A PERSONAL INSIGHT INTO THE PRESENT AND FUTURE OF ARCHITECTURE

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by

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A MASTER'S THESIS

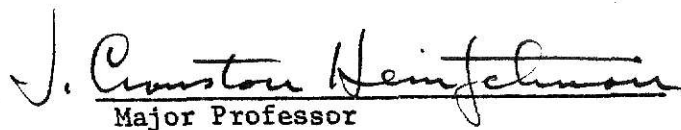submitted in partial fulfillment of the

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A Master's Thesis
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Kenneth C. C. Chang

LIST OF GRAPHS

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PREAMBLE

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(Note: Events that lead to the determination of thesis subject area.)

The opportunity to do research work in areas of personal interest at the graduate level provides an unlimited range of possible topics. Although it seemed quite an impossible task, I have been able to develop a research topic which I personally feel will fulfill my expectations. It will provide the opportunity to research an area which will not only be quite relevant but also an opportunity to express my understanding, knowledge and philosophy of architecture. The masters thesis is a means of establishing a standard so others may judge the quality of knowledge developed over the years of schooling and an opportunity to express oneself in an area of interest that will indicate a philosophy and 'way of thinking.' The attitudes and thinking process are the essence of the proper use of knowledge, taught as part of the architectural curriculum. Above and beyond the basic school requirements is the development of a personal inquiry into methods and use of techniques in establishing a design philosophy and design attitude. Often masters degree projects which are structured designs, tend to stifle the thinking process of the individual because the result becomes more important than the mode.

Prior to arrival at Kansas State University, I was advised not to specifically determine a masters degree project, but rather to think of areas which I personally would be interested in pursuing. The tentative areas that I determined at that time were: programming, design process and decision making in the design process. Upon arrival and through subsequent meetings with my advisor, I was able to determine the primary direction of my initial interest areas.

I investigated the programming process, I investigated the various design methods and I investigated methods of decision making. Each

investigation subtly oriented me toward a major area of study. The

opportunity to enroll in various courses: planning, human behavior,

theory and design provided sources of information and reference.

Professors Reid, Windly, Chang, Fisher, and Ernst provided honest insights

to questions that were puzzling or difficult for me to comprehend. All

of these inputs and the open discussion sessions with Professor

Heintzelman ultimately guided me to my masters degree topic.

Significant areas of research were in decision making and the

organization of a personal schematic design process. It was quite

obvious to note that all questions related to design were empirically

determinable. The courses in planning, theory and human behavior indicated

the influences each course had upon the decision making process. Research

into the design processes of others and the development of a personal

schematic design process indicated a great deal of variation. Research

into relevant areas of architectural trends through books, research

papers, comments by architects and designers etc., indicated a significant

imbalance within the profession. Additional research and reading began

to fill my mind with questions about the whole process of architecture,

its methods, techniques, implications and effects. It would seem very

difficult for a would be practitioner to become part of this profession

since there seemed to be so many major schisms within it. The new modes

of data collection, effect of architecture on society and vice versa,

personal design methods, new techniques were all major reasons for the schisms.

The telescoping of the few areas of studies that I originally began

with and the subsequent expansion of questions developed by these inquiries

provided the impetus for my desire to research and develop my masters

degree topic area. I will become part of the 'professional' world when I graduate from Kansas State University. A personal understanding of the existing conditions of the profession is imperative for me. I would like to investigate the elements that effect architecture and their relationship to society. If these elements are a part of society, any change upon society will have a marked effect upon architecture. A major research area at the very onset of this masters thesis is to establish the existing situation in architecture - what are the components of architecture? Are these components effected by definable elements? Are these elements related to the component elements of society? What are the major trends of architecture and society?

Research in the masters thesis topic area will, again, provide the opportunity for me to express a personal philosophy and a 'way of thinking'. It will be an opportunity for me to express and develop the sensitivity to the present that will make me aware of what lies ahead. The multiplicity of goals and 'eye-balling' of trends in architecture and society is the means for an individual to indicate a personal awareness and ability to draw from the subconscious to conscious solutions to architectural problems, which are quite abstract. I am attempting to provide an insight into a personal philosophy and sensitive awareness, rather than prediction or fortune telling.

I have done preliminary research that indicates answers to these questions and goals. I cannot help but begin to feel a personal involvement and commitment to the possibilities of such a topic. The opportunity to research the existing status of architecture and the professed personal goals. I will be able to develop insights into architecture and its future; I will be able to express a personal way of thinking and a

philosophy of architecture that I have developed through my years

of schooling; and to express a personal sensitivity and awareness of

architecture. I realize that this must be the area for my masters

degree thesis. There is a need for student expression in this area

of research. I am confident that I will be able to fulfill the

objective and requirements by persuing a thesis topic in this area.

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PROGRAMMING

"There is no finality in architecture.......only continuous change."

Walter Gropins

INTRODUCTION

The italian architect, Eugenio Montuori said, "The mess is complete."[1] The statement was made in reference to the age we find ourselves living in today. An age of transition where the rate of change accelerates from one day to the next. Our age is different from any of the past. It is no longer possible to go back to the past for answers. We stand at the threshold of a new era of progress, peace and prosperity. In place of a static situation involving slow change we are now caught up in dynamic situations bringing extremely rapid changes. This is what makes the most radical difference in the present situation and outlook for architecture in the realm of confused architectural ideas and actions.

Modern architecture is not an offshoot of the major tree but rather a new growth from its roots. Economic, social, political, administrative, technological and aesthetic achievements have accompanied change in the building industry. These rapid developments have cut so sharply into the familiar patterns of our existence that we are left with nothing but loose ends. It is no longer possible to exploit the achievements of the past because the styles evolved from them were entirely different from those of the present. We have attempted to find a medium for expressing the new innovations in architecture but have created additional confusion and disarrangement. Architects must develop an awareness and sensitivity to the evident confusion in which we find ourselves. Architecture is said to be "a true

mirror of the life and social behavior of a period"[2]   and should once

again gather resources toward a new sense of balance and unity.

Constatinos Doxiadis stated:

"What the architect can do is stand still for a moment
and think seriously about the future, for the great
problems around him find their echo in the equally great
problems within him. He must adapt himself not only to the
changing world but also to the changing requirements of his
profession, altogether and may have to alter it."

There is an obvious need for the architect to become aware and

sensitive to the present conditions of society and architecture. He

must start to work with existing situations in order to establish a

criteria for their analysis. Architecture should express the spirit

of the age and see harmony with the modern world. However,

contemporary architecture has not moved as fast as the technological,

economic and social conditions.

As an individual seriously interested in the present condition

of architecture, it is imperative that I attempt to develop this

awareness and sensitivity to the existing situations of architecture

and society. The direction and intent of this master's thesis is to

express my beliefs and to develop the realization of my many sub-

conscious thoughts as a potential contributor to the professional

world. The development and express of a 'way of thinking'[3] and

a personal philosophy is a significant intent of this thesis. The

thesis has a dual purpose of 1) providing me with an opportunity

to express my ideas and, 2) enabling me to explore some of the problems

facing architecture. It has been said the slightest problem in the

balance of the universe has an immediate impact upon architecture.[4]

We must encourage individual research in this area so as to allow
free flow and interplay of ideas, directed toward reaching a consensus
of opinion.

I have found that architecture is essentially a social art and
the technological advances are of small consequence in comparison to
social change. "It is his (the architect's) responsibility to under-
stand the necessity for socialization in the society of the present and
the future and to adopt his own architecture to serve the broader goals
now set by humanity for greater numbers of people and for a better
way of life in general."[5] Subsequent research into the state of arch-
itecture and society suggest serious ramifications of the future trends
in architecture. I have attempted to develop this awareness and sen-
sitivity in my thesis.

My development of the present and future status of architecture
is supported by fairly accurate and in-depth research material and
consultation with resource people. The facts are as accurate as possible
and my bias can only be found in the final selection of trends for the
future. I am attempting to present a broad and complete data collection
in order to objectively review the material and draw a personal conclusion
from the material collected.

This thesis is directly related to my design process; 1) programming
2) data collection, 3) analysis and synthesis and, 4) design conclusion,
which is reflected in the table of contents. It has been arranged
to indicate personal intentions, expectations, limitations and goals. I
have attempted to select resource material from all sources available at
Kansas State University and I have arranged them into a fairly manageable

form. I have not intended to present myself as a prophet of the
present and future of architecture; rather I want to suggest
a personal insight and a survey of the situation. Though my
multiplicity of goals are personal in nature, I ultimately desire
to bring about an awareness and provide ideas which may awaken
individuals to the serious situation in which architecture finds
itself. My thesis is dedicated to the development of this cause.

DATA COLLECTION

"The characteristic of our time is the perfection of tools
and the confusion of aims."

Albert Einstein

EVENTS IN MODERN ARCHITECTURAL HISTORY

To have a clear comprehension of the significance of architecture in
the present and future, it is of utmost importance that the events that lead
up to the present situation in architecture be understood. I have intended
this master's thesis to be concerned only with the development of architecture
in America, since, at the present there has been a,"...reversal of the relations
between Europe and America. Today American architecture sets as a precedent
for European, and one cannot understand the directions taken by European
building without first having some idea of its models from the other side
of the Atlantic."[6] The influence of architecture in the United States
upon our expanding economy and political and social influences is of signi-
ficant interest to me, as an individual entering the profession. There are
definite trends that have developed in architectural history that have led to
the present 'confused' situation of modern architecture. "The main reason
for our confusion is that we find ourselves in an epoch of transition, the
general nature of which is also reflected in our architecture."[7] The events
that led up to the ultimate polarization of present architecture may serve as a
means for us to understand and develop solutions for the problems that exist.
The period of American architectural history that will be discussed and has
the most significant influence on the architecture of the present is the
period from World War I to the present.

An understanding should be established concerning the origins of the
modern movement. It is conceded that the modern movement was born in Europe
but the ultimate transition of the modern movement to the United States

changed the impetus and the United States became the leader in the modern movement. The reason for this being that the character and forms developed in the United States were basically autonomous and interpreted in an original manner--an international setting where superimposition of European culture could not be felt. This was the character of the dynamism of American architecture.

A trend that became a marked characteristic of architecture in the past, was the desire to import solutions or develop solutions and adapt them to the needs of a particular location or site. "Modern architecture then was compaigning on a straight foward and uncomplicated principle. It was rationale, clean, uncluttered. No dust traps."[8] Between the nineteenth and twentieth centuries, the problem of centralized control of building production arose while the economic and social processes were expanding rapidly. American culture was compelled to rely on already known styles and adapt them to meet the requirements of the existing situation. Eclecticism became the dominant 'style' of architecture in the United States. Americans accepted eclecticism as fact and not as convention (which later proved to be a serious area of controversy) and developed it to perfection. However, in later years, this eclecticism attained a position of prominence in the United States.

During the period of prosperity between the first World War and the crisis of 1929, building production increased at an astounding rate. Major changes in the lifestyle of America evolved and reflected in its architecture. First, the concentration of business centers in cities and second the advent of the motor car, tended to create dwelling units in suburban areas. The perfection of eclecticism was used as means of providing a style to meet demands of the period. "Violent changes of this sort are characteristic of architecture, and outward display of the internal stress of an art with two

such inconsistent sides: the side of useful technology and the side of expression."[9]

The desire for change in the United States, with silmultaneous political problems in Europe and the immigration of a number of noted European artists and designers, could not be contained for long by the perfection of eclecticism. In the 1930's there was a surge toward modern architecture in America. The United States offered a paradise to this movement. Unlike Europe, it offered a vast composite setting where many races and traditions co-existed in a western culture. Such European designers as Finn Eliel Sarrinen, William Lescaze, Richard Neutra, Frank Lloyd Wright, Walter Gropius, Mies Van der Rohe, and a number of American architects exploited the unlimited horizons of the United States. Various styles and schools were developed in the modern movement in America.

Today architects are not concerned with their origin, but have retained the policy of attacking the architectural problems with variety, expediency and rapid changes to meet specific requirements. The trend of the modern architect was toward meeting the requirement of the existing environment and developing the technology and methodology to meet the changing situations. "The study of the origin of culture shows that from the intuitive impulse and the scarcely conscious ideas of a people, the germ of a social system is evolved. These ideas clarify and become sufficiently codified and accepted to find expression in characteristic activities. Given natural opportunity to develop the tendency of a social system will be to grow from simplicity to complexity. Although certain modifications may be made from time to time in the controlling and directing ideas in answer to economic needs and physical causes, yet in the absence of powerful external influences the basic character of the culture will be maintained."[10] As a result, the modern architect solved

the immediate problems without reference to the larger more significant

problems that would arise. A central problem of the very recent past was

that of effecting a timely transfer from old to new urban structure, and

a realization of the new scale of planning that has evolved from this trend.

"The modern architectural trend encompassed the redesign and scope

of cities, development of housing, transportation, commercial and retail

establishments, public and private building, etc. Nineteenth century pre-

occupation with building, rather than with space, misused perspective."[11]

The significant external effect upon these developing problem areas is the

"...speed at which things change, making impossible the repetition of earlier

attempts at making series of convergent experiments necessary, in the present

state of cultural organization, to attain acceptable results through this

rapid state of transition that is prevalent at this time, the root cause

for the unrest of American culture at the present time."[12]

"I realize that our problem is a problem of confusion. One
generation back we tried to break with the past. We did
indeed break the bonds but only of architectural design
and now we are confused about the future."

Constantinos Doxiadis

PRESENT SITUATION OF ARCHITECTURE

The present situation of architecture is visible all around us. Look
at your buildings, look at your cities, look at your friends and look at
yourself. Can you be contented with the situation in which you find yourself?
In reference to architecture and socialization, I have a difficult time
accepting the environment I inhabit. "It is on this earth that we find our-
selves living today in an age of great transition, an age where the rate of
change is accelerating from one day to the next. The rate of change is the
most characteristic phenomenon of our age, wheather we speak of technological
progress or of economic development, of population growth or of social or
cultural phenomena. Our transition is a transition from old to new, from
traditional to modern, from the concepts of the past to the concepts of the
future, and so from the problems of the past to the problems of the future."[13]

According to Robin Boyd, we are in the 'third phase' of twentieth-
century architecture; the first, its marriage with the machine, second, its
search for significant forms, and presently, its search for a basis from
which the architecture of our time may express itself. We have failed to
reach satisfactory solutions in any of these transitional periods. We are
still reshuffling our entire lives as a result of the advancement of technology,
but we are unable to come to terms with it. "Nevertheless, while we yet
lack a body of theory proper to our own machine age, we are still free-
wheeling along with the ideas and aesthetics left over from the past." [14]

"Architecture simply follows the general trends of the age. It is now

in the process of evolution, as it has always been, but an evolution

more intense and more rapid than ever before.'[15] The architectural profession

is polorized on idealogical grounds. Half of the offices, the older ones,

were determined to stick to traditional styles and believe that 'modern'

was an unnatural stunt and should not be concerned with it. The other arch-

itectural offices were more inclined by temperament to the new movement.

The profession must be aware and sensitive to tangible and obvious trends

and work toward providing for the new needs and conditions of the period.

"It is fortunate for them (the architect) that they have such prophets unless

of course the profession is satisfied to continue on its present path to

extinction, becoming as outmoded as the dinosaur."[16]

"The first and simplest definition of the change, especially for the

architects and the technologically advanced groups of people, is that its

transition from academic to modern."[17] Where traditional trends and styles

have been overthrown in preference to expressed social needs, architecture

aspires to serve society but is in itself confused. The technological

advancements of the age have overwhelmed society, leaving society groping

for direction. "Men not machines (should) determine the fundamental scale."[18]

"I think the present situation can be summed up as follows: a break

has been made with the past which enables us to envisage a new aspect of

architectural correspondance to the technical civilization of the age we

live in, the morphology of dead styles has been destroyed and we are return-

ing to honesty of thought and feeling; the general public, which was

formerly indifferent to everything to do with building, has been shaken out

of its topper; personal interest in architecture as something that concerns

everyone of us in our daily lives has been aroused in wide circles; and the lines of future development has been clearly manifested..."[19] It too is the progress of science that we owe the remarkable changes, both good and bad, in our world around us. Architecture must move as rapidly as science. It should also reflect the trends of society. Architecture's inability to decipher technological trends from sociological trends has added to the complexity of the problem of the era. Architecture is caught in a dilemma, "The rising tide (problems) will overwhelm humanity, for man will one day discover that they have become slaves of their surroundings, compelled as they were to adapt themselves to the new conditions of living in a metropolis which in itself dying a slow death under the impact of the machine."[20] We must as architects, understand the twentieth-century problems, particularly in relation to the conflict of technological and sociological trends--"It is the epic achievements of American twentieth-century industry, agriculture, education, and space movement and exploration that have convinced the people of the possibilities of solving their mounting environmental problems and of the righteousness and feasibility of their goals for social progress."[21]

Although architecture and society have broken with tradition, there are many mental concepts and physical structures that still tie us to the past. "Our people ceased to live simply. Life became more complex, even more agitated."[22] Guided by the technological trend, sociological trends began to advance. Thus technology and formative influence on man's attitudes and desires for the future. Humanity gradually acquired the ability to accept technological advances, yet the desire for expression of the past. "The standard forms of architecture expressed a happy blend of techniques and imagination or rather a complete coincidence of both.

This spirit--though by no means its dated forms--should be revised to create our own environment, with our new means of production, the machine." [23] This is one of the major problems of the contemporary architect. "The rate of change requires him to create something which in many respects should be new, but at the same time he bears the great weight of his own habitat. Thus he is caught between the old which cannot be demolished overnight and the new which is indispensable to the new type of life that the people have to lead."[24] Another statement may make this problem clearer: "Mannerism in architecture is not limited to this period in history, however, many of the designers of our spaces today are so hamstrung by regulations and customs that all that remains to them is the meaningless search for unrelated uncertainties". [25]

The innovations of the present age surround us with an endless assortment of devices to make our lives easier. We have become dependent on the technology, science and machinery of our age without realizing its effect upon us as individuals and upon society. "Mechanized travel at these miraculous speeds revolutionizing the very foundation of perceiving, understanding and controlling the environment."[26] "This the modern architect accepts the machine as the measure of our age, uses the newly evolved structural techniques for the sake of the increased ammenities that they allow and derives its beauty from the elements of the building--its structure and purpose."[27] In contrast to the preceding statement: "It behoves the thoughtful man to ponder well this question of machine production, for it is at the bottom of all the material and obvious changes in the world of appearances. It is no longer employed merely to perform operations which will end drugery and toil thus remaining in the background as the humble

assistant of man. On the contrary, they already dominate the whole economic situation." [28]

Many changes have occurred which have effected architecture significantly. "One of the most important of these is the shift of architectural creation from handicraft to industry...Thus, where the architect was once the sole master of his creation, he is compelled more and more into the use of materials and elements in the conception, production and form of which he has played no part in whatever." [29] There have been marked effects upon architecture during this period of transition. The general design process has not changed to a great degree, rather the technology, tools and knowledge have improved, causing a reshuffling of the position of the professions within and relating to the building trade. The changes showed their results gradually through structural parts until every aspect of the building industry was altered.

The architect has changed: "Today the architect is not the 'master' of the building industry", [30] due to the transitional period he finds himself part of. "Architecture as a tool of social and economic development has a crucial responsibility for participating in the heavy investments required during an era of epic technological, institutional and environmental changes." [31] Architecture has lost first position for several reasons: 1) unwillingness or inability to change with the time and assimilate new methodology and technology, 2) quantitatively, it does only 5 percent of the total world construction activity, 3) qualitatively, the work produced is of low quality, and 4) it does not reflect human requirements. "It is this general loss of credibility in politics and religion which in a strange

way, has even been the cause of modern architecture."[32] Looked at from
a scientific standpoint, architecture is less advanced than any other field
of activity in our era."[33]

The change in society's values and trends has affected the situation
of architecture: "It could not readily reflect society since it too was
in a state of transition. Almost any label that identifies anything worth
identifying in the period will draw attention to some aspect of the trans-
formation has had powerfully affected human life and opened up new paths
of choice in the ordering of our collective destiny."[34] Thus society, the
primary objective of architecture, is in a state of turmoil and in turn
has affected architecture. "Architecture, a tool of social, and economic
development has a crucial responsibility for participating in the heavy
investments required during an era of epic technology, institutional and
environmental change."[35]

The building industry expanded with new technology and changed with
many innovations. Architecture could not keep up with the radical changes
in the building industry. "As a matter of fact, the new building architecture
of today has arrived less through the architects that through engineers, the
master of the machine which is at the height of social revolution."[36] The
architect, because of his close relation to society, would not compete with
engineers, scientists, etc. in providing innovative ideas. "The arch-
itect is in a very real danger of losing his grip in competition with the
engineer, the scientist and the builder unless he adjusts his attitudes
and aims to meet the new situation. "Then within a few weeks, or so it
seemed, hardly longer than the time between issues of the style sensitive
journals, the outlook abruptly changed and there were generals everywhere.
Not just four star generals (architects), as in the second quarter of the

century, each with a world following for his own personal manner within
the style, but suddenly hundreds of one star generals (contractors,
engineers, etc.)." [37]

It is difficult to accept the complete reversal of roles that
architecture and architects have undergone, "unfortunately the architect
is becoming bound to the chariot wheels of finance and a mere hanger-on
to development schemes. This position, while it provides him with and may some-
times line his pockets; is more often than not inimicable to his position." [38]
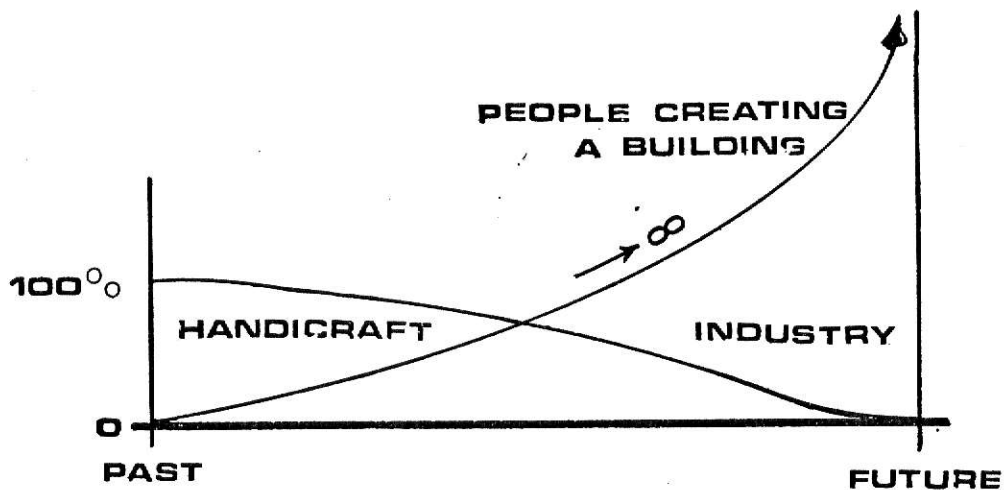
Fig. 1 From handicraft to industry ; architecture moves at different speeds
depending on country, locality and economic and technological
development.

"Perceptual proportions of man's environment is not only the relationship of space to space, of mass to mass, and mass to space. But of the various human systems of the system of environmental variables."

<div align="right">Julian Eugene Kuliski</div>

PROBLEMS

The present situation in architecture, as expressed in the preceeding section, is basically due to the state of transition through which we are passing. The situation is quite confused; there are definite problems that interact with each other to create the complex situation of modern architecture. I am attempting to develop the causes; primary, secondary and tertiary, for they all reflect problems that are affecting architecture. The causes of transition are basic in themselves; I shall only refer to these causes and will place major emphasis on the problems resulting from them.

The attempt at solving these problems should be considered in the full context of major problems surrounding a specific situation since solutions to a single problem area may affect and initiate changes in related problem areas. It has been suggested, "The co-existence and interplay of all of these many forces we have refered to often compel man to make a sudden leap from a nomadic or rural pattern of life into a modern industrialized system."[39] This form of "cultural shock"[40] is acceptable to make, but "future shock"[41] of completely different environment forced upon man, is not. An example of the need to handle the multiplicity of problems simultaneously is suggested in the following statement: "Shaping man's environment on a metropolitan and megalopolitan scale requires not only the understanding and guidance of extremely complex systems of transportation, communication, social and economic organizations, political and administrative structure, and technological functions of man, but requires most of all their simultaneous control and

development of the continued unplanned and chaotic growth of cities is to be terminated."[42] The need for awareness and sensitivity to complex problem solutions suggests a new source which is in itself a problem. Teamwork and collaboration between design professionals seem imperative, but organization of the team is a major problem. "The engineer could indeed assist the architect, and throughout the 1950's an extraordinary stream of strangely shaped buildings flowed from collaboration. At no time did the stream grow wide or deep enough to affect ordinary professional or commercial buildings but for some years it dominated the architectural journals, the undergraduate studios, and architectural discussion. It seemed to indicate clearly a major change in direction of twentieth-century architecture."[43]

I shall attempt to develop an insight into the major problem areas; population, economic development, socialization, industrialization and technological progress, forms and research, in a quantitative manner, with the hope of suggesting the qualitative aspects of these problems.
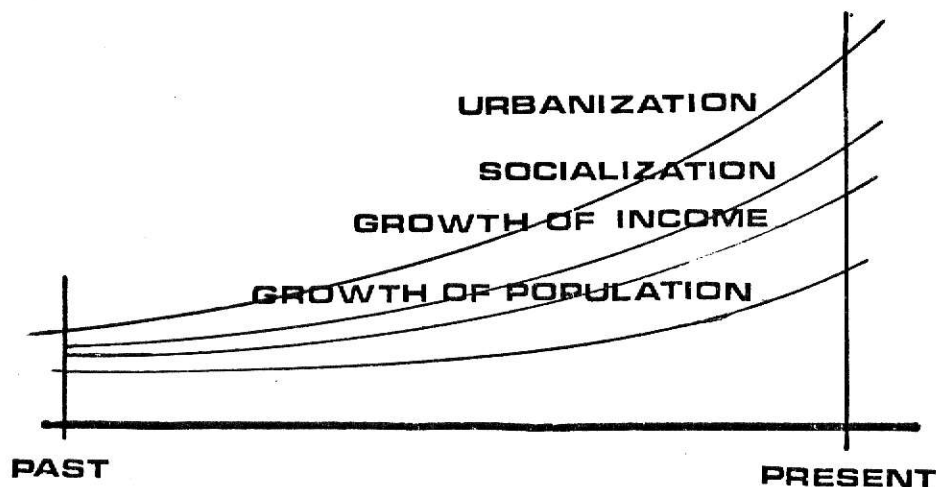
Fig. 1A The need for architectural creation will be continuously increasing over the next generation or two because of the co-existence of many forces.

POPULATION
    a.   pollution
    b.   city planning
    c.   public interaction

The problem of population growth has several serious effects upon the
present situation of architecture. Population growth is predicted to move,
"...towards a five million global population in the year 2000".[44] The modern
architect must understand this problem and its possible consequences. A
significant result of the population explosion which requires serious
consideration is the impact of population pressure on our natural resources.
"...population of megaproportions, greedy and absolute use of land, air, and
water resources have quickened the tempo of biological, social and behavioral
imbalance."[45] The depersonalizing size of cities has not only affected environ-
mental conditions, but also the physical and mental well being of individuals.
It has been proven that health "...a state of comparative complete physical,
mental and social well-being"[46] is being seriously restricted as a result of
the taxation of environmental conditions by the modern architect; 1)noise
pollution-unwanted sound; 2)water pollution-available sources decreased by
the pollution of our streams, rivers and lakes and 3) air pollution - pollutants
resulting from mechanization and industrialization to meet the increased
demands of an increasing population.

Another significant consideration is suggested by the following state-
ment: "The world has never before witnessed such expansion of its already
teeming millions, with the result that while the population grows faster with
the development of modern medicine and public health programs its increase
is not paced by any comparable increase in architectural activity, so
that very many people are left without houses or buildings."[47]

WORLD POPULATION INCREASE

ARCHITECTURAL PRODUCTION

PAST   PRESENT   FUTURE
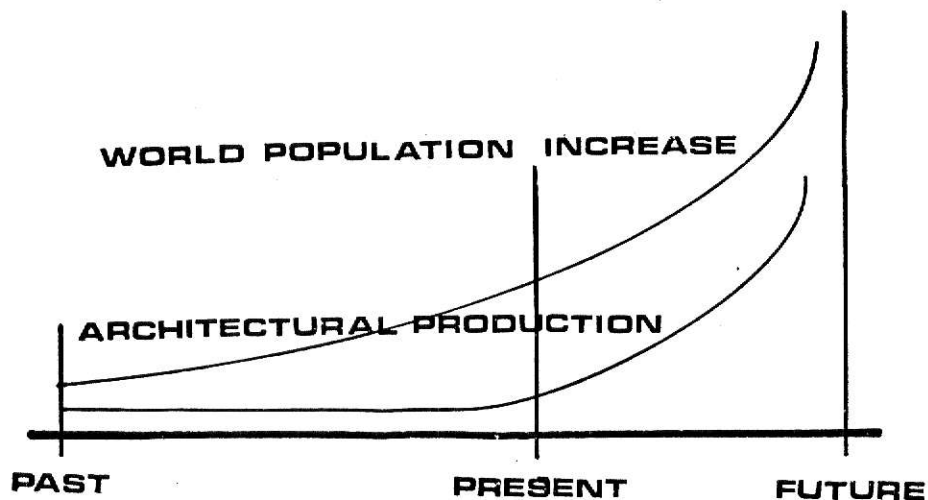
Fig. 2 The gap between population and architectural production has been
        increasing recently and is going to increase even more in the future.

In addition the population increase has affected the public's interaction

with its administration, creating an ever-widening rift: "The size of

today's depersonalized mammoth city administration has grown beyond human

scale. A citizen of the city has no personal contact with his elected officials,

he is obliged to surrender to a distant power. Consequently, growing social

indifference has diminished community relations. Irresponsibility and social

alienation are spreading. Art, science and religion today are disconnected

islands, a new synthesis must make whole again what is now unhappily separ-

ated."[48] Our present situation, a result of poor and inadequate insight and

awareness by architects, planners, designers and the public, is the disaster of many of our larger cities.

The solution may lie in our ability to use hindsight and observe the events which have led to the inadequate and poor design of our cities and towns. "Our failure to develop a more responsive environment has, in a large part, been due to the fact that although the psychology of man's interaction with man is well understood by contemporary society, the psychology of man's interaction with urban space and architecture remains a largely unexplored horizon."[49] There must be a review of the method by which we observe and perceive space to meet the age of transition that we are in. This is an important area for research: "Since the basic quality of perceiving space is movement, which implies constant and continuous change of viewpoint and dimension it is not surprising that viewing architecture from a single, stationary and limited point of perspective is unsatisfactory. However, this is exactly how architecture has been viewed for the last few hundred years, and the habit has become so ingrained in our whole attitude towards viewing that it is extremely difficult to view architecture as it really is--experiencing space while in motion".[50]

ECONOMIC DEVELOPMENT

The acceleration of economic development creates a variety of new problems which are of the greatest importance for architecture: "...for while everyone requires better and better buildings, the demand for buildings grows at a higher rate than that of the increase of wealth or the general rate of the economy."[51]

NEED

SUPRESSED DEMAND

SUPPLY

PAST   PRESENT   FUTURE
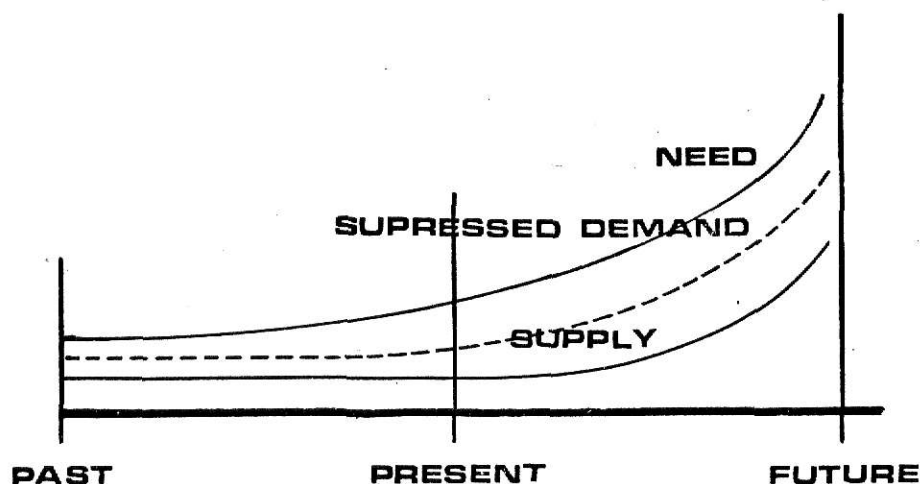
Fig. 3 Architecture needs are increasing while the demand is still sup-
        pred and is lagging behind. In the future, however, demand will
        tend towards actual needs. Thus the supply will have to be in-
        creased; but before we reach this stage the gap between supply and
        demand will widen.

It is interesting to note that quantitative economic improvements result in

a quantitative demand where people who acquire a higher income level request

and expect not only large houses or schools, but better and better equipped

ones. Economics, in addition to supply and demand discussed in a preceding

section, includes monetary and financial situations influenced by architectural

consideration in technological mechanical and industrial solutions: "The sickness

of our present communities is the pitiful result of our failure to put human

needs above economical and industrial requirements".[52]

ARCHITECTURAL RESEARCH

    The architectural implication of this category is quite unique. It is

a relatively new area of concern in society and for architecture. Though it

could well become a serious problem area for architects, I have considered

it as an 'area of concern'(personal) due to the lack of information in this

area. "Architectural research is very limited; moreover, there is very

little work being done regarding the proposed conception of architectural

space inside and outside buildings or the relationship of man to his living-

space in terms of physiology, micro-climate or aesthetics."[53] There should

be additional research work done in the area of human behavior and psychology.

This research would suggest that human behavior has become a major consider-

ation and determinant for modern architecture; suggesting that all design

processes of the past are aesthetically determined and should change in the

present according to human, individual desires and requirements. It should

also suggest that studies and data collected from experience with human

patterns and reactions to buildings be collected and stored in a central

data bank accessible to all. Architectural research is a new and ever

expanding area that the architect of our age must consider seriously.[54]

INDUSTRIAL AND TECHNOLOGICAL PROGRESS

Industrial and technological progress, both of which have caused

growth of modern architecture and architectural problems, are significant parts

of the third physical dimension of height and depth in design. This third

physical dimension increases the complexity of possible solutions. "... in

these circumstances the traditional methods and simpler types of construction

with which we were content are gradually giving way to a complex architecture

in which only modern methods and materials can exist."[55] A serious implication

of these changes maybe, "... as a matter of course fail to realize their effect

upon us or the growing momentum of the changes they bring."[56] Changes can be

observed in the mental, physical and psychological problems as offshoots of

primary problems discussed in these sections. There should be an attempt to

humanize the machine and relate its contributions to modern architecture and life. We have seen too often that the coexistence and interplay of all these forces have compelled man to make sudden changes in his lifestyle to adapt to these situations without being aware of the impetus: "Our scientific age, by going to extremes of specialization has obviously prevented us from seeing our complicated life as an entity. The average professional man, driven by the multiplicity of problems spread out before him seeks relief from the pressure of general responsibility by picking out one single, rigidly circumscribed responsibility in a specialization field and refuses to be answerable for anything that may happen outside this field."[57] This is a very unique situation, in which industrial and technological problems have dictated the average man's position within society. Are we not free thinking individuals?

As a result of this problem area, many good, innovative concepts of standardization, mass production and modularization have affected the economic and financial situation, as well as social situations. We can observe the extreme effects upon the attitude of the architect, who must reconcile the consequences of the use of these innovations with personal taste and good judgement. The following conflicting statements serve as an illustration of the dilemma: "Yet this is a larger point in the philosophy of architectural realism. For a stretch of the meaning of functional design to include psychological coddling of the occupants can be taken as license to include any arbitrary shallow shape or decorative device",[58] and, "A cheap thing in itself is not necessarily bad, the evil creeps in when the cheap imitates the expensive, when mechanical duplication floods us with lifeless approximations of things valuable specifically for a handmade feel and for an appropriateness in a special position."[59]
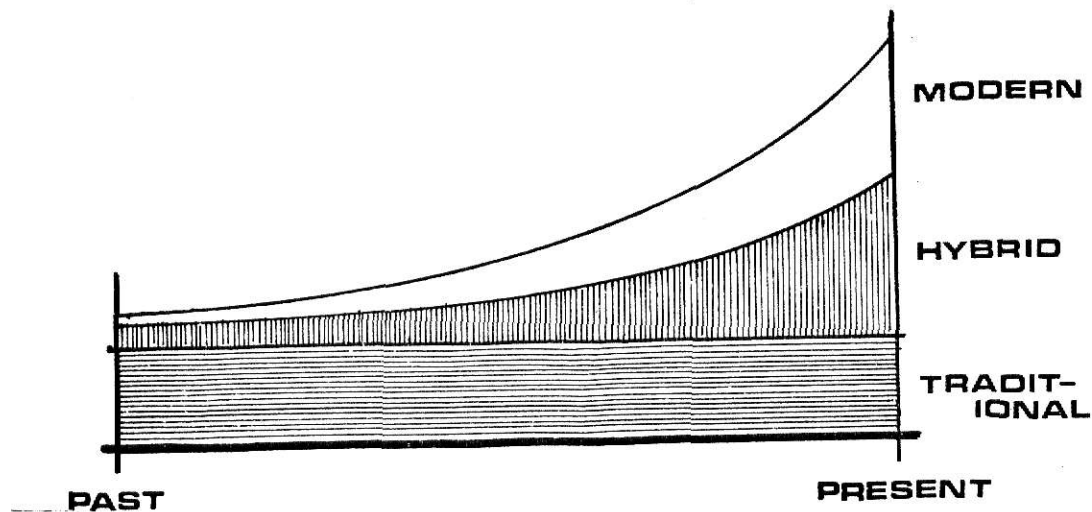
Fig. 4 Total architectural activity.

MODERN FORM AND STYLE

The essence of form and style is the major cohesive factor which

draws the architecture of a period together. Modern architecture is groping

in the darkness for solutions to significant and complex problems. "Modern

architecture now contains a bewildering variety of distinct styles, not

to mention the various frivolous decorative fashions that have come and gone

since the modern Gothic of the adolescent skyscrapers. All this confusion

in defiance of the early wish to create a style-free era is not, however,

entirely without pattern."[60] Too often, we have attempted without success,

to modify solutions of the past to meet the requirements of contemporary

problems. Attempts at solutions which would have had significant effect upon

this period were made by engineers when architecture was searching for a form

and style. "They were reminiscent of the kinds of sweeping curves seen on

graphs, stress diagrams glimpsed over an engineer's shoulders and usually they demonstrated in clear sign language some structural principle that was new to building though often known well enough to engineers."[61] However this concept was criticized by Sir Kenneth Clark: "This complete lack of meaning that symbolic, spiritual storytelling embellishment has for the liberated man of today."[62] But, "The desire to repeat a good standard form (from the past) to be a function of society (the present) that was true before the impact of industrialization".[63] As you can see, this search for a form and style is a serious problem of architecture: "The architects who tried to speak a language of their own, even if they used the grammar and vocabulary of the past..."[64]

During the second industrial period and to a lesser degree in the present, architects have been attempting to display personal solutions to the problems of form and style in modern architecture. Many times the attempts were stifled by the same society which modern architecture attempted to reflect. "For this reason those concerned did not waste much time demonstrating the excellence of the new principle with theoretical discussions and projects, but preferred to seek out every opportunity of showing that these principles could be applied successfully to concreter problems. The decisive argument was in fact that of experiment, people needed to be persuaded that the new architecture worked better than the old."[65]

SOCIALIZATION
    a. public demands
    b. clinging to old styles

Socialization is considered to be a fundamental cause of our problems, since it affects every aspect of our lives. The major problem is society's incapacity to determine the way it wants to live. "Now, is the moment to ask ourselves if we can define our ideas for a better way of living. Only if we really know how we want to live, and what our ideals are, can we

find answers to our many problems, because only then, shall we know what
our targets ought to be."[66] The hectic urbanization, the desire of
society to retain pre-war standards of living and growth have all been
affected by socialization, if architects could understand society's
changes. This could be an insight into the solution of the many problems
of socialization.

There are many other situations that accompany the major problems
of socialization that the architect must deal with: "... I saw that the
demands on the flexibility of human nature during the last generation have
been indeed all too sweeping. Constant changes in all fields of activities--
material as well as spiritual--natural human inertia could not keep pace."[67]
We sense that with increased socialization we are in a period of disorder
because of the change of stress from human needs to consideration of
economical and industrial requirements, which is reflected in the haphazard
appearance of our cities and towns. "The confined dwelling is also losing
its suitability for social intercourse and intellectual inspiration is sought
outside the family circle..."[68] Humanity is being influenced by these
upheavals in socialization. Are these the results of society's values or
uncontrolled events of the contemporary world? What does society desire in
the age of transition? "Our living, our transportation, our communication,
are new; but we cling to or are caught in old houses, inefficient, stylistically
smelling of the past."[69] and, "Because of the new architecture is so different,
because in practice so little of it can be seen in any one place, as com-
pared with manifestation of the old..."[70]

Although, with the increase of socialization and the demand upon
housing, public building, etc.:"...existing architects do not design more
than 5 per cent of all buildings created over the world..."[71] and, "Even

this assumption of 2 percent (considered good architecture by the author)
is misleading of what we think of real architectural creation which does not
mean designing buildings but creating urban architectural space by
combining urban architecture space by the combination of all buildings.
This certainly is not accomplished for more than a millionth of our total
architectural creation."[72] The blame should not be placed solely on the
architect, but also upon society. "It will be interesting to see how
the man in the street, faces this tide (socialization). He certainly feels
the need for the services of architect, but also feels the growing problems
which he cannot analyze or grasp."[73] The revolutionary changes which have
occurred in architecture, "... have left us all in a quandry in assisting
man in shaping a position in an urban environment."[74]

"Our society has certainly recognized the essential value
of the scientist for its survival. We are very little
aware, however, of the vital importance of the creative
artists when it comes to controlling and shaping our
environment."

Walter Gropins

TRENDS

According to Webster's Dictionary, the word trend means: 1) a line of
general movement or direction, 2) a prevailing tendency or inclination,
a general movement, a current style of preference or a line of development.
The reasons for trends vary, they may be: 1) possible solutions to problems
2) purely philosophical, 3) results of specific situations. They may be
upward, suggesting a progressive movement, or downward, suggesting a return or
backward movement. Trends may change with time and be either branching or
cyclical in nature. A trend may be completely distinct and separate from
others, or be a part of a group of trends tending in one general direction
but having different emphasis. Finally, they serve as a means of understanding
the reasons for various situations in the world.

COEXISTENCE OF TRENDS

Team approach

There seems to be a trend toward the collaboration of the various prof-
essions of the building industry as a team working toward a common goal.
"Architects in the future will refuse to restrain from a natural urge to take
actual part in a team effort with, the industry to produce buildings and
their parts. The emphasis, I believe, will be more and more on the team."[76]
There exists a desire by the architect to once again reestablish his position
and become an integral part of the building industry. The trend seems
to indicate a complete analysis and evaluation of the architect and a

redevelopment of his role in the future--as a team member. "Today's architect should have a working knowledge of hundreds of materials and dozens of techniques and must try to keep up with the continuous stream of new products and structural methods, or adaptations of old ones, which the engineers and chemist feed to hopeful manufacturers. It is no longer possible for one man to keep the whole glutted bill of fare before his mind's eyes as he plans what material to use."[77] His future role will be to create and coordinate at the highest level of architectural conception and implementation, using the most appropriate methodology and technology available; "...the design of timeless building from such componant parts, and their actual assembly on the site--should be solved in a closely integrated collaboration between him, the engineer and the builder in direct contact with industrial methods and research."[78]

Master Architect

This trend seems to suggest that the architect become a "Master Architect". This implies that the architect should elevate himself once again to a position of awareness and familiarity with every aspect of architecture, the building industry, economics and politics. With the increasing amount of and demand for, data banks and retrieval and processing centers, the possibility of having the necessary information at the touch of a few buttons may provide the architect with this information and thus support this trend. Experience and a basic, but complete, knowledge will be necessary for the implementation of this trend, the data will be provided by computers. "The conclusions are quite simple. In order to play his new role, the architect has to: (a) Resume his traditional role of master, as coordinator of all forces leading to the creation of the building, without limiting himself to

the designing aspects of the creation. (b) Expand his subject in size,
so as not to include any long just simple building but units which will
better serve the new demands of his role; as well as to achieve architectural
synthesis in the broader spaces created in the new type of expanding human
settlements. (c) Enter industry, government and centres of research and
education where new notion about ways of living, the art of living construc-
tion and the needs of production are being developed. In this manner arch-
itectural creation will be influenced at a new level. It is a level with
which the architect is not yet acquainted but one with which he must familiar-
ize himself if he is to achieve his purposes; and (d) proceed to all these
activities in full knowledge that he is the scientist, the technician and the
artist who is responsible for architectural creation. In order to achieve
this he has to gain a much broader education than at the present."[79]

POPULATION TRENDS

Dehumanization of Architecture

There seems to be a trend towards a dehumanization of architecture. The
scale by which buildings, especially high-rise and multi-story buildings,
etc., are presently built, seems to be unrelated to human scale. There is
greatly reduced emphasis on detail and small self-contained units. Although
modular components may imply or indicate a relationship to the human scale, the
over-all mass of the building form completely overwhelms the human scale. The
scale of modern architecture is technologically materially oriented, to meet
the standardization of modular component parts which were developed according
to material and not human specifications. "Because of the change in the dis-
tribution of open space relationship to buildings, man has lost his normal
relationship to architecture. Our buildings no longer directly relate to

man..."[80] The change of scale suggests a change of emphasis and a change of existing and contemporary symbols to reflect the new technology and science of our era. "The church is no longer the tallest building in the city, and the same applies to all our monumental buildings. Thus the direct influence exerted by these buildings on the people is declining, while at the same time their very function as symbols is itself diminishing in importance because they have lost their significance in the scale of the city."[81]

Human Design

There seems to be a strong trend towards human design. Human design has been a factor throughout the history of architecture, but with varying degrees of emphasis. During the era of industrialization that we have just passed, people were not major factors in design. There seems to be a serious objection to this design process, as a result, there has been a reversal of thought in this matter. "The realistic architect in the meantime must recognize that a human being is not simply a lump of flesh to be kept dry at a temperature range between sixty-eight and seventy-five degrees."[82] This trend seeks a complete consideration of the physical, mental and spiritual aspects of humanity:" ...showing the ever increasing scope of sociophysical design. In addition, it attempts to use architectometrics to study selected problem areas which require immediate attention to allow more extensive and more successful creation of man's environment and solutions of the pressing socioeconomic problems."[83] Modern technology and science have developed many revealing theories about the human psyche and its actions and attitudes, which have disproved a number of established concepts. "Furthermore behavioral science research has in recent years discovered the extent

of the effect of the environment upon man."[84] With the increased

information and desire to research and reflect these theories in design

the trend toward human design is a strong trend for the future. "To under-

stand these requirements fully the architect must also enjoy a comprehensive

understanding of the human material, not just the practical and physiological

sides of it, but in psychological emotions and sentimental sides as well.

Only with such understanding will he be able to design in positive and complete

functionalism, as nature does, and thus create an intellectually and

scientifically pure architecture."[85]

Architecture and Design

There seems to be a trend towards a total involvement of the architect

with his design--human relationship. This suggests a return of the arch-

itect's position from above and apart from people and society, to a position

equal to, and providing a professional service to, everyone. "It seems

certain that the new human, economic architecture is going to be formalized

at the top of the human cone (heiarchial system), but it will prove successful

only if the ideas coming from the top are reflected to the base and then

reflect upwards again."[86] The architect must understand and relate to

society and become familiar with the physical and mental requirements of

the people. The increase in interest in the arts, human behavior and reac-

tion to our over-mechanized world have given additional impetus to this trend.

"It is high time for us to recognize that in this epoch of transition, our

goal cannot be to create architecture in the abstract, but to dedicate our

architectural creation to the service of the people."[87]

Human Psychology

There seems to be a trend toward human psychology research and its input into architectural design. The increased emphasis of designing for man and increased research into the human psyche has caused a strong trend toward human psychology. There has been a great deal of work done in the area with significant results. These initial problems have disproven a number of established behavioral concepts. "Therefore, the process of development and education of the individual must proceed side by side with architectural research in individual and group psychology if the delicate balance between the mutual affect of structured environment and man is to be approached."[88] The significant results of these initial studies have suggested answers to the intricate problems of a complex modern society. "The kinetic sequence of man's spatial experience is a never ending process throughout his life, and the sensations he encounters during his travels through the complex modern society. "The kinetic sequences of man's spatial experience is a never ending process throughout his life, and the sensations he encounters during his travels through the complex heirarchy of spatial routes, departure, transfer, and destination modes form the total of his personal immediate environment."[89] The desire to implement these new concepts of human psychology is increasing, paralleling that of the designer of the industrial age to show the possibilities of the new technology in actual building forms.

Pollution Design

There seems to be a continuing trend towards serious consideration of pollution in architectural design. Pollution is a problem, especially in an age of increasing population and industrialization. It is reflected in a

trend toward adequately solving these growing problems in design, particularly.
in understanding the effects pollutants have upon man's mental and physical
health, well-being and cultural development. "Yet, the present day dis-
truction of natural and human resources makes it apparent that our efforts
are directed more at increasing the size and scale of spaces along functional
lines of a bygone era than in a concentrated attack on primary sociophysical
problems."[90]

The demands of pollution control on architecture are not left only
to the discretion of the designer but also to strict requirements and regulations
reflected in local, state and federal laws. These standards may vary according
to economic and social conditions of the period, as in the case of federal
pollution standards being relaxed due to the energy crisis of 1974 in the
United States.

ECONOMIC DEVELOPMENT TRENDS

Rehabilitation of Communities

There seems to be a trend towards the rehabilitation of basic communities,
with a major emphasis on making them personalized and enjoyable to live in.
Developments of suburbs and other residential communities are naturally con-
sidered very desirable by a large number of people who wish to 'set ones roots',
but due to depersonalized design character, these communities have become
quite unattractive. With the realization of the inadequacies of various com-
munities, better and better designs and facilities have been developed in
attempts to meet these demands. "Well planned community rehabilitation seems
to call first for drastic stimulate interest and responsiblity on the part
of every citizen by letting him participate actively in local affairs."[91]
This is continuous and progressive trend which must constantly be revised
to reflect the prevailing desires and needs of the people.

The dehumanization of living conditions in cities, the invention of

modern modes of communication and transportation have created a desire

for the rehabilitation and creation of 'human' residential communities.

The forms of communities may change in the future but the basic objectives

toward rehibilitation of basic communities, to suit human needs will not,

and makes this trend very desirable.

Leisure Time

This trend is a result of the mechanized age in which we live: a trend

toward more leisure time and the proper utilization of it. With the advent

of modern machinery and newer methods and techniques, man in (present day)

society has been given more leisure time; personal time, that can be used for

'recreation'. "We only know that increasingly now that the problems of nobly

utilizing leisure time becomes all-important."[92] The unique situation

created by additional leisure time, has been an all encompassing development,

where all classes within the population benefited. Unlike the past,

leisure time was available only to the rich.

The second implication of this trend is that leisure time will be util-

ized for the development of the arts of the period. This, in turn, suggests

an increase in appreciation of and awareness to, our environment that has

resulted from the opportunity for leisure time. "This matter of leisure is

of the greatest importance because of its bearing upon appreciation of art

and the development of culture generally."[93] Living standards and desires

may change significantly toward the use of leisure time in the arts.

"Artistic sensitivity may not arise from leisure but it can only find

expression when time permits.....From the ultimate point of view, increased

leisure is likely to benefit the arts rather than otherwise and make
for an artistic civilization."[94]

ARCHITECTURAL RESEARCH TRENDS

Data Collection, Processing and Retrieval Centers

A significant trend that has roots in the present is the trend towards
the development of data collection, processing and retrieval centers. In
our quite technological and scientific age, the loss or improper use of time
means a loss of monetary gain. Therefore, speed and availability are of
great importance in efficiently reseraching and obtaining necessary information
without undue duplication of work. In economic and practical terms,
money can be saved by this method and basic information can be obtained, that
is standardized and free from individual retrieval biases. "Through modern
environmental information retrieval centers, this sea of knowledge can be
made available quickly and precisely at the time that it is required to all
concerned with the improvement of man's environment."[95] The possibilities
of universal inputs of data, and the use of scientific empirical theories
can lead to new dicoveries. As a result information obtainable from a central
retrieval centers is unimaginable.

The trend toward data collection, processing centers and retrieval
centers is an obvious outgrowth of the enormous amount of information and
technology that can be filed and retrieved efficiently:"...the increasingly
rapid growth in the bulk and complexity of knowledge will evermore prevent
the presentation of anything approaching a completely homogeneous philosophy
after this model".[96] The possibilities of such a system could revolutionize
the whole architectural process. "Furthermore, this information could thus

be made available in the exact form in which it is needed, independent

of time and place. The development of regional, national and international

environmental data processing centers is without doubt a number one

priority of environmental science and architecture."[97]

New Language

This trend is towards a new language in modern architecture. The arch-

itectural language and grammar of the past is not appropriate to meet the

requirements of the modern architect, which reflects the ever increasing

speed in which our environment is moving. "Every language has its grammar,

its body of words, its rules for combining these words. These rules must be

understood and applied by the people who use the language. Just a truly

architectural language has its grammar, its elements and a method for their

combination, useful and understood by all."[98]

The vocabulary of the past has a number of basic elements that apply to

our age but new elements and concepts should be added to develop complete

architectural language. "Once the basic language is developed it would cause

the unification and understanding of all periods--the juxtaposition of

buildings and landscape, the isolation and emphasis of shapes that are

beautiful in themselves, and the aesthetic use of harmony and contrast,

expressed in terms of shapes, color and texture."[99]

INDUSTRIAL AND TECHNOLOGICAL TRENDS

Suburbia

A movements towards suburbia is in response to the appearance of tech-

nological, mechanical, sociological and economic situations. "In America

the situation was completely different; ever since the appearance of the

motor-car the decentralization and dispersal of residents into the suburbs surrounding the city had been going on, while means of distance communication had brought part of the recreation functions, which formerly took place in communal centres into people's houses."[100] The positive aspect of this trend; the dispersal of the populus, had serious consequences on the people and the environment. Suburbia proved to be a reaction to technological advance, the deterioration of large cities, and a response to the 'care-free' life offered in the rural areas. Suburbia developed at an alarming rate. Its original goals and objectives were not followed in the race to fulfill the demands of homes in suburbia. Presently the trend once again towards suburbia is increasing with the revitalization of the original concepts and designs with stronger emphasis on human consideration. This trend will continue to develop towards the future if periodic review of major objectives are made with alterations made to suit the conditions and desires of the period.

Man vs. Machine

A trend of architecture is towards a new relationship between man and machine--a negative trend. It is basically a reaction to the complete domin- ence technology and mechanization has had over society during the industrial revolution until the present. "The sin would be to let the machine control us, we must rise above it, control it. We must make it so easy so efficient so lifeless, that we use beyond it to enjoy the serenities, those spiritual contacts, these pleasures of quietness, that enriched life before the machine era."[101] This trend suggests an awakening of society and architecture to the negative effects that the industrial age has had upon us. There must be a realization of the need to seek other methods or techniques to discover solutions to problems without having economic and financial values, as the

prevailing source and returns. This trend also suggests that there be additional stress placed on individual expressions. The forces which dominate an age need not find complete expression in the architecture. The trend is towards spiritual or human, instead, and an attempt to refrain from the use of modern technology and mechanization.

Man and Machine

Although this trend may seem quite closely related to others, it has a distinctive quality of suggesting an equal relationship between man and machinery, which is quite unique. This trend is towards harmony. This trend indicates that if a close relationship can be developed between man and machine, there will be beneficial results in improving each, there is no need for either to dominate one another. "...must realize that there is opinion against opinion, that nowhere else are we supported by a great body of learned men, as herein this matter of faith in inspiration and beauty growing directly out of machinery."[102] In this trend, both man and machinery work together on an equal level towards a common goal. "With the development of an architecture more precise in character and in harmony with machine forms..."[103]

MODERN FORM AND STYLE TRENDS

Realism

There seems to be a trend towards realism in modern architecture. This trend has been in existence during the last two phases of the twentieth-century architecture. There should be a clear understanding of this trend as a method of expressing meaning, values, and consequences. "Throughout the exercise, the realist architect must search his soul and his design at every turn, asking what is realistic and what is unrealistic, what is done only for

appearances or by habit or to please the inadequately enlightened taste of his client or the public, what can be eliminated."[104]   This trend should lead architecture toward the projection of life itself. Realism suggests an intimate knowledge of biological, social, technical and artistic problems. The new architecture should look further, for the essence of life. "I believe that our conception of the new architecture is nowhere in position to that of tradition; since respect for tradition does not imply a stable pre-occupation with bygone forms of arts, but is and always has been a struggle to get at what is at the back of all technique, which is forever seeking visible expression with its help." [105]

Expression

There seems to be a trend towards a new expression of modern architecture. There is a desire to establish a tradition for architecture of the present, to reflect the forces, spiritual and material, which demonstrate our transitional age. This expression suggests a complete rejection of the expression of the past in style and especially past technology since the modern architecture of this period will reflect the highest of standards ever developed. "...when a building is built in accordance with its purpose, and when it is physically as well as spiritually in harmony with it as a whole and in all its parts... new purpose will have a modifying influence on architecture...New inventions are necessary to realize its aims."[106]

The architects of today should be very objective in their work and develop a standard which would lead towards the establishment of a new trad- ition and an acceptable architectural language. "All architectural work would be based on established principles and on the special requirements of each building and the materials and structure employed."[107]

Ideally, our endeavors should be to find a new expression that would promote a creative state of mind in those taking part and would finally lead to a new attitude or architecture.

Fusion of the Arts and Architecture

Fusion of the arts and architecture is a reversal of an established trend. This trend suggests a new direction for an apparently misused and misunderstood trend. The loss of direction and purpose, of the present, is apparent everywhere in our environment. "None of our magnificient practical new tools can turn 'Main Street' into a beautiful pattern for living unless they are put into creative hands, unless a changing attitude of mind, will bring about a fusion between science and art."[108] This trend suggests a closer relationship between the architect and the art, for each may contribute towards a mutual and better solution, than if they were to solve the problem seperately. "In the struggle between the creative work of the artist and the theories of the engineer, which distinguishes modern architecture, is reflected in the problems of reconciling human aims to technical requirements, a problem characteristic of our entire age. Modern architecture has given proof that new values can be found by bodily grasping our technical resources and applying them with perception."[109]

SOCIALIZATION TRENDS

Improving the Social Environment

There seems to be a trend toward becoming very concerned with the improvement of the social environment. There have been attempts at improving the present environment, through various psychological and physiological means, but without satisfactory results. The age of transition and speed

at which we are moving, is the basic problem area. Our traditional social
environment must be updated to meet this drastic change: "The imbalance, dis-
parities and diseconomies of the social environment must become the environ-
mental architect's prime concern if the goal of architecture--the process
of optimization of environmental opportunities for all--is to be even part-
ially achieved."[110] And, "the architectural profession by focusing
greater attention on its responsibilities for the social environment, would
assist in erradicating this dichotomy which exists between capacity and res-
ponsibility."[111]

Cultural Ecology

This trend of cultural ecology in architecture is a modern trend that
has its origin in the present. Unlike the trends for a return to nature and
towards a balance between man and technology, this trend is derived from the
vital environment that we live in. "Cultural ecology, on the other hand,
recognizes man's relationship to basic dependence upon his cultural environ-
ment--the man shaped spaces of his natural surroundings."[112] It requires
a person who has a 'composite mind', a process of continuous cross-
checking and balancing objectives toward a solution. Although cultural
ecology is quite idealistic and philosophical, it suggests a means of develop-
ing a solution from and for our existing environment. "To live the open life,
with mental honesty, fresh air in ones lungs, sunlight for tonic, color for
enrichment, respecting only the barriers of mutual consideration; this may
become with us a national ideal, and even seems to be a tide that is washing
at all the shores of the world."[113] This trend suggests the desire to
find spiritual uplifting by the development and acceptance of a solution
that is directly related to the environment and individuals that it is

designed for.

Nomadicism

A nomadic trend. This nomadic trend was primarily instigated by a
mass of vacillating people in pursuit of the dollar. "The industrialization
implies, even demands, that people should be mobile between area and area,
town and town, neighborhood and neighborhood, so that the working population
can be adjusted to the location of its employment."[114] With the decay
of cities, over population of suburbia, modern science and technology
provided means of mobilization, nomadicism became a strong trend in society.
"With almost complete mobilization our people being an established fact and
the long maligned suburban phenomena became illustrative of the spirit of
the time."[115]

Individual expression and response to the environment became the spirit
of the younger generation. Individuality and the 'free spirit' was reflected
in the nomadic desire to travel, by the younger generation. This nomadic
group increased significantly with changes in the economy and society. "The
rented apartment is replacing the ancestral family home, attachment to the
home town crisis, and a new era of nomad individuals begins, fostered by the
rapid development of mechanized transportation."[116] The conditions of
the present forced nomadicism upon society and people were able to accept
this form of life.

Dis-united Family Unit

A trend away from the strong family unit. Man must adapt to the ever
changing environment. Strong family ties become economically infeasible and
the 'free spirit' movement by the younger generation were major consequences
that resulted in the decline of the family unit. "With the spread of the

rights of the individual, the family progressively surrenders its function to the state and thus the importance of the family unit in the sociological picture gradually decreases."[117] The importance of the individual and his independent rights overshadows that of the family as a sovereign unit. And coupled with the evolutionary process this new 'spirit' changed the structure and significance of the family.

As a direct result of the new 'spirit', woman, the pillar of the family unit has begun to reshape her position within the traditional family which further tended to modify the basic family unit. "One further phenomena has had a decisive effect on the structure of the modern family (and the change of the family unit). As the family era was ushered in by the rise of man, so the individual era is characterized by the awakening and progressive emmancipation of woman."[118]

OTHER TRENDS

Education

There seems to be a trend in education towards adapting the curriculum in education to reflect the demands of the professional world. There seems to be a desire to include reality into the curriculum and orient projects and attitudes, good or bad, towards real and actual problems. "To bridge the gap, there is a need for more than mere random attempts to initiate new schools of architecture and of environmental studies, for more than mere reorganization of the existing school's philosophies and curriculum which is, of course, needed and much more than the pre-professional development programs valiant and to a large degree successful effort to provide the profession with coordinated and systematic mid-career educational opportunities."[119]

This education should be supplimented with the social and architectural values and realities of the period in which they find themselves. The development of an awareness and sensitivity to trends is another significant direction of education. "Furthermore, we need programs and plans for the training of such architects, who should be looked upon not as a species of meteorites who will dazzle humanity for a brief moment with their designs, but as the pioneers who, after proper education and pain taking effort, will one day produce for us the better world we seek in architecture.

Universality

A trend toward universality in architecture has been established due to the modern technocracy that is characteristic of our times. Standardization of materials, modular sizes, economic and financial considerations, all suggest a type of universality in architecture. "We are gradually moving not only towards similar solutions but towards solutions which are themselves basic to humanity and not bound to a particular locality."[120] A personal desire towards humanitarian goals that surpass race, creed and beliefs are implied componants of universal architecture. "In order to achieve these ends, architecture has to be seen as a discipline meant to service everyone, to house everyone, to create the proper habitat for every citizen of the world."[121] This trend of universality can only be useful if the solutions are satisfactory to the specific needs of a certain people, suggesting an 'average person concept'. "No architecture is capable of universal application, unless it can be accepted by most people as a solution to their needs, and a satisfaction of their hunger for visual delight."[122]

Re-design of Cities

There seems to be a prevailing trend for the re-design of large cities

both in physical structure and composition. The technological and mechanical

advances of the past and present age have caused the complete alteration of

the significance of the center of the city, it was once the center of business

and finance, presently it is mainly housing for the poor and disadvantaged.

"The previously clear distinction between the city and the country are in the

process of disappearing; the city, only a few years ago, the center of economic

and cultural life, has become mainly a service facility and home to a large

number of the poor and disadvantaged."[123] There are basically two trends

which seem to be developed by this existing situation, 1) as expressed above,

the re-design and rejuvination of the center of cities towards a completely

functional entity: "Central urban spaces will in the future, contain multiple

functioning megastructures, capable of constant and rapid adaptation to

increasing new needs",[124] and 2) method by which housing can be provided

to the needy and disadvantaged population that live in the present cities:

"The position is serious because it has now become impossible to house any

decently large section of people on the lowest rates of wages without the aid

of subsidy."[125]

TIME

The concept of time must be considered a significant trend, as it sets

the relationship to which other concepts may be judged. This relationship in

time, is established in reference to the period of 'transition' of our age.

The term transition suggests time, and is clearly understood in the complete

context of a statement: "It has been established that our age of transition

is marked by the 'confusion' caused by our rapid rate of change. This trend

is towards a new dimension of time--basically a change of our established

notion of time towards a more rapid phenomena or short period by which

things change. This new dimension of time has marked affects on the main

characteristics in a situation which has so radically altered the framework

in which our architecture is created, we shall see that what has really changed

is our notion of time."[126]   Another example of this time trend and its effect;

"The unprecedent rate of urbanization combined with population explosion,

new sociopolitical systems, expanding technologies and the unprecedented

growth of cities have added a new dimension to the urban structure--the

element of time."[127]   The element of time affects everything in society and

provides the context and frame of reference that must be established in

order to develop an overall understanding of change. "Mechanical means of

movement and communication made time the basic measure, completely altering

the concept of city structure."[128]

TURNING TO NATURE

    A strong trend is that of turning to nature. This trend has a great

deal of appeal to the basic instincts of man; "Turning to nature is not

limited to only physically returning to nature but the desire to find answers

to our complex technological problems in nature. Also to find inspiration

and a standard by which we may judge the forms of styles in architecture

and society. "The first broad category is still the largest and, although

losing on a percentage basis, it is the category which we could call natural

architecture; that is architecture as conceived by the inhabitants and the

natural self taught builders, the masons and the master masons..."[129]

    In our present technological age, the desire to turn to nature is a

trend that may be due to a negative response, by people, to the present technological environment. "There is today an impulse to seek systems and laws in matters of art, and research to this end is by no means wasted, for on turning to nature whence comes our inspiration, we find law and order not always obvious but never the less discoverable. It is the composition of natural forms which determines for us what we shall like or dislike in artificial forms as well as what is appropriate."[130]

This trend implies that a return to nature may have the most satisfying effect on man physically, mentally, and spiritually. "To many people, a certain amount of routine work is essential particularly that of manual nature and many brain workers, for their health sake, find it necessary to mow a lawn or hoe potatoes as a contrast to their normal occupation. There is no evidence that man wishes to dispense entirely with such labors, except where, under unfavorable conditions, he is tempted to sit in the sun and do nothing more arduous than scratch himself."[131]

Freedom and Honesty

There is a strong trend towards complete freedom and honesty in expression. "The importance of a clear and honest expression is one of the main tenets of twentieth-century architecture."[132] The trend towards freedom and honesty of expression is not only manifested in the physical products that are developed by especially in the attitude and philosophy of architects. "Here in lies a serious cause of confusion, for philosophy not only acts as the liason between the various groups of specialized knowledge, but is also the intermediary between reason and intuition."[133] This freedom and honesty is a characteristic of our time. It is in response to the 'confused' situation that architecture and society finds itself in

this age of transition. "Architecture depends on material factors, but it
may transcend them. It may indeed, do this so forcefully that we overlook
all its material dependencies, and think we see a pure creation of free
will."[134]

Rate of Change

There seems to be an over-riding trend that reflects this period of modern
architecture; that of the high rate of change that everyone and everything
in our present environment is going through. "In describing our epoch as one
of transition, we assert that not only architecture but everything is in
transition and that architecture is merely following the broader trend."[135]
This trend has had serious consequences both upon architecture and society. It
is characteristic of our time and must be understood and respected. If this
trend is completely accepted, then we may have made the first step toward an
adequate background and time frame of our time. "All objects and all space gen-
erate a certain degree of stimulus. The individual who is in constant and
immediate communion with his environment responds directly to this continuous
flow of energy which stimulates his total system of sense."[136] Furthermore,
the acceptance of the environment will replace the more static principles
which have characterized architecture of previous eras."[137]

"We may also be forced to seek other solutions which may even
lead to a revolution in our ideas about architects and architecture"[138]

                                        Julian Eugene Kuluski

THE RELATIONSHIP BETWEEN ARCHITECTURE AND SOCIETY

It is clear that the architect as the most qualified in the field of
architecture, has a great responsibility to study contemporary problems of
architecture within a developing society and propose solutions to them.
The architect must study and understand the developing situation around
him, interpret them in terms of architecture, and present his solutions in
the form of building, designs and texts. To clarify the architect's
responsibility, "we must assume either that he is responsibile for leader-
ship in the field of architecture – and its end product, the way of life of
the people – or that he has no responsibility in this field and is merely
following the trends which humanity as a whole imposes on him".[139]

No one, not even the architect, has the right to become a dictator or
on the other hand impose his will on society. The architect cannot sit idly
and simply follow society's developments. The role of the architect is to
forsee the broad trends of contemporary human evolution and try to create the
optimal architecture for the present generation and the generation to come:
"His role is to understand the future, to predict it as far as possible and
to create the best human habitate for the types of people..."[140] It is
the responsibility of the architect to understand the necessity for social-
ization in the society of the present and the future, and to adjust his own
architecture to serve the broader objectives set by humanity for greater
humber of people, and for a better way of life through his architecture and
design.

Thus, there seems to be a strong relationship established between arch-

itecture and society. The architecture must develop an understanding of the
social in order to reflect it in better architecture and design. Socialization
is one of several trends of our epoch that the architect must realize,
decipher and, "...produce the best that can be achieved inside these trends
..."[141] I feel that the socialization trend is the major trend that an
architect must understand in order to develop a truly acceptable architecture
for society. The following is an overview of contemporary sociological
theories which provides the proper insight to society that an architect must
acquire. The contemporary theories expressed by Walter Wallace, editor of
'Sociology Theory' has developed viewpoints into a very understandable form
as to establish a way of explaining the socialization of society.

According to Wallace there are eleven theoretic viewpoints from which
human social phenomena are being investigated. A framework has been developed
for differentiating, as well as interpreting, all eleven viewpoints. This
framework of criteria is based upon means by which the theories complement
each other. This attitude expresses a concept that ideas are true only to
a point, and that no single current viewpoint adequately represents the full
range of sociological interests. The rule of parsimony has an effect in
organization of the theory when a scientific discipline has developed several
theories bearing on the same problem, their number should be reduced by con-
solidating some/or all of them into a single theory expressing their common
and complimentary features.

I am dealing with theories and not laws, but who can set human laws of
sociology if the environment is constantly changing? Scientific use of theories
extend beyond being a passive storehouse of large amounts on information since,
1) theory specifics the factors one should be able to measure before doing
research, and 2) theory serves, after the research is done, as a common
language into which the results may be translated for purposes of

comparison and logical integration with the results of other researches. In an important sense, new scientific theories do not 'refute' the old ones but somehow reconstruct them; even some conversely with the old order of things.

Basic sociological terminology and laws must be understood before a clear relization of the basic eleven theorietic viewpoints and their relationships can be grasped-

1. The definition of 'theory' is any set of symbols that is claimed verifiable to represent and make intelligible specific classes of phenomena and one of more of their relationships.

2. All theories of the class of phenomena called 'social' as either results of antecedent phenomena, or aslogical deductions from higher abstractions, or both.

3. A social phenomenon is always defined in terms of interorgamism behavior relations or is constitued by the regular accompaniment of one organism's behavior by at least one other organism's behavior.

4. The definition of the social falls into two types:

    a) One stresses objective, or overt, or motor, behavior relations

    b) The other stresses subjectively, or covertly, or dispositional, behavior relations.

5. The sociological concept of group refers to a number of people who interact with one another in accord with established patterns.

6. 'Organisms' in question may be defined as humans, temites, bees, bats, etc.

7. Regularity may be defined in relatively simple or complex terms, with more or less statistical rigor and may be set at high or low levels.

8. 'Accompaniment' of one organism's behavior by that of others may be required to be simultaneous, temporally ordered one way or another, or sequence may be irrelevant, it may be demanded that the accompaniment occur at

a fast tempo, or at a slow tempo, etc.

9. There exist behavior relations (i.e. 'social values') as well as objective behavior relations (i.e. 'social interaction'), among individuals.

10. The stress on the observations that theories indicate, of course, allows the scheme to suggest conclusions not only about theories, but also about the design and interpretation of empirical research.

11. A theoretic viewpoint that stresses the imposed type of explaining element is what may be called 'functional imperativism', which suggests that certain classes of events are put forward as universal and inevitable conditions of social phenomena.

12. The elements that are proposed by various sociological theories to explain social phenomena may also be grouped into two broad types-

    a) The first type of explanatory element stresses conditions that are imposed on the social by the given nature of the participants or by the nature of the universe that environs them. From this viewpoint, the social is rather more 'controlled' and 'determined' by these temporally prior and/or logically more primitive conditions.

    b) The second type of explanatory element emphasizes conditions that are generated by the social itself in affecting the participants or the universe that environs them. From this point of view, the social is rather more 'free' and 'self-determinizing'

13. One example of an explanatory element stress condition that is imposed on the social is symbolic inter-actionism, where an essential idea is that social phenomena are continuously emerging from the present interactions of symbols generated in past interaction, and that this emergence is not predictable from imposed conditions.

    Thus Blummer claims - "With the mechanization of self-interaction the human being ceases to be a responding organism whose behavior is a

product of what plays upon him from the outside, the inside, or both. Instead, he acts toward his world, interpreting what confronts him and organizing his actions on the basis of the interpretation.. symbolic interaction involves interpretation or ascertaining the meaning of the actions or remarks of the other person, and definition, or conveying indications to another person as to how he is to act. Human association consists of a process of such interpretation and definition. 14. And example of the socially generated type of explaining element is found in Ogburn's technologism. Ogburn notes that the inter-relationship of sociological situations give rise to invention and discovery, and to their use by society. The other is on the effects upon society of the uses of invention and discovery. Ogburn's emphasis, of course, is on the latter.

"How technology changes cause social changes depends on an understanding of the nature of causation, and is seen to be a process. Basic to the process is the fact that a technological influence does not always stop at its first direct effect upon users and producers but often has a succession of derivative effects which follow one another like the links of a chain. These are not often recognized, because an effect is generally not the result of some cause alone but of several converging causes. Also, since the impact of an invention may have several effects dispersed in different directions the process is more like a network than a chain."

Eleven contemporary sociological theories will follow. Each viewpoint will discuss, to some detail, its relationship to others. The framework for differentiation as well as integration is also explained. Each theory will have basically two major sections in the body of its composition; Part 1 -

a personal explanation of the theoretic viewpoint and its relationship to
the others and, Part 2 - a detailed sociological explanation of the theoretic
viewpoint and its relationship to the others. This method was incorporated
to show how the sociological trends and information may be expressed in
terms applicable to architecture.

Ecologism

Part 1 -

In an attempt to understand the socialization of scoiety, the ecological
viewpoint is a significant theory, due to its close relationship to human
ecology. Ecologism is a subsection of human ecology since it is only concerned
with the object behavior relation (social interaction) that is 'caused' by or
'affected' by the non-human environment (population, environment, technology
and the ecological comples). This viewpoint stresses that non-human elements
'impose' and 'control' social interaction. In this case the individual may
or may not be part of a group, as the environment and its effects are constant
throughout. Ecologism is only concerned with the non-human element and its
functional interaction and not psychological or moral issues. With this
viewpoint, scientific data can easily be collected and interpreted concerning
social interaction caused by non-human elements. This information in turn
will lead to a better understanding of the socialization of society by the
architect.

Part 2 -

"The ecologistic viewpoint typically defines the social in terms of
objective behavior relations, and seeks to explain it by referring to
phenomena imposed on the social through characteristics of the participant's
non-human environment."[142]

Clearly, ecologism's principle class of explanatory events is imposed on the social, rather than generated by the social, and operates via those characteristics of participants' environments that are primarily non-human. For example, Hawley says, "The community...is in the nature of a collective response to the habitat, it constitutes the adjustment of organism to environment. Culture is nothing more than a way of referring to the prevailing techniques by which a population maintains itself in its habitat."[143]

Quinn defines human ecology," ...as the study (of) the relations of man to man as influenced by limited supplies of environmental resources... No socialogical study can be called truly ecological unless it uses certain aspects of environmental influence as principles of interpretation."[144]

At the same time that they emphasize imposed factors as explanantes, ecologists usually argue for socially generated factors as well. Along these lines, Hawley says: "Human ecology deals with the central problem of sociology, that is, the development and organization of the community. Human ecology, however, does not pretend to exhaust that problem; The human community is more than just an organization of functional relationships and to that extent they are limitations to the scope of human ecology. Man's collective life involves, in greater or lesser degree, a psychological and a moral as well, a functional interaction."[145]

The basic composition of human ecology are four main concepts; 1) population, 2) environment, 3) technology, and 4) organization called 'ecological complex'. Human ecology emerges and remains a primary sociological concern. The development and organization of the community is the central problem of sociology, is the major objective of human ecology. However, it does not provide all of the solutions to this problem. The human community is more complex than just being a simple organization of functional relationships and to that extent there are limitations to the scope of human ecology.

Man's collective life involves a psychological and moral as well as a functional integration. But these should be regarded as complimentary aspects of the same thing rather than separate phases or segments of the community. Sustenance activities and relationships are inextricably interwoven with sentiment, value systems, and other idealogical constructs. Human ecology does not explain all of the ramifications of human interrelationships, though it serves as a source of hypothesis concerning certain aspects of the community. The question of how men relate themsleves to one another to live in their habitats."[146]

The 'ecological complex' includes population and technology as well as natural environment. There are disclaimers that cannot discard communications with symbols, custom, and the artificial or cultural transformations man makes in his environment and treat the residue as the ecology of the species. Ecologism seems typically to provide such factors secondary theoretical status. Thus the ecological, economic, political and moral orders seem to arrange themselves in a kind of hiearchy. It is suggested that a form of hiearchy has ecologism at its base.

Demographism

Part 1 -

The demographic viewpoint suggests that object behavior relations (social interactions) are 'controlled' by, or 'determined' by, elements of the human environment (urbanization, economics, productivity, political system, educational system, etc). This viewpoint is similar to ecologism, except for the differing controlling element. Demographism deals with population variation and change, which in turn, affects the extent of social phenomena, social values and social interaction. It is primarily concerned with the social values and social interaction 'caused' by or 'determined' by the human environment. Again, this pattern of individual or group action can easily

be determined through scientific data collection and may be translated
to become relevant information for the architect.

Part 2 –

"Demographism in sociology typically defines the social in terms of
objective behavior relation, and seeks to explain it by referring to
phenomena imposed on the social through characteristic of the participants'
human environment."[147]

Hauser and Duncan distinguish the difference between the definitions
of the term 'demography'. The stress for this discussion is on the second
broad definition. Demographic analysis is the study of components of
population variation and change. Population studies are concerned with
population variables, relationships between population changes and other
variables – social, economic, political, biological, genetic, geographical,
and the like. Thus demography is in a narrow sense, synonymous with
'demographic analysis' but, in a broad sense, encompasses both 'demographic
analysis' and 'population studies'.

Demographism contributes insight to sociology in two distinctinve and
related explanations of the social in claiming that social phenomena are
influenced, and therefore explained, 1) by the number of participants and
2) by the extent to which dead or emigrated participants are replaced in
them. This explains the 'numbers' proposition which is based upon the
definitional statement that social phenomena involves at least two participants
by adding the theoretic predictions that these phenomena will vary in
systematic ways according to the exact number that are involved, whatever
that number may be. The 'replacement' proposition, which is based upon the
assumption that social phenomena must involve living-and-dying things, adds
the theoretic prediction that the persistence of a given social phenomena
beyond the life-span of its initiators depends on participant replacement.

The extend of this replacement will cause fluctuation in the social phenomena.

An important tradition in sociology is this proposition that number of participants will affect the nature of social phenomena, i.e. number of social participants tends to increase more rapidly than food supply and therefore prevents a rise in the level of living. It seems clear that demographism views the requirements of numbers and repacement as imposed upon the society by logical definition and by reproduction and mortality of organisms.

Demographism also explains the social in terms of objective behavior relations as realized in urbanization, economic productivity, political systems, educational systems, etc. [148]

Materialism

Part 1 -

Materialism completes the basic theoretic viewpoints concerning the understanding of the socialization of society through rational terms. The materialistic viewpoint suggests that object behavior relations (social inter-action) are 'controlled' by or 'determined' by physiological characteristics of the individual. Physiological characteristics are those necessary life processes of the individual; eating, drinking, a habitat, clothing and others, which relate very closely to the interaction necessary to satisfy these basic needs. This is basically the essence of materialism. These activities can then be scientifically studied and interpreted and the results may be important to the architect interested in understanding the socialization process of society. The basic interrelationship of the three viewpoints; ecologism, demographism and materialism, will provide a solid foundation to understanding the social in objective rational terms.

Part 2 -

"The materialistic viewpoint typically defines the social in terms of objective behavior relations and seeks to explain it by referring to phenomena imposed on the social through the physiological characteristics of the participants themselves."[149]

Marx and Engels express the social in these terms - "The first premise, that men must be in a position to live before they can affect society and the environment. Life cannot exist first without the basic needs, eating, drinking, a habitation, clothing and others. The first act is the production of the means to satisfy these needs, the production of material life itself. The social structure and the state are continually evolving out of the life process of defined individuals, but of individuals as they really are; effective, produce materially, and are active under definite material limits, presupositions, and conditions independent of their will.

With this understanding there is a realization that ecologism, demographism and materialism define the social in objective rational terms, whereas ecologism emphasizes man's non-human environment and demographism emphasizes man's human environment. Materialism emphasizes the physiological nature and needs of individual man."[150]

The individual is part of the group; the relationship between group and environment is never a one-way matter. The group is not passive before the environment: it reacts and it even defines what the environment shall be. Its purposes make different aspects of the environment important. Mutual dependence between the work done in a group and the motives for work between the division of labor and the scheme of interaction, so far as these relationships meet the conditions that the group survives the environment this is understood as the external system. Materialism is concerned with physiological aspects of the social which relate only to the general propostion of society."[151]

<u>Psychologism</u>

Part 1 -

It should be stressed again, that the overall theory, of the eleven

theoretical viewpoints, is that they all work simultaneously in society. The

psychologistic viewpoint suggests that object behavior relations (social inter-

action) are 'caused' by or 'determined' by psychological characteristics

(interaction, norms, sentiment) of the participants themselves. The social

interaction suggests the need for interorganism relationships to occur before

the motives of individual action can be determined. Although the psychological

characteristics are innate to the individual there must be interaction before

they can de displayed. These basic motives are stimulated by activities, tools

and techniques in the environment. In this manner, we can observe the

socialization process through the interaction of individuals, and their

actions and attitudes as they are caused by environmental elements.

Part 2 -

"The psychologistic viewpoint typically defines the social in terms

of objective behavior relations and seeks to explain it by referring to

phenomena imposed on the social through the psychological characteristics of

the participants themselves."[152]

Social behavior appears to be an effort to show exactly how imposed

psychological motives come to be the prime explanation of the group and

of all other variables in the external and internal social systems, including

activity, interaction, norms, and sentiments generated by the social. [153]

The trouble with civilized men is that they are continually questioning

and changing the institutions which they have created for themselves. When

a new institution has driven another behavior underground, men can express

a behavior that could never have surfaced before or after this transition

period. At times these transitions have provided the opportunity for

honest straightforward social behavior. If man is to feel at home in the world of his making, he must come to understand better what it is his institutions are to be considered with the better means in just those ways science has committed itself to. This is the only reason for studying the familiar chaos that is elementary social behavior - psychologism.[154]

Human distinctly forecasts the psychologistic theme which social behavior is to develop more fully. A group needs motives for cooperation, a set of activities to carry out, and a scheme of interaction among its members. All groups, whether part of a complex society or a complete seperate group require motives, activities and a scheme of interaction. There are basic drives which are, at one and the same time, biological drives, which may never have surfaced, unless they are satisfied by the cooperative activities of men and women, the form of the activities being determined by the environment and the available tools and techniques. [155]

Technologism

Part 1 -

The technologistic viewpoint is the first of a group of viewpoints which suggest that elements proposed by the specific viewpoint explain social phenomena as 'generated' by the social instead of being 'imposed' on the social by the given nature of the individual or the environment. Technologism suggests that object behavior relations (social interaction) are 'free' or 'self-determining' in responding to the technological characteristics (non-human) of the environment. Technologism suggests that the changing technology of the individual's environment is the criteria to which social interaction responds. The technology of the environment in this viewpoint is non-human elements, i.e. machines. We are able to observe the socialization of society through the interaction of individuals caused by the participant's external non-human environment.

Part 2 -

"The technologistic viewpoint typically defines the social in terms of objective behavior relations and seeks to explain it by referring to the phenomena that are socially generated through technologically augemented characteristic of the participants environments." [156]

Ogburn, originator of the 'cultural lag' theory, expresses a viewpoint that focus on technology or 'material culture'. The material culture from; bone is added to the use of stone and bronze is added to the use of copper, etc., force immediate changes in some parts of the culture but may have slowly developing effects on such parts as social organization and customs; they lag behind the material culture changes. However, there must be a distinction between socially created material culture and the natural material conditions of life. Material culture is replacing, to a certain extent the old significance of geographic environment. There is this distinction; the material culture today changes frequently, whereas the changes in geographic conditions are slow. An example - the introduction of steam makes changes in home production, the growth of cities, new causes of war, but there is no reason to think that steam was adopted in order to make an adjustment to some part of the non-material culture. Cottrell argues that technology determines the energy that is available to man and limits what he can and will do. He believes that technologist theories, the relationship between energy converters and the fuel men use and the kind of societies they build share a common definition of the social through reference to sociologically generated and non-human phenomena (i.e. machines) that operate on participants' external environment." [157]

Functional Structuralism

Part 1 -

The structuralist viewpoints; function, exchange and conflict, are all 'generated' by the social, meaning that each is 'free' of self-determining according to the participant's environment. They are all very closely inter-related, and each depends on the other for its explanation and definition. Functional structuralism suggests that objective behavior relations (social interaction) are 'generated' by the characteristics of the individual's environment. It should be emphasized that we are observing any and all social interactions, unlike exchange and conflict structuralism where specific types are observed. We must understand that in functional structuralism, we are viewing the consequences of multiple interactions, and the patterns which they form in a single direction only. This information may prove informative to the architect towards understanding the socialization of society.

Part 2 -

"The structuralist viewpoints in general define the social in terms of objective behavior relation and seek to explain it by referring to phenomena that are socially generated through characteristics of the participants environments. In the structuralisms, these latter characteristics are constituted by the behavior of social participants occupying established positions relative to each other. Three related structuralist viewpoints may be distinguished; functional, structuralism, exchange structuralism and conflict structuralism."[158]

Functional structuralism seeks to explain in the context of the other two structuralism, exchange and conflict, which will be explained in the following sections. Functional structuralism suggests two linkages, on

the other structuralist viewpoints and to functional impervision, again
explained in detail later. A general understanding will be especially
strategic for an understanding of all these viewpoints in regards to
sociology. An explanation between functional structuralism and functional
imperativism will lead to an understanding of functional structuralism.
These terms are meant to distinguish between types called structural-function-
alsim and the distinction lies essentially on the observation that one
stresses the explanatory powers of imposed imperatives. It should also be
emphasized that the two types of structural functionalism have in common
their view of the consequences of one phenomenon as the cause of other,
subsequent phenomena.[159]

Exchange Structuralism

Part 1 -

The exchange structuralist viewpoint involves the exchange of behavior
in group interaction. This viewpoint suggests that there are a number of
people who interact with each other forming patterns, which indicate both
beneficial and harmful behavior to individuals during interaction. It is
noted that the pattern or network of social interactions indicate the
process of social association between individuals and must be considered
in a group context instead of isolated pairs. The patterns and networks
can be beneficial to the architect in understanding the socialization of
society.

Part 2 -

"Exchange structuralism seeks to explain the social as an exchange of
behavior between two or more participants - no matter what combination of
beneficial and injurious behavior is involved in the exchange."[160]

The relationship between functional structuralism and exchange structuralism may be summed up in the following manner; where as functional structuralism typically focuses on one side of a given social transition, exchange structuralism attends both sides. In a typical social transition between a social phenomena A and social phenomena B. Functional structuralism pays most attention to the consequences of A for social phenomena B and suggests that the consequences of B for A are social phenomenon B and the reversal of B for A as both social transactions a problematic.[161]

It is essential that one must realize the conceptualized process of social association between individuals in a social translation finds expression in networks of social relations in group and not isolated pairs from a group context.[162]

Conflict Structuralism

Part 1 -

The conflict structuralist viewpoint is very similar to the exchange structuralist viewpoint. The conflict structuralistic viewpoint suggests the exchange of behavior group interaction. The emphasis of the observation is on negative or injurious behavior caused by the conflict situations. Conflict structuralism seeks to delineate the patterns that are developed by individuals in response to injurious exchange. In this manner information may be obtained that can be used by the architect to understand unexplained behavior caused by negative aspects of the environment.

Part 2 -

"Conflict structuralism seeks to explain the social as an exchange of behavior between two or more participants - given that the exchange involves some injurious behavior."[163]

Conflict structuralism can be understood as related to the conflict of

theory in at least two ways. First, conflict theory may be considered as a variety of exchange theory in so far as it is concerned primarily to the exchange of acts - act defined as injurious or punishing. Exchange structuralism again; the concern is on the exchange of acts whether benefical or injurious rewarding or punishing. Second, the observation of the exchange (all exchanges of things is a compromise) that involve compromise. The exchange of gifts may be a substitute for conflict.[164]

Conflict theory puts us in a position to formulate more sharply urgent problems or emphirical investigation, to bring within our grasp unexplained events, to see what is known from additional points of view and to transform tentative questions into a systematic search - that is, to do precisely, what a scientific theory should accomplish. It is an attempt to understand the compromise and the social investigation of 'value' during compromise.[165]

Symbolic Interactionism

Part 1 -

The social actionist viewpoint suggests that subjective behavior relations (social interaction) are 'generated' by or 'self-determining' by the individual, the group and the environments. The emphasis of social action-ism if the 'freedom' in which the individual or group may develop patterns of interaction dictated by the environment and the indivdual himself. This viewpoint implies that there must be motives for the mutual orientation of the individual or groups involved before there is interaction. This system of interaction and motives make up what is considered social actionism. Knowledge of the patterns that are caused by social interaction may provide information to the architect toward understanding the socialization of society.

Part 2 -

"Symbolic interactionism typically defines the social in terms of objective behavior relations and seeks to explain it by referring to phenomena that are socially generated through characteristics of the social participants themselves."[166]

Human interaction is a positive shaping process in its own right. The participants in it have to build up their respective lines of conduct by constant interpretation of each others on going lines of action. Social controls becomes fundamentally and necessarily a matter of self-control. Social change becomes a continuous indegenous process in human group life instead of an episodic result of extraneous factors playing on established structure. Human group life is always seen incomplete and undergoing development instead of jumping from one complete state to another. Social relations can be placed in a continuum with the dramatic or completely restricted kind of social relations at one extreme and strategic or infinite kinds of social relations at the other on such a continuum. The social structuralism would tend toward the dramaturigical end and symbolic interactionism would tend toward the strategical end.[167]

Social Actionism

Part 1 -

The social actionist viewpoint suggests that subjective behavior relations (social interaction) is 'generated' of 'self-determining' by the individual or groups' environment and of themselves. The emphasis of social actionism is the 'freedom' in which the individual or group may develop patterns of interaction dictated by the environment and the individual himself. This viewpoint implies that before there is interaction, there must be motives for the mutual orientation of the individuals

or groups involved. This system and motives make up what is considered social actionism and the understanding of the patterns that are caused by the interaction may provide information to the architect towards understanding the socialization of society.

Part 2 -

"Social actionism typically defines the social in terms of subjective behavior relations and seeks to explain it by referring to phenomena generated by the social through characteristics of participants' environments and of the participants themselves."[168]

As a prelude to an explanation of social activism there must be an understanding of other implied material. As the 'theory of action' there are no group properties that are not reducible to properties of systems of action, and there are no analytical theories of groups which are not translatable into terms of theory of action. Also, that a social phenomenon is constituted by at least two actors making subjective and mutually complementary choices. However, since each actor must be subjectively oriented toward the other, the orientation of either is taken as the basic unit of social actionist analysis. The emphasis in social actionism is explicitly on the social generation and maintance of subjective despositions in role incomments. Social activism concentrates on choice making. Therefore a view of social activism may provide answers to the following questions: 1) How may the alternative means - end relationships that social actors confront, and the criteria of choice among them that some actors employ, be the most intelligibly defined? 2) What factors explain the stability of such criteria, hence the regularity with which given choices are made by given actors, and hence social life itself?[169]

Functional Imperativism

Part 1 -

The functional imperativist viewpoint suggests that subjective behavior relations (social interaction) are 'imposed' by or 'determined' by the individual, the group, and their environments. This viewpoint indicates that the criteria set forth by the participants and the environment will control the relationship of the individual and group. With these elements determined, the patterns and network of social interaction can be studied to provide information to the architect toward understanding the socialization of society.

"Functional imperativism typically defines the social in terms of subjective behavior relations and seeks to explain it by referring to phenomena imposed on the social through characteristics of the participants' environments and of the participants themselves."[170]

Because interrelations involve two or more choice-making actors, social systems - the explicit concern of functional imperativism - emerge, and at this point the essentially micro explanadum of social actionism is transformed into the more macro one of functional imperativism. Functional imperativism concentrates on selection among alternates. Parson says, "The conceptual shceme of imperatives has added a set of rules and procedures whereby the analysis of components of action in terms of pattern variables can be carried out by 'looking down' on them...from the perspective of the social system. This implies that when functional imperativism is employed to explain a micro unit act, it treats the later as the consequence of structurally differentiated functioning of the macro social system as a whole, and concludes that the latter must therefore be its primary explanadum."[171]

ANALYSIS AND SYNTHESIS

"We shall not cease from exploring. And the end of all our
exploring will be to arrive where we started. And know
the place for the first time."

T. S. Elliot

THE RESPONSE OF ARCHITECTURE

The complexity of our modern society is reflected in its problems.

Complex in that they are caused by multiple factors, these problems respond

to multiple sources and rapidly reflect our changing environment. Any

attempt by architecture to solve a major problem may only be applicable to

a part of the complex problem, and in many cases has caused a shift of emphasis

in the entire problem. It is quite similar to the condition in sociology,"...

a technological influence does not always stop at the first direct effects

which follow one another like the links of a chain. They are not often

recognized, because an effect is generally not the result of some cause alone

but of several effects dispersed in different directions, the process is more

like a network than a chain."[172] In many instances architecture's response

to a problem is probably the most appropriate course of action, considering

the role architecture plays in society today. As an individual attempting

to analyze the present and future situation of architecture, the network

pattern has become very obvious, indicating the present unsatisfactory

position of architecture in society. Using the most recent architectural

periodicals, I have attempted to determine the initial response of architecture

and then to explain the network pattern that results.

Population
    pollution
    city planning
    public interaction

Population growth is an obvious problem of society. This growth in pop-

ulation has cuased problems in many other related areas. As a result, arch-

itecture is responding to a diverse number of problems created or triggered
by a single major event. In its present situation, architecture can only
respond to the related areas and the network of other problems that may
result.

Air, noise, and visual pollution have been problems throughout history.
Since the population explosion, pollution has become a significant problem
area. Architecture has attempted to respond to this problem in a number of
appropriate ways. "It is the architect to set the president on current
public debate on environmental policy. It is fragmented. Let me emphasize
that I am not suggesting that architects alone are equiped to deal with the
environmental crisis. But I am suggesting that they are better equiped
than any other single profession or discipline which relate to this future
equality of the built environment. The architect must help the public ful-
fill its needs for visualizing its aspirations."[173] However, the pollution
problem cannot be solved by the architect alone. There must be a cooperative
effort by the federal and state governments, industry, and the public
towards reaching a satisfactory solution, if there is one. The architect
is the means by which these solutions may be implemented.

Another area of concern in which architecture has shown a great deal
of response is the energy crisis. Here again the architect and the con-
struction industry have responded to the serious energy crisis resulting
from the increased demand by an increasing population. "There's an energy
crisis now in some areas - and its spreading. Environmental concerns are
making it harder to mine fuel and locate new generating plants...If we
agree that there is an energy crisis, what can architects and engineers
do about it?

1. Solar energy - but designers insistence on purity of design will not permit sun screens.

2. Correct heat gain and loss by cooling or heating whole space.

3. Change peoples clothing.

4. Recycle air properly within buildings.

5. More insulating etc trade off of initial cost to long run costs.

6. Change in design - less glass.

7. Better designed buildings reflecting problems.

8. Recycle materials.

9. Better site plans.

It is clear that much can be done by architects and engineers - and by manufacturers - to conserve great amounts of energy, it is also apparent that they cannot accomplish much until their clients acknowledge the seriousness of the problems and become willing to explore the overall economics of buildings - operating costs as well as first costs - much more comprehensively than they are accustomed to.

Such rules or standards will not be imposed, of course, until we are much closer to a national crisis. But there is much that architects and engineers can do now. They can - as professionals with a professional responsibility to society as a whole - work to persuade their client to choose or accept design, material, and equipment operations that will cut down waste of energy."[174] Suggestions have been made by the building profession in response to the energy crisis. The architect can be in the position to significantly affect this problem area, with the support of his clients, by designing buildings which make the most efficient use of out natural resources. "Energy conservation, a potential disaster area starts getting the attention it deserves. At least two major industrial producers are effectively promoting conservation. The Office of

Emergency Preparedness is acting not just supply but conservation."[175]

The architectural profession, through its various areas of concentration, has responded to the problem of humanizing the city scale by making many proposals that attempt to shift the city scale back to the very human. "As we have shown the approach of the study has been to consider the city as a system in which the elements are meaningfully related; this system has been represented by a mathematical model which has enabled us to deal with the complexities of urban structure. The theoretical approach is closer to that of the social physicist rather than the behaviorist though many of the equations can be explained in behavior terms. This mathematical approach has produced results which are starting to provide a real understanding of the underlying structure of the urban system which is often obscured by the complexity of the real world."[176] Social interaction was almost completely lost in the cities for a number of reasons; population, development, of suburbia, technological and scientific advancements, etc. In attempting to provide a solution to urban and rural problems, programs were implemented with state and federal funds, using architects and architectural designs as means to revitalize the city core. "Louisville, Kentucky, is out to prove that inner city malls are beneficial to both business and people."[177]

It is easily noted that architecture is responding to the current problems of society, but with very little effect, especially in the area of city of community renewal and has had an effect on the populus. "In a period characterized by demographic uncertainties like declining birth rates, and vacillating rates of household and family formations every year, nearly one person in five changes his place of residency. Last year's figures yield fairly standard patterns with respect to age and employment

status. Last year's median age of those that moved to a new residence was 23, for instance, while the median age for non-movers was 32. And these figures are pretty much representative of most of the last decade.[178] The ineffectiveness of the present means of curtailing the problems of the population increase has had serious repercussions. The responsibility should not be completely relegated to the architects. Controversy may rage over the effeciency or the correctness of a building or a design by an architect, but economic and financial support of architectural projects in this area are the final determining factors at the present. Should not the determining factors be geared toward human design and public demand?

Although there seems to be a sincere desire by the architectural profession to solve the problems of the population explosion, in most cases the professional's response has been quite ineffective. There are many plans and theories which may be effective in the future, but architects must be given the opportunity to use them. The following is an example of a design: "The problem of the 70's and 80's is not poverty, but results from increasing population affluence, mobility, leisure time, and aspirations. Above all we have to plan for the increasing demand for wider choice and higher standards linked to the capacity to pay.

What is required is the injection of a series of new center which could form focus for the larger areas of population which have spread too far and are excluded from the life of the existing city centers. The new centers must not weaken existing centers but allow adverse pressure to be taken off thus, allowing individual identity to remain, and give them time and space to regenerate."[179]

I believe that given the opportunity, the architectural profession could provide feasible solutions to the problems of population growth. The profession

seems to have the leadership and the motivation at the administrative level

necessary to accomplish these goals. There must be a concensus of opinion

within the profession before any serious attempt at solving major problems

should be made. Architecture should be the most qualified profession to

meet society's problem.

Economic Development

To a great extent, economics and the profit motive have kept the arch-

itect from responding to public demand for more and better living, recreating,

and working buildings and spaces. Economics is the base by which all pro-

jects done by architects and builders are governed, though it may not be the

desires of the public. "Today the list of complaints against the tall build-

ings drags on like a bad year and the noise of the complainers has risen in

proportion with number and height. The National Policy Task Force of the

A.I.A. sees it the same way and reports 'Our own guess is that most of America

expects growth from now until the end of the century will occur within

existing metropolitan areas - whether all of us would like that to happen

or not'.

One thing seems eminently clear: The public will no longer accept tall

buildings. The public, in other words, is actively and strongly influencing

the sillouettes of their cities. The uses of a building and the inhabitants

of a city have to adapt to a certain degree - life is like that - but the

creator of the tall building must be able to improve on past records. Results

of future interdisciplinary research; then, will shape the architecture of

tall buildings."[180]

The architectural profession is sensitive to the demand for more

housing and the desire to supplement the primary objective of financial gain

with human needs and desires. "The goal of architecture and of synoptic

environmental design is to maximize opportunities for all men and to create a spaces which respond optimally to the needs of people."[181]

Economics and the profit motive are not the only obstacle that the architect must overcome before he may respond adequately. Politics and funding of projects through the state and federal governments play a significant role. "If Congress and the Administration cannot cooperate in reaching our goals, then those interested in maintaining the nations committment to housing the poor must work harder than in the past."[182] The architectural profession has realized these problems, and yet have also attempted to satisfy the needs of the public, recognizing that they simply do not serve these needs satisfactorily, but serve them only to a limited extent in limited areas and for a limited number of people. The profession wants to respond to these pressing problems, but has been shown, it is ineffectual in too many other areas. As a result architecture must work to solve its own problems concurrently with an attempt to change the project motives and goals.

Architectural Research

Architectural research is a significant 'area of concern' and at the same time is a projected trend. Architecture has made a significant response to this area. The primary response of architecture to architectural research was the acceptance of it as a means to supplement data collection in the design process. "In my mind Research is a rather dangerous. It implies careful and deep inquiry into the nature of human events in buildings and towns - which we need very badly, but the word also implies that there is an activety seperate from design, which can be expected to yield fruitful results. I don't believe that Research, divorsed from design, is almost always cut and dry and lifeless."[183] The next response of architecture to

research is in the area of storage and retrieval systems. Our modern
technology has provided us with a walth of information, as well as a means
to store them all. "The rapid proliferation of technological information
requires methods of referral and retrieval which were not important ever
a few years ago. Many offices are developing detailed-in-house information
manuals which contain maximum information or special building types and
prototypes product use and experience data, and cost information."[185]
The final response of architecture to research is the implementation of
computers into the architectural processes, though it has not been completely
accepted. We know that computers can be applied in this design process, but
this profession has been slow to respond partly because of the value
placed on traditional techniques and partly because of infamiliarity of
this computer as well as the architects traditional education process.
But most important, few office can afford such application and most clients
are reluctant to accept billing for these services. In addition, computer
application to this design process is new. The high risk trial and error
factor still prevails."[186]

Although architecture has been able to respond quickly to perceive
the problems of architectural research and the need for expansion into this
area, a number of restricting factors - unfamiliarity, costs, etc., have pre-
vented many architectural offices from responding to this problem area.
"Here is the delemma - and the paradox. The theorist must test his views
before they can be effected; the practitioner is doubtful of their use and
cannot afford to test them. Further, the architect must make a profit to
continue to practice; and since the new techniques of design must be imple-
mented and taught in the office, the trial of a new technique on a given
design job very likely would eliminate the profit on that job. Thus the
architect cannot afford, particularly since he is not assured that such over-

head expense will be justified by a successful result or that the theory tested will have further application."[187] Architecture must expand with architectural research in the future. We must remember that even in this area of architectural response to architectural research we must deal with quantifying the quality of information with the use of modern means to qualify the materials used. "Despite the fact that computer technology has advanced greatly and is available to help solve storage and retrieval problems, no solution is yet in sight for the architect and the construction industry: The real problem is the quality of information that provides input to any system."[188]

Industrial and Technology

"Western civilization today is characterized by unrest and aimlessness both politically and economically. It is also a time of progress and prosperity, though this seems often to be attained at the cost of ever-increasing inflation..Great things have been achieved in science and technology. Their results could be vastly benefical to man, they could also be totally disasterious."[189] Architecture has approached this problem by seemingly disregarding the possibility of the disastrous effect of industry and technology. It has an increased emphasis on human design as a counter-balance to the possibility of the negative aspect, "every thinking contemporary searched his mind new trying to figure out what way be the ultimate value of our stupendous scientific progress "[190] and, "to optimize the chances of being able to meet most of the new social responsibilities which find the architectural and other environmental design professions would be to improve the competance and to broaden the social responsibilities of the profession."[191]

The problem that industry and technology is developing in society must be assumed to be the desire of the public and the society in which it exists. The architectural profession is incorporating these advances to satisfy the

desires of society.

Modern Form and Style

If we were to agree on the basic concept of the role of the architect in society, we could realize that the present architecture is responding to the problems of modern form and style. I believe that the architect should study the situation developing around him, interpret it in terms of architecture, and the present his conclusions in the form of building, designs and texts. If this is the accepted role of the architect in modern society, architecture is responding to the problem of form and style. Since we are in an age of transition, "the structure of individual building is gradually changing under the impact of these new forces, but not nearly as fast as the function of the building in the overall urban composition."[192] We need this type of architect that can be aware of and sensitive to these changes.

Since, technology and rapid change are reflected in our buildings; we cannot look back to traditional style or form. We should, it has been suggested, develop a new language and dialect. The architect of today reflects the changes of society; if there are internal changes made in the profession, there could still be a definite movement in the development of a modern form or style of architecture. Present-day architecture does not have this form or style and must work towards organizing itself before any results may be recognized. "We stand for variety and catholicity, for freedom dogma, for avoidance of mindless immitation, for exploration of the links between architecture, perception and behavior. We admit fine detailing, but only as a means, not as a preoccupation. We endorse the frank exposure of industrial materials and the equally frank use of applied color patterns as devices for articulation of form and space.

And we stand for architects and designers who remain open to new influences, who are not tied to one familiar, marketable formula, who continually modify and define their ideas in the light of new challenges."[193]

The ability to realize the demands of society and the use of our modern technology and science is the essence of the basis for modern design in architecture. As was recognized by an architectural jury of the A.I.A. when judging a student competition(the design of a zoo), the future architectural goals may be quite satisfactually fulfilled by the new generation of young architectural students. "The students were striving - in an imaginary and somewhat fanciful program framework - to relate to the needs of their clients; and they had seen as their clients the animals. That's a funny thing to see as a humanistic point of view.

The future of architecture is already with us, in the sense that the motivation in architecture are no longer focused on stylistic or technological matters but social needs. We are in a new age of architecture in which architects dream not of building monuments but of helping solve human problems. The most creative impulses in architecture, today reflect the trend and our best architects are concentrated with making the creative act of architecture the channel for serving not some personal vision, but the needs of ordinary people."[194]

Education

Although architectural education is not a response to a sociological problem, it is an internal 'architectural' problem. This subject area has received a great deal of architectural interest from the administrative leaders in the architectural profession. It has been stated that there is a trend toward improving the educational curriculum to make it 'real' and integrated with actual problems. "More and more, CDC and AIA chapters work together to motivate and expose architectural students to community-oriented serivces. It is a mechanism through which not only the student can develop his professional potential but the community as well can benefit from the design and technical skills of the profession."[195]

Students in this epoch of architecture have developed a keen sense of awareness and desire to obtain the type of education that will provide them with the means of accomplishing their goals. "Students today realize that the problems of the physical world are primary in the minds of people. They have set their priorities. Their social concerns may be different from those of previous generations and rightly so, but they are saying that the world must be a better, a more beautiful place in which to live. And they know that if they are to have a part in making it more beautiful, they have to have the skills to make it so."[196] Students are voicing a strong demand for a closer relationship between the educational programs and the profession. "Students find that a common weak link in the education is the nuts and bolts of practice; there is a strong need for professional assistance. The communication gap is not as wide as it is believed to be, but students will continue to voice anger as their responsibility to help the schools help the students help themselves."[197] In their desire to obtain the most relevant architecture possible, they are even questioning the credentials of professors. "Practicing architects are not known for their interest in architectural education. On the other hand, there are professors who have all but lost significant contact with the practice of architecture. Could be our man is the architect/professor who combines practice with teaching. Why both? The strongest argument is relevance. Teaching and practicing are complementary activities and may be our means for keeping our schools of architecture relevant to the realities of the world."[198]

This educational problem area has been noted by the students and the instructors. The profession has responded to the problem area through various members within its administration and organizational ranks. It is obvious that this gap between the architects and the education of architectural students will begin to close in the future. "Relevance to what? To man as he is, as he ought to be. Schools of architecture have taken the lead in dealing with

theoretical philosophical problems; practicing architects have a responsibility to participate in these efforts. The issue of relevance reduces to the problem of bridging the gap between the study and the *practice of architecture*; practitioners and professors alike must work to bridge the gap."[199] And, "What is work study programs proves is that if the profession wants graduates to have command of a variety of skills -- in short, a relevant education -- architects will have to get more directly and deeply involved in the educational programs."[200]

Socialization

The problem of socialization is so large and diverse that it is very difficult to determine the overall response of architecture to this problem area. There are many separate and distinct areas of concern. The rapid changes in our society have accelerated to a point where the architect can attempt solutions only in sporadic situations, although the profession does understand the problems and repercussions of the socialization of society. "The optimization of the environmental opportunities and maximization of the economic and psychological environmental stimuli as the basic responsibility of environmental architecture must be met at all levels of the environmental scale."[201] In many instances where the demands of the public can be heard and its desires could be met, architecture must comply with archaic laws and outdated regulations, and thus must disregard the requirements of the people. "In a desperate attempt to continue the development of central urban land under obsolete national tax structure and lack of national or any other urban land development policy, it becomes impossible to mold space within any kind of behavioral, social or artistic logic."[202]

Working within the expressed economic and political parameters, the

architectural profession has attempted to provide solutions that meet the
obvious public demands for housing. An effort is being made to humanize the
scale and the quality of the living environment. Achievements have been
made in both urban and rural areas. Urban area solutions have been in
urban renewal and rehabilitation of units. "Gruzin and Partners are the
architests and planners for a mammoth urban renewal project. The new town,
downtown will include 3100 units of housing, office space, common space, a
new school, a theater and cultural facilities."[203] Solutions in the rural
area have been in the field of increased architectual design of living units.
"In a recent survey of 1970 home building Record's research department found:
308,400 single family houses built by large builders, 268,308 wer architect-
urally planned. Of 205,600 houses started by small builders 67,848 were
architecturally planned. Of 579,000 apartments built, 526,890 were architect-
urally planned."[204] And, "Medium-size builders (26-100 units a year) 8.5 per
cent had architects on their staff, an additional 40.4 per cent hired outside
architects, and 6.0 had both. Large (over 100 units) builders, the comparable
percentages were 6.1 percent, 36.4 percent and 5.5 per cent. And even
for the small (1-25 units) builders, 8.1 percent had architects on staff,
28.4 percent hired architects on fee basis, and 4.4 percent used a combination
of both.

The problem remains, however, many builders are intimidated by archi-
tects and many architects still do not understand the builders problem.
And we have a lot of architects who could help (and profit handsomely)
if they tried harder to communicate with builders, and tried harder to
understand their problems, their way of building, their way of operating."[205]

In other areas of the socilization problem, there has been negative
response. The zeal to produce housing units to meet the demand has been a

negative aspect of architecture in many, since it disregarded social and human problems. High rises have caused increased crime rates, "A three year study by the New York University Institute of Planning and Housing has produced evidence that there is a direct relationship between height and crime rates in public housing,"[206] and the condemnation of land without regard for the historical value of land to be used for public housing, "The historic building of the North American Phalanx, one of the most important communitarian settlements in the United States are in immediate danger of demolition. An emergency committee has formed to save the Phalanx."[207] This oversight has occured even within the ranks of the architectural profession. "The important task of the American architect today is to furnish qualitative rather that quantitative solutions to the problems of a perplexed people. Design should determine the development of our institution and way of life rather than simple responding to a tendency toward monumentality which seems inherent in every civilization at certain stages of evolution. Such a tendency in the past has caused a loss of the human scale in the process, and civilization has been the worse for it.

There is certainly a place for the lone architect or for the small firm in the struggle to give shape to the institutions of our society. Here lies the hope for the humanization of our architecture and our cities. It is a time of growth and change, and growth is inevitably generated by the energies of change. We welcome these energies eminating out of change. Our salvation will be to have them embodied in an architecture with a human scale in such a way that humanity can be restored to the American city. We call for some architects to be indifferent to the movement toward bigness and to act together in the mission of guiding growth in this age of tremendous change."[208]

With the strenuous attempts to meet the rising demands of socialization, we find that we fail to provide for the needs of our society. "Ralph Nader predicted recently that difficiencies in housing would be an issue in the 1970's comparable to the automobile issues of the 1960's. His speech came down hard on FHA standards. FHA was described as the "leaky, shaky umbrella now facing the greatest crisis in its history."[209] As a result there has been a serious change in the life styles of the public. "Some people, usually out of conviction as much as out of necessity, prefer to create their own kinds of housing, using familiar materials in a form of contemporary folk art."[210] And, "The initial impact of shift in migration patterns should come in the area of housing. Builders seem always to respond immediately to any upward shift in market demand. But history has shown them to be much less sensitive to the forewarning of market down turns."[211]

The huge problem of socialization can be affected to an extent by the architectural profession. The profession is moving towards accomplishing these goals, but this is only solving a small part of the whole. There must be an attempt by other disciplines to desire a change and desire to solve this serious problems of society. As expressed in another section, the architectural profession should be the best equipped profession to affect and provide the necessary information and knowledge towards reorganizing and helping society change to meet the demands of its people.

DESIGN

"It is a truism that the architecture of each historic period
reflects the state of society and the technological knowledge
of that time."

Nelville Conder

CONCLUSION

Part 1   Re-Organization

I have attempted in my thesis: 'A Personal Insight into the Present
and Future of Architecture', to provide information, data and a reflection
of my sensitivity, awareness and ability to glean the essence of architec-
ture from the sea of information that is available to us. It has been
presented in the most straight-forward manner possible, specifically noting
where necessary personal biases so that the reader may be able to respond
individually to the objective information that is presented or to my
subjective insights and conclusions. In my analysis and conclusion sections
of this thesis, I have taken the opportunity to express my 'way of thinking',
a philosophy, sensitivity and awareness regarding the present and future
situation of architecture. I ultimately desire to provoke awareness and
provide a source which may awaken individuals to the serious situation of
the profession of architecture and to enable the reader to formulate
ideas regarding the problem.

We have seen the development of american architecture from that of a
duplication of European styles to an architecture that has become uniquely
'American': a style of architecture that is responsive to the environmental
circumstances and situation in time. We have recognized that architecture
and the profession must be progressive and must respond to the needs of
society. We are in an age of transition where our environment is changing
from one day to the next. Modern technology and science has set new precedents
which society has attempted to respond to and assimilate. As a result,
architecture has been caught in the dilemma of attempting to reflect a

changing society, itself unable to come to terms with the same changing

environment, which has had serious effects upon the profession of architecture.

It is obvious, that architecture in the present is attempting to respond, as

it has done in the past, but has not broken from those bonds which have

prevented the achievment of desired goals. We need not completely forget

the past, but we must assume a new course of action in order to attain

the ideas of an architecture responsive to the present environment and its

people.

The role of the architect is all encompassing. The architect's role

is, in fact, to foresee the broad trends of developing humanity and society

that he is a part of and create the best possible architecture to reflect

these trends for the present and future. He must work within the framework

of the trends that can be determined and not attempt to reverse those, but

to understand and develop them using his total capacity to serve people.

In this situation, the architect must be unbiased in his realistic evaluation

of the phenomena and recognize it as resulting from the needs of humanity.

He may appraise the trends that are developing, but should not stand against

of disregard them if they are the people's desire. He must use discretion

and objectivety, with the technology of the time to enhance and develop

the major trends to their fullest potential. The architect must finally

understand the future, predict it as far as possible and develop these

perceived trends, including technology, to create the best human habitat

for the type of people and the type of situation that will evolve.

The premise for the future of architecture must be based on these 'ideal'

concepts as the ultimate goals of the architect and architecture. These

'ideal' concepts have not basically changed since the beginning of the

history of modern architecture. It has been said that transition is a

feature, not only of our architecture, but of every aspect of life and of

society. Present and future architecture must first re-organize and analyze itself before it can attempt to establish proper responses and solutions.

At present, the profession has not established any sort of primary control or understanding of the internal effects of this transitional and 'confused' period. Society and architecture have broken with tradition but have not been able to re-establish a solid foundation in the modern environment. Elements characteristic of the new era took command of the entire situation and placed humanity and architecture at the mercy of modern advances. Modern technology and science have become the dominant characteristics and motivating forces of the modern world. People within society have attempted to accept the new developments and tried to manifest them into their own desires and needs. Science and technology have provided the means by which advancement could be made, representing the changes or the need for change in the modern world. Major problems appeared when segments of society could not keep pace with the accelerating changes of our transitional period. There is a snowballing of problems in the modern age. The multiplicity of problems has inevitable affects on the human being. Science, technology, transition and change are all significant characteristics of our modern world. It is a reality that cannot and should not be altered.

Architecture and the architectural profession are no different from society. They are also caught in evolution and transition. Architecture has attempted to respond to the problems of society using techniques and methods of the past, incorporated into the use of contemporary materials and means. It is difficult to accomplish and provides only 'stop-gap' solutions. Architecture of the present is still attempting to use adapted forms of design and processes of the past with some effectiveness, but again

these feeble attempts are unable to reflect our rapidly changing age. During the interim, while architecture was attempting to reorient itself to the times, it lost all significance and relevance to the present situation. Architecture found ourselves, like society, being affected by the characteristic elements of modern society.

Modern elements and the resulting characteristics have become the needs and desires cf society. There must be a major overhaul of the present structure and organization of the architectural profession so that architecture may respond and before it can effect change. My recommendations are as follows:

1. I must again stress the importance of the overriding goals of the profession; that of the realization of the need for establishing itself into the framework of modern society by developing the attitude of foreseeing the broad trends of the developing humanity and society, and to create the best possible architecture that reflects the trends for the present and future.

2. The architectural profession must adapt to the changing times. It cannot retain traditional architectural methods and organization. Architecture has made a break with the past and is in a completely new and revolutionary time. People are reflecting this phenomenon and so must architecture. Information, knowledge, technology, methodology and almost every aspect of life are changing. In the past, architects could assimilate and interpret the changes in society plus the changes in the building industry and still develop outstanding architectural designs. In the present there is too much information for a single person to comprehend and decipher in architecture. The architect must make associations with other professions in order to meet the needs and demands of the changing society. The design process has

always been an individual method of organization, but again, this is a
traditional concept. In our modern age, a new type of language has been
formulated to reflect modern information, attitudes, leadership, resources,
goals, etc. In the present situation of the design process, I suggest
specific organization, leadership and a process of status grouping. The
status grouping in architectural team design process is autocratic or
democratic. It is obvious that one man alone cannot design today's
complex structures, but it is equally obvious that one man acting with
autocratic control over a team can direct successful designs. Both concepts
exist and are viable processes in the profession. However, with the increas-
ing specialization of knowledge and the growing need for facilities and
equipment, the design professional does not have all the knowledge and
the skills. He depends on a body of complementary linked professions,
each ultimately dependent on individual talent. The organization of
professionals is an important area that must be established for the
future. The attitude of team approach may not simply lie in the work toward
a design solution but may be an association that may result in new building
products, manufactured goods, etc. The association or team approach suggests
that each professional is competant in his individual area of concern and
that the architect will be the intermediary through wich actual project
designs and projects can be completed.

3. At present, information is growing constantly. Computer technology
must be incorporated so that this information can be organized into a man-
agable form. Computers, data banks and retrieval systems must be incorporated
into the efficiently run professional architectural office. Computer
information, retrieval and storage are imperative for a project, but computer
methodology in the actual design should be left to the discretion of the

firm and need of the specific case. New methodology and technology do
not replace creativity, especially in the artistic sense, but reinforce
it with objectivety, scientific probing and rational explanation from
data based on sound research embracing the total order of a design problem.

Additional information should be supplemented with a central resource
data banks, open to all designers desiring information on design and past
results. As explained, creativity is not lost because the data that is used
is universally known, it is to supplement the design concept of the indivi-
dual designer. The type of supplementary information that I am referring
to is data that explains the function of past projects and data obtained
by returning to the past projects and objectively gathered information
concerning the effectiveness of the design components. This type of data
collection must be done for every project completed by its designer, and the
information should be placed in a central resource data bank, available to
other's interpretation. Ideally this method will increase the effectiveness
of design and improve the standards in order to represent the lifestyle
and meet the demands of the public.

4. Within the architectural professional office the physical and mental
stability of the employees are very important, a sense of security must be
developed. Significant steps must be made to secure stability and trust
between employees and employer. The upsurge of architectural unionization
efforts should be encouraged to relieve chronic high turnover and to develop
job security. An organizational system which stablizes employer-employee
relationships is, for example, the Occupational Safety and Health Act which
creates a statutory liability on the employer for violation of any act
that exposes the employee to occupational safety or health hazards. Amal-
gamation of the architectural profession is essential in developing the

profession into one that is stable internally and, as a result, provide
the type of service that is reflected in the stability of the organization.
Along with this standardization of the employee's status, should be a
standard by which basic information may be obtained so that the same
quality and quantity is available to the entire profession. As a result,
emphasis in the organization is placed on creativity of design and not on
completeness or incompleteness of material which design is based on. In
this way the standards of the profession can be improved with a beneficial
redirection of emphasis on design.

5. With this stablizing effect on the profession of architecture, the
primary objective of architecture can be comtemplated - humanizing architecture.
I believe that the instability of the present situation of the profession
has been the major cause of its ineffectiveness. Architecture is unstable
in the areas of objectives, personal methodology, and technology. If these
areas can be re-organized or restructured, it will provide the architectural
profession with the ability to develop into an intregal part of society
in the future. With the restructure of the architectural profession,
present trends that reflect its position will distinguish themselves.
Simple interpolation will indicate the significant trends.

The major emphasis of the future of architecture must be placed on
social needs and on providing objective solutions that reflect the needs of
and problems of ordinary people. The architectural profession, of the
future, must reflect this desire to meet the needs: this will be the most
significant change that the profession can make. It must be stressed again
that in the attainment of a specific goal, as in the present situation of
architecture, it is impossible to affect any portion of the problem area

without a consensus of opinion and mutual understanding within the profession. The incorporation of the five discussed areas would provide the cohesive elements that will unify the profession and provide the public with the strong unified front of a professional organization.

A significant characteristic of our modern society is the importance politics has upon every aspect of life. The administration of the architectural profession are attempting to become involved in the area of politics. The A.I.A. task force has proposed state and federal legislation. It is obvious that the architectural profession must become integrally involved with the political situation. Due to its disunited situation, the present architectural profession is only able to respond to the problems and trends of society in sporadic, individual instances. I feel, that with the re-organization and re-orientation of goals, the architectural profession will be able to affect the sources that cause major problems as well as respond with solutions. Architecture should be one of the most qualified of all professions to handle society's complex problems.

Part II Trends

Architecture of the future will reflect the demands of society. As expressed in an earlier section, society is presently caught in an age of transition. In the past, obvious trends of society could be easily detected, since there were no major motivating trends in the environment, as comples and influential as those of the present, being science and technology. Modern architecture is able to reflect society, but very ineffectively. This situation is not created by the architectural profession, but rather by the failure of people to adjust properly to the 'confused' situation of our age and inability to project significant and appropriate demands and desires etc. This is the reason for my strong feeling that

architecture should have an intense understanding of sociology and the socialization of society, so that once again it will be able to understand and reflect the trends, even though they may not be readily observable. There is a direct relationship between architecture and society. If architects can assimilate this concept in its organization, it is quite possible that the architect will be able to observe and relate to social interactions. (those expressed in section II E 'Relationship of Architecture to Society') that are characteristic of the individual, and which may not be overtly expressed because of the influence of technology and science in our environment. In this way the architect will assume a new role, that of inter pretation of society's needs and the projection of significant trends that reflect these needs. If the architect could see beneath society's facade and view the underlying desires, needs, motivation of individuals and develop an attitude toward these trends, I am sure that architects of the future will be able to design more appropriate architecture.

A superficial understanding of the socialization of society is inadequte. A clear social understanding and a philosophy must become characteristic of a good architect of the future. This interpretation of social interaction is an area where one must apply the previously explained overriding goals of architecture to foresee future trends and work toward its implementation takes place.

In presenting an insight to the future of architecture, I have attempted to suggest areas of change. There are problems that, until now, could not be solved with contemporary techniques or methodologies. The established trends of the present are a response to the inappropriate workings of the profession itself. Should the profession work towards a reevaluation

of its ultimate goals, as suggested, the future of architecture will be radically different from the present. I believe that the essence of the future of architecture is not only a matter of following or responding to strong trends, but also entails attempting to understand the factors that have developed trends and their appropriateness and implications for the future.

If future architecture were to reorganize itself, a clear understanding of its effect upon today's problem and trends would be realized. We must begin to view architecture in a new light, since we have broken with the past and are in a new age. I am suggesting a new interpretation of this theory of architecture and its interrelationship with present trends would reveal a clear picture of its future direction. It can provide solutions to present problems and in the future, architecture and the profession will be in a position to significantly affect problems before they become major architectural problems. Architecture must be the most qualified of the professions to affect, direct and guide society.

In the design, analysis and synthesis portion of this thesis, it can be observed that there are significant responses made by architecture to various trends. I have indicated that the present situation of architecture is very inadequate, even though there may have been some very good responses. It is obvious that trends will continue in the future. I suggest that future architecture, transcending that of the present will not only respond to trends, but will also affect the causes of the trends, resulting in a network of interrelated trends. There are several primary trends that will be instrumental in the development of an insight to the future of architecture. They include organizational trends, time trends, human design and political trends (goals) and a cultural ecology trend. As expressed in the first section

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of this conclusion, I believe that the reorganization of the profession
is imperative to the future of architecture. Trends in team approach and
data collection, central information and retrieval systems will tend to
unite the profession into cohesive organization. All of the trends that
may be listed under human design as a goal suggest that there should be a
strong trend toward human design. If an attitude is formed towards human
design, it will have significant impact on the trends in form and style,
which include: new language, expression, a new art and social harmony,
freedom and honesty. A new direction in modern form and style may result.

Politics, another significant trend for the future, as expressed in
an earlier section, will be a goal oriented trend. An organized architecture
with definite goals which interrelate with cultural ecology (the trend toward
working with the existing condition of the environment towards a contemporary
solution) will affect secondary trends (pollution, suburbia, nomadism and
disunited family units) to a point where resulting trends (leisure and turning
to nature) will be effected. These trends (from Section II D of this thesis)
were developed as having equal importance in the present situation of
architecture, the heirarchial form that the trends begin to form as they
relate with the reorganized architecture suggest a new position and relation-
ship of architecture and the architectural profession of the future.

Diagram of future trend relationships
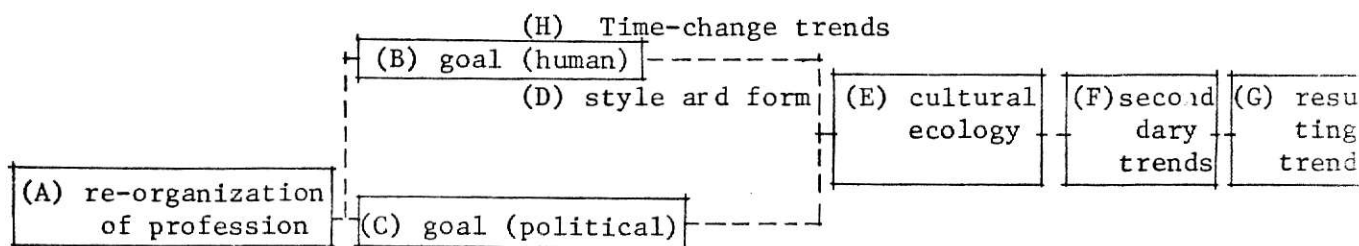
Note: Trends that make up each of the major catagories of the above graph
follows, explanation of each trend can be found in section II D.

(A) <u>re-organization</u>
    team approach
    data collection
    others.

(B) <u>human design(goal)</u>
    de-humanization
    human design
    arch. design
    man and machine
    man vs. machine
    re-design of cities
    rehabilitation of
       cities

(D) <u>style and form</u>
    new language
    realism
    expression
    art and social behavior
    universality
    freedom and honesty

(E) <u>cultural ecology</u>

(F) <u>secondary trends</u>
    pollution
    suburbia
    nomadism
    dis-united family

(G) <u>resulting trends</u>
    turning to nature
    leisure time

(C) <u>politics (goal)</u>

(H) <u>time and rate of change</u>

It is suggested that architecture is no longer responding solely to problems and trends but is working to establish and affect its future position and its relationship to society. Again the major trends that will have a significant effect on future architecture will be; (1) time and the rate of change, (2) organizational trends (team approach and data collection and retrieval trends, (3) goal oriented trends (political and human design) and finally, (4) cultural ecology (which will provide the framework for re-established trends to relate to the new position and response of modern architecture.

In summary, it is clear that architecture has a great responsibility to humanity. Architecture should be able to reflect human design which is the basis of society. Understanding of human design and politics is imperative which; (1) the former has a great deal of influence with governmental and organization hierarchites and show a significant need for active participation by the profession in politics, (2) the latter, design which has a great influence on architectural design, requires that the architect develop a

strong understanding of sociology. If the architect of the future can reorganize himself and have a basis the suggested trends in a heirarchy pattern, I believe that the profession will once again become a major force in the design and orientation of the society of the future. I believe that the architectural profession has the potential of providing for society's needs of the future. The suggestions for the future of architecture are only refinements to the already existing basic structure. With these changes, I am sure that architecture will once again be the means by which all aspects of society's needs can be met. Architecture should be the most qualified of the professions to satisfy this need.

FOOTNOTES

FOOTNOTES

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A PERSONAL INSIGHT INTO THE PRESENT AND FUTURE OF ARCHITECTURE

by

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AN ABSTRACT OF A MASTER'S THESIS

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ABSTRACT

The twentieth century finds itself in age of transition. An age where
the rate of change accelerates from one day to the next. In place of a static
situation involving slow change as in the past, we are now caught up in a
dynamic situation requiring extreme rapid change. We are at the threshold
of a new era of progress, peace and prosperity. Architecture and the arch-
itectural profession has not kept pace with the 'rapid' and 'confused' age
and has not established itself in modern society. We as architects and
designers must evaluate ourselves and seriously consider the problems that
are around us and within us. We must understand these problems and adapt to
them, in order to effectively serve modern society.

Architecture and society have made a break with the past and have not
been able to come to terms with the elements of the modern environment. Science
and technology are the elements which have contributed significantly to the
age of transition. Architecture should reflect the needs and desires of
people in physical form, but during the age of transition, architecture has
been incapable of reflecting the needs of a 'confused' society, since it too
is caught in the same delemma. The instability of architecture is compounded
by its incapability to remain 'master' of the building industry. The break
with the past, the effects of the age of transition, and the affect of science
and technology upon society and architecture has consequential contemporary
problem areas: 1) pollution, 2) economic development, 3) architectural research,
4) industrial and technological progress, 5) modern form and style and,
6) socialization.

There are a number of trends which indicate the prevailing tendencies
or general movements within society and architecture, which have significant
effects upon the professional attitude and direction. In the body of this
thesis, nine major groups of trends are investigated: 1) co-existence of trends,

2) population, 3) economic development, 4) architectural research, 5) research methods and architectural design, 6) industrial and technological progress, 7) modern form and style, 8) socialization and, 9) other trends. They are important in determining the existing situation and attitudes of the present and also suggest a direction for future architecture.

It is clear that the architect should be the most qualified, in the field of architecture, by his great responsibility to study contemporary problems within a developing society and propose solutions to them. The role of the architect is to foresee the broad trends of a contemporary human evolution through the socialization of society and create the optimal architecture for the present generations and generations to come. The strong relationship of human design, as established between architecture and society, is developed through an understanding of social interactions. The socialization process of society, is suggested in areas in which the profession must develop in order to accomplish the needed understanding and analysis of people of our contemporary society, in an age of transition.

Material presented through the final conclusion has been developed to provide factual information, which provoke awareness and provide a source which may awaken individuals to the serious situation of the profession of architecture and enable the reader to formulate ideas regarding the problem. Throughout this thesis I have expressed my philosophy of architecture and a 'way-of-thinking'. The final section is an opportunity for me to express my sensitivity and awareness, and possibly providing another occasion for the reader to formulate personal ideas concerning architectural and social problems.

The future of architecture does not lie in understanding the response of architecture to significant trends and problems but rather to establish

a new criteria and framework in which modern architecture can represent
a modern society. Architecture must re-establish itself and respond to
major trends and problems, and must be able to affect the basic sources
and causes of the trends and problem areas. A strong unified architectural
profession that has strong direction, in human design and understanding
of the major influence of society and politics, will provide the means
by which I have been able to realize the overriding trends. I feel the
realization of the direction of architecture and the architectural profession
should be its ultimate goal.