

PERCEPTION OF OLD TOWNS, HISTORICISM, AND TEMPORALITY

by

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Calcutta, India, 1983

SUBMITTED TO THE DEPARTMENT OF ARCHITECTURE IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN ARCHITECTURE STUDIES AT THE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

June 1986

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OF TECHNOLOGY

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ABSTRACT

The crux of this enquiry deals with one of the qualities which have been attributed by architectural and urban design theorists to the old, traditional town - its overwhelming sense of visual unity. In this study, it is argued that this unity is somewhat of a perceptual aberration which might arise out of structuring the perceptions of the old town in terms of its common denominator of oldness. The all-pervading sense of age could, to a certain extent, erase other irregularities, so that the old town may be cognized with a powerful sense of unity.

The first part of the study plants this central issue within the larger context of architectural theories and practice. Certain aspects of the theories of Christopher Alexander and Aldo van Eyck which are contingent upon the issue of the old town are expounded. The issue is also linked with the widespread architectural movement in the eastern world to create a culturally and socially responsive architecture. An important corollary of this movement is the imagery of the old town. The second part of the study deals with a perceptual test conducted to gain some insight into how old buildings are perceived. Rome has been taken as a case for this enquiry. Finally, in the third part, attempts are made to explain the results of the test through phenomenological means. Certain notions of temporality which impinge upon the perception of the old town are briefly touched upon. The social and cultural intentions with which architects seek inspiration in such towns are also touched upon to gain a greater understanding of the central issue.

Thesis Supervisor: Sandra C. Howell
Associate Professor of Behavioral Science in Architecture

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ACKNOWLEDGEMENT

Foremost, I am grateful to my advisor, Prof. Sandra Howell, who not only guided me through this difficult exploration, but also endorsed the wide perspective I wished to take.

I am also grateful to Prof. Gunter Nitschke for helping me with certain historical and philosophical issues; to Prof. Ronald Lewcock for his critical review of certain portions of the work; to Prof. Bishwapriya Sanyal for his friendly encouragement; and to Prof. Julian Beinart for guiding me through the early stages of the research.

My thanks are also due to Mark Sheldon for helping me with certain phenomenological issues; and Sally Sullivan whose typing efforts made the production possible. I am also grateful to the respondents of the perceptual test who spared their valuable time for me; and to Vishnu Patel for his timely help.

Finally, I am indebted to my parents and to Nandini for their kind encouragement and support.

PREFACE

"Oh call back yesterday bid them return."

William Shakespeare; Richard II, 3.2.

In retrospect, as I try to impose a structure upon this study, I realize that it is as much a scathing self-analysis as a general enquiry into the phenomenon of attraction to the built forms of the past. This is perhaps inevitable when attempts are made to search in continuity with the inner currents of one's own mind. The world reflected within one's own self is what often provides the intuitive bearings of a sincere enquiry, and indeed, what is discovered as belonging to the realms of the collective, is often, in the end, found to stem from the personal.

Love for history, both as recounted in the texts, and as testified in historic buildings and mute ruins, has always been a part of myself. However, it was only in architecture that I found myself amidst kindred spirits who were looking at the past for a paradigm to solve the riddles of the present. Being nurtured in a generation

which has risen out of the aftermath of Modernism, I found myself within a global movement to reestablish the severed links with history. While in the west, this historicism has been more in the nature of a rebellion against the functional dogmas of the Modernists, or in certain cases, an expression of the existential state of post-industrial society, in the east the historicism has manifested itself as a concerted attempt to define a national identity and create a socially appropriate architecture. The traditional indigenous town has been the subject of much eulogy, and indeed, of late a dominant current of eastern architecture has been characterized by an imagery of such towns and an emulation of their labyrinthian morphology. Until of late, I had myself indulged in such designs.

However, I had never been a total convert into the movement. Often times I had questioned the validity of simulating the visual images of people-made-places. I had asked myself, does the built environment of the past really possess the qualities that are attributed to them? The doubt kept returning from time to time, until a visit to Rome and Florence proved to be the turning point. I had a strange, dream like experience of the two cities. As claimed by numerous

architectural theorists, I experienced an all-pervading sense of unity. It was only later, when I made some exhaustive readings on the architecture of the two cities, that I realized that in reality they were the products of the layering of different kinds of architecture through different periods of time. I asked myself, could the unity suggested by old towns be a perceptual illusion?

What follows is an attempt to answer the question. Skepticism against one's own inclinations can be very trying. On the one hand, it results in the loss of innocence. The revelation of one's own mind, and the conscious awareness of history pulls back the reign on a spontaneous indulgence in the past. On the other hand, it delineates the limits of historicism so that its romantic aspects could be somewhat checked by the forces of reason.

THE PREMISE

This thesis stems from a concern for the current architectural movements in the eastern world. More specifically, it relates to the situation in India. However, inasmuch as India might be within the nexus of those countries which have been grouped together by the north-south and the east-west polarity, this study may be said to be somewhat relevant to most of the so-called developing countries. At a higher level, inasmuch as historicism and the perception of the old town are discussed in generic terms, it may be said to somewhat relate to the global situation in architecture.

However, before we could go on, the term historicism needs to be clarified. It has been used by numerous thinkers, including Karl Popper, in different senses. The semantic connotations of the term are often contrary to one another. Dictionary definitions suggest that there are three interpretations of historicism: 1. The theory that all socio-cultural phenomena are historically determined and that all truths are relative. 2. A concern for institutions and traditions of the past. 3. The use of historical forms. As Alan Colquhoun

observes, "the first is a theory of history; the second, an attitude; (and) the third an artistic practice."¹ It must be noted that in this study, the term has been used in the last sense. It refers to the widespread practice in architectural circles to create a vocabulary of expression which is referential to the past.

Reverting to the situation in the eastern world, an overwhelming tide of nationalism or regionalism, whatever one may term such a movement, is making itself felt powerfully. Styles and motifs from the past are being referred to, abstracted and garbed in a modern syntax, so as to express cultural identity. The labyrinthian urban structure of traditional, organic towns is being emulated and simulated to house what is conceived as the indigenous way of life.

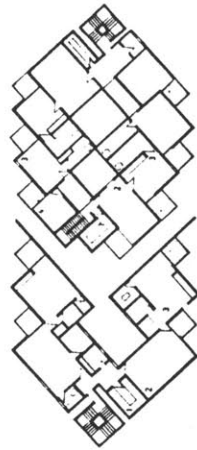
Perhaps some examples would clarify the issue. Indian architect Raj Rewal's Asian Games Housing project in New Delhi may be considered as a typical product of the movement mentioned above. Rewal derives inspiration from medieval, Indian desert towns, particularly Jaisalmer, and recreates space and forms which are typical of such towns - narrow, irregular lanes suddenly opening up into non-axial open spaces and a jagged skyline, suggesting a random accretion through time. In

Fig. 2

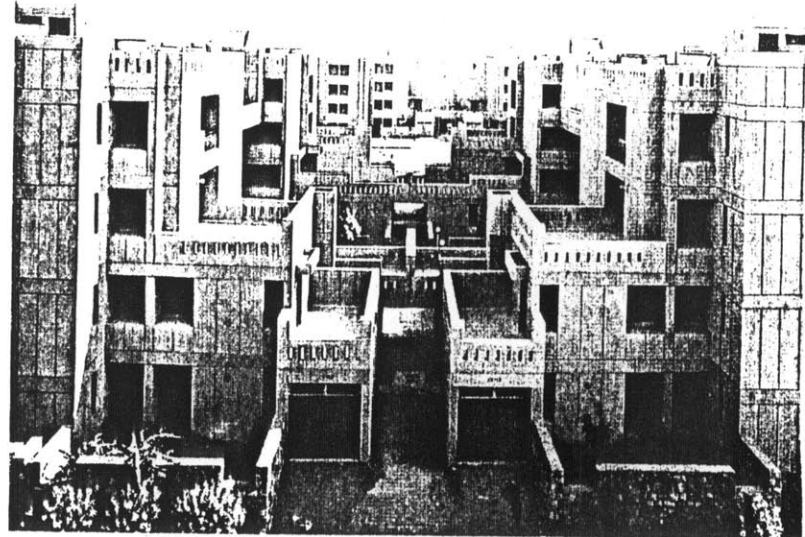
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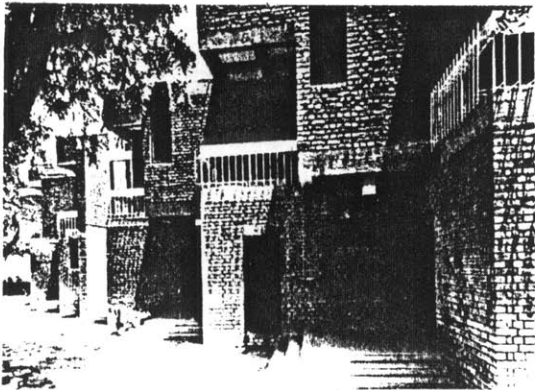
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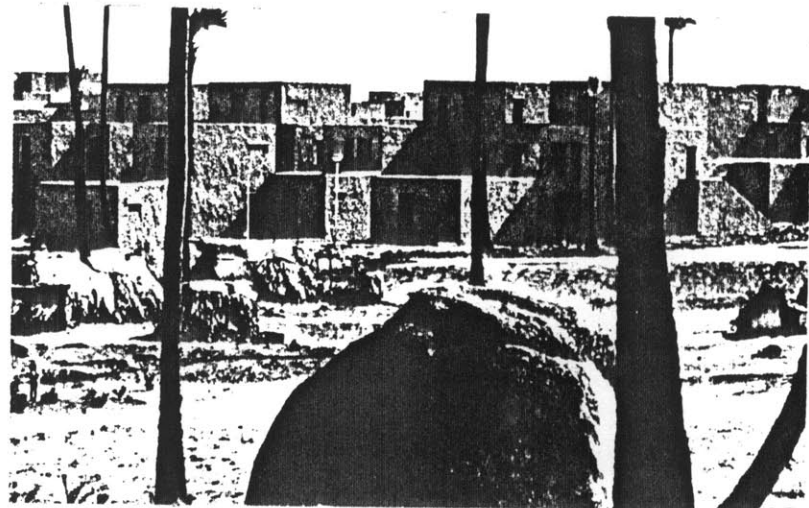
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3

1) Jaisalmer, Rajasthan, India 2) Raj Rewal's Asian Games Housing in New Delhi

3) B.V.Doshi's E.C.I.L. housing in Hyderabad, India

4,5) Design Group's Y.M.C.A. housing in New Delhi

effect, the design principle has been a calculated attempt to simulate a sense of disorder. Nevertheless, to this recreation of medieval imagery, Rewal adds a dimension of social meaning: "The traditional 'gali' (narrow street) and the little courts provide for intimate encounters between people and their neighbors of the traditional 'mohalla' (neighborhood)."² The assumptions behind appending such a social meaning are clear enough: that the traditional town fostered a gregarious interaction, and that a self-conscious emulation of its dense urban fabric would rejuvenate the vanishing sociability of modern man.

B.V. Doshi, the renowned Indian architect, clearly admits his nostalgia for village life: "My parents and my relatives came from small towns and villages My affinity for village life comes from that, as does my affinity for planning principles that simulate that kind of closeness - the narrow lanes the quiet little courtyards".³ What is interesting is the belief in architectural determinism; that simulation would lead to stimulation of social cohesiveness. Doshi's housing in Hyderabad, India, is in many respects a forerunner of Rewal's village. Here, too, we find the same architectural syntax - the narrow lanes, the courtyards, the dense clustering

Fig. 3

of housing units and an attempt to give an impression of variety and multiplicity. Doshi seems to have made a conscious attempt to give an effect of ageing: "I built the housing in stone, and it looks as if it has been there for a long time. That is also important. I really want to find out more about making buildings so that they don't look like they were done today."⁴ Clearly we see the magical attraction of the old, working upon the architect.

Rounding off the scenario, perhaps the observations of an outsider would not be out of place to supplement the picture portrayed above.

Peter Serenyi, in his review of contemporary Indian architecture, has remarked about the Y.M.C.A. Staff Housing project by Design Group:

"The most fundamental connection between Giancarlo de Carlo's Urbino apartments and the Y.M.C.A. housing is their respective sources - The Italian medieval hill town and the Indian medieval hill town have much in common."⁵

Indeed, the above observations are but a few of the products of the historicism related to the old town. The issue is closely related to the global disparagement of new towns. The critical question is: why this eulogy of the old town and the accompanying criticisms of

Fig. 5

the new one? The question may be dealt with from numerous viewpoints. Nevertheless, in this study, it is proposed to explore it from the causal point of view.

THE OBJECTIVE OF THE STUDY AND A PRELIMINARY HYPOTHESIS

Let us, at this point, clarify the objectives of this study and state a working hypothesis. As further issues are delved into, the hypothesis shall be clarified, so that at the commencement of the next chapter, we shall have a fairly focussed question.

The primary objective of this study is to make a preliminary enquiry into the historicism which is manifested through the imagery of old, traditional towns. Obviously such a study could be conducted from numerous perspectives; but what is proposed here is to comprehend it from the causal point of view. Consequently, the perceptual reaction to an old town shall be studied as the key to understanding the above historicism.

The assumption underlying this is that most architectural theories which stem from, or allude to, the built form of the past are derived as much from the architect's perception of the old town, as from an

objective knowledge about it. Architects, being trained to conceive and perceive in visual and spatial terms, often infer certain qualities and characteristics purely from a perceptual point of view. Often they posit, as indeed Raj Rewal does in relation to the old town, that recreation of what is perceived would engender similar reactions. However, perceptions might themselves be treacherous so that often one may believe what never really existed. Hence, any induction derived from it would run the risk of aberration and failure.

It is contended here that the old, traditional town, because of the peculiar perceptual responses it evokes, is particularly seductive for the inductive tendencies of architects. The overwhelming work of our ancestors, so different from our own, could spark within us certain reactions through the perception of space, form and time. The labyrinthian spaces and the unique forms are perhaps understandable components of our experience; but what may not be readily obvious is the role of time. Both in its external manifestations and its internal rhythms, perception of time is an important component of historicism. It has often been mentioned that the old town evokes

in us a feeling of 'timelessness'. Ambling across the desolate ruins of the citadel of Chittorgarh in western India, gazing down upon the plains where many a battle may have been fought, exploring the spot where the beautiful princess Padmini immolated herself centuries ago, and indeed divers of such experiences could exalt our spirit and put it in communion with an eternal past. Numerous architects, including Louis Kahn, are known to have been susceptible to the temporal vibrations of the old town.

Nevertheless, as has already been suggested, extrapolation of the past into the future may involve difficulties. When the convoluted streets, enjoyed so much in a medieval desert town are abstracted and recreated in a modern housing scheme, they may no longer evoke the same feeling or harbour the same social cohesiveness. In short there may be something in the nature of oldness itself, which may create perceptual mirages. The distancing of a building, far into the realm of historical time, may indeed make it project an image which is far from objective facts.

With the above working hypothesis, this study intends to make a

preliminary enquiry into the nature of our perception of the old town. The aim is not to attack the architectural theories which allude to the past. Rather, it is to be viewed in a constructive fashion: as an attempt to delineate some limits of such theories. Hopefully, this would help in our use of the past in a more critical and careful manner.

THE STRUCTURE OF THE STUDY

The study has been divided into three parts. Part one will briefly discuss certain theories which allude to the old town. In the general absence of theoretical positions among eastern architects, and consequently in the absence of a substantial body of accompanying literature, it is proposed that two western theorists, Christopher Alexander and Aldo van Eyck, be discussed, so as to distill the attributes in old built form which they find attractive. Alexander and van Eyck have been chosen because their theories somewhat parallel the developments in the eastern world. It is not sure how far they have exerted a direct influence upon architects of that part of the globe. Nevertheless, in that their theories derive from

non-western cultures, they are set in a certain linkage with the eastern world. It may be wondered why Aldo Rossi has been left out of the discussion. It is because his rationalist mode of thinking, and his method of providing autonomy to the forms of the old town, free from direct social meanings, has not found its echo in the east. Nevertheless, it is speculated that his theory of the collective memory as the bearer of the past might gradually gain popularity in the eastern world.

Part two of the study will deal with the empirical testing of one of the attributes which have been bestowed upon the old town - the sense of unity perceived within it. With the city of Rome as a case, a test of people's perception of old buildings of different styles and different periods of history will be conducted. The objective will be to test the gap between perceptual and factual understanding of the old town.

In part three, an attempt will be made to explain the results of the test phenomenologically. This explanation will be linked to issues of temporality which impinge upon historicism in general, and more

specifically upon the historicism in the eastern world. The discussion will, by no means be claimed to be complete, for not only is it desired to leave certain questions open for future exploration, but also theories of temporality are so varied in range that within the short scope of this exploration, only a brief discussion is possible.

Finally, before we go on to a discussion of the theories of Alexander and van Eyck, it must be mentioned that each of the three parts described above have a different character. Moreover, they wax and wane regarding the breadth of discussion. The first part, setting the central issue within a larger theoretical framework, is analytical in nature. The second one, comprising the perceptual test, is more focussed, and is empirical in nature. Finally the last part, expounding the central question in terms of auxiliary issues is once again broad in its scope and somewhat contemplative in nature.

PART ONE

A PRELUDE TO THE DISCUSSION OF CERTAIN ASPECTS OF CHRISTOPHER
ALEXANDER'S AND ALDO VAN EYCK'S THEORIES

The following sections will briefly discuss the theories of Christopher Alexander and Aldo van Eyck. The scope of this study does not allow an elaborate exposition. Nor is it felt necessary to discuss the theories in their totality. Only those portions which are contingent upon the virtues of the old town will be dealt with. This would entail a greater emphasis upon the inspiration behind the methods rather than the methods themselves. Therefore, care should be taken not to interpret the following discussion as a discourse of Alexander's and van Eyck's theories as such. Rather, it should be noted that this is only a selective view of their work.

CHRISTOPHER ALEXANDER'S THEORIES AS CONTINGENT UPON THE VIRTUES OF
THE OLD TOWN

"It is vital that we discover the property of old towns which give them life, and get it back into our artificial cities."

Christopher Alexander; A City is Not a Tree.

Christopher Alexander's thinking may be broadly divided into two phases. First, as a rationalist, he contrasted the dynamics of people-made-places and consciously designed ones, and propounded a design method to recreate the 'fit' between built form and society. Gradually, he attained the realization that the virtues of people-made-places were enmeshed with much more profound questions, including life itself, and that they could not be recreated through an over-rationalistic, mathematical approach. Henceforth, we find him leaning more towards Taoist and Zen mysticism, although his positivist attitude comes through once again as he propounds a linguistic theory of place-making.

The rationalist phase of Alexander's work is primarily contained in his Ph.D. dissertation, 'Notes on the Synthesis of Form'. In the book, Alexander, with a rigorous, scientific bent of mind, speaks of the act of form-making as the resultant balance of the external forces contingent upon it. Drawing analogies from the renowned biologist, D'Arcy Thompson, who called form 'the diagram of forces', Alexander finds it comparable to an organism which is in a perfect state of ecological balance with its environs. The crucial task of the

designer, Alexander contends, is to achieve a 'fit' between form and context. "The form is that part of the world over which we have control, and which we decide to shape while leaving the rest of the world as it is. The context is that part of the world which puts demands on the form; any thing which makes demands on the form is context. Fitness is the relation of mutual acceptability between the two. In a problem of design we want to satisfy the mutual demands which the two make on one another. We want to put the context and the form in effortless contact or frictionless co-existence."⁶

What is critical is that to draw the contrast between the state of architecture and urbanism of modern times with that of the past, and that of the so-called primitive societies, Alexander brings up the idea of what he terms the 'unselfconscious' cultures as opposed to 'selfconscious' ones. He highlights the contrast with the examples of the huts and the settlement patterns of African tribesmen in French Cameroun. He observes that those built forms are in a state of perfect fit between form and context. In order to regain the same fit between built form and society, Alexander propounds an elaborate design process using set theory and mathematical syntax. The premises of this

study do not call for a discussion of this method. Nevertheless, what must be mentioned is the strong sense of positivism inspiring it. Alexander transcended to his second phase when he realized that the act of designing could not be forced into the strait jacket of mathematical rationalism, and that in order to recreate the qualities of people-made-places, one ought to somewhat set the faculties which engender designs in the realms of enlightened intuition, and let the multifarious forces of society shape the product. In his 'The Timeless Way of Building', with a decidedly mystic tone, he points towards the idea that the essential quality of good architecture is its capacity to establish a spiritual communion between man and built form. This would evoke what he terms the 'nameless quality': the quality which lends life to a place, engenders joy and brings about a certain emancipation of the spirit which gives it an expensive dimension of timelessness. Alexander tries to invoke this by drawing images from his own emotional experience: "The first place I think of when I try to tell someone of this quality, is a corner of an English country garden, where a peach tree grows against a wall..... The sun shines on the tree and as it warms the bricks behind the tree, the warm bricks

themselves warm the peaches on the tree. It has a slightly dozy quality. The tree carefully tried to grow flat against the wall; warming the bricks; the peaches growing in the sun; the wild grass growing around the roots of the tree, in an angle where the earth and the roots and the wall all meet."⁷ This timeless quality, which is the quintessential crux of human existence, is what Alexander points towards as being the fundamental objective behind the creation of good architecture. However, in his 'Pattern Language', he posits that in order to unravel the quality, we ought to observe the world in terms of certain repetitive patterns of space and activities. He reduces the observed world into a linguistic system consisting of a finite set of patterns: "Our world has a structure in the simple fact that certain patterns of events - both human and non-human - keep repeating, and account essentially for much the greater part of the events which happen here."⁸ In planning a neighbourhood or a town, Alexander calls for piecemeal action, drawn out through time, and based upon a healthy interaction of various interest groups. Playing down the role of the architect and the planner, Alexander calls for a free play of the constructive forces of society. In fact, sensing the

incompatibility between his Zen-like exposition of the world and the somewhat prescriptive 'pattern language', Alexander in the end, again moves away from determinism: "The language and the process which stem from it merely release the fundamental order which is native to us. They do not teach us; they only remind us of what is already known and what we shall discover time and again, when we give up our ideas and opinions and do exactly what emerges from ourselves."⁹

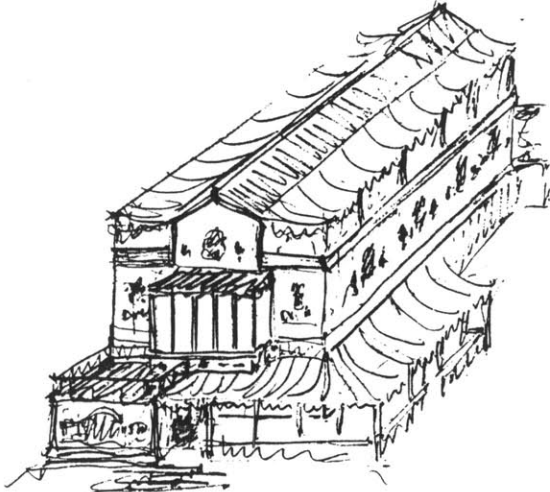
Fig. 6,7

Perhaps an example of Alexander's work could be taken as a practical manifestation of what he is trying to achieve. The 'Oregon Experiment' deals with his attempts at planning; however, since here we are primarily concerned with architecture, we shall briefly discuss the Linz Cafe, which encapsulates his thoughts on architecture. The cafe, set upon the banks of the Danube in Austria, was inspired by the idea of creating forms and spaces which put the users in communion with their souls. "A simple object in which a person may see his own self, mirrored, faithfully or unfaithfully, so that in coming into this building, one feels more solidified, made more whole, more at peace, more resolved in one's inner life In essence calm and happy with a simple happiness, comparable to which we feel in a meadow or



6

6,7) The Linz Cafe



7

in the presence of a very old or deceptively simple Turkish prayer rug or an early Christian jug."¹⁰

At Linz, Alexander builds a plain, almost anonymous building, with ordinary wooden construction, simple furniture, carefully chosen pastel shades for the walls and simple ornamentation. The idea is to adopt a craftsman-like approach and create an unpretentious structure. The orange awnings, the balconies, the intimacy, the simplicity, the sun, the wind and the view of the Danube; all conjoin to make the place dear to its users.

Now, let us come down to where Alexander's work might be contingent upon this study; his views, both direct and indirect, of the old, traditional town. In 'A City is Not a Tree', he argues that the 'natural', traditional town is characterized by a complex plurality and a variety which is manifested through an overlapping of relationships. This 'semi-lattice' structure, with its complex linkages is in contrast with modern cities which are laid out in a hierarchical relationship. Nevertheless, in spite of its diversity, Alexander sees a unifying quality of order in the old town: "The idea of overlap,

ambiguity, multiplicity of aspect, and the semi-lattice are not less orderly than the rigid tree, but more so. They represent a thicker, tougher, more subtle and more complex view of structure."¹¹ Commenting upon the ambiguity of the morphology of Cambridge, England, Alexander observes, "At certain points Trinity Street is almost indistinguishable from Trinity College. One pedestrian crossover is literally part of the college. The buildings on the street, though they contain stores and coffee shops and banks at ground level, contain undergraduates' rooms in their upper stories. In many cases the actual fabric of the street buildings melts into the fabric of the old college buildings so that one cannot be altered without the other."¹²

In his mystical thinking as elucidated in 'The Timeless Way of Building', Alexander sees the undefinable, timeless quality as being manifested among other things in nature and in old towns. To him, the built environment of the past possesses a tranquil serenity, a certain sense of oceanic bliss, where the inhabitants are in perfect harmony with the built forms and the spaces. The patterns of activities and the patterns of spaces are in perfect conjunction with each

other. The old town, to Alexander, is almost like nature, absorbed by the continuum of time. "You can see the timeless character in historical plans They have this inner relaxation. They have the balance of order and disorder; the gentle rectangles, distorted slightly, wherever the building and the land require it; they have a subtle balance of small spaces and open spaces; the unity which happens when each part, inside or outside, is a part with its own solid shape; they all have a slightly rambling, innocent appearance, which shines through the tighter order, and lets us feel at peace."¹³ Alexander, however, sees the quality which is intrinsic in old towns and unselfconscious villages as being potential in any kind of space or built environment which is in communion with our deep, ageless, spiritual stirrings. ".... and yet what looks at first as an accidental quality which marks towns and villages of the past, turns out to be the fundamental physical property of the world we live in."¹⁴ With reference to the Linz Cafe, he states, "In my mind the building makes absolutely no conscious reference to the past at all. Why then does it seem to be reminiscent of traditional buildings? (because) it is based upon (timeless) facts about the nature of

buildings, which are necessary to human comfort It therefore resembles the buildings of the past, not out of a desire to be like the past, but in the same way as one wave of the ocean is similar to another wave - because it is based on the same rules."¹⁵

Without going into a critical dissection of Alexander's theory, let us sum up and attempt to distill some of the qualities he associates with the old, traditional town. In his rationalist phase, he sees such towns as being the exemplar of the perfect organic 'fit' between form and context. It embodies the perfect union of the patterns of forms and spaces and those of human activities. Of the physical attributes of the old town, he observes plurality, variety, ambiguity and a structure of overlapping relationships. Yet he sees this multiplicity ordered within a structure of unity. Order in disorder is how he terms this paradoxical play of opposites. In his mystical phase, Alexander finds old towns to possess an oceanic feeling of timelessness which is analogous to that in nature. The deliberate hand of man is almost erased in an old town, so that it is bestowed with a serene and tranquil peace with itself. Like nature it is blessed with the power to invoke in man deep spiritual feelings and

put him in communion with his soul.

ALDO VAN EYCK'S THEORIES AS CONTINGENT UPON THE VIRTUES OF THE OLD TOWN

"One can live more fully in a medieval city today than in one of the new city quarters."

Aldo van Eyck; Architectural Forum, no.7, 1959

Aldo van Eyck, as a member of the Team Ten, was one of the first architectural theorists to raise the banner against the indiscriminate object-making of the first generation modernists. Although his theories lack the systematic exposition of Alexander, and to a certain extent are enigmatic in their poetic garb, some generalizations can indeed be made. Nevertheless, the task is made difficult by the fact that van Eyck has never compiled his thoughts in the form of a book. They only exist in a disjointed fashion in numerous articles.

Branded as a structuralist, van Eyck is known to have studied the indigenous settlements of the so-called primitive cultures of Africa

and North America. He has put forward the argument that the intrinsic nature of man has not changed after all, and, therefore, the problem of his shelter and his settlement ought to be solved with reference to history. "Man has accommodated himself physically in this world for thousands of years. His natural genius has neither increased nor decreased."¹⁶ In that sense, van Eyck wages a tirade against the early modernist attitude of continuous invention and change. Of the mellowing effects of time, van Eyck remarks, "as the past is gathered into the present, (the latter) acquires temporal depth - it loses its acrid instantaneity; its razor blade quality. One may call this interiorization of time or time rendered transparent."¹⁷

Van Eyck's primary concern has been the creation of 'place'. He connects the abstract volumetric conceptions of space with the notion of place by rendering it with certain phenomenological and existential dimensions. 'Place' is the image of man in space and 'occasion' is the image of man in time. By declaring that the primary aim of the architect is to 'prepare for man's home-coming',¹⁸ van Eyck assigns architecture with a certain sanctimonious role.

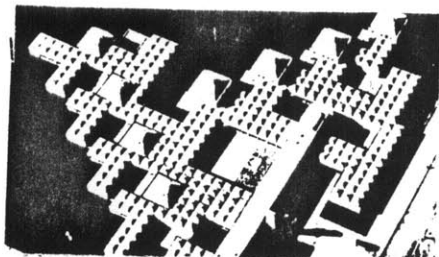
As regards social dimensions of architecture, van Eyck, with a figurative expression similar to Alexander's 'fit', declares architecture to be the 'counterform of society'. Social forces constitute the parameters out of which a design is generated. It is not surprising, therefore, that user participation should be an important facet of his theory. By letting the public participate in the design process, he proposes to bring about the vitality so commonly perceived in people-made places.

Reciprocity or multiple meaning has been an important concept for van Eyck. His architecture embodies certain ambiguities and multivalencies which are internalized through pronouncements such as "the tree is a leaf, the leaf is a tree; the home is a city, the city is a home."¹⁹ The dialectic between opposing polarities - inside and outside, simplicity and complexity, closed and open - are considered to be vital for his architectural works, perhaps to avoid the pitfalls of a one-dimensional truth. Thus he places architecture in what he terms as the 'inbetween zone'; where there is no nostalgia or bigotry to be on either side of the fence. This must be understood in the context of the time when the Team Ten were raising their standard

of revolt. While they denounced the autocratic and dogmatic attitude of their predecessors, they were themselves deeply rooted in the syntactic vocabulary of modernism.

'Labyrinthian clarity' is a term commonly used by van Eyck and his disciples, Herman Hertzberger and Piet Bloom. It has been interpreted by critics as an additive method of construction. Van Eyck's orphanage in Amsterdam can be taken as an example of this accretive mode of planning. Using square modules, he organizes them in a random fashion to diffuse the rigor of geometry. The analogy is somewhat directed towards the convoluted urban fabric of medieval towns. The notion of reciprocity is internalized into the work through the polarized phenomenon of geometry and non-geometry, the ambiguity of the inside and outside, and the contradictions of the big and the small. It must be noted that around the same time, fellow Team Ten members, Candillis and Woods, used a similar mode of composition for their Free University of Berlin. Nevertheless, van Eyck's work is characterized by a greater control through geometry.

Fig. 11 Piet Bloom's 'casbah' housing in Hangelo, Holland, would come closest



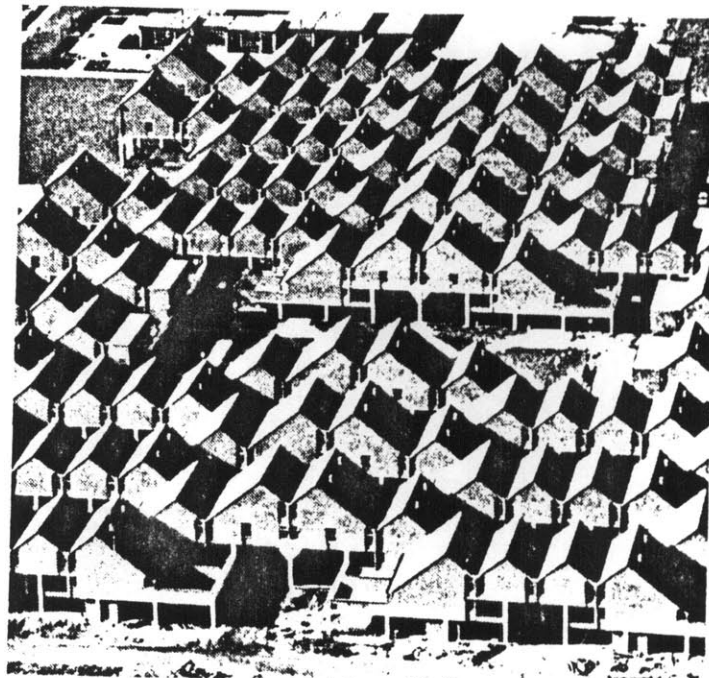
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8,9,10) Van Eyck's orphange project

11) Piet Bloom's 'Casbah' housing

to the current trends in the eastern world. Alluding to the north African casbah, Bloom frankly presents this as a 'roof of dwellings', referring to the picturesque view of the 'disorderly' agglomerate of steeply pitched roof forms. The layout itself is staggered, so as to create calculated accidents of space and form. Perhaps van Eyck would consider this as a much too literal interpretation of labyrinthian clarity. Nevertheless, it must be noted that this kind of abstraction of the vernacular is what has been popular in the eastern world. Doshi's, Rewal's and Design Group's projects are almost on similar lines as Bloom's.

It is implicit that van Eyck's theories stem from an appreciation of the vernacular settlements of un-selfconscious cultures and old towns of Europe. Of the Saharan villages he states: "I still incline towards the immutable. Nor has my affection for those silent desert villages diminished. Though I do wish that sometimes their gentleness would enter our own sad environments."²⁰ Describing Amsterdam, he notes its all-pervading sense of unity: "The old houses on the canals themselves, the boulevards and the streets - even the only royal building, the palace on the dam, and the enormous churches

with the harmonious towers manage things primarily together rather than separately. Nowhere does any one of them impose itself to the disadvantage of the other; no bombast, no excesses, no absoluteness of a separate object."²¹

At this point, let us distill ideas from van Eyck's theories which are directly relevant to this study. Van Eyck conceives time as a continuum, and propounds that the present and the future be conceived as an extrapolation of the past. History is the bearer of man's primal reaction to space and form and therefore it ought to be referred to in order to unravel what is unchanging in man. The old town is therefore a prototype to be carefully examined for a humane environment. According to van Eyck, 'place' and 'occasion' are two important existential dimensions through which man establishes a communion with built environment. Place is generated through gregarious interaction, while occasion is perpetuated through memory.

Like Alexander and numerous eastern architects, van Eyck propounds social ideals in his theories. Architecture seen as a counterform of society, clearly points in the direction of user participation. As

far as the morphology of the old town is concerned, he clearly reads it as a labyrinth. Yet he perceives an all-pervading sense of unity which bestows upon it a certain clarity. Visually as well as spatially, the old town is possessed with a legible structure and a certain sense of unity.

COMMON CHARACTERISTICS OF THE OLD TOWN AS OBSERVED BY ALEXANDER AND VAN EYCK

The thoughts of Alexander and van Eyck somewhat parallel each other. When analyzed in more specific terms, they manifest considerable differences. In contrast to van Eyck, Alexander almost calls for a subdued role of the conscious designer and the planner, and the adoption of a craftsman-like, anonymous approach. Van Eyck, on the other hand, still embedded in the mainstream of architectural thinking, stamps the deliberate hand of the designer and uses geometry as a controlling agent of his additive method of composition. His method tends to be inductive, unraveling the structural continuities of human behavior and their relation to space through a study of history. Initially, Alexander's method also tends to be inductive, trying to unearth the

underlying patterns of space and human activities. However, in its final application in design, the information collected is repositied in a Zen-like realm of intuition. Thus, while Alexander's product may be finally attributed to the nebulous forces of emotion and intuition, van Eyck's must be attributed to a certain extent, to the conscious forces of reason. The latter is characterized by abstraction, while the former by an existential expression of the whole.

Nevertheless, in that both theories aim at creating places for people and both derive inspiration from people-made-places and old traditional towns, we may discern certain overlaps as far as their understanding of the old town is concerned. Both perceive in the traditional town a tremendous sense of unity, both in the social sense of the mutual adjustment of built-form and society as well as in terms of visual and spatial order. The three major characteristics of the old town, which both of them seem to agree upon, are enumerated below.

THE NOTION OF MUTUAL COMPATIBILITY OF BUILT FORM AND SOCIETY

As has already been discussed, Alexander clearly sees the old, traditional town as being in a state of frictionless coexistence with its

context which is primarily constituted by the society it houses. Social needs, technologies available, materials available, and other such parameters, exert their forces to create the resultant counterforce in the form of built environment. This visualization in a figurative manner suggests an ecological balance between society and built form. It is no mere coincidence that van Eyck too uses a metaphor analogous to 'fit'. By conceiving architecture as a 'counterform of society', he too suggests an organic interaction between form and society that may have existed in the old town.

THE NOTION OF LEGIBILITY AND UNITY IN THE OLD TOWN

Both Alexander and van Eyck perceive the old town as possessing a great sense of legibility which is manifested through a certain visual and spatial unity. Although the medieval town may be apparently disorderly, it is bound by an ordering principle which gives it a clear and legible structure. Alexander uses the term 'order in disorder', while van Eyck calls it 'labyrinthian clarity'. In the next chapter, reference will be made to Kevin Lynch's views on the legibility of the old town.

THE NOTION OF TIMELESSNESS EXPERIENCED IN THE OLD TOWN

While Alexander refers to this directly and makes this the central theme of his later theory, van Eyck conceives the same phenomenon more abstractly as the continuum of time. For him, time is the bearer of those primal characteristics of man which have remained unchanged through generations on end. The built environment of the past carries with it the imprint of what is unchanging in man - his sense of 'place' and his sense of 'occasion': the two basic determinants of his existential links with the town.

In this study it is proposed that one of the issues - that of visual unity - be examined through empirical means. Although the issue of timelessness will be briefly touched upon in the last chapter, and somewhat explained through a theory of temporality, the discussion will be no means be elaborate considering the limited scope of this study.

Nor would this limited study permit the examination of the notion of mutual compatibility of society and built form claimed to be characteristic of old towns. To delineate the limits of the notion, a

separate historical study ought to be undertaken to view the development of the city as a process of conflict rather than a process of agreement. Interventions in terms of built form and the social context within which they are implanted mutually adjust themselves to each other through a slow process of adaptation. The process has a certain duration in time, through which the change from a frictioned to a frictionless state of coexistence is achieved through the painful process of rounding off the sharp edges. The frictionless state can only be observed when the process has almost terminated through a long passage of time. In that sense, the old town has a greater chance of being perceived as a case of 'fit'. On the contrary, the new town, in most instances, may be seen as a painful case of maladjustment. Perhaps a quote from Fredrich Engels would exemplify the issue. Observing Manchester in a state of misfit and as a cauldron of human suffering, Engels noted, "The slums of the English towns have much in common - the worst homes in the town being in the worst districts. They are generally an unplanned wilderness of one or two storied terrace homes built of brick; wherever possible there are cellars which are used as dwellings A great number of people are huddled

together in a very small area, so that it is easy to recognise the air in these workers' quarters."²² Today, for all we know, those very same districts might be sought after for their old-world charm. The dwellers might be quite oblivious of the social turmoils their neighborhood had harboured in the past.

The issues of legibility and unity themselves cannot be tackled in their totality within the limited scope of this study. In architectural and urban design terms, legibility may be said to relate to two components -- form and space. One is perceived visually while the other is perceived through movement. Within the limits of this study, only the issue of the visual perception of the old town will be studied. The question of spatial perception, closely related to the notion of scale, needs to be studied through other phenomenological enquiries.

Let us, therefore, go on to the next chapter, where the issue of the visual unity of the old town will be explored through an empirical test. As mentioned earlier, Rome will be taken as a case. The test will be in the nature of a preliminary pilot enquiry, and in that

sense, the results need to be consolidated through further advanced investigations.

PART TWO

THE QUESTION REDEFINED

"Now let us suppose that Rome is not a human habitation but a psychical entity with a similarly long and copious past - an entity that is to say in which nothing which has come into existence will have passed away and all the earlier phases of development continue to exist alongside the latest one If we want to represent historical sequence in spatial terms we can only do it by juxtaposition in space: the same space cannot have two contents It shows how far we are from mastering the characteristics of mental life by representing them in pictorial terms."

Sigmund Freud; Civilization and Its Discontents.

In the last chapter it had been proposed that the visual unity of the old town be tested through empirical means. As a prelude to the perceptual test, let us first of all, redefine the question and the hypothesis.

The issue of unity is closely related to the notion of imageability. Kevin Lynch has defined imageability as "that quality in a physical
x object which gives it a high probability of evoking a strong image in a given observer." ¹ He expands upon this and equates it with a heightened sense of legibility. This latter term he defines as "the ease with which the parts of a certain environment may be organised and put into a coherent structure." ² Underlying this notion of a coherent

structure lies the idea of visual unity. If a coherence is to be perceived, it is imperative that a common denominator of unity should weave through all the elements of the image. As Lynch once again observes in relation to Florence: "Every scene is instantly recognizable and brings to mind a flood of associations. Part fits into part. The visual environment becomes an integral part of its inhabitants' lives There seems to be a simple and automatic pleasure, a feeling of satisfaction, presence and rightness, which arises from the mere sight of the city or a chance to walk through the streets." ³ The part fitting into part to create a whole is what suggests unity. In other words, unity with respect to the old town is the structure which is imposed upon it to perceive it as a whole.

What is contended here is that oldness itself, to a certain extent , lends the structure of unity which makes historic towns such as Florence imageable. Shared values and the limited nature of building technology and materials were definitely important common denominators in the architecture of the city. Nevertheless, it is also the gulf of time between modern observers and historic towns which lends them a certain degree of unity. Indeed time may have erased a number of

contradictions, controversies and irregularities that may have surrounded their built environment in the past. For example, when Brunelleschi and Michaelozzo, in the first half of the fifteenth century, imposed their highly selfconscious sense of classical order upon the fabric of medieval Florence, there may have been ripples of discontent. History records that Cosimo Medici rejected Brunelleschi's grand plan for the Medici Palace because he felt that such a building would arouse the jealousy of fellow Florentines. Thus, Renaissance planning may have been associated with ostentation, and in a society hitherto charged with Christian values of piety and charity, the classical paradigm may have been, to a certain extent, a violation of the value system. Nevertheless, today the masterful creations of Brunelleschi, Michelozzo and Alberti are somewhat absorbed within the medieval fabric of Florence, so that the once apparent schism between the old and the new, is to a large extent, subdued in the perceptual sense.

The quintessential question is: Is there something in the nature of oldness itself which lends traditional towns their sense of visual unity? Does the built environment of the past, perceived as it is within the parenthesis of oldness, conjure illusions of an over-

x overwhelming sense of visual coherence? Indeed the working hypothesis of the perceptual test that follows is that the built environment of the past is read flatly and abstractly, and it is provided with a unifying structure by the most common empirical quality it possesses - the quality of oldness.

/ It must be clarified that by the term 'flatly' and 'abstractly' are meant that the old buildings are perceived collectively under the simple classification of 'the old', without distinguishing them according to finer irregularities.

ROME AS A CASE TO ELICIT COGNITIVE RESPONSES FROM PEOPLE

In order to study people's perception of buildings, especially old ones, Rome was chosen as a case. One may wonder why Rome; for a large proportion of its buildings are indeed selfconscious works of art. The thesis of the Indian architects and Alexander's and van Eyck's theories point more towards unselfconscious, vernacular, traditional towns than selfconscious ones. In the light of this, Rome was chosen for two reasons. First of all, the old districts of Rome, having

developed over a medieval fabric, do have certain qualities attributed to the vernacular town - the labyrinthian network of streets and certain 'typological' varieties of architecture. As in the case of Florence, there is an apparently strong image Rome evokes. Although the city has been layered through the ages by deliberate acts of man, their 'acrid instaneity and their razor sharp quality', as van Eyck would term it, have been, to a certain extent, rounded off through time. Rome therefore shares certain characteristics with the vernacular town.

The second reason concerns the logistics of conducting an empirical test. To establish the differences between perceptual understanding of a building and factual understanding of it, we have to have certain objective, commonly agreed upon knowledge about it. Few systematic studies have been made regarding vernacular, people-made-architecture. Fewer still have been organised in terms of stylistic categories which are widely accepted as 'historical' knowledge. Moreover, since the chronology of vernacular buildings is not well established, designing an experiment with people-made-buildings runs into the problem of lack of factual knowledge. Hence the choice of Rome.

Moreover, the experiment was so designed as to elicit perceptual responses to old buildings in general. The fact that the buildings chosen were selfconscious works of art, attribute them with a certain historical importance, so that historical knowledge about them would serve as an intervening variable in the responses. Therefore, it might be argued that in the case of old, vernacular buildings, of which not much might be known, those aspects of the results would be relevant which relate to a relative ignorance of historical knowledge.

Before we conclude this section, the relation between oldness and the vernacular town ought to be clarified. In that the building traditions of most urban vernacular towns, such as Jaisalmer and Jodhpur in India, are, to a large extent, dead, what remain to provide inspiration to architects are mostly old. Therefore a study of perceptual responses to old buildings is not considered unjustified in the context of the the current architectural trends in the eastern world.

PERCEPTUAL CONTINUITIES AND OBJECTIVE DISCONTINUITIES

In an objective sense, various historic styles constitute distinctive

groups which are recognized by certain salient characteristics. Although along the temporal continuum they may have, on the one hand, evolved slowly, or on the other hand, come into being as a sharp breach with the immediate past, the fact is that in historic terms, they are recorded as being congruent with distinct periods of time. In that the styles are different they may be said to constitute, at least on some count, a certain degree of disunity. In that they belong to different periods, once again, they may be said to constitute disunity.

Therefore, for all practical purposes of the perceptual test, stylistic and temporal differences were taken as the criterion for disunity. In other words, if the respondents were unable to distinguish between various styles and various ages, they may be said to have perceived a certain degree of unity in the old town in which the buildings were located. With this argument in mind, it was contended to test the following factors:

1. Whether people actually perceived stylistic differences in the buildings of an old town. (STYLISTIC FACTOR)
2. Whether they perceived chronological differences in the buildings. (TEMPORAL FACTOR)

3. Whether they perceived a certain coherence and a sense of unity within the buildings that constituted the stimulus material. (COHERENCE FACTOR)

The last factor was tested by eliciting whether the respondents perceived a certain group of buildings to 'fit' with one another, so that they were perceived to be in the same place. Indeed, if they were seen to be compatible with one another, it could be argued that they would, to a certain extent, be seen within the framework of coherence.

THE MULTIPLE SORTING TASK AS AN EXPERIMENTAL TECHNIQUE

The objective of the empirical test was to determine whether persons of varied experiential backgrounds were able to perceive differences in buildings. Considering the fact that the discriminating capacity of the respondents was being tested, it was felt that the multiple sorting task would be the most suitable experimental technique to elicit the required responses. The technique, which has been used by numerous researchers in psychology, entails the respondents sorting out the stimulus material, which may be in the form of photographs,

models or objects, into discrete sets, according to certain common characteristics perceived by the respondent. Its particular adaptation to this study will be discussed in a later section. Among others, it has been used successfully by Bruner (1956), Sherif and Sherif (1968), Rosenburg and Kim (1975), Krampen (1977), Ward (1977) and Horayangkura (1978). Linda Groat, in her study on 'Meaning in Post-modern Architecture' (1982), has used the method effectively in order to unravel the differences in the perception of modern and post-modern buildings by architects and non-architects. Other studies using the sorting task have been directed, among other things, towards understanding lay concepts of personality, perceived similarities of nations, ethnic groups etc.

The greatest advantage of the sorting task is that unlike the semantic differential scale, it does not elicit responses in terms of an a-priori set of possible responses, preconceived by the experimenter. Therefore the respondents are free to state the criteria upon which they sorted the materials into various sets.

THE VALIDITY OF USING SIMULATED STIMULUS MATERIAL

The validity of using simulated stimulus material - such as coloured photographs, which have been used in this case - has been discussed by various researchers including Winkel and Sasanoff (1966), Bonsteel and Sasanoff (1967), Hershberger (1971), Howard, Mynerski and Sauer (1972) and Sims (1974). The general agreement is that if the nature of the experiment permits it, the real environment is more effective than the simulated one. However, differences can be minimized by making the simulations as close to real life situations as possible. For that reason, in this test, clear, street level, coloured photographs were used. Moreover, in this case the nature of the experimental technique - the multiple sorting task - called for the use of small, handy, stimulus material such as photographs.

Another argument may be cited in favour of the use of simulated material. Teaching and design methods in architecture often employ photographs and slides for the understanding of the context around the site. A designer's response to the site is often conditioned by the fact that he assimilated images from such simulated sources. In that sense, we

could view the coloured photographs of Roman buildings as being somewhat congruent with the hypothetical situation of architects or architectural students responding to the architecture of Rome through the use of photographs.

SELECTION OF STIMULUS MATERIAL

Twenty-six coloured prints of size 3.5" X 5" were chosen as stimulus material after careful research. Initially, a pilot test was run with black and white prints and finally, forty coloured slides from M.I.T.'s slide library were made into coloured prints. Out of these twenty-six were chosen as stimulus material. Four of these were post-1955 buildings in Rome, three being apartment buildings and one a detached residence. These modern buildings were chosen to test a possible perceptual schism between the old and the new. Of the remaining twenty-two, three were from cities in Europe other than Rome, one each being from Florence, Paris and London. These were chosen to test how old buildings in different contexts are judged side by side. The rest of the nineteen photographs consisted of historic buildings from Rome. Care was taken to select examples from various styles and various ages.

Representative examples of Roman, Early Christian, Romanesque, Baroque, Rococo and Neo-classical architecture were chosen.

It must be mentioned at this point, that another reason Rome had been chosen as a case was because it is one of the few historic cities which have been overlaid time and again, with different styles of architecture and planning. In that sense it is a good testing ground for how people perceive temporal and stylistic distinctions.

What follows is a list of all the twenty-six buildings which had been included in the stimulus material. A brief description of the stylistic category they fall under is followed by the names of the buildings and the chronological data concerning them. Before we go on, it must be acknowledged that the brevity of the description of styles expose them to the risk of over-simplification. Therefore it must be noted that they have been provided to give only a general idea.

ROMAN ARCHITECTURE

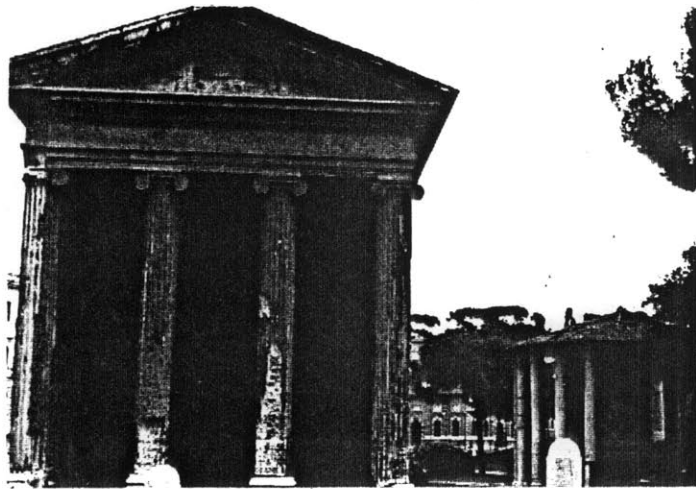
Roman Architecture derives its influences from Hellenic sources as well as Etruscan ones. On the one hand, it is characterized by the use of

trabeated systems, fashioned after the Greek model, while on the other hand, it is known for its arcuated systems of arches, vaults and domes, developed from beginnings made by Etruscans. A dominant feature of Roman architecture is the use of the five orders - Doric, Ionic, Corinthian, Tuscan and Composite. The Romans are also known to have been one of the earliest users of concrete, so that they could span enormous spaces. Consequently, their architecture is also known for its gigantic scale. Materials most commonly used by the Romans were brick, stone and concrete.

- Fig. 12 1. Temple of Fortuna Virilis, Rome. (c. 40 B.C.)
- Fig. 13 2. Pantheon, Rome. (25 B.C.; rebuilt between 120-124 A.D.)
- Fig. 14 3. Castle San Angelo, Rome. (c. 130 A.D.; rebuilt from time to time since 1347 A.D.)
- Fig. 15 4. Arch of Constantine, Rome. (312 A.D.)

EARLY CHRISTIAN ARCHITECTURE

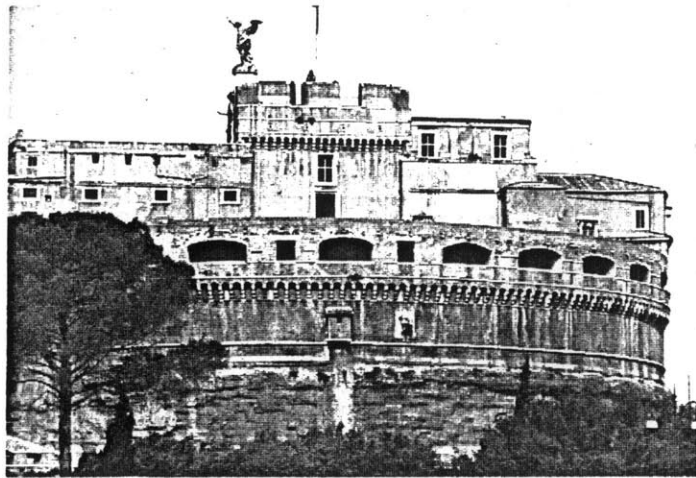
Early Christian Architecture is somewhat of a continuity to the late Roman traditions of construction, except that prosperity having declined, materials used were more humble and decorations not as elaborate.



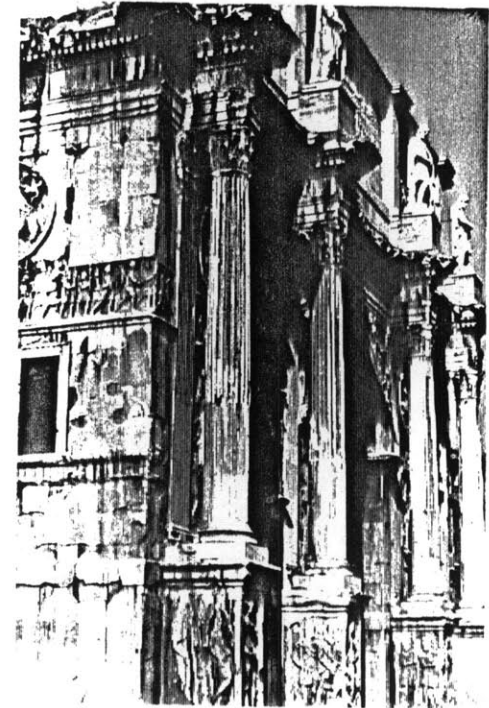
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12) Temple of Fortuna Virilis 13) Pantheon
14) Castle San Angelo 15) The Arch of Constantine

16) Santa Maria in Trastevere

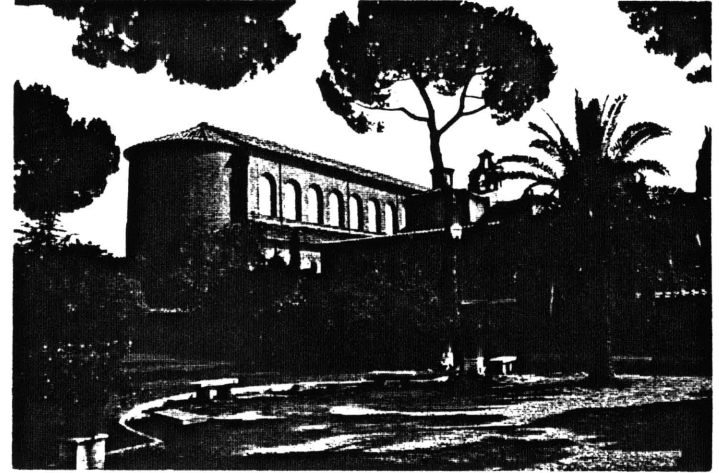
17) Santa Sabina

18) Santo Stephano Rotundo

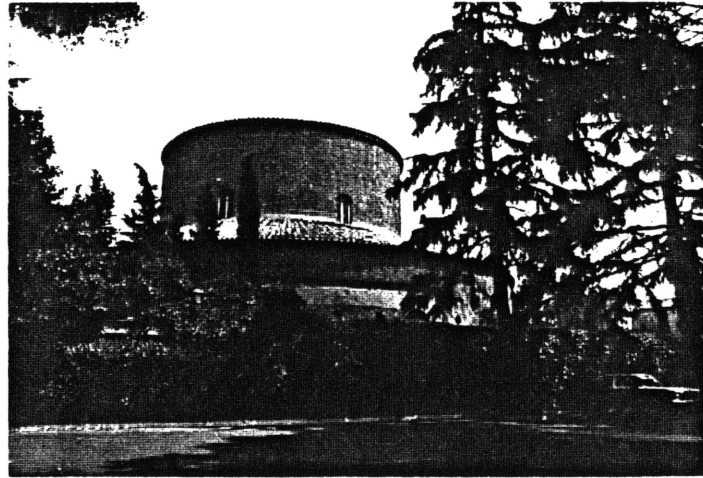
19) Santa Maria in Cosmedin



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Most commonly, we find the basilican form of the church, fashioned after the Roman halls of justice, with an atrium in front and a nave ending in a semi-circular apse. The interior is often characterized by arcaded aisles on the two flanks, with a gabled roof on the top of the nave and lower mono-pitched roofs over the aisles. Brick or roughly dressed stones were used for the walls while the roof was supported by means of wooden trusses. On the whole the architecture is characterized by simplicity and functionality.

- Fig. 16 5.Santa Maria in Trastevere, Rome. (3rd. C. A.D.; renovations in
1140 A.D.when the Romanesque
campanile was added.)
- Fig. 17 6.Santa Sabina, Rome. (422 - 432 A.D.)
- Fig. 18 7.Santo Stephano Rotundo, Rome. (468 - 483 A.D.)

ROMANESQUE ARCHITECTURE

Romanesque architecture is characterized by the use of dressed stone masonry and stone, vaulted roofs. From the Roman basilican plan, the church gradually took up the cruciform shape. Semi-circular arcades in the porticoes, and square, circular and octagonal campanile or bell-

towers are characteristic of Romanesque architecture.

In Italy however, we find a more orthodox continuation of Early Christian traditions. Roman modes of construction were employed, and often the roofs were made of wood. As Spiro Kostof observes, "Here, several threads of our story - native Romanness, Byzantium, Islam and Transalpine medievalism get intertwined."⁴ Therefore, the borderline between Early Christian and Romanesque is somewhat ill-defined in the context of Italy.

Fig. 19

8. Santa Maria in Cosmedin, Rome. (6th. C. A.D.; enlarged between 772 - 792 A.D.; Romanesque portico added in 12th. C. A.D.)

Fig. 16

5. Santa Maria in Trastevere, Rome. (Romanesque bell tower added in 1140 A.D.)

GOTHIC ARCHITECTURE

Gothic architecture is characterized by the use of new structural technologies incorporating the ribbed vault, the pointed arch and the flying buttress. Mouldings are often profusely decorated, and grotesque

sculptures of mythical creatures are often used. Fenestrations are characterized by traceried windows, and the overall effect in the interiors as well as in the exteriors, is marked by a pronounced sense of verticality. The Gothic style proliferated in Western Europe and its influence upon central and southern Italy was limited.

Fig. 20

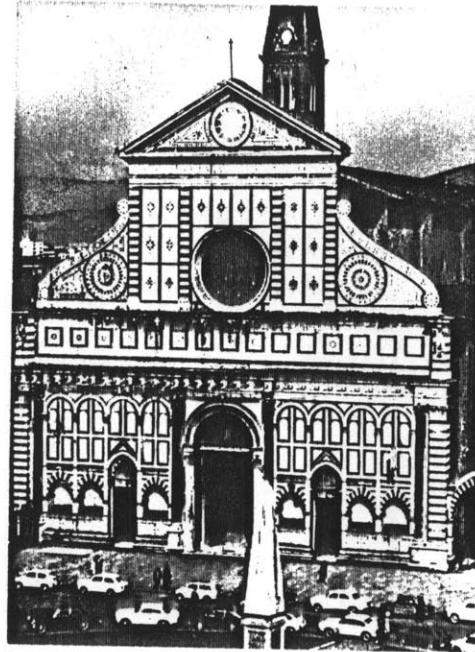
9. Notre Dame, Paris (1163 - 1250 A.D.)

RENAISSANCE ARCHITECTURE

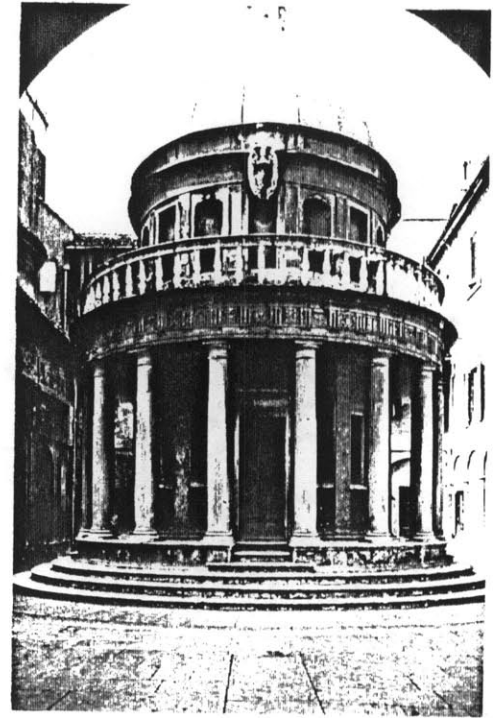
Renaissance architecture began as a revival of the classical Roman tradition, but gradually over the years, it came to possess an individuality of its own. It is characterized by the use of a strict, modular system of planning, symmetric composition, use of semi-circular arches and a canonical application of classical orders. As opposed to the Baroque style which followed, Renaissance architecture is an architecture of planar surfaces. The gradual progression towards a plasticity of surfaces is termed by different names, beginning with Early Renaissance, where an academic classicism was followed, High Renaissance, where a reappraisal was made of Roman principles, and a monumental scale was achieved, and finally the Mannerist phase, where the Baroque



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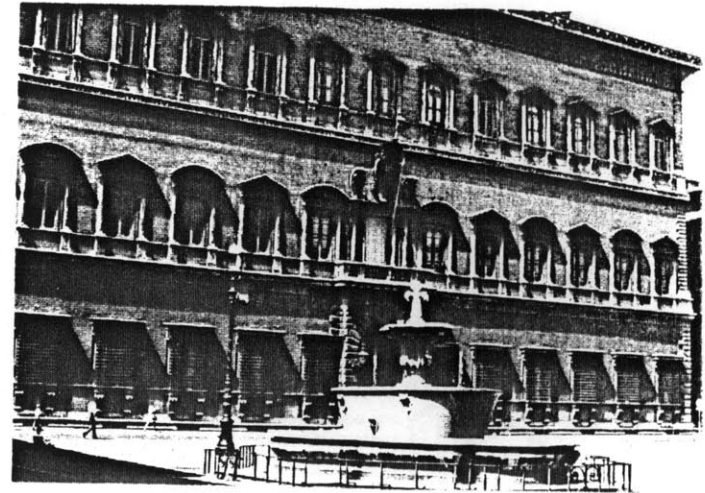


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- 20) Notre Dame 21) Santa Maria Novella
 22) Palazzo della Cancelleria
 23) Tempietto in San Pietro in Montorio



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24) Villa Farnesina 25) Palazzo Farnese 26) Church of Gesu
27) San Vincenzo ed Anastasio

BAROQUE ARCHITECTURE

Baroque architecture is characterized by an increased elaboration and experimentation with the Renaissance repertoire of forms. Although the classical vocabulary of forms was generally adhered to, during this age we find an eclectic tendency towards profuse decorativeness and plasticity. As opposed to the rectilinear and planar architecture of the Renaissance, Baroque architecture is characterized by curves and flowing lines. The oval form was particularly popular during this period.

Rococo is the name given to late Baroque architecture which is characterized by even more profuse decorations. The sinuous, flowing lines are a major hallmark of Rococo architecture. Most historians agree that true Rococo architecture is not to be found in Rome.

The English Baroque is subjected to the sobering influences of the classical and the Palladian traditions. Yet traces of plasticity and sinuosity are observable, especially in the bell towers of churches.

ITALIAN BAROQUE

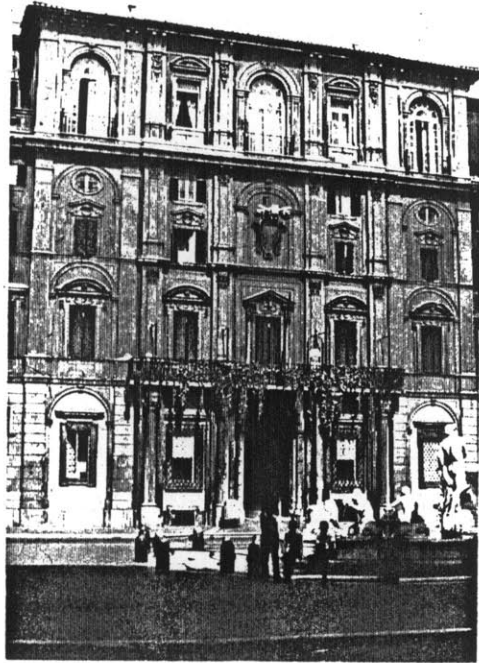
- Fig. 27 16. San Vincenzo ed Anastasio, Rome. (1630 A.D.)
- Fig. 28 17. Palazzo Pamphilj, Rome. (1644-50 A.D.)
- Fig. 29 18. San Agnese, Rome. (1652-72 A.D.)
- Fig. 30 19. San Andrea al Quirinale, Rome. (1658-70 A.D.)
- Fig. 31 20. Santa Maria Madelena, Rome. (1735 A.D.)

ENGLISH BAROQUE

- Fig. 32 21. St. Martin-in-the-fields, London. (1722-26 A.D.)

NEO-CLASSICAL ARCHITECTURE

Neo-classical architecture is considered to be a reaction against the the effusive and over-decorative nature of late-Baroque and Rococo architecture. Roman and Greek styles in their pure, classical forms were revived for institutional, ecclesiastical as well as residential buildings. The use of the orders was characteristic, as was the monumentality of the scale. However, within Neo-classicism, we find different tendencies: some leaning towards Hellenic styles, others towards Roman, and yet others inventing their own eclectic versions. Never-



28



29



30

28) Palazzo Pamphilj

29) San Agnese

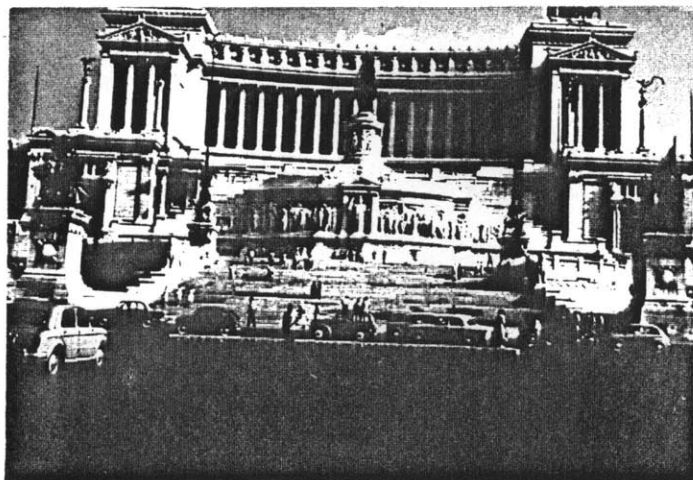
30) San Andrea al Quirinale



31



32

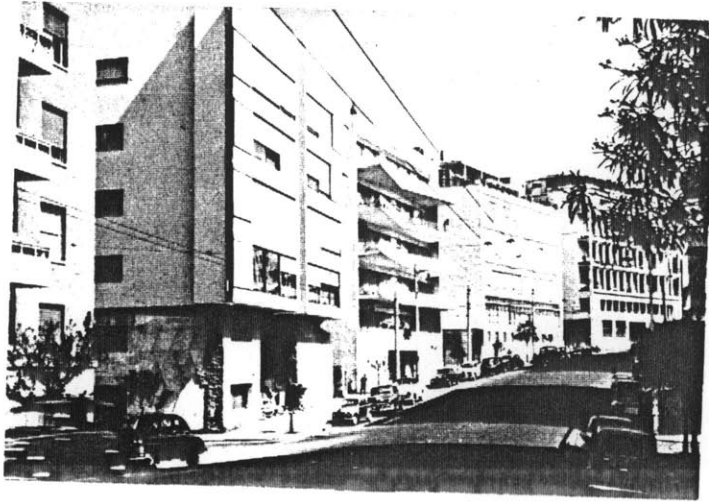


33

31) Santa Maria Madalena

32) Saint Martin-in-the-fields

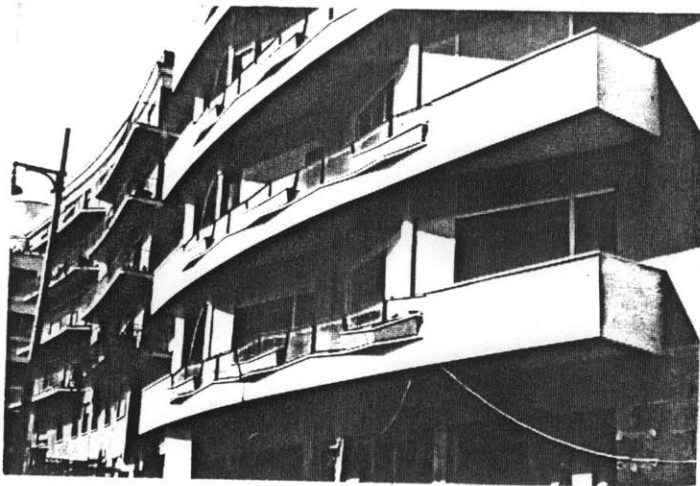
33) Monument of Victor Emanuel II



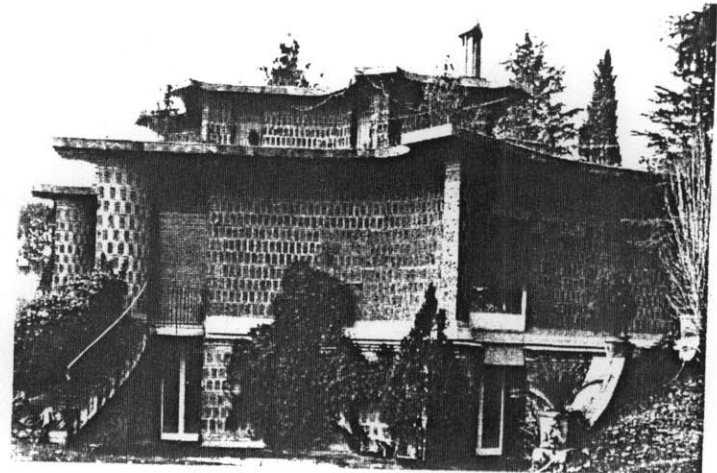
34



35



36



37

34) Apartments on Via Archemede 35) Apartments on Viale Bruno Buozzi

36) Apartments in Rome 37) Casa Baldi

CHOISE OF RESPONDENTS

Six architects and six non-architects were chosen as respondents. These two groups were formed so that varying degrees of knowledge of architectural history could serve as an intervening variable. Care was taken to choose a few respondents in each group who had been to Rome. This would make familiarity with the architecture of Rome as another intervening variable. Care was also taken to mix non-westerners as well as westerners in each group. This would help test any culturally subjective conditions which might intervene in the perception of old buildings.

Of the six architects chosen, three were males and three females. In terms of nationality, two were Chinese, one Belgian, one Greek, one American and one Guatemalan. The average age was twenty-six, the oldest being twenty-nine and the youngest twenty-five. Of the six, only one had been to Rome; two had taken advanced courses in architectural history, while all had taken elementary courses in the history of architecture. Consequently, every one of them had some idea of the general character of buildings.

The non-architects' group was chosen from among the residents of the graduate dormitory in which the experimenter lives. Of these, three were Ph.D. students in Materials Science, one a Ph.D. student in Mechanical Engineering, one a Ph.D. student in Physics and another a masters student in Nuclear Engineering.

In the non-architects group, one of the respondents was a woman, while the other five were men. As for their nationalities, three were Americans, two Indians and one Chinese. The average age in this group was twenty-four, the oldest being twenty-eight, and the youngest twenty-two. Of the six, only two had been to Rome. None of them had taken any courses in architectural history, although one was somewhat familiar with Italian cities, having seen some Italian films.

THE EXPERIMENTAL PROCEDURE

Three pilot tests were run on respondents who were not included in the final group of twelve. During the pilot tests, forty pictures were provided and the respondents were asked to perform the sorting task five

times, twice according to their own criteria and three times according to certain guidelines specified by the experimenter. The entire exercise was timed and it was found that it took a little over an hour. The respondents were asked for comments and it was concluded that the tasks were rather tiring. As two of the independent sorts overlapped one of them was eliminated. The number of times the sorting task was asked to be performed was reduced from five to four. In addition, the number of pictures was reduced to twenty-six after a careful screening. The test time was brought down to about forty minutes.

Before administering the test each of the twelve respondents was given the following instructions: "I am interested in knowing how people perceive buildings. I shall give you twenty-six pictures of buildings in one or more cities in Europe. You have to sort them out into smaller sets so that each set has certain common characteristics for which they are grouped together. You may have as many groups as you wish. I shall ask you to perform the sorting task four times; the first time, you may do it according to your own criteria, but the following three times I shall specify the criteria upon which you shall sort. Remember, after each sort, I shall ask you what the common characteristics were for

each group you sorted into a set. The task is a simple one; no trick involved; therefore do it freely."

The twenty-four photographs were handed to the respondent and he was asked to sort them out, for the first time according to his own criteria of distinction. At the end of the first round the respondent was asked to specify why certain pictures were put into certain groups and what were the common characteristics that he had perceived in each group. This was noted down along with the picture numbers of each group in a predetermined format which shall be discussed in the next section.

Following the first sort, the pictures were shuffled and handed back to the respondent. This time, he was asked to sort according to groups, each of which he felt had a similar style. This was to determine the 'stylistic factor'. By style he was asked to use the common sense notion of the term. However, the Oxford English Dictionary definition of the term was also recounted: "Architectural style refers to similarities in ornamentation or decoration, similarities in modes of construction and similarities in the arrangement of various elements." Having thus defined style, the respondent was asked to proceed with

the sorting task. At the end of this, once again in the predetermined format, the picture numbers and the stylistic criteria were noted down.

The pictures were again shuffled and handed back. This time the respondent was asked to sort according to the time he thought the buildings had been built. This was to determine the 'temporal factor'. He was instructed that he could group them according to centuries or time spans of a few centuries. Once again, at the end of the sorting, the picture numbers were noted down along with the time period specified for each set. Although unplanned, often it was found necessary to ask the respondent why he felt a particular group belonged to a particular period. This information too was noted down.

Finally, the 'coherence factor' was tested. This time, after shuffling and handing back the pictures, the respondent was asked to sort them into groups which he felt belonged to the same 'place'. The respondent was allowed to interpret place fairly freely. Nevertheless, in most cases, it was found necessary to provide some explanation. He was told to sort out according to groups of buildings which he felt could co-exist in the same neighbourhood or in the same city. Often familiar

examples in relation to Boston or Cambridge had to be given. Different respondents used different units for the notion of 'place'. Some thought of it in terms of countries, others in terms of cities, while yet others thought of it in terms of neighbourhood. This freedom of interpretation was allowed. At the end of the final sort, once again the usual process of noting down facts and figures was carried through.

At the end of the test, the respondent was thanked and asked whether she or he wanted to know anything about the study or the pictures. In most cases interest was shown and the questions answered.

FORMAT FOR DATA COLLECTION

The various sets into which the stimulus material was grouped in the four sorts were carefully noted down in tabulated charts shown in the Appendix (p.139-150). The photographs were provided with numbers at the back of them so that these numbers were noted down instead of names. Below each group of pictures, the characteristic quality associated with them, as enumerated by the respondent, was noted down.

At the end of the sorting task, the respondent was asked to fill out a questionnaire reproduced in the Appendix (p.133) The objective of this questionnaire was to elicit the background of the person: age, sex, occupation, educational major, nationality, number of years in the west, and finally whether she or he had visited Rome or taken advanced or elementary courses in the history of western architecture.

METHODS OF ANALYSIS

The method of analysis was, on the whole, qualitative, although finally frequencies for the various observations were recorded.

First of all the response chart of each of the twelve respondents was analysed. The chart was read horizontally, i.e., each of the four sorting tasks was analyzed separately. The picture numbers were reconverted into names, and their grouping criteria, as enumerated by the respondent were carefully noted down against each group. This was carried out for all the four sorts in the case of all twelve respondents. We shall refer to the set of notes made at this stage as analysis # 1.

Next, analysis # 1 of each sort, for each of the twelve respondents

was further analyzed and certain generic tendencies were noted down. For instance, respondent #7 may have made the stylistic sorting in broad terms - columns, pillars, triangular pediments, arched openings, similar windows, etc.. This analysis, which was essentially a distillation of analysis # 1, we shall call analysis # 2. Analysis # 2 therefore, consists of the generic tendencies of each of the twelve respondents to the four sorting tasks.

Next, certain specific buildings to which the respondents may have reacted in a characteristic manner was analyzed. As in the tabulated chart shown in the Appendix (p.151), here the matrix consisted of the four sorts along the vertical axis and the twelve respondents along the horizontal. The comments of each of the respondents in relation to that particular building in stylistic terms, temporal terms and coherence terms were noted down. These comments were read horizontally, i.e., across all twelve respondents for each of the four sorts. The common denominators or the generic comments were noted down into separate set of notes. These we shall call analysis # 3.

Next, analysis # 1 and analysis # 2 were read horizontally, that is

side by side, for each of the four sorts. First the group of six non-architects were analyzed and then the group of six architects. Certain generic responses to each of the sorts which were repeated by more than two respondents were carefully noted down. These we shall call analysis # 4. Each of the elements of analysis # 4 were again put in a matrix against the six respondents and a count was taken as regards how many agreed to a particular observation . For example, five out of six non-architects thought that the Early Christian churches were built after the nineteenth century. This set of frequency counts , we shall call analysis # 5.

Finally , analysis # 3 and analysis # 5 which consisted of frequency counts were used to draw certain general conclusions.

ANALYSIS OF THE STYLISTIC FACTOR

The analysis that shall follow will be accompanied by certain frequency counts. For instance, figures such as 3/6 shall refer to three out of six respondents. This should be borne in mind while reading the next few sections.

Non-architects tended to judge the style of a building using broad and generic cues such as predominance of 'pillars' or columns (6/6), 'triangular tops' or pediments (5/6), arched openings (3/6), etc.. One Chinese respondent characterized the styles by using more qualitative and less formal terms such as 'solidity', 'decorativeness' and 'simplicity'. Architects, on the other hand, generally used stylistic terms to distinguish between the various groups (5/6). One respondent however, refrained from using such terms, lest they be incorrect. He used descriptive phrases such as 'curved surfaces; heavy use of relieved decorations; sinous lines', which were more specific and generally more observant than the non-architects.

In certain instances, (3/6) architects used a few non-terminological descriptive phrases along with architectural stylistic terms. One responded with , 'Ones using the classical orders', to describe a set of buildings with a predominant use of columns. This was found among students who had taken less advanced courses in history.

Both architects (6/6) as well as non-architects (6/6) were easily able to distinguish the three 1960s apartment buildings. While a few (2/6)

architects termed them as 'International Style', the rest of the ten respondents used the term 'modern'.

Architectural styles which are derivatives of Greek and Roman architecture, especially ones with a predominant use of columns and the classical orders, such as the Renaissance, the Baroque and the Neo-classical, were often confounded with one another. Among non-architects this seemed to be more so than among architects. All six non-architects sorted together, under the 'columned and the pedimented style', buildings as stylistically and temporally varied as the Roman Pantheon (6/6), the Renaissance Tempietto (6/6), the Neo-classical Victor Emanuel's Monument (6/6), the Roman Temple of Fortuna Virilis (6/6), the Italian Baroque church of San Vincenzo (3/6) and the English Baroque church of St. Martins-in-the-fields (2/6).

The architects did this sparingly; but we do find instances of different buildings of the classically derived styles creeping into one another. St. Martin-in-the-fields (6/6) and the monument of Victor Emanuel (6/6) were classified either as Renaissance, Italian Baroque or Roman. In a majority of cases (4/6), the Renaissance Tempietto was

classified as Roman.

In the case of Early Christian architecture, we find that among non-architects, Santo Stephano Rotundo and Santa Sabina were mostly (4/6) put together. Certain respondents remarked about their similarities of material (brick) and the simplicity of the architecture. Santa Maria in Trastevere was , on the other hand, mostly grouped with Santa Maria in Cosmedin (3/6) probably because of the similarities of their Romanesque towers. Nevertheless, the Roman Castel San Angelo, Rotundo, Sabina, Trastevere, Cosmedin and the Gothic Notre Dame formed another group as opposed to the classically derived group. They seemed to be grouped under 'arched' or in certain instances 'brick' architecture.

Among architects too, we find Medieval and Early Christian architecture being treated as a somewhat bipolar set as opposed to the classically derived styles of the Roman, the Renaissance, the Baroque and the Neo-classical. Only one confounded a building from one of the two sets for another. Some respondents (3/6) put the Early Christian churches of Santa Sabina and Santo Stephano Rotundo together as a separate class while others (3/6) grouped them with Trastevere and Cosmedin. The whole

group they called Romanesque or Byzantine.

Baroque architecture was in general, more identifiable than other classical derivatives. Among architects, all six identified most of them as being characterized by curvilinear surfaces. But sometimes, (2/6) the Roman Arch of Constantine was mistaken for being Baroque for its overwhelming decorativeness. Non-architects, however, confounded other classically derived styles with the Baroque more often. Nevertheless, it formed a more cohesive group than the Renaissance, the Neo-classical and the Roman. This may however be owing to the fact that Rome being mostly Baroque, a greater proportion of buildings of that period were represented in the stimulus material.

The Gothic Notre Dame was identified by its style by most (5/6) architects, while in the case of non-architects, it tended to be mixed with broader classifications such as 'arched architecture' and 'towered buildings'.

Among non-architects, we find an overwhelming (6/6) tendency to identify the three palaces, (one Early Renaissance, one Renaissance-Mannerist

and one Baroque) as a single group. All of them remarked about their characteristic flat facades and repetitive windows. Among architects too, we find the majority (4/6) putting them as a separate set and classifying them stylistically as 'Italian Urban Renaissance' or using such descriptive phrases as 'they all have the alternating pediments of Michelangelo.' Thus, we find here typological similarities taking precedence over stylistic ones. Indeed, this little clue - whether in the case of old buildings, 'types' such as the church, the palace or the castle, take precedence over varieties of style - needs to be tested through more advanced cognitive experiments. Indeed, perceived building use type may hold some of the secret of the unity sensed in the old town.

ANALYSIS OF THE TEMPORAL FACTOR

With regard to judgement of time, architects tended to correspond dates with styles. In most of the cases (4/6), the correspondence of the groups in the stylistic sort with those in the temporal sort was overwhelming. However, in a few cases (2/6), where general terms such as 'Architecture using classical orders' were used, there was some confusion between style and date.

Most non-architects did not correspond style with date. Although there was a certain degree of overlapping between the stylistic groups and the temporal groups, the correlation was not so overwhelming as in the case of architects.

Most non-architects used weathering and other effects of ageing to judge the date of old buildings. However, what is curious is that as a consistent rule, other buildings from a different period, which on certain counts had similarities with the weathered buildings were also considered as old. For instance, classically derived buildings as the Renaissance Tempietto (4/6) and the Neo-classical Monument of Victor Emanuel (3/6) were often adjudged as old as weathered Roman buildings such as the Temple of Fortuna Virilis (5/6) and the Pantheon (4/6).

Non-architects tended to use thumb-rule like generalizations to judge age. For example, simplicity and functionality seemed to be associated with the modern times, while elaborateness and decorativeness seemed to be associated with the olden days. Two respondents used the rules that functional looking, fortress-like structures such as the Roman Castle San Angelo belonged to the Dark Ages.

Half the non-architects judged the fifth century, Early Christian Churches as belonging to the twentieth century, while a few (2/6) judged them as belonging to the eighteenth century. When asked the reason, they felt that 'the simplicity and use of a modern material such as brick' suggested so. Similarly, the three Renaissance and Baroque palaces were adjudged by most (5/6) of the non-architects as being post-1850s. Most of them felt that the functional nature ('looks like a brown-stone office building in New York or Boston') of the buildings suggest youth. As opposed to the Palazzos however, the churches of the Renaissance and Baroque period were rated closer to the right time. A third of the non-architects put them in the sixteenth century, another third in the eighteenth century, while the remaining third put them in the nineteenth century. Perhaps this was because of the 'unfunctional' nature of the church.

Most architects (5/6) on the other hand, put the Early Christian churches and the Medieval buildings between 200 A.D. and 1200 A.D. Only one out of them made the mistake non-architects tended to make - of putting the Early Christian buildings in the nineteenth century. Her criterion for doing so was surprisingly the same - simplicity, functional

look and the use of brick. The three palaces were adjudged by most architects (5/6) as being of the period between 1300 A.D. and 1400 A.D. Half of them mixed them up with other Renaissance buildings, while the other half considered them as a separate temporal category. Nevertheless, their judgement of date was much more accurate than the non-architects.

All six architects as well as the six non-architects had no trouble in sorting out the four twentieth century buildings and adjudging them as modern. It was observed that almost in all cases, this was done first. Only after the sorting of the new ones had been done, was the task of judging the old ones undertaken.

Among architects, Roman structures such as the Pantheon (4/6) and the Temple of Fortuna Virilis (4/6) were adjudged among the oldest group. As already mentioned, half the architects mixed up the Renaissance Tempietto with this group. Among non-architects too, the Temple (5/6), the Pantheon (4/6) and the Arch of Constantine (4/6) were adjudged as being in the oldest group. Most of them mistook the Tempietto (4/6) and the Monument of Victor Emanuel (3/6) as being in this group. Half

of them put the age of Roman buildings in the period between 1300 A.D. and 1400 A.D.

In general, Baroque churches were adjudged closest to their dates. Most architects (5/6) put them between the sixteenth century and the eighteenth. Among non-architects a third each put them in the sixteenth, eighteenth and the nineteenth century. Among architects a third put the Gothic Notre Dame in the seventeenth century, while another third put it between the thirteenth and the fifteenth century. One thought of it as a probable Neo-Gothic structure of the nineteenth century. Indeed, among architects, there seemed to be some trouble in dating revivalist styles such as the Renaissance and the Neo-classical. Beyond a certain point of ageing, replicas and originals tend to be confounded.

A major finding in the case of non-architects was what could be termed as 'temporal shrinkage'. In a few cases (2/6), the range between the oldest and the newest group was the fourteenth century to the present. In other cases (3/6), the range was between the eleventh century and the present. Only one respondent put the oldest buildings at around

the sixth century. In most cases it was observed that a crowding occurred between the eighteenth and the nineteenth centuries. Among architects, on the other hand there was no shrinkage, but there seemed to be a void in the period between the third and the tenth centuries. The architecture of that period tended to be confounded, not only in terms of its style, but also in terms of its time.

A table showing the agreement rates between the actual dates of the various buildings and those adjudged by the respondents has been provided in the following page. It reconfirms the fact that the modern buildings were the most easily judged, followed by the Baroque and the ancient Roman. The later was perhaps better judged because of the weathered conditions of the buildings. Once again the table confirms that the Early Christian churches were the most confounded because of their 'modern' appearance.

ANALYSIS OF THE COHERENCE FACTOR

In judging 'place', there seemed to be a clear schism between the old and the new. All six non-architects classified the modern apartments

*

AGREEMENT RATE IN JUDGEMENT OF DATE OF BUILDINGS BY THE RESPONDENTS

STYLE	NAME OF BUILDING	DATE BUILT/ RENOVATED	ARCHITECTS AGREEMENT RATE	NON-ARCHITECTS AGREEMENT RATE
Roman	Temple of Fortuna Virilis	C. 40 B.C.	.83	.17
Roman	Pantheon	25 B.C./ 120-124 A.D.	.83	.17
Roman	Castle San Angelo	C.130 A.D./ 1347 A.D.	.67	.50
Roman	Arch of Constantine	312 A.D.	.33	.17
Early Christ/ Romanesque	Santa Maria in Trastevere	3rd. C. A.D./ 1140 A.D.	.50	.00
Early Christ.	Santa Sabina	422-432 A.D.	.20	.00
Early Christ.	Santo Stephano Rotundo	468-483 A.D.	.00	.00
Romanesque	Santa Maria in Cosmedin	772-792 A.D./ 12th. C.	.50	.17
Gothic	Notre Dame	1163-1250 A.D.	.40	.17
Renaissance	Santa Maria Novella	1456-70 A.D.	.33	.33
Renaissance	Palazzo della Cancelleria	1486-1498 A.D.	.80	.17
Renaissance	Tempietto in Montorio	1502-1510 A.D.	.50	.17
Renaissance	Villa Farnesina	1509-1511 A.D.	.60	.17
Renaissance	Palazzo Farnese	1515-1546 A.D.	.80	.17
Renaissance	Church of Gesu	1568-1584 A.D.	.60	.33
Baroque	San Vincenzo ed Anastasio	1630 A.D.	.83	.50
Baroque	Palazzo Pamphilj	1644-1650 A.D.	.40	.50
Baroque	San Agnese	1652-1672 A.D.	.83	.67
Baroque	San Andrea al Quirinale	1658-1670 A.D.	.83	.33
Baroque	Santa Maria Madalena	1735	.83	.67
Eng. Baroque	Saint Martin-in-the-fields	1722-1726 A.D.	.83	.83
Neo-Classical	Monument of Victor Emanuel	1885-1911 A.D.	.50	.33
Modern	Apart. on Via Bruno Buozzi	1960	1.00	1.00
Modern	Apartment on Via Archemede	1960	1.00	1.00
Modern	Apartment in Rome	C.1960	1.00	1.00
Modern	Casa Baldi	1959-62	1.00	1.00

* The Agreement rate was calculated by tallying the number of correct responses within ± 100 years of the actual date of construction, and dividing the figure by 6, i.e., number of respondents in each group.

as being in the 'new districts' of the city. Of the architects, a majority (5/6) did the same... Only one respondent mixed certain old buildings, especially the palaces, and contended that they could coexist in the same neighborhood.

Of the remaining old buildings, judgement of place was made mostly in terms of density, suggested by the pictures. For example, cars, piazzas, people and the dense array of buildings suggested the old down town core of the city. Trees and open spaces around suggested a suburban or a rural location. Most of the architects (5/6) used density as a major criterion for speculating the place where the old building might be located, while among non-architects too, most (5/6) used it.

Another major determinant used by architects as well as non-architects to speculate place, was their image of certain cities and countries. Among non-architects, in most instances (4/6), at some point or other, images of certain cities were used. Simple thumb-rules were used - 'piazza is Italian; no piazza is French; villa is French and Gothic is German.' One respondent thought that the modern apartments may be in Mexico, because she felt that they

suggested a 'place which was caught up in the development process.' Among architects too, we find that in a few cases (2/6), images of a place were used. In both cases, however, the person had been to the European cities and had some knowledge of the buildings.

Only occasionally was style used as a criterion for judging place. Among non-architects, only one used stylistic differences as a determinant to differentiate between places. For example, classical ones belonged here, arched ones there, etc. Among architects, only a few (2/6) used style as a criterion, although somewhat implicit in the use of images of places was the idea of style. Non-architects sometimes used criteria such as similar weathering effects (1/6) and cues from other external objects such as cars (1/6) as criteria to judge place.

Thus, generally old buildings such as the Villa Farnesina, the Santo Stephano Rotundo and the Santa Sabina which had a lot of open spaces around them were thought of as being outside town. Old buildings which suggested density, with all manner of stylistic and temporal backgrounds, ranging from the Roman Temple through the Mediaeval

Cosmedin, the Renaissance Tempietto, the Baroque churches, right up to the Neo-classical Victor Emanuel were sorted together. However, one non-architect and a few architects (2/6) put the palazzos in a separate set and classified them as being in a separate residential or commercial district. But the majority put them with the other old buildings in the dense old, downtown core.

DISCUSSION

In the following discussion, attempts shall be made to infer certain generic observations from the responses to the cognitive test discussed in the last section. These observations will be overlaid upon the hypothesis that was propounded at the beginning of part II. It may be recalled that it had been contended that the built environment of the past is perceived flatly and abstractly and it is provided with a unified structure by its common property of oldness. The following discussion will be directed towards clarification of the above statement. The architects' group shall be said to represent the independent variable of a certain degree of historical knowledge and exposure, while the non-architects' group shall be considered to

represent the faculties of intuition, and normal human tendencies in the absence of specialized knowledge and training. Therefore, it would not be too unreasonable to hold that architects too, when exposed to an old built environment, which they have very little knowledge of, would, to a certain extent, react the same way as non-architects.

Let us first of all deal with the issue of judgement of style. From the responses to the enquiry, it is apparent that the new buildings were the most easily identifiable in terms of style. Indeed these were sorted out foremost, before the set of old buildings was scrutinized. In most cases the term used to categorize these was modern, which, although a legitimate stylistic term, denotes the self-consciousness, not only of architects and architectural theorists, but also of lay-persons, of their own age. The schism between the contemporary and the historic is perhaps embedded in the consciousness of the observer, so that it is the first thing which is manifested when a cognitive response is called for.

As regards old buildings, lay persons tend to judge style through

generic cues and broad stylistic elements which predominate in the general appearance of the building. By judging buildings in terms of materials such as brick or stone, structural elements such as arches and columns, stylistic elements such as the classical orders, they ran the risk of confounding various styles which may resemble each other on these counts, or which may have derived from the same source, but in actuality, may be quite different from one another. Knowledge, to a certain extent, allays this, as shown in the response of the architects. Nevertheless, the tendency remains to judge historic styles according to elements which predominate. Indeed this might be the reason why until a few years ago, contextualist design in Islamic countries meant, to a large extent, replication of domes and arches.

While dwelling on the issue of style it must be mentioned that in certain cases it was found that type took precedence over style in being categorized. For instance, the Palazzo types, with their rectilinear composition, horizontal elements and the regular array of windows, were clumped together more out of their typological similarities than stylistic ones. Indeed this might perhaps be the

reason why row houses in Back Bay in Boston are generally considered to possess a certain sense of unity in spite of their stylistic dissimilarities.

Coming to the issue of temporal distinction, again we find that the new buildings are sorted out foremost as opposed to the old ones. This is natural considering the ease with which the contemporary is judged. Nevertheless, what is important to note is again the schism between the old and the new. As regards the old buildings where no direct associations could be conjured up, or where no knowledge of style was possessed, only external cues of the physical condition of the building such as effects of ageing and weathering could be used to judge the age of the building. Thus, where the building was well maintained such as in the case of the Early Christian Churches, chances were that it would be confounded. Moreover, among lay persons we also find younger buildings which resemble older, weathered ones being adjudged older than they are. Therefore, in the absence of cues judgement of age becomes somewhat speculative. Between the limiting conditions of the very old, recognized by their dilapidated condition, and the new, recognized through experience, lies a realm

of time which does not lend itself easily to judgement.

Another interesting phenomenon was the conception of the old as a complement of the new. For instance, certain thumb rules are used to characterize newness, while oldness is somewhat characterized by the antonym of these criteria. For instance, if modern architecture is characterized by simplicity, flatness, cubistic massing and functionality, old architecture is characterized by plasticity, elaborate decoration and a ceremonial character. Perhaps for this reason, the Palazzos which look simpler and are more functional were adjudged much younger than the churches which were contemporary to them.

Even when there was knowledge of revivalism of styles, as in the case of the architects, there seemed to be some confusion regarding dating. The Baroque, the Neo-classical and the Renaissance seemed to be confounded with each other and Roman architecture. As in the case of antiques, perhaps, beyond a critical state of ageing, most buildings, if they are in a fair state of repair, enter into a realm where finer distinction of age cannot be made and where, to a

certain extent, the quality of oldness itself defines the set within which they are judged collectively.

The temporal shrinkage associated with lay-persons may also have to do with the phenomenon of judging the past somewhat in terms of the present. Without a well informed sense of history, man's projection of built-form into the past seems to be resisted by his sense of temporal decay and degeneration of old buildings. It is speculated that his sense of the old town stretches into the past in terms of whatever old buildings are seen and used in the modern city. As the perceptual test showed, in the case of lay-persons, most crowding occurred in the 19th century, while in most cases the upper limit seemed to be set around the fourteenth century.

In perceiving coherence or unity of the various buildings, again there seemed to be a schism between the old and the new. The new, perceived to be in a modern district, were seen as an entity set apart from the old. The normal tendency, both among architects as well as non-architects, seemed not to mix the two or conceive them as being compatible with one another.

On the other hand, the old city seemed to be judged not so much in stylistic and temporal terms as in terms of broader cues such as density and the nature of the urban fabric. Similar kinds of crowding, vehicles, piazzas and a dense urban fabric suggested the downtown core of an old, European city. On the other hand, buildings set amidst parklands or generous open spaces were perceived as being in the suburbs or the countryside. So far as images of places were used, style did play a part, but not to a great extent. For instance, the Notre Dame being Gothic, most people did not mix it with the old Italian buildings. Nevertheless, generally, the old buildings were grouped together more in terms of oldness itself, together with factors such as density and the similarities in the urban fabric. Nevertheless, it is contended that further advanced research needs to be done to establish conclusions regarding the coherence factor.

Summing up, the critical point that may perhaps be distilled from the above discussions is the complementary relationship between the old and the new. It points to the observation that the old may be read as a wholistic entity, set in a dipolar relationship with the

new. As David Lowenthal in 'The Past is a Foreign Country' observes, "We are aware of the past, both as a realm coexistent and distinct from it." ⁵ Therefore the property of oldness itself perhaps becomes the common denominator of all old buildings, so that a structure of unity is provided to conceive them wholistically.

The evolution of the modern city, being entangled with one's experience of everyday life, is perhaps seen with its multifarious attributes and hence is subjected to greater criticism and often equated with confusion. The old, on the other hand, is perhaps seen more objectively, and in terms of a singular attribute, so that it is eulogized, and equated with clarity. Its relegation into the realms of the past eliminates to a certain extent the irregularities such as stylistic and temporal distinctions. In perceptual terms, it is left with the most powerful property it possesses in relation to the new -- the quality of oldness.

PART THREE

PRELUDE

In this chapter, a multidisciplinary view will be taken of the central issue concerning the historicism of the old town. Foremost, attempts will be made to provide a phenomenological explanation of the perceptual test reported earlier. Ancillary issues which impinge upon the perception of the old town shall also be discussed. Certain notions of temporality will be touched upon, including culturally subjective constructs of time which have some effect on perception and conception of the old town. Finally some socio-cultural intentions of architects which inspire their imagery of the old town shall be discussed to relate these broader intentionalities with the issue of perception.

AN EXPLANATION OF THE PHENOMENON OF VISUAL UNITY

"Is it not possible, I often wonder - that things we have felt with great intensity have an existence independent of our minds; are, in fact, still in existence? And if so, will it not be possible, in time, that some device will be invented by which we can tap them? Instead of remembering here a sound and there a scene, I shall fit a plug into the wall; and listen into the past Strong emotion must leave its trace; and it is only a question of discovering how we can get ourselves again attached to it, so that we can live our lives through from the start."

Virginia Woolf; A Sketch of the Past

In the last chapter, the perceptual comprehension of the old town was explored. It was noted that in the instance of lack of knowledge, although a certain amount of discrimination was made as regards stylistic and temporal irregularities, the old town, as such, was conceived as a wholistic entity, structured by the one overwhelming quality it possesses - its quality of oldness. Oldness, as opposed to the new and the modern, was seen as the one common denominator through which most buildings were equated with one another. Other qualities, exposed through a more critical examination of the old city, were generally revealed through some prior knowledge.

Let us try to explain this phenomenologically. An object, when perceived, reveals itself to the viewer through certain representations of its existential whole. These representations, at least initially, and when conditioned by a lack of knowledge, are those properties of the object which are strikingly characteristic about it. They are what Christian Norberg-Shultz calls 'mediating phenomena or lower object levels.'¹ For instance, classically derived architecture in Rome, to a casual and inexperienced viewer, may be comprehended and assimilated as an architecture of columns and pediments. Only

through greater knowledge, or closer observation, would it reveal itself at 'higher object levels'. Only some knowledge of architectural history and the motivated intention of discerning differences would reveal the distinction between the Renaissance, the Baroque and the Neo-classical.

The process of comprehension and assimilation of a phenomenon involves the reductionist process of generalizations. As Norberg-Shultz observes, "objects are built up through generalizations and ordering of experiences The nature of the object is defined as the properties appearing more frequently and forming the simplest relationships. Properties characterized by irregularities are generally of minor importance."² Therefore, in order to conceptualize a perceived phenomenon, there is no way one can escape imposing upon it a structure of unity. A phenomenon, in its entirety, cannot exist, or rather cannot be defined in the world of objects made by man. As Nelson Goodman remarks, "temporally diverse events are brought together under a proper name or identified as making up 'an object' or 'a person'.³

Let us now apply the notions discussed above to the case of the old

town. In the instance of lack of knowledge on the part of the viewer, the old town is revealed to him as a 'lower level object'. The mediating phenomenon, in the act of conceptualizing is the quality of oldness. This is the one all-pervading property which serves as a common denominator to structure one's experiences. 'All the buildings are old', is what imposes the framework of unity upon the diverse set of buildings. Upon closer examination, of course, a certain building may be revealed at its higher level; for instance the weathered Roman Temple of Fortuna Virilis may appear as 'real old', while the Baroque Church of San Vincenzio might appear as 'a little more decorative'. But on the whole, the structuring device of such towns would be oldness itself. As Norberg-Shultz's observations indicate, the 'irregularities' of style and time would be erased, to a large extent, by the mediating phenomenon of 'oldness'.

Now what could lead us to 'higher object levels' or greater understanding of the phenomenon is knowledge. And since knowledge of the old town is essentially 'historical knowledge', it is important that we discuss, briefly, the nature of such knowledge. History is reconstruction of the past based upon disjointed vestiges of evidence

which are encountered by researchers. As Collingwood asserts, "The past simply as past is wholly unknowable. It is past, as residually preserved in the present that is alone knowable."⁴ Therefore, History cannot be taken as the total truth. In fact, salvaging the total truth from the past is humanly impossible, for, as George Kubler observes, "all past events are more remote from our senses than the stars of the remotest galaxies, whose own light at least still reaches the telescope."⁵ Therefore, the critical question is, even if we are able to conceive historical artifacts, such as an old town, as a higher level object, how far can we trust it? Moreover, history itself, being subjected to the necessity of communication, cannot free itself from a reductionist structuring of temporally and qualitatively diverse facts. The classic example of abstract structuring is the use of 'periods' to encompass a certain span of historical time. As Berkhofer Jr. observes, "When the historian uses the term decade, generation, era, epoch or period, he conceives of the number of years under consideration as possessing a certain unity."⁶ Therefore, in history too, as in phenomenological perception, a certain structure of unity may be conveyed, which may never have existed to the degree suggested.

Hence, even in resorting to history, in order to conceive the object at a higher level, one could, to a certain extent, be trapped with a notion of unity.

The parallels between an architect's perception of an old town, and a historian's conception of history may be drawn further. As George Kubler, with an objectivist view of historiography observes, "The survival of antiquity has perhaps commanded the attraction of historians mainly because the classical tradition has been superseded; because it is no longer a live water; because we are outside it and not inside it. We are no longer borne by it as in a current upon the sea: it is visible to us from a distance and in perspective, only as a major part of the topography of history. By the same token, we cannot clearly descry the contours of the great currents of our own times: we are too much inside the streams of contemporary happenings to measure the flow and volume."⁷ Thus, only the objective distancing in terms of time allows a structure of unity to be imposed upon the past. By a similar argument, in the case of architectural and planning theory, the old town might lend itself, much more to a wholistic conception of unity than the modern city. Indeed this to a large extent may be

responsible for the criticism leveled at the modern city and the complementary eulogy of the old, historic town.

Which brings us to the trinity of temporal comprehension: the notion of the past, the present and the future. A number of time theorists, including the phenomenologist, M. Merleau Ponty, hold the view that our apprehensions of the past and the future are mediated by our rootedness in the present. Of the empirical reality of the present, J.B. Priestley observes: "Every thing is real when it is Now; in the present moment. Whatever is not-Now does not exist. Reality seems to be served to us in thin slices of Nows."⁸ Nevertheless, Now itself, being infinitesimally small cannot sustain itself as a dimensionless perceptual entity and hence has to appropriate small amounts of the past and the future in order to accord itself with a dimension. Hence, the notion among other philosophers of the 'psychological present'. Regarding this, Paul Fraisse, in an argument reminiscent of Kant, observes, "The perception of change is characterized by the successive integration of stimuli in such a way that they can be perceived with relative simultaneity."⁹ The present therefore exists, as Fraisse terms it, as a psychological entity, which has not yet been

subjected to structuring or rendered with a meaning in relation to the temporal continuum. As soon as it recedes into memory it is shorn of its inessential, and the essential experience is abstracted and rendered with a meaning. Therefore, once again we see that the past lends itself to structuring while the present does not.

The notion of the 'psychological present' when conceived at a macro level, in relation to society at large, may be thought of as being analogous to the idea of the 'Historical present'. Technically, whenever an event recedes into the past, which it does instantaneously, it becomes history. But not all past events are thought of by society as being historical. There is a critical and implicit social consensus as regards which events are relegated into the realm of the historical past and which are not. As Agnes Heller asserts, "the 'Historical Past' is the 'old', in other words it is the socio-cultural structure which we have already transcended. We are outside it (It) encompasses all events and happenings whose consequences do not fill us with hope or fear."¹⁰ The Historical present, as a complementary notion is therefore, that which in some way or other impinges upon our temporal existence more directly. As in the case of the

'psychological present', it is still entangled within the meshes of experience and subjectivity. As already mentioned, it does not lend itself too easily to structuring, and hence is often mistaken to be confusion. The 'historic past' on the other hand, being distant from us, and being shorn of its subjective 'confusion', appears as the quintessence of clarity.

Hence, once again, the criticisms leveled at the present age, and the modern city, and the praises bestowed upon the bygone age and the old town.

THE TIMELESSNESS PERCEIVED IN THE OLD TOWN

"The poetry of history lies in the quasi-miraculous fact that once, on this familiar spot of ground, walked other men and women, as actual as we are today, thinking their own thoughts, swayed by their own passions, but now all gone, one generation vanishing after another, gone as utterly as we ourselves shall shortly be gone like ghosts at cock-crow."

G.M. Travelyan; *Autobiography of a Historian*

Although history is written objectively, it is experienced poetically. Wandering about the meandering alleys of Florence, hearing the chime

of medieval church-bells, ambling along the piazzas, where many an intrigue may have been plotted, exploring Michelangelo's studio, or just thinking of the Ponte Vecchio as having been a mute witness to the transient flow of humanity, could fill us with a transcendental feeling of poetic bliss. The same feeling could make our soul well with emotion, while walking over the epitaphs of great Englishmen in Westminster Abbey. Indeed this may be what Christopher Alexander terms as the 'timeless spirit'. "Almost everybody feels at peace with nature: listening to the ocean waves against the shore, by a still lake, in a field of grass, or a windblown heath. One day when we have learnt the timeless way again, we shall feel the same about our towns, and we shall feel as much at peace with them, as we do today walking by the ocean or stretched out in the long grass of a meadow."¹¹

x The expansive and tranquil sense of eternity experienced within the beauty of nature may be analogous to the timelessness experienced in the old towns. Rev. Edward Young, referring to the eighteenth century cult of ruins in England, observed, "Ruins, rooted for ages in the soil, assimilated by it, are a work of nature and not of art."¹²

Indeed, this may hint towards the speculation that the old town too, absorbed within the infinite continuum of time, may be perceived of as belonging more to the realms of nature than of man. Ageing through the centuries may have erased the deliberate hand of man, so that years later, they may be attributed to some timeless agent, probably nature, which lay outside the self-conscious world of human beings. Nevertheless, whatever may be the reason for such moods of timelessness, let us try to comprehend why they result in such feelings of oceanic bliss.

J.T. Fraser, in 'Time and Conflict' attempts to explain this in terms of individuation. "When attention is restricted to an unchanging single item or process, the being-like component of the existentialist stress is emphasized and the becoming-like repressed: the unresolvable conflict of individuation lessens The direction of time vanishes: the definition of nowness and selfhood loosen up, and an oceanic feeling of timelessness envelops the person."¹³ As individuals in a mass of humanity, we try to define ourselves through the stressful process of individuation. Such a process is generally encompassed within the finite lifespan of the individual. Rarely are

we conscious of our limited and point-like existence in the infinite continuum of time. It is only in our occasional contact with symbols of eternity, like nature or an ancient artifact, that we might be reminded of the order of Infinity, residing outside ourselves, and yet powerful enough to hold us within its grip by assigning us a tiny stretch of time. Such a realization, Fraser contends, relaxes our stresses of individuation and shifts our consciousness from ourselves to the infinite order of time. This relaxation of stress is what may engender the poetic bliss.

Historically too we find the feeling of timelessness associated with divine bliss. The Hindu notion of 'Moksha', or salvation and the analogous Buddhist concept of 'Nirvana' are associated with that feeling. They essentially connote an escape from the worldly consciousness of finite time to the transcendental consciousness of a timeless reality. Even the Taoist equivalent of the supreme being is said to reside in the realms of timelessness, so that attainment of the Tao is associated with the consciousness of the timeless.

Thus we see that the experience of timelessness is closely associated

with poetic and divine ecstasy. Often, as confirmed by Fraser, it is the source of aesthetic inspiration; and therefore it is not surprising that architects should be drawn towards it. In the last quarter of the twentieth century, when existential stresses of mankind at large are reaching an unprecedented high, it is not surprising that architects should be attempting to do their share in allaying them. Hence, perhaps, their search for paradigms in sources which evoke a feeling of simple bliss and relieve man of his existential stresses.

CULTURAL CONSTRUCTS OF THE LINEAR AND CYCLICAL NOTIONS OF TIME AND ATTITUDES TO THE PAST

"In the beginning, God created the heaven and the earth. And the earth was without form, and void; and darkness was upon the face of the deep. And the spirit of God moved upon the face of the waters. And God said, let there be light and there was light."

Genesis (1:1.3)

"All beings, O son of Kunti (Arjuna), enter into my nature at the end of a world cycle, and I send them forth again, at the beginning of a new cycle."

Bhagvat Gita (9.7)

In this section, it shall be argued that easterners, particularly Indians, may nurture, to a certain extent, their culturally generated notion of cyclic time. This might lead them to view the past, and in the context of this study, the old town, somewhat differently.

The above two verses from ^{Hebrew} Christian and Hindu religious texts, represent two distinct, culturally subjective constructs of time. The Judeo-Christian conception of linear time stems from the observation of change as a progressive phenomenon, while the Hindu, the Buddhist, and the Taoist notion of cyclical time stem from noting change as a repetitive phenomenon. In nature change may be observed both ways: the cycles of days and nights, the seasons, the tides, etc. point towards the notion of the return of time, while the progressive changes such as ageing and death, point towards the idea of the irretrievable nature of time. As is commonly agreed upon by time theorists, the concept of time came about through the need to understand and measure change. Therefore, it would not be surprising if the notions of linear and cyclical time arose out of the observation of the two different modes of change. Of course, to a certain extent, all cultures nurture both notions, but the degree of emphasis on any one of them is what

determines the general cultural attitude to time.

The Judeo-Christian conception of linear time, which might be said to have structured western people's attitude to the past, arose out of the Israelite spiritual history which consisted of a two thousand year dialogue with Yahweh or God. The exodus from Egypt and the receipt of the ten commandments are but two of the numerous occasions when a communion was established with God. These events had specific locations in the temporal continuum, as did the various patriarchs who led the people. And these specific temporal events came to be celebrated in the form of festivals. As Lawrence Fagg observes, "The Israelites worshipped a God of history as opposed to a God of nature."¹⁴ This celebration of a sequential order of events was what may have given rise to a linear sense of time and an objective view of history.

The Hindu and the Buddhist conception of time, on the other hand, was comprised of enormous cycles of generation, degeneration, extinction and regeneration. Even living beings were subjected to the cyclicity through the concept of rebirth. Unlike the Judeo-Christian prophets, the Hindu prophets were not considered as specific temporal events,

but were rather thought of as the reincarnation or the 'avatar' of the same divine phenomenon.

The Taoist philosophy of China also propounded a cyclical notion of time, although not in such specific terms as the Indians. Nevertheless, in China, with Confucian philosophy and the practice of ancestor worship, we find a parallel notion of linear and objective history.

The critical difference, where these cultural views of time impinge upon historiography and historicism, is that the linear notion calls for a rigorously academic and a theoretically objective approach to the past, while the cyclical notion allows a more casual and unselfconscious approach. The linear tradition considers temporal events as truth in themselves, so that history is meticulously recorded. On the other hand, in the cyclical tradition, temporal events are considered as illusion or myth, so that history is mythified and restructured for social and religious purposes. As Panikkar, in his 'Time and History in the Tradition of India' mentions, "in the perception of India's past, there is no criterion for distinguishing between myth and history. What the westerner considers as history

in the west, he would regard as myth in India..... while what he calls history in his own world would be regarded by Indians as myth."¹⁵

Although this view may be said to be somewhat exaggerated, nevertheless, it may be safely stated that the sense of history in India is not so objective as in the west. It was only after contact with the westerners that attempts were made to disentangle and write an objective history. Deep within the consciousness is a very casual and unselfconscious approach to the past. As Indian philosopher Rajneesh observes, "(In India), the historic sense is not there. It cannot be; because with a circular time concept, history cannot be. With an infinite possibility of repetition, a historic sense cannot exist."¹⁶ Indeed, this casual attitude to the past may have been alluded to when Indian architect, Charles Correa, remarked, "In India one might appropriate the past as easily as a woman drapes her saree."¹⁷

With such an attitude towards the past, it might be conjectured that the Indian architect's comprehension of the old town may derive somewhat out of giving more reign to pure perception than his western counterpart would have endorsed. Not only can the Indian, to some extent, not fall back upon history to structure and refine his

perception, but also no need is felt for being selfconscious about the past. Hence, it may be speculated that the observations that were made with regard to the lay-person's group in the perceptual test reported earlier may, to a certain extent, apply even to architects in India; more so in the vernacular context, where no study has been done in objective terms.

SOCIAL INTENTIONS BEHIND HISTORICISM

Let us now fan out into two broader issues concerning social and cultural motives behind the historicism related to the old town. Phenomenologists have put forward the notion of intentionality in connection with perception of objects. Norberg-Shultz simplifies the idea and puts it forward as 'attitude'. The attitude with which we direct our perception of an object directly colors our perception: "Attitude does not only mean a more or less friendly outlook on things. (It) directly determines the phenomenon."¹⁸ Considering this, in order to complete this enquiry on perception of the old towns, we ought to take a broader view of the attitude and the intention with which people in general, and architects in particular, look at them.

SOCIAL PERCEPTIONS OF THE PRESENT TIME AND HISTORICISM

The manner in which society perceives its own times is intimately linked to its attitude towards the past. The selfconscious modernist notion of the 'zeitgeist', or spirit of the age, made modern architects sever their links with the past and look forward towards a glorious future. As Le Corbusier remarked, "The fact that we have been nourished by earlier civilizations enables us to disperse the clouds and to judge with clarity. It is defeatist to think that once one's student days are over, one is nothing but a relic. Should we set out to be old? Old! The twentieth century in Europe may well be the magnificent ripening of a civilization."¹⁹

The confidence with which that generation rejected tradition is no longer possible. Today, need for technological advancement is tinged with an equally real apprehension of the future. As David Lowenthal observes, "(There is a) desire to escape from the modern lock-step world of digital watches and computers, to slacken the pace of life and regain a sense of rootedness....."²⁰

This apprehension and the consequent desire to escape may stem from

our inability to cope with the rapidly changing world: Psychologists and sociologists have studied the phenomenon and have discovered that such situations are tackled by reverting back to tradition and known ways. Peter Marris in 'Loss and Change', studied the phenomenon of apprehension of the future in a wide variety of situations, ranging from the individual case of a widow losing her husband to the collective case of slum clearance. Marris concludes, "Our ability to handle the changing environment relies, therefore, upon conserving the fundamental structures of meaning each one has grown up to."²¹

Considering this conservatism and its relation to growing uncertainty, we might look upon historicism as a sociological phenomenon to restore the equilibrium disturbed by rapid industrialization. Therefore, in order to comprehend the perception of the old town, it is imperative to note that today architects and planners approach such towns with a specific intention - the intention to discover a spatial and visual order which would help man cope with the dehumanizing nature of modern life. Considering this, it would not be too wrong to suggest that the positive attitude with which architects approach old towns colors their perceptions, and perhaps makes them see more unity than there actually

may be.

MEMORY AND PERSONALITY; HISTORY AND NATIONALITY
HISTORICISM AS RELATED TO NATIONALISM

Memory essentially connotes the storage of past experiences within the individual. It is the repository of the subjective past; but what qualifies it as an entity is its capacity of being recalled. One of the common uses it is subjected to is to judge the present and direct the future. Numerous psychologists have argued that it is the structure imposed upon memory, along with the projection of that structure into the future that defines a man's personality. As Agnes Heller argues, "If I reinterpret my past and reconstruct its organic unity with my 'now', if I build my future on this foundation with my 'now', I am a personality."²² Therefore, memory and its recall may be considered to be absolutely imperative for an individual to define his personality.

But what memory is to an individual, history is to a nation. Although memory is subjective, and history claims to be objective, the two are intimately related. As Lowenthal remarks, "Memory and history are

processes of insight; each involves components of the other and their boundaries are shadowy."²³ History is often constructed through the evidence from the memories of others, while memory is often affected through the objective knowledge of history.

It might be interesting and useful to stretch the analogy between the individual and the nation. If we accept national history as the objectified memory of a nation, it is also a tool to structure the personality of the nation, which in short could be termed nationality. The quintessential nature of a nation is distilled from the dominant patterns of its history. Therefore an essential corollary of nationalism is historicism. In paying tribute to a nation, it is essential to refer to its history. In defining a nation, it is essential to refer to its history. In the context of the colonized nations, Paul Ricoer has observed, "The fights against colonial powers and the struggles for liberation were, to be sure, only carried through by laying claims to a separate personality: for these struggles were not only incited by economic exploitation, but more fundamentally by the substitution of the personality that the colonial era had given rise to. Hence it was necessary to unearth a country's profound

personality and replant it in its past in order to nurture national revindication.²⁴ Ricoer's observation shows how nations have historically reacted to the threat of a loss of identity - by recalling their past and structuring the present and future in relation to it. If we were to observe the analogy of the individual and the nation, even individuals, when faced with the danger of a loss of identity, normally resist by reasserting individuality.

Now considering the homogenizing forces of the modern industrial culture, most nations are faced with the cultural crisis of the loss of identity. In the field of architecture, until a short while ago, the international style was steamrolling through long indigenous traditions of building design. Faced with the threat of a loss of identity, it is not unusual, therefore, for architects to recoil and reassert tradition. And what more effective way than through historicism?

Thus, once again we see a specific intention with which architects from the newly industrializing world look at an old city. As mentioned in relation to other reasons for historicism, once again it is contended that the directedness of purpose colors the perceptions and

makes the old city appear to have more unity than it actually may possess.

CONCLUDING OBSERVATIONS

In this section, certain relevant observations which impinge upon design issues shall be inferred from the study. In that the study has emanated from an architectural movement in the eastern world, the concluding remarks shall be directed more towards that context. Nevertheless, in that the above movement may be seen as a variant of the global phenomenon of historicism, some of the observations may be said to relate to the architectural world in general.

This study has made certain clarifications towards the contention that the virtues attributed to the old town may be somewhat of an overestimation. On the one hand, this may arise out of a certain degree of perceptual illusion that may be conjured by the old town. On the other hand, the positive intentionalities with which architects and urban designers seek inspiration in such towns may reinforce the illusion. Moreover, the abstraction of historical knowledge about the town may also convey a certain erroneous notion of

unity. Considering these perceptual and conceptual mirages, care should be exercised in the use of historical forms; more so when a social expectation is appended to the replication of the past. If the very assumptions upon which such expectations are built are themselves the product of a certain degree of perceptual aberration, the results would not be entirely as expected.

Which brings us directly to the architectural movement in the eastern world. To steer it in the proper direction and provide it with a certain sense of bearing, the ideological positions upon which it is built need to be clarified. If creation of a socially responsive architecture is taken to be the primary objective, it cannot be convincingly argued that replication of historical forms would rejuvenate the vanishing sociability of modern man. This study has somewhat shown that the old town was perhaps not as infallible as it is thought of. Even if its mirages are discounted for, and architects and urban designers contend its superiority, elaborate inquiries ought to be made as regards the effectiveness in its replication. Does simulation of a dense urban fabric really stimulate social cohesiveness? This unflinching faith in architectural determinism

needs to be substantiated through rigorous research in behavioral science.

As discussed earlier, Peter Marris has put forward his thesis that reverting to the known past may help cope with the apprehension of an unknown future. If the imagery of the old town is accepted as a homeostatis mechanism, research ought to be undertaken as regards its effectiveness to that end.

On the other hand, if creation of a cultural identity is accepted as the *raison d'etre* of the movement, the social, political and economic forces which have generated the need for such identity need to be identified. How far do the homogenizing forces of modern industrialization threaten the identity of eastern countries? Or is the identity crisis perceived only by those segments of society which are at the frontline of westernization? In that case, how far does the historicism in eastern architecture relate to social forces at large?

All these questions need to be seriously answered in order to give the architectural movement in eastern countries a theoretical framework which could guide it through these troubled times.

APPENDIX

QUESTIONNAIRE

Profession: _____

If student, degree objective: _____

If architecture student, area of specialization: _____

Age: _____

Sex: _____

Nationality: _____

If non-western, how long have you lived in the west? _____

How much do you know about the city of Rome?

(Please choose one of the following categories; if none of them are suitable, qualify in the blank space provided under 6.)

1. Have been to Rome / have taken advanced courses dealing in its architecture / have read extensively about its architecture.
2. Have been to Rome / have not taken any courses dealing in its architecture / have not read about its architecture except perhaps from guide books.
3. Have not been to Rome / have taken advanced courses in its architecture / have done extensive readings on it.
4. Have not been to Rome / have taken elementary courses in history of western architecture, which to a certain extent covers the architecture of Rome.
5. Have not been to Rome / have no or very little idea of its architecture.
6. Any other category: _____

INDEX FOR PICTURE NUMBERS OF BUILDINGS

<u>Picture Number</u>	<u>Name of Building</u>
1	St. Martin-in-the-fields
2	Temple of Fortuna Virilis
3	Notre Dame
4	Castle San Angelo
5	Tempietto in San Pietro in Montonio
6	Villa Farnesina
7	Santa Maria in Trastevere
8	Palazzo Pamphilj
9	San Vincenzo ed Anastasio
10	Palazzo della Cancelleria
11	Santa Maria Madalena
12	Monument of Victor Emanuel
13	The Arch of Constantine
14	Santo Stephano Rotundo
15	Apartment by Tani
16	Apartments on Viale Bruno Buozzi
17	Santa Sabina
18	Casa Baldi
19	Santa Maria Novella
20	San Agnese
21	Palazzo Farnese
22	Church of Gesu
23	Pantheon
24	Apartments on Via Archemede
25	San Andrea at Quirinale
26	Santa Maria in Cosmedin

BACKGROUND OF THE RESPONDENTS

Architects

Respondent #1

Graduate student of architecture (H.T.C.)

Age 29; Female; Taiwan R.O.C.;

Lived for 5 yrs. in the U.S.A.

Had not been to Rome; had taken some elementary courses in the history of architecture; somewhat familiar with architectural styles.

Respondent #2

Graduate student of architecture (Environmental Design)

Age 26; Male; Belgium

Had not been to Rome; had taken some elementary courses in the history of architecture; somewhat familiar with architectural styles.

Respondent #3

Graduate student of architecture (Housing)

Age 26; Female; Greece

Had not been to Rome; had taken some elementary courses in the history of architecture; had some idea of Rome's architecture.

Respondent #4

Graduate student of architecture (Environmental Design)

Age 25; Male; Guatemala

Had not been to Rome; had taken some advanced courses in history of architecture; familiar with architectural styles.

Respondent #5

Graduate student of architecture (Housing)

Age 27; Female; China; in the U.S.A. for the past 1 1/2 years;

Had not been to Rome; had taken some elementary courses in history of architecture; somewhat aware of architectural styles.

Respondent #6

Graduate student of architecture (Environmental Design)

Age 25; Male; U.S.A.

Had been to Rome; had taken elementary courses in history of architecture; marginally aware of architectural styles.

Non-architects

Respondent #7

Graduate student (Ph.D. candidate) of Materials Science.

Age 28; Male; Taiwan R.O.C.; lived in the U.S.A. for past two years;

Had not been to Rome; had not taken courses in history of architecture; no knowledge of architectural styles.

Respondent #8

Graduate student (Ph.D. candidate) of Materials Science.

Age 22, Female; U.S.A.

Had not been to Rome; had not taken courses in history of architecture; no idea of architectural styles.

Respondent #9

Graduate student (Ph.D. candidate) in Astrophysics.

Age 23; Male; U.S.A.;

Had not been to Rome; had not taken courses in architectural history; some knowledge of Rome from general readings and Italian films.

Respondent #10

Graduate Student (Ph.D. candidate) in Electrical Engineering.

Age 22; Male; India; lived in the west for 5 years.

Had not been to Rome; had not taken any courses in history of architecture; no knowledge of architectural styles.

Respondent #11

Undergraduate student (degree objective Ph.D.) in Mechanical Engineering.

Age 28; Male; U.S.A.

Had been to Rome; had not taken any courses in history of architecture; little knowledge of architectural styles.

Respondent #12

Graduate student in Nuclear Engineering.

Age 24; Male; India; lived for 5 years in the west.

Had been to Rome when very young; had not taken any courses in history of architecture; no knowledge of architectural styles.

RESP # 1	SORT # 1	SORT # 2	SORT # 3	SORT # 4	SORT # 5	SORT # 6	SORT # 7	SORT # 8
Picture #	15, 16, 24 / 18	9, 22, 25, 3	11, 13	1, 12 / 5, 20	7, 14, 26, 17, 4	8, 6, 21, 10	23, 2	19
Criteria for FREE SORT	Modern materials; simple plan / falls under no group; hard to identify	Strong surface movement; curving; columns and pediments /	Sculpture used	Ceremonial building; public building; / Domed building	Simple architecture; plain treatment of materials	Plane continuous facade; regular windows	Triangular pediment	Surface decorations different
Picture #	18, 16, 15, 24	5, 23, 2	14, 17	26, 7, 4	21, 10, 8	6 / 1	19	9, 12, 25, 11, 20, 13, 22, 3
Criteria for STYLISTIC SORT	Modern	Old Roman	Christian churches	Romanesque or Roman	Italian Urban Renaissance	Villa / Combination of Renaissance & Gothic	Back Romanesque; imitation of Pompei	Baroque; bold treatment of exterior facade
Picture #	14, 17	2, 5, 23	4, 7, 26	21, 6, 10	9, 12	1, 8, 11, 25, 13, 9	19	18, 24, 16, 15
Criteria for TEMPORAL SORT	200 A.D.	Roman	Romanesque; arches	Italian Urban Renaissance; 14th.- 15th.C.	Baroque	Baroque 15th.-16th. C.	16th. C.	20th. C.
Picture #	24, 19, 1, 22, 10, 21, 16, 3, 15, 8, 12,	6, 7, 5, 2, 14, 26, 18, 17, 23, 4	20, 25, 9, 11, 13					
Criteria for COHERENCE SORT	Old residential buildings may complement modern buildings	Peaceful setting ; do not compete with one another; buildings have a certain character; simplicity	Same Baroque					

RESP # 2	SET # 1	SET # 2	SET # 3	SET # 4	SET # 5	SET # 6	SET # 7	SET # 8
Picture #	1, 3, 11, 22, 19, 9, 5, 7, 20, 2, 25, 17	4, 10, 12, 13, 21, 23, 26	14, 8, 6, 15 16, 18, 24					
Criteria for FREE SORT	Religious buildings; the cross shows that + from personal experience	Official building	Residential architecture; don't know 14					
Picture #	5 / 10, 8, 21	1 / 22	6, 7 / 25, 20, 9	11 / 26	17, 14 / 2, 23	12, 13 / 15, 16, 24	18 / 19	3 / 4
Criteria for STYLISTIC SORT	Free-standing structural elements; simp le; heavy lines / flat facade; repetitive windows;	can't charact- erize; hetero geneous / moderate use of ornamenta- tion; double pilaster	Flat facades; use of colum- ns; heavy friezes; arch- es / Heavy decora- tions; heavy curved lines	Curves; decorations; heavy use of relief / simplici; less urban	materials; slope of roofs; arched windows/ very old; magedic but simple	Monumentality; columns; use of statues in niches / Modern residential buildings	A game of planes and surfaces; / Surface deco- rations and columns	Gothic / Fortification
Picture #	13, 23, 2	3	14, 26, 17, 4	8, 6, 5, 7, 22, 10, 19, 21	9, 22, 11, 20, 12	1	16, 18, 15, 24	
Criteria for TEMPORAL SORT	Roman period ? B.C.	Gothic 13th. or 14th. C.	Pre-Renaissan- se; may be 1 18th. C. 14th. - 15th. C.	Renaissance; 15th. C.	High Renaissa- nce- Baroque; 16th. C.	18th. C	Modern architecture	
Picture #	14, 18, 17, 4	3	2, 6, 25, 26	15, 16, 24	5, 1, 8, 10, 7, 21, 19, 23, 22, 11, 20, 9	13, 12	19	7
Criteria for COHERENCE SORT	Suburban or countryside	Paris; I know the building	Low density urban or sub- urban; trees and gardens around suggest that	Modern residential area	Downtown architecture; may not be in the same city	Same as set # 5	In a different city; differ- ent surround- ings	Smaller city; older neighbourhood

RESP # 3	SET # 1	SET # 2	SET # 3	SET # 4	SET # 5	SET # 6	SET # 7	SET # 8
Picture #	16, 15, 24	17, 14, 26, 7	6, 21, 10, 8	3	20, 5, 25, 9, 12, 11, 22	19 / 2	23, 1	4 / 18
Criteria for FREE SORT	Modern buildings 'I hate them'	Byzantine style; windows, common volumes heavy construction.	Don't know name of style; may be Renaissance; rectangular windows with repetition.	Gothic	Baroque ; curvature suggests that; same classical elements, but curved.	Picturesque; facade architecture; 'I don't like it'. / Ancient Greek	Pediments, ancient proportion; towers; different volume behind	Venetian Castle / 'I know this building, but can't recollect it'
Picture #	Same as above *							
Criteria for STYLISTIC SORT	"							
	* As the free sort overlapped with the stylistic sort, in this case the stylistic sort was waived.							
Picture #	2 / 23	4 / 7, 11	1, 13 / 3	22, 12, 5, 20, 25, 9, 11	26	21, 10, 8	19	18, 15, 16, 24, 17, 14
Criteria for TEMPORAL SORT	5th. - 1st. C. B.C. / 1st. C. B.C.-1st. C. A.D.	Romanesque 12th. C. A.D./ 15th. C.	2nd. C. A.D. Roman. / After Baroque 18th. C.	Baroque 18th. C.	Late 18th.C. Neo-Byzantine	Don't know; perhaps 15th. C. or 19th. C.	Eclectic 19th. C.	20th. C. The churches, 14 & 17 are something like Romanesque
Picture #	20, 5, 12, 22, 25, 11, 9, 13, 1, 23	21, 26, 10, 8	14, 17	4, 18, 11	24, 16, 15	7 / 3	2	19
Criteria for COHERENCE SORT	Parts of the same old town; they all fit together; may be in Italy ?	Could be in the same city as in set # 1. They look like a working or housing district	Different style; in different context; in a park or a countryside	Suburban detached houses	Neighbourhood with new apartment. (not the historic center of the city)	Smaller towns / different place; 'I know the building'	Can be with old buildings; but looks like a different context.	Some small town?

RESP # 4	SET # 1	SET # 2	SET # 3	SET # 4	SET # 5	SET # 6	SET # 7	SET # 8
Picture #	22, 25, 9, 11, 20, 13	24, 15, 16, 18	8, 10, 21	14, 17, 6, 7, 26, 3, 19, 4	5, 23, 1, 12, 2			
Criteria for FREE SORT	The elements in the facade same; have columns which are attached to the facade	Have sunshades to protect from the sun	Several windows are set upon the facade in a rhythm	Arched openings	Porticoes in front with columns			
Picture #	7, 26, 14, 17	15, 16, 24	18	2, 23	3	10, 8, 24, 5, 6, 4	9, 25, 20, 13, 22, 11	12, 1, 19
Criteria for STYLISTIC SORT	Romanic or Medieval; before Gothic; Spain or Italy; similar materials; brick	International style concrete; colours similar; aluminium	Strange building; Art Nouveau? Arts and Crafts? Gaudi?	Classical; very old; perhaps Roman or Greek; columns and pediments; materials and proportion	Gothic; vertical elements; Rose windows	Renaissance buildings; well proportioned; same classical elements; static; symmetrical	Baroque; curves in the facade; rich in elements; profuse sculptures	Neo-Classical or Neo-Gothic Copied from previous styles; eclectic
Picture #	15, 16, 24	17, 14, 26	18	20, 25, 9, 22, 13, 11	2, 23	3 / 7	4, 21, 6, 10, 8, 5	19, 1, 12
Criteria for TEMPORAL SORT	20th. C.	10th - 11th.C.	Early 19th.C. between 19th. & 20th. C.; older	16th.-17th. C	Very old; 5th. C. A.D.	13th. C. / 12th. C.	14th.-15th. C.	18th. C.
Picture #	15, 16, 24	8, 2, 26, 3, 23, 20, 4, 6, 25, 9, 13, 22	1, 12, 19	14, 17, 18				
Criteria for COHERENCE SORT	Won't like to have near the others; all in a new district; no importance of these buildings; dull	Historic public buildings; churches; palaces	copies of something; 'I don't like them'; may have been rebuilt	Rural; outside the city; lots of vegetation around				

RESP # 5	SET # 1	SET # 2	SET # 3	SET # 4	SET # 5	SET # 6	SET # 7	SET # 8
Picture #	24, 15, 16, 18	14, 17	4, 19	3	2, 12, 1, 10, 21, 8, 26, 6, 7	11, 25, 20, 9, 22, 13	5, 23	
Criteria for FREE SORT	Modern buildings; no special character; can be anywhere	Modern too, but a little later. (like M.I.T. chapel)	Looks like Muslim architecture; Arabic	Gothic building	Renaissance Buildings; Palladian; may be Florence	Baroque	Roman Empire period.	
Picture #	15, 16, 24, 18	10, 6, 21, 8, 26, 7	11, 9, 20, 13, 22	1, 3	14, 17	4, 19	5, 23, 12, 2	
Criteria for STYLISTIC SORT	Modern style	Renaissance	Baroque; complicated, lots of decorations, facade curved	May be Gothic	Similar material - brick; windows etc., similar	Islamic or Spanish	Roman or Greek	
Picture #	5, 23	4, 19	10, 21, 8, 7, 26, 12	3 / 2	1, 13, 25, 9, 11, 20, 22	6	14, 17	18, 15, 16 24
Criteria for TEMPORAL SORT	100 B.C. - 100 A.D.	A little later; 5th. C. A.D.	Renaissance; 15th. 14th. C.	Almost same pd. as set 3, diff. place, Gothic 5th. C. B.C.	16th.-17th. C.	17th. or 18th. C.	Don't know, may be quite old.	New; 20th. C.
Picture #	7, 26, 21, 8 12, 13, 22, 25, 20, 11, 5, 9, 10	6, 3	1	4, 19	2	16, 15, 24	17, 14	18
Criteria for COHERENCE SORT	Italy; Rome or Florence	Paris; looks like French architecture	Not sure; may be Rome	Don't know, may be Turkish or Arabic	Greece	Latin America; looks like built for hot climates	Can't say; Europe	Europe or America

RESP # 6	SET # 1	SET # 2	SET # 3	SET # 4	SET # 5	SET # 6	SET # 7	SET # 8
Picture #	8, 21, 10	17, 26, 14	23, 5	18, 15, 24 16	4 / 2, 17, 13	6, 12, 13	20, 7, 25 11	22, 1, 9, 19
Criteria for FREE SORT	All buildings have a characteristic repetitive elements in the fenestration	Expression of materials; arches used.	Domed - construction	Contemporary buildings	Defensive building / axially not suggested so strongly	Symetry	They belong to the same period; axial layout	Axial entrances
Picture #	15, 24, 16	18 / 3	25, 11, 9, 20	26 / 6	7, 14, 17	21, 8, 10 / 4	22 / 19	13, 5, 1, 23, 2, 12
Criteria for STYLISTIC SORT	Modern stuff	Organic modern / Gothic	Baroque and Rococo	Don't know / Don't know styles	Romanesque	Shows Michael-angelo's alternating pediments ; Renaissance	Don't know style / Don't know style	Greek orders used in these buildings
Picture #	18	15, 16, 24	1	3	7, 13, 26, 14, 17	4	12, 23, 11, 20, 9, 25, 5, 10, 22, 6, 21, 19, 8	
Criteria for TEMPORAL SORT	Most recent buildings; 1965-70	1980s	Late 1700s early 1800s	1600s	900 A.D, don't know, intuition suggests 10th. C.	1100 A.D.	1000 A.D.- 1200 A.D.	
Picture #	26, 14, 17	24, 16, 15	12, 25, 9, 20, 5, 22, 7, 11, 23	21, 10, 8	1 / 2	18 / 3	4 / 6	19 / 13
Criteria for COHERENCE SORT	Less urban setting	Urban modern districts; could be anywhere; residential	Urban downtown; must be Rome; part of that city's walking experience	Same overall context as in set # 3; however, statement different	St. Martin's, London; know the building / Roman ruins	Building stands alone/ stylistically incompatible	Outside the city / Low density suburban	Different area of the same city / May be a close up of Victor Emanuel

RESP # 7	SET # 1	SET # 2	SET # 3	SET # 4	SET # 5	SET # 6	SET # 7	SET # 8
Picture #	24, 15, 16, 10, 21, 8	4, 17, 18, 6, 14	19, 20, 1, 26, 7	9, 2, 25, 5, 13	23, 12, 11, 3, 22			
Criteria for FREE SORT	Some kind of Housing; may be offices or residences	Independent Housing; Has distinct character	All have tower; functional building. may be bus station, church etc.	some special architecture; emphasis on design	Some kind of antique (old) serves some special function; gym or public meeting place			
Picture #	15, 16, 24, 21, 10	17, 18, 14, 4, 26	1, 20, 7, 3	12, 23, 7, 3	25, 11, 9, 22, 8, 6	19		
Criteria for STYLISTIC SORT	Similar arrangement; lots of windows; simple; no decorations	Solid feeling; very strong; not fancy; functional; isolated	Towered buildings; lots of fancy decorations	Have similar concepts; use colours; serious building; strong feeling in the building	Close to the last group; some decoration; family use.	Unique; different from the rest; Arabic		
Picture #	15, 16, 24, 18	14, 17	20, 11, 8, 10, 21, 7, 3, 20, 22, 9, 26, 6, 1	19, 4	23, 2, 12, 13, 5			
Criteria for TEMPORAL SORT	This Century; 1960-70s; Modern city looks similar everywhere; no distinct character	1900	around 1800s	1600s or 1700s	Oldest ones; 1300s; can't tell.			
Picture #	20, 13, 5, 23, 12, 25, 7, 2	11, 8, 22, 3, 9, 10, 21, 1	24, 16	17, 14, 18, 6	4	15, 19, 26		
Criteria for COHERENCE SORT	Use of lots of pavements; buildings similar; some old district; not such a strong feeling of city.	All in the city; Downtown	Newly developed area; crowded	Country-side; trees and open areas	May be on the top of a small hill	In area that is pretty old; but now a new development is going on; lots of hills around.		

RESP # 8	SET # 1	SET # 2	SET # 3	SET # 4	SET # 5	SET # 6	SET # 7	SET # 8
Picture #	15, 24, 16	13,12, 7, 20, 9, 3, 1	25, 4, 14, 23, 5	21, 26, 8, 11, 10	18, 17, 6	19, 22	2	
Criteria for FREE SORT	Modern looking; nothing distinctive	Majestic buildings ; distinctive; stands out on block	All the buildings are round	Old buildings which blend into the settings; Similar as set # 1; dull as opposed to majestic	Difficult to put together; Private houses or palaces; Shape looks alike	Interesting old buildings; not majestic, neither dull, similar shape	Old; ancient	
Picture #	4, 19, 3, 6, 26	15, 16, 24	9, 1, 12, 5, 20, 11, 7, 2, 23, 22, 25, 13	10, 8, 21	14, 18, 17			
Criteria for STYLISTIC SORT	Arches ; open	Straight lines; squared off corners	pillars and triangles (pediments)	lots of windows and those triangular things over the windows	Modern; brick odd shapes; modern yet interesting			
Picture #	14, 17, 24, 15, 16, 18	21, 8	10, 19	11, 26, 12	20, 7, 5, 13, 1, 9, 3, 25, 6, 22	4, 23	2	
Criteria for TEMPORAL SORT	1960-70s brick is a new thing; lack of fine artistry; people lazy these days	1900-20s resembles New York's brownstone buildings	1850s not so intricate; old	1850s intricate	no idea of age; old, but not very; May be 1600s	old; no large windows; condition of buildings suggest age	Ancient Greek; may be 500 B.C conditions of buildings suggest age	
Picture #	15, 16, 24, 19	9, 7, 20, 22, 23, 5	1, 21, 8, 10, 3,13,11	18, 25, 6, 17, 14	2, 4	12	26	
Criteria for COHERENCE SORT	Mexico or some foreign country - caught up in the modernization process	From an old city. 1400s the city grew around these buildings; congested	Reminds of New York or Boston Buildings with lots of room	They could be out in the country	Tourist attractions ; secluded , left over	Standing all by itself; reminds of the Capitol; Official or Government building	Didn't fit anywhere; not a landmark; would have been leveled in America.	

RESP # 9	SET # 1	SET # 2	SET # 3	SET # 4	SET # 5	SET # 6	SET # 7	SET # 8
Picture #	15, 24, 16	14, 18,	10, 21, 13, 2, 6, 8	9, 25, 11, 22	5, 23, 17	12, 4	3, 20, 1, 19 7	
Criteria for FREE SORT	Modern, square and ugly	Unconventional shape	A flat - expanse of facade	Large facade above door with triangular pediment	Domical structure	Misc. Most of them big	Dominated by towers	
Picture #	24, 16, 15	6, 7	9, 25, 22	26, 17, 19	10, 21, 8	11, 20	5, 13, 23, 12, 2, 1	3, 4, 14, 18
Criteria for STYLISTIC SORT	Modern	Doors at the bottom; openings are in the form of arches	Columns around the doors; pediments	Smaller arched windows; towers	Flat with windows	Columns around entry; a different style	Dominated by big columns	Misc. Don't fit with anything else
Picture #	16, 15, 24, 18	1	25, 8	19, 21	20, 22, 6, 9, 11	3, 19 / 7, 6	14, 17 / 4	2, 23, 13, 5, 12
Criteria for TEMPORAL SORT	After 1955	1800s	No idea; may be 1800s; looks more modern; more sparse	Early 1800s	1700s may be Baroque or Gothic	Late Renaissance. 1600s/ Early Renaissance; 1500	More primitive; before Renaissance. Dark ages; Medieval 1200s	Greek or Roman 1000 A.D.
Picture #	16 / 24	6	26, 1, 10	3, 20, 4	5, 12, 2, 15	19, 11, 22	13, 14, 17, 9 18, 8, 7, 25	21, 23
Criteria for COHERENCE SORT	In Britain; cars suggest/ European; France, Britain or Germany	French Chateau.	French; because of external cues No piazzas; cars suggest France	Gothic; Therefore Germanic	Rome; looks Roman;	Reminds of Venice	Perhaps Italian; piazzas	

RESP # 10 ⁶	SET # 1	SET # 2	SET # 3	SET # 4	SET # 5	SET # 6	SET # 7	SET # 8
Picture #	15, 6, 9, 11, 25, 19, 10, 21, 3, 20, 11, 8, 16, 23	17, 12, 7	18, 14, 24, 22, 13, 5, 26					
Criteria for FREE SORT	They have people around, others don't. More lively	Same as set # 1	They don't have people around; less alive					
Picture #	9, 22, 12, 5	8, 11, 21, 10	3, 22, 1, 25, 19	17, 14	2, 13	15, 16, 24, 18	26, 7	4, 6, 20
Criteria for STYLISTIC SORT	Similar columns and pillars	Similar windows which dominate the buildings	Similar styles look similar	With gardens, stands alone, brick used in the buildings	Similar big columns	All modern buildings as opposed to ancient	In the middle of the town. The towers are similar	Can't fit these anywhere else
Picture #	23, 22, 9, 2	19, 12, 13	11, 25, 20	3, 1	5, 4, 8	14, 26, 17, 6, 7	18, 10, 21	16, 24, 15
Criteria for TEMPORAL SORT	14th. C	15th. C.	16th. C.	17th. C. early	17th. C. late	18th. C. late	19th. C.	This century. 1970-60
Picture #	22, 25, 1	6, 18, 3	14, 17 / 8, 11	12, 2, 5, 9, 23, 13	10, 21	19, 1	26, 7	4 / 20
Criteria for COHERENCE SORT	Similar styles marked by peculiar use of columns	Set amidst open spaces	They look the same; perhaps residential / Similar styles	These are somewhere in the middle of the city; downtown areas	Residential district	Church districts	Downtown center; functional buildings	Way out of town; a castle / may be a mosque

RESP # 11	SET # 1	SET # 2	SET # 3	SET # 4	SET # 5	SET # 6	SET # 7	SET # 8
Picture #	15, 24, 16	14, 17, 18	5, 13, 3, 12	2, 22, 9, 23, 25	21, 10	11, 8, 6	20, 4	1, 9 / 7, 26
Criteria for FREE SORT	Very freshly painted; residential buildings	Bricks used; may be modern	Predominance of columns in these buildings	Triangular pediments used	Ornamental town houses; perhaps looks like ware houses	Residential looking	Looks like palaces	Churches/ Public buildings with square towers
Picture #	23, 12, 9, 1	10, 8, 21	25, 20, 11, 22, 13, 19	26, 3, 7, 6, 17	24, 15, 16	14	4	18
Criteria for STYLISTIC SORT	Buildings have columns instead of arches; pediments	Less ornamental; more functional; lots of windows; small rooms behind	Ornamental columns; supported by walls	Arches used in these buildings	Modern buildings as opposed to others	Round roof; conical roof	Fortress	Wierd; haven't seen anything like this
Picture #	17, 14, 24, 18, 15, 16	21, 10, 8, 6	1, 22, 11, 20	7, 26, 3	9, 12	19	13 / 4	25, 2, 23, 5
Criteria for TEMPORAL SORT	20th. C. simpler; more functional	18th. or 19th. C.; more expensive to build; fancy public buildings; these days not as elaborate	18th. C. more ornate; good understanding of materials; ornamental columns	17th. C. Arches instead of columns. perhaps Gothic	Columns used in abundance	Can't predict this one's age ; must be 16th. C.	15th. C. Renaissance looking / This building belongs way back when things were functional (500 A.D.)	11th. C. weathering suggests that
Picture #	5, 13, 23, 12	20, 25, 10, 9, 22, 21	7, 8, 11, 19, 26, 2	17, 14, 18	3, 2	6	4	24, 16, 15
Criteria for COHERENCE SORT	All these buildings have a reddish hue; iron content in the soil suggests same place	Materials weathered the same way; same environmental condition; could be in the coast	Roofs same; materials such as bricks were used. Hue of buildings match.	Boring modern bricks used. Similar vegetation suggests suburban location	White material weathered black	odd building	fortified; stands alone	Contemporary Design; could be anywhere

RESP. # 12	SET # 1	SET # 2	SET # 3	SET # 4	SET # 5	SET # 6	SET # 7	SET # 8
Picture #	24, 15, 16, 18	1, 26, 7	21, 10, 8	3, 19, 9	14, 17, 6	2, 5, 12, 13, 23	22, 25, 11	20, 4
Criterion for FREE SORT	Modern Architecture	Tower dominates in these buildings	Windows and flat facade	Cathedral-like structures	Semi-modern Architecture	Based on pillar columns	Arched windows Similar entrance	Miscellaneous
Picture #	1, 26, 7, 19	5, 23, 20	14, 17, 12, 13, 22, 25, 9, 2	15, 16, 18, 24	8, 21, 6, 11, 10	3, 4		
Criterion for STYLISTIC SORT	Tower architecture. Triangular pediments	Dome and pillar structure	Triangle (pediment) and pillar	Modern buildings	With huge windows, well ventilated	Misc.		
Picture #	2, 20, 13, 12, 23, 5, 9	8, 21, 22, 10, 10, 4, 11	25, 1, 19, 26, 7, 3	6, 14, 17	15, 18, 16, 24			
Criterion for TEMPORAL SORT	Oldest; Roman or Greek	17th. or 16th. Century	Second oldest group. Can't tell date	18th.C	Youngest; 20th. C.			
Picture #	4, 14, 17, 6	13, 2	24, 16, 18, 15					
Criterion for COHERENCE SORT	England	Greece	Modern buildings	Rest of them are in Rome				

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