with the Gothic to form the Baroque Gothic. The evolution of the Baroque Gothic in Bohemia has already been discussed, related to the work of G. Santini between 1700 and 1723[114].

Some churches where the Baroque is combined with the Gothic can be found in Fribourg in Switzerland - J.F. Reiff (1647-58) and in Austria - G. Martinelli (Church of the German Knights in Vienna 1720-25)[115]. In England Gothic has already been revived by Sir John Vanbrugh, H. Walpole, R. Morris and J. Wyatt in the 18th century.

In England nationalistic Romanticism of 19th century got its expression in the form of the Gothic Revival[116,117]. The early stage is represented by the work of J. Nash in the Royal Pavilion in Brighton. The Gothic Revival in England reached its peak in the design of the New Houses of Parliament (1834-40), authors August Welby Northmore Pugin (1812-1852) and Sir Charles Barry (1795-1860)[118,119] and in the Law Courts in London[120].

But despite the opinion, that Gothic was the national style of England, the Gothic Revival was not accepted generally: "Even in the British Isles it is noticeable that at no time did the production of genuine Gothic Revival buildings account for even half of the production of new buildings. And so the Gothic Revivalists failed to achieve their objective, which was the establishment of the Gothic Revival as the universal style"[121].

In this period one building was created which became one of the milestones in the evolution of the world architecture. It is the Crystal Palace at the International Exhibition in London in 1851, designed by J. Paxton, constructed from iron and glass, with the use of prefabricated building components, that enabled its fast erection[122]. "The construction of the Crystal Palace was commenced on 26 September, 1850 and the structure was practically completed by 14 January, 1851"[123].

In France the Romanticism is associated with the movement for the reconstruction of mediaeval monuments. The leading architect of this period was E.E. Viollet le Duc, the author of the reconstruction of many historical buildings in France, including the cathedral of Notre Dame in Paris, the Sainte Chapelle, the cathedrals in Amiens and in Reims and many others. Despite not being significant for this study, but

important for the evolution of the architecture of this period, two French architects have to be mentioned. They are Victor Baltard, author of the Justice Palace in Lyon and particularly of 'Les Halles' in Paris, with the use of cast iron in the structure as well as in the architectural detail, and in the late period A.F. Peyre - Theatre Odeon in Paris.

In Germany as well as in other parts of Europe at this time buildings were constructed either in 'Neo-styles' or were influenced by historical styles. Some of the works of F. Schinkel date from this period, the castles of Kamenz and Babelsberg in the Neo-Gothic, and some other buildings.

Leo v. Klenze (Pinakothek in Munich) and the early works of Gottfried Semper belong to this period and deserve to be mentioned.

The German patriotism of this period reached its peak in the War of Liberation (from 1813 onwards)[124]. As an expression of the nationalism some of the unfinished mediaeval churches in Germany were completed in both Romanesque and Gothic styles.

In particular the completion of the Cologne cathedral in 1814 was seen as "a national monument to commemorate the successful outcome of the War of Liberation"[125] and became the national task. Three expressions were used in this respect: "Religion, Fatherland and Art"[126]. Gothic was thought of as the German style of architecture[127] and the Cologne Cathedral

as the major example of this style[128]. But the German national variation of the Romanesque style was also accepted by the nationalism of this period. For the Romanesque Revival in Germany the term "Rundbogenstil" was used[129].

Apart of the use of national Neo-styles, the adjustment of the architecture to the functional needs of the buildings and to the role of the buildings in their environment were other characteristic signs of the architecture of Romanticism.

The free creative access which can be observed in the early stage changed to the schematism typical of the late phase. The uncertainty of architecture and of the architects of the late period of the Romanticism was symbolised by the main topic of the Congress of German Architects held in Prague in 1844, which was: "In what a style should we build"[130]. The discussions held at this Congress resulted in the recommendation that for each project architects submit alternative designs in different styles.

2.30 LATE ROMANTICISM AND NEO-RENAISSANCE (1860-1890)

This is the period of fast expansion of industry lead by England, of scientific innovations, of growth of the towns, and the wealth and power of the bourgeoisie.

Economic growth gave rise to increased personal liberties which were enforced in Austria with the end of the absolutism in 1861, and in Russia with the ending of serfdom.

France continued in her leading role in the culture and art and at the same time played a distinguished role in science and technology.

Nationalism in Europe grew to an unprecedented extent. It resulted in the unification of Italy in the unified Italian Kingdom in 1861 and the German Empire in 1871. Roumania gained her freedom in 1853 and Bulgaria hers in 1877. Austria was changed into the constitutional Austro-Hungarian monarchy in 1867. In 1875 the French Republic was created. The era of Colonial Powers began.

In France Neo-Renaissance developed from the Classicism at the time of IInd Republic, continued its evolution under IIId Empire and under IIId Republic[131]. The last period marked the transition to the Eclecticism.

The leading French architects of this period and their work were: J.F. Duban - Ecole de Beaux Arts in Paris, F. Duquesnay and I.J. Hittort - West and North Railway Stations, H. Labrouste - Library St. Geneviève and the National Library which had a structure of cast iron, L. Ch. Boileau and A.G. Eiffel - Department Store 'Au Bon Marché', P. Sédille - Department Store 'Du Printemps'. The use of steel structures reached its

climax in the construction of the Eiffel Tower.

Among the monumental buildings is the Paris City Hall designed by the architects Baltard-Ballu-Deperthes and the church of Ste. Trinité by T. Ballu.

The building of the Paris Opera House designed by Charles Garnier is of special significance as it marks the beginning of the Eclecticism in France.

In this period also the large 'Boulevards' were constructed, which form the main traffic network of Paris till today.

Other parts of Europe in the period of Late Romanticism and Neo-Renaissance:

England: The main architectural works from this period are: Ch. Barry - Travellers Club and Reform Club in the Italian Renaissance, R.N. Show - New Scotland Yard, Picadilly Hotel and Gaiety Theatre in London in the Palladian Renaissance.

Belgium: A. Balat - Museum of Fine Arts, J. Polaert - Justice Palace in Brussels, at this time the largest building in Europe.

Italy: G. Sacconi - Victor Emanuel I Monument in Rome, passage Galeria Vittorio Emanuelle in Milan by G. Mengoni and Department Store Bocconi in Milan designed by G. d'Angeli.

In Russia the Neo-Renaissance was not accepted.

The period of the Classicism was followed from the eighteen fifties by Historicism and Rusticalism taking their inspiration from Byzantine and Old Russian architectures.

In Roumania J. Mincu was the author of the Roumanian national architecture of this time based on traditional Byzantine examples.

Germany: Buildings of significance from this period are the Royal Palace and the War Ministry Building in Munich from L. Klenz; from the later phase is the museum Johanneum in Dresden - M. Hänel (1873-73) and the New Theatre in Leipzig - K.F. Langhans (1864-67) both built in the style of the German Neo-Renaissance. The building of the Reichstag (Parliament) in Berlin (1884-95) by P. Wallot bears already the signs of the Eclecticism.

The leading personality of the German Neo-Renaissance, who also influenced the future development of world architecture, was Gottfried Semper (1803-79), Professor of the Academy in Dresden, he later worked in London, Paris, and Zurich. Among his works is the Theatre in Dresden (1838-41), Theatre in Vienna (1880-1886, together with K. Hasenauer), two Museums in Vienna and the Neue Burg, an extension of the Vienna Castle (1872-1881)[132].

In Austria - Hungary building activity was concentrated in Vienna. The Emperor "Franz Joseph who came to throne of Austria in 1848, wished to create a new Vienna

to rival the Paris of Napoleon III"[133]. Apart of the works of G. Semper, already mentioned, the important buildings from this period are: Opera House in Vienna (E.v.der Null and A.v. Siccardsburg 1861-69), Stock Exchange (T. Hansen 1886), Parliament building in Vienna (T. Hansen 1874-83).

In Hungary the Neo-Renaissance is related to the work of the architect N. Ybl (1814-91). Among his works are the completion of St. Stephen's Cathedral in Budapest, the reconstruction of the Buda Castle and the Opera Building in Budapest (1879-84).

The architecture of Bohemia in the period of the Late Romanticism and the Neo-Renaissance is of importance for this study, showing the specific national character of the country. The leading architects of this period were J. Zítek (1832-1909) and J. Schulz (1840-1917). Apart of individual projects, they designed some buildings in co-operation: National Theatre in Prague - J. Zítek (1866-81), Colonade in Carlsbad - J. Zítek (1871-74), Concert Hall Rudolfinum in Prague - J. Zítek and J. Schulz (1874-84), National Museum in Prague - J. Schulz (1885-90). These buildings were constructed in the period of the Czech National Revival, the period with strong nationalist feelings among the Czech people aiming for independance from the Austro-Hungarian monarchy. There was therefore the need to give a specifically Czech national character to the buildings of the National Theatre and of the

National Museum. Under the influence of the Vienna School of Architecture, of which both architects were former students, they designed the buildings in the then cosmopolitan stream of Neo-Renaissance. The national character was given to the buildings in their decoration, particularly in the sculptures and paintings, with their subjects taken from the Czech mythology and history. National ornaments and figures wearing national costumes were used as elements in the decoration to express the national character.

Towards the end of the 19th century, the movement for the Czech National Revival and liberation grew still stronger. This nationalist movement had a multiple form and was active in all the fields of the life of the Czech people including economic activities, but in particular in the culture. In architecture nationalism found the expression in the replacement of the then cosmopolitan stream of the Neo-Renaissance by the specific "Czech Neo-Renaissance", as one of the symbols of national traditions[134]. The Czech Renaissance developed as the national variation in 16th and at the beginning of 17th centuries. It was based on a combination of North Italian Renaissance building adapted to the conditions of the country and the tradition of the Czech Gothic[135].

The characteristics of the Czech Neo-Renaissance were similar to the Czech Renaissance: Quite flat elevations without heavily protruding plastic decorations, the use of the sgrafitto in the form of the typical sgrafitto rustica, and decorations in sgrafitto with

subjects of a national character. Other architectural elements typical for the Czech Renaissance were revived such as typical gables, round cornices with semi-cylindrical intersections, decorated with the sgrafitto etc.

This specific national variation of the Czech Neo-Renaissance spread from Prague, the Capital of Bohemia, to the whole country, and buildings in this style can be found in many towns, even small ones, having only regional or rural importance. They are the expression of the 'Spirit of the time' in the architecture of this period of the nationalist movement for Czech Revival.

The first Czech architect who designed buildings in this national variation was A. Wiehl (1846-1910). He was soon followed by a group of several contemporaries who changed over from the use of the cosmopolitan Neo-Renaissance to the style of the national Czech Neo-Renaissance. To mention the names of some of them: J. Koula, O. Polívka, A. Balšánek, A. Turek.

It can be summarized that the Czech Neo-Renaissance is a deliberate deviation from the cosmopolitan Neo-Renaissance style of the period aiming to impart the national appearance to buildings in the period of the National Revival of the Czech Nation.

Comparing the early Romanticism of the forties and fifties with it's enchantment with the free use of the historical mediaeval styles, the late Romanticism was

based on the scientific research of historical architectural buildings.

Rationalism determined the use of the appropriate style for different kinds of buildings, e.g. the Gothic for churches and hospitals, the Renaissance for theatres and residential houses and both for Parliament buildings, City Halls or Law Courts[136]. On the other hand the nationalism of the period resulted in the use of national variations of historical styles in the Neo-styles, in different countries.

In Germany at this time in particular, there was a wave of nationalism resulting from the unification of Germany under the leadership of Prussia and the military success of the country. This nationalist movement found the expression in the fine arts of Germany including the architecture. The nationalism of this time in Germany can be followed also in the music, in particular in the works of Richard Wagner.

The German architecture of the period of Neo-styles took the form of national German variations of historical styles, as the German "Sondergotik" in the form of Neo-Gothic churches in Hamburg[137], Hanover, and Stuttgart, and in the City Hall in Munich (G.v. Hauberisser)[138], the North German Neo-Romanesque style, using bricks, in the St. Thomas Church in Berlin (F. Adler) or in the City Hall in Berlin (F. Waesemann). The German Neo-Renaissance was used in the design of the City Hall in Hamburg,

displaying exaggerated dimensions, similar to the City Halls in Munich and Berlin, already mentioned[139,140].

Of the buildings in other countries, which had a wider importance in the late Romantic period, two have to be mentioned: The Parliament building in Budapest (E. Steindl, 1882) in the Neo-Gothic style and the church Sacré Coeur in Paris (P. Abadie, 1874-87) in the Mediterranean Neo-Romanesque style with Byzantine influences[141].

The late Romanticism of the smaller countries of Western Europe expresses the nationalism of the period as well. The buildings were designed with the use of national variations of historical styles.

In this respect the architecture of the Netherlands is the mostly known. The buildings that best display the national trends in the architecture are the Rijksmuseum and the Railway Station in Amsterdam (P.J.H. Cuijpers) built in the Dutch traditional way with a combination of red bricks with the natural stone[142,143,144,145]. The reason for its nationalism can be seen as resulting from the relation of a small nation to a big neighbouring country.

In England some large churches were built in the period of the Late Romanticism, such as Westminster Cathedral in London (J.F. Bentley, 1895), Moorish in appearance and Byzantine in interior[146].

In the buildings of the civic character, apart of the prevailing Neo-Gothic, the Neo-Romanesque style was used.

2.31 ECLECTICISM (1890-1900/1914)

The end of the nineteenth century was the period of technical discoveries and industrial development. Architecture however was in a phase of uncertainty and of unanswered questions as to which style to adopt and what architectural form should be given to the new demands architects had never faced before[147,148]. This final phase of Historicism in architecture is characterised by the wide use of elements borrowed from different historical architectural styles. Elements even from several styles were used on a single building, with the aim to represent, to surprise, to show luxury.

In some countries, the national variations of Eclecticism incorporated elements of the national variations of earlier styles, particularly in Germany. The City Hall and Theatre in Bielefeld or the Bavarian National Museum in Munich can be taken as examples of stylistic borrowing from the German Renaissance[149].

The same process can be seen in Bohemia. In this respect the work of three architects are noteworthy: O. Polívka who designed the Czech National Bank building in Prague (1894-1902) in the style of the Czech

Renaissance[150], B. Ohmann used Czech national variations of different styles in his buildings, the Czech Baroque in the Valter House in Prague and in the Chapel in Kutná Hora, Rococo in the Varieté Theatre in Prague, late Czech Gothic and transitional style to the Czech Renaissance in the Štorch House in Prague or the Baroque in the Kramář Villa in Prague. D. Jurkovič used elements from the Czech and Moravian vernacular architecture in his works, as in the buildings in the spa Luhačovice[151].

From the period of Eclecticism in other countries the following works can be mentioned: In England the Unionist Church in Brighton (J.W. Simpson) and the British Naval College in Dartmouth (A. Webb), in Sweden the Parliament building and the State Bank in Stockholm (Johansson) and the Opera House (Anderberg) in the late Renaissance style. In some other buildings the synthesis of the Gothic and early Renaissance elements can be found. In Russia Eclecticism used elements of the Russian Classicism influenced by the traditional Russian architecture[152,153].

The use of national variations of historical styles in the Eclectic period appeared in countries with strong nationalist movements as e.g. in Germany and Bohemia, and also in England, the Netherlands and in Scandinavian countries as the apparent expression of nationalist sentiments.

2.32 ARTS AND CRAFTS, ART NOUVEAU, JUGEND STIL, SECESSION (1890-1914)

All these movements affirmed, in different countries, the necessity of artistic freedom in a reaction against the use of historical architectural styles, particularly the Eclecticism, i.e. against the last stage of the Historicism.

The predecessor of these movements was the movement Arts and Crafts in England (from 1862). It emphasised the functionality, rejected pseudo-historical forms and demanded the return to the use of natural materials and to the crafts[154, 155].

Other movements appeared simultaneously in the nineties in several countries of Europe, having a similar aim and using similar means of architectural expression, 'L'Art Nouveau' was the name of this movement in France, Belgium and in the Netherlands (in France sometimes called 'Le Moderne Style'), Jugendstil in Germany, Secession in Central Europe, which spread from its centre in Vienna (Viennese Secession)[156] to Bohemia (Czech Secession), to Hungary and partly to Poland, Russia and Northern Italy (there it was called the 'Stile Liberty') and to the countries which are now Yugoslavia[157].

This style, though decorative, replaced the decorative means of the historical styles with a new

kind of decoration derived mainly from nature, e.g. branches, leaves, flowers. Iron structures, if used, were treated in the same decorative way. The decoration was carried out in different materials: iron, glass (plain and coloured), glazed ceramics, stone, etc.

The main representatives of these movements were: William Morris - Arts and Crafts movement in Britain[158], V. Horta - Belgium, O. Wagner, J. Olbrich and B. Ohmann - Austria, the later also in Bohemia, A. Endell - Germany, O. Lachner - Hungary, S. Wyspianski - Poland, M. Vrubel and F.O. Shekhtyel - Russia, L.C. Tiffany - U.S.A., J. Kotěra, J. Fanta, A. Balšánek, O. Polívka, D. Jurkovič - Bohemia[159].

The work of the young Ch. E. Jeanneret - Le Corbusier is in this style. His early designs "were concerned with establishing a representative, local form of Art Nouveau based on the plant and animal forms of the Swiss Jura"[160]. He aimed for a regional form of this style. Later he rejected Art Nouveau under the influence of the ideas of Adolf Loos[161,162].

This style, despite its short duration, was welcome as the first style not using historical styles for its inspiration: "Enthusiasm for it among aesthetes and intellectuals seem to have been coloured by a consciousness of the approaching new century, and a somewhat desperate feeling that the nineteenth century had so far failed to produce a style specially its own"[163,164].

As a national variation the Czech Secession, which developed from the Viennese Secession, is important. The nationalist movement of the Czech Revival found its expression in the architecture of the Czech Secession by using national Czech themes and elements in decorations, which were produced in mural paintings, in sgrafitto, glazed ceramics or in mosaic. In this respect a similarity with the Czech Neo-Renaissance can be expressed[165]. The use of decoration however is entirely in the spirit of the ideas of the Secession.

The most important building of the period of the Czech Secession is the Prague Municipal Building containing a concert hall, several multipurpose halls, restaurants and other facilities related to the social life of the City. This building, erected in 1902-1911 was aimed to have a Czech national character. The authors A. Balšánek and O. Polívka achieved it by using already mentioned means.

In the Netherlands Art Nouveau, under the specific conditions of that country, which included East-Asiatic and Indonesian influences, developed to "a remarkable national style which was very lively but above all decorative"[166]. A paralell can be drawn between the use of decorative elements drawn from the former Dutch colony in the architecture of the Netherlands, and the use of the Egyptian

motifs in France in the Napoleonic era after the victorious Middle-East campaign[67,68].

The further evolution of the architecture in Europe was described by B. Fletcher: "From the end of the century until the war, Europe was a ferment of new ideas in architecture"[69]. It is the period of the beginning of the Modern Movement, the period of search for a new style[170].

Summary of the periods of Classicism and Empire, Romantic Movement, Historicism and Beginning of the Modern Movement (1760-1914)

Classicism evolved from a sobre appearance at the beginning to the decorative style in the later periods, particularly in the Napoleonic era - the Empire style.

From common roots at the beginning, which was the introduction of the classical rules of architectural composition as a reaction to the Baroque and as the expression of the Rationalism, Classicism developed to variations in the countries where it was used. The architecture of the Napoleonic era can be seen as resulting from the intention to create an architecture with a specific appearance, symbolising its period.

In the late period of Classicism decoration was used in the large extent leading in some cases to overdecoration.

In the period of Romanticism at first the elements of other historical styles e.g. Gothic or Baroque were used on Classicist buildings, later the Neo-styles e.g. Neo-Romanesque, Neo-Gothic and Neo-Renaissance became the prevailing modes in architecture.

The nineteenth century, particularly in its second half, was the period of the nationalism in Europe. The expression of this nationalism led to the national Neo-styles, in which the national variations, that had developed in the historical styles in the different countries of Europe, were used anew. In this sense Gothic was proclaimed as the national style in England, France and Germany[171], but by this was meant however the particular national variation of Gothic.

The period of the Neo-styles developed at the end of the 19th century into Eclecticism in which elements of different historical styles were selected and used on one building. Even in this period national variations appeared in the way those elements of the national variations of past styles were used, as the expression of nationalist movements or sentiments in the countries concerned. National variations of historical styles were deliberately used to give an unmistakeably national appearance to the buildings.

The use of national variations of historical styles in the period of Neo-Styles and in the Eclecticism is of a great importance to this study. Taking the

examples as "pars pro toto", it is possible to say that e.g. the English Gothic or the German "Sondergotik" in the 15th Century and the same English Gothic or the same German "Sondergotik" used in the 19th Century, although identical in form, are not the same in respect of their origin and their purposes for which they were used.

The 15th Century forms were the result of spontaneous evolution of a style into national variations in the specific conditions of the countries. The same forms used in the 19th Century are alike only in their appearance, qualitatively they are different, their shape resulting not from the evolution of the style, but being a copy of a previous style with the deliberate and outspoken aim of expressing the national character in the architecture.

The period is neatly summarised by G. Germann: "The people living at this time were preoccupied with the problem of personal and national identity"[172]. The reflection of it can be seen in the architecture of the period.

The end of the 19th century gave birth to the decorative style which had different names in different countries: The Arts and Crafts Movement, Art Nouveau, Jugend Stil, Secession. It was a reaction to the previous periods, where the motifs were taken from earlier styles, and developed decorative elements from

nature particularly branches, leaves, flowers etc. In this style, despite its short duration, national variations can be found, resulting from a deliberate desire in each nation to impart a national appearance to its buildings.

The end of the 19th century till the First World War was the period of the Beginning of the Modern Movement.

2.40 SUMMARY OF THE EVOLUTION OF HISTORICAL STYLES AND THEIR VARIATIONS

2.41 DECREASE OF THE LIFETIME OF ARCHITECTURAL STYLES

The duration of architectural styles, generally speaking, has decreased in the course of history. The oldest styles lasted for centuries (Egyptian architecture even for thousands of years), the more recent styles have lasted for only short periods e.g. the Classicism, Romanticism and Historicism only about one century, the movements Arts and Craft, Art Nouveau, Jugendstil, Secession only some few decades.

2.42 SPREAD OF ARCHITECTURAL STYLES

The older architectural styles i.e. the Romanesque, the Gothic, the Renaissance and the Baroque originated in one country - the first two in France, the later two in Italy - and spread to other countries. The time of the beginning of the styles therefore differs

from country to country and is later in comparison with the country of origin. The phases of evolution also differ in time.

2.43 LEADING COUNTRY IN THE EVOLUTION OF THE STYLES

The country of origin is the leading country during the period of the spread of the style, and starts its evolution. This country either retains the leadership, or another country can become the new leading country either entirely (as France took over the leadership from Italy in the latest phase of the Baroque), or partially in the sphere of its cultural influence. Some countries developed the style later themselves, in their conditions, independently from the developemnt of the style in the country of origin (as England did in the Gothic period or France in the Renaissance). These national variations of the styles have sometimes a very specific character.

2.44 EVOLUTION OF THE ARCHITECTURAL STYLES

All the "big" or "healthy"[173] architectural styles, i.e. the important styles in the history of architecture, underwent a similar evolution from their beginning through the Early period, the High (Mature) period with the peak, the Late period to their end which can be either abrupt or with a transitional period to the next style.

The only exception was the Romanesque style which had no late period, being replaced suddenly in its High period by the Gothic. There was however the transitional period from the Romanesque to the Gothic style.

2.45 CHARACTERISTIC TRAITS OF THE STAGES IN THE EVOLUTION OF ARCHITECTURAL STYLES

The principles on which the architectural style is based (structural, aesthetic including the emotional intention to be achieved etc.) are subordinate to the development which can be characterised as follows:

a) - Early period: Simple, structural, usually more massive. Basic principles of the style appear.

b) - High period with the peak period of the style: Full development of the principles of the style. Vigorous appearance. The structure, if it forms a substantial emphasised part of the building, is developed to the boundary of its possibilities.

c) - Late period: Loosening of principles and of rules. Decorative appearance. Distortion of structural and other elements. The structure is used in a decorative way and sometimes is used against its own structural logic. The Late period is sometimes called the "Baroque period" of the style (e.g. the "Roman Baroque" or the

"Baroque period of the Gothic style", the Baroque style itself being virtually the Late period of the evolution of the Renaissance). The first part of the Late period is still creative and produces architectural works of a high value. The last part is characterised by a loss of the creative vigour.

2.46 NATIONAL VARIATIONS IN THE EVOLUTION OF HISTORICAL ARCHITECTURAL STYLES AND THEIR CAUSES

At the beginning of every historical architectural style, it was uniform in the country of origin and in the first phase of its spread to other countries. It can be said that the style is at the beginning universal or cosmopolitan (within the limits of its influence and use).

In the course of its use, in the specific conditions of different countries, deviations from the original appearance of the style develop[174]. This phenomenon can already be detected in the later part of the Early stage. In the High period these national variations are established. Within their frame regional or even local differences can appear. National variations are mostly more distinct in areas more remote from the country of origin or from the country having the leading position in the evolution of the style.

The evolution of national variations is

influenced not only by such factors as specific materials locally used or climatic conditions which are different from the country of origin, but also by the differences in the character of the nations, their customs, way of life, attitudes, way of thoughts and by the "cultural climate" and "spirit of the time" in the countries. "The fine arts live from the exchange, but the importations are adapted fast to the spirit of the country that accepts them"[175].

These developed deviations from the original style can become the part of the national cultural heritage. The best known examples of this are the English Gothic[176] and the French Renaissance. All the "big" styles developed national variations. Their strength and specific character in the countries, where the style was used, differ sometimes very substancially from the original appearance of the style.

This kind of national variations, that developed spontaneously, is the normal phenomenon in the evolution of the architectural styles[177].

On the boundary of the normal spontaneous evolution of the style and of the intentional variation is the evolution of the Classicism in the Napoleonic era into the Empire style. It is an open question whether to interpret this phenomenon as the natural evolution of the style under the given circumstances of the

period or whether and to what extent this evolution was deliberate. The spontaneous evolution of architectural styles into national variations can be observed in every style and is a phenomenon related to its natural evolution in specific conditions of the countries.

National trends in architecture with the explicit aim of giving a specific national character to buildings can be observed in the architecture of several countries in the Romantic period in the nineteenth century. This was the period of the nationalist movements in Europe.

The reasons for the nationalism and for its expression in the architecture can be traced in the history of the countries concerned.

Examples showing a distinct expression of nationalism in the architecture, used as representatives:

Germany: Nationalist movement of a nation politically divided into small states, which led to the unification of Germany and later to expansionism at the end of 19th century (war with France).

The Netherlands: Nationalism of a small nation that faced in its history the occupation of the country by Spain and the menace from its powerful eastern neighbour towards the end of the nineteenth century.

Bohemia (the western part of what is now Czechoslovakia):

> Nationalist movement in 19th century related to the Czech National Revival and to the struggle of the Czechs for independance from the Habsburgs' Austro-Hungarian Monarchy. The aim was to show in the architecture as in other activities, the national identity, culture and character[178].

In tracing the causes that lead to the rise of intentional national variations in the architecture, it can be observed that this kind of variations is related to the periods of nationalism in the contries concerned.

It is a generally recognized fact, that the events in the history of the nation reflect in its culture[179]. In this respect, the intentional national variations of architectural styles have to be recognised as being the expression of the nationalist movements in the nation in the field of its architecture. The best term to express the nature of this architecture would be probably "Nationalist Architecture".

However in these periods not all the buildings were built, in the countries concerned, in accordance with the intentional national variations. It can be observed that the use of intentional national variations is larger and the proportions of the number of buildings having its character is bigger in the countries with a stronger nationalist movement than in the others.

Looking into the origins of nationalist movements, it can be seen that they are generally two different types:

a) The first generated in time of danger to the nation or its oppression, which continues in the period after it[180,181] i.e. in relation to the negative period of the history of the nation (as for example the Netherlands and Bohemia),

b) or the opposite, i.e. in the time of success and glory of the nation as an expression of the succesful, i.e. of the positive period of the history of the nation, taken from the point of view of the nation concerned (as the mentioned examples of England and of Germany in the 19th Century).

The appearance of intentional national variations in the architecture, with the purpose to create the buildings having the national character, is a phenomenon qualitatively different and independant from the spontaneous evolution of architectural styles to national variations.

Intentional national variations are apparent only in some styles. Because of the intentional aim to express the national identity in architecture, they are phenomena which are not related to the natural evolution of the styles. They can appear even in the earliest stage of the style.

2.50 NOTES TO CHAPTER II

1 "The incentive to build was initially an outcome of what has been called the Neolitic Revolution: a point of transition in the changing pattern of human behaviour, at which the tribal organisation of hunters and cave dwellers was discarded in favour of better co-ordinated agricultural communities". - "It is probable that the development began to take place soon after 10,000 B.C." - Lloyd, S. et al (1974), p. 9

2 "For we shall see that the Greek masters went to school with the Egyptians, and we are all the pupils of the Greeks. Thus the art of Egypt has a tremendous importance for us". - Combrich, E.H. (1970), p. 33

3 Classicism and Empire Style, Neo-Styles (Romanticism) and Eclecticism are subdivided in the later part of this study into four Chapters 2.28 to 2.31

4 Syrový, B. et al (1977), p. 30

5 Lakomý, Z. et al (1967), p. 19

6 Op cit Lloyd, S. et al (1974), p. 75

7 See Chapter 1.63

8 Levey, M. (1974), p. 21

9 Ibid p. 23

10 Op cit Syrový, B. et al (1977), p. 38
Note: Lloyd, S. et al (1974) indicates the reign of Akhnaton 1365-1349 B.C. Quotations 9 and 10 indicate the differences in information, contained in different sources.

11 Op cit Lloyd, S. et al (1974), pp. 116, 158

12 "In the Old Kingdom the obelisk is relatively thick in shape; in the Middle Kingdom and particularly in the beginning of the New Kingdom it became more slender and was made a feature of the architecture, generally paired in front of the pylons of the Temple". - Op cit Lloyd, S. et al (1974), pp. 102, 115

13 The evolution of the form of the columns in Ancient Egypt is described in the literature by several authors e.g. Ibid p. 120 or Op cit Lakomý, Z. (1967), p. 19

14 Op cit Lloyd, S. et al (1974), p. 167

15 Hoar, F. (1967), p. 7

16 Op cit Lakomý, Z. et al (1967), p. 35

17 "The conquest of Alexander established ties with the Orient which found expression in the luxurious palaces and theatres for the new capitals. The transition to this period is marked by the splendid Temple of Alea in the Peloponese, by the sculptor Scopas. All three orders were used here, the peristyle in Doric, the interior columns Ionic and Corrinthian". - Op cit Hoar, F. (1967), p. 18

18 "We mostly refer to this art of the later period not as a Greek art, but as a Hellenistic art, because that is the name given to the empires founded by Alexander's successors on eastern soil". - Op cit Gombrich, E.R. (1970), p. 73

19 Op cit Lloyd, S. et al (1974), p. 358

20 Ibid p. 348

21 Op cit Lakomý, Z. et al (1967), p. 27

22 Op cit Levey, M. (1974), p. 53

23 Op cit Hoar, F. (1967), p. 13

24 Op cit Lloyd, S. et al (1974), p. 193

25 Op cit Hoar, F, (1967), p. 22

26 Pevsner, N. (1961), p. 16

27 Ibid p. 16

28 Op cit Syrový, B. et al (1977), p. 273

29 See criteria for the "Selection of Historical Styles for the Study", Chapter 2.10

30 De Caumont, A. wrote in his 'Essai sur l'architecture réligieuse du moyen âge, particulièrement en Normandie': "Buildings in our province had semicircular arcades, in which we are able to recognize a debased form of Roman architecture, and which I propose to call the Romanesque genre". - Germann, G. (1972), p. 45

31 Op cit Syrový et al (1977), p. 135
Op cit Lakomý et al (1967), p. 42

32 Op cit Hoar, F. (1967), pp. 43-44

33 Ibid p. 49

34 De Caumont, A. (1823), mentioned by Op cit Germann, G. (1972), p. 46

35 Op cit Pevsner, N. (1961), p. 282

36 Op cit Hoar, F. (1967), p. 89

37 "Ce qui fait la originalité des églises gothiques, ce n'est ni le plan ni l'élévation, c'est le mode de construction et les formes qui en résultent". - Hautecoeur, L. (1950), p. 79

38 Op cit Levey, M. (1974), p. 88

39 Ibid p. 90

40 Fletcher, B. Sir (1975), p. 588

41 Op cit Germann, G. (1973), p. 46

42 "Yet the vaults of English cathedrals show an equal addiction to extremes, not of height but complexity. The architects seem to delight in constructing a web of ribs, now fanning out, now clustering in star-shapes. Increasing virtuosity of effect turned what was originally something which marvellously defied gravity by soaring upward into something no less gravity-defying and marvellous: a pendant-vault, like that at Christ Church, Oxford Cathedral, where the miracle seems to consist in the whole structure being suspended in space - forever dropping and forever held like a canopy over the choir. That was built in 1478, when the Gothic style in England had gone through the permutation hoops set up by architectural historians - Early English, Decorated, Perpendicular - and even then had not reached the firework brilliance of Henry VII's chapel in Westminster Abbey". - Op cit Levey, M. (1974), p. 94

43 Fletcher, B. Sir (1975), p. 637

44 Atkinson, T.D., using the term 'local variations', mentions the main factors, determining in his opinion the evolution of local variations in the English architecture, as follows: Geology and Geography, Race, Religion, the Foreigner (without regard to his activities e.g. as conqueror, as a missionary or as a monk), Wealth, Transport, Fashion (the fashion is meant as the 'common human tendency to copy our neighbours'). - Atkinson, T.D. (1947), pp. vii, 56, 75

45 This royal oratory is described by Knox, B. as "a bulging balcony spattered with twigs". - Knox, B. (1965), p. 25, pl. 76

46 Germann, G. mentioning Bramante's memorandum from 1510. - Op cit Germann, G. (1972), p. 28

47 Op cit Levey, M. (1974), p. 90

48 Filarete, a conceited Italian architect and sculptor, used as first in the Renaissance period in Italy the nickname "Gothic" for this style, considered to be the creation of the Gothes, the barbaric Germanic tribe. - Op cit Syrový, B. et al (1977), p. 158

49 See paragraph 2.25 - "Gothic" of this study

50 Op cit Germann, G. (1972), p. 28

51 Op cit Hoar, F. (1967), p. 124

52 Op cit Fletcher, B. Sir (1957), p. 787

53 "What is usually called the High Renaissance style was almost an Italian creation; it remained Italianate even when disseminated through Europe, and was indeed carried there by expatriate Italians". - Op cit Levey, M. (1974), p. 160

54 Some examples from Bohemia are published in B. Knox' book 'The Architecture of Prague and Bohemia', e.g. the castles in Litomyšl (1568-75) pl. 32 a, Opočno (1560-67) pl. 32 b, Jindřichův Hradec (1580) pl. 44 d, Bučovice (1566-87) pl. 51 a. - Op cit Knox, B. (1965)

55 Op cit Lakomý, Z. et al (1967), p. 59

56 Op cit Hoar, F. (1967), p. 151

57 Hamlin, T. (1947), p. 211

58 Lavedan, P, (1956), p. 179

59 "Ils (les decorateurs) traduisent le décor italien en language français". - Op cit Hautecoeur, L. (1950), p. 105

60 Op cit Syrový, B. et al (1977), p. 206

61 Op cit Hoar, F. (1967), pp. 154-155

62 Op cit Syrový, B. et al (1977), pp. 225-226
Op cit Fletcher, B. Sir (1975), p. 782

63 "The High Renaissance is full, Mannerism is maigre". - Op cit Pevsner, N. (1961), p. 340

64 Ibid p. 340

65 Op cit Syrový, B. et al (1977), p. 273

66 Ibid p. 275

67 Some historians of architecture do not consider the Baroque to be a real architectural style but merely the late period of the Renaissance and even Classicism as an 'Antiquarian' trend in the evolution of the Renaissance: "The Renaissance in Italy may be divided broadly into three main periods, viz:

Early Renaissance - fifteenth century
High Renaissance and Proto-Baroque - sixteenth century
Baroque - seventeenth and early eighteenth centuries

Thereafter, from c. 1750-1830, the Renaissance follows an 'Antiquarian' trend". - Op cit Fletcher, B. Sir (1975), p. 782

68 Op cit Syrový, B. et al (1977), p. 275

69 "It was only after Mannerism had completed its course that a new generation at the beginning of the 17th century, especially in Rome, tired of the forced austerity of the late 16th, rediscovered Michelangelo as the father of the Baroque". - Op cit Pevsner, N. (1961), p. 383

70 "In the hands of such sculptors as Michelangelo, architecture assumed a plastic formation, and the unity of painting, sculpture and architecture produced the Baroque, with its overwhelming appeal to the senses". - Op cit Hoar, F, (1967), p. 8

71 Op cit Fletcher, B. Sir (1975), p. 973

72 Louis Hautecoeur mentions the differences in the understanding of the term 'Baroque' by the historians: "Le baroque pour les uns est l'art de la Contre-Réforme, pour l'autres l'art de la fin du XVIe et du XVIIe siècles, pour d'autres encore c'est l'expression d'un état d'esprit". - Op cit Hautecoeur, L. (1950), p. 110

73 Op cit Knox, B. (1965), p. 48

74 The High Baroque in its dynamic stream corresponded to the "spirit of the time" in several countries: "High Baroque flourished in parts of Spain, Northern Italy and Bohemia long after it had died in Rome".- Jencks, Ch. (1980), p. 188

75 Op cit Knox, B. (1965), p. 131

76 Ibid p. 141

77 Ibid plates 57a,b; 58a,b; 59a,b
Op cit Syrový, B. et al (1977), p. 326

78 Ibid p. 328

79 Op cit Knox, B. (1965), p. 132

80 Op cit Syrový, B. (1977), p. 326

81 Lectures of Dr. V.V. Štech, Professor of the History of Fine Arts at the Caroline University in Prague

82 Op cit Hoar, F. (1967), p. 18

83 Named after the founder of the style Don José de Churri-Guera (1650-1723)

84 Op cit Hoar, F. (1967), p. 18
Op cit Syrový, B. et al (1977), p. 286

85 Ibid p. 287

86 Hamlin, T. (1947), p. 116

87 Op cit Pevsner, N. (1961), p. 412

88 Lavedan, P. (1956), p. 133

89 Op cit Fletcher, B. Sir (1975), p. 877

90 Ibid p. 877

91 Ibid p. 877

92 Op cit Hoar, F. (1967), p. 8

93 Op cit Fletcher, B. Sir (1975), p. 979

94 Ibid p. 982

95 Ibid p. 878

96 Ibid p. 878

97 Ibid p. 878
Op cit Syrový, B. et al (1977), p. 276

98 Op cit Fletcher, B. Sir (1975), p. 878

99 Op cit Pevsner, N. (1961), p. 383

100 Different dates of periods can be found in different authors. In this study B. Syrový's indications are followed

101 Op cit Syrový, B. et al (1977), p. 342

102 Ibid, p. 343
Op cit Lakomý, Z. et al (1967), p. 87

103 Op cit Hoar, F. (1967), p. 206

104 Ibid p. 206

105 Ibid p. 207

106 Op cit Fletcher, B. Sir (1975), p. 878

107 Op cit Syrový, B. et al (1977), p. 344

108 "The long predominance of Italy in European architecture had come to an end well before the nineteenth century. No Italian architect of note arose after Piranesi, as Paris became the centre of influence, and architects turned to England and Germany for structural innovations". - Op cit Hoar, F. (1967), p. 217

109 Op cit Syrový, B. et al (1977), p. 349

110 "On the fall of Napoleon, the Congress of Vienna (1814-1815) had tried to impose upon Europe its previous political structure without regard to the new feelings of nationalism stimulated at least in part, by the internationalist system enforced by Napoleon, while memories of 1789, with its intoxicating idals of liberty, fraternity and democracy, were impossible to erase". - Op cit Fletcher, B. Sir (1975), p. 1187

111 Op cit Germann, G. (1972), p. 22

112 Hitchcock, H.R. (1958), pp. 113-114

113 Op cit Syrový, B. (1977), p. 350

114 Chapter 2.27 of this study

115 Op cit Syrový, B. et al (1977), p. 350

116 J.B. Papworth discussed the question of a new style in his article 'On a National Style of Architecture' in 1822: "With us, a fine national style of architecture can only result from works designed with British feeling by men of genius, well grounded in the principles on which the ancient architects executed the finest specimens of art". - Op cit Germann, G. (1972), p. 66

117 "The first and most important Gothic Revival building to be constructed under nationalistic impulses was the Palace of Westminster, built after the fire destroyed the original building in 1834". - Collins, P. (1965), p. 101

118 A.W.N. Pugin considered the Gothic architecture as the national English architecture: "Another objection to Italian architecture is this, - we are not Italians, we are Englishmen. God in his wisdom has implanted a love of nation and country in every man, and we should always cultivate this feeling". - Pugin, A.W.N.: The True Principles (1841), p. 56, Op cit Germann G. (1972), p. 71

119 The following reasons were given for the choice of a Gothic Building by the parliamentary Committee for the reconstruction of the House of Parliament: "The peculiar charm of Gothic architecture is in its associations; these are delightful because they are historical, patriotic, local and intimately blended with early reminiscence". - Ibid p. 67

120 "The peak period of nationalistic Gothic Revivalism in England was 1857-9, when Sir George Gilbert Scott delivered the official lectures at the Academy". "The last great monument of the folly of the nationalistic Gothic Revival was the Law Courts in London, for which a limited competition was held in 1867". - Op cit Collins, P. (1965), p. 104

121 Op cit Germann, G. (1972), p. 188

122 The appreciation of the importance of the Cristal Palace in the evolution of architecture from historical forms to the New Architecture is expressed in R. Macleod's 'Style and Society'. He mentions the view of Robert Kerr, who considered the 1851 International Exhibition as the starting point of the further evolution, as he writes in his introduction to the 1891 edition of James Fergusson's 'History of the Modern Styles of Architecture', mentioning the reasons for this claim. - Macleod, R. (1971), pp. 78-79

123 Whittick, A. (1950), pp. 65-66

124 Op cit Germann, G. (1972), p. 27

125 Ibid p. 151

126 Ibid p. 151

127 Gothic architecture was considered to be the German art. In this spirit J.W. v. Goethe proposed for it the name "Die Deutche Baukunst". - Ibid p. 89

128 "It came therefore as a rude shock to the Germans when they discovered in 1842 the striking similarity between the Cologne Cathedral and the French Cathedral of Amiens, and learned that the Amiens Cathedral was built earlier".- Ibid p. 151

129 Ibid p. 42

130 Op cit Syrový, B. et al (1977), p. 355

131 "To generalize it can be said that during this phase France maintained her leadership in both academic and innovatory architecture, Prussia and Italy tended to follow her in the former, while in Austria and Southern Germany a wide eclecticism prevailed". - Op cit Fletcher, B. Sir (1975), p. 1192

132 The main theoretical work of G. Semper is the book 'Der Still' (i.e. The Style) bearing the subtitle 'The Practical Aesthetics'. He considered architectural work as the unity of function, material, environment and the individual character of the architect. He required function to be the basis for architectural form. - Op cit Syrový, B. et al (1977), p. 359

133 Op cit Hoar, F. (1967), p. 215

134 Op cit Syrový, B. et al (1977), p. 362
Lectures of Prof. V.V. Štech, see Note 81

135 See Chapter 2.26 - Renaissance of this study

136 Op cit Syrový, B. et al (1977), p. 363

137 The Commission for the design of St. Nicholas' Church in Hamburg was given to the English architect Sir George Gilbert Scott, winner of the competition held in 1848. - Op cit Germann, G. (1972), pp. 99, 103
G.G. Scott used the elements of the German "Sondergothic" in his design.

138 "Although Gothic did not achieve (in Continental Europe) the popularity it had in contemporary Britain, there was a growing interest in the style, which, as in England, was seen as having strong national associations, particularly in Germany". - Fletcher, B. Sir (1975), p. 1190

139 Op cit Syrový, B. et al (1977), pp. 363, 364

140 "The German Empire, following its unification by Otto von Bismarck, produced a spate of ponderous and somewhat menacing buildings that conform in spirit to the earnest and rigid military atmosphere prevailing throughout the country up to the time of the First World War". - Op cit Hoar, F. (1967), p. 216

141 "In Germany and in France towards the end of the nineteenth century, the more favoured styles were the Romanesque and the Byzantine". - Ibid p. 198

142 Op cit Syrový, B. et al (1977), p. 364

143 "In Holland and in Scandinavia, inspired by the mediaeval examples and the ideas of Viollet-le Duc, there was a movement towards a less pretentious, more humane and at the same time national architecture. In both cases brick, which was the traditional material of the regions, was extensively used. Initiated by P.J.H. Cuijpers (1827-1921) and developed by H.P. Berlage (1856-1934) in Holland, and represented by Martin Nyrop (1849-1923) in Denmark, Ragman Osterberg (1866-1945) in Sweden and Eliel Saarinen (1873-1950) in Finnland, the movement had an affinity with the contemporary British vernacular revival". - Op cit Fletcher, B. Sir (1972), pp. 1192, 1193

144 "He (P.J.H. Cuijpers) was an architect who, while carefully following the footsteps of Viollet le Duc, at the same time sought Dutch elements, particularly from the Netherlands Renaissance period". - Blijstra, R. (1960), pp. 8, 9

145 "(In the Scandinavian development). What has been called 'National Romanticism', rooted in the cultural climate of the eighties, had a briefer span in Denmark than in Sweden". - Op cit Hitchcock, H.R. (1958), p. 395

146 Op cit Syrový, B. et al (1977), p. 364

147 Op cit Lakomý, Z. et al (1967), p. 96

148 "Never had any era produced such a proliferation of styles, forms, and building types for such diverse purposes and with such mutually contradictory ideals". - Op cit Macleod, R. (1971), p. 123

149 Op cit Syrový, B. et al (1977), p. 367

150 Lectures of Prof. V.V. Štech, Caroline University, Prague. The requirement of the client was to give an unmistakeably Czech character to the building of the Czech National Bank and to introduce a national Czech element into the appearance of the street in the town centre by means of this building. The building was constructed with this intention. See also the note 178.

151 Op cit Syrový, B. et al (1977), pp. 368-369

152 Ibid pp. 367-368

153 Russian Classicism, see Chapter 2.28 "Early and High Classicism and Empire"

154 Op cit Syrový, B. et al (1977), p. 364

155 "The Arts and Crafts movement, in its general sense, can best be described as the broad wave of enthusisam for the minor arts generated by ideas of the association of artistic merit with hand labour, tradition, and materials".- Op cit Macleod, R. (1971), p. 106

156 "L'Art Nouveau was a strong influence in Vienna and among the artistic 'Viennese Sezession' " - Op cit Whittick, A. (1950), p. 46

157 "Even more important for us the reaction against this nineteenth-century eclecticism - a reaction which, in the last years of the century, produced an almost world-wide explosion of originality known variously as 'art nouveau', Jugend-stil', the 'craftsman' movement and so on. It was characterised by a definite, self conscious, and eager revolt against the use of any traditional forms whatsoever". - Hamlin, T. (1947), p. 176

158 R. Macleod calls William Morris the "begetter and prophet of the Arts and Crafts movement" and "the movement's most illustrious figure". - Op cit Macleod, R. (1971), p. 106

159 Op cit Syrový, B. et al. (1977), pp. 390-391

160 Jencks, Ch. (1973), p.21

161 Ibid p. 22

162 "He had absorbed and rejected Art Nouveau and in 1910 he did the same with the nascent German functionalism". - Ibid p. 29

163 Op cit Fletcher, B. Sir (1975), p. 1193

164 K.F. Schinkel in 1830: "Every major period has established its own architectural style, so why do we not try to establish a style for ours? Why should we always build in the style of another period?" - Op cit Germann, G. (1972), p. 9

165 For Czech Neo-Renaissance see Chapter 2.30 of this study

166 Op cit Blijstra, R. (1960), p. 13

167 Architecture of Napoleonic era, see Chapter 2.28 of this study

168 An example of a similar phenomenon, that the victor took over the part of the culture of the defeated country, can be found in the history of West Africa: The Ashantis, after the defeat of king Adinkra, took over the symbols on his armour, taken as their booty, and used them further. The Adinkra-symbols, frequently used in Ghana, became part of the culture of the Ashantis. (The former Ashanti kingdom is part of contemporary Ghana). The above information was given to the author of this study during the time of his appointment at the University of Science and Technology in Kumasi, Ghana.

169 Op cit Fletcher, B. Sir (1975), p. 1193

170 "Now (i.e. in 20th century) at last the architect and the artist are free, and for that freedom much of the credit must go to the brave revolt of the early followers of the 'art nouveau'." - Op cit Hamlin, T. (1947), p. 177

171 Op cit Germann, G. (1972), p. 184

172 Ibid, p. 184

173 Term used by Pevsner, N. (1961), p. 687

174 "Though all healthy styles of the past have begun internationally, they have all assumed decided national characteristics in the end, the Perpendicular in England as against the Sondergotic in Germany, the style of Delorme in France as against that of Burghley House in England". - Ibid p. 687

175 "Les arts vivent d'échange, mais les importations sont rapidement adaptées à l'esprit du pays qui les reçoit". - Op cit Hautecoeur, L. (1950), p. 105

176 "The great periods of local style were the fourteenth and fifteenth centuries in church architecture and the sixteenth and first half of seventeenth in domestic". - Atkinson, T.D. (1947), Introduction

177 "In every case the architects have copied past forms as well as they could, when these forms seemed beautiful; in every case, nevertheless, architectural styles grew up inevitably national, inevitably expressive of the contemporary life". - Op cit Hamlin, T. (1947), p. 212

178 The late Dr. V.V. Štech, Professor of the History of Art at the Caroline University in Prague, described in his lectures this period from the own experience as well as from the experience of his father, the

Curator of the Municipal Museum in Prague. In this period of Czech National Revival each single building played an important role in the aim to achieve the Czech character of Prague, the Metropolis of the Czech nation.

179 Quotation, page ii of this study

180 According to the experience of the author of this study, the aim to express the national identity and the national culture was still alive in the Czech nation in the late twenties of this century, i.e. several years after the liberation and declaration of the independant state in 1918. Nationalism was expressed e.g. by often wearing of national costumes at solemn occasions or by national ornaments applied on dresses for every day use.

181 In the countries that have been under colonial rule, strong nationalism can be observed up to today, several years after gaining independance.

3.00 CHAPTER III - "NEW ARCHITECTURE" - "MODERN ARCHITECTURE"

3.10 VARIATIONS IN THE EVOLUTION OF THE "NEW ARCHITECTURE" - "MODERN ARCHITECTURE"

After the transitional period of the "Avant-guarde", which can be described as the search for a new style[1], the "Modern Architecture", called sometimes simply "Modern" or the "New Architecture", crystalised and developed into an international, cosmopolitan style.

In contrast with previous decorative architectural styles, the use of the ornamental decoration was not only neglected but even condemned in the early stage of the style. One of the leading architects of this period A. Loos expressed this trend: "The way of the culture is from the ornamental to the ornamentless"[2], rejecting ornament as a "crime"[3,4]. With his ideas he is the precursor of the "Purism", one of the streams of the early stage of the "New Architecture".

The proponents of the main streams in the "New Architecture" express their basic view and the areas of their emphasis as:

- Purism
- Functionalism[5,6] and its split
- Constructivism, architecture based on constructional laws, emphasising the aesthetics of the structure in the architecture.

The names of several outstanding architects are connected to the evolution of the "New Architecture" in its early stage. The leading personality of Purism and Functionalism was undoubtedly Le Corbusier (his own name Charles-Edouard Jeanneret). In 1921 he wrote the manifesto of Purism in architecture. In 1927 he formulated the theoretical and artistic basis of 'Functionalism' in five principles of the new architecture. Le Corbusier influenced the evolution of the "New Architecture" as much as any other architect and therefore the evolution of himself as an architect and of his architectural work has to be taken as being of the highest importance in considerations of the evolution of the "New Architecture" as an architectural style. He is the most eminent representative of the "New Architecture"[7,8].

Even Frank Lloyd Wright, the eminent architect of extreme creative ability, despite his considerable large impact on the evolution of the "New Architecture", did not have the global influence of Le Corbusier.

Constructivism, that is the stream in which the structure is treated in an aesthetical way thus forming the basis for the architectural appearance of the building, has its most outstanding exponent in Mies van der Rohe. Among his early works the German Pavillion for the International Exhibition in Barcelona 1929 is considered to be the "masterpiece of his European career"[9]. His next work, the Tugendhat house in Brno in Czechoslovakia built in 1930 "was one of the most uncompromising statements of the new architecture"[10].

The "New Architecture" had roots and developed simultaneously in several countries under their mutual influence. Some small countries played an important role in this process, the Netherlands (architects H. van de Velde, J.J.P. Oud) and Czechoslovakia (J. Fragner, K. Honzík, O. Tyl, J. Fuchs) whose buildings stimulated world wide interest in their time.

In the thirties of this century the "New Architecture" or the "Modern" could be observed already as an established international cosmopolitan style.

The milestone in the evolution of the "New Architecture" was the creation of the 'CIAM - Congrès Internationaux d ' Architecture Moderne ' with its programme of the international architectural style, proclaimed in 1928. The CIAM met nearly every year. Among other proclamations was the Charter of Athens of 1933 with its declaration of principles for the new functional structure of the town, which was of a far-reaching importance.

In the U.S.A., practically independant of Europe, a centre of the "Modern Architecture" developed. The biggest influence on its creation can be attributed to the founder of the American "Modern" Frank Lloyd Wright.

In Europe, Le Corbusier and the "Bauhaus" in Germany played the leading role. The closing of the "Bauhaus" in 1933 contributed indirectly to the spread of the "New Architecture". Under political pressure the leading architects of the "Bauhaus" moved to other countries [11], and became tutors at the universities. The activity of Mies van der Rohe as the Director of the Illinois Institute of Technology in Chicago[12,13] and of W. Gropius as the Head of Department of Architecture at Harvard University in the U.S.A. are of the highest significance. Marcel Breuer, the "Bauhaus" tutor also moved to Harvard University[14].

These architects from the former "Bauhaus" influenced in a decisive way the programme of education of architects in American universities from the thirties and through their activity, the evolution of the architecture in the U.S.A.

The U.S.A. took over from Europe the position of the leading country of the "New Architecture" and influenced its spread to other countries of the American continent[15].

The thirties are also significant in another way for the purpose of this study as the beginning of the adjustment of the "New Architecture" to different local conditions, in the first place climatic, but also cultural. As examples the following buildings can be mentioned: Ministry of Education

in Rio de Janeiro, Brazil (L. Costa, J.M. Moreira, O. Niemeyer and A.E. Reidy, 1937-1943), the Governmental Hospital in Haifa (Israel) and the Medical Centre of the University in Jerusalem (E. Mendelsohn, 1936-38)[16].

The adjustment to more adverse climatic conditions than those mentioned, as well as to cultural traditions, could be observed during the thirties in the countries of Northern Europe, that are in a relatively isolated geographic position.

In the Nordic countries the "New Architecture", under the Functionalist influence, evolved as a synthesis with the Scandinavian building tradition, which is characterised by the sensitive relation of the buildings to the landscape and respecting the specifics of the Nordic climate and traditional building materials.

The architects who worked in this were:

Sweden: E.G. Asplund in the thirties, S. Backström and L. Reinius in the forties and fifties - highrise buildings in visible red burnt bricks, S. Markelius - Concert House in Hälsingborg 1932. The last three named architects are authors of the design of the satelite town Vällingby near Stockholm (1953).

Denmark: K. Fisker, Ch. F. Moller and P. Stegman - University and living houses in Arhus 1931-38, A. Jacobsen - Group of dwellings Bellavista at Copenhagen (1930) and a large number of later works, particularly in the field of housing.

Finland: A. Aalto - Library in Viipuri 1927-35, Sanatorium in Paimio 1929-33, with the architect E.W. Bryggmann the Chapel

in Turku (1938-41), and the architects E. Huttunen, P.E. Blomstedt and V. Revell, who are representatives of the contemporary Finish architecture. A. Aalto's later works reached world fame, particularly in his consistent attempt "to humanize the mechanical forms of different materials"[17].

During the thirties, in those countries of Europe, which had dictatorial governments, the ideas of the functionalist "New Architecture" were suppressed[18,19].

In the then Nazi Germany and Fascist Italy, the political parties, that had the decisive power over all aspects of the life of the two countries required the architecture to be the image of the "Third Reich" or of the new "Imperio Romano", proclaimed in Germany and Italy respectively. The result was the official architecture of these countries, that can be described as schematic academicism[20] or schematic neoclassicism[21].

These deviations from the "New Architecture", which had already become a world style, are in reality a negation of the "New Architecture". They are national variations restricted in the area of their use solely to the two countries mentioned. They are related to the official nationalist movements of Nazism in Germany and Fascism in Italy and are their expression in the field of architecture.

Their course can be compared with the official architectural styles of the past, e.g. with the architecture of Ancient Egypt or with the architecture of Napoleonic era. They were suddenly interrupted when the official demand ceased to exist, as it was in this case the defeat of the Nazi Germany

and Fascist Italy in 2nd World War.

Another deviation in the evolution of the already international "New Architecture" occured in the thirties, in the architecture of the U.S.S.R. In the period between the October revolution in 1917 till the mid thirties, "Constructivism" was the leading trend in the architecture of the U.S.S.R. Even Le Corbusier was invited and worked for some period in the U.S.S.R. In the thirties, some of Soviet architects became critical of the "New Architecture" and reverted to traditionalism and schematic historicism. Their view got the official support.

The architectural competition for the new Palace of the Soviets was the main turning point. Le Corbusier participated and his design was rejected[22,23].

This trend towards historicism and traditionalism in the arts generally called the Socialist Realism, became the official style. As other official styles, not in conformity with the general evolution and with the "spirit of the age", it ceased suddenly with the ending of official support and demand for it in 1954. The Socialist Realism will be discussed later in a more detailed way.

The further evolution of the "New Architecture" at the end of thirties and in the forties was widely influenced by the 2nd World War. In continental Europe this evolution was practically halted.

In between however the "New Architecture" spread as the international style to the countries of all other

continents. The speed of spread and the extent of the area, where the "New Architecture" was adopted, is an unprecedented phenomenon in the history of architecture, and widely discussed by several authors. Two quotations can be taken as proof of unanimity of the assessment of this:

Nikolaus Pevsner described the evolution of the "New Architecture" in the years 1930-1950, its spread and its international character in the following way:

"Nothing could be more telling of the most spectacular change between 1930 and 1950, the change from a style of pioneers and pioneer countries to a style producing outstanding work all over the world. The Gothic style had been created in Ile de France; it took one full generation to introduce it to England, two or three to introduce it to Germany, Italy and Spain. The Renaissance style had been created in Florence. It took one generation to acclimatize it in Rome and Venice and eighty years and more to introduce it to Spain, France, Germany and England. The style of 20th century, thanks to easier travelling, the spread of cheap printing, and the well illustrated technical press, has been faster. Fifty years after its creation it has its outpost nearly everywhere, and nothing short of a journey round the world can acquaint the critic or the enthusiast with its outstanding or its most sensational achievements. He has to visit Brazil without any doubt, and Venezuela, and Chandigarh in the Panjub, and Japan, and certain educational buildings by English architects in West Africa as well as in Burma. He can sample Le Corbusier at Chandigarh and Berlin, Niemeyer also at Berlin, Skidmore,

Owings & Merill at Istambul, Breuer in Paris, Eero Saarinen in London, Alvar Aalto at Cambridge, Massachusets, and so on. - This increased internationalism - for the new style was of course, like any healthy style, essentially international at its beginning - has been welcomed by some, abused by others"[24].

Similar ideas were expressed by B. Syrový and co-authors:

"The characteristic of the twentieth century is the further acceleration of the cycle of changes in architectural forms". "Classicism needed nearly a full century to conquer the main centres of the European culture and then it survived for a long time as Academicism. Romanticism lived in its Neo-Gothic and Neo-Romanesque form an equally long time. The Eclecticism seized architecture in the course of two decades and for the Secession (Art Nouveau) only ten years were necessary to dominate the Fine Arts and the Architecture on the European Continent, and in this short period it created the first microstyle of the modern age. Architecture based on the Functionalist principles spread over the world in ten years and became the basis of the'International Style'. If we compare this accelleration with the length of the evolution periods of the styles in the last millenium, then this phenomenon is still more remarkable".[25]

The influence of Functionalism and its ideas could already be observed during the thirties in countries outside Europe, in particular in South America, North America and in some countries of Asia as in Japan and India. In these countries deviations from the "International style" developed as the result of the adjustment to specific conditions there.

"In the new architecture of those countries the theoretical concept of Functionalism was soon fused with the customs and methods of their building traditions, which reflected specific conditions of their climate, materials and civilisations"[26].

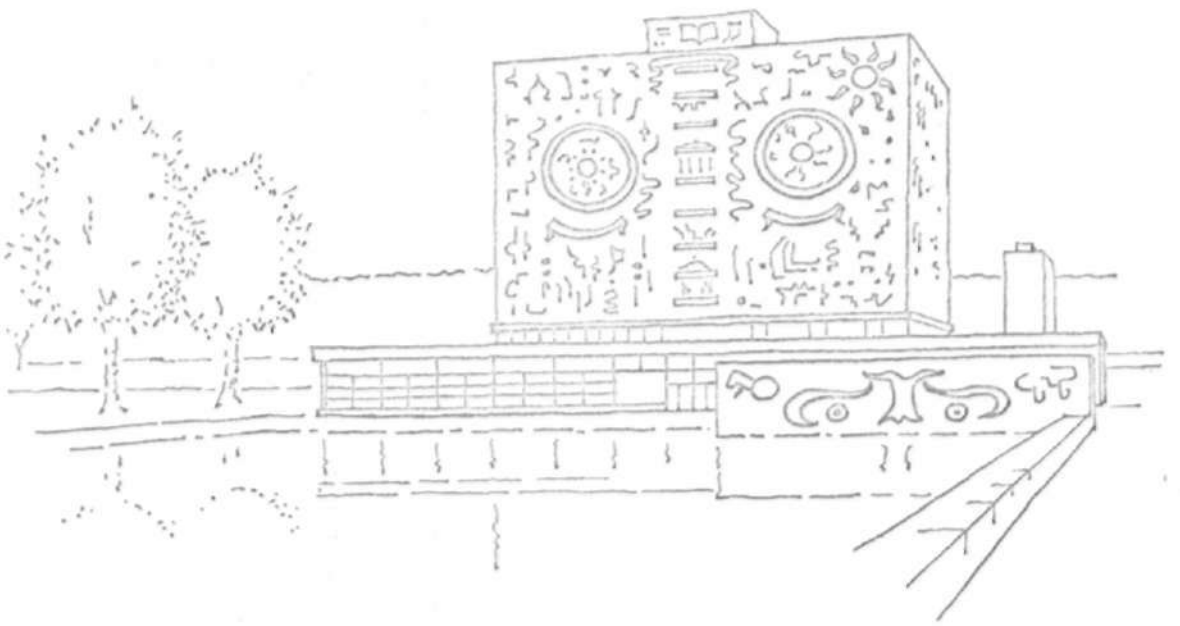
At the end of the thirties, Brazil, Mexico and Venezuela became centres of the use and evolution of the "New Architecture" in South America. The names of architects to be mentioned are: In Brazil L. Costa, J.M. Moreira, O. Niemeyer and A.E. Reidy, in Venezuela C. Dominguez and C.R. Villanueva, and in Mexico J. O'Gorman, J.M. Velasco, G. Saavedra, C. Lazo, M. Pani and E. del Mora[27].

In the "New Architecture" of Brazil, apart from the adjustment to tropical climatic conditions, the new approach to the aesthetics of architectural forms is characteristic. In the architecture of this country the following architectural elements were used: contrasts of plain and decorated areas, three dimensional plastic elevations with extensive use of sunshading devices 'brise-soleils', complicated compositions of basic geometrical forms, aesthetically balanced curves, ornamental mural decorations, frescoes in bright colours - all of them together resulting in surprising effects. In particular O. Niemeyer's work is characterised by the dynamic forms of his reinforced concrete structures. The best example of it is the Church San Francisco in Pampulha (1943)[Ill.2]. This building can be taken as the predecessor of the future stream of the three dimensional dynamic tendencies in the "New Architecture"[28].

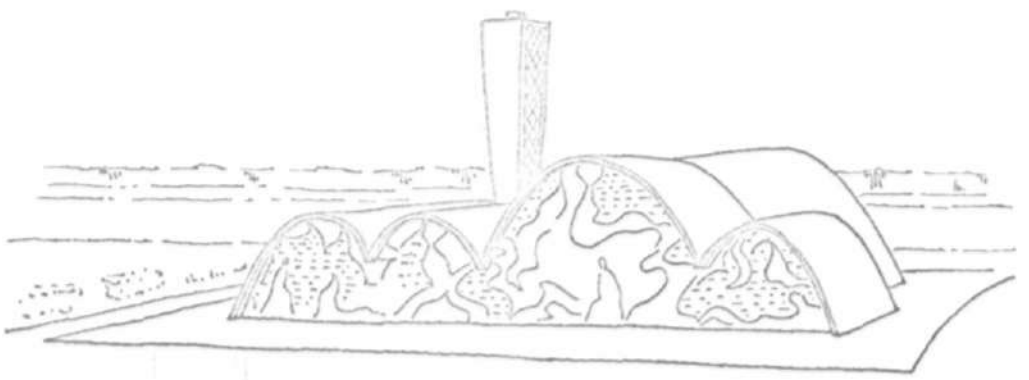
In Venezuela the "New Architecture" is outstanding in the methods of adjustment to the tropical climatic conditions of the country: Its buildings are of the highest aesthetical standard.

The "New Architecture" in Mexico, contrary to other countries of Latin America, took its inspiration in the indigenous national tradition of art and architecture, which can be traced back to the Mayan culture which last from 3rd to 9th centuries A.D. The essential part of this architecture was a highly plastic relief covering the surface of the walls in the form of mural decorations. In an entirely contemporary way, this tradition was interpreted after 2nd World War by the architects J. O'Gorman, J.M. Velasco and G. Saavedra. They designed the University Library in Mexico City (1952)[Ill.1] and other University Buildings in this national variation. The buildings designed by other Mexican architects, public buildings in particular, follow the tradition of Mexican monumental mural decorations, but revived in a different form, e.g. the mosaic (Theatre Insurgentes, City Waterworks), fresco paintings (the interiors of the Hospital Building), the mosaic in the relief form (University Administration Building).

The "New Mexican Architecture" has a really national, typically Mexican appearance which is different from the "New Architecture" of any other country. In this Mexican variation of the "New Architecture" the apparent aim can be seen to express the national identity of the country in the architecture of the buildings. However it has to be mentioned that



1 CENTRAL LIBRARY, UNIVERSITY CITY, MEXICO
J. O'GORMAN, J.M. VELASCO, G. SAAVEDRA 1951-53
MURAL DECORATIONS USED IN A WAY TYPICAL OF ANCIENT MEXICAN ARCHITECTURE



2 CHURCH OF S. FRANCISCO, PAMPULHA, BRAZIL
O. NIEMEYER, 1943
DYNAMIC FORMS OF REINFORCED CONCRETE SHELLS
MODERN ART MURAL DECORATIONS

only some, not all the buildings in Mexico, were designed in this way. The others followed the international stream of the "New Architecture", adjusted to the climatic conditions of the country.

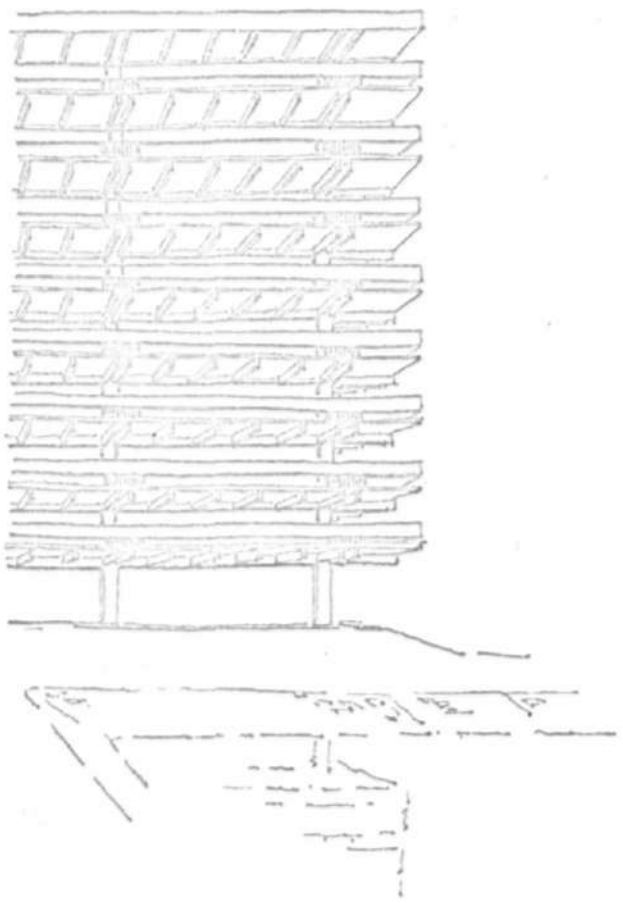
In Japan, the influence of the European modern architecture could already be seen in the twenties. Until this time Japanese architecture developed in isolation in its own traditional way. The architects, who were the intermediaries in the process of the introduction of the "New Architecture" to Japan, were F.L. Wright (Hotel Imperial in Tokyo, 1915-22) and A. Raymond, who designed several buildings in the twenties and thirties, e.g. St. Luke Hospital in Tokyo (1930), and in co-operation with B. Feuerstein, the Chapel in Rikkyo and the seminar in Nagoya. In A. Raymond's office the outstanding Japanese architects K. Mayekawa and J. Yoshimura were employed at the beginning of their careers. Among the Japanese architects, who helped to introduce and develop the "International Style" in Japan, are T. Merano (Department Store in Sogoh in Osaka 1935), B. Yamaguchi (School of the Dental Medicine in Tokyo 1934), T. Yoshida and particularly M. Yamada (Telecommunications Building in Tokyo 1926 and the Hospital in Teiskin 1937). Their buildings are close in appearance to European "Constructivism". They retained a simple functional composition and form even after the 2nd World War.

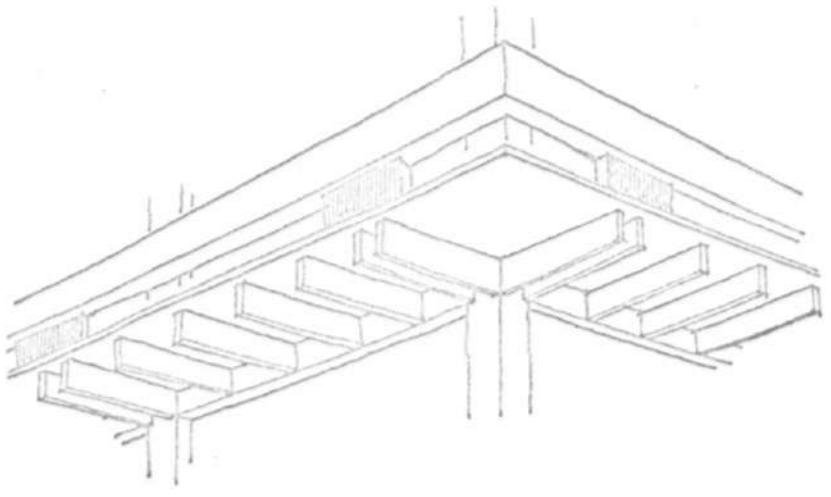
The main representatives of the "New Architecture" in Japan between the two World Wars were K. Mayekawa and J. Sakakura. In the late twenties they worked in Europe in

Le Corbusier's office. Together with him they were the authors of the Museum of Modern Arts in Tokyo, built in 1957-59[29]. After 2nd World War Kenzo Tange joined them and gained worldwide recognition[30].

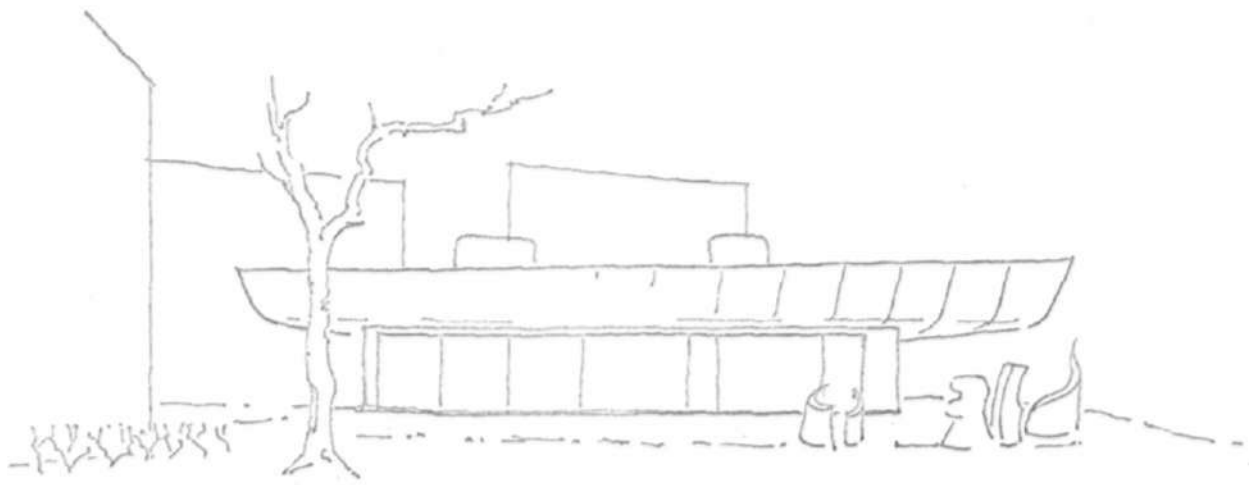
In the work of these three architects, the "International Style" was fused with elements of traditional Japanese architecture into a unity, forming a specific national variation of the "New Architecture", which is immediately recognisable as typically Japanese[Ill.3a,b,4,5,6,7]. The Mexican and Japanese variations are discussed later in a more detailed way. From the late thirties, Functionalism as the unifying idea of the "International style" became common in Europe and, as mentioned, in the fifties it had already spread to several countries of other continents. At this time, the first critical reactions appeared. Some architects even began to feel that the theoretical concept of Functionalism and its architectural forms were exhausted, which resulted in the search for a fresh means of expression.

The post-war "spirit of the time" in Europe and its reflection in architecture has been expressed by Charles Jencks: "The International Style become officially accepted everywhere and, in a watered-down and sterile form, the style for vast schemes of reconstruction. Hence the popular reaction against modern architecture which occured in the fifties and sixties. In retrospect, the surprising thing about this post-war period is that it did not generate the excitement and liberation which the end of the previous war had done. There were no

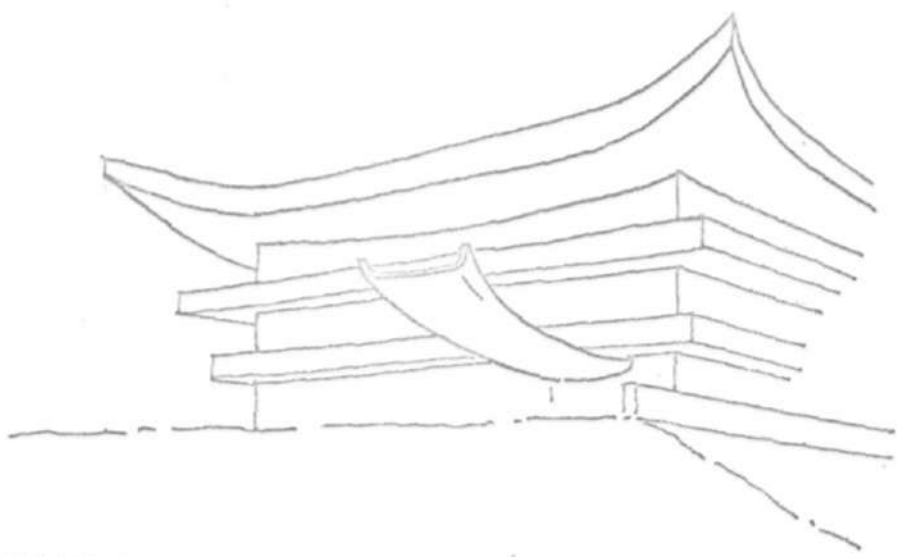




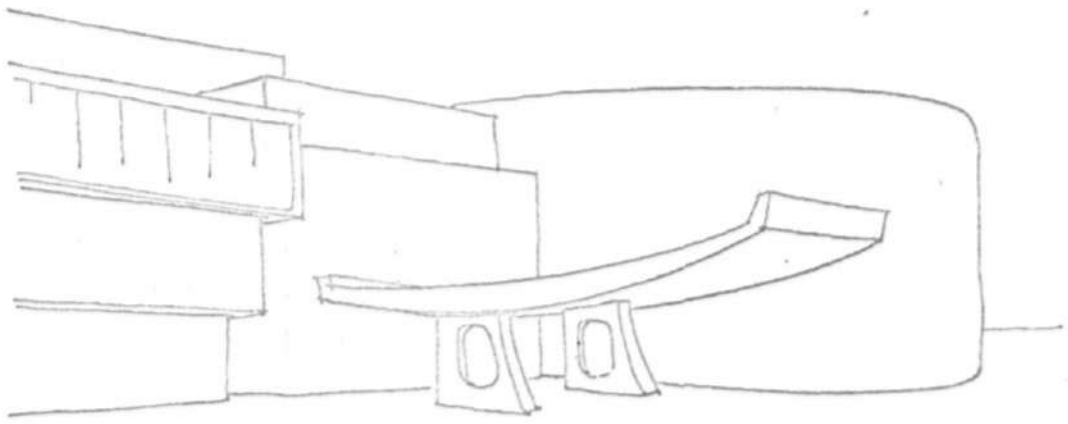
3a,b KAKAWA PREFECTURAL OFFICE, TAKAMATSU, JAPAN
KENZO TANGE 1958
CREATIVE USE OF ELEMENTS TAKEN FROM TRADITIONAL ARCHITECTURE:
EMPHASIS ON HORIZONTAL DIVISION OF THE BUILDING INTO STOREYS
TRADITIONAL WOODEN STRUCTURE TRANSFORMED INTO R. CONCRETE
AND USED AESTHETICALLY



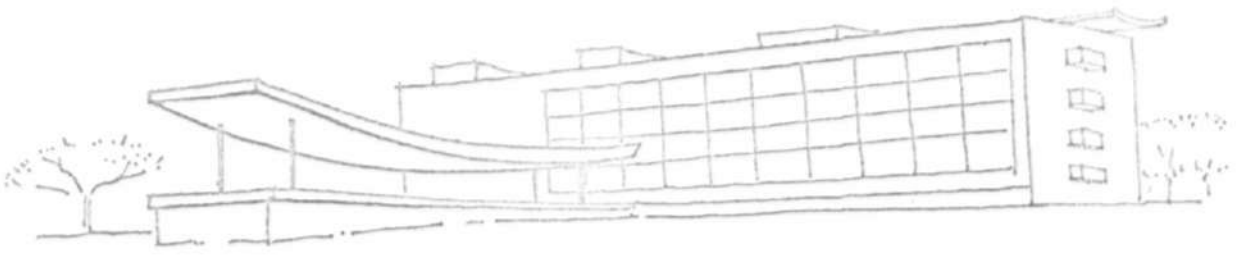
4 TOKYO METROPOLITAN HALL, JAPAN
KUNIO MAYEKAWA, 1958-61
ELEMENTS TAKEN FROM TRADITIONAL JAPANESE ARCHITECTURE USED IN THE CREATIVE WAY



5 HIRAOKA CITY HALL, JAPAN
JUNZO SAKAKURA, 1964
FORM AND ARCHITECTURAL ELEMENTS OF A TRADITIONAL JAPANESE PALACE USED AS INSPIRATION



6 IWATE BROADCASTING STATION, MARIOKA, JAPAN
JUNZO SAKAKURA, 1964
USE OF TYPICAL ELEMENTS FROM TRADITIONAL JAPANESE ARCHITECTURE & CANTILEVERED STEPPED-UP STOREYS, TYPICALLY BENT FORM OF THE ENTRANCE CANOPY



7 RESEARCH CENTRE FOR TOYO RAYON CO., KAMAKURA, JAPAN
JUNZO SAKAKURA, 1962
CURVED ROOFS TYPICAL OF THE TRADITIONAL JAPANESE ARCHITECTURE USED TO COMPLEMENT THE RECTANGULAR ARCHITECTURE OF THE BUILDING

new movements akin to Expressionism, Purism, Dada, and Constructivism. Perhaps the exhaustion of war and the pessimism it seemed to imply as a chronic and inevitable state had a dampering effect on men's creative capacities"[31].

The evolution and changes of opinion of the fifties even affected the international basis of the programme of functionalism, the CIAM - Congrès Internationaux d'Architecture Moderne and in 1956 this organisation ceased to exist.

The evolution of the "New Architecture" then developed in two different ways. The first was a further evulution of "Functionalism" consistent with the changed "spirit of the time", and the second was "Organic architecture"[32].

"Organic architecture" - the main exponent of which was F.L. Wright - proclaimed the balance of the material and psychic forces, architecture being the harmonic result of reason and the senses. Space was seen not only in its material aspect, but included the life for which it was designed.

The accepted principle of Functionalism, that "the form follows the function", was replaced by the mutual equity and unity of both of them. The Czech architect K. Honzík expressed these trends as: "From the cool reason to the senses"[33].

As already mentioned, the 2nd World War brought a halt to the evolution of the "New Architecture" in Europe which then lost the leading role in its evolution. Immediately after the war, only single works of some few European architects influenced the "New Architecture" in the global context. The

exeptions were the works of Le Corbusier and the influenceful work of British architects in the evolution of the idea of satelite towns and their construction.

The most important task of architects in Europe after the 2nd World War was the renewal and the reconstruction of destroyed towns. Among the first was the reconstruction of the destroyed port Le Havre (A. Perret), the reconstruction of Warsaw (R. Piotrowski), city centres of Coventry and London, the port of Rotterdam in the Netherlands, the towns Maubège and Saint Denis in France, Nurenberg, Dresden, Berlin and other towns in Germany, Stalingrad (Volgograd), Kiev, Minsk and other towns in the U.S.S.R. destroyed in 2nd World War.

These reconstructions were done in different ways. The extensive destruction of the port of Rotterdam gave way to the construction a virtually new town in accordance with the principles of the contemporary town planning, and in the spirit of the "New Architecture". In the most cases however the reconstructions were along traditional lines, preserving the pattern of the historical old towns, thus losing the opportunity to create really contemporary towns. The opportunities which were missed after the fire of London in the seventeenth century were missed again, but this time on a much larger scale. "Destroyed cities were built up on the outlines and styles of the past. The undestroyed sewer systems often served as an argument for keeping the old road patterns and building plots. Le Corbusier, almost alone, protested against the lost opportunities and offered, once again, a 'new spirit of the age'

appropriate to the situation, as he saw it. In this case the spirit he proferred through his buildings and paintings was primitive, more realistic towards the aggressive aspects of man, and explicitly sensual. If the war had undermined his faith in the machine civilisation, it liberated a new belief in formal gratification. In a word, Le Corbusier conceived architecture as sculpture in a new plastic language"

"New Architecture" in the countries of Eastern Europe after 2nd World War:[35]

The evolution of the post-war architecture in these countries is relevant for the purpose of this study. It followed a specific course, influenced by political evolution.

The countries concerned comprise Poland, the German Democratic Republic, Czechoslovakia, Hungary, Roumania and the Soviet Union.

With the exeption of the U.S.S.R., where Historicism had been the main stream of architecture since the thirties, the architecture of all other countries continued to develop after the war the ideas which had been interrupted.

Particularly in Czechoslovakia, where a strong tradition of the functionalist architecture had developed between the wars, the first post-war buildings were of a remarkable quality, the "Collective Houses" in Litvinov with more than 350 flats (V. Hilský, E.Linhart 1946-58) and in Gottwaldov (J. Voženílek 1948-50) with all essential services for inhabitants included in the building, in a manner similar to

Le Corbusier's "Unité d'Habitation" in Marseilles (1946-52), which was built at the same time. Some housing estates built at this time, were of high quality in their planning as well as in the architectural solutions[36].

In the U.S.S.R. Historicism was the result of a reaction against the mechanical Functionalism of the thirties[37]. Historicism was part of the official policy in the Fine Arts called the "Socialist realism", which aimed at an art "Socialist in its contents and national in its form". The application of this requirement in the architecture of this period resulted in the use of national traditions in architecture[38].

In the Soviet Union the Historicism after the 2nd World War continued in its prewar form using the architectural forms and details of historical styles in grandiouse realisations, e.g. in the first highrise buildings in Moscow, which gave the new characteristic image to the skyline of the city and the new scale to which even the most recently constructed buildings are related.

Under the influence of the U.S.S.R., Socialist realism in architecture became the requirement of the authorities, as the decisive design philosophy in the countries under discussion. Using the terminology of this study, Socialist realism formed the basis of the "official style" in the Socialist countries in the latter years of the forties up to the middle of the fifties[39].

In different Socialist countries, despite differences in approach, the results were in some respects similar. The

design approach was based on the study of the architecture of the past periods, in which specific national variations of the styles developed. Elements of the architecture of these periods were used, sometimes only in a decorative way, to give a national appearance to the buildings.

"Socialist realism" followed the fate of those "official styles", not in sympathy with the "spirit of the time". It suddenly ceased to be used with the end of its official demand. This happened in the U.S.S.R. in 1954 and the other Socialist countries followed.

In the evaluation of the period of Socialist realism in architecture in the countries of Eastern Europe, its negative consequence was the interruption of the normal evolution of the "New Architecture" in the then prevailing streams of "Functionalism" and "Constructivism" in these countries. The positive side of this period was later seen in the beginning of the eighties, thus promoting a renewed interest in the theory of architecture and in the history of architecture, particularly in the development of a national identity in architecture.

Studies of historical buildings and of historical towns influenced the approach to the renewal and reconstruction of buildings and towns in Eastern Europe after the destructions caused by the war.

Examples of successful restorations of historical buildings and towns can be found in Poland, in the renewal of the Old Townsquare in Warsaw, destroyed entirely during the

war; the renewal of the Palace and of the park in Lazienky near Warsaw, and the renewal of the Townsquare in Gdansk; in the German Democratic Republic the renewal of the destroyed Zwinger Palace in Dresden and of the classicist buildings designed by K.F. Schinkel in Berlin; in the U.S.S.R. the renewal of the buildings and of the park Pyetrodvorets near Leningrad, the renewal of the Kremlin in Pskow, of the Sofia Church in Kiev and of a large number of other historical buildings destroyed in the war; In Czechoslovakia the town centres of some historic towns were entirely renewed, the historic town squares of the towns Slavonice and Telč in Moravia, Bardejov in Slovakia and Nové Město nad Metují and Cheb in Bohemia. Among the outstanding works in the field of reconstructions is the renewal of the historic building of the Caroline University in Prague, one of the oldest universities in Europe, founded in 1348[40].

The architecture of the Socialist realism is interesting for this study in the means used for the expression of the national character of the buildings.

After the interregnum, caused by the period of the Socialist realism, architecture in the countries of Eastern Europe again joined the general stream of the evolution of the "New Architecture" as a global architectural style.

In the second half of the fifties and particularly in the sixties and seventies, successful buildings were constructed in the countries of Eastern Europe[41].

Coming back to the evolution of the "New Architecture"

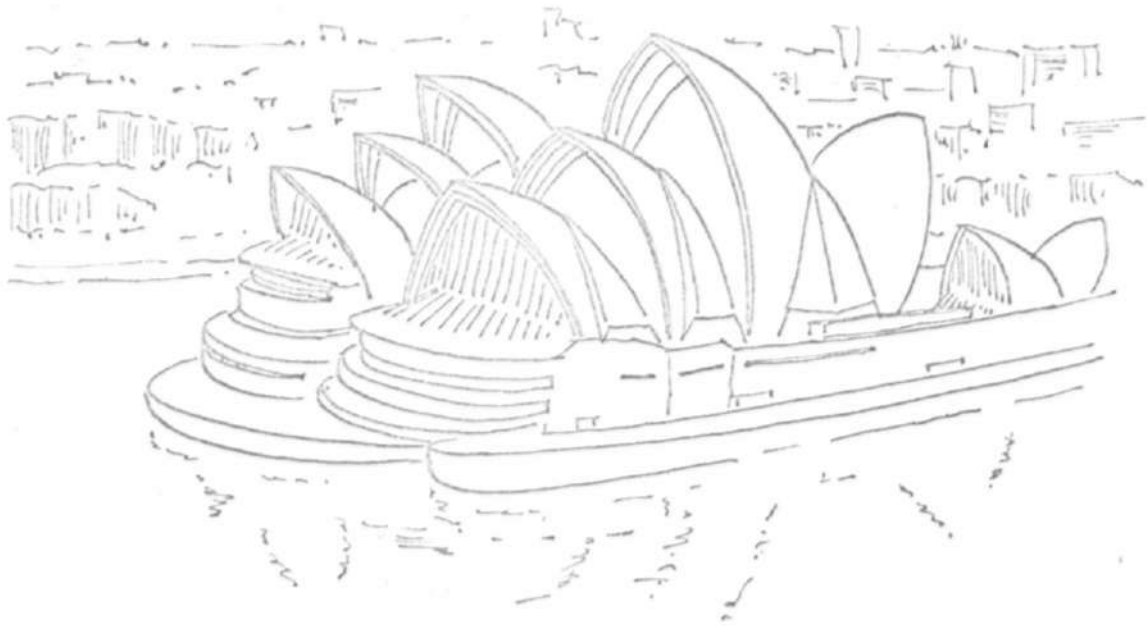
as the international style, it is possible to observe in the fifties, that the unified evolution of the cosmopolitan "New Architecture" began to differentiate. Particularly the means and forms used became more diversified in different countries. This can be taken as some kind of disintegration of the "New Architecture" as a uniform world style.

On one side Constructivism can be observed, with its main architectural elements derived from the visible, aesthetically developed structure and from the aesthetic use of the products of recent technology. The harmony of simple, perfectly developed architectural forms can be compared with the classical styles and the term "Contemporary Classicism" could be used.

On the other hand an increased number of buildings appeared having curved or even dynamic forms, which resembled in some cases more a sculpture than a technical feature.

As an example of this retreat from the rectilinear architecture, two buildings can be mentioned that aroused world interest in their time. It is the City Hall in Toronto, Canada, (V. Revel and Searle, Wilbee & Rowland)Ill.9 and the Opera House in Sydney, Australia (J. Utzon), 1957-73Ill.8.

In the evolution of the "New Architecture" as a global style, two buildings were built in the first half of the fifties that attracted worldwide interest. They had the same function, both being chapels, both outstanding architectural masterpieces, but, despite the fact that they were built simultaneously, they are entirely different, the best examples



8 OPERA HOUSE, SYDNEY, AUSTRALIA
JØRN UTZON, 1957-73
CURVILINEAR ARCHITECTURE HERALDING THE LATE STAGE OF THE "NEW ARCHITECTURE"



9 CITY HALL, TORONTO, CANADA
VILJO REVELL AND EARLE C. WILLIS & ROWLAND
INTRODUCTION OF CURVES INTO THE RECTILINEAR ARCHITECTURE

of the two streams of architecture in this period. The authors were two leading architects of the "New Architecture", Le Corbusier and Mies van der Rohe.

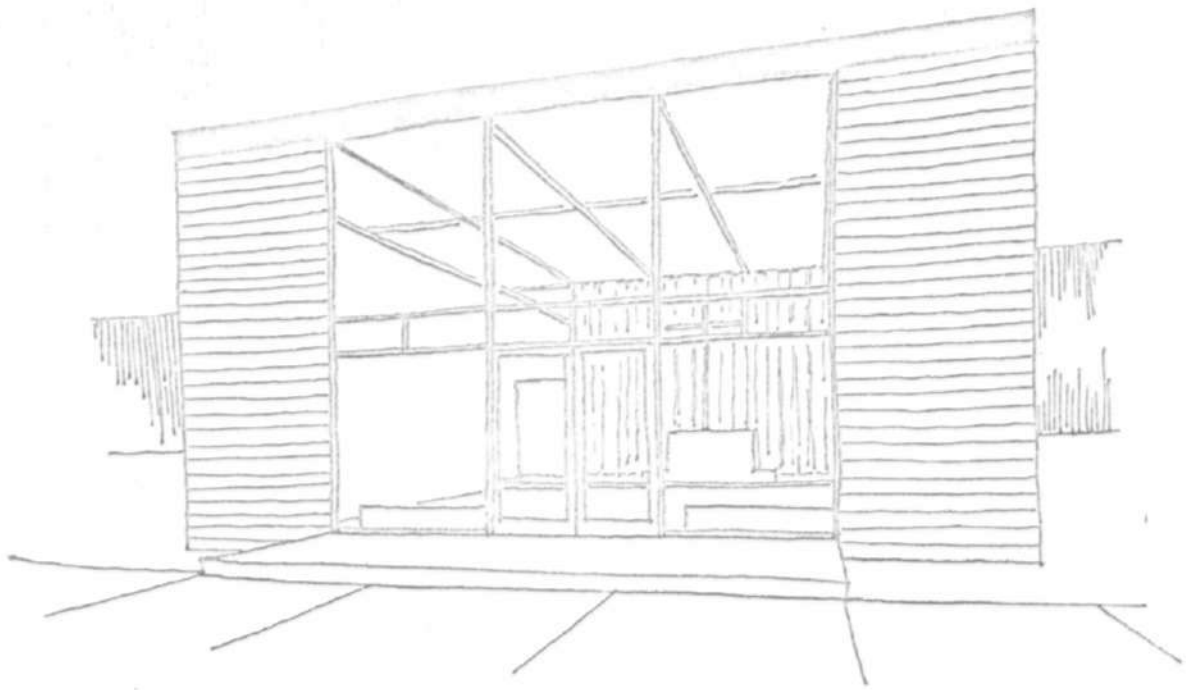
Mies van der Rohe built in 1952 the Illinois Institute of Technology Chapel in Chicago[Ill.10]. Its form is a simple prism constructed from steel, glass and burnt bricks.

Simultaneously Le Corbusier built the Chapel Notre-Dame du Haut in Ronchamp, 1950-54[Ill.11]. In its sculpturally moulded form the author explored the possibilities offered by concrete as a building material, to express the form created in the architect's imagination in probably the best way it could as of that period. Le Corbusier explained the irrationality of his approach as "the answer to the aims, that the man feels sometimes, to leave himself and to seek the contact with the unknown"[42].

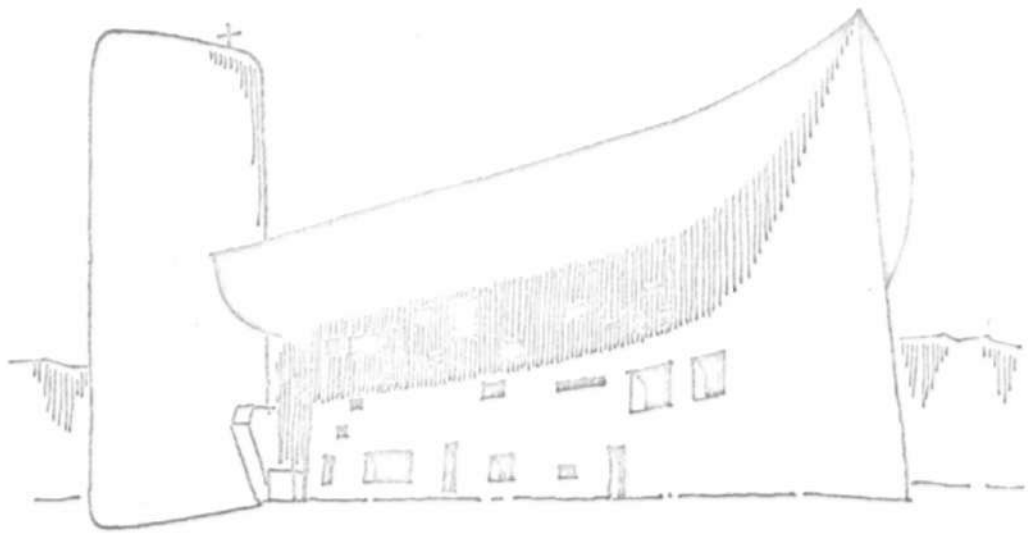
Mies' IIT Chapel, contrary to Le Corbusier's creative approach, is the rational expression of the technical culture of the 20th century. Le Corbusier's Chapel in Ronchamp is an architectural form, created by the artist. These two chapels are symbols of the two main creative approaches to architecture in the fifties.

The architecture of the first is based on functional reality, the use of an aesthetically treated structure and on the repetition of highly developed technical detail. The second represents the free artistic imagination, resulting in sculptural forms that cannot be repeated.

Mies' works were from the very beginning of his career



10 I.I.T. - ILLINOIS INSTUTE OF TECHNOLOGY CHAPEL, CHICAGO, U.S.A.
MIES VAN DER ROHE 1952



11 THE CHAPEL OF NOTRE DAME, RONCHAMPS, FRANCE
LE CORBUSIER 1950 - 55

distinguished by their functionalism and discipline. In the fifties, his creative spirit reached its peak. His works are the purest expression of the ideals of the "New Architecture" or "Modern Architecture" - whatever term we prefer to use - as the architectural style of the twentieth century. He developed to perfection the principles, that were the basis of this style, i.e. functional architecture without the decorative ornament - an aesthetically treated structure. Apart from the IIT Chapel in Chicago, the works that represent his peak period are: The Crown Hall (School of Architecture, 1952-56), Farnsworth House (1946-50), Seagram Building in New York (1957) and the Lake Shore Apartments in Chicago. Even in his further works, Mies never wavered in his approach to architecture. In 1962 he designed the New National Gallery in Berlin, which was constructed in 1965-68. This commission was an act of recognition by his country of origin, Germany. This work again is a perfect example of the constructivist approach. But meanwhile the "spirit of the time" had changed. At the opening ceremony of the New National Gallery it was the author and his whole-life work rather than the building of the New National Gallery itself which were the subject of acclaim. The way in which the New National Gallery was designed, was in the sixties already outdated[43].

A. Drexler characterised the Mies' position in the "New Architecture": "With Mies, architecture leaves childhood behind"[44].

The following quotations can be used to express the

opinions of different authors about Le Corbusier and Mies van der Rohe as great personalities of the "New Architecture":

About the role of these two leading architects T. Dannatt wrote in 1955: "Here enters the question of leadership. Since 1945 Le Corbusier and Mies van der Rohe have been the two most powerful sources of influence and of the two, Le Corbusier much the more powerful; indeed it seems that no formal decision can be taken without being ultimately pro, para or anti that presiding genius. If, in 1928, to have 'got right away from Corbusier anyway' was a precocious skit on the new sophistication, today it is no joke at all; after thirty years we seem as likely to escape from him as did Italian architects of another age from Michelangelo"[45].

Sir B. Fletcher characterizes Mies van der Rohe's and Le Corbusier's work:

"All his (Mies van der Rohe's) mature work is characterised by extreme simplicity, clarity of form and richness of materials. Externally, glass is widely used, and he normally adhered to the rectangular steel frame. Interior accommodation is organised by freely-disposed light partitions, interwoven with the inner pillars of the structural frame"[46].

"Le Corbusier went on to produce buildings of virtually all principal classes and schemes for town planning, ever provoking curiosity and controversy yet ultimately securing general confidence in the tenability of his many stimulating ideas"[47].

About the Chapel of Ronchamp, designed on curved lines, Ch. Jencks wrote, in relation to the changes that occured in Le Corbusier's creative way: "This is quite a turn-about for a man who had been damning the curve as 'the pack-donkey's way' and proclaiming that 'culture is an ortogonal state of mind' "[48]. This quotation characterises at the same time the changes in the evolution of the "New Architecture" in the fifties.

H.R. Hitchcock's opinion, written in 1958 about the evolution of Le Corbusier and modern architecture: "But this church (Chapel de Ronchamps) makes even more evident than the High Courts (in Chandigarh) the fact that Le Corbusier in the fifties has been moving in almost the opposite direction from that in which he led in the fifties"[49].

"In an exaggerated [illegible] Le Corbusier described his early houses as 'machines a habiter'; but Notre-Dame-du-Haut is more like an enormous piece of sculpture than a 'machine for praying-in'[50]. He who once drove architecture towards the mechanistic, the precise, and the volumetric, now provides the exemplar of a new mode as plastic as Gaudi's blocks of flats of fifty years earlier"[51].

"Whether Chandigarh and Ronchamp evidence a deep split in modern architecture or represent a major turning point is far to being clear yet (i.e. in 1958). Few have yet succeeded in following the line of development they appear to open"[52].

The above quotations recognise both Le Corbusier and

Mies van der Rohe as the leading personalities in the "New Architecture". The Chapel of Ronchamp is seen as the turning point in its evolution, an opinion, which was confirmed in the years that followed.

About the great architects, as about any great artists, it can be said that they are in the forefront of the general evolution, showing and paving its way. This was the role Le Corbusier continued to play. Mies' case was different: He was one of the great artists who reached their peak, but did not develop their creative style further in spite of the changing "spirit of the times". He remained unchanged by the changing times. The similarity can be seen in this respect with the work of Rembrandt, the great painter-artist of the past. He also reached his peak, but did not follow the changing evolution of the art of his time thus remaining unchanged as an artist.

To follow the further evolution of the "New Architecture" in the fifties and sixties, it is necessary to look primarily at the architecture of the U.S.A. The concentration of leading architects of European as well as of American origin after 2nd World War, and the large and different tasks commissioned to them, were the reasons for the variety of ideas and new architectural forms in U.S. architecture in these years. In this period it is the U.S.A. that plays the leading role in the further evolution of the "New Architecture" as an architectural style.

The free creative approach resulting from diversity of

ideas and forms can be identified in the work of several architects. To mention some of them: R. Neutra's villas of this period, M. Breuer's Church in St. John's Abbey in Minnesota (1953-61), L. Sert: Maeght Museum in St. Paul de Vence, M. Nowicki: Multipurpose Hall in Raleigh with the use of the suspended longspan cable roof. Eero Saarinen designed in these years a wide range of buildings, from the strictly technical expression of the General Motors Centre in Michigan to the dynamic architecture of the reinforced concrete shell structure of the TWA Airport Building in New York. (1951-61)[53].

In the further evolution of the "New Architecture" the name of one of its founders Frank Lloyd Wright has to be mentioned again. His creative activities of the thirties were characterised by his search for the synthesis of architectural form and nature as exemplified in his Kaufmann House in Bear Run (1936). In his own house Taliesin West in Arizona (1938), F.L. Wright searched after forms close to those structural principles found in nature. Of these the crystal and the spiral became the forms often used as architectural elements in his later works. Thus the complex of Johnson Wax Company Buildings in Rancine, Pens' house and the Madison Theatre are composed on the curvilineal grid. His most famous work of the post-war period is the Guggenheim Museum in New York (1943-59) having the form of an encased ascending spiral ramp. Crystalinic forms are the basis of his Price Tower in Bartlesville, the Synagoge in Elkins

Park (1959) and for his study of the Illinois Skyscraper (1956-57) a mile high and having the form of a tall crystalinic pyramid. This skyscraper, designed for Chicago, was one of his last works[54]. F.L. Wright's work, which can be described as individualistic, had undoubtedly a big influence on the evolution of the "New Architecture", particularly in the U.S.A. Though in the world evolution of the "New Architecture" his influence did not have the impact of the ideas and works of Le Corbusier and of Mies van der Rohe. The comparison of the work of all three great architects was made by A. Drexler: "The utilitarian bias of the age exalts mediocrity, but it has also found room for three architects of genius: Frank Lloyd Wright, Le Corbusier and Ludwig Mies van der Rohe. Wright saw machines as a tool with which to make buildings approximate natural phenomena: skyscrapers like trees, houses like caves, a museum like a shell. For Le Corbusier technology and art alike derive from geometric form valuable for its own sake; for him there is no conflict between art and technology, and the machine is no less refreshing than nature. But Mies has responded differently. He has made art seem rational, as it if were science"[55].

In the post-war architecture of the U.S.A. a specific place has to be attributed to R.B. Fuller, author of the new structural system of geodesic domes, lightweight longspan structures, which allowed large spaces to be covered without internal supports.

The architects in the U.S.A., who had adopted the rational approach to the development of architectural forms as represented by Mies van der Rohe, were: P. Johnson: Glass house in New Canaan (1949), M. Abramovitz, G. Bunschaft, W.K. Harrison and the group SOM - L. Skidmore, N.A. Owings, J.O. Meril, who were famous for their designs for multistorey buildings, of which the Lever House in New York (1952) achieved a widespread recognition[56].

From the fifties, differences in evolution of the "New Architecture" can also be observed in Europe.

In this respect it is necessary to mention in the first place the works of Le Corbusier. In each of his projects, he found a new and unusual architectural expression.

His works were always ahead of the evolution and had a great impact on the architecture of the period.

Apart from the Chapel of Ronchamp, already mentioned, it was the Unité' d' Habitation in Marseille (1947-52) that became a source of inspiration and influenced many buildings in several countries. Because of the exceptional importance of the Unité' d' Habitation in the European post-war architecture, more information, including quotations, seem to be useful: From the functional view, the Unité provides the primary facilities for the life of the families and even for their individual members, combined with meaningful collective activities. They cover twenty-six

different social functions, from a gymnasium to a shopping center. From the architectural view point, "the overall feeling is ... of being on a gigantic ocean liner ploughing through the choppy seas of verdure and haphazard suburban sprawl. The sheer physical presence of this ship-like monolith is overwhelming. Its power and weight are crushing. Its sculptural boldness and aggressive outline are so emphatic that, although it is now actually smaller than some surrounding buildings, it still radiates a presence through the landscape"[57]. In this building Le Corbusier used the concrete, the "beton brut", which became the sign of the New Brutalism of post-war architecture. The facades of the Unité are the antithesis of Le Corbusier's flat-plane facades of the twenties. They are "violently sculptural in their depth and protrusions"[58].

Modifications of the Unité were built in Nantes and Berlin, with strong plastic treatments of the facades.

The other works of Le Corbusier which have to be mentioned are: The Museum of Modern Art in Cambridge in the U.S.A. (1961), Governmental Buildings in Chandigarh (1951-59), Philips Pavilion at the World Exhibition in Bruxelles (1958), Monastery La Tourette in Evreux (completed in 1961).

Other leading architects in France in this period are: A. Lurçat, G. Candilis, author of the Housing estate Bagnol sur Céze (1956), B. Gillet and B. Zehrfuss, co-authors of the UNESCO Palace in Paris.

In Italy, the architects that influenced the evolution of the "New Architecture", are B. Zevi with his theoretical works, and particularly P.L. Nervi and G. Ponti, authors of the Pirelli Building in Milan (1958), that served as the source of inspiration for several later highrise buildings in the world. The work of P.L. Nervi, who is a structural engineer and architect in one person, is of an extraordinary significance. His most successful works are large halls usually constructed as vaults or domes in reinforced concrete (prestressed or prefabricated and poststressed), with vissible fan-like ribbs, used both structurally as well as aesthetically. Among his best known works are the Olympic Sports Halls in Rome (1957-60), Trade Fair Hall in Turin etc[59]. Other Italian architects from this period, to be mentioned, are L. Figini and G. Pollini with their design of buildings in Ivrea, E. Castiglioni with his sculpturally treated architecture e.g. School in Busto Arsizio and G. Michellucci who designed the St. John Chapel near Florence.

In the fifties, the Greek architect and planner of Athens C.R. Doxiades, founder of the Ekistiks, science about human settlements had a special place in world architecture[60]. He is the author of Master Plans for the reconstruction of several towns as well as the designer of several new towns in different parts of the world, e.g. of the port town Tema in Ghana.

Great Britain also contributed to the evolution of the "New Architecture" in the fifties and sixties. The real

entry of Great Britain into the group of nations with a remarkable "New Architecture" was in 1951 with the "Festival of Britain". The Festival was held one hundred years after the International Exhibition in the London Hyde Park in 1851, the place of the construction of J. Paxton's Cristal Palace[61]. For the Festival of Britain the Royal Festival Hall, designed by the architect R. Matthew, was built serving as the nucleus for one of the most outstanding complexes in Great Britain, the Cultural Centre in London (South Bank) with the Queen Elizabeth Hall (H. Bennet 1967) and other facilities.

About the "New Architecture" in Great Britain T. Dannatt wrote: "One is forced to admit that we never produced any real 'school' of English modern architecture". - "In 1951 the new architecture swept suddenly into full public view with the Festival of Britain and the South Bank Exhibition"[62].

From the fifties the British Architecture produced outstanding works as T. Gibberd and D. Lasdun: Residential house at St. James Park in London (1960), new residential districts of London (Roehampton and others) and new buildings in the University towns of Oxford and Cambridge, as the Caius College in Cambridge by L. Martin (1962)[63].

From the architecture in Great Britain in the Post-War time one building must not be omitted. It is the New Cathedral Church of St. Michael in Coventry, designed by Sir Basil Spence, on the place of the Old Cathedral,

destroyed in the 2nd World War. This building is one of the most noble examples of the buildings of the "New Architecture", giving a positive impression of national architecture. The New Coventry Cathedral is a building belonging to the "New Architecture", but the architectural means, used as elements and details, immediately awaken the feelings of a typically English church, retaining the atmosphere of the English Gothic Cathedrals, despite the fact that the New Cathedral is not Gothic at all, but in every sense contemporary[64].

The further evolution of architecture lead to the loosening of forms and to the evolution of the architecture of free forms in the fifties. At this time the interest in the art and architecture of the end of the nineteenth and of the beginning of the twentieth centuries can be observed, which lead to studies of the achievements of those periods. The study of strong or interesting periods of the past is always a sign of discontent with the prevailing stage of the art and architecture, of uncertainty, and at the same time a sign of the search for new inspiration or even for a new style. As the result the short-lived wave of the renewed Art Nouveau - Secession - Jugendstil passed through Europe in the sixties first evident in Art and with consequent impact on architecture later.

In contrast to the strictly structural and functional ideas, expressed earlier by Le Corbusier, "House - a

machine to live in", a new stream arose treating the "House as a sculpture"[65]. In the first place it was Le Corbusier himself, who, in his evolution, "conceived architecture as sculpture in a new plastic language"[66] of which the Ronchamp Chapel is witness. A. Bloc designed some buildings in this sculptural way.

The return to Cubism can be observed in such buildings of this period, as K. Bayes' School in Peredur in England (1960).

Another direction in architecture is distinguished by the use of crystalinic forms. They were used in different variations. In this way R. Pietila designed the Students Centre in Dipoli in Finland. The representatives of this stream in Germany were G. Böhm and in particular H. Scharoun.

H. Scharoun criticised the achievements of the "New Architecture" up to the mid fifties as:"The rectangular grids of townplans in the recent past and the rectangular grids of the modern facades are examples of the unfruitful use of technical knowledge and of the pressure of the geometry on the creative process"[67].

H. Scharoun is one of the architects, who were in the fore-front of the general stage of evolution. The peak, that an artist can reach, is, if he is able to create his own style so that without knowing the author it can be said: "This is the work of ...". Scharoun was such an architect. It has however to be mentioned, that, despite the recognition he achieved, a correct assessment of the impact of his

contribution to the evolution of the "New Architecture" still awaits to be done.

H. Scharoun's designs can be recognised by the use of crystalline forms based on the use of planes and lines in different directions, resulting generally from the functional requirements of the spaces to be created. Aesthetical considerations were treated at the same time.

In this way he designed the Philharmonic Concert Hall in Berlin 1956 (1960-63). He used similar way of designing, in co-operation with the architect W. Frank, in the Tower Block of Flats "Salute" in Stuttgart (1961-63). The resulting impression was expressed by W. Pehnt: "The twin block seems to carry out a rotary movement"[68].

Alwar Alto designed in 1958, in conformity with the "changed spirit of the time" the Tower Block of Flats in Bremen in Germany (built in 1959-62), which: "situated at the main shopping centre, the tower with its undulated west front breaks the rectangular monotony of the surroundings"[69].

The era of the sixties in architectural history is characterised by "inventiveness of form and design"[70].

New structural systems and new technologies influenced architecture during this period, suspended cable structures, long span steel structures, large scale prefabrication, prestressed reinforced concrete, pneumatic structures. The names of architects identified with these innovations are B. Fuller, P.L. Nervi, F. Otto and others.

Further tendencies in the evolution of the "New Architecture" in the second half of the twentieth century:

The characteristic of the evolution of the "New Architecture", up to the time of this study, is the search to express the new "spirit of the time" in particular the changes in ways of thinking, in aesthetic values as well as advances in technology. This resulted in a wide diversity of ideas and architectural forms. The apparent aim of the authors is to be original, unique, to surprise. The post-war trend, expressed by Ch. Jencks, continues: "Part of Le Corbusier's late style was concerned with his 1923 definition of architecture as the 'masterly, correct and magnificent play of masses brought together in the light'. The masses became more massive, distorted and exagerated after the war"[71].

The present stage of the "New Architecture" can be characterized as a further loosening of the principles, which were set at the beginning of the "New Architecture". In particular function is no longer observed as the predominant factor. The discontent with the rules fixed in the Charter of Athens, the cornerstone document of the C.I.A.M. of 1933 was the main cause of the final breakup of the C.I.A.M. at the tenth Conference, held in Dubrovnik in 1956. The Charter of Athens was held "as beyond the law by the older members but as irrelevant dogma by the younger"[72]. The rebuttal of the Charter of Athens represented "a drifting viewpoint and change of volumes"[73]. Functionalism was outdated by the evolution.

One of the present streams proclaims architecture to be the artistic expression of all its contributing components, including the ethics. The architecture is expected to fulfil not only its function, but to appeal also to the senses of the man.

Buildings are divided into parts having different functions, which are clearly expressed; these parts are composed to form building complexes. One of the most prom... representatives of this stream is P. Rudolph, the author of the building of the School of Architecture and Arts of the Yale University (1953-63).

British architecture influenced the evolution of the "New Architecture" beyond the boundaries of the country. The rejection of traditional aesthetics and formal composition resulted into a new aesthetic, influenced probably by Le Corbusier's example, making use of the beauty of concrete in its natural appearance as a building material. The stream, representing these ideas, is the "New Brutalism". Among its buildings are: School in Norfolk, architects Alison and Peret Smithson (1954), City Hall in Marlo and University Hall in Delft by the Dutch architects F.H. van der Broek and J.B. Bakema, Orphanage in Amsterdam by Aldo van Eijck (1955). Brutalism indicated the possibility of a synthesis of two seemingly opposing principles: cool technical rationalism and the pure intuitive artistic imagination[74].

Another of the present trends in architecture is the

composition of different volumes and forms, the buildings being thus broken into several parts, mostly according to their functional contents. This trend is represented by the American architect L. Kahn: Medical Laboratories of the Pensylvania University in Philadelphia (1957-61) and the Church in Rochester (1963), by the British architects J. Stirling and J. Cowan: Laboratories of the Engineering Department of the University in Leicester, and in a large scale by the work of Japanese architects.

At the World Design Conference in Tokyo in 1960, the group of Metabolists was established; Their aim was to express in architecture in an artistic way the functions of the human life, including permanent changes and movement in the life of man and society[75]. Ch. Jencks describes the origin of the Metabolists: "A group of younger architects, some of whom were working in Tange office in the late fifties, came together to start a self-conscious movement called Metabolism. The name and philosophy were invented, almost as propaganda, for the World Design Conference held in Tokyo in 1960. Kisho Kurokawa was twenty six and the other architects and critics, Kiyonari Kikutake, Fumihiko Maki, Masato Otaka, Naborii Kawazoe and Hirosha Asada were in their early thirties. They had studied the politics of European avant-garde movements and were determined to fashion an "ism" which would compete with those of the West"[76].

Discontent with the contemporary form of the towns and with the prevailing ideas of architecture and urban design,

multiplied by the scarcity of land in Japan, led to the design of multistorey megastructures over the shallow bays and above the overcrowded old parts of the cities.

The projects designed along this pattern are: K. Kikutake: Marina Civilisation Scheme (1960), K. Tange: City over the Tokyo Bay (1961), N. Kurokawa: Helix City (1962), Apartment Tower in Tokyo (1972), Y. Watanaba: Sky Buildings, Tokyo (1971).

In these megastructures as well as in the architecture of other kinds of buildings, the movement of people were expressed and accentuated, in line with the ideas of the Metabolists.

Buildings, designed according to the programme of the Metabolists are: The Press and Broadcasting Centre in Kofu (1967) and the Shizuoka Building in Tokyo - K. Tange (1962), Tokoen Hotel in Keite - K. Kikutake (1964), Fukuoka Bank in Osaka - K. Kurokawa (1975).

Since then the Metabolist group ceased to exist. "The Metabolist movement has broken up, as each Metabolist has become successful and diverged in viewpoint. There hasn't been a general meeting since 1965"[77].

The specific characteristics of the contemporary Japanese architecture is that, despite being "New Architecture" it reflects its own traditions in the form, structure and function, that developed in the past into the typical style of the Japanese Islands. This national trend can

also be seen in the design of contemporary Japanese family houses. Their form, size and variability are based on the dimensions of the traditional floor and wall mats "tatami" (1.9x0.8m).

In contemporary Japanese architecture, a large number of buildings have been constructed, designed as national variations of the "New Architecture"[78].

Of the different streams in contemporary architecture, one displays characteristics reminiscent of the past historical styles.

So the fine and decorative artistic architecture of the architect M. Yamasaki - Reynold Building in Detroit (1956) and of the architect E.D. Stone reminds one of the Romanticism of the end of the last century and is close to a new Eclecticism.

The influence of and some kind of return to Neo-Classicism, under contemporary conditions, can be observed as well. The enclosed Neo-Classicist composition can be traced in the space concept of some new towns, even in Brasilia, and in the architecture of complexes of cultural and public buildings such as the Lincoln Cultural Centre in New York - W.K. Harrison, P. Johnson, M. Abramowitz (1957-64), Congress Palace in Moscow - M. Posochin (1961), Embassy of the U.S.A. in Athens - W. Gropius' T.A.C. Group and the Boston City Hall - Kalmann, McKinnell and Knowles (1963) with its slab, several stories thick, raised high and reminiscent of the architrave architecture of the antique

period.

In the Socialist countries of Eastern Europe after the period of the Socialist Realism, architecture joined again its own tradition of the "New Architecture" and from the end of the fifties, the fast evolution of the "New Architecture" can be observed in these countries, in their specific conditions. Apart from unique single buildings and complexes, the centre of activity of architects has been in mass housing. In mass construction, the factors influencing architecture are the economics, speed of construction, the industrialisation of the construction process, new forms of planning and of the urban design. The architects of the Socialist countries take as the main task of architecture in their countries to create the appropriate complex environment for the life of man and his activities[79].

Naturism is another different stream in the "New Architecture" which derives, its architectural forms from nature. The representative of this stream is B. Goff - Villa Bavinger in Oklahoma (1951).

Opposite to this stream is the stream emphasising technology. The example is the Sainsbury Centre for the Visual Arts, University of East Anglia, Norwich - N. Foster (1974-78) - "The emphasis on pure technology and logic has resulted once again in a striking sensuous image"[80].

The peak reached in this stream is the "Machine aesthetics"[81] of the Pompidou Centre in Paris, designed by

architects Richard Rogers and Renzo Piano (1971-77). - "Architecture about construction, technology and movement- the three canonic subjects of Modernism are given a Mannerist emphasis"[82].

In contemporary architecture there are also tendencies towards the utopian and visionary. Examples to be mentioned are: W. Katavalos: Chemically grown architecture and P. Soleri: Biochemical town. The dynamic and mobile architecture known as the "Action architecture" can be followed in the work of several architects, usually using the form of megastructures above the town or landscape, as the works of P. Mayont and Y. Friedman, Revolving town -Mirebeau and C. Parent, Cybernetic town - N. Schäffer, Walking City[83] on telescopic supports and Plug-in City (1964), work of the Group of British architects Archigram[84], standing close to the Metabolists, Suspended town - J. Fitzgibbon, Floating town Ellis Island - F.L. Wright's students. Proposals for entirely covered towns in Siberia, with artificial climate[85] are at the margin of being realistic.

These schemes result from the fast evolution of science and technology and represent the reaction of architects to it. In projects of this kind the question arises about the boundary between utopia and reality.

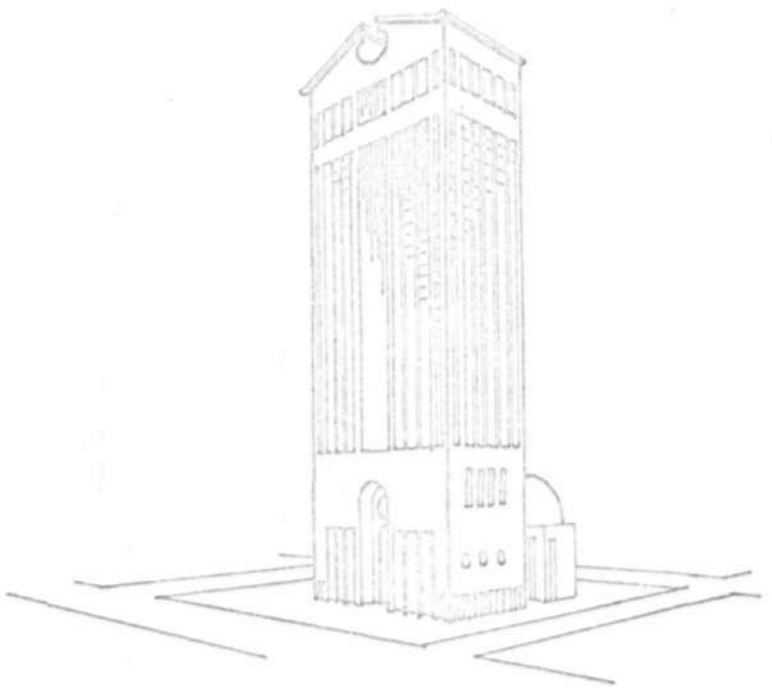
In a part of contemporary "New Architecture", the interpretation of the general principles of the composition, taken from the past, can be followed, including the method

of artistic expression of structural principles. This trend, despite containing some trace of Eclecticism, seems to be on the one side the expression of a discontent and uncertainty, on the other hand of the awareness for a continuity of the architecture toward a permanent evolution. Inspiration is drawn from the periods in which the architecture reached artistic certainty, the Classical Antiquity, the Renaissance and Classicism and its revival Neo-Classicism, but also the Gothic has been used as another source of inspiration.

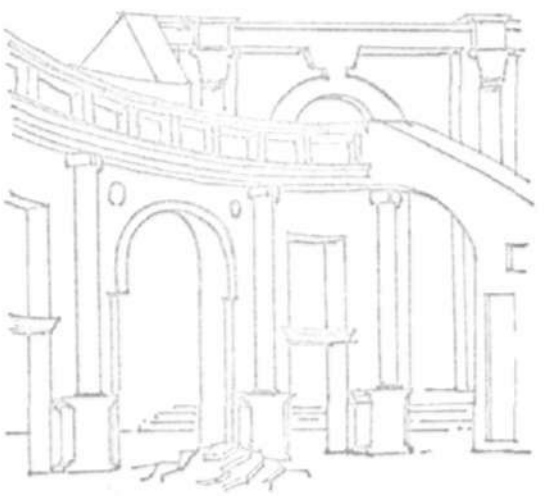
Among the buildings belonging to this category is the AT & T Building in New York City, architects Philip Johnson and John Burghee (1978, supposed completion in 1982). This skyscraper is designed with the use of elements reminding one of several historical styles. It is provoking contraversial comments. Two of them are interesting for this study, their authors being renowned contemporary critics:

Ch. Jencks' opinion: "Philip Johnson and John Burghee, AT & T Building, New York City, 1978-1982?, Ill.12 re-establishes the conventional New York Skyscraper code of an articulated masonry frame culminating in a pitched roof of classical provenance. Various historical codes underlie this form including the column (i.e. base, shaft, capital, entablature), the Pazzi Chapel (base), the Chippendale tallboy (top) and the Rolls Royce radiator"[86].

The comment of A.L. Huxtable: "Johnson's taste and intellect are much admired, but I cannot take a standup joke



12 AT & T BUILDING, NEW YORK, U.S.A.
PHILIP JOHNSON AND JOHN BURGEE, 1978-
USE OF ELEMENTS OF PAST STYLES (ANTIQUITY, RENAISSANCE, BAROQUE)



13 PIAZZA D'ITALIA, NEW ORLEANS, U.S.A.
CHARLES MOORE 1973-1978
NEW ECLECTICISM

like his AT & T Building in New York seriously"[87].

The opinion of the author of this study is that P. Johnson's work has to be taken seriously and that the use of terms like "joke" is not correct. The use of elements of strong periods of the past, incorporated into the contemporary building in the form of some kind of Eclecticism was in the historical styles the sign of the uncertainty of the period and of the beginning of the search for a new style. These symptoms are natural in the evolution of styles. The same applies to a still more eclectic design of the "Piazza d' Italia" in New Orleans by Charles Moore (1975-78), Ill. 13 described by A.L. Huxtable as "the ultimate eclecticism - architecture and urbanism as calculated stage set"[88].

Another example can be taken to characterise the architecture at the time of the completion of this study. It is the 'Atheneum' in New Harmony, Indiana (1979) designed by Richard Meier. A.L. Huxtable comments this building:

"Richard Meier uses elements of eclecticism and elements of formalism. He does not reject modernism; his work has, in fact, been called "modernism reconstituted". He obviously borrows from early Le Corbusier; many people are thrown off by his complex love of the every nuance of that now-nostalgic early 20th century eye[89].

The author's opinion is that this building also fits naturally into the characteristics of the present stage of

the "New Architecture". The architect returned for his inspiration in this case not to the historical style but to the period of Functionalism of the early period of the "Modern", which was a strong period (so strong that it could even fix its principles into the programme of the international style in 1928). The result resembles, although only in the context of a single building, the "rebirth" of the Antiquity in the fifteenth century. In its changed conditions, however, instead of the "reborn Antiquity" the result was something else - the Renaissance. The creative return of the architect to the early 20th century style, albeit under a changed "spirit of the age" at the end of the 20th century, could not result into a repetition, but necessarily into "something else", a kind of the "Renaissance of the early 'Modern' "or to use the term of A.L. Huxtable "modernism reconstituted". This design, showing the return for inspiration to a strong period of the past, is again characteristic of the present period.

The U.S.A. has been the leading country in the evolution of the "New or Modern Architecture" since the thirties. The U.S.A. still maintains this leading role. The three examples mentioned, from the work of architects P. Johnson, Ch. Moore and R. Meier are characteristic of the present stage of the "New Architecture" in their country. They are the result of the spontaneous evolution of the "New Architecture" in the U.S.A. and have therefore to be recognised

as examples of the spontaneous national variation of the "New Architecture" in the U.S.A. To the author's knowledge, a similar kind of "New Architecture" has not appeared at the beginning of the eighties in other countries.

The present stage of the "New Architecture" at the beginning of the eighties can be described as the stage of differentiation. The formerly uniform cosmopolitan "International style" split to streams that represent different approaches and different ideas. Some of these streams are related closely to specific conditions of the countries, which means not only the adjustment to different natural conditions of the climate, of the building material etc., but they are also related closely to different cultural traditions and other peculiarities of these countries in conformity with the "Spirit of the time".

Speaking about the present stage of the "New" or "Modern" architecture, it would be appropriate to quote the two leading contemporary architectural critics, Ch. Jencks and A.L. Huxtable.

Ch. Jencks differentiated in 1980 two main streams in contemporary architecture, that evolved from the sixties, the 'Post-Modern Architecture' and the 'Late-Modern Architecture':

"Post-Modern Architecture is 'doubly-coded', one half Modern and one half something else (usually traditional building), in its attempt to communicate both with the

public and a concerned minority, usually architects"[90].

"Late-Modern Architecture, 'singly coded', takes the ideas and forms of the Modern Movement to an extreme, exaggerating the structure and technological image of the building in its attempt to provide amusement, or aesthetic pleasure. This exaggeration the Modernists would have found unacceptable in the twenties; it sometimes merits the labels 'Slick-Tech', or 'Supersensualism' "[91].

The quotations from A.L. Huxtable's ideas, published in 1981 in the article "Architecture at the Crossroads" :

"It has become fashionable to say that modern architecture is dead. We are told that we are now in the postmodernist period"[92].

"Publishers' lists are filled with titles like 'The Failure of Modern Architecture' and 'Form Follows Fiasco' "[93].

"Ch. Jencks published 'The Language of Post-Modern Architecture' "[94].

"As a movement, however, modern architecture is growing old; we are, after all talking about part of the 19th century and most of the 20th century. It is old enough to present a body of work of tremendous achievement and a distinctive style that has already taken its place in the history of art"[95].

"Crying failure is a very cheap shot. Modern architecture is an immense, magnificent and undeniable 'fait accompli' paralleled by only a few periods of similar

creative magnitude in the history of civilisation. It has produced masters equal to any; Alvar Alto, Le Corbusier and Mies van der Rohe have already taken their place in the history of art"[96].

Despite the real high respect and even admiration of the author of this study for Ch. Jencks as well as for A.L. Huxtable and for their achievements as critics of the contemporary architecture, his view is that, concerning their evaluation of the latest part of the "New" or "Modern Architecture" their conclusions are not entirely correct.

Ch. Jenck's use of the word "Post Modern" in respect of a style that still exists as a contemporary architectural style is misleading. It is a premature label. Until the "New" or "Modern Architecture" ceases to exist, the use of the term "Post Modern" is unjustified. Following the evolution of the "Modern" and the symptoms related to the evolution of the styles, it can be said in general that we are living at the late stage of the "Modern", therefore the correct name for the whole architecture of our contemporary time at the beginning of the eighties is the "Late-Modern".

A.L. Huxtable accepts the "New" or "Modern Architecture" to be a style and highly appreciates its achievements. The author of this study agrees entirely with this assessment. His opinion is that the achievements of the "New" or "Modern Architecture" can eventually be emphasised still more, because none of the past styles had such a large impact on

the whole world and none of them can claim the achievements that changed the world surface to an extent comparable with the "New Architecture".

From the quotations just mentioned, the author of this study got the impression that A.L. Huxtable is not convinced that the actual period is really "Postmodernist".

The negative notes of A.L. Huxtable concerning the appearances of the use of elements of historical styles and of some kind of Eclecticism show however that this critic, despite accepting the "Modern" as the architectural style, is not consistent in this matter. The appearances of the studies and return to the strong periods of past styles for inspiration and even some kind of Eclecticism resulting eventually from it, are a manifestation of the normal phenomenon in the evolution of styles in their advanced late stage. The opinion of the author is that the critic probably is not aware deeply enough of the present stage in the evolution of the "Modern" as a style and of the symptoms related to this stage.

A greater appreciation of the present stage in the evolution of "Modern Architecture" and of the Eclecticism that now pervades "Modern Architecture" as symptoms of a decaying style suggests a late development in the evolutionary process similarly identified in the previous styles. It is a "Late Modern" stage of the "New" or "Modern Architecture".

Concerning different streams in contemporary architecture at the beginning of the eighties, the author of this study recognises two main streams:

They are the further development of two main streams in the early and mature period of the "New Architecture", i.e. Constructivism emphasising the technology, having in its peak period Mies van der Rohe as its most important exponent, and Functionalism, having in its evolution Le Corbusier as the leading personality. The functionalist stream in its peak period and even in its present evolutionary stage deviates from its purely functionalist approach resorting to sculptural aesthetics or a preoccupation with building appearances.

An attempt to find appropriate terms for these further developments of the "New Architecture" that encapsulate the creative characteristics of the developments remain only partly successful:

Technically oriented stream: The name "Aesthetic Technicism" would probably represent its characteristics.

Artistically oriented stream, in which architecture continues to be one of fine arts. This stream follows different creative ways. In some countries some of designed buildings have the specific character of the national architecture of the country. The name "Aesthetic Formalism" or "Aesthetic-functional Formalism" may be close to the aims which characterize this second,

and it has to be mentioned, that this is prevailing stream at the beginning of the eighties.

There is no strict boundary between these streams.

In the two streams mentioned, different approaches can be recognized. They are basically of two kinds:

The moderate approach and the radical approach:

The moderate approach developing further the "Modern" in following its unwritten principles, particularly its aesthetics, in the way that can be described as usual or normal, in relation to the contemporary evolutionary stage of the "Modern".

The radical approach apparently aiming for originality and possibly for surprise and resulting thus into extremes, exaggerations, distortions and eventually eclecticism. The radical approach can be recognized in particular in one part of the most recent architecture in the U.S.A., the leading country in the evolution of the "New Architecture".

Again, there is no strict boundary between the two mentioned approaches.

In the contemporary architecture appearances are recognizable, related to the evolution of the "New Architecture", as symptoms of the present stage of this architectural style.

3.20 NOTES TO CHAPTER III

1 Sir B. Fletcher's characteristic of this period is mentioned in Chapter 2.32

2 Syrový, B. et al (1977), p. 393

3 "His (Adolf Loos') well known passionate declaration in a Viennese cafe that 'ornament is a crime' is no exaggeration of his attitude, although it is not easy to reconcile this with many of his interiors and furnishings where certain ornamental features appear". - Whittick, A. (1950), p. 52

4 Also another pioneer of the "New Architecture", the Dutch architect J.J.P. Oud made the following statement in 1920: "Ornament is the universal remedy for architectural impotence". - Blijstra, R. (1960), p. 22

5 "The new school of thoughts was called 'functionalism' because of its emphasis on these qualities". - Hamlin, T. (1947), p. 9

6 Louis Sullivan is observed as the predecessor of the Functionalism. His idea is often quoted: "The form follows the function". - Ibid p. 204

7 From many assessments and appreciations of Le Corbusier the following can be mentioned: "Le Corbusier is arguably the greatest architect of the twentieth century. Why? Because of Le Corbusier's undeniable creative potency: he left us a mass of technical-aesthetic inventions which have had a widespread influence on world architecture, probably comparable only to Palladio's influence in the past. He changed, or was instrumental in changing, the aesthetic direction of modern architecture twice: once in the twenties with the philosophy of 'Purism'. - and once in the fifties with his sculptural form of 'Brutalism'. - Beyond these creative contributions, Le Corbusier gave to the modern movement a moral stature and strength which was also quite unique". - Jencks, Ch. (1973), Introduction

8 Ch. Jencks quotes also the assessment of the English architect Peter Smithson, from his article 'Mies is Great but Corb Communicates', published in Architectural Association Journal, London (May, 1959): "The German Movement (of modern architecture) was rational and severe more than anything else, and its spirit was a continuation of a previous tradition, the ethic of nineteenth-century architecture. It was certainly not one which would make a man leave home and start a new life, which I hold Le Corbusier's work could". - Ibid

9 Drexler, A. (1960), p. 19

10 Ibid p. 21

11 "Throughout the thirties and early forties there was a worldwide reaction against the modern movement which was directed against its leaders, for example Walter Gropius, Le Corbusier and Leonidov, and its various avant-guarde organisations, such as Ring, CIAM and OSA (the Association of Modern Architects in Russia, 1925-32)". - Op cit Jencks, Ch. (1973), p.127

12 "The key to Mies' enormous authority lies in one simple fact: his ideas can be taught. His art is communicable. It can be practised by others with measurable success". - Op cit Drexler, A. (1960), p. 9

13 "He (Mies) has described his architecture as 'skin and bones', and he has described his attitude toward art with the phrase 'less is more'." - Ibid p. 31

14 The quotation of W. Churchill is known in this respect: "Hitler shook the tree and the U.S.A. collected the fruits".

15 "Since about 1930, the architectural contribution of the Americas has been of a great significance. Not only the U.S.A. but also Canada and the countries of Latin America have produced notable buildings, which have had much influence throughout the world". - Fletcher, B. Sir (1975), p. 1249

16 (Governmental Hospital in Haifa and the Medical Centre of the University in Jerusalem)"... both of 1936-38, show a most skikful adaptation of the international European canons to a hotter climate and a different cultural tradition, somewhat as in the case of the Ministry in Rio". - Hitchcock (1958), p. 387

17 Source of information: Syrový, B. et al (1977), pp. 418-419

18 "The arguments that Senger, Mauclair and the Nazis used against Le Corbusier were the following: First, the architecture should be the embodiment of national glory, territoriality and such specific determinants as race, climate and local materials. The international modern architecture was supposedly none of this, although Le Corbusier answered that it was". - Op cit Jencks, Ch. (1973), p. 128

19 "The other leaders (apart Le Corbusier) did not write books against reaction, they went underground, into exile, or collaborated with the mounting nationalist movements". - Ibid p. 127

20 Op cit Syrový, B. et al (1977), p. 415

21 Ibid p. 416

22 "Le Corbusier's attitude towards this debacle was not his usual fury. He actually justified the decision to build in the Renaissance style as understandable in view of the youth of Russian revolutionary culture". - Op cit Jencks, Ch. (1973), p. 119

23 Le Corbusier, after the jury rejected in 1931 his project of the Soviet Palace, speaks about the "... beauty to everyman's taste. Statues, columns and gables are easier to please than straight and severe lines..." - Le Corbusier (Volume 1929-34)

24 Pevsner, N. (1961), pp. 686-687

25 Op cit Syrový, B. et al (1977), p. 387

26 Ibid p. 420

27 Ibid pp. 421-422

28 Ibid p. 421

29 Ibid pp. 422-423

30 Altherr, A. (1968)

31 Op cit Jencks, Ch. (1973), p. 137

32 Op cit Syrový, B. et al (1977), p. 423

33 Ibid p. 423

34 Op cit Jencks, Ch. (1973), p. 137

35 See also Chapter 5.24 of this study

36 Op cit Syrový, B. et al (1977), pp. 424-425

37 Discussed in the previous parts of this study

38 Op cit Syrový, B. et al (1977), p. 425

39 As an example, the introduction of the Socialist realism to Czechoslovakia can be mentioned: A delegation of three architects, lead by the late Dr. O. Starý, Professor of Architecture at the Prague Technical University, visited the U.S.S.R. to study its architecture so that the results of their study-trip could be used as the basis of official policy.

40 Architect J. Fragner. Op cit Syrový, B. et al (1977), p. 426

41 From many examples one from the last year of the seventies can be mentioned. This example, taken from the U.S.S.R., the country of the origin of the Socialist realism, testifies at the same time the international character of the "New Architecture". It is the renewal project of the Moscow neighbourhood Arbat: "Now with a blueprint that could have been lifted straight from a Western urban-planning textbook, the Soviets have decided to make Arbat a showcase of urban restauration". - White, N.J. and Schmidt, W.E. (15.10.1979), 'Urban Planning comes to Russia', Newsweek

42 Op cit Syrový, B. et al (1977), p. 427

43 The information about Mies van der Rohe's New National Gallery in Berlin is contained e.g. in Pehnt, W. (1970). The comment is the author's.

44 Op cit Drexler, A. (1960), p. 32

45 Dannat, T. (1959), p. 28

46 Op cit Fletcher, B. Sir (1975), p. 1247

47 Ibid pp. 1247-1248

48 Op cit Jencks, Ch. (1973), p. 104

49 Op cit Hitchcock, H.-R. (1958), p. 386

50 Le Corbusier in Towards a New Architecture (1927): "The house is a machine for living in". "A house is a machine for living in ... An armchair is a machine for sitting in and so on". Le Corbusier (1976), pp. 10 and 89

51 Op cit Hitchcock, H.-R. (1958), p. 387

52 Ibid p. 387

53 Op cit Syrový, B. et al (1977), p. 427

54 Ibid pp. 372-373, 395, 420, 433

55 Op cit Drexler, A. (1960), p. 9

56 Op cit Syrový, B. et al (1977), pp. 427-428

57 Op cit Jencks, Ch. (1973), pp. 139-140

58 Ibid p. 144

59 Op cit Syrový, B. et al (1977), pp. 416-417, 428

60 Ibid p. 429

61 About Crystal Palace see Chapter 2.29 of this study

62 Op cit Dannat, T. (1959)

63 Op cit Syrový, B. et al (1977), p. 427

64 Information about the Coventry New Cathedral was taken from Op cit Dannat, T. (1959), pp. 210-211

65 Op cit Fletcher, B. Sir (1975), p. 1245

66 Op cit Jencks, Ch. (1973), p. 137

67 Scharoun, H. et al (1957), p. 16

68 Op cit Pehnt, W. (1970), p. 82

69 Ibid p. 80

70 Ibid p. 6

71 Jencks, Ch. (1980), p. 77

72 Landau, R. (1968), p. 29

73 Ibid p. 29

74 Op cit Syrový, B. et al (1977), p. 430

75 Ibid p. 431

76 Op cit Jencks, Ch. (1980), p. 100

77 Ibid p. 106

78 Discussed in a more detailed way in Chapter 4.28 of this study

79 Source of information: Op cit Syrový, B. et al (1977), pp. 432-435

80 Op cit Jencks,Ch. (1980), p. 6

81 Term used by Ch. Jencks, Ibid p. 36

82 Ibid pp. 13 and 36

83 Ch. Jencks mentions the Walking City as one of the examples of the stream, to which he gave the name 'Second Machine Aesthetic'. - Op cit Jencks, Ch. (1980), p. 36

84 The Archigram Group: Warren Chalk, Peter Cook, Dennis Crompton, David Greene, Ron Herron and Michael Webb are authors of the Plug-in City project in 1964. - Ron J. Herron designed the Walking City in 1964. - Op cit Landau, R. (1968), pp. 67-69, 72

85 Source of information: Op cit Syrový, B. et al (1977), p. 432

86 Op cit Jencks, Ch. (1980), p. 20

87 Huxtable, A.L. (1981), "Architecture at the Crossroads", Dialogue, No. 53, p. 3

88 Ibid pp. 4 and 5

89 Ibid p. 8

90 Op cit Jencks, Ch. (1980), pp. 6, 8

91 Ibid p. 8

92 Op cit Huxtable, A.L. (1981), p. 2

93 Ibid p. 3

94 Ibid p. 3

95 Ibid p. 4

96 Ibid p. 4

4.00 CHAPTER IV - NATIONAL VARIATIONS IN THE "NEW ARCHITECTURE" OF SOME SELECTED COUNTRIES

4.10 SELECTION OF COUNTRIES

National variations in the "New Architecture" were mentioned and discussed in general terms in Chapter III, as an aspect of the evolution of the "New" or "Modern Architecture".

For the purpose of this study on "National Trends in the New Architecture" it is appropriate to look into the matter of national variations in the "New Architecture" more deeply, particularly as how they came into existence and the means used in the expression of the national character. The intention is to follow this phenomenon in the "New Architecture" of the countries where national variations appeared or still appear strongly, or at least in a more distinct form than in other countries, using them as examples. In this respect the selection of the countries that are discussed, is based on the results of the Chapter III.

The selected countries are as follows:

	Approximate dates of the appearance of national variations:
Nazi Germany	early thirties till 1945
Fascist Italy	early thirties till 1945
U.S.S.R.	thirties till mid fifties
Socialist Countries of Eastern Europe	end of forties till mid fifties
Switzerland	forties till now with a decreasing trend
The Netherlands	forties till now
Mexico	end of thirties till now
Japan	after 2nd W. War till now
Arab Countries	after 2nd W. War till now
Iran	after 2nd W. War till now
Some of the African Countries	after 2nd W. War till now

This list does not claim to be complete. In order to study National variations as a phenomenon, it includes some of the countries where "National trends" are or were indeniably strongly developed, be it in any form. It is not intended that this study should be a History of National variations in architecture.

Because of the fact that they were discussed in general terms in the Chapter III, some partial repetition cannot be avoided.

4.20 COUNTRIES DISCUSSED:

4.21 Germany: Early thirties till 1945

The evolution of the "New Architecture" was interrupted by the intervention of the authorities of the dictatorial Nazi-regime. Architecture, introduced as the official architecture required by the authorities, can be characterized as a kind of schematic Neo-Classicism using elements of the German national variations of the Renaissance.

Although derived from the Renaissance, which was the expression of the spirit of Humanism in architecture, the appearance of the official Nazi-architecture reflects the brutal character of its period[1]. The best known buildings of this time are the Brown House in Munich, the "Reichskanzlei" (Chancellary) in Berlin and the Stadium for Nazi-Party Conventions in Nurenberg. The most ambitious was the design of the Nazi Assembly Hall in Berlin with the reinforced concrete dome of a span of 200 metres. The scale of this building was exaggerated in such a way that, if built, the people would inevitably feel oppressed by the dimensions of the space - the architecture being the mirror of its time.

The living houses, be it family houses or blocks of flats, were designed using elements of

traditional German architecture.

This architecture was the expression of the highly nationalist Nazi-movement in Germany and was the official style of the "Third Reich". This National variation suffered the same fate as any of the official styles of the past, which were not in conformity with the "Spirit of the time". The style ended suddenly with the defeat of the Nazi-regime at the end of the 2nd World War.

4.22 Italy: Early thirties till 1945

The official architecture of the dictatorial Fascist-regime in Italy can be described as a kind of simplified Italian Renaissance. The nationalist movement was aiming for the revival of the Roman Empire - Imperio Romano.

From the large schemes built in this period the best known is the "Foro Mussolini", now "Foro d' Italia" in Rome and the satelite town called now EUR, south of Rome.

The impression of this architecture is pompous and massive.

Talent and skill cannot be denied the authors of the schemes. The best Italian architects and artists of this time participated in the design and the building of the projects[2].

With the end of the Fascist-regime in Italy at the end of the 2nd World War, this official style, like that of Germany, ceased to exist.

4.23 U.S.S.R.: Thirties till mid fifties

In the Soviet Union the "New Architecture" had a promising evolution and reached a high standard in the twenties and at the beginning of the thirties. Some Soviet architects at this time expressed dissatisfaction with the "New Architecture" and emphasised the importance of the artistic aspects of architecture which they saw in historical architecture. This stream got the official support and under the influence of the centralist government, it became the official architecture of the Soviet Union. This variation, "Socialist realism", which found its expression both in the Fine Arts and Architecture, aimed for "art socialist in its contents and national image in its appearance". The "New Architecture" was labelled "cosmopolitan", a term which seems to have been used in a negative sense.

A typical example of the "Socialist realism" in the architecture of the U.S.S.R. is the building of the Soviet Army Theatre in Moscow (1940), Ill.14 a,b.

The Soviet Union is a multinational country. In the Republics of the Soviet Union the architecture of the Socialist Realism has a different appearance, the result of the general approach to the design. The





14 a,b SOVIET ARMY THEATRE, MOSCOW, U.S.S.R.
K. ALABYAN, B. SIMBIRTSYEV, 1940
HISTORICISM IN THE PERIOD OF SOCIALIST REALISM IN THE U.S.S.R.
UNCORRECT USE OF THE SYMBOL, THE FIVE POINTED STAR IN THE DESIGN OF THE PLAN CANNOT BE RECOGNIZED FROM THE NORMAL EYE LEVEL

traditional historical architecture of each of the Republics was used as sources of inspiration. Designs range from the Eclecticism of elements to original creative work.

In the mid fifties, the loss of official support led to the end of this official style.

The proclaimed aim for the architecture to be "national in its appearance" puts this official style in the category of intentional national variations: That is the arts should be the expression of patriotism. (The term 'nationalism' is used in the socialist countries for the negative appearances close to the chauvinism.)

In this context, it has to be mentioned, that one of the nations in the Soviet Union, the Armenians, achieved remarkable success in this kind of architecture. The Armenians are one of the oldest existing cultural nations of the world. The old Armenian architecture has a specific character with the use of a distinctive kind of bas-relief ornamental decoration. This historical Armenian architecture was the source of inspiration for its creative use in the new conditions of the architecture. Among the mostly known Armenian architects are A. Tamanyan, G. Arababyan and K. Altunyan.

It is interesting, that even after the end of the "Socialist realism" in the arts and architecture contemporary Armenian architecture as well as the whole Armenian culture still retains a national identity or

character. A reason is yet to be found for this continued expression of the Armenian national character in her Arts and Architecture even when there is no official requirement for it any more.

For an explanation, a deeper insight into the history of the Armenian nation may be helpful. In the U.S.S.R., the Armenians live in the Armenian Soviet Republic, but Armenian minorities live in some other countries: Syria, Lebanon, Iran and Turkey. In Turkey, in the twenties, as a result of genocide, more than half a million Armenians lost their lives. This aspect of the Armenian history may account for a deep sense of nationalism among the Armenians, so strong as to arouse patriotic feelings.

This view was confirmed by one of the staff of Ahmadu Bello University in Zaria, who is of an Armenian origin. The slogan "Save Armenia" is an example of Armenian Patriotism. The autonomous Armenian Soviet Socialist Republic is the only country of Armenians, where they enjoy their self-rule. According to the laws of the U.S.S.R., the condition for the existence of the autonomous Republic is, that it has to have at least one million inhabitants. Due to the heavy loss of lives in the 2nd World War, the existence of the Armenian S.S. Republic was in danger, the consequence of a too small number of inhabitants. In the action "Save Armenia" many Armenians living in other countries went to the Armenian S.S. Republic to complete the number of inhabitants necessary

for the autonomous existence of their country in the U.S.S.R.[3].

The national trends existing even in the contemporary Armenian architecture are the apparent expression of the patriotism of the endangered nation.

4.24 Socialist countries of Eastern Europe: End of forties till mid fifties.

After the 2nd World War these countries adopted the socialist economic and political system. Under the influence of the U.S.S.R., the Socialist realism became the official policy in the fine arts generally and in the architecture as well. As mentioned in Chapter III, they were directed to be "socialist in content and national in its appearance" - and in the context of this study could be identified as an intentional national variation of the "New Architecture".

The period of Socialist realism in these countries is characterised by studies of their national heritage in architecture, with a special emphasis on those specific architectural forms and features of national variations developed from historical architectural styles. These specific elements were used in the new architecture in a different way, ranging from the simple transmission reminiscent of some kind of

eclecticism, to original creations using the elements of historical forms as inspiration.

Despite the seemingly generally uniform result in the architecture of the Socialist realism in the countries of Eastern Europe, it is possible to recognise the different periods of the national variations from historical styles, that influenced the development of architecture in Socialist countries in this period.

Examples: In the German Democratic Republic the influences of the "Moderne" of the twenties can be traced in the architecture of this period. In the Northern G.D.R. architecture of this period used red burnt clay bricks, traditionally used in North German architecture.

In Poland a quite moderate form of Historicism developed. In several cases only the architectural details taken from historical Polish architecture were used; on some buildings the threedimensional texture on the facade was the architectural element used to express the national appearance.

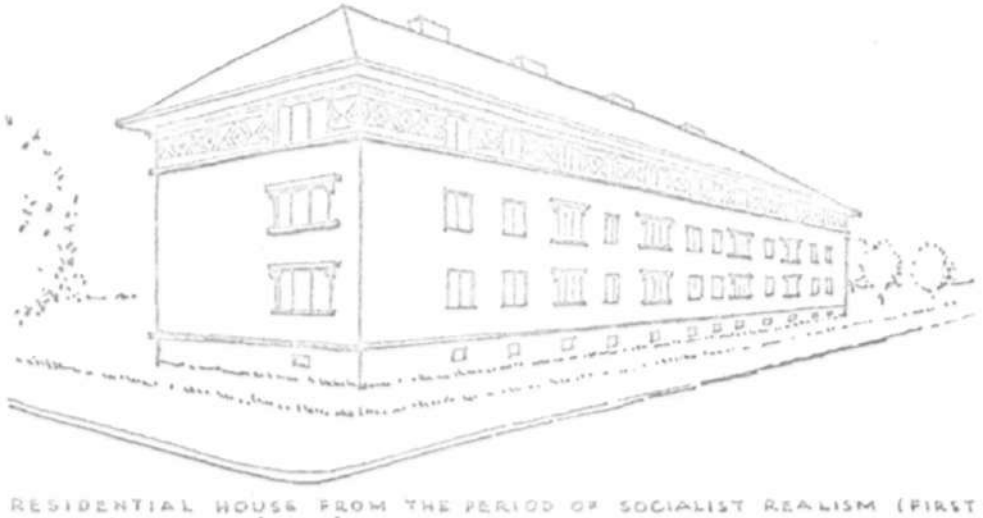
A remarkable difference in the architecture of this period can be seen between the architecture of Roumania and Bulgaria. Historicism was used in both of them, but the influences that prevailed in the architecture of these two countries between the World Wars, can be seen to continue. In Roumania it was the influence of the Paris Ecole de Beaux Arts, in Bulgaria the influence of

the Berlin and Munich Moderne. Even in the town planning these differences are visible, particularly the influence of French Classicism on town planning in Roumania[4].

In Czechoslovak architecture Socialist realism had differentiated forms, resulting from the different approaches of individual architects to achieve the common aim, that is a national character in the design of buildings. The differences were caused particularly by different sources of inspiration taken from the national architectural heritage. The prevailing sources were the national variation of the Czech Renaissance[5] used already as a source of inspiration in the period of the Czech Neo-Renaissance[6], and the folk architecture prevailing in the astern part of the country. Apart from the use of traditional forms, the use of only architectural details or of decorations having the national character can be observed. In particular in Slovakia, the eastern part of Czechoslovakia, the use of the national ornaments, decorations and details taken from folk architecture was the prevailing approach Ill.15,16.

In the town planning of Czechoslovakia in this period traditional principles were followed. This can be seen in the new industrial towns of Poruba and Havířov in Northern Moravia and Dubnica in Slovakia, built in the early fifties.

Socialist realism in architecture has to be seen as a kind of national variation in the "New Architecture" of



15 RESIDENTIAL HOUSE FROM THE PERIOD OF SOCIALIST REALISM (FIRST HALF OF FIFTIES), KYSUCKÉ NOVÉ MESTO, CZECHOSLOVAKIA, WALLS IN BEIGE, SGRAFITTO USING SLOVAK NATIONAL ORNAMENT IN DARK RED



16 WINDOW DETAIL FROM THE PERIOD OF SOCIALIST REALISM, KYSUCKÉ NOVÉ MESTO, CZECHOSLOVAKIA. SGRAFITTO USING ELEMENTS FROM SLOVAK NATIONAL ORNAMENT. WHITE ORNAMENT ON DARK RED BACKGROUND. BEIGE WALLS

the countries of Eastern Europe after the 2nd World War, aiming at architecture that would be "national in its form". At the same time it was the official architecture required by the State authorities as the main client having the decisive position and power. The Socialist realism followed the destiny of official styles of the past. If the official style was not in conformity with the "spirit of the time", it ended as soon as the official demand for it ceased. This was the case of the Socialist realism in all the countries of Eastern Europe in the middle of the fifties.

So it was confirmed again, that culture is the "mirror" of the period and reflects its events. Architecture as part of the culture reflects the events in its specific way. In the U.S.S.R. the loosening of the rules governing the Fine Arts occured in the first half of the fifties. The milestone in the evolution of the architecture of the U.S.S.R. was the frontpage caricature published in the influential satirical magazine "Crocodile" in 1954, ridiculing the use of forms and elements taken from historical styles in contemporary Soviet architecture. This caricature showed in the artist's imagination how cars would appear if designed using historical forms and details in the way the architects design buildings. - In the U.S.S.R. Socialist Realism in the architecture ceased to be required[7]. Other countries of Eastern Europe followed this example.

The question arises about the reasons for the sudden interruption of the use of the "Socialist realism" in the countries of Eastern Europe.

All these countries were occupied in 2nd World War by the Nazi armies. There were therefore strong nationalist or patriotic movements in these countries.

Despite the fact that strong nationalist feelings existed at this time in these countries, Socialist realism, which aimed at the expression of national character, followed the destiny of official styles that are not in conformity with the feelings of the people.

The explanation is that the countries of Eastern Europe, particularly Czechoslovakia, had already developed a strong tradition of the "New Architecture" starting in the twenties. The occupational power forbad the use of the "New Architecture", which was Functionalism, the prevailing stream in this period. The people of these countries felt that functionalist "Modern Architecture" represented their nationalism at the time of foreign occupation and in the period that floolwed[8].

4.25 Switzerland: Forties till now

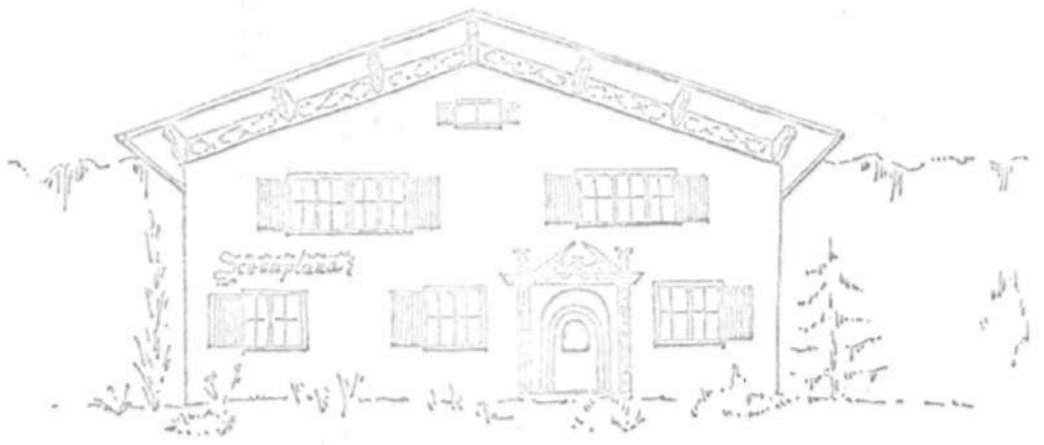
Switzerland is a much smaller country than its neighbours Germany, France and Italy. Since the creation of the Swiss Confederation in the 12th century, its independence has often been in danger.

This has naturally developed in the Swiss a strong national feeling.

Switzerland was aware of the danger of German occupation in the 2nd World War. This knowledge and the spirit of freedom and resistance increased the already strong Swiss nationalism. These nationalist feelings found expression in architecture as well. National trends can be seen in the architecture of Switzerland in the period close to the War and after it[9]. Ill.17.

In recent years however the Swiss architecture shows fewer signs which display national identity. The architecture of recent years can be described to be generally cosmopolitan though it contains typical details that are common in Swiss architecture as the result of normal evolution. The explanation for this phenomenon can be found if we follow consistently the way architecture reflects the "spirit of the time". In the postwar evolution of Switzerland, a decrease in nationalism and an increased cosmopolitism can be seen, particularly among the young generation, which did not associate itself with the events and dangers of the 2nd World War[10].

In one field however deliberate variations are in steady use in Swiss "New Architecture": the buildings and facilities related to the tourist trade. Switzerland is one of the countries with the most developed tourist trade in the world. Foreign tourists



17 CHALET ST. MORITZ, SWITZERLAND
TRADITIONAL FORM, TYPICAL ROOF WITH VISIBLE WOODEN MEMBERS, TRADITIONAL WOODEN WINDOW SHUTTERS, WHITE WALLS, DARK BLUE SGRAFITTO DECORATION ORIGINATING FROM SOUTH SWISS NATIONAL VARIATION OF THE RENAISSANCE RELATED TO THE NORTH ITALIAN VARIATION OF THE RENAISSANCE



18 HOTEL, ZERMATT, SWITZERLAND
TRADITIONAL SWISS HOUSE FORM WITH THE TYPICAL ROOF USED IN A BUILDING HAVING SEVERAL STORIES WITH WOOD IN TRADITIONAL DARK BROWN COLOUR

expect the facilities to have the character of the country. This is a natural requirement and at the same time the reason that even in the most recent buildings related to the tourist trade the national trend in the architecture is expressed in a decent and tasteful way, specific to Switzerland. Ill. 18

4.26 The Netherlands: Forties till now

The architecture of the Netherlands is strongly influenced by the lack of stone as a building material. For centuries Dutch architecture is characterized by the use of red brick[11] combined with elements, particularly window and door frames in light colours ranging from white to the beige. This gives a specifically Dutch character to the buildings.

Towards the end of the last century, national trends appeared in Dutch architecture, which resulted from nationalist movements of the time[12].

At the beginning of the thirties of this century, i.e. at the time of the international style, a group called the "Delft School", lead by Professor Grandpré Molière, proclaimed and followed the revival of the aesthetic and ethical 'traditionalism' as opposed to 'technical' functionalism[13].

In 1932 another, the '1932-Group' split from the Netherlands CIAM Group. They may be called 'functionalists partly converted to traditionalism'[14]. Their work is linked with the Netherlands classicist Baroque,

The explanation of this phenomenon in the architecture of the Netherlands may be traced to the following:

i) The normal, or may be under the conditions of the country, accelerated evolution of the national variation of the "New Architecture", which is characteristic of later periods of the styles. The conditions in this case being particularly favourable to the traditional use of bricks, the prevailing building material, which was still in use.

ii) An "intentional national variation", as distinguished from the conditions just mentioned, as an expression of the Dutch nationalism, which then existed, was intensified by the Occupation and still exists today[19]. This nationalism may be an explanation for the movement of the 'traditionalists' in the thirties as well as the evolution of the Netherlands in the fifties towards specific Dutch modern architecture.

iii) Both above reasons combined, i.e. a spontaneous evolution accelerated and accentuated by nationalism.

It cannot be asserted definitely which of the above explanations is attributable to the evolution of the Dutch national variation of the "New Architecture", however the "New Architecture" in the Netherlands is an interesting example of the possible ways and means used for the expression of national character in contemporary architecture.

4.27 Mexico: End of thirties till now

The "New Architecture" in Mexico, since the end of the thirties, had all the signs of "Functionalism" but in its expression it was unique, typically national Mexican. The inspiration was taken from the local artistic tradition, which has its roots in the culture of the Mayas (3d - 9th centuries), followed by the civilisations of Olmecs, Zapotects, Totonacs, Toltecs, Mixtecs and the Aztecs, the Chighimecs and the inhabitants of Xochicalco[20].

In the architecture of the past, it was nature that played a dominant role. The characteristic of Mexican landscape is its grandeur, with large open spaces is reflected in the architecture of the past in the concept of large spaces, the architecture being either in conformity or in contrast with the nature, in every case "composed with space"[21]. "Sometimes the play of masses is opposed to plain and mountain; sometimes it imitates the latter (the pyramids). Man imposes or adapts"[22].

Contemporary Mexican architecture takes its inspiration from its past: its main characteristics are the sense of space and a grand scale[23].

Two principles of composition in the contemporary Mexican architecture are retained from the architectural composition of the architecture of the past: the

principle of open spaces in front, around and within the building, and as a second principle the most direct contact between interior and exterior space.

The application of these principles can be observed in numerous complexes of buildings constructed in Mexico, as in the Anthropological Museum, the University City,[Ill.1] the Polytechnic Institute at Mexico City, Theatre Insurgentes, City Waterworks, in Medical centres in different towns etc. Architects who design consistent with Mexican national variation are J.O'Gorman, J.M. Velasco and G. Saavedra.

A further element of the past used in the new architecture of Mexico is the dynamic lines and volumes of pre-Columbian architecture. The "New Architecture" exploits also the experience of the past, that "the simplest, even elementary, effects are the most effective"[24]. The sun, the transparent air and nature contribute to the impression.

The architecture of the past is characterized by the use of the high or bas-relief on the surfaces of the buildings - "geometrical or stylized motifs sculptured over the entire surfaces of walls"[25], or by mural decorations done in fresco or mosaic.

The "New Architecture" of Mexico uses these and other architectural elements of the past in a new form on contemporary buildings, which belong undoubtedly to the "New Architecture". Apart of the mural decorations, executed in high or bas-relief, exterior and interior surfaces

are decorated with flat-mosaic, relief-mosaic or fresco-painting. "In both Mexico and South America the greatest contribution has been in reinforced-concrete building, and work in these areas is often characterized by its daring structural forms. The use of colour is also noteworthy, and in Mexico whole facades are sometimes treated as rich mosaic mural decorations"[26].

The result is that the buildings have a national Mexican appearance.

The Mexican intentional national variation of the "New Architecture" is one of the best and most successfully achieved.

The reasons for this, if we accept the hypothesis, starts with the question whether this phenomenon is, or can be, the expression of a nationalist movement and patriotic feelings among the Mexican people. Rich cultural heritage gives them identity.

It is well known, that Mexico lives in the shadow of his powerful and richer Northern neighbour, the U.S.A.[27]. Even the war between these two countries and the loss of California are still remembered in Mexico. It is only natural, that a strong Mexican nationalism has developed as a reaction and that the Mexicans aim to show the own national identity in cultural values. It is in the field of the culture, that their country is superior, having a very long tradition by comparison with the relatively short cultural tradition of the U.S.A. Mexican

nationalism is very strong and can be observed even in the mutual international relations of the two countries[28,29].

It is possible to say with certainty that the highly successful national deviation in the "New Architecture" of Mexico can be considered as the result of nationalist or patriotic feelings. Because these feelings are alive, there is a natural need for their expression. The consumer - the public in this case - requires architecture that shows the national Mexican identity. This can explain the success of the national trends in the "New Architecture" in Mexico.

4.28 Japan: After 2nd World War till now

The "New Architecture" was introduced in Japan as the functionalist cosmopolitan style in the thirties and its international appearance can be seen on the buildings built up to the start of the 2nd World War.

In post-war Japanese architecture, national tendencies in the "New Architecture" can be observed, which have the form of an "intentional national variation" (using the term of this study). This has been used so extensively that it deserves to be called the new national architecture of Japan. Even the term "The New Japan Style" has been used[30].

The architecture combines the principles of the "New Architecture" with its own historical architecture of traditional forms, traditional structures and structural details, as well as with traditional functional requirements. "Recent Japanese architecture has expanded the language of Modern architecture and opened up routes to the past and tradition which were previously cut off. Because of this it is likely that Japan will become a model to follow"[31].

Historical Japanese architecture has been a distinct style since the 16th century. The elements of this traditional style have been used in a somewhat eclectic but nevertheless creative way.[Ill.4,5,6,7.] "The West preaches eclecticism and syncretism now, whereas for the Japanese they have been a commonplace"[32].

The expression of continuity with the traditions of historical Japanese architecture can be observed in the structural principle of the Prefecture Kagawa by K. Tange (1955-58).[Ill.3a,b.] The reinforced concrete structure of the building, with the projected ends of the beams, joined together as in traditional Japanese wooden structures, gives to the building the character of traditional Japanese wooden architecture. A comparison can be drawn with Ancient Greek architecture in the way wooden forms were transformed into a permanent material particularly in the Doric order, in Ancient Greece into stone, in this case into concrete.

Even the sports halls for the Olympic games in Tokyo (1964) by K. Tange, although being a fully contemporary architecture, bear the sign of national Japanese character, particularly in the curved forms and lines of roofs which are so characteristic of traditional architecture.

Other Japanese architects, working in the manner of the national architecture, are Y. Ashihara, J. Yoshimura and in particular G. Otani, whose International Conference Centre in Kyoto (1963-65) reminds one of historical Japanese palaces. Another building, bearing the sign of national Japanese character, is the Tokoen Hotel, Kaike by K. Kikutake (1964).

These buildings without any doubt belong to the "New Architecture" even though at first sight they are not anonymously cosmopolitan, but virtually nationally Japanese. Seeing these buildings, the immediate reaction is to accept them as Modern Japanese buildings, the national identity being so strongly expressed.

This Japanese national variation in the "New Architecture" is very successful.

The extent of this phenomenon and its success undoubtedly results from the need for such a national architecture in the life of the nation. The consumers of the architecture require it, it is the expression of the "Spirit of the time" in Japan.

Again the question arises as to whether this can be the result of the Japanese nationalism. It is well known that the Japanese nationalism led in the past to the expansionism on the mainland of Asia. The present form of the Japanese nationalism, influenced by the defeat in the 2nd World War, ranges from the positive aim to show Japanese ability in different fields of activity, (which found its expression in the World Exhibition in Osaka Expo 1970) to negative appearances.

It can be taken as certain that the intentional national variation in the Japanese "New Architecture" is the result and expression of Japanese nationalism.

4.29 Arab countries: End of the 2nd World War till now

In the "New Architecture" of Arab countries strong national trends can be observed after the War. Elements originating from the traditional architecture have been used to a greater or lesser extent in synthesis with the contemporary, prevailingly functionalist "New Architecture".

These elements have their source in historical Islamic architecture and culture. Their use gives the specific character of the country to its buildings: "In many places the traditions of Islamic building have been applied to the needs of expanding communities and changed situations. The combination of traditional forms and the technological opportu-

nities of twentieth-century architecture has proved difficult. The vigour of much of the endeavour indicates that in due course a more coherent style could emerge"[33].

This national trend in architecture can be observed in all Arab countries after their liberation and its widespread influence witnesses the intention.

Looking into the possibility as to whether these national variations in the architecture of Arab countries is the expression of nationalist movements, the following facts can be considered:

The Arab countries were under the colonial rule. This time was, without any doubt, a time of oppression which naturally gave rise to nationalist movements: "Islam is being used as a vehicle for striking back at the West, in the sense of people trying to reclaim a very greatly damaged sense of self-esteem. They feel that for the past 150 years the West has totally overpowered them culturally, and in the process their own institutions and way of life became second rate"[34]. "Muslims are rediscovering their spiritual roots and reasserting the political power of the Islamic way of life. Repelled by the bitter fruits of modernization and fired by a zealous pride in their ancient heritage, the umma (world community) of Islam is stirring with revival"[35].

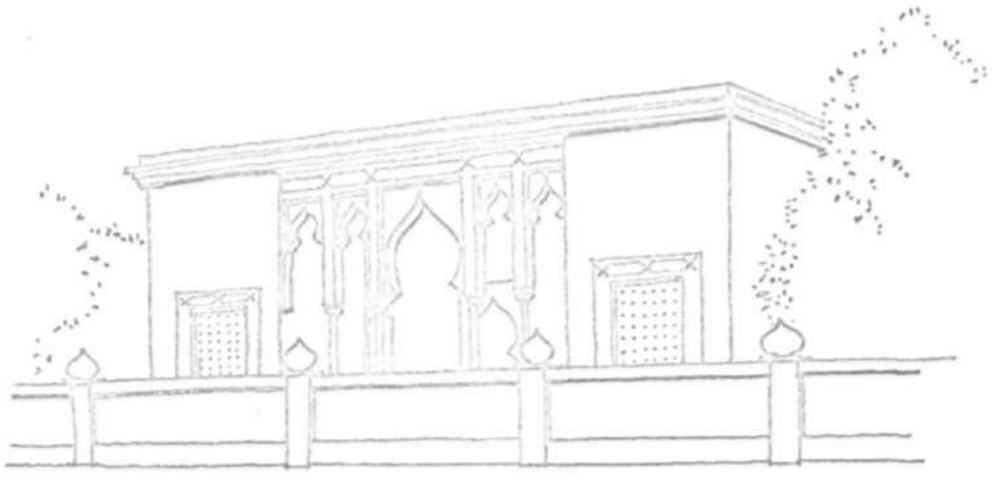
Some of the Arab countries fought for their independance. Apart from that, some of the Arab countries

are now very prosperous due to their oil resources, i.e. their economic strength may be a further source of national pride.

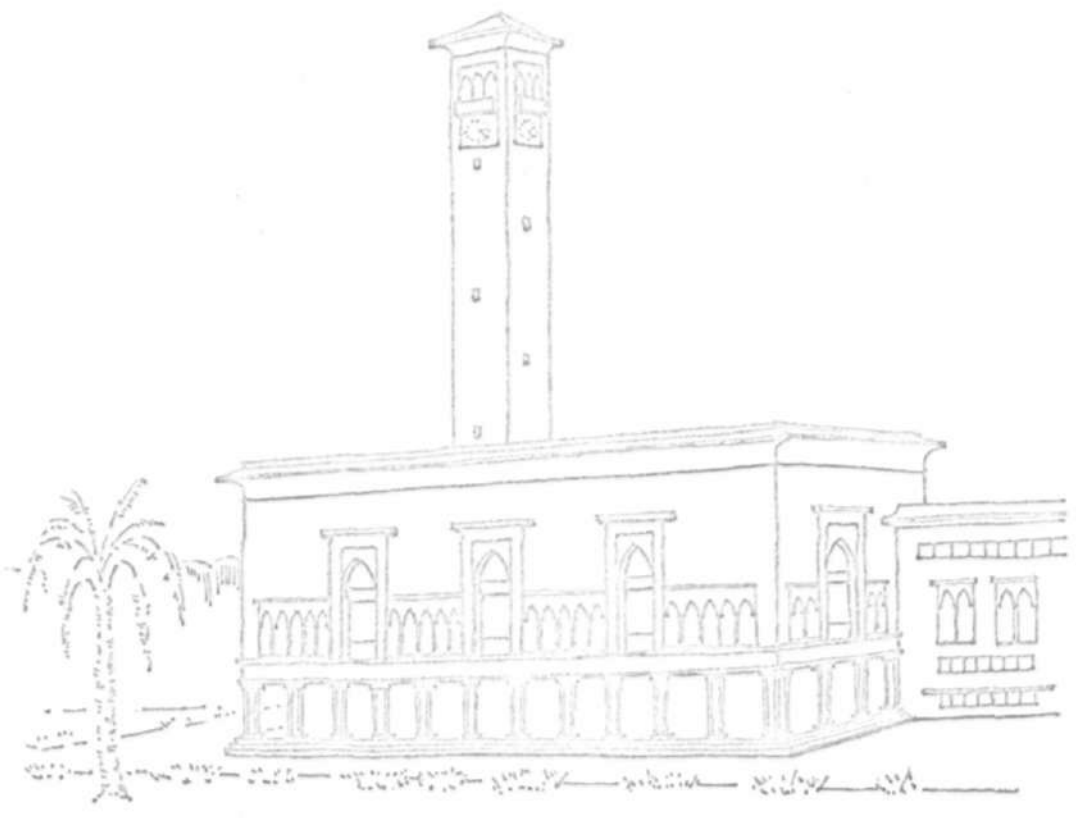
Some thoughts about Arab nationalism were expressed by I.A. Gambari, Senior Lecturer in Political Science, Ahmadu Bello University, Zaria: "As in Vietnam, the Americans tend to be engaged in wishful thinking, misunderstanding or underrating Vietnamese nationalism, they seem also to be misunderstanding Arab nationalism in the Middle East"[36]. "It seems to me that there are two nationalisms at work in the Middle East: micro and macro nationalisms. Arab macro nationalism tends to give legitimacy to the micro nationalism of the individual Arab states in the region"[37].

In countries with strongly centralised governments, the possibility always exists that the architectural style can be dictated by the authorities, with the danger that this style may not be in conformity with the feelings of the public, with the "Spirit of the time" in the country. This may eventually be the case of Morocco[Ill.19,20] or of Saudi Arabia, which are monarchies, and where there are a large number of buildings designed tastefully as a national variation of the "New Architecture". These national trends appear also in the "New Architecture" of Arab countries in which the people participate in the government, as in Tunisia, being a Republic.

In Tunisia, elements of traditional architecture



19 CASABLANCA, MOROCCO
ELEMENTS OF TRADITIONAL ARAB ISLAMIC ARCHITECTURE
MOSAIC IN BEIGE, WALLS WHITE



20 CITY HALL, CASABLANCA, MOROCCO
ELEMENTS OF TRADITIONAL ARAB ISLAMIC ARCHITECTURE
WALLS WHITE, ARCHITECTURAL ELEMENTS BROWN

influenced by Islam, have been used in a tasteful way not only on public buildings, but also on private houses, Ill.21,22,23a,b giving a national character to these buildings.

It can be therefore taken as certain that the national variations in the "New Architecture" in Arab countries result from the needs of the time in those countries. The reason again is nationalism.

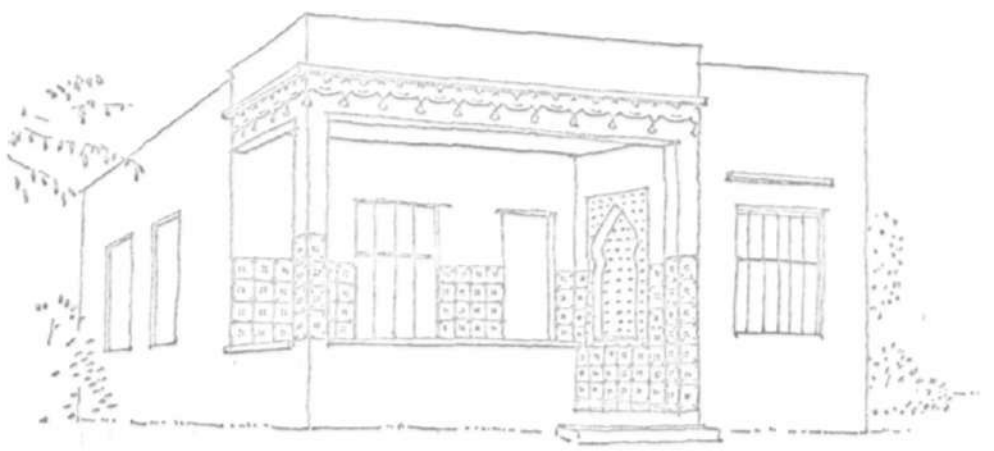
It has to be noted that several of the buildings, that are national variations in the "New Architecture" of some Arab countries, have been designed by foreign architects. In these cases it is certain that this reflects the wish of the client, but at the same time these buildings are also example of the influence of the environment, of the "Genius loci" - "Spirit of the place" on the architects[38].

4.30 Iran: After 2nd World War till now

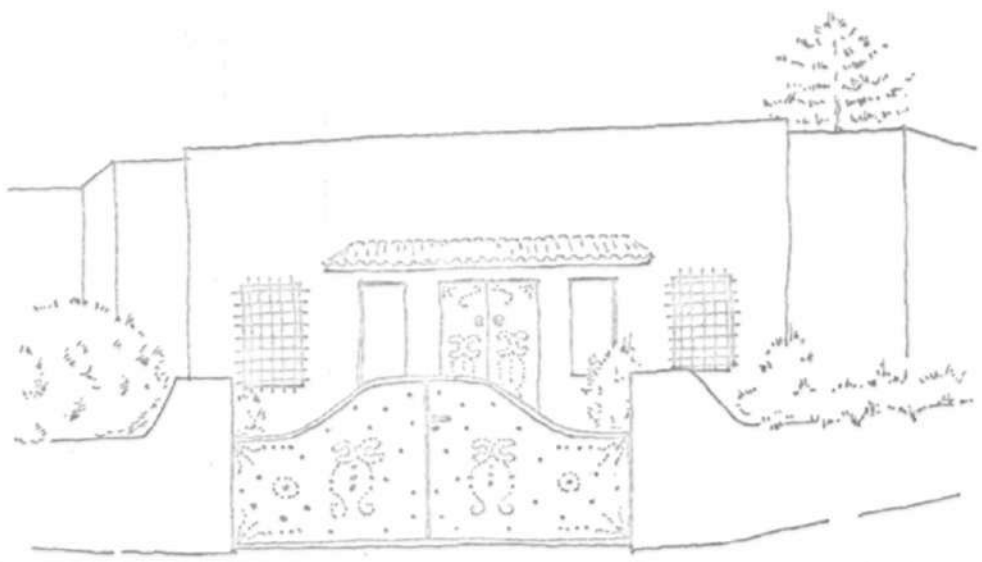
The use of elements from the traditional Iranian architecture can be seen on several complexes as well as on single buildings in Iran in the recent years, which has resulted in the specifically national appearance of these buildings. National trends in the "New Architecture" of Iran can as certainly be considered to be expressions of Iranian nationalism, as in other Muslim countries.

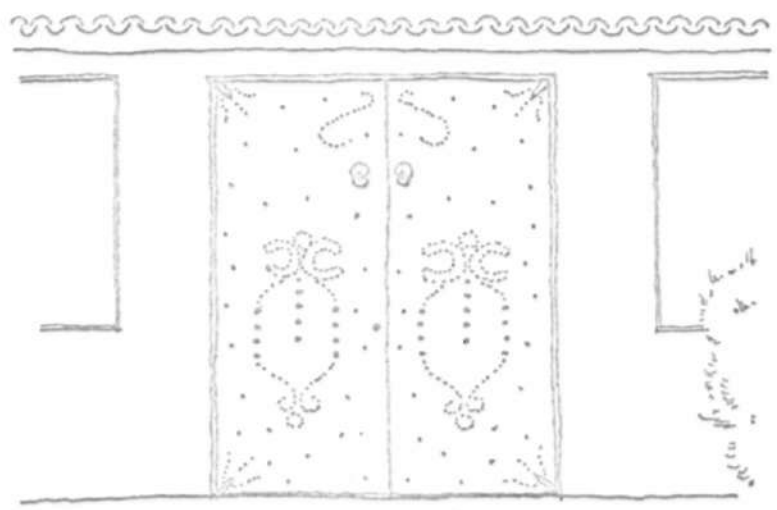


21 TUNIS - CARTHAGE , TUNISIA
USE OF ELEMENTS TAKEN FROM TRADITIONAL ARAB ISLAMIC ARCHITECTURE , DOMES , ARCADES



22 TUNIS - CARTHAGE , TUNISIA
ARCHITECTURAL ELEMENTS FROM TRADITIONAL ARCHITECTURE , NICHE IN THE TYPICAL FORM , MOSAIC OF GLAZED CERAMIC TILES WITH TRADITIONAL DECORATION





23 a,b TUNIS - CARTHAGE , TUNISIA
DECORATION OF DOORS TYPICAL OF TRADITIONAL ARCHITECTURE.
HEADS OF NAILS OF DIFFERENT DIAMETERS USED ORNAMENTALLY.
BLUE NAILS ON WHITE DOOR SURFACE

Because of the decisive power and influence of Shah, the ruler of Iran till 1979, there exists the theoretical possibility that this national variation in the "New Architecture" of Iran may be a kind of an "official style". Some further years therefore will be necessary to clarify whether this variation had deeper roots and whether it will continue as the "mirror" of the undoubtedly strong nationalism in Iran[39].

For the study of the means used to evoke the national identity in the "New Architecture", the Iranian variation is highly interesting. The extent and specific character of this Iranian variation enables that it can become the subject of a specialised study.

4.31 African Countries South of Sahara: After 2nd World War till now

The history of the introduction and of the use of the "New Architecture" to Africa, is similar as the introduction of historical architectural styles from the countries of origin to other countries: "New Architecture" developed in the countries with the temperate climate. It was introduced to African countries by architects coming from the countries in the temperate climatic zone. At the beginning, the "New Architecture" was used in the original form of the style, without any basic adjustment to African

conditions and even not to specific climatic conditions[40]. This concerns in particular the use of large windows without any shading devices.

Later the "New Architecture" in African countries took these specific conditions into account and adjustments began as the beginning of the natural evolution of spontaneous variations. Now, at the beginning of eighties, a modern tropical African architecture exists.

Apart of this evolution, intentional national variations appeared, aiming at the expression of the African character.

Of the countries in Africa South of Sahara, the attention of this study will be mainly concentrated on examples from two countries, Ghana and Nigeria, with single examples from Ivory Coast and from the Republic of Benin. The choise of Ghana and Nigeria as examples for the study of national variations in the "New Architecture" resulted from the following reasons:

Ghana was the first African country to gain independence from the colonial rule after the 2nd World War. The country played an important role among African countries in the political sphere and for a long time in the economic field as well.

Nigeria has the largest population in Africa, giving her a unique political and economic position supported by her military strength and her economic prosperity derived

from oil.

This selection was made because of the author's knowledge of those countries, having worked for 4½ years as a Lecturer in Ghana and more than 8 years in Nigeria.

In both countries, intentional national variations in the "New Architecture" have appeared. The architecture of some buildings gives at first sight the impression of African Architecture. The impression in some cases is of African Architecture in general, in others it belongs more specifically to one country or even to one part or region of it.

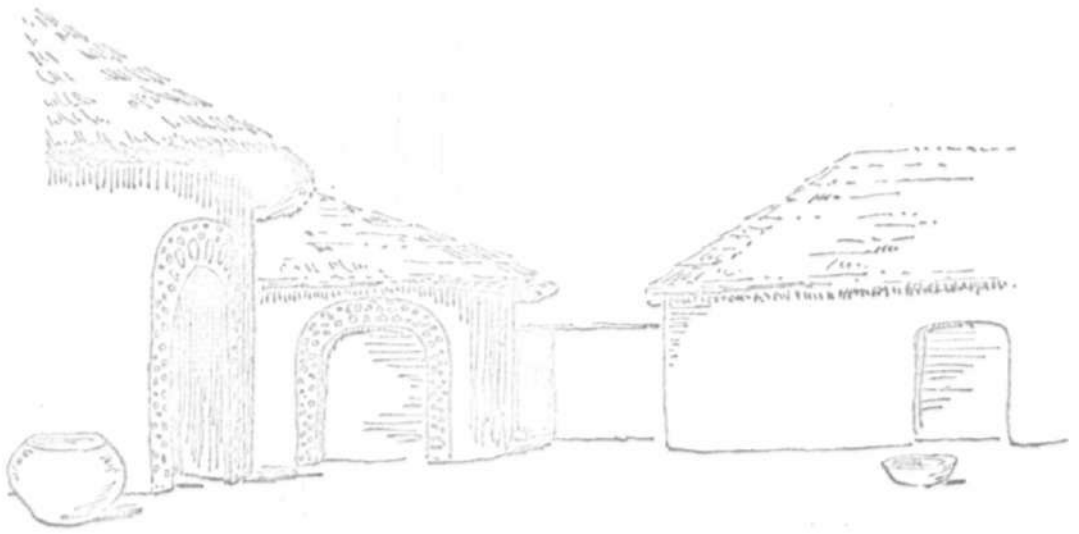
This specific character is expressed sometimes strongly, sometimes not, but sufficiently that the national identity can be easily recognized.

The examples of traditional architecture as well as of some buildings constructed in recent years are on Illustrations 24 to 43 a,b,.

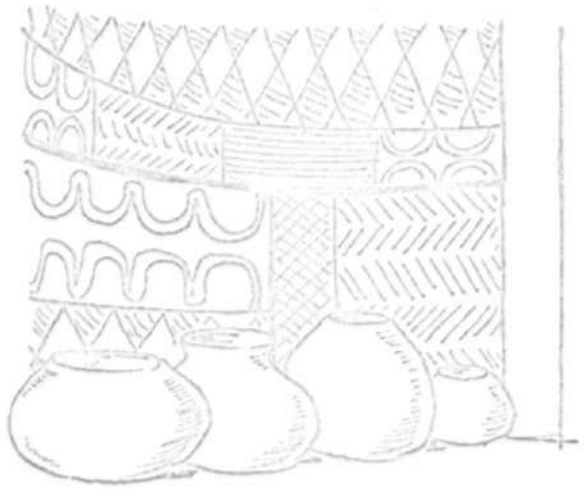
The client particularly the public client, often desire that the design expresses the African identity or more specifically the identity of his country.

The need to express the national character has been raised several times by African as well as non African external examiners to Schools of Architecture during the moderation of examinations in both countries.

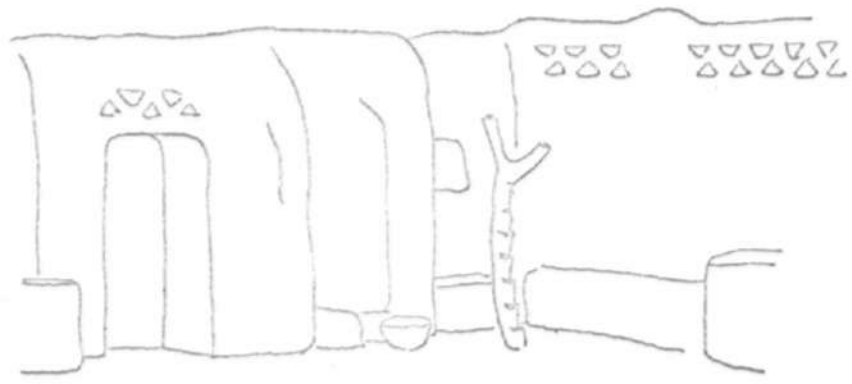
As mentioned, there is a demand for specifically



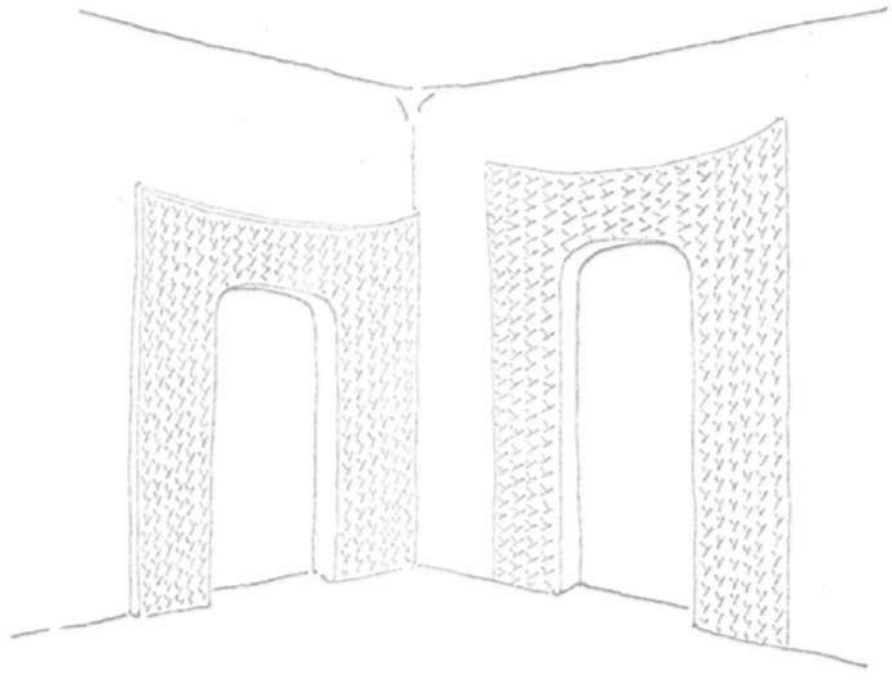
24 KUSULIYILI , A DAGOMBA VILLAGE , NORTHERN GHANA
DECORATIVE TREATMENT OF ENTRANCES.
SEGMENTS OF BROKEN CHINA OR EVEN WHOLE PLATES SET INTO THE PLASTER.
THE AUTHOR SAW THIS KIND OF DECORATION DURING A SURVEY MADE IN THE DAGOMBA RURAL TOWN KUMBUNGU IN NORTHERN GHANA.
A SIMILAR KIND OF DECORATION HAS BEEN USED IN THE MINNA AREA IN NIGERIA



25 TONGO , A TALLENSI SETTLEMENT, NORTHERN GHANA
DECORATIVE WALL TREATMENT
INCISED PATTERNS ARE CUT WITH A SHARP TOOL



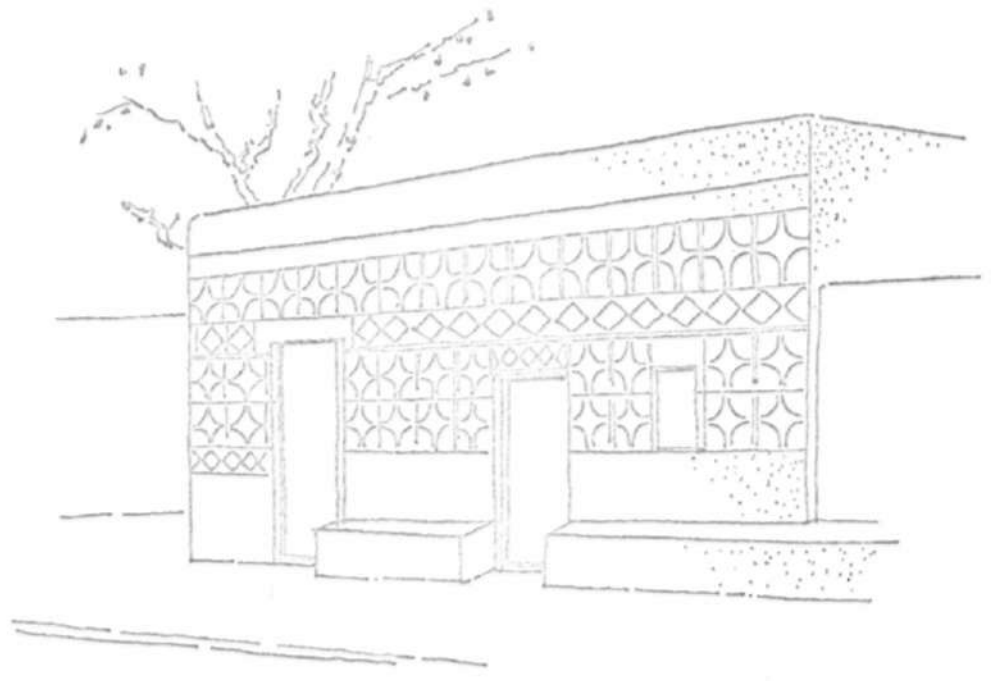
26 SEKAI, AN ISALA VILLAGE, NORTHERN GHANA
TRIANGULARLY PIERCED LINTEL AND PARAPETS ACHIEVED BY THE ARRANGEMENT OF DRIED MUD BRICKS LAID AT ANGLES TO ONE ANOTHER



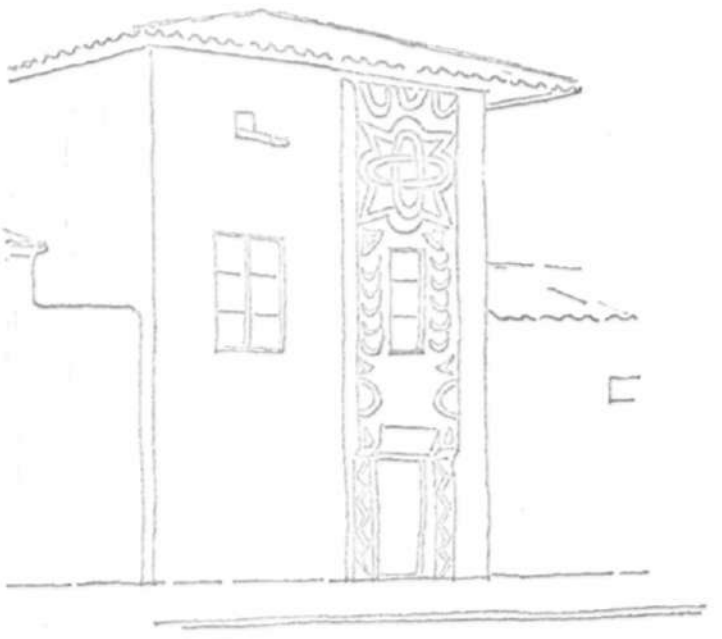
27 LARABANGA, A GONJA VILLAGE, NORTHERN GHANA
DECORATIVE DOOR TREATMENT
DESIGN ACHIEVED BY USING FINGERS



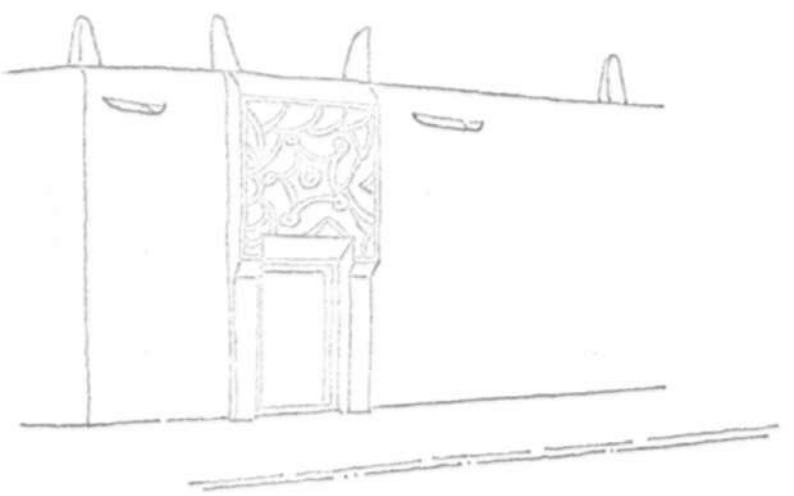
28 ZARIA OLD CITY, NIGERIA
PLASTIC MURAL DECORATION
WHITE WALLS, WHITE DESIGN ON BROWN BACKGROUND



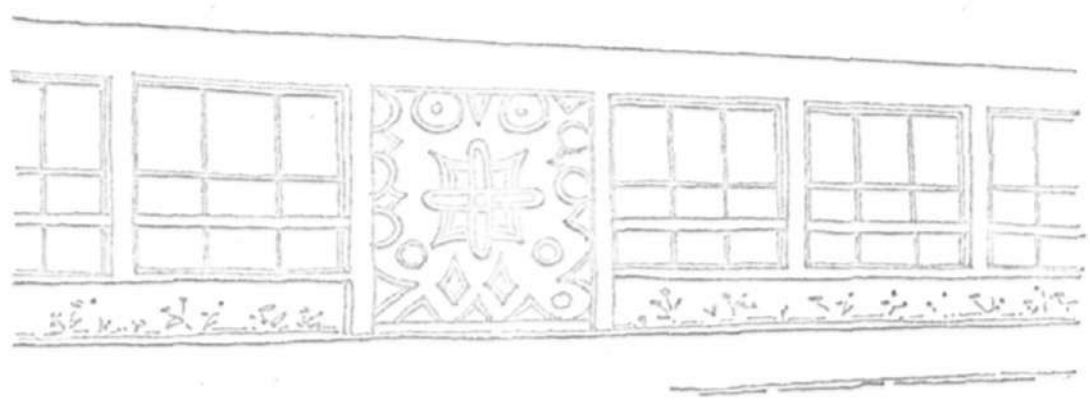
29 ZARIA OLD CITY, NIGERIA
PLASTIC MURAL DECORATION
WHITE WALLS, DECORATION IN COMBINATION OF WHITE AND REDDISH BROWN



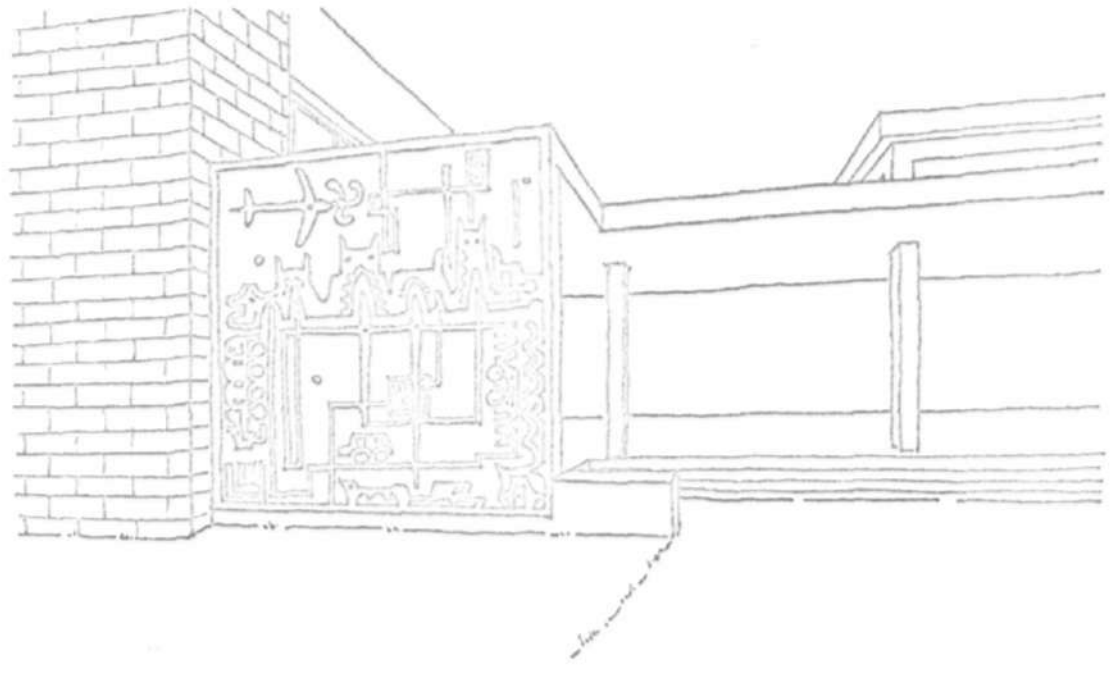
30 SHAGALINKU HOTEL, ZARIA TUDUN WADA, NIGERIA
MURAL DECORATIONS IN RELIEF FORM. ALL WHITE WALLS.
NORTH STAR, SYMBOL OF NORTHERN NIGERIA



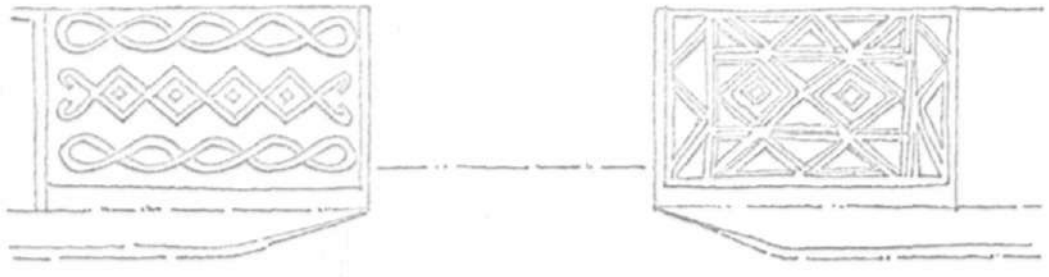
31 ZARIA TUDUN WADA, NIGERIA
MURAL DECORATION IN RELIEF FORM
MUD WALLS IN NATURAL REDDISH LATERITE COLOUR



32 BAGAUDA LAKE HOTEL, NIGERIA
PLASTIC MURAL DECORATION ON THE MAIN FACADE
WHITE DESIGN ON BEIGE BACKGROUND
NORTH STAR, SYMBOL OF NORTH NIGERIA



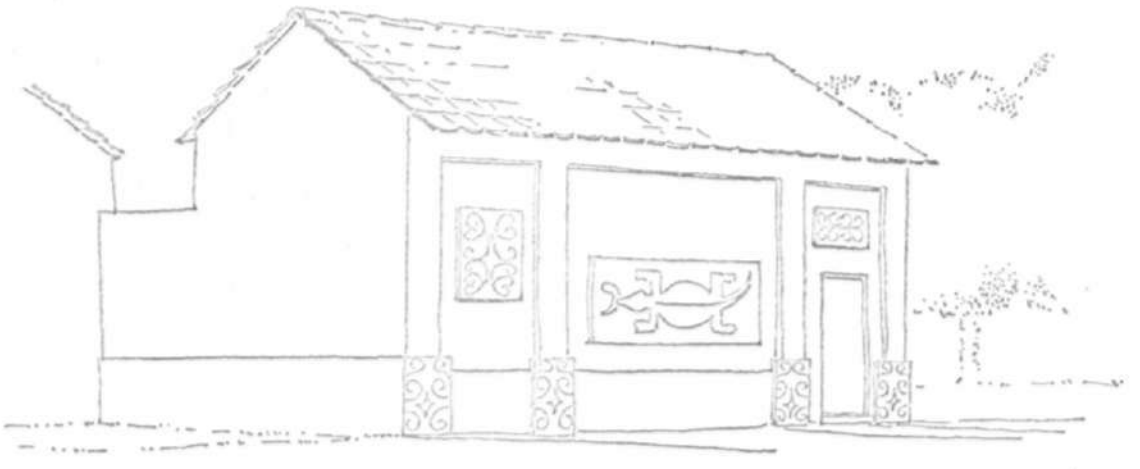
33 POST OFFICE, ZARIA, NIGERIA
DEEP PLASTIC MURAL DECORATION INSPIRED BY TRADITIONAL DECORATIONS.
WHITE DESIGN ON BLUE BACKGROUND



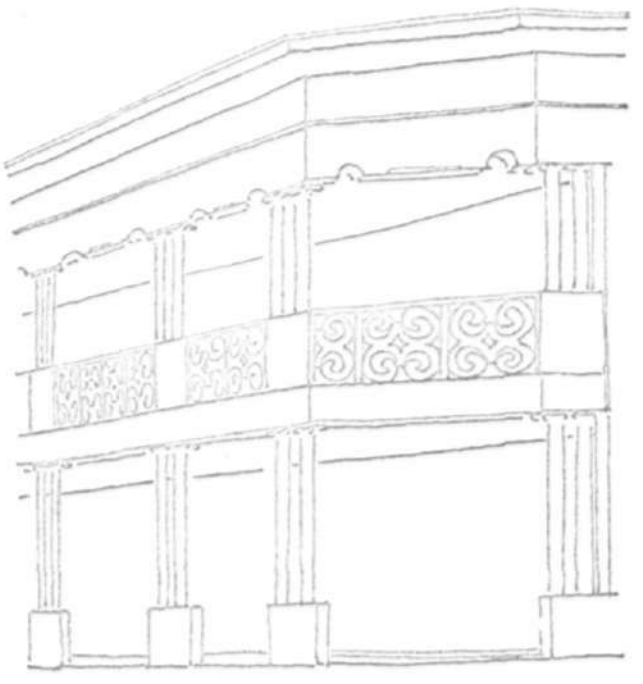
34 FENCING OF THE WATER RESTAURANT, KANO, NIGERIA
PLASTIC DECORATION INSPIRED BY TRADITIONAL MURAL DECORATIONS
WHITE DESIGN ON BLUE BACKGROUND



35 FENCING OPPOSITE DURBAR HOTEL, KADUNA, NIGERIA
PLASTIC DECORATION AS THE MODERN AFRICAN ART INSPIRED BY TRADITIONAL MURAL DECORATIONS
COMBINATION OF WHITE, LIGHT BLUE AND DARK BLUE

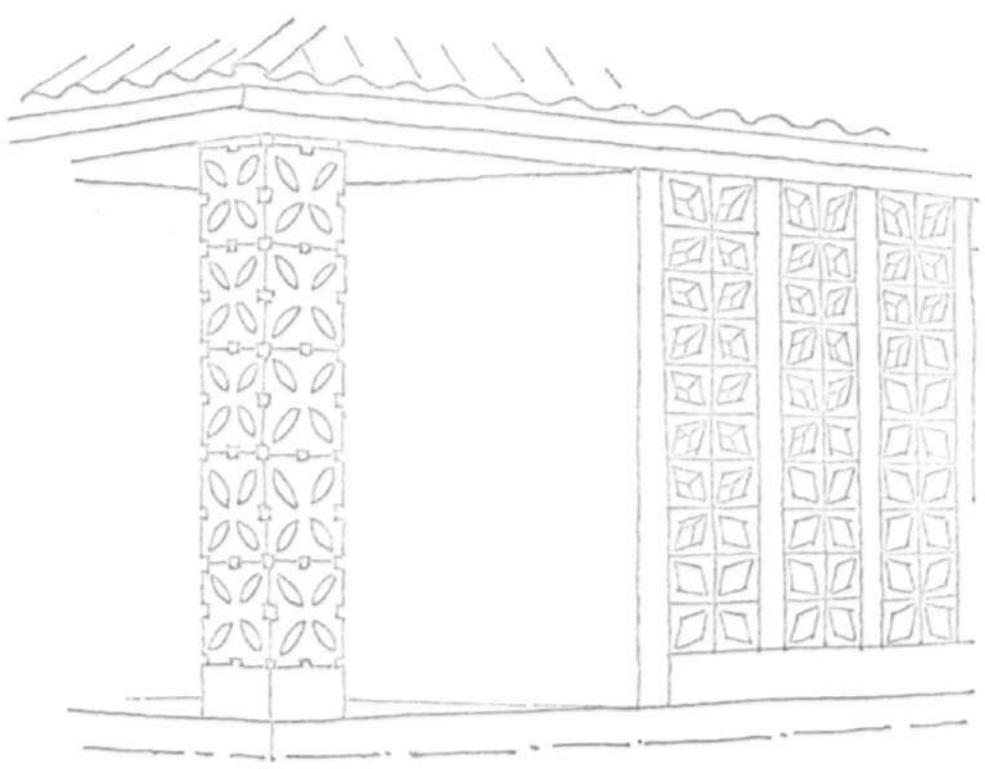


36 MUSEUM, CULTURAL CENTRE, KUMASI, GHANA
REPLICA OF A FETISH HOUSE IN PERMANENT MATERIAL,
AS WELL AS PLASTIC WALL DECORATIONS

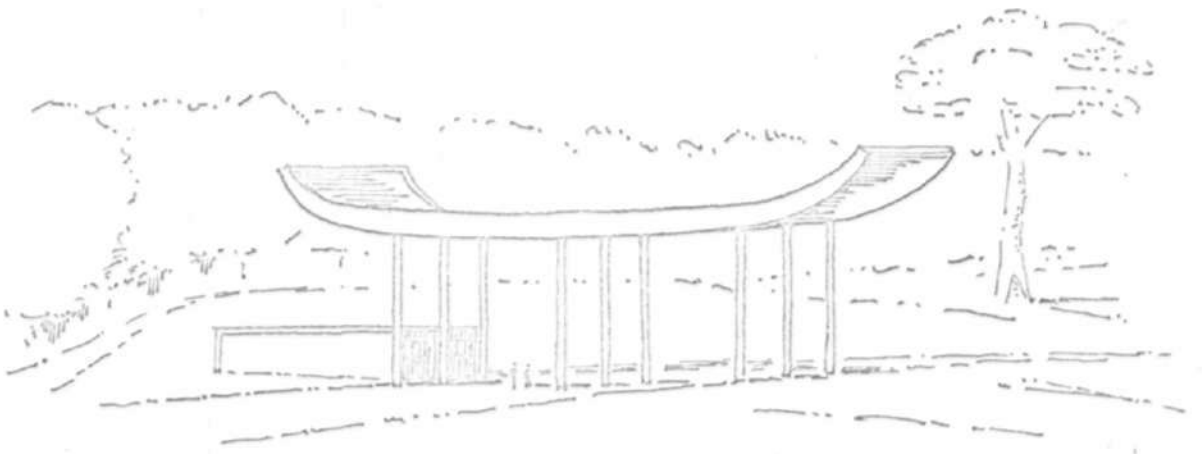


37 HOUSE ON THE ACCRA ROAD, KUMASI, GHANA
TRADITIONAL ADINKRA SYMBOL USED AS BALCONY BALUSTRADE
DECORATION

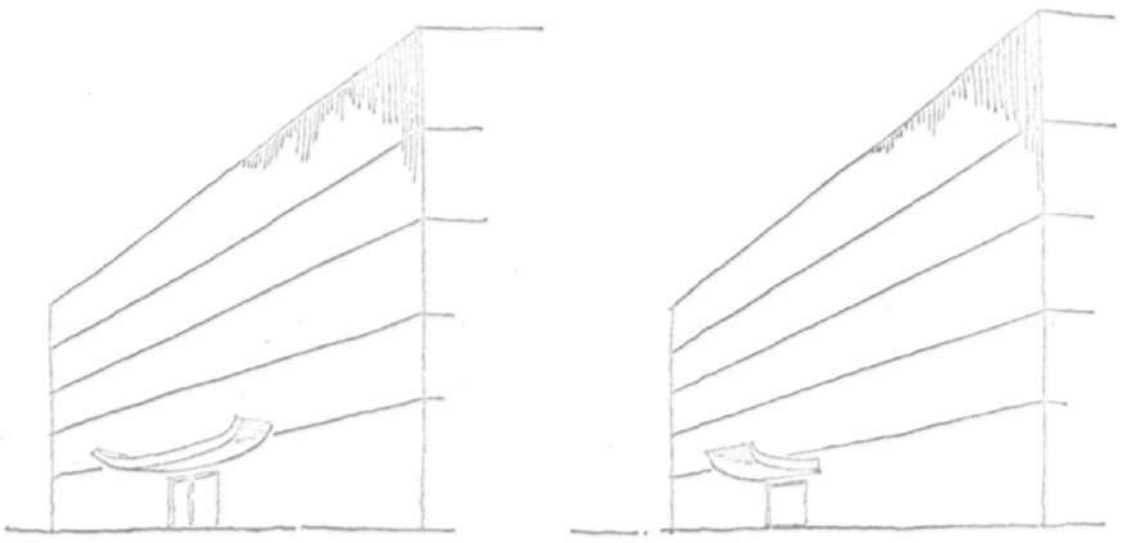




38a,b ORATORY, CULTURAL CENTRE, KUMASI, GHANA
A.D.C. HYLAND 1973
TRADITIONAL HOUSE FORM
USE OF ADINKRA SYMBOLS ON COLUMNS AND OPENINGS



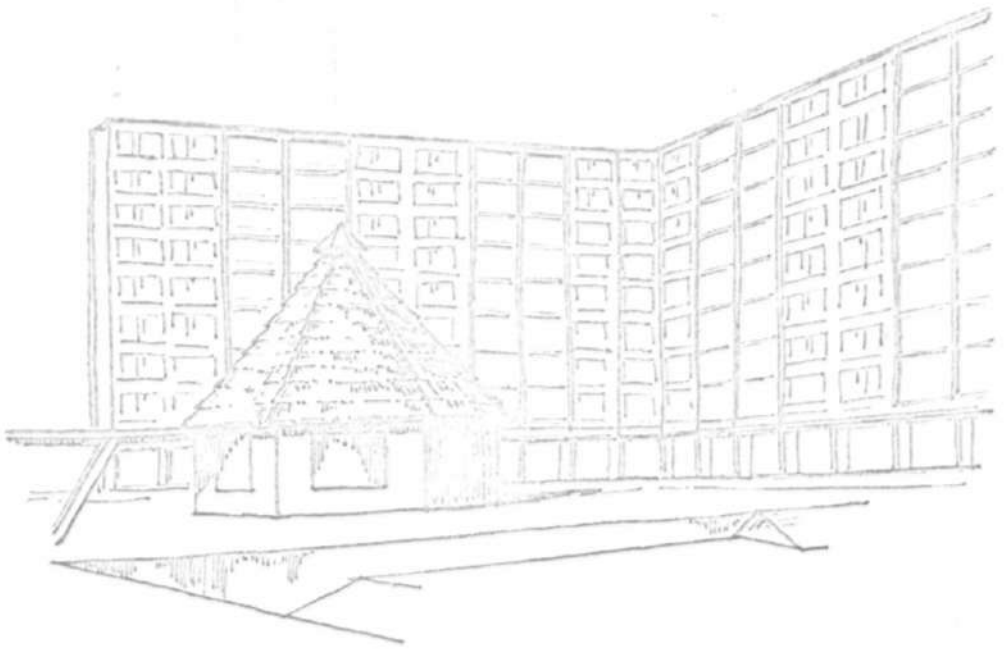
39 ENTRANCE GATEWAY, UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI, GHANA. J. OWUSU-ADDO 1965
FORM OF THE TRADITIONAL ASHANTI STOOL



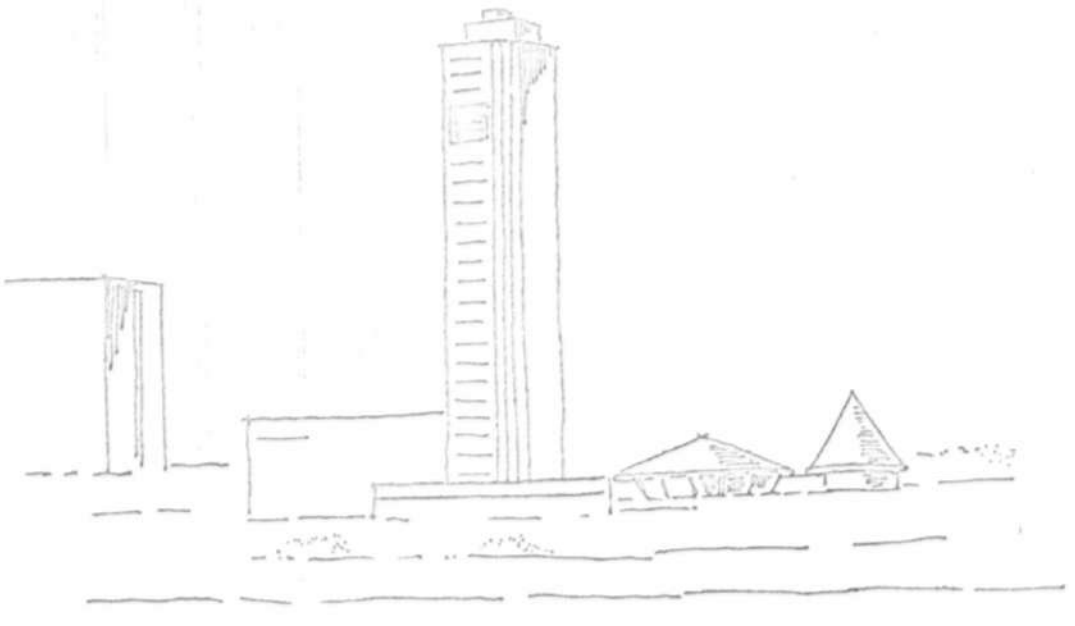
40a,b SYMBOLIC FORM OF THE TRADITIONAL ASHANTI STOOL USED FOR THE ENTRANCE CANOPIES AT SEVERAL HOUSES IN GHANA

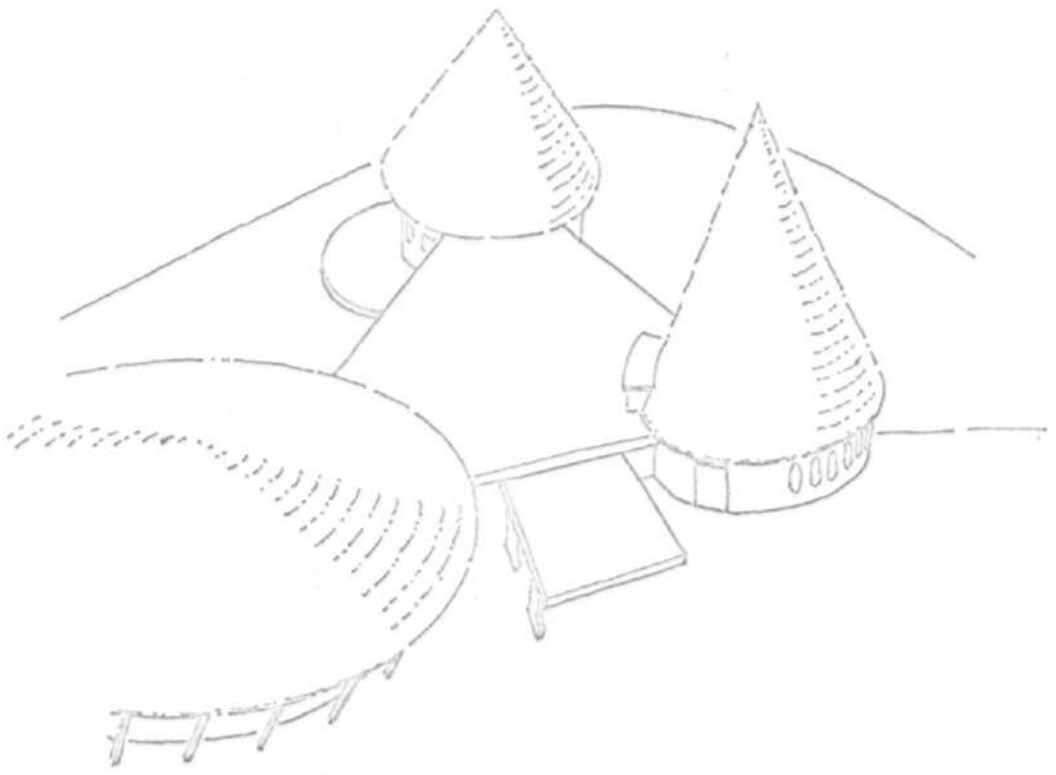


41 MOTEL, COTONOU, REPUBLIC OF BENIN
CHALETS IN FORM OF TRADITIONAL ROUND HUTS WITH THATCHED ROOF



42 SOCIAL FACILITIES IN THE BLOCK OF FLATS ALONG BADAGRY EXPRESSWAY, LAGOS, NIGERIA
FORM OF THE TRADITIONAL HUT CHANGED FROM ROUND TO POLYGONAL





43a,b HOTEL IVOIRE, ABIDJAN, IVORY COAST
FORM OF COTTAGES TAKEN OVER FROM TRADITIONAL AFRICAN ROUND HUTS. SIZE INCREASED, PERMANENT MATERIALS USED

African "New Architecture" in the official and public circles in the African countries. Some buildings are in this respect more successful than others. The same can be said about the students' design work in African schools of Architecture.

Searching for the reasons for the expression of the national character in the architecture, the hypothesis that this phenomenon results from nationalist feelings of the people in these countries seems to be quite confirmed:

The period of the colonial rule was the period of exploitation in African countries. It is only natural that nationalist movements appeared as a reaction against it. The opinion of two historians of African Art W. Fagg and M. Plass in this respect: "In the perspective of history, where today's propaganda pamphlets have been blown away by further winds of change, it will doubtless be seen that the most important and significant contribution made to Africa by the colonial system was the political movements, at present usually called 'nationalism', which helped to bring about its dissolution"[41]. These nationalist feelings are still alive.

In discussions with some Nigerian colleagues they admitted that the nationalism may explain the wish to express the Nigerian identity in the architecture.

The result of the author's observation, concerning nationalism, is that in Africa and particularly in Nigeria

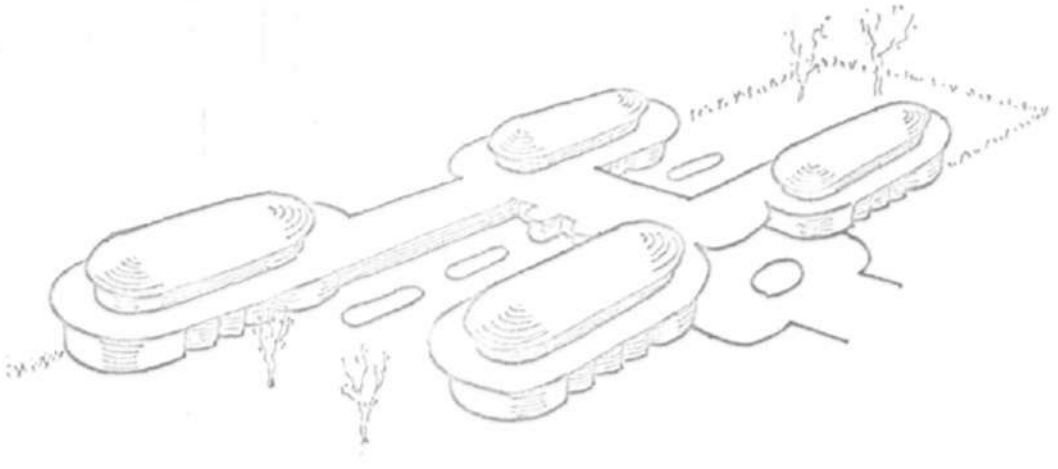
there are three kinds of nationalism. The first is African nationalism or Pan Africanism, it can be called the nationalism of the continent. The second is Nigerian nationalism, i.e. the nationalism related to the country. The last is the proud expression of being a member of a particular ethnic group.

This observation was confirmed by the work of students of architecture, aiming for the expression of the national identity. Some of their successful designs can be mentioned:

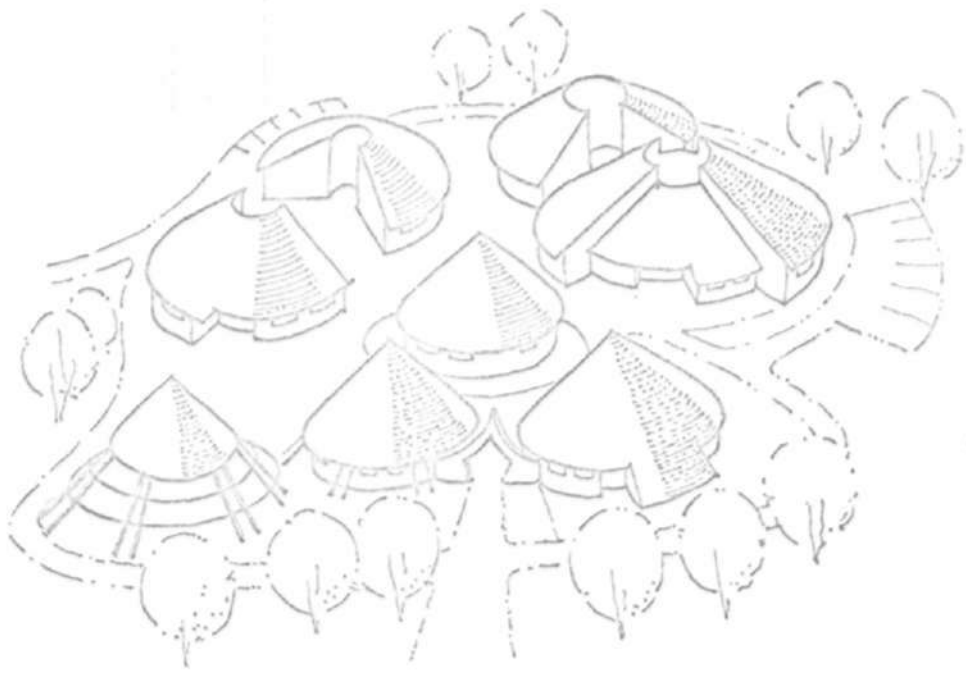
One student, a Camerounian, successfully designed the Museum for Hausa - Fulani Culture Ill. 44 achieving an unmistakably African character using creatively elements of traditional North Nigerian architecture. The student is an African nationalist.

Another student designed very successfully a new palace for a traditional ruler, Oba, in Yorubaland, using features, elements and details typical of historical buildings of this kind. The result was astonishing. The student, coming from the Yoruba Chief's family, was a Yoruba nationalist, aiming in his design not only to give to it the national character, but also to show in it the cultural heritage of his people.

The third student, an apparent nationalist of the Nigerian North, designed an Educational Centre for Kano, the Metropolis of Northern Nigeria. His design had the characteristic appearance reminiscent of the traditional architecture of this part of Nigeria, influenced by



44 MUSEUM FOR HAUSA-FULANI CULTURE, KANO, NIGERIA
ANYE A. FORCOB, M.Sc.(ARCH.) THESIS 1979
CREATIVE USE OF TWO ELEMENTS OF THE TRADITIONAL NORTH NIGERIAN ARCHITECTURE : ROUND FORMS AND DOMES



45 TOR TIV PALACE, GBOKO, BENUE STATE, NIGERIA
V.H. GBERIKON (MISS), M.Sc.(ARCH.) THESIS 1981
CREATIVE USE OF THE FORM OF THE TRADITIONAL AFRICAN COMPOUND COMPOSED OF ROUND HUTS WITH CYLINDRICAL ROOFS

Islamic architecture.

Another successful example was a design for the new Palace for a traditional ruler in Benue State, the Tor Tiv, in the Central part of Nigeria.[Ill.45] The student used as her source of inspiration the traditional African compound composed of round buildings with a quite steep cylindrical roof. The scale of single buildings was enlarged to meet functional needs. The differentiated forms were the result of the creative approach of the student to the task.

All these projects were at the same time in the contemporary "New Architecture" style.

Apart of these successful designs, the opposite should be mentioned as well, the unsuccessful attempt of another student. He designed a complex of buildings having the cultural character. His first design was a cosmopolitan design, adjusted to tropical conditions. After being asked to try to express the character of the culture of the country in his design, his attempt failed. The character of his first design revealed a cosmopolitan outlook.

These examples show that to achieve success in this field the authors must be convinced themselves about the validity of their aim to arrive at a national character in their work.

In the African countries South of Sahara several buildings were constructed, having the African character,

but the reason has not necessarily been nationalism. These buildings are either of a cultural character, or they were built for the tourist trade. Nationalism can play its role in the aim to express national character in these kinds of buildings, but it is not a necessary pre-condition.

4.40 NOTES TO CHAPTER IV

1 "Hitlerite Germany produced a harsh, abruptly brutal type of building of which the Brown House at Munich was typical, and the big programmes of domestic housing were intentionally traditional in character". - Gloag, J. (1975), p. 312

2 "In Italy, Fascism compromised virtually all the modern architects by adopting the style of stripped-classicism and commissioning such rationalist designers as Pier Luigi Nervi and Giuseppe Terragni". - Jencks, Ch. (1973), p. 127

3 The whole contemporary Armenian culture is specifically national. The world famous example is the music to the Armenian "Sabre Dance" by the composer Aram Khachaturyan.

4 Source of information: Syrový, B. et al (1977), pp. 425-426

5 See Chapter 2.26 of this study

6 See Chapter 2.30 of this study

7 In later years the criticism of the Socialist realism took place in the U.S.S.R. together with the critical view on the whole period.

8 This statement is based on the author's experience as an architect who worked in Czechoslovakia in this period as a practicing architect.

9 The author could observe the strength of the Swiss nationalism at the occasion of his employment in the offices of two Swiss architects in 1947 and 1948. One of them expressed his view: "We 'Schwyzer' want that our architecture is 'Schwyzerisch'."

10 The increased cosmopolitism of the Swiss young generation is taken in Switzerland as the matter of fact and is mentioned even in the publications for the tourists. As an example, it is said of Swiss young people that they speak more about London, Paris and New York, which they like to visit, than about their own country. - This cosmopolitism can be explained by the frequent contact with foreigners, Switzerland being one of the "Tourist - countries". The explanation for the decreased nationalism can also be the reality that the danger to Swiss independance has ceased to exist.

11 "The Dutch have an aversion to waste of land, consequently to waste of space: they like to build as small and as compactly as possible. A second decisive factor stemming from the nature of the country is that it contains no natural stone. Baked clay - bricks - must therefore be used as building material. As a result of the process by which they are made, the bricks are small, thus calling for attention to detail". - Blijstra, R. (1960), p. 6

12 See Chapter 2.30 of this study

13 Op cit Blijstra, R. (1960), p. 20

14 Ibid p. 21

15 Ibid p. 21

16 Ibid p. 25

17 Ibid p. 26

18 Ibid pp. 33, 34, 37

19 Particularly in the years after the 2nd World War, nationalism in the Netherlands was noticeably strong, as the author could witness several times at the occasion of his work and stays in the Netherlands

20 Stierlin, H. (1968), p. 9

21 Ibid p. 4

22 Ibid p. 5

23 Ibid p. 5

24 Ibid p. 6

25 Ibid p. 4

26 Fletcher, B. Sir (1975), p. 1249

27 Per capita GNP in U.S. Dollars: (U.S. Government Estimates)
U.S.A. 7,860
Mexico 1,150
From the article 'Rich Men, Poor Men' (28.5,1979), Newsweek, p. 17

28 "Naturally, the U.S. has to be highly sensitive to nationalism in all those countries". - From the article 'Energy from the Americas' (11.6.1979), Time, p. 61

29 "Castro's visit marked yet another step in Mexico's avowed aim of moving slowly away from U.S. dominance and toward new and independent alliances". - From the article 'Castro's Mexican Fiesta' (21.5.1979), Newsweek, p. 19

30 Jencks, Ch. (1980), p. 99

31 Ibid, p. 98

32 Ibid, p. 99

33 Op cit Fletcher, B. Sir (1975), p. 409

34 Ideas of Marvin Zonis, University of Chicago (16.4.1979), Time, p. 87

35 Ibid p. 86

36 Gambari, I.A. (8.5.1979) 'The Implication of the Middle East Treaty'. New Nigerian, p. 5

37 Ibid p. 6

38 See Chapter 1.56 of this study

39 This Iranian nationalism could be followed e.g. in the events leading to the seizure of the U.S. Embassy in Teheran in November 1979

40 The matter of the inappropriate introduction of the "New Architecture" to African countries by some European architects at the beginning of fifties was at this time discussed by the Swiss architect Professor A. Roth in the magazine 'Bauen und Wohnen'; Professor Roth being one of the architects who designed several buildings in African countries.

41 Fagg, W. and Plass, M. (1973), p. 3

5.00 CHAPTER V - POSSIBLE ANALOGY IN THE EVOLUTION OF THE "NEW ARCHITECTURE" WITH THE HISTORICAL STYLES

As mentioned in Chapter I under Methodology, the basic approach used in this study is "A comparison of the evolution of selected historical styles with the evolution of the 'New Architecture' ", with the object of finding any possible analogy which could lead to the explanation of National trends in the "New Architecture".

An attempt has been made by using comparisons in the following areas common to historical styles and the evolution of the "New Architecture":

(a) - Stages of evolution.

(b) - Variations, in particular national variations and their relation to the evolution.

(c) - Factors and reasons for the evolution of national variations.

(d) - Means used in the expression of national character.

5.10 STAGES IN THE EVOLUTION OF THE "NEW ARCHITECTURE", THE STAGE REACHED AT THE BEGINNING OF THE EIGHTIES.

The hypothesis that the "New Architecture" has already become an architectural style leads to a further hypothesis, that the stages of evolution of the "New Architecture" can be determined

analogically, in comparison with the evolution of historical architectural styles.

In Chapters II and III, the characteristics of the stages in the evolution of architectural styles were mentioned[1]. The attempt therefore has to be made to find the analogy in the evolution of the styles of the past, with the aim of determining the stages of its evolution and to fix their dates.

If the events in the history of the "New Architecture" are followed, the last two decades of the nineteenth century and the beginning of the twentieth century up to the end of the 1st World War is the period of the predecessors - of the "Avant-guarde". In this period other styles were still existing: it was the time of the end of Historicism in the form of Eclecticism, and the period of the short-lived "Mini-style" Art-Nouveau - Secession. This period from approximately 1880 till 1918 can be considered the transitional period to the new style "Modern Architecture" - at this time the name "Modern" had a real meaning.

After the 1st World War, the "New Architecture" began to gain ground and become established as the new style in its early stage. The style can be regarded to have become consolidated in the middle of the twenties. This consolidation can be seen in the fact that it was possible at this time to formulate its principles, which happened in 1927. The following year, 1928, the organisation C.I.A.M. - Congrès Internationaux d' Architecture

Moderne was founded, which was the sign of the stabilisation of the style and its growing vigour. The end of the twenties can therefore be taken as the end of the early period of the "New Architecture".

In the mature period architectural styles are already stabilized and continue to develop their principles to the perfection of the peak period of the style.

At the beginning of the thirties the "New Architecture" was already an established style, which spread rapidly over the world. The architectural exhibitions in the first years of the thirties in different countries of the world helped to speed up this process. The style developed further.

The basic principles, emphasised at the beginning of the "New Architecture", were non-decorative functionalism, the use of new structures, particularly of reinforced concrete and of steel, with a stream emphasising the aesthetics of the structure in the architectural appearance of the buildings.

Looking back in order to fix the peak period when these principles were brought to their highest point, the work and evolution of the leading architects has to be followed, because they are in forefront of the evolution and show the way to the others.

In the evolution of the "New Architecture" we find, that these principles were developed in the purest way in the work of Mies van der Rohe with the peak reached in

his I.I.T. Chapel in Chicago in 1952, this building being the most outstanding example[2].

At the same time, i.e. at the beginning of the fifties, another leading architect of the "New Architecture" Le Corbusier designed the Chapel of Ronchamp, built in 1950-54,[3] which represents a diversion from the original principles of the "New Architecture". This diversion was non-structural, sculptural, emotional architecture. This work was preceded by other works of the same author as the Unité d' Habitation at Marseilles, where the decorative solution of the facade already heralded the coming decline from the pure functional non-decorative architecture.

Mies van der Rohe's New National Gallery in Berlin, designed in 1962, built in 1965-68, has to be mentioned again. At the time of completion it could be felt, that its appearance no longer corresponded with the "Spirit of the time" being already outdated by the further evolution of the "New Architecture"[4].

In the assessment of the stages of the "New Architecture" the different time taken in the evolution of this style in different countries has to be taken into consideration. Some of the countries were more advanced, others behind them to a greater or lesser extent.

An example of the author's experience from the middle of the sixties can be taken. At this time rectangular grid-architecture was still prevailing in Europe, but in the U.S.A. and in Canada an inclination to the use of curves

in the architecture was visible. The leading position of the U.S.A. in the evolution of the "New Architecture" could be recognized.

The analogy with the historical styles leads to the conclusion, that the peak in the evolution of the "New Architecture" was reached in the first half of the fifties of the twentieth century, with the already mentioned works of Mies van der Rohe and Le Corbusier as milestones in this evolution.

The dissolution of the C.I.A.M. in 1956 was a sign of the discontent with the principles adopted in the Charter of Athens in 1933, which were regarded at the time to be already out-dated. This can be taken as additional certification of the fact, that in 1956, from a global point of view, the peak period was already reached and that the style began to enter its late period.

The architecture of later years bears the signs of any architectural style in its late period, i.e. deflection from the principles of its origin, their neglect or even denial, decorative character, the used features for purely aesthetic reasons, which in some cases even contradict the structural or statical concepts, structure sometimes used for creative or decorative aims only, exaggerations and distortions.

Among other signs of the late period of the style is the increasing dissatisfaction with the actual stage of the style, which give rise to several new streams.

In the advanced stages of late periods of the historical styles the architects turned for inspiration to the strong or interesting epochs of the past styles. This phenomenon already can be observed in some recent buildings.

The role of the U.S.A. as the leading country in the evolution of the "New Architecture" can be followed in this respect in the American architecture in the second half of the seventies. The most recent work by P. Johnson and J. Burghee AT & T Building in New York, Ch. Moore's Piazza d' Italia in New Orleans and R. Meier's Atheneum in Harmony, Indiana discussed in Chapter III, are examples of this phenomenon.

This appearance is the sign of uncertainty and heralds the approach of the last stage of the style and the search for a new style.

To the author's knowledge, buildings which would contain such a high degree of eclecticism as the first two mentioned examples (P. Johnson - J. Burghee, and Ch. Moore) did not appear in any other country till the beginning of the eighties. The third example (R. Meier) shows a moderation in the approach, remaining "Modern" in the means used.

In different countries the "New or Modern Architecture" displays elements which belong specifically to such countries, the evolution of the style in specific conditions of the countries lead to spontaneous national variations of the "Modern"

in their architecture.

The architecture of the U.S.A. has developed its own character as well, so that we can speak about a U.S. spontaneous national variation of the "Modern". The diversity of results reflect different approaches and the apparent aim for originality and surprise, which are achieved sometimes by exaggerations, distortions and eclecticism.

Other countries did not follow this path to such an extent, at least not till the beginning of the eighties.

It seems that even in the U.S.A., the leading country in the evolution of the "New or Modern Architecture" since the thirties till now, in its late or "Baroque" period, two streams are cristalising, the radical stream tending to exaggerations and extremes and the moderate stream.

Looking back, it is possible to see an analogy between the "Baroque period of the Modern" and the historical "Baroque Style".

In the Baroque style two main streams were followed: the dynamic or radical stream and the classicistic, which can be described as moderate. Different countries followed one or the other of the Baroque streams in accordance with the "spirit of their time". The most known example is England. England's sober spirit never accepted the dynamic, radical stream of the Baroque - St. Paul's Cathedral is the best witness of this period. Comparing this with the

"Baroque period of the Modern" it can hardly be imagined that an architecture similar to Ch. Moore's Piazza d'Italia would be accepted or that it would be possible to build it in England - or in several other countries either.

The coming years will show clearly whether the "New Architecture" in its late period will develop similarly into two streams, the radical and the moderate, The author's opinion is that it is quite possible, bearing in mind the evolution of the "New Architecture" in the U.S.A.

If we attempt to classify the stage in the evolution of the "New Architecture" reached at the beginning of the eighties, the comparison and the analogy with the historical architectural styles indicates that the present stage of the evolution of the "New Architecture" is the advanced stage (but not the latter end) of the late period or, if we desire to use the historical term, the "Baroque period" of the New Architecture", with the signs of an approaching last stage and of the search for a new style.

In the late periods of historical styles buildings of an interesting and sometimes even surprising architectural appearance were created, some of them of a high architectural value. The late periods of the styles, with the exception of their end stages, are highly creative periods. The same can be seen in the architecture of recent years. The analogy of the "New Architecture" with the evolution of historical architectural styles is evident.

Comparing the evolution of the "New Architecture" with the evolution of historical architectural styles, it can be stated, that the "New Architecture" behaves in general as any other historical architectural style.

In summarising the evolution of the "New Architecture", the stages of its evolution are:

Predecessors -

"Avant-guarde":	End of the nineteenth century till the end of 1st World War 1918.
Early period:	After 1st World War 1918 till the end of twenties (1928 Foundation of CIAM).
Mature period:	End of twenties till the beginning of fifties.
Peak period:	First half of fifties (1956 Dissolution of CIAM).
Late period ("Baroque period"):	Second half of fifties till now.
Present stage at the beginning of eighties:	Advanced stage of the late period with signs of the approach of the last stage and a search for a new style.

5.20 VARIATIONS, IN PARTICULAR NATIONAL VARIATIONS: RELATION OF NATIONAL VARIATIONS TO STAGES IN THE EVOLUTION OF STYLES GENERALLY AND OF THE "NEW ARCHITECTURE" AS AN ARCHITECTURAL STYLE IN PARTICULAR.

In the previous part of this study, the characteristics described by N. Pevsner about the evolution of the "New Architecture" was quoted,[5] mentioning the increased speed of the evolution of more recent styles by comparison with the styles of past periods, and particularly emphasising the speed in the introduction and the spread of the "New Architecture" to the countries of the whole world.

The result of considerations about the evolution of the "New Architecture" and its stages[6] was the finding, that the "New Architecture" behaves as any "healthy style of the past", to use Nikolaus Pevsner's term. The conditions for the evolution are naturally different, and the speed of the evolution is faster, under the present possibilities of the fast communications in the "Age of Technology".

In the matter of national variations in historical styles, the variations were found to be of a dual, qualitatively different character:[7]

i) The normal spontaneous variations which develop naturally, from the originally

uniform style, in different countries with their specific conditions in the course of the time when the style was in use. In historical styles these variations began to develop in the later part of the early stage and were most distinct in the late period of the style. The origin of spontaneous national variations is related to the normal evolution of the styles.

ii) The conscious national variations, which could be recognized to be the result of some reasons, were e.g. in the nineteenth century the expression of nationalist movements and appeared only in the architecture of some countries, where these movements were flourishing. Another reason for the intentional national variations was recognized to be e.g. the tourist trade. This kind of intentional variations appeared only in some styles. It could be recognized that they existed in any time of the evolution of the styles, even in the early stage. These intentional national variations, which aim to express national identity, are not part of the normal evolution of styles and are not related to it. They are the result of national circumstances, caused by specific conditions of some countries.

As a result of these findings, it could be stated that the "New Architecture" has generally the same evolution as other historical styles, both kinds of

national variations occuring in the life span of the style.

i) The beginning of normal, spontaneous variations from the uniform international character in different forms could be observed at the end of the twenties. This can be observed as the early stage of the style. This differentiation is mainly in the varying adjustments to different climatic conditions and local building materials, and also to the different cultural traditions of the countries. In the thirties, that is, the beginning of the mature stage, this evolution was still more recognizable. It was still more visible in the forties in the countries, where the evolution was not interrupted by the 2nd World War, as in the countries of South America, and at the beginning of the fifites in several other countries. The diversification of the "New Architecture" in varying forms arising from spontaneous national adjustments still continues at the beginning of the eighties. The specifics of the present architecture in the U.S.A., as the country's spontaneous national variation to the "New Architecture", were already discussed. It can be said, that the evolution of spontaneous national variations in the "New Architecture" is similar to the evolution of the historical styles, and that the process of evolution in some countries is faster and more recognizable than in the others.

ii) National trends in the "New Architecture", having the form of intentional national variations aiming to express national character, appeared in the "New Architecture" in the thirties in Germany and Italy under the Dictatorships. These variations had the form of official styles, imposed by the state authorities. In the thirties also in the U.S.S.R. the official style proclaiming an architecture 'national in its appearance' was decided by the state authorities. Similar official styles were introduced at the end of forties in Socialist countries of Eastern Europe. They ceased to exist in mid fifties. Intentional national variations, giving a national character to the buildings, appeared in the forties in Mexico, after the 2nd World War in Japan, in the Arab countries, in Iran and in some of the ex-colonial African countries. Intentional national variations can be recognized even if mild or, less significant in some other countries e.g. in Switzerland or in the Netherlands. These conscious national variations appeared only in some countries, their strength and occurrence being different, and not related to the stages of the evolution of the "New Architecture".

5.30 FACTORS AND REASONS FOR THE APPEARANCE OF CONSCIOUSLY DEVELOPED NATIONAL VARIATIONS IN THE "NEW ARCHITECTURE"

Among the findings reached in this study, is the observation that "National trends" in the form of

conscious national variations, are not present in all the styles, but are only identifiable in some of the styles as found in some countries and at some periods. They flourished particularly in the nineteenth and at the beginning of the twentieth centuries. The reason for such national variations can be ascribed to nationalist movements and feelings in the countries concerned, in an attempt to express the national character in the architecture of the buildings.

Nationalism took different characters depending on the circumstances of a nation's history:

i) negative events in the history of the nation,
ii) positive period in the history of tha nation.

It could be said, that nationalist movements appear during extreme conditions of a nation's existence, that is,

i) at the time of oppression, danger, crisis or similar situation, and also some time after this negative period of the history of the nation,
ii) at the time of a nation's glory and success, that is, the positive period of the nation, as perceived by the nation. (This period can be the cause of the negative period of the history of another nation).

Looking closer at those countries where national trends in the "New Architecture" appeared or still appear,[8] the question arises about their reasons and whether any

analogy with the reasons found in the past styles is possible,[9] i.e. can the nationalist movements in the countries, and with other secondary reasons found in the historical styles, be taken as the actual cause of the occurrence of these national variations in the "New Architecture"?.

The focus on the countries concerned has therefore to be concentrated on the possible existence of nationalist feelings or movements, which could be the reason for national trends in their "New Architecture".

This matter is discussed more deeply in the Chapter IV - National variations in the "New Architecture" in some selected countries. The finding is, that in the countries where intentional national variations appear strongly, there are also strong nationalist movements or feelings. In some countries intentional national variations were related to the existence of the official client deciding the national appearance in the architecture.

By comparing historical styles, it can be seen that similar reasons exist in the "New Architecture", i.e. nationalism and the nationalist feelings aiming for the expression of the national identity are of primary importance, but other reasons also exist for the expression of the national character e.g. at the design of cultural buildings and facilities for the tourist trade.

5.40 REASONS FOR THE FAILURE ...NSCIOUS NATIONAL VARIATIONS TO DEVELOP IN SOME COUNTRIES, WHERE THESE COULD BE EXPECTED

In Latin America the seemingly contradictory situation exists of Mexico with strongly developed national variations and other countries where this phenomenon does not appear.

In Mexico, intentional national variations giving the unmistakably Mexican character to the buildings, have been evident from the end of the thirties.

Some other Latin American countries have conditions similar to Mexico and similar achievements in the "New Architecture". Brazil and Venezuela, to mention two of ...ve similar geographic, climatic and economic conditions and similar introduction to the "New Architecture". In comparison with Mexico, they reached a similar high standard of the "New Architecture"; the adjustment to the climatic conditions was used in a considerable way in the architecture, but any intentional variations, aiming at the expression of the national character, did not appear in these countries, although strong nationalism existed in both of them.

The question arises about the reason. Looking back we have to analyse the form taken by the expression of national character in the "New Mexican

Architecture". It was achieved by the use of architectural and decorative elements drawn from the architecture of the ancient civilisations that flourished in the territory of Mexico before the Conquest. They were used as the source of inspiration.

Neither in Brazil nor in Venezuela had a remarkable civilisation developed in the past. There existed therefore no historical architecture, that could be used as the source of inspiration for use in the "New Architecture", to express the character of these two countries. This seems to be the apparent reason for the non-appearance of intentional national variations in the "New Architecture" of Brazil and Venezuela. Analogically this sets the condition for the possibility to express the national character in the "New Architecture" : The source for the inspiration must exist in the cultural heritage of the country.

Even if a nationalist movement exists in the country, without this source of inspiration, there are no means for its expression. The cultural heritage in the field of architecture has to be therefore considered as a "causa sine qua".

5.50 MEANS USED IN THE EXPRESSION OF THE NATIONAL CHARACTER

In the historical styles the conscious expression of the national character in architecture was achieved by different means.

The prevailing way was a revival in the use of elements derived from national variations developed in the country in the past. This ranged from making replicas to the use of single characteristic elements, often in the form of eclecticism.

The architects' approach to the task ranges from copying the achievements of the past to a creative use where the historical characteristics were used only as a starting point in the creative process.

Other fine arts, sculpture and painting contributed, if used, to achieve the national impression. The subject matter selected helped in this respect. The use ranging from unchanged form to the creative way can also be found.

Looking into the possible analogy in the means used by national variations in the "New Architecture" aiming to express national character, with those of historical periods, it can be said that in general terms the means are similar:

Use of national cultural heritage in a similar way, i.e. ranging from making replicas to the use of single elements.

Complementary use of other fine arts, including appropriate subjects to achieve the aim.

The use of the cultural heritage appears either in the unchanged form or in the free creative way, under the conditions of the "Spirit of the contemporary period".

In respect of the means used to achieve national character there is the similarity of the "New Architecture" with the periods and countries in the history of the architecture where similar aims can be traced.

The means employed in the expression of the national character are discussed in a more detailed way in the Applied part of this study, Chapter VII.

5.60 SUMMARY (POSSIBLE ANALOGY)

The use of comparison and analogies between the "New Architecture" and the evolution of historical architectural styles was helpful in finding an explanation for developments in the "New Architecture" and in particular the appearance of "National trends". There exists a similarity, even the term 'a surprising similarity' can be used without overstatement.

The comparison and analogy led to the following findings:

"New Architecture" is already an architectural

style with stages of evolution, that were determined in this study.

Variations in it having the national character are of a dual form:

- Spontaneous, related to the evolution.
- Intentional, not related to the evolution, but based on reasons for the intention.

The reasons for the intention to express the national identity were found to be analogical with corresponding appearances in historical periods.

The means used in the expression of the national character are in general terms also similar to those used in historical styles.

Three hypotheses set at the beginning of the study[10] resulted in the following findings:

Hypothesis "A": "New" or "Modern Architecture" has become already an architectural style.
- Confirmed.

Hypothesis "B": National trends having the form of variations from the general stream of evolution are a phenomenon that may be related to the evolution of the styles.
- Confirmed partly, extended by a new finding.

Hypothesis "C": Comparison and possible analogy between the "New Architecture" and Historical architectural styles may be helpful in the explanation of national trends in the "New Architecture".

- Confirmed.

The results of this study, related to the method used, are indicated graphically in Chapter VI of this study.

5.70 NOTES TO CHAPTER V

1 See in particular Chapter 2.45 of this study

2 See Chapter 3.10

3 Ibid

4 Ibid

5 Ibid

6 See Chapter 6.10

7 See Chapter 2.46

8 Discussed in Chapter IV

9 See Chapter 2.46

10 See Chapter 1.30

6.00 CHAPTER VI - RESULTS OF THE STUDY

6.10 SUMMARY OF THE EVOLUTION OF THE "NEW ARCHITECTURE" AND VARIATIONS ARISING IN THE COURSE OF ITS EVOLUTION

This summary is the abbreviated repetition of the findings contained in the previous Chapters of this study.

The "New Architecture" or the "Modern Architecture" has a similar evolution to the historical architectural styles, so that in this study it could be stated that it "behaves in general as any other historical architectural style".

In analogy with historical styles, it was possible to determine the periods of evolution of the "New Architecture"[1]:

Predecessors, ("Avant-guarde"):	End of the nineteenth century till the end of 1st World War 1918.
Early period:	After 1st World War 1918 till the end of twenties (1928 Foundation of CIAM).
Mature period:	End of twenties till the beginning of fifties.

Peak period:	First half of fifties (1956 Dissolution of CIAM).
Late period, ("Baroque period"):	Second half of fifties till now.
Present stage at the beginning of eighties:	Advanced stage of the late period with signs of the approach of the last stage and of the search for a new style.

The stages of the evolution of the "New Architecture" are accompanied by similar appearances as in historical styles:

In the early stage the principles on which the new style was based appeared in their initial form and they were further developed.

In the mature stage the evolution of the style continued and the principles characterising the style were brought to perfection in the peak period. In the mature stage the style was at its most vigorous. This was the strongest period of the style.

The perfection achieved in the evolution of the principles was not final. Evolution continued - the validity of the "phenomenon of permanent evolution" was confirmed again.

The late stage or the "Baroque period" of the

style, in which we are now living, is characterized by a loosening of the principles, on which the style was founded. The late style is more decorative. The aesthetic part comes to the fore, even when the structure is not concealed and used in the visible form. Structural elements tend to be used decoratively and sometimes illogically. Exaggerations and distortions appear.

The advanced part of the late stage is characterized by uncertainty which leads to the extensive diversification of architectural means used and even some kind of Eclecticism appears. The first signs of the search for a new style can be observed.

It can be asserted that the "New Architecture" is the expression of the industrial age (the architecture as the "mirror of the age" reflecting the "spirit of the period"). In its early and mature age the enchantment with industrial civilisation can be felt, as witnessed by the characterization of the house as a "machine to live in", pronounced at this period, simple basic forms, straight flat surfaces, visible structures and the use of concrete, metal and glass as main materials are its characteristics.

The late stage reflects the retreat from the "machinery enchantment". Technology is used in a decorative way.

The evolution of variations in the "New Architecture" was similar to any other "healthy historical style". At the beginning the "New Architecture" was a uniform style.

From the countries where it originated, the style spread to other countries unchanged, in its original form. Due to the specific conditions of 20th century this spread was fast and worldwide. The "New Architecture" became a cosmopolitan international style.

The evolution of spontaneous national variations began at the end of twenties - at the end of the early stage. In the fifties this evolution was already distinct. This spontaneous evolution, which is the normal evolution of the style into national variations recurs in the "New Architecture" influenced by specific national conditions.

In some countries, but not in all, national variations appeared with the purpose of expressing the national character of the buildings. This kind of intentional national variations is qualitatively different than that developed spontaneously. The means used for the expression of national identity are usually taken from historical or traditional architecture of the country. They are used either unchanged or more often in a creative way, stylistically related to the "New Architecture".

The results of this study indicate that the reasons for the intentional national variations are:

Nationalist or patriotic movements which appear in the nations either in their positive periods, in the time of success or glory, or in their negative periods, in times of oppression or danger. They continue for some

time after this period.

The intentional national variations are not part of the natural evolution of the styles and therefore they are not directly related to their evolution. In some of the historical styles in which the intentional national variations can be seen, they appeared in any stage, even shortly after the beginning of the early stage. In the "New Architecture" similarly, these intentional national variations had already appeared in some countries in the thirties.

They were generally of a dual form:

i) The expression of nationalist or patriotic movements of the nations in their architecture as in Mexico or in Japan.

ii) The expression of the nationalism required by the official client in the form of an official style. Such a kind of national deviations cease to be used when official demand ends as Germany and Italy under the Dictatorships.

iii) There are also other reasons for the expression of the national character in the architecture. Certain buildings of a public character have to represent the image of the country as do governmental buildings, or buildings of a cultural character, museums etc.

Another cause of intentional national variations is the need for an expression of the national character in tourist trade. Tourists coming into the country expect to meet what is specific for the country.

The last two cases appear even in countries where nationalist movements are not evident.

In every case intentional national variations in architecture are an expression of some need for them - the architecture being the "Witness of the period".

The method of the comparison and possible analogy of the "New Architecture" with historical styles lead to the results.

There is the analogy in the evolution of the "New Architecture" in its stages.

Variations related to the evolution appear similarly as in every historical style. Intentional national variations, not related to the evolution, are based on similar reasons as in some historical periods.

Three hypotheses set at the beginning of the study lead to the results presented graphically in the following figures: Figure 3, 4, 5 and 6 (Chapter 6.20).

6.20 RESULTS OF THE STUDY IN FIGURES

6.21 - Fig. 3 - Results of the study related to the method used.

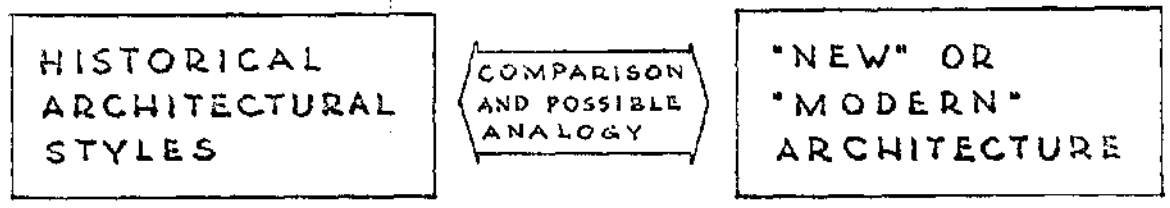
6.22 - Fig. 4 - General characteristics of the usual evolution of architectural styles.

6.23 - Fig. 5 - Evolution of the "New Architecture" as an architectural style.

6.24 - Fig. 6 - National trends in the "New Architecture".

FIGURE 3

RESULTS OF THE STUDY RELATED TO THE METHOD USED



AND HYPOTHESES "A", "B" AND "C" LEAD TO RESULTS:

"A": "NEW" OR "MODERN ARCHITECTURE" HAS BECOME AN ARCHITECTURAL STYLE WITH STAGES OF EVOLUTION AS HAS ANY OTHER HISTORICAL STYLE

HYPOTHESIS "A" WAS CONFIRMED

"B": NATIONAL TRENDS HAVING THE FORM OF VARIATIONS FROM THE GENERAL STREAM OF EVOLUTION ARE NOT ONE SINGLE PHENOMENON BUT TWO QUALITATIVELY DIFFERENT PHENOMENA:

1. SPONTANEOUS NATIONAL VARIATIONS RELATED TO THE EVOLUTION OF THE STYLES
2. INTENTIONAL NATIONAL VARIATIONS WITH THE AIM OF EXPRESSING NATIONAL IDENTITY FOR DIFFERENT REASONS, NOT RELATED TO THE EVOLUTION OF THE STYLES

IN THE "NEW ARCHITECTURE" BOTH KINDS APPEAR

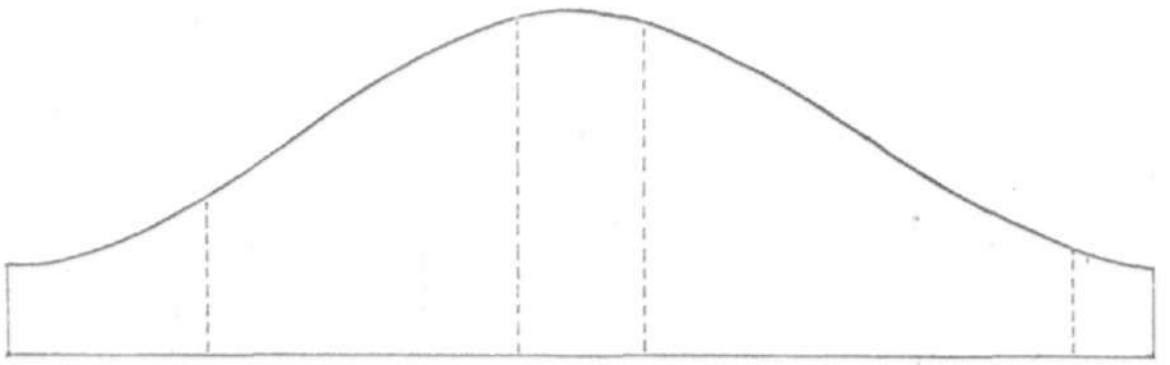
HYPOTHESIS "B" WAS CONFIRMED IN THE PHENOMENON 1

PHENOMENON 2 IS ONE OF THE FINDINGS RESULTING FROM THIS STUDY

"C": THE COMPARISON OF THE EVOLUTION OF THE "NEW ARCHITECTURE" WITH HISTORICAL ARCHITECTURAL STYLES LEAD TO THE EXPLANATION OF THE PHENOMENA OF "NATIONAL TRENDS IN THE NEW ARCHITECTURE"

HYPOTHESIS "C" WAS CONFIRMED

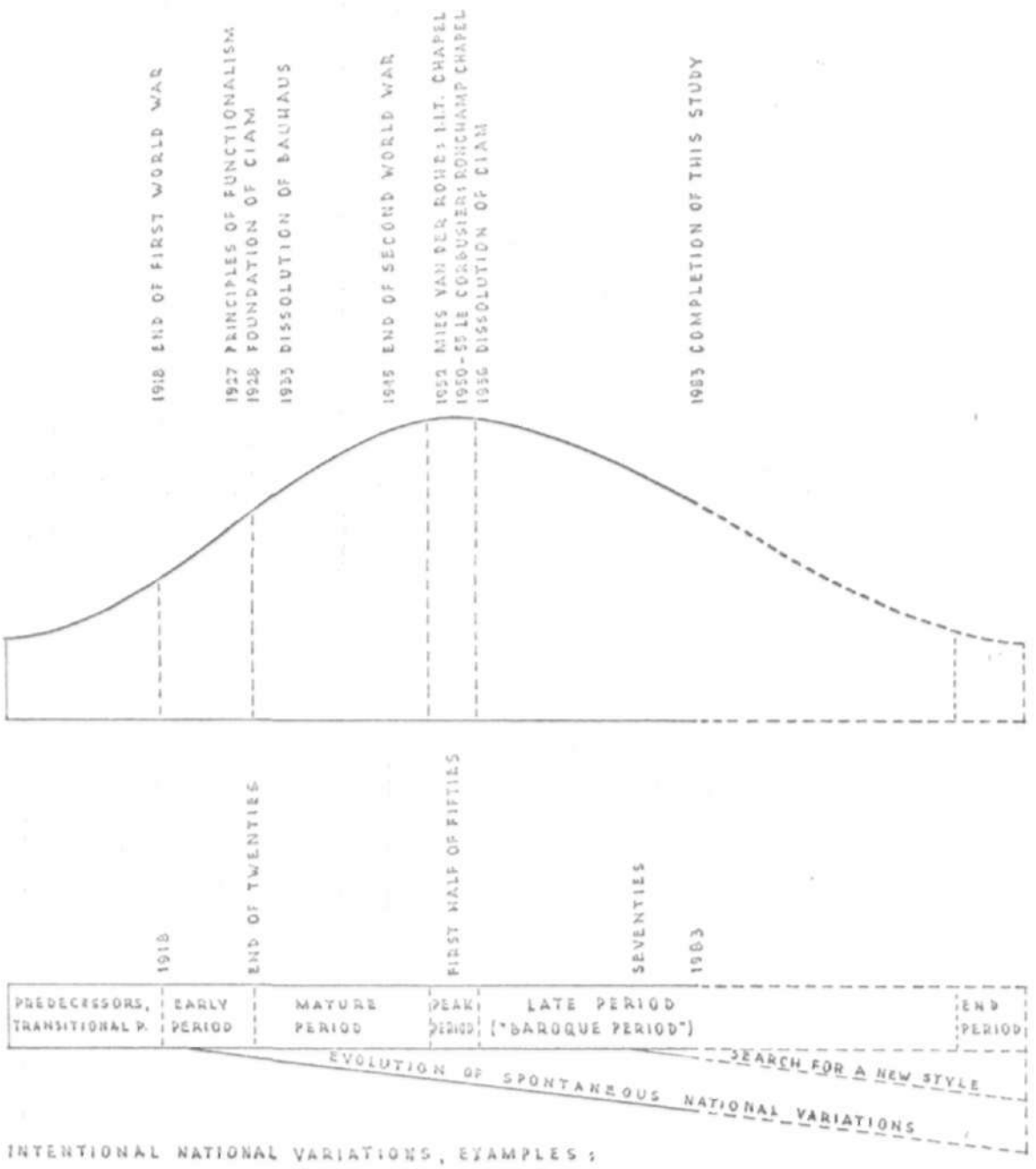
FIGURE 4
GENERAL CHARACTERISTICS OF THE EVOLUTION OF HISTORICAL ARCHITECTURAL STYLES



EARLY STAGE	MATURE PERIOD	PEAK PERIOD	LATE PERIOD ("BAROQUE PERIOD")	END PERIOD
EVOLUTION OF SPONTANEOUS NATIONAL VARIATIONS			SEARCH FOR A NEW STYLE	

CHARACTERISTICS OF THE PERIODS :				
PRINCIPLES CHARACTERIZING THE STYLE ARE FORMULATED, SIMPLER AND HEAVIER APPEARANCE, STYLE IS UNIFORM AT THE BEGINNING. ADJUSTMENT TO CONDITIONS OF COUNTRIES AND DIFFERENTIATION BEGINS TO SPONTANEOUS NATIONAL VARIATIONS	FURTHER EVOLUTION OF THE PRINCIPLES OF THE STYLE TO A MORE PERFECT EXPRESSION. LIGHTER AND FINER APPEARANCE. DIFFERENTIATION AND EVOLUTION OF SPONTANEOUS NATIONAL VARIATIONS CONTINUES	PRINCIPLES ON WHICH THE STYLE IS BASED ARE DEVELOPED TO PERFECTION	LOOSENING OF THE PRINCIPLES AND RULES, SOMETIMES EVEN REJECTION OF ORIGINAL PRINCIPLES, EXAGGERATIONS AND DISTORTIONS. MORE DECORATIVE APPEARANCE. LOST OF THE VIGOUR OF THE STYLE. EVOLUTION TO SPONTANEOUS NATIONAL VARIATIONS CONTINUES. NATIONAL VARIATIONS REACH SOMETIMES A VERY SPECIFIC CHARACTER SYMPTOMS OF THE SEARCH FOR A NEW STYLE : DISSATISFACTION, STUDIES OF STRONG PERIODS OF PAST STYLES. ELEMENTS FROM PAST STYLES MAY APPEAR FIRST PART OF THE LATE PERIOD IS CREATIVE / IN THE LAST PART OF THE LATE PERIOD LOST OF THE CREATIVE POWER	END OF THE STYLE ABRUPTLY OR WITH A TRANSITIONAL PERIOD

FIGURE 5
EVOLUTION OF THE "NEW ARCHITECTURE" AS THE ARCHITECTURAL STYLE



NOTES: 1. FOR CHARACTERISTICS OF STAGES OF EVOLUTION AND SYMPTOMS OF THE SEARCH FOR A NEW STYLE SEE FIGURE 4 - "GENERAL CHARACTERISTICS OF THE EVOLUTION OF ARCHITECTURAL STYLES"

2. THE CURVE INDICATING THE LATE AND END PERIODS IS NOT DRAWN TO ANY SCALE

FIGURE 6

NATIONAL TRENDS IN ARCHITECTURAL STYLES

DUAL FORM

A - HISTORICAL ARCHITECTURAL STYLES

STYLE UNIFORM AT THE BEGINNING

SPONTANEOUS NATIONAL VARIATIONS
IN ALL THE STYLES AND IN ALL THE COUNTRIES
CAN DEVELOP TO SPECIFIC FORMS ("NATIONAL STYLES")
ARE PART OF THE NORMAL EVOLUTION OF STYLES
RECOGNISABLE IN THE EARLY STAGE

INTENTIONAL NATIONAL VARIATIONS
ONLY IN SOME STYLES AND IN SOME COUNTRIES
RESULTING FROM THE DESIRE TO EXPRESS THE NATIONAL IDENTITY DUE TO REASONS:
- NATIONALIST MOVEMENTS
- REQUIREMENT OF THE AUTHORITIES
- OTHER REASONS

ARE NOT RELATED TO THE EVOLUTION OF STYLES
CAN APPEAR AT ANY STAGE

B - "NEW ARCHITECTURE"-"MODERN ARCHITECTURE"

STYLE UNIFORM AT THE BEGINNING

SPONTANEOUS NATIONAL VARIATIONS
ALREADY RECOGNISABLE IN THE TWENTIES, MORE DISTINCT LATER
FORMS ADJUSTED TO DIFFERENT CLIMATIC CONDITIONS, TO USUAL BUILDING MATERIALS AND TO CULTURAL TRADITIONS
THE DIFFERENTIATION IS CONTINUING IN EIGHTIES

INTENTIONAL NATIONAL VARIATIONS
RESULTING FROM THE DESIRE TO EXPRESS THE NATIONAL IDENTITY
ONLY IN SOME COUNTRIES, EXAMPLES:

COUNTRY:	TIME:	REASON:
GERMANY	THIRTIES TILL END OF 2ND WAR	NATIONALISM-AUTH.
ITALY	THIRTIES TILL END OF 2ND WAR	NATIONALISM-AUTH.
MEXICO	END THIRTIES TILL NOW	NATIONALISM
SWITZERLAND	FORTIES TILL NOW	NATIONALISM
U.S.S.R.	THIRTIES TILL MID FIFTIES	AUTHORITIES
SOCIALIST COUNTRIES	LATE FORTIES TILL MID FIFTIES	AUTHORITIES
JAPAN	AFTER 2ND WAR TILL NOW	NATIONALISM
ARAB COUNTRIES	AFTER 2ND WAR TILL NOW	NATIONALISM
IRAN	AFTER 2ND WAR TILL NOW	NATIONALISM
AFRICAN COUNTRIES	AFTER 2ND WAR TILL NOW	NATIONALISM
SEVERAL COUNTRIES	DIFFERENT TIME	TOURIST TRADE
SEVERAL COUNTRIES	DIFFERENT TIME	CULTURAL BUILDINGS

6.30 NOTE TO CHAPTER VI

1 Repetition of the findings contained in the Chapter 5.10 of this study

B - APPLIED PART

7.00 CHAPTER VII - ARCHITECTURAL MEANS USED FOR THE EXPRESSION OF NATIONAL CHARACTER IN THE "NEW ARCHITECTURE"

7.10 GENERAL NOTE

The architectural means used for the expression of national character and the way these means were used, can be determined from examples of the complexes and single buildings built in different countries where "National trends in the New Architecture" appear distinctly. This can be done by considering the use of architectural means in general terms and summarising them generally so as to cover the "National trends" expressed in the form of intentional national variations as phenomena, without tackling the details which are specific only for some country or countries.

7.20 ARCHITECTURAL MEANS

The architectural means and the way they have been sued, cover quite a wide range of applications:

7.21 - COMPLEXES OF BUILDINGS

1) The designing of building complexes in the manner characteristic of the traditional architecture of the country. This comprises the specific method of relating wider

complexes of buildings (as well as single buildings) to the nature and to the landscape (e.g. New Mexican architecture in general).

2) In the design of complexes, the characteristics to be taken from the traditional architecture of complexes, as the characteristic arrangement of buildings forming the complexes and their mutual relations and the methods of forming the spaces (e.g. University City in Mexico City).

Note to 1): This may apply to the need to design in conformity with the characteristics incorporated in the traditional methods of town planning and urban design[1].

7.22 - SINGLE BUILDINGS

a - The Form of the Building or of its Part

i) The replica of the building in its original form (e.g. Museum in the Cultural Centre in Kumasi, Ashanti Region, Ghana, Ill.36).

ii) The replica of the form of the building but changed in scale (e.g. Cottage at the Hotel d' Ivoire, Abidjan, Ivory Coast, Ill. 43 a,b).

iii) The use of the traditional form of the entire building but with adjustments particularly to the materials used (e.g. Kyoto City Hall, Kyoto, Japan, Arc. Kunio Mayekawa).

iv) The partial use of specific traditional forms of the country (e.g. Tokyo Metropolitan Hall, Tokyo, Japan, Arc. Kunio Mayekawa, Ill.4; Chalet and Hotel, Switzerland, Ill. 17,18).

v) The use of specific structural methods that are characteristic for the traditional architecture of the country. These structural elements can be used in another material, particularly in a permanent material like concrete when the original was constructed in a non permanent material like wood (e.g. Kakawa Prefectural Office, Takamatse, Japan, Arc. Kenzo Tange, Ill. 3 a,b).

vi) The use of a single architectural element or of a few elements only, characteristic of the traditional architecture of the country (e.g. Research Centre for Tokyo Rayon Co., Kakamura, Japan, Arc. Yunzo Sakakura, Ill. 7; New Architecture of Netherlands).

b - Decorative Means

i.e. the use of the methods of decoration, and decorative elements on the elevations and interiors, or of decorative schemes characteristic of the country:

i) Mural decorations covering the whole surface of the walls of the building (e.g. University Library, Mexico City, Mexico, Arc. J.O'Gorman, J.M. Velasco,

G. Saavedra, Ill. 1).

ii) Partial use of mural decorations characteristic of the traditional architecture of the country e.g. Nigeria, Ill. 32,33, Czechoslovakia Ill. 15,16, Switzerland, Ill. 17).

iii) Use of characteristic elements on the facades of houses in the way typical of the traditional architecture of the country:

- characteristic element(s) related to the structure of the buildings (e.g. the Netherlands, Switzerland, Ill. 17,18)

- typical decorative element or a typical subject of the decoration (e.g. Ghana, Switzerland, Czechoslovakia)

- typical materials or typical combinations of materials used in the specific traditional way, (e.g. the Netherlands, Switzerland)

- typical combination of colours (e.g. the Netherlands)

- Use of symbols and emblems (e.g. Ghana, Ill. 38b, 39,40, Nigeria, Ill. 32, the U.S.S.R., Ill. 14a,b).

Some of the mentioned decorative means can be used simultaneously or in combination.

Note to the use of the symbols: If symbols are used to achieve the intended national character of the buildings, the condition is, that they have to be used in such a way, that the human eye will be able to see and to recognize them. This applies in particular to the design of the buildings having their plan in the form of the symbol. This intention is normally only recognized as the bird eye view from the aeroplane, hardly ever from the normal eye level.

Le Corbusier expressed his view on this subject in "Toward a New Architecture", Chapter "The Illusion of Planes": "Man looks at the creation of architecture with his eyes, which are 5 feet 6 inches from the ground. One can only deal with aims which the eyes can appreciate, and intentions which take into account architectural elements"[2]. "In actual fact a bird's eye view such as given by a plan on a drawing-board is not how axes are seen: they are seen from the ground, the beholder standing up and looking in front of him"[3,4].

7.30 METHODS OF USING ELEMENTS OF TRADITIONAL OR HISTORICAL ARCHITECTURE IN THE "NEW ARCHITECTURE"

Generally two streams are evident in the National Trends of the "New Architecture" showing the approach and methods of using forms and elements taken from traditional architecture:

7.31 - Unchanged use

The traditional forms and elements are taken over and used unchanged, in the form of copies (replicas) of whole buildings, their parts or of single elements.

7.32 - Creative use

These forms and elements are used in the creative way, where the historical elements serve as the inspiration to new elements that are, nevertheless, unmistakably national in character and where the original source of inspiration can be recognized.

7.40 SUMMARY

In general it can be noted that if the elements from the traditional or historical architecture are used in the "New Architecture" in an unchanged form, this approach is in some cases comparable with the period of the "Eclecticism" in the architecture of the second half of the nineteenth century.

The best, most successful and most impressive results, however, were not achieved in this way, but in the designs and constructions in which the architecture from the past of the country served only as a source of inspiration for the creative process of the contemporary architects. This leads to original results that are immediately recognisable as the "New Architecture", inspired and influenced by the cultural traditions of the past.

The best examples in this respect can be found in Japan and in Mexico.

The Mexican architect Vladimir Kaspé expressed his view on the New Mexican Architecture in a way that is of the general value:

"The outstanding contributions of contemporary Mexican architects are indissolubly linked with nature, which has nourished them,with the past that impassions them, and with the present (or future, virtually the same), which they approach with enthusiasm and faith. The successful combination of these different elements is responsible for our architecture which, while in perfect harmony with the ideas of the so-called international architecture, still possesses its own individual and remarkably fascinating character"[5].

7.50 NOTES TO CHAPTER VII

1 The planning aspect is not discussed in any more detailed way. The reason is that this study is a thesis on architecture and not on planning. An example from the work of the Department of Architecture of Ahmadu Bello University, concerning the planning, is mentioned in the note 6 to Chapter VIII.

2 Le Corbusier in Towards a New Architecture (1927), Paragraph "The Illusion of Planes" and Chapter "The Illusion of Planes". Le Corbusier (1967), pp. 11 and 164

3 Ibid Chapter "Arrangement", p. 173

4 As a successful example in this respect the "Dagauda Holiday Resort" in Northern Nigeria can be mentioned with the symbolic Nigerian "Star of the North" on its facade, in contrast with the design of the Soviet Army Theatre in Moscow in the U.S.S.R., where the symbol, the five pointed star, used for the plan of the theatre, cannot be recognized from the normal human eye level. (See illustrations 32 and 14a,b to this study).

5 From the Preface written by the Mexican architect Vladimir Kaspé to the book "Living Architecture: Ancient Mexican". Stierlin, H. (1968), Preface

8.00 CHAPTER VIII - POSSIBLE ARCHITECTURAL MEANS FOR THE EXPRESSION OF THE NATIONAL CHARACTER IN THE "NEW ARCHITECTURE" IN SOME SELECTED AFRICAN COUNTRIES SOUTH OF SAHARA, WITH PARTICULAR REFERENCE TO NIGERIA

8.10 GENERAL NOTE

The architectural means for expressing national character in the "New Architecture" were mentioned in general terms in the Chapter VII of this study. The whole contents of Chapter VII applies to possible means and ways for the expression of the national character in African countries South of Sahara as well.

8.20 SPECIFIC ARCHITECTURAL MEANS, CONSIDERING NIGERIA AS THE EXAMPLE

For the purpose of this study and for the intended use of its results, it seems to be appropriate to extend the contents of the previous Chapter VII into the field of possible specific means for the expression of national character in the "New Architecture" of the African Countries South of Sahara, with particular reference to Nigeria.

The example of Nigeria can be taken as a basis, having a wider validily for any other countries concerned.

The intentional national variations in architecture are drawing inspiration from their cultural

heritage in the field of architecture.

Nigeria is a diversified country. Her population consists from more than two hundred ethnic groups, three of which are large: The Hausas in the North, the Yorubas in the South-West and the Ibos in the South-East. Each of the ethnic groups has its own cultural tradition of which traditional architecture is a part.

Traditional architecture has been a source of inspiration in the architecture of all the countries where national trends have appeared.

In Nigeria there are also buildings, which proclaim their national identity. This means that in Nigeria national trends in the "New Architecture" already exist. These buildings contain specific elements which are characteristic of the traditional architecture of people of specific parts of Nigeria. Because of the diversification of the population and of their cultures, the buildings are not and can hardly be typical of Nigeria in genral (they can be more easily typically African in general), but they can be typical of Northern Nigeria or typically Yoruba.

Taking first the south of the Country, the typical feature of the Yoruba architecture are the roofs. They are quite steep, overhanging the lower part of the buildings. Another typical element is e.g. the internal impluvial courtyard surrounded by carved wooden posts, sometimes in

the form of figures, supporting the roof. In the palaces of Yoruba chiefs, the Obas, prominent protruding covered entrances are typical.

The traditional architecture of Northern Nigeria is influenced by Islamic architecture and by its typical features domes, arcades and fine ornament. The most typical architectural element in the North of Nigeria is its mural decorations. They are executed basically in two different ways: plastic decoration in relief, and painted decoration[1,2].

Mural decorations are still used on the elevations of houses in Northern Nigeria. Examples, showing the creative inventiveness of their authors, can be seen in many towns. In the literature, pictures of houses with decorated walls can be found in the books about the African art generally as well as in specialised publications[3].

Mural decorations have been used also in other African countries. They are of a different character, as e.g. the decorated elevations of Dogon buildings, which are reminiscent in some ways of the typical Dogon mask representing the antelope[4].

In the Ashanti region in Ghana traditional houses have the surfaces partly or fully decorated by traditional patterns[5].

Other elements that have been used for the expression

of the identity of the country are the symbols. Two of them have been used in West Africa very frequently:

The Northern Star is the most typical feature of Northern Nigeria. On the facades of many traditional houses, it has been used around the entrance door as the main subject on the vertical strip decorated in relief.

In Ghana, the Adinkra symbols have often been used as the symbol of the Ghanian identity.

A further large range of possibilities includes the use of single characteristic elements, either structural or decorative. They can be incorporated into the design of buildings constructed in the "International style" and be sufficient to give an African character to the whole building. An example of this is the horizontal strip of decorations used on the elevation of the National Theatre in Lagos.

8.30 SUMMARY

In general terms, the way of using the architectural cultural heritage in the "New African Architecture" can be similar to that mentioned in the previous part. The examples, contained in the illustrations show some basic possibilities[6].

- Replica of the whole building - e.g. Museum in the Cultural Centre in Kumasi in Ghana, being the replica of an Ashanti shrine Ill. 36.

- Use of a typical form of a building, but in a different scale and in a different material - e.g. Cottages at the Hotel d' Ivoire in Abidjan, Ivory Coast Ill. 43a,b or the Motel in Cotonou, Republic of Benin Ill.41.

- Traditional form of a building partly changed - e.g. Social building in the blocks of flats in Lagos Ill.42. Traditional cylindrical round form was changed to the polygonal, the conical roof to the form of a pyramid.

- Use of architectural, structural and in particular of decorative elements. They can be used either in the unchanged form or in a creative way, (see Illustrations) when they serve only as the source for the inspiration of the artist, the architect being the artist as well.

If the architect is to succeed in the design of buildings, bearing the signs of the national character, the success is conditioned by several suppositions:

- The basic supposition is that there has to be the need for the expression of the national identity, be it the "Spirit of the time" in the country, which requires the national awareness to be expressed, or other reasons.

- The next supposition is the deep knowledge of the culture of the country and of the people.

- The last and main condition concerns the person of the architect himself: He must be a real creative architect.

8.40 NOTES TO CHAPTER VIII

1 "The interiors of buildings in the Muslim North of Nigeria have been decorated for a long time, but it seems to have been only in the late nineteenth century that the outer walls began to be decorated. - Willet, F. (1971), p. 122

2 "The sculptured surfaces of buildings are often painted, but painted decoration alone is often employed as well". - Text to the illustration showing the group of houses in Zaria, Nigeria. Ibid p. 123

3 Typical examples of mural decorations are included e.g. in F. Willet's book "African Art", showing both the plastic decoration in the relief form as well as the painted decoration. - Ibid

4 Ibid pp. 124, 125

5 Ibid p. 128

6 The examples are restricted to the expression of the African character of buildings - this study being an architectural thesis. The intention to express the African character can appear also in the town planning. An example of it is contained in the work of the Department of Architecture of the Ahmadu Bello University in Zaria: "Nigeria's New Federal Capital Study". The traditional principle of the Nigerian town centre containing the palace of the traditional ruler and the market in its vicinity is kept and used by means of situating the City Hall in the most prominent place in the City and the market adjacent to it.

9.00 CHAPTER IX - SUMMARY OF THE THESIS ON NATIONAL TRENDS IN THE "NEW ARCHITECTURE"

The Summary of the Thesis contains the brief abstract of the results of the previous Chapters of the Thesis. Repetition therefore has to be accepted.

9.10 HISTORICAL ARCHITECTURAL STYLES

Historical architectural styles evolve from an early stage to the mature stage with the peak period, followed by a late stage and the end of the style with or without the transitional period to the next style. The stages of architectural styles have their specific character.

The partial exception is the evolution of the Romanesque style which has no late stage, being replaced in its peak period by the Gothic style.

Every style of importance in the history of architecture began as a uniform style and spread from the country of origin in an unchanged original form to other countries of its cultural sphere of the period.

In the course of the further evolution of the style national variations developed. Among the results of this study is that they are of the dual, qualitatively different character:

1. Spontaneous national variations that develop

in the specific conditions of individual countries. These spontaneous variations have developed in all the historical styles. They are apparent already in the later part of the early stage and become more distinct in the peak period and in particular in the late stage when they can reach even the form called by some authors national styles. They are part of the normal evolution of all the styles.

2. Intentional national variations that aim expressing the national identity. They do not appear in all the historical styles or in all countries. In them they are not used generally, only partly. Their proportion in the total number of buildings constructed varies from country to country. The most distinct form can be observed in the Romantic period as an expression of nineteenth century nationalist movements of different countries. These nationalist movements appear in the highly positive period of a nation's history, i.e. in the time of their success or glory, or in the negative periods, e.g. when their existence is endangered or in times of oppression. There can be also other reasons for the appearance of intentional national variations. Intentional national variations are not related to the evolution of the styles and can appear at its any stage, even at the very beginning of the early stage.

The speed of evolution of architectural styles

and of their stages has accelerated in recent styles in comparison with the older ones.

9.20 "NEW ARCHITECTURE" - "MODERN ARCHITECTURE"

The "New Architecture" or "Modern Architecture" has become already an architectural style. By analogy with the characteristics of the evolution of historical architectural styles the stages of the "New Architecture" can be fixed as follows:

- Early stage from the 1st World War to the end of the twenties (1927-28)
- Mature stage till beginning of the fifties (1950-51)
- Peak period first half of the fifties till 1956
- Late period ("Baroque period") from second half of the fifties up to date, with the signs of the search after a new style recognisable in the seventies.

One of the results of the Thesis is the finding that the "New Architecture" has behaved in a way similar to any other historical architectural style.

The speed of evolution of the "New Architecture" is faster than that of the historical styles, with the exception of the short-lived Art Nouveau - Jugendstil - Secession.

At the beginning, the "New Architecture" was a unified style and spread in this form all round the world, so that the term "International Style" has

been used sometimes.

National variations have appeared in the "New Architecture" as they did in the historical styles. They are of a dual character as well:

1. Spontaneous national variations that have developed in the specific conditions of the countries. They can be traced at the end of the early stage and are more distinct in the thirties, i.e. at the beginning of the mature stage. This evolution continued so that at the end of the seventies it is possible to speak about the characteristic variations of the "New Architecture" in some countries.

2. Intentional national variations that have to be recognised as the "National trends in the New Architecture" in the proper meaning of this term. In general they appear to be the result of the aim to express a national identity or awareness in some countries. They are of a different origin:
   - "Official styles" in which the national appearance is required by decisive clients, usually state authorities. This kind of national deviation ceases to exist with the end of the official demand for it.
   - National variations as the expression of

nationalist movements or nationalist feelings with the aiming to express the national identity in architecture. They are apparent only in some countries. The countries concerned always have strongly developed nationalist movements. Nationalism or national awareness can be taken as the reason for expression of the national character in the architecture. This kind of national variations began to appear in thirties and are more frequent later, continuing up-to-date, i.e. till the beginning of the eighties.

- National variations, based on other reasons for the expression of the national character of buildings, e.g.
  . Tourist trade or
  . Buildings for cultural purposes.
  National variations based on these reasons appear even in countries where distinct nationalist movements cannot be observed.

The condition for the appearance of intentional national variations is that there must be a source of inspiration in the cultural heritage of the country, that can be used in the expression of the national character, either in the unchanged form or creatively.

9.30 WAYS AND ARCHITECTURAL MEANS USED FOR THE EXPRESSION OF THE NATIONAL CHARACTER IN HISTORICAL ARCHITECTURE

Intentional national variations in architecture

appeared in particular during the period of Romanticism in the second half of the nineteenth century, which was the period of strong nationalist movements in Europe. In conformity with the general trend of the architecture of this time appearing in the form of Neo-styles in some countries, the elements of the developed national variations of the historical styles, were used to express the national character, instead of the then internationally used elements of the architecture of Ancient Greece or of the Italian Renaissance.

9.40 WAYS AND ARCHITECTURAL MEANS USED FOR THE EXPRESSION OF THE NATIONAL CHARACTER IN THE "NEW ARCHITECTURE"

The expression of national character in the "New Architecture" is achieved mainly by using elements of national cultural heritage contained in the architectural past of the country.

Such elements are used either in the unchanged form or in a creatively applied way, when the architecture of the past serves only as the source of inspiration.

The extent can differ from the entire copies (replicas) of the historical buildings, through the partial use of traditional forms to the use of single characteristic elements that are sufficient to give the intended expression of the national character.

The use of the architectural elements in the unchanged form can result in a kind of New Eclecticism.

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APPENDIX I

POST SCRIPT

After completing the study on "National Trends in the New Architecture", the author would like to express his conviction that the study has answered the questions set at its beginning, in particular concerning the main topic, i.e. the phenomenon of national variations in architectural styles, the reasons for their appearance and their relation to the evolution of the styles.

In addition, the comparison and analogy of the "New Architecture" with the historical styles has made it possible to determine the stages of its evolution with their related characteristics, and by this means to explain events in the present stage of the "New Architecture" at the beginning of the eighties. According to these findings, even two prominent contemporary architecture critics do not comment entirely correctly. In the opinion of the author, this is a confirmation of the originality of the approach and of the findings.

In the applied part of the study about the means and ways for the expression of the national identity in the architecture a wide range of possibilities was identified.

Even an answer to the personal author's question has been found, why after the 2nd World War the attempts failed in his country to create an architecture which would have a national appearance.

The results of the study "National Trends in the New Architecture" also make it possible to predict to some extent the further evolution of the "New Architecture" as an architectural style till the end of its lifespan. This prediction can be done with quite a high degree of probability. A forecast for the time thereafter however would be only a guess, though it could be based on analogies with the events in the history of architecture.

This does not mean that the further evolution of the "New Architecture" - "Modern Architecture" must necessarily follow the evolution of past styles in a passive way. Circumstances and in particular strong creative personalities can influence its evolution substantially or even can change its course.

The author would like to express his hope that the study on the "National trends in the New Architecture" and particularly its applied part may be useful in the education of the architects at the Schools of Architecture in Nigeria and in particular at Ahmadu Bello University, where he is a tutor.

APPENDIX II

POSSIBLE FURTHER STUDIES

The destiny of many studies is that they answer several questions and at the same time they either open some other problems or they show that some of them could be eventually subject to a further, more datailed study in the form of specialised studies. The same can be said about this study. Corresponding to the broadly oriented study, some subjects were tackled in a general way. They may eventually become the topics of detailed studies. Such topics could be:

- Detailed study of the "National Trends in the African New Architecture" or still more specialised as the detailed study of the "National Trends in the New Architecture of West African Countries".

- Specialised study of the "Official Styles in the History of Architecture".

- Broadly based study of the "Evolution of Architectural Styles into National Variations".

- Specialised study of the "Spontaneous evolution of National Variations in the New Architecture".

If the mentioned topics would reveal the interest, the author would be pleased to offer his help and co-operation.