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Urban Development as the Result of Political, Economic, and Social Forces - An Approach To Urban Planning

by

Michael V. McEnany

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William T. Cannady
Thesis Director

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ABSTRACT

URBAN DEVELOPMENT AS THE RESULT OF POLITICAL, ECONOMIC AND SOCIAL FORCES, AN APPROACH TO URBAN PLANNING

The area of this investigation has been the examination of urban development from the foundation of man's first social institutions to the present "free city" of the United States. Throughout history, no example of organization, no development or discovery was ever a result of pure organic growth. In every case of the evolution of man's physical environment, there have been determining reasons.

Physical form has and will continue to be determined by the political, economic and social forces prevalent at any given time acting on new or inherited physical situations. The urban environment is the physical manifestation of power structure. In our present day in the United States, planning as is generally understood has proven to be of little use. Two dimensional land use plans or the authoritarian super-scheme have no meaning and therefore no value. Our increasingly complex society cannot be categorized by either simple diagrams or master systems. A meaningful dialectic cannot result from personal caprice.

It is my thesis that any meaningful planning proposals must have as their basis the political, economic and social factors prevalent in the society at that particular time. The proposals which will be most
influential in shaping and directing future physical structure will not be the most inventive and creative form studies, but rather will be the schemes based on the clearest understanding of the developing aims and ambitions of our society. The great majority of recent planning proposals are based on either a personal, subjective reaction to existing conditions or an over application of the findings of myopic analysis. Insight into how the political, economic and social forces have determined the physical environment of the past and objective criteria for the analysis of current proposals will better enable the planner to organize man's activities than the usual repertoire of mechanical and sculptural gymnastics.

In the examination of the political, economic and social forces in the present United States, it becomes apparent that the power structure is very dissimilar to any situation of the past. The ability to act is by comparison greatly dispersed and is lacking in any clear direction. The physical environments which presently best mirror the attitudes of our society are Los Angeles and Houston. It is my opinion that the increasing public concern about air and water pollution, increasing crime, impossible transportation facilities, the projected population increases and the resulting necessities of physical plan, unnecessary conditions of poverty and increasingly expensive military involvement will have a profound effect on our urban institutions. Any meaningful planning in the United States will have as its
basis the developing directions of these political, economic and social pressures. The role of the planner is to translate the ideals and attitudes of his society into ordered reality. This task has been the same throughout history.
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PART I - INTRODUCTION

PURPOSE AND AREA OF RESEARCH

The purpose of this analysis of "the city" is twofold. The first results from a genuine interest in the city, the subject of which I have been able to pursue for a comparatively short period of time. Secondly, this research is intended to establish an approach for the planning of both our contemporary and future cities. In order to be capable of dealing with present and future problems in urban situations, it is first necessary to have some idea about what the city is. Only then is it possible to analyze what they could and should be.

The study of history has not always been as significant to man's development as it is today. During all stages of this development, interest and curiosity have motivated him to learn what has happened previously. And in some cases, the desire to immortalize various deeds and events has stimulated him to record what had been experienced.

"But it is only in an age, influenced by present day attitudes, which has turned to history as to a science which can reveal and explain the trends underlying human life and human affairs. In the age in which we live, history served as more than a remembrance of times gone by, and of past efforts of man; it served as a guide for our actions which shape the future". (1)

And although, the purpose of this research is not historical,
per se, one point should be made concerning the many concepts of history. All of the philosophies of history are in agreement in at least one area, that is, in the conclusion that history is not only the record of past events and deeds, but also "a thought process in the present". This process, if undertaken with genuine intent, cannot help but give our lives greater and richer significance but also serve as a strong basis for our future actions and decisions.

This thesis is based upon the conviction that planning for present and future urban institutions should result from the careful study and consideration of areas that can be embodied in two premises. The first is that the town and the city exist as the physical expression of the power structure of society predominant at any given time. Secondly, we are presently at a population and technological crossroads. The first will consist of a study of social forces which, though history, have been responsible for the creation of towns and have been instrumental in determining their history. The second will be an attempt to realize the implications of our technology, and more particularly the problems which face us in view of population trends. In this effort, it will be understood that solutions of the future will not be based on a multiplication of present trends and attitudes. "Every pattern is the product of history. You cannot take current statistics and project them forty years ahead. Such procedures look like science, but actually are alchemy". (2) The
general directives for our subsequent actions will result from the understanding and amalgamation of these considerations.

The organization of this research will be in four parts. The first will include how the city came into existence, and in so doing established ideals, customs and modes of thinking, many of which are still prevalent in society today. The second will be a study of cities which have existed for the purpose of discovering how various social attitudes and powers both determined and resulted from the expression of an environment and a way of life. The third part of this research will give attention to recent proposals and contemporary attempts to deal with problems of urban life now confronting us. Finally, the last part attempts to outline the basis of approach for urban planning.
POWER, THE ABILITY TO ACT

For as long as man has possessed the faculty for reasoning, he has sought to direct or at least influence the course of events. Probably beginning at the recognition of the first problems did he learn that the exercise of power provided a means for achieving his predetermined objectives. Most reasonable men would agree that even if we lack complete freedom to choose, we do have the power to act according to our choice. The liberty of man consists of being able to do what we want to do. Naturally there are determining reasons for our choice, and there is our commitment to act according to this choice. And, quite often, we weight reason against the immediate urge to either rectify or remove some present difficulty and satisfy only immediate needs. As a result we frequently do not self-determine what is best in the long run, and perceiving and approving the better course, prefer and follow the worse one.

Fewer reasonable men would agree that the entire course of history exemplifies the "Will for Power" of Nietzsche. However, on the continuum between pure evolution, the struggle to adapt and submit to nature, and man avenging himself on nature and fellow man without the necessity of excuses for tragedy and inhumanity, lies the development, and the decline or fall of the city. Its placement on this continuum lies closest to the latter. The city has always been
and must continue to be the expression of the power structure of society current at the time.

No institution, no example of organization, no development or discovery was ever a result of organic growth. In every case of growth or change there is a reason, this not always being in the best interests of either the cities or the citizens. No result has ever occurred immediately without effort and struggle. But once a change becomes a reality, it continues to mold, influence and in some degree control future thinking.
SUBJECTIVE CONCEPTION OF THE CITY

If we were able to halt our frantic scampering and observe the cage around us, we would soon realize that we are at a crossroads in civilization. Presumably the animal, homo-sapiens, is in control of this planet, and his being endowed with practically the same or equal faculties for reason and observation, would make him the only earth creature who would need go to the trouble of taking an inventory. It would not take long to come to agreement on two problems of paramount importance. The first is how to house, clothe, feed, and occupy the time of the succeeding generations, to say nothing of the present. The second is ironically enough, how to ensure that there will be succeeding generations.

According to experts in the field of demography, the world population will, barring a catastrophe, double in something like the next thirty-three years. Although we in the United States don't expect quite such a large multiplication factor in the future, and of course we will be protected greatly by the oceans on two sides and by our boundaries on the other two sides, we will be forced sooner or later to do something. We who are able can close out these facts by building walls around our immediate environment, sit quietly and contemplate rationally, (only in our present era have one hundred and ninety million people collectively refused to recognize almost twice
as many) perhaps for the rest of our lives, but alas the burden will be only shifted, it's weight having increased many fold, to our children.

The city of the future will be, in many respects, very similar to the cities of the past. They will continue as the focal points for the meeting of minds, the examination, application and exchange of ideas, the crossroads of goods and people and the storehouse of knowledge. The importance of the city in regional, state and world affairs need hardly be pointed out, except to state that its role will be far more important in the future.

Perhaps the most significant word in the discussion of a future environment is mobility. The city will allow and provide the complete freedom of movement that is possible under contemporary conditions using the latest technology. And this will not be confined to intercity movement, but in fact will include intra-city traffic, both locally and nationally. Although the roots of "home" will exist, ours will be essentially a migratory population with mobility available to all members of society. These citizens will be products of many varied social, economic, political and cultural backgrounds, meeting in and experiencing a diversity of environments.

This greatly increased mobility will have a multitude of effects on, not only the formulation of ideas, but also the shaping of the physical environment. Not the least of these will be a trend toward
the removal of political boundaries of the school district, the city, the state and probably even the nation. The result will be the invasion, conflict and assimilation of the heterogeneous cultures, which presently exist in a vacuum, resisting change or even the analysis of their own convictions. Perhaps this new mobility will lead to positive solutions to the problems of increasing boredom and leisure time. In the stimulating conflict of individualities, many will find the ultimate meanings of their personal lives.

Future cities will contain a diversity of possibilities and choices to be made. As interests and beliefs vary so will availability. Individuality and initiative will be increased through experience, and a difference of opinion will not be discouraged but welcomed. The individual will be responsible for his own actions and well being, but at the same time he will be aided in the pursuit of his own ends by a complex variety of choices and experiences made available to him.

The physical form of the city will necessarily reflect the values acquired by the vast increase in mobility and the growth of leisure time. No longer will the new be so greatly dictated by inherited past situations. The geometric increase in our population will continually present new conditions in every area of research presently being carried on by man. And it will necessitate bold and imaginative thought in the areas of physical planning. Future cities will not be static but kinetic. They will increasingly display the
elasticity necessary to keep up with social changes, and will offer a
greater variety of choices and functions. Extension of the physical
environment will not be approached with the antiquated adherence to
the master plan, but rather as a strategy of design. Only in this way
will we be able to avoid the drabness and monotony of the private life
existing in a vacuum, deteriorating into complacency, drugged to the
point of inactivity, and whose final necessity is only to be fed and
watered as a herd of cattle.

Three hundred years ago there was no thought about technology
or the machine as a determining cause in social and human develop¬
ment. But within this period of time, the machine has made its
existence felt and, more recently, has assumed a status and person¬
ality of its own. Often, in observing discussions where the word
machine or computer is mentioned, an air of reverence is assumed,
as if the object has acquired qualities not altogether inanimate.

Technology, the sacred cow of the present, will be the salvation
of future cities. We find ourselves in the position of being able to
have anything physical that we could desire. It is only our lack of
agreement in what we consider important that stands in the way of
what we could now have. Without allowing technology to become
master, citizens of the future will use their inventiveness and
imagination to provide a human environment for themselves and
future generations.
The city of the future will profit from observation of its predecessors' policies toward economics. The short term financial expense will not be the determining factor of urban growth or renewal, but rather the necessity of investment will be weighed in accordance with future financial value to the city. In essence, the choice will be made between the monetary cost of development and the social cost of the avoidance of development.

Thus far nothing has been directly mentioned about education, although it will be the foundation of man's future cities. The disciplines now recognized will continue to be taught, as they are now, but a new dimension will be added, that of awareness, interest and excitement, learned only with the aid of experience of an integral community life. It is now well understood that education is our best investment, but it seems very difficult to implement any plan of large scale action. The future needs are, in themselves, self-evident, and the quality of today's teachers is often beyond reproach. In future cities, education will compete with business for competent personnel who are interested not only in the research project or the grant, but primarily in the communication of knowledge. Education on the collegiate level will be readily available to all members of urban life, while education through experience will continue as a result of diversity of urban functions and activities.
Before the appearance of the first town, there existed for man a long stage of development. This history of man is usually divided into two areas, the Age of Stone and the Age of Metals. The former, the preliterate age, is commonly accepted as beginning in 500,000 B.C. and ending c. 5000 B.C., thus comprising some 95% of his temporal existence. Early paleolithic man was essentially a nomadic creature whose primary occupation was food gathering and hunting.

It is generally accepted that he had the capacity for speech, which enabled him to communicate with the members of his tribe and pass on learned information to succeeding generations. It is also justifiable to assume that he possessed some ability for reason, however underdeveloped it might be by present human capabilities.

Perhaps the first indications of beginning social institutions can be observed in Neanderthal man. There is evidence of flint-working floors and stone hearths where fires appear to have been made in the entrances to caves where he either lived or took refuge. More significant is the practice of Neanderthal man's burial of the dead, in a cavern or mound, with the inclusion of tools and other objects of value. This practice suggests the development of some religious sense or at least a belief in some form of survival after
death. It is significant that the first institutionalized settlement was reserved for the dead.

As time brings us to the Upper Paleolithic culture, there is found a marked development. Not only is there evidence of far superior tools, the adoption of clothing and the use of fire, for warmth and the preparation of food, but, for the first time, man's life became not wholly nomadic. Remains found around caves in southern France indicate that Cro-Magnon Man must have used them, seasonally at least, for years at a time.

"The profusion of charred bones at Solutre and elsewhere probably indicate co-operative enterprise in the hunt and sharing of results in great community feasts. The amazing workmanship displayed in tools and weapons and highly developed techniques in the arts could scarcely have been achieved without some division of labor" (3)

The importance of this first indication of the division of labor cannot be over stressed. Patrick Geddes suggests that there was a group of basic occupations from which all others have developed. These were the miner, the woodman, the hunter, the shepherd, the poor peasant, the farmer and the fisherman. In his attempt at the scientific survey of past to present, he states, "To trace these developments is thus to unravel the explanation of the individuality, the uniqueness, of each of the towns and cities of men; and yet to also understand their manifold similarities region by region." (4) The workmanship evidenced in tools, weapons and the highly
sophisticated techniques in the arts indicate that certain members of the tribes must have gone through long periods of training and self appraisal, devoting all of their time to their type of specialization. As a result, it was necessary for them to have been supported by a substantial number of hunters and food gatherers. This may be indication of the first aristocracy; the cult of the priest-artist, the highest members of which possibly became rulers with at least limited authority.

Cro-Magnon man had a highly developed sense of a world of unseen powers. He bestowed greater attention to the bodies of the dead than did Neanderthal man, painting the corpses, folding the arms over the heart and depositing jewelry and ornately carved tools and weapons in the graves.

Perhaps the greatest achievement of Cro-Magnon man was his art; painting, sculpture and carving. The cave paintings have their origin in the belief in sympathetic magic, the picture expressing the occurrence of a thing to come, the capture of a lion or the killing of a bear. It was believed that these depictions would enable the hunter to have a successful day, thereby ensuring the struggle for existence. The first carvings and sculptures were also based on the belief in sympathetic magic, displaying the hope either for the necessities of life, the success of the hunt or fertility. Presumably, these first works of art were not produced to satisfy the primitive
man's aesthetic sense. Once completed, Cro-Magnon man was apt to be indifferent to them, often times painting over earlier works, and discarding carvings. Apparently the important thing was not the finished product itself, but the process of making it.

As Mumford points out, two of the three original aspects of primitive settlement, the cemetery, the cave and the collecting and hunting economy, are a development of sacred things, and not just that of physical survival. The burial of the dead in the grave mound and the ritual of the cave were the first meeting places in which man periodically returned, both being based on the division of labor.

"The magnet comes before the container, and this ability to attract non-residents to it for intercourse and spiritual stimulus no less than trade remains one of the criteria of the city. As the city takes form, much more will be added: but these central concerns abide as the very reason for the city's existence, inseparable from the economic substance that makes it possible." (5)
The most significant changes thus far in man's development occurred during the Neolithic period or the New Stone Age. This area in history witnessed both the development of agriculture and the domestication of animals, thus enabling Neolithic man for the first time to become a food producer. No longer was his life determined by the availability and the mobility of his food supply. Man now had at least some degree of control over areas of his existence thus far left only to nature.

The first animal to be domesticated is generally thought to have been the dog, presumably because he would continually follow the hunter's camp in order to feed on bones and scraps of meat. Before the end of this period, the cow, the goat, the sheep, the pig, the ox, and finally the ass and the horse were added to the list of animals made to serve man's needs. With this came the periodic planting and harvesting of grains; barley, vegetables, numerous fruits and flax for its textile fiber.

Without agriculture and domestication it is inconceivable that society would have attained the complexity it did. The harvesting of crops and the need for protection of this new source of livelihood ultimately led to the establishment of the village, the first seed of an urban community. This source of food supply, security and
leisure time, and a further division of labor, allowed a chain of developments impossible for a nomadic culture. Not the least important of these is that they gave man the impetus to seek new methods of the control of nature and led to the first systematic accumulation of knowledge, passed from one generation to the next, altering and improving with each phase of this learning process.

One of the most important features of the Neolithic culture was the establishment of institutions. This body of customs, rules and traditions, existing as a combination of group beliefs, performed the role of the first government in securing peace and order in society, however loose and unorganized the agencies for enforcement might have been. The first power of control in these societies consisted of mores and public opinion directed at the expression and preservation of group need. There were physical manifestations of the customs such as buildings, penal devices, and communication facilities. And although many of the elements of these institutions existed in earlier times, their fully developed form seems to have occurred as an achievement of the Neolithic Age.

The first of these institutions, of perhaps the most ancient origin is the family, a permanently composed group consisting of parents and their offspring. The purpose of this group was primarily the care of the young, division of labor, production and distribution of property, and the preservation and teaching of
beliefs and customs. As Lewis Mumford points out, the agricultural revolution was quite possibly preceded by a sexual revolution, resultant from a greater food supply and more leisure time. This change shifted the emphasis from the male figure as the hunter and protector to the female who bore and nurtured the young, planted and cared for the seeds and perhaps was responsible for the development of the first fertility rites.

A. M. Hocart has suggested that both the domestication of animals and the use of manures might have originated in early fertility rites and magical sacrifices. "In any event, general domestication was the final product of a growing interest in sexuality and reproduction; and it was accompanied by an enlarged role for woman in every department".

"Certainly 'home and mother' are written over every phase of neolithic agriculture, and not least over new village centers, at least identifiable in the foundations of houses and in graves. It was woman who wielded the digging stick or hoe: she who tended the garden crops and accomplished those masterpieces of selection and cross fertilization which turned raw wild species into prolific and richly nutritious domestic varieties. It was woman who made the first containers, weaving baskets and coiling the first day pots. In form, the village too is her creation: for whatever else the village might be, it was a collective nest for the care and nurture of the young......... Without this long period of agriculture and domestic development, the surplus food and manpower that made urban life possible would not have been forthcoming." (6)
The second institution developed in more complex form by Neolithic man was religion. It is generally agreed that early religion was not a matter of belief but a series of rituals with the myths, dogmas and theologies arising later. As primitive man was almost entirely dependent upon nature, rites and sacrifices developed for the purpose of evoking natural phenomenon such as continued sunshine or rain, not dissimilar to the sympathetic magic of Neanderthal man.

Another element conspicuously present in primitive religion was fear. This fear was not only of sickness and death, but also of hunger, drought, floods, spirits of the dead and animals which had been killed. A large part of early man's religion consisted of charms, incantations, and other ceremonial precautions to ward off evil. In primitive societies of today, there is little conception of natural cause; each event such as death, birth or flood has its own mystical significance. Such theories about the meaning of these mystical occurrences undoubtedly came into the minds of exceptional men, revered then as much as the medicine man seems to be in present primitive societies.

The last institution developed by Neolithic man was the state, a sovereign group with power to make and administer laws and to preserve social order by punishing men for not adhering to those laws. Except in times of crises, the state is not thought to have
existed in a great number of Neolithic societies, and even then only in the latter phases of the culture. These groups of people living together, harvesting their crops and trading their animals had no permanent system of courts, police officials or organized governments with coercive powers. Mores and customs took the place of what we now know as law with offences being handled between private individuals or families. It would be difficult to support the claim that there existed a clear conception of crime against the community, although there must have been instances in which the councils of elders or some other such group of men formed by the society dealt with and banished offenders for certain deviations from existent patterns. And probably the majority of these instances were a result of a violation of a taboo or other religious prohibition, the punishment being religious not political.

The origin of the state was a consequence of a variety of factors, of which certainly one of the main ones was the development of agriculture. In areas such as the Nile Valley where life depended upon the intensive cultivation of a limited amount of soil, a high degree of social organization would be of the utmost necessity. Ancient customs would not suffice for the establishment of rights and responsibilities in a society, that had such a wealth of agriculture and the tremendous possibilities of the conflict of interests. New measures of social control would become necessary in the form of a
strong central authority with members of society initially submitting to it for their common good. The establishment of this authority would continue gradually until the position of the state, not necessarily despotic, but with full authority, came into being.

Other reasons for the establishment of the state were the result of the development of agriculture and the domestication of animals. As it has been previously mentioned, the process of domestication directly involved and was to a large degree dependent upon woman. The results of this taming do not on the surface seem to include the hunter in such activities as planting and watering seeds and the maintenance of a permanent dwelling. Perhaps, initially, the hunter was welcomed not for his domestic skills or his ability to secure the mainstay of food, but for his protection of the community. Wild game, particularly the larger varieties, must have ceased to be a necessity as a food source, but instead became unwanted because they were detrimental to crops. It is possible that villages, under the protection of hunters, prospered more than those where crops were trampled by wild herds and whose children and women were eaten or mangled by wild beasts while attending to the fields. Certainly one cannot immediately conceive of the hunter as turning from the wild animal to the practice of preying on his fellow man, but somewhere between the village chieftain and the divine monarch, the hunter must have made his influence felt. "It has not been for
nothing that hunters became nobles and that kings, nobles and rulers remained hunters even to our own day. Nor is it chance that sport and games, mostly of their making, play a chief role in the education of the youth of all other origins and occupations, training them for our service." (7)

A number of ancient states evidently owed their success to various war activities such as conquest, and the defense against invasion or expulsion of invading forces from the vicinity. In determining the first cause of the military state, one must look at a loosely organized society in the time of a crisis. In the face of impending danger, one from the group often steps forward and takes leadership for the duration of the crisis, and what was originally an informal band of hunters or village dwellers assumes the character of a rudimentary state. Frequently in a settled society this leader does not entirely retire back to his original position as a member of the ranks, but retains his position lest his society face peril again in the near future. One has only to look at the effects of modern warfare, both offensive and defensive, in strengthening and dilating the powers of the state to see how the initial development might have occurred.

Religion also made its contributions to the organization of the state. Medicine men frequently may be seen to exercise an authority, and while they might not command physical forces, they have had the power to impose religious penalties or use their position to
control the followers of their opponents with the element of fear. It is entirely probable that some medicine men, or mediators, or interpreters, who occupied the position between fellow citizens and the unknown, made themselves kings.
FROM VILLAGE TO TOWN

The change from village to city was by no means a result of the mere addition of citizens, but as in the development of the state, a result of conflict, a meeting of dissimilar forces, the culmination of a crisis and then a stage of intermixture and absorption. Although which of the ancient nations is the oldest is still a continually debated question, the several causes responsible for the earliest rise of civilization is an area of greater agreement. And of these causes, the geographic factors of both the Nile and the Tigris-Euphrates valleys seems to have been the most important, each having a limited area and exceedingly fertile soil. In Egypt, the soil was productive enough to allow as many as three crops per year on the same land, while beyond the river valley, on either side, there existed nothing but desert. The river as the highway of the area, had a unifying effect, and at the same time served as the only means of water transportation.

In the Tigris-Euphrates valley, similar conditions were present. As in Egypt, the rivers provided excellent facilities for inland transportation as well as containing an abundant supply of fish and waterfowl. The distance between the Tigris and Euphrates varied between twenty and forty-five miles, and since the surrounding areas were deserts, the development was contained.
Climatic influences also played an extremely important part in both areas. The atmosphere of Egypt was dry and stimulating while even the hottest days were not nearly as uncomfortable as in areas more to the north. Except in the Delta, rainfall occurred in almost negligible quantities, but this deficiency in moisture was counteracted by the annual flooding of the Nile between the months of July and October. Another factor of great importance was the direction of prevailing winds. For more than three quarters of a year, the wind was from the north, directly opposite to that of the Nile current, the result being a simplification of the problem of transportation. Certainly this factor was of extreme advantage in promoting contact among numerous groups of peoples separated by hundreds of miles.

The conditions in Mesopotamia were somewhat less favorable than along the Nile Valley. The summer heat was considerably less tolerable, the humidity somewhat higher and tropical diseases, virtually unknown in Egypt, were at best hazardous. Nevertheless the climate and the seasonal winds from the Indian Ocean were perfect for the growth of date palms, perhaps the greatest single inducement for the settlement of large numbers of peoples between the two rivers.

Most important of all of the geographical situations was the effect of scarce rainfall in both of the regions, the result of which was the inducement to imagination and incentive. Although there
persisted yearly inundations of the rivers, irrigation was essential if full potential was to be taken from the rich soil. The end result, as far as the utilization of agricultural potential is concerned, was a highly developed system of social co-operation utilized with mathematical skill and engineering ability. But, between this point in Mesopotamian and Egyptian history and the stage where there existed only sparsely settled unconnected villages there were centuries of military and political struggles.

It is maintained by Ludwig Gumplowicz that all culture is a product of group conflict. He proclaims that the earliest groups of social organization were held together by bonds of kinship, and they lived in comparative peace. But, with the coming of prosperity and the increase not only in numbers but in movements, diverse groups came into contact and there resulted a collision of interests, with quarrels persisting until the weak were forced into submission. Initially the defeated were exterminated, however it soon became apparent that it was more profitable to enslave them. Thus appeared the ruling class, who ensured its future position with various regulations, and the exploited group, whose role in life was to work for their conquerors. Of these conquerors, a small group set themselves up as rulers of the state, and, in control of the armies were able to determine the direction of the state according to their own impulses.
FOOTNOTES

(1) Kirchner, Western Civilization, p. 1

(2) Futterman, The Future of Our Cities, p. 30

(3) Burns, Western Civilization, p. 7


(5) Mumford, The City in History, p. 9-10

(6) Mumford, The City in History, p. 11

(7) Geddes, Cities in Evolution, p. 21, introd.
MESOPOTAMIA

The oldest civilizations of the Tigris-Euphrates valley date from c. 4000 B.C., and although they are generalized as Mesopotamia, these cultures may be divided into three main periods: "Babylonian Period, c. 4000-1275 B.C., with towns like Erech, Lagash, Ur and the early Babylon; Assyrian Period, c. 1275-538 B.C., including the Chaldean period from 612-538 B.C., the time of the palaces of Sargon (722-705 B.C.) at Khorsabad, at Nineveh and Nimroud, and the great city of Babylon under Nebuchadnezzar (604-561 B.C.); Persian Period, 538-333 B.C., the time of the large palaces of Darius (521-485 B.C.) and Xerxes (485-465 B.C.) in Persepolis." (1)

The first development in Mesopotamian civilization originated with a tribe of peoples known as the Sumarians who settled in the lower Tigris-Euphrates valley between 5000 and 4000 B.C., and to whom succeeding generations owe much of their characteristics. The system of writing common to later Assyrians and Persians was of Sumarian origin as were the religion, laws and much of the scientific and commercial foundations. The only major differences developed by later conquerors were in the fields of government and warfare. The transformation from the first villages to the emergence of the city can best be seen in Mesopotamia.
The first settlements in the Tigris-Euphrates valley were influenced by the rich, fertile soil between the two rivers, and a plentiful supply of water. But it became apparent that if agriculture, the major source of existence, were to reach its high potential, irrigation had to be utilized by a high degree of social coordination and cooperation. "This management of water was the price of communal survival: for there was a natural threat of water shortage at the beginning of the growing season and a likelihood of storms and floods at harvest time. Agricultural productivity here rested on unceasing vigilance and collective effort." (2)

The head of this new organization was probably the descendant of the tribal chieftain, now the central authority of a small village. The abundant of food supply, which had led to an increase in reproduction, was stored in the village granary under the protection and control of this chieftain. It would not take many generations to remove this man, the medicine men who were responsible for the benevolent forces of nature and the soldiers who guarded the surplus, from social participation in village life. As they became men of responsibility and power, walls were not only necessary for protection of harvests, but of the authorities themselves. Slowly, villages began to emerge as townships. Shrines were erected to the numerous gods, which by then had attained distinct personalities and human attributes. With these shrines came the secretive mystery
cults, which later developed into established priesthoods. With the increase in central authority a larger area could be maintained and the potential surplus in food and human energy was enormously enlarged.

In the development of the urban situation, Sumer undoubtedly took the lead. During the greater part of their history, Sumarians existed in a loose confederation of city states, each headed by a "patesi", in whom was embodied the functions of chief of state, commander of the army and controller of the irrigation and drainage systems. These early city states were seldom united, except in the instance that an ambitious ruler would, as a result of military conquest, extend his control over a group of cities and set himself up as king. But not until 2000 B. C. did Dungi unite the people of Sumer into a single nation with one central authority.

Perhaps, originally, the village chieftains occupied fortresses while the remainder of the townspeople lived in the surrounding areas in close proximity to their agricultural work. But in times of danger, either from attack or from bad weather which forced them from their homes, the people took shelter in the fortified and protected enclosure. As the walled fortress or citadel began to contain the full time occupancy of the king, the priests, and the military, it began to take on psychological significance. The wall offered not only physical but mental security in the time of peril, and at the same time served to
awe the beholder. The citadel constantly reinforced the difference between the insider and the outsider.

With the invention of cooperative warfare and destruction, the wall became a necessity not only for the central district, which housed the priests, rulers and military, but also for the remainder of the citizens, setting definite boundaries and limits to the city, and defining completely the division between the city and the countryside. Besides the function of protection and military defense, the walled city offered a physical means of control. The gates into the city were carefully guarded and watched to stop infiltration from any source. And in a like manner, the insiders were subject to control by the power of the rulers and military. With the growth of new methods of attack and defense, and an intricate system of power and control, the walls developed into a complicated system of enclosures within enclosures, continually becoming more difficult to assault.

As has been previously mentioned, the chief basis of Mesopotamian economy was agriculture. Land was never the exclusive property of the rulers, but few of the people had little which could be termed their own. The majority of the masses were serfs, rather than slaves, who had mortgaged themselves into debt. However, they were not a degraded class of people as they could own their own property, work for wages when not needed by their masters, and marry free women. Free men were not much better off than the
serfs, since they were forced to pay high rents and labor on the public works projects, and property was difficult to obtain as it existed primarily in large estates held by the rulers, the priests and the army officers.

Sumarian religion had changed little from earlier conceptions. Neither spiritual nor ethical content seems to have been of great importance. Gods were anthropomorphic, adopting the body of mortal man and with it the same passions and weaknesses. This religion provided no blessings or significant relations with the gods nor did it dictate or enforce any standards of morality. Afterlife was regarded as dreary and only temporal. Sumerian religion was for this world exclusively, benefiting man only the provision of abundant harvests and success in business.

War and natural possibilities for easy movement led to commerce, the second most important source of Sumer's wealth. The communication with surrounding cities encouraged the establishment of a flourishing trade. With the invention of cuneiform writing, numerical weights and measures, and the processes of multiplication and division, the young and growing merchant class was given great impetus. As libraries were built for the storage of numerous records, schools were established which trained book keepers and accountants. Under the protection of a unified government, all of the familiar aspects of business were highly developed; bills,
receipts, notes and forms of credit were in frequent use, with gold and silver serving as the medium of exchange.

Perhaps the most distinctive development of the Sumerians was the establishment of a law code by Dungi in the middle of the third millennium. It resulted from a long period of local usage, and as it is generally agreed upon, was restated in the well-known code of Hammurabi, king of Babylonia. It is based on the "eye for an eye, tooth for a tooth, limb for a limb" philosophy, the court usually serving only as a negotiator between private parties. The code applied to the people according to their class, aristocracy, commoners, and serfs or slaves, with the severity of penalties resulting from the class of the victim and in some cases from the class of the offender. An offense against an aristocrat or patrician resulted in harsher treatment than the same crime against a commoner or serf, and similarly, if a patrician was the offender, he was punished more severely than would be a person of lesser status. Since the patricians were mostly of the military, and hence chiefly responsible for the defense and orderly maintenance of the state, their actions could be permitted to deviate far less. The responsibility of the responsible has not since been maintained in this manner.

The city of Ur, c. 2125-2025 B. C., the birthplace of Abraham, contains two hundred and twenty acres within its walls, including harbors, canals, two temples and the palace, and crowded houses
raised twenty feet above the plain. The ziggurat is the most domi-
nant feature of the city, symbolically elevating the shrine, seat of
the ritual of the fertility cult. The shrine itself was simple and
unelaborate, but the superimposed towers with their monumental
stairways and successive levels were embellished to a great degree.
The ziggurat rises above, and commands the attention of not only
the entire town, but the countryside and the adjacent Euphrates
river. Even the palace of this early Mesopotamian town seems to
lie in the shadow under the protective force of this shrine, awaiting
its turn for dominance.

The city of Khorsabad is dated at the end of the eighth century
B. C. and its overall fortified appearance attests to the development
of the art of war and destruction. The dominance of power is mani-
ifest in the king's palace, now elevated on an artificial platform above
the parapets of the city wall, serving not only the function of resi-
dence but also the center of administration and control. This Assyr-
ian city (of about 740 acres in 700 B. C.), exhibited the exalted
position of the royalty above all else. These palaces were given the
major attention of techniques in construction and ornamentation to
heighten the magnificence of the rulers, while the sacred buildings
or temples were given only a subservient position in the overall
scheme. The power of the ruler and the military has asserted and
glorified itself far above not only the serfs and commoners but the
institutions of religion.

BABYLON

In Babylon, which dates back to the eighth and ninth centuries B.C., there was a revival of building activity under Nebuchadnessar which centered about the replanning of old Babylon of the Chaldean Age into a monumental capital with wide streets intersecting at right angles. Temples were reconstructed on a mammoth scale as well as gigantic bronze gates controlling passage in the city wall. Within these walls were fields ample enough to provide food to sustain the entire population during an attack. In the words of Herodotus who visited the town in 450 B.C.:

"The city stands on a broad plain and is an exact square, a hundred and twenty furlongs each way, so that the entire city (outer walls) is four hundred and eighty furlongs. It is surrounded in the first place by a broad and deep moat, full of water, behind which rises a wall fifty royal cubits (1 cubit - 18 inches) in width and two hundred feet in height. On the top along the edges of the wall, they constructed buildings of a single chamber leaving between them room for a four-horse chariot to turn. In the circuit of the wall are a hundred gates all of brass, with brazen lintels and side posts.

"The city is divided into two portions by the river which runs through the middle of it (Euphrates). The wall on either bank has an elbow carried down to the river; thence, from the corners of the wall, is carried along each bank of the river a wall of burnt bricks. The houses are mostly three and four stories high, the streets all run in straight lines, not only
parallel to the river but also the cross streets which lead down to the waterside. At the river end of these cross streets, are low gates in the wall that skirts the stream.

"The outer wall is the main defense of the city. There is, however, an inner wall of less thickness than the first, but very little inferior in strength. The center of each division of the town is occupied by a fortress. In the one stood the palace of the kings surrounded by a wall of great strength and size, in the other the sacred precinct of Jupiter Belus." (Herodotus)

"The 'Champs-Elysees' of this composition was the so called Procession street along which the images of the gods were carried to the New Year's Festival. Where it passed through the inner wall, the famous Ishtar Gate made an 'Arc de Triomphe', and it skirted the imperial palace with its Hanging Gardens before reaching the great temple of Bel, Etemenanki, whose ziggurat had now also been built on an ambitious scale" (3)

The physical image of Babylon expressed the major attributes of the development of the power structure of the Mesopotamian area. At this time all of the elements which are later recurrent had been developed; strict control by the rulers, military and priest cult, the active expression of warfare and the necessities of fortification, and the influence of industry and trade and the resulting intensity of city life. The walls of Babylon display not only protection from exterior peril, but active military control from within. In order to curtail riots resulting from anxiety and insecurity, the bridges connecting the two sides of the town were raised during the night.

Trade and commerce left an imprint on the form of Babylon,
and probably its economic success was determined because it was located on the Euphrates River, one of the main arteries of communication. It is significant that the city bridges the river, the source not only of water but also the instrument of human communication. Although the priests did not control physical power, they exerted a tremendous psychological influence over society. Their privileged position was the result of the control of knowledge, as they were the judges, teachers in the schools and the officials in the business of government.

"Their superior factual knowledge, their prestige as prophets and their status as judges and teachers gave them a position in society which, after the death of Hammurabi, they could exploit for the sake of gaining political and economic power." (4)

It was this priest domination of affairs and a weakened military that proved disastrous to Babylonia.
EGYPT

Between c. 5000 to 3200 B. C., there existed no unified state in the Nile Valley. In the early part of this period, the area was composed of a number of "nomes" or independent city-states, although there seems to have persisted cooperation with each other for economic reasons. Sometime after 4000 B. C., as these communities began to draw closer together, there resulted a fusion into two empires, one in the north and one in the south. How this came into being is not certain, but possibly it was accomplished by voluntary agreement or peaceful acquisition by a greatly magnified village chieftain.

Much of the early development of the Sumerian city may have been very similar to Egypt as they both exhibited the powerful central authority, great emphasis on the religious cult, and many agricultural and climatic similarities. But, in contrast with Mesopotamia, that which was most valued by man was the afterlife, and it was this in the Egyptian religious heritage that permeated every phase of Egyptian life. Artistic development was an expression of religious symbolism, literature and philosophy were continuously influenced by belief in the supernatural, and the government of the Old Kingdom was, to a great degree, a theocracy, the Pharaohs ruling not in their own behalf but as the agents of the gods.
The Pharaoh as a living god at the head of a rigid, centralized
government exercised strict control over the whole country. As the
supreme landlord and with authority over the foundation of Egyptian
life, the Nile River, this man executed laws, levied taxes, regulated
agriculture and the use of the water systems, and appointed gover-
nors to supervise various districts of the kingdom. However, most
of the farmers remained free, owning their own cattle and farm im-
plements such as plows and hoes. It was not until later that the
nobility succeeded in gaining control over a great deal of the land
and farmed it with slave labor. "Yet, strict class stratification
did not exist; social nobility prevented a rigid structure and many
rose from a low to high estate." (5)

The Nile River was the factor of unity in Egypt, but although
this natural river valley existed in a location virtually free from
invasion, it disallowed commerce and the interchange of ideas
enjoyed by Mesopotamia. It was the river which demanded the
large scale social cooperation that resulted in a strong central
government. And it was the river which determined agriculture as
the major livelihood of the Egyptian people. Not until after 2000
B. C. did trade and commerce have a great deal of importance.

Probably in Egypt, as in Mesopotamia, the earliest configu-
ration of the city was characterized by the growth of the protective
wall. But these features of military dominance disappeared with
the rise to power of the great Pharaohs, as centralized figures of both religious and political authority. The foundation of government of the Old Kingdom had rested on a policy of peace and non-aggression, an extremely unique situation in the establishment of a state. The Pharaoh had no standing army or any organization which could be referred to as a national militia; rather each nome or "city state" maintained its own local militia which was commanded by civil authorities, and was generally called out only for public works projects. On threat of invasion, these local forces were assembled by the Pharaoh and placed under the command of one of the local authorities, but at no time did the Pharaoh have an organized national army at his disposal. As the state had been founded on the basis of cooperative necessity, the Egyptians in the Old Kingdom pursued the policy of isolation rather than that of exploitation.

"The walled city of Egypt was an early form, whose military features disappeared once the great Pharaohs had established a universal order and a unified command, resting mainly on religious belief and voluntary support rather than on physical coercion.... In Mesopotamia each city was a separate world. In Pharaonic Egypt the cities did not, probably, hold so large a part of the population: the function of the city - enclosure, assembly, intermixture - were performed by the land itself." (6)

Mumford goes on to suggest that the very success of Pharaonic religio-political system removed the necessity of the walled citadel as an instrument of control. It was the Pharaoh himself,
by virtue of being king and at the same time a living god who existed as the focal point of the city, who brought voluntary control into the palace and the temple. This unification of the Nile Valley not only relaxed the need for walled control, but along with Egyptian pre-occupation with the afterlife, gave form to a unique and new focus of civilization; the city of the dead.

In the open city of Gizeh, the dead are given priority over the living. The act of construction of the pyramids was a consecration of faith, although they held political overtones. The indestructable tomb of the ruler provided the assurance of his afterlife and at the same time guaranteed immortality to the people as the Pharaoh was the figure of national and spiritual life. It was also intended to provide the state with the symbols perpetuating permanence, stability and beauty. Perhaps too, they were proposed for the economic purpose of providing opportunities for employment. This would be assuming that agriculture had reached such a high degree of productivity that many of the people were without work for at least some part of the year. The collective labors which resulted in the structures at Gizeh were far more than the aggrandizement of a political or religious authority. Rather they were the expression of national pride, the provision of a major pre-occupation of the Egyptian people, the afterlife, and a symbol of the strength and permanence of their state.
Perhaps more impressive than the actual royal tombs themselves is the planning of the total complex. The structurally perfect pyramids, which, by sheer scale, dominate the area of Gizeh are so precisely oriented that the north star, Polaris, is visible from any point in the long entrance passage. Their impressive monumentality is further emphasized by the low horizontality of the funerary group, landing temples on the edge of the Nile below, and the connecting causeway, all separated from the tombs by reason of their having to be sealed off. The mastabas clustered about the pyramids are also laid out according to the compass, displaying their inward sloping walls as the instrument of permanence. This geometrically imposed order is the antithesis of an organic growth which takes generations to mature into a fully enriched form. This orderly planning is associated with the capability of implementation, reaching final completion during one lifetime. This basic principle of order perhaps first culminating here in Egypt, will be of utmost necessity in both our lifetime and in future periods of development.

During the Middle Kingdom and the Empire Period or New Kingdom, the preservation of the corpse of the Pharaoh lessened in importance as did the universal identification of the ruler with the people and the nation. The government was considerably weaker than that of the Old Kingdom, although the Pharaoh continued as the dominant figure of state. The authority and power moved into the
hands of the nobles and aristocrats who ruled their districts with despotic jurisdiction. And although a revolution of the masses culminated in the democratic Twelfth Dynasty, a period of social justice and intellectual achievement, disorder and war again prevailed with the intervention of the Hyksos. The founding of the Empire resulted from the successful war against the Hyksos, and the Pharaoh's reluctance to disband his military machine.

It was during these latter two periods that the temple replaced the pyramid as the dominant architectural form. Probably the reason for this was that the expense of a pyramid was such that it could not be undertaken by the weaker monarchs after the Old Kingdom. Some of the best examples are the temple at Karnak built under the military governments of the Empire Period.

The Egyptian temple was not intended as a place of prayer for the people. Rather it provided a setting for ritual conducted by a secretive hierarchy of priests, as none but they were allowed admission to the temple precinct. Nor did the temples serve the purpose of tombs. By this time it was apparent that there was no possibility of sealing tombs from clever thieves. As a result, the Pharaohs of the Empire Period dug hidden tombs in the Valley of Kings near Thebes, sacrificing the grandeur of the visible tomb to security of the corpse. But none of the monumentality or the expression of power and grandeur sufficient for a military state and
an increasingly important priest cult was sacrificed in other structures.

The purpose of the temples at Karnak can be easily comprehended from a brief look at their planning. They are organized along a central axis with the elements symmetrically opposed, balancing each other on alternate sides. "Each element marks a prescribed stage in the ritual approach to some ultimate mystery, and it is in a cult-chamber associated with this mystery that the axis usually terminates." (7)

It is during the Empire Period that the growth of military absolutism and the increasing frequency of wars and conquests necessitated vast amounts of revenue and almost an unlimited supply of food. The result of this imperialism was the extension of governmental control over every phase of economic life. By this time, the merchant class had all but disappeared.

There was strong support for the Pharaohs and the military state from the priests. As a result, this power and plunder conscious ecclesiastical hierarchy was exempt from taxation, held two percent of the population in slavery, owned one-seventh of the arable land, nearly one hundred ships, numerous livestock and employed untold numbers of artisans and craftsmen. Undoubtedly these affairs of the priest order put a tremendous drain on Egypt's economic situation, and ultimately were one of the prime causes of social
and moral decay. This squandering of wealth by the priests and the state and the ambitious attempts at the conquest of an empire were the downfall of Egypt.
FOOTNOTES

(1) Korn, History Builds the Town, p. 19
(2) Mumford, The City in History, p. 58
(3) Copplestone, Ed., World Architecture, p. 25
(4) Kirchner, Western Civilization, p. 16
(5) Kirchner, Western Civilization, p. 8
(6) Mumford, The Culture of Cities, p. 81
(7) Copplestone, Ed., World Architecture, p. 32
PLAN OF BABYLON
UNDER NEBUCHADNEZZAR

BABYLON IN
CHALDEAN AGE

PROCESSIONAL WAY, BABYLON
ISHTAR GATE
"Egypt in her stone architecture initiated a phase of "organized surroundings" that was extended by Greece and Rome into the systematized vocabulary that was destined in time to constitute the idea of classic arrangement in building. In the splendid pyramid groups of Egypt with their outstretched causeways lies a supreme demonstration of the meaning of geometry. Egyptian building is an affirmation of order; it negates confusion and the arbitrary sentimentality of chaos; it is the antithesis of makeshift... Egyptian architecture stated the great fundamental laws of building, Greece infused the shaping attributes of the humanities into the city fabric. The Greek city is the outward expression of a collective life rich in activities of the creative mind and its architecture is a timeless exposition of a created background that is truly constant with its informing spirit." (1)

Ancient Greek civilization has had a profound and lasting effect on the whole of the Mediterranean world and also on the entire subsequent history of the Western world. It has been recognized by both historians and political scientists that Western European civilizations have their foundations in antiquity, not only in the cultures of Greeks but Romans, and that the development has been a continuous process except for the slackening during the "Dark Ages".

Of ancient cultures of the Near Orient, principally the Hittite, Aegean, Phonecian and Lydian, the Hittites are perhaps the most important because they are the main connecting link between the East and the West, principally Egypt, the Tigris-Euphrates Valley
and the region of the Aegean Sea. At the height of power the Hittites ruled a mighty empire covering most of Asia Minor and extending to the upper area of the Euphrates River. In the last stages of this control, c. 1300 B.C., the Hittites waged an exhaustive war against the Egyptians which undoubtedly had much to do with decline and fall of both empires. The main significance of the Hittites is their role as intermediaries. "Doubtless in this way certain culture elements from Mesopotamia were transmitted to such nations as the Canaanites and Hyksos and to the peoples of the Aegean Islands." (2)

The racial heritage of the Aegeans is important for later explanation of the elements in Greek city development. "Their ancestors appear to have come from Syria and Anatolia and were closely related to the Hittites and the earliest invaders of India. At the same time there is evidence - from the fact that their artists depicted them with long heads, short, slender bodies, and dark, wavy hair - that they bore a relation to the Egyptians." (3) In any case, they were not the same as the true Greeks who were of totally different ethnic origin. This explains Haverfield's statement that early Athens, originally a Mycenean settlement, was "an almost Oriental mixture of splendid public buildings with mean and ill-grouped houses."

The Aegean civilization originated on the island of Crete, developing from one of the oldest cultures of the world. It is thought
that as early as 3000 B. C. the peoples of Crete had moved from
the Neolithic stage to the metal era and probably had developed
systems of writing. The island of Crete had a favorable climate,
and although the soil was fertile, it was greatly limited in area.
As a result, population increases demanded new means of earning
a living and although some emigrated, ultimately establishing settle-
ments on the mainland of Greece and in Asia Minor, and others be-
came seafarers, the majority of the people remained on the island
and developed articles for export. The result was the development
of extensive trade, and with this trade the country became a com-
mercial and industrial power with numerous contacts in the sur-
rounding world.

The Aegean civilization was probably one of the freest and
most progressive of any western culture up to this time. Even be-
fore any attempt was made to organize Minoan towns under a common
system of control and protection, "they seem to have lived together
peacefully as no fortifications have been found, and as members of
a single economic system, in view of the uniformities in types of
metal tools, stone vases, etc." The later rulers were known by
the title of Minos, the position being roughly that of the early Egyp-
tian Pharaoh. But unlike Assyrian and Persian kings, the power of
the Minos was not founded on war and military control. The king's
professional army was small, he held no fortified cities, and there
seems to be no evidence of conscription. He maintained a large, efficient and powerful navy, but its purpose was for the protection of trade and defence against external conquest, not to awe or dominate the citizens of Crete. And although industry was at least partially controlled by the state, there is no indication that this was not benevolent as in the early systematic development of irrigation in Egypt.

The Aegean peoples of all classes seem to have been almost entirely undominated and lived prosperous lives. If slavery was in existence at all, it certainly was minimal and as an institution it did not dominate Aegean society. Regardless of class, there was no public activity nor no occupation in which both man and woman could not participate equally.

The town of Gournia, dating from the late Minoan period, 1550-1450 B.C., is the physical extension of a social development, displaying no necessity of walls, fortifications or the impediments of warfare. "The town had in its palace and public court a civic center, a fact which in itself is a clear indication of the degree of organized living and of communal interests that had been reached by this date." (4) "The town plan was continuous and cellular and therefore the result of concerted and collaborative effort." (5)

R. E. Wycherly states that "The Minoan city was concentrated round a centre formed by the palace and a kind of agora, an
open place for festive and possibly political gatherings. The Mycenaean town was appended to a fortified citadel." (6) Both Minoan and Mycenaean towns were of great influence in the later development of Greek cities, but there is a gap in the explanation of the similarity between the Minoan and later Hellenic city and the secondary importance of Mycenaean cities in classical Greece.

The first peak of development in Crete was under the leadership of the cities of Knossos and Phaistos c. 1800 B. C., but less than one hundred years later the central palace at Knossos was demolished, as well as important buildings in other cities. Exactly what happened is not known, but presumably an earthquake, followed by a revolution, was responsible. In any case, a new pattern of rule was established and with it came not only a new system of writing but also a change in many of the activities of past life. It was at this point that Troy and the cities of Crete were rebuilt, great centers were established at Mycenae and Tiryns and power was extended over the remaining portions of the Aegean world.

But this power and splendor was not destined to last. "In the 16th century B. C., barbarian Greeks known as Achaeans expanded from their original home of Achaia in the northern Peloponnesus and eventually conquered Mycenae. Gradually absorbing the material culture of the vanquished, they became rich and powerful lords." (7) The city of Knossos was captured c. 1400, and soon thereafter, the
whole of Crete was under their domination. It was at this time that the citadel of Mycenae was enlarged and protected by a system of circuit walls, and the extension of power of the Achaeans became manifold. This power and warring domination increased in the thirteenth century under the leadership of Agamemnon, but, in 1200, hordes of Dorians began their conquest of Mycenean cities. Two hundred years later, Aegean civilization had passed into the records of history.

Although many of the achievements of Aegean civilization perished, the debt of the Greeks to these earlier peoples is great. The Greek religion contained numerous Aegean elements, and Greek devotion to athletics, their system of weights and measures, knowledge of navigation, and many of the artistic traditions have foundation in Aegean culture. Perhaps F. Tritsch exaggerates the strong similarities between Minoan and Hellenic cities, but the parallel between Minoan social and political order and later Hellenic systems of power cannot be totally dismissed any more than the likeness in physical form. If the later Hellenic city was a new creation, then the similarities must have resulted from like power distributions and social forces.
HELENIC GREECE

The infiltration of the Achaeans and Dorians has already been mentioned, but a third group of peoples who have become known as Ionians is also important, although their movements are not so devastating as that of the Achaeans and Dorians. It is thought that these peoples were generally of Alpine and Nordic descent, but soon they mixed with the already established Aegeans who were of Syrian and Anatolian origin. These three peoples, in the Homeric Age, 1200-800 B.C., developed the foundations of later Greek culture.

Homeric culture was extremely primitive by later standards, with the political institutions of this era being almost non-existent. The king had no power to make or enforce laws, and was given no monetary rewards. He, like any other citizen, had to cultivate his farm as his only means of survival. His duties were to command the army during the time of siege and offer sacrifices to the gods in behalf of his village. Custom took the place of law with private administration of justice. Generally, during this time, there was no class stratification although the epic poems often portray society as aristocratic. Any warrior could rise in social position by displaying unusual bravery and courage. Manual labor was not looked upon as it was to be later, and although there are records of dependent laborers, it is doubtful if they were slaves as they were treated
as members of the landowner's family and could not be bought or sold. The Greek religion of the Homeric Age had no commandments, dogmas, sacraments or complex rituals. This religion was intended to explain the physical world and man's position in it, afford him self-discipline and self-control which was essential for success of warfare, and provide material benefits, long life and good fortune.

By the end of the Homeric Age, the Greeks were already developing the ideals which would last throughout the civilization. By c. 800 B.C. the village units which were originally founded as a group of people with common interests, began to develop into larger political units, the polis or city-state. Their formation was a result of a development of a new alphabet, and a geographic isolation which allowed some degree of mobility and made difficult large scale aggression. But the primary factor in the development was the nature of the Greek himself. He was an optimist who viewed life as fulfilling in itself, with no needed promise of an after life. He was an egoist and a materialist who was interested in fulfillment of the self, and who conceived his world in physical terms. He was a humanist who worshiped the transcendent rather than the sublime. Finally, he had a supreme devotion to liberty, even more extreme than his descendents were able to accept.

With few exceptions, the city-states went through a similar
political development. They began as monarchies and during the eighth century B. C., and changed into oligarchies as a result of the concentration of landed wealth. This new wealth took over power, usually without violence, and the kings were replaced by magistrates and a council of landed aristocrats. In the seventh century B. C. the invention of money caused an economic revolution which transformed the entire Greek world. Handicrafts and commerce were greatly stimulated and for the first time a mercantile economy appeared. The results of this revolution were enormous as it brought about a merchant class whose wealth lay not in land but in moveable goods. The power of the aristocracy was undermined, the process being accelerated by popular movements, discontent with the decline in prosperity, and was eventually destroyed. One attempt to resolve this economic crisis was the establishment of a fixed code of laws, but more often there was a seizure of power by a tyrant with the support of the merchants and the mass of small peasants who had been dominated by the landed nobles. But the tyrant was in power as a result of popular support, and as their reforms solved these social and economic problems, they were removed either by a wiser aristocracy as at Corinth, or by a democracy as developed in Athens.

The city of Athens is the product of centuries of struggle, both political and economic. The physical form of the city at any
point is demonstrative of this struggle rather than the product of a rational planning process. The Acropolis hill seems to have been occupied at least from the end of the Neolithic Age by peoples later absorbed by the relatively peaceful Ionic invasion.

At some time near the end of the 13th century B.C., the natural defenses of the Acropolis were reinforced by huge walls of masonry, probably in response to tribal movements announcing the Dorian invasion. Attica was too poor to tempt the Dorians, and was not invaded by them, but rather became a refuge for exiled and fleeing persons. In the eleventh century B.C., Athens was invaded, and it was in the next three hundred years that new ideas and values were fostered in all parts of Greece. Between the tenth and eighth centuries B.C., the city-state of Attica became unified under a monarchical form of government. In the century that followed, the Council of the Areopagus, nobles of landed wealth, undermined the king and continued to grow in economic control. The unrest of both the middle classes in the towns and the indebted farmers and threats of revolution resulted in the agreement of all parties upon the appointment of Solon as magistrate with complete power to carry out reforms. Although many social and economic reforms were put into practice, there existed much discontentment in each group. The nobles were dissatisfied because many of their privileges had been removed, and the merchant and peasant classes were still not
allowed to hold offices of the magistracy. Even worse, Solon had attempted to divert attention from domestic troubles by pursuing military adventures abroad.

After the death of Solon, there existed a time of dictatorship. Athens became wealthy under the tyranny of the Pisistratids, and at the same time existed as a brilliant center of learning. Not only were many public buildings erected, but there was a great influx of Ionian scholars, artists and poets who had escaped from the Persians. As R. E. Wycherly states, by this time "the city was complete in its essentials, though there was great latitude for architectural development in various directions."

The last stage of Greek political development began with Cleisthenes' establishment of a constitution in 507 B. C. Athenian democracy attained its full perfection in the Age of Pericles, 461-429 B. C. The last century of her existence as an independent state was marked by two wars, the first, the war with Persia as an outgrowth of expansion, and the Peloponnesian War which not only ended the supremacy of Athens, but eradicated freedom throughout the Greek world.

In the fifth century, B. C., the area of the city of Athens was larger and more diversified than any other Greek city. The development of the physical structure had not been an act of planning, but rather bears witness to the constantly changing attitudes of an
energetic people. As the temple replaced the palace on the Acropolis, this citadel ceased to be the dominant expression of the power of a state, and became an expression of man's rational process of building with the functional purpose of housing a cult-statue. No longer were the great walls the city's prime means of defense. Probably at this time the agora began to assume the focus of community life. In the beginning it was no doubt a simple free space, perhaps originating from the "theatral areas" of Minoan towns, performing the function of public interchange. Initially it served functions of the theater, the market, religious expression and political assembly, until each of these was to find its own location elsewhere in the city. As Greek political development went through various forms and finally culminated in democracy, the agora became the center of political exchange and governmental decision. As Aristotle states, "An acropolis is suited for oligarchy and monarchy, level ground for democracy."

In the later development of Athens, the Agora became the dominant element of the city, with all major paths of communication leading erratically into it. It is still an irregular mixture of temples, stoa and other public buildings reminiscent of the development of Greek social, political and economic life.

The theaters and gymnasia perform a unique function in the development of Athens. In addition to their status as integral,
secondary foci of the Greek citizen, by being located in areas of the city away from the Agora, they alleviate what could have been impossible congestion. As Athens grew, the functions had to be separated so that each was more easily attainable and would have a greater possibility for expansion. The location of these theaters and gymnasia are not the result of a prescribed planning order, but rather are the utilization of natural factors.

Between these areas of public interchange and activity, were located private dwellings, and with the exception of the dwellings of the nobles, must have been at best, very bleak. But as was true of public buildings, the house may have lacked in attention because "Greek life did not call for public buildings, since it was lived largely out of doors." (8)

In contrast to the irregular growth of Athens, the regular arrangement of Hellenistic planning is best seen in the town of Priene. "On a small scale it is a model Greek city, containing everything which makes a polis, all very neatly and ingeniously arranged and subordinated to the Hippodamian plan." (9) Priene was refounded in the later part of the fourth century B. C., with its planning largely influenced by geographical features. It is situated on a sloping hillside with major streets running parallel and comparatively level and the secondary streets crossing them and ascending the hill by use of steps. In the center was located the
agora, wisely tangent to the main street of the town, and comprised of markets, temples, the house of assembly and the town hall. Above the town was a much steeper slope upon which was founded the acropolis, enclosed by the same irregular wall which protected the city.

The full importance of Priene is only comprehended by the objective examination of attitudes that gave rise to Hellenistic town planning. Up until this point the Greek had focused his attention upon the isolated element, or at the most a limited grouping of elements, and no doubt this self limitation to restricted elements and materials necessarily preceded the larger task of spatial organization. In Priene, this architectural experience has crystalized into a significant form. The specific elements no longer are treated as separate or specialized elements. "There is only one medium - that of town-planning." (10)

The central aesthetic principle which is the basis of Priene by nature rules out the possibility of piecemeal organization and the picturesque charm which may result from haphazard development. "The continuity of the city pattern and the emphasis on uniformity are not factors that can be evaluated for or against the success of the city as a whole, they are interwoven in its fabric." (11) This underlying principle of unity which links the different Greek civilizations also displays the object lesson for us today, and is best
expressed in the single word - Man. Man was always the center of Greek thought, literature and art, in all periods. As Andre Bonnard states, "All the most important conquests of Greek civilization aimed at the same end: to increase the power of Man over nature, to increase his humanity. It was man and human life that the Greeks tried to make more perfect."
FOOTNOTES

(1) Martienssen, The Ideal Space in Greek Architecture, p. 12-13
(2) Burns, Western Civilizations, p. 121
(3) Burns, Western Civilizations, p. 124
(4) Glotz, The Aegean Civilization, Book II - Chapter I
(5) Martienssen, The Ideal Space in Greek Architecture, p. 13
(6) Wycherley, How the Greeks Built Cities, p. 2
(7) Burns, Western Civilizations, p. 124
(8) Upjohn, History of World Art
(9) Wycherley, How the Greeks Built Cities, p. 25
(10) Martienssen, The Ideal Space in Greek Architecture, p. 38
(11) Martienssen, The Ideal Space in Greek Architecture, p. 40
ROMAN CIVILIZATION

No careful study of Greek civilization would deny that their achievement is one of the most amazing in world history. With a very limited amount of fertile soil and few natural resources, they were able to achieve a higher and more diversified civilization than did the cultures of Mesopotamia and Egypt with far greater natural resources. Whereas the arts in these two empires developed to express the power and grandeur of the state, that of Greece, especially in Athens, was founded upon ideals of freedom, rationalism, the sanctification of the body and the mind and ultimate regard for the dignity of man.

But two considerations must always be remembered in evaluation of the Greeks. It cannot be assumed that the achievement of Athens and the Ionian states across the Aegean were models of Greek development. "The Spartans, the Arcadians, the Thessalians, and probably the majority of the Boetians remained untutored and be-nighted from the beginning to the end of their history." (1) Furthermore, as Arthur Korn points out, Athenian civilization was economically based on the exploitation of peasants who fell into debt, were dispossessed of their property and sold as slaves. Free society was racially exclusive and constituted only a small percentage of population, and eventually the freedom of thought and the dignity of man gave way to imperialism and warring aggression.
It is often stated that the chief contribution of the Greeks to Western civilization was in the areas of scientific, artistic and humanistic achievement while that of Rome was social organization, government and law, and the utilization of physical structures to accommodate the physical needs and pleasures of man. But another argument must be considered. It is that the Greeks, in their process "to increase the power of Man over nature", achieved a social order in which man could live based on materialist expression. But, on the contrary, the Romans set up ideals for the conduct and interrelation of man irrespective of material advancement.

By 1000 B.C., Italy had produced a civilization known as Villanovan, named after the town, Villanova, located north of Florence. The Villanovan civilization was composed of numerous tribes, foremost of which were the Latins, who later founded Rome, and the Etruscans who resided in Etruria in central Italy. Although beginning their history as farmers, the Etruscans founded such towns as Tarquinia and Veii as early as the tenth century B.C., and began to flourish as commercial and manufacturing centers. As they increased their sphere of influence, Etruria became an important trade link between the Germanic regions north of the Danube River and the "Italians", Greeks and Phonecians by means of the Mediterranean Sea. As a result of well advanced manufacturing, there was considerable class stratification, and the Etruscan development of kingship,
nobles and military domination had a pronounced effect on later Romans. Also Etruscan religion and art, borrowed to a great degree from the Archaic Greeks and further developed, had an influence on the Romans.

The point of contact was the Etruscan occupation of Rome in the seventh century. After this time the cultures of Etruria and Rome were intimately linked. Etruscan control of Rome witnessed the erection of numerous temples dedicated to Etruscan gods, the development of water systems, promotion of commerce and development of a governmental organization. It was during this time that the kingship of Roman government, the assembly and the Senate were developed. Although his authority was limited by ancient custom, which could not be changed without the consent of the elders, or members of the Senate, the King exercised control in all branches of government; executive, legislative and judicial. He judged all civil and criminal cases, prescribed and carried out punishment and was the instrument of new legislation, and, although his accession to power had to be approved by the people, once in office, he could not be deposed. The assembly was comprised of male citizens of military age who had the power to veto the king's laws, but had no right of initiation. In many respects, the Senate, whose members were the nobility of the state, was the strongest power of the government. It had the authority not only to veto laws ratified by the assembly, but in case of the death or expulsion of the king, the Senate assumed full authority. As a conse-
quence, laws were extremely difficult to enact or change even if they were supported by the people. The conservative attitudes and continuously conflicting jealousies in the Senate continued throughout Roman history.

By the end of the sixth century, the last Etruscan king, Tarquin Superbus, was removed from office, probably due to the increasing jealousy of the Senate, and rule was established by those patricians of Latin heritage. From the establishment of the republic, to the full expansion of the Roman Empire has been described as "the product of a single expanding urban power center and was in itself a vast city-building enterprise: it left the imprint of Rome on every part of Europe, Northern Africa and Asia Minor." (2) The growth of Rome was financed by her expanding empire.

The history of Rome for two hundred fifty years after the fall of the monarchy and the establishment of a republic was one of economic growth, of social struggle and of expansion, and was occupied by almost constant warfare. During the fifth century, Rome was involved in struggles to avoid domination by surrounding peoples. The first of these struggles resulted in the destruction of the Etruscan city of Veii, and in 390 B. C. the Gauls took advantage of the weakened Roman forces to invade the Republic, capture and sack the city and finally were induced to leave by a bribe of 1000 pounds of Roman gold. Next the Romans had to quell revolts of peoples previously
conquered, and these victories increased the appetite for further expansion of power. By 265 B.C. Rome controlled the entire Italian peninsula.

The long military conquests had a marked effect on social and political development of the Republic. The government of the revolution which overthrew the monarchy incorporated few changes. It established two elected consuls in place of the king and placed the responsibility of public funds in the Senate. The wars and the acquisition of new lands made the development of commerce unnecessary, and, unlike Greece, there developed no middle class. The patrician senators, insured their domination of the plebeians by increased taxation and forced conscription. The restless plebeians revolted in the early fifth century, and forced the patricians to agree to the election of tribunes with power of protection of the citizens. Increasing pressure resulted in the famous Law of the Twelve Tablets, the legal code of 450 B.C., which was a charter of the people's liberties. The final plebian victory came in 278 B.C. with the passage of the Hortensian Law, stating that measures which were passed by the assembly would become law whether the Senate approved them or not.

But the significance of these struggles should not be misunderstood. The advancements by the plebeians were not the gain of more personal liberty, but rather, measures to curtail power and unfair
treatment by the magistrates. The Roman plebeians were never to
govern themselves, but only to be governed. Even the later admission
of plebeians into the Senate did not have any effect in liberalization.
So strong was the respect of the Roman for authority that religious
beliefs were surpassed by loyalty to the state. Roman morality be-
came a matter of patriotism and the veneration of authority and tra-
dition. During this time, the Romans had made little intellectual and
social advancement. The conquests demanded that only war and
agriculture could exist as occupations of the vast majority of citizens.
The importance of commerce is demonstrated by the fact that no stan-
dard system of coinage had developed until 269 B. C.

The three Punic Wars, ending in 149 B. C. after restriction of
Carthage, with the majority of her citizens butchered and the remain-
der sold into slavery, had momentus effects upon the city of Rome.
The conquest of Greece brought Rome into conflict with eastern Medi-
terranean powers, and using Greece as a stepping stone, the entire
Mediterranean area was brought under Roman control before the end
of the second century B. C. But more important effects of this ex-
pansion were the social and economic changes which engulfed Rome,
during the third and second centuries B. C.

"The incidents of this revolution may be enumerated as follows: (1) a marked increase in slavery due to
the capture and sale of prisoners of war; (2) the
decline of the small farmer as a result of the estab-
ishment of the plantation system in conquered areas
and the influx of cheap grain from the provinces; (3) the growth of a helpless city mob composed of impoverished farmers and workers displaced by slave labor; (4) the appearance of a middle class comprising merchants, moneylenders, 'publicans', or men who held government contracts to operate mines, build roads, or collect taxes; (5) an increase in luxury and vulgar display, particularly among the parvenus who fattened on profits of war."

Rome changed from a republic of farmers into a nation of parasites and slaves, whose demands for public spectacle and debauchery resulted in the grand monumental structures which we now associate with Rome. With the exception of the elaborate public baths and the mammoth capacity of the arenas, Rome added nothing new to city building. The Forum Romanum was not only the center of public life for Rome itself but for the whole empire. It began as an open meeting place about which the principal monuments were constructed, a synthesis of the idea of Greek agora and acropolis. Through its center the Via Sacra led past the Domus Vestae and passed various religious temples before ascending the Capitoline Hill. "To this forum, in the course of time, significant additions were made: triumphal arches, pillars of victory, a basilica, senate house and colonnades of shops. And when in the Imperial age it became inconveniently congested, successive emperors extended it by appending their own forums, each one on an increasingly ambitious scale." (4) The embodiment of this construction was the expression of "the new Rome of aggressive fact and reality, the Rome of looting soldiers, cringing slaves
and crass land speculators concealed beneath the toga of the traditional Rome of patriotic aspiration and Stoic dream." (5)

This order of public planning spread from the center to other parts of the city, particularly in the extension of the great porticoes and colonnades. The Roman public architecture, the amphitheater, seat of awesome spectacles, the stadium, embodiment of brutal sport, and the bath, institution of public debauchery, are the instruments of opiated Rome, with the capacity for the majority of Romans. "A calendar year of 354 A.D. gives 175 public holidays, i.e., nearly half the year. These spectacles consisted either of dramatic performances in the theater or of chariot races in the circus, gladiatorial shows and fights with wild beasts in the amphitheatre." (6) There is little doubt why Toynbee dates the beginning of Rome's decline from the end of the Punic wars.

The city of Rome utilized scale above all else in the attempt to provide "mass forms for all the collective occasions of life." There existed numerous open spaces and parks in the vicinity of the royal palaces, and beginning with Caesar's gift of his own private parks to the public, they were of no little importance to the city. But the squalid and congested areas of mass housing were no more alleviated by proximity to public parks than they were serviced by the systems of water or sewage disposal that Roman engineering so greatly pioneered. Sanitation and hygiene in these areas were inferior to any
community which had preceded it.

The importance of Roman expansion and colonization cannot be
over-emphasized, as it left the imprint on all of Western Europe,
with the possible exception of Germany. The Roman law of nations,
which was concluded as the fundamental law, extended its influence
upon Thomas Jefferson as is witnessed in our Declaration of Indepen-
dence. These early laws of nature were the basis for modern con-
ceptions of human rights and justice.

The success of the Roman rule is perhaps best analyzed by
Machiavelli. "The Romans in the province they took always followed
this policy; they established colonies, inveigled down the most power-
ful and did not allow foreign rulers to obtain influence in them." (7)
The understanding of the Romans for maintaining an Empire is well
supported by the fact that Carthage was not only conquered but devas-
tated, and her citizens were either massacred or sold into slavery.
As successful rule is based not on strong armies but upon the support
of conquered inhabitants, the free Greek society, being the most diffi-
cult type to hold, had to be readily destroyed. "The Romans, ob-
serving disorders while yet remote, were always able to find a remedy,
and never allowed them to increase in order to avoid war; for they
knew that war is not to be avoided, and can be deferred only to the
advantage of the other side." (8)

The physical imprint of the Roman town was of consequence in
the later development of not only Turin, Ravenna, Pavia, Naples, Bologna, Verona and other Italian towns, but also in shaping Basel, Strasbourg, Orleans, Niemes and London. These new towns served as holding points for the conquered lands. Even today the piazzas and arcaded streets of Italy are the extension of Roman planning, and although the market places differ greatly from the fori, certainly there must be some connection.

Timgrad was a typical Roman colony founded in 100 A. D. by Gallus for the Emperor Trajan. As in the founding of all Roman towns, Timgrad began with a wall in the form of rectangle, partly for religious and partly for functional, protective purposes. Like Priene, Timgrad was built in a relatively short period of time, and as a consequence did not display the elements of congestion and confusion of older towns exposed to the pressures of growth and change. The town, c. 1000 by 1000 feet, was subdivided into plots of 75 by 75 feet, reminiscent of the regular order of the Roman tent camp. Also as Priene, Timgrad displayed all of the elements of its home culture; the arcade, the forum, the theater, the amphitheater and the baths. But, of far more significance than the physical impressions of towns such as Timgrad, was the spread social, legal and lingual institutions which would have a profound effect in the future development of the Western world.

The unplanned metropolis of Rome and its inane monuments for debauchery are perhaps a more important cause of the dissolution of
the Empire than the physical attacks at her border. This infestment of the core permeated out into the empire until eventually the inland capital of Rome had to be abandoned. "The diminished freedom of action had resulted from a lessening of mental energy. As the minds of men became less vigorous, the power of every individual to direct his outer life and occupation declines with the loss of vigor at the source. No example is more generally true than the phenomenon of 'The Fall of the Roman Empire'". (9)

The extension of Greek city building is a manifestation of mental development. Greek architecture and planning exist as tangible results of this searching process. The development of the city of Rome is motivated by a debauched and degenerate populace, with the physical extensions serving as an opiate of social diversion, and the willful expression of the power and grandeur of personalities. "Of the two great regions of the Empire, the East and the West, the first far surpassed the second, both in superiority of civilization and in a much higher level of economic development. At the beginning of the fourth century B. C., there were no longer any really great cities save in the East." (10)
FOOTNOTES

(1) Burns, Western Civilizations, p. 178
(2) Mumford, The City in History, p. 205
(3) Burns, Western Civilizations, p. 209
(5) Mumford, The City in History, p. 223
(7) Machiavelli, The Prince, p. 38
(8) Machiavelli, The Prince, p. 39
(9) Taylor, Freedom of the Mind in History, p. 77
(10) Pirenne, Medieval Cities, p. 2
As Henri Pirenne correctly points out, the concepts of Roman Imperialism, classical scholarship, the spirit of early Christianity and, perhaps most important, the commercial foundation of the Roman Empire prevailed widely until at least the middle of the eighth century. In the last stages of the Roman Empire, several able rulers were still to occupy the throne, such as Diocletian, Constantine and Julian the Apostate. But in spite of numerous ministers and advisors, they were unable to cope with the internal social disintegration, and their strength was not sufficient to control the flood of external attacks. During the reign of Diocletian, revolts in the outlying provinces of England, Gaul, Egypt and Lybia greatly weakened frontier defenses, and it was at this time that the Empire was divided into the East and the West.

In the fourth century, the frontiers began to give way to the Germanic tribes, as they moved southward in great numbers, and by the beginning of the fifth century, the whole west was involved with the invasion. But the appearance of the Germanic tribes was not critical in breaking the Roman traditions.

"The aim of the invaders was not to destroy the Roman Empire, but to occupy and enjoy it. In the misery and the anarchy which accompanied the invasions, there was naturally a certain decline, but even in that decline there was preserved a physiognomy still distinctly Roman. The Germanic
tribes were unable, and in fact did not want to do without it, but they did not consciously germanize it." (1)

But in this slow process of social and urban decay, there arose one institution which was destined to develop a new social and political order and greatly influence, if not directly control, much of the later European urban development — The Christian Church. During the time of the Empire, Christianity had been an underground movement, threatened with persecution and brutal murder. In 313, Constantine's decree of Milan allowed the freedom of Christian worship, at which time no more than one tenth of the inhabitants of the Empire had been Christians. But by the end of the century membership had risen to include the vast majority of western Europeans. The success of the Christian religion is probably due to its closeness to the realities of man with the expectations of sickness, pain, persecution and death. Whereas in previous religions, man was called on to make sacrifices to his gods, "with Christianity its god had taken human form and had accepted sacrifice in order to redeem sinful man and free him from the anxiety and guilt that issued forth from his condition." (2) During the last stages of the Roman Empire, all of the creative cultural forces began to center about the Christian Church. Roman law, literature and ancient philosophy was permeated with the Christian spirit, and spread throughout western Europe.

With the legal acceptance of Christianity and the increasing
flood of new members, the Church faced the problem of organization, resulting in the ecclesiastical hierarchy of religious districts patterned after the administrative districts of the Roman Empire with the base located in the old capital of Rome. In this way the Church contributed to the continuing existence of Roman cities, and was responsible for their survival as centers of economic activity. In the field of expansion, the Church was the most progressive force. In 496, Clovis demanded to be baptised by the Church, and from the sixth century France was the seat of church monastaries. Christianity was taken to the shores of England in 597 by Augustine, and the first episcopate was founded at Canterbury. It is significant that the mission of Augustine and forty monks had originated not from the nearby shores of Gaul, but from the distant coast of Italy.

The Mediterranean Sea continued to unite all of the areas of the Western Empire even after the death of Constantine. The Christian Church was in many respects the instrument of the continuance of Roman culture, and its aid in the survival of towns is supported by merchants and the continuance of Mediterranean trade. And although the Germanic invasions did much to destroy the political organization, the economic unity both in the West and between the East and West continued to be prevalent. Even the municipal character of the Roman cities was preserved by the Frankish kings, although the size of the political units had been greatly decreased, and city building had
reached a virtual standstill.

"The world-order which had survived the Germanic Invasions was not able to survive the invasion of Islam." (3) Within fifty years after the death of Mahomet, the forces of Islam spread from China to the Atlantic Ocean, overthrowing Persia, Byzantium, Syria, Egypt, Africa, and Spain. The centuries of common language, religion, custom, ideals and interchange, which had existed on every shore of the Mediterranean, was now destroyed, and Moslem domination of this water continued for almost seven centuries. Western development, which had previously thrived on the shores of the Mediterranean, was forced to turn inland, and as a result the Frankish Empire became the chief instrument in modeling European History.

Even before the invasion of Islam, the world of the Middle Ages had clearly emerged. With the breakdown of central Roman authority, government existed on the local level with each of the units either independent or connected through personal relationship. With the establishment of bishoprics and monastaries, the Church rapidly became one of the largest landowners.

At the beginning of the ninth century, Charlemagne attempted to re-establish the old Roman Empire. In 800 he was crowned by the Pope, and by expanding the territories of the Frankish kingdom, succeeded as the ruling power of the continent. This alliance between the church and the state had both economic and cultural significance.
The empire of Charlemagne was essentially an inland one; an empire without foreign markets or communication. A decrease in inland trade resulted from the division of the country into shires, with officers of the crown performing the functions of administration. This agricultural political economy of no markets resulted in the feudal social organization that existed until the rise of monarchies.

At the same time Charlemagne restored learning and the arts. Christianity and the monastery became the chief source of education and culture. There was a revival of classical literature and a renewed interest in theological problems. Schools were attached to the monasteries where monks trained students for the service of religion, books were collected and copied, and scholarship promoted. The religious orders monopolized knowledge, art and culture until the middle of the 12th century. Even the design of churches was considered a sacred art until the 13th century, and the monastery dominated architectural development. In effect, the monastery became the new citadel, functioning in order while turbulence and chaos were rampant outside. This new religious culture, which denied wealth, property and power, served as the institution which protected man during troubled times. "The closest link between the classic city and the medieval city was that formed, then, not by the surviving buildings and customs, but by the monastery." (4) It was in the monastery that the books of classical literature were recorded, the Latin
language was preserved and "in the Benedictine Abbeys at least, that the advanced practices of Roman agriculture and Greek medicine were maintained, with a corresponding rise in productivity and health." (5)

In addition to the maintenance of old towns and the establishment of new monastic developments, the early ninth century witnessed the founding of new castles and castle towns, particularly by officers of the crown. The purposes of these fortresses were to maintain administration along the borders. These slow developments were interrupted by ravaging new invasions from all sides during the ninth and tenth centuries; from the south Moslems began the conquest of Sicily in 827, and a few years later took Rome, from the east the powerful Magyars threatened and most important, from the north the new Germanic migration started, that of the Vikings or Northmen. They moved southward through Germany, France and Spain, pillaging Paris three times between 845 and 861, burned Cologne and destroyed many of the monasteries. "To counteract all of these attacks an impressive defense system for central Europe was organized by the Frankish kings, Henry and Otto, 919-973. Frontier villages were strengthened by ditches and stockades. Bishoprics and palatines were walled." (6)

The castle building, which had been begun in the ninth century, became widespread during the tenth century, and the city walls of Roman towns were rebuilt. Generally, in the thirteenth century, the earthworks, ramparts and moats were replaced by walls and battlements,
but not until the fourteenth century was every town fortified by a wall.

During the ninth century, both the social and economic conditions of Europe were at their lowest point, with a virtual standstill being reached in France. As urban life and commerce declined, cities, estates, and monasteries became almost entirely self-sufficient. The economy became that only of consumption with any trade occurring in the form of barter. The basic economic unit of the feudal regime was what is termed the "manorial estate," with society divided into three classes; the lords and their officials, the priests and the fiefs. Each of the estates comprised one or more villages, with the land divided into common forest and pasture, that owned by the lord and that belonging to the local church or monastery, all of the land cultivated by the serfs. In this system of agricultural subsistence, each had his role and function, and prosperity was dependent upon the coordination of the whole. The lord, perhaps owning thousands of such estates was responsible for the protection of his estates and his vassals, and usually no method of providing this was avoided, whether it be personal agreement with other lords, war or even alliance with the invading tribes.

From this self-sufficient economy of no markets, the struggles for both physical and monetary power were to result in the social, political and physical forms of Europe. After the death of Charlemagne in 814, the strong central government, which he had built up,
collapsed and the Empire was divided into three parts. The two largest of these were the modern boundaries of Germany and France, and the third consisted of the Lorraine and the present Netherlands. After this division, all three sections came rapidly under feudal domination, with the descendants of Charlemagne having no more authority than the scores of princes, counts and dukes. The rise of national monarchy in France, which was most completely feudal, began in 987 when Hugh Capet, Count of Paris, displaced the last of the weak Caroligian monarchs. But it was not until the beginning of the thirteenth century that Philip Augustus, also a Capet, succeeded in consolidating monarchical power. The national monarchy in England dates back to 1066 at which time William the Conqueror established stronger authority than had previously been known to the isle. Both the monarchies of England and France were greatly strengthened for a variety of reasons, not the least of which was the growth of trade. This newly begun commerce not only provided the kings with new sources of revenue, but also resulted in the alliance of kings and the increasingly powerful bourgeoisie in the struggle against the nobles. These alliances resulted not only in the establishment of strong national monarchies in England and France, but also ended feudalism, stimulated trade and promoted town growth.

Although feudalism in Germany was ended by the fifteenth century, and in Italy some time earlier, in neither of these countries
was a national monarchy established until some time later. The power of the nobles in Germany was too strong for any one to gain complete control, and the powers of the Pope and the Church in Italy was too great for national unity to emerge. Furthermore, the emperors of Germany who might have been able to build up centralized rule, such as Otto or Frederick II, were not content to be rulers at home, but attempted to interfere with Italy.

The new towns which began to grow between the eleventh and thirteenth centuries, first in southern Europe and later in the north, had a distinct character unlike any which had preceded them. These new physical expressions of a developing social order were of various origins and their energetic growth was a result of a number of factors. The oldest of these new medieval cities were towns which had been founded in Roman times, many of which had increased both in size and importance because of the establishment of bishoprics. Some grew around monasteries which had expanded into centers of trade and industry, while others developed as castle towns whose initial purpose had been to provide protection. But, "the greatest majority were a result of the revival of trade which began in the eleventh century." (7)

"Three factors determined this vigorous growth of the town: (1) the expansion of trade and crafts resulting in (2) the accumulation of money wealth as distinct from land wealth, and (3) the growth of
self-government and the ending of the old feudal restrictions." (8)

The tenth century was a time of recovery, as western Europe ceased to be overrun by ruthless hoards. Population began to increase and in the agricultural economy there was a great need for more farmland. In the eleventh century forests were cleared and the great revival of trade began, which was to change the entire social order of the western world. By this time there was a flourishing trade being carried on between Venice and Constantinople and between London and the towns of the Flemish coast. With the beginning of the Crusades, the whole Mediterranean was to open up, ending Moslem control of the sea. There began trade with the East, reaching as far as India, and the north Italian towns of Milan, Florence, Pisa, Genoa and Venice began to flourish.

The basic economic institutions of the medieval city were the guilds, of which the first known was that of the weavers founded in Mainz, 1099. Initially these guilds contained both traders and artisans, but soon they were split into separate organizations of the craftsmen and merchants, their main purpose being to hold a monopoly of markets for their members and maintain a consistent non-competitive pricing system. By the end of the twelfth century, these guilds not only had greatly increased in numbers, but held property, constructed guild houses, administered justice and levied taxes. The craft guilds, as well as the merchant guilds, came to be dominated by the wealthier
members, who in turn strived to maintain their position in succeeding generations. After much struggle, this new power, the wealthy town merchant, was able to gain control of the town from the feudal lord. In the majority of cases, after the formation of the town council, the government of medieval cities was dominated by an oligarchy of merchants.

The change from an agricultural or landed wealth to a new money wealth had a corresponding influence on the physical form and development of the medieval city, most important of which was the development of an urban culture. The two "styles" of architecture that were developed during the Middle Ages display the transition of man from the environment of the protected to the worldly, from a primarily rural to an urban point of view. The increase in wealth, the advancement of learning, the growth of secular interests and the pride of newly freed cities parallel the transition between the massive piers, small windowed and dark interiors of the Romanesque structure and the light, airy, skeletal Gothic structure. And whereas the architecture of the Romanesque was the dictate of the monastery, the Gothic expression was almost exclusively urban, usually erected with the participation of most members of the community. In many instances the cathedrals were the resultant of town rivalry, as in the case of Siena and Florence. The urban culture had again assumed the dominant position in shaping and maintaining the forms and relationships
of society.

"By the thirteenth century, the main forms of the medieval city were fixed: what was followed was an elaboration in detail. But the new institutions which began to dominate the town curtailed the older influence of the abbey and the castle, and the theme for the next three centuries was not authority, withdrawal and security, but freedom, involvement, challenge and adventure." (9) The development of the Medieval Town into its mature form was a continuous process in which urban life was to dominate and suppress the rural life from which it sprang. The early castle or monastic towns represented the power of the clerical and secular lords who controlled the nearby land. Every element of their physical structure reinforced their function of protection. Gradually, as population and production increased and the social structure became more complex, the institution of the town market began to evolve, and was at first only a local activity and of secondary importance. But with expansion of trade and the resulting crafts, a new town emerged; a town of guilds, commerce and sovereignty. The early nucleus of the castle or the church was expanded to include the cathedral, market, town hall and guild streets and houses, all of which were surrounded by tower walls and gates. To the necessity of protection were added the elements of trade, commerce, government and social interchange. This core became the meeting place of goods and people and the point of interchange of ideas.
The medieval towns, as is true of towns of any historical period, were generally of the two types, those that grew gradually and those that were planned. The former is usually considered as the truly medieval type, the product of a process of growth rather than the attainment of a preconceived goal. Each town of this type, although containing the basic elements of the medieval town, church, market, residential and commercial streets and protective walls, grew as a result of unique conditions, and each plan displays a unique solution. The basis of this functional town planning is either the discipline imposed by a man-made confining wall or nature itself, with streets following the natural boundaries, turning here and there to follow a slope or to avoid a group of trees. In this cityscape the cathedral and the open space dominate as the focus of the town, both expressive of the point of gathering of man, and his physical, intellectual and emotional movement. As Lavedon points out "the essential fact of medieval urbanism is the constitution of the city in such a fashion that all lines converge toward a center, and that the contour is usually circular: this is what the contemporary theorists call the radio-concentric system." Unfortunately this type of analogy does not take into consideration either the element of scale or need. The limitation of size and the clear definition between city and country must have been of considerable importance in the achievement of the medieval form, as can be readily seen in the comparison of the two Greek towns,
Athens and Pergamon, both a product of this rational functional planning. To the second need, it was necessary that the medieval town be confined to the smallest area possible for the purposes of both communication and protection. Usually the limit of the medieval town was no greater than the range from which people could be assembled by the tolling of church bells. We of today, as a result of communication and the development of warfare, have no need for a densely confined city.

While the towns of northern Italy were gaining independence, three other areas of Europe attempted to construct planned towns. The purpose of the German towns was to obtain and hold new lands for an expanding population, while the "bastide" towns of Wales and Southern France were constructed as an extension of monarchy and the enforcement of rule. The vast majority of these settlement towns, the Welsh castle town of Beaumaris, Conway and Caernarvon founded by Edward I, French bastides of Montpazier, Aigues Mortes, Montreal and St. Clar, and the German colonial towns of Neidenburg, Berlin, and Breslan, were constructed on a regular pattern and were protected by a wall or a ditch. The French and German towns usually had straight right angled streets which connected the gates with the market place. Their beginnings were similar to that of the Roman colonial town; first a rectangle or oval was laid out, walls were constructed with gates on four opposing sides, and straight streets con-
verged in the center of the market place. As rational compositions of space, the medieval town planning attempts and the Greek towns of colonization cannot be compared. They are only as utilitarian as the land parceling systems that plague American cities.
FOOTNOTES

(1)  Pirenne, Medieval Town, p. 5
(2)  Mumford, The City in History, p. 243
(3)  Pirenne, Medieval Town, p. 15
(4)  Mumford, The City in History, p. 247
(5)  Mumford, The City in History, p. 247
(6)  Korn, History Builds the Town, p. 43
(7)  Burns, Western Civilization, p. 323
(8)  Korn, History Builds the Town, p. 44
(9)  Mumford, The City in History, p. 299
"THE TOWN OF EARLY CAPITALISM"

The movement from the collectivism of the medieval town to the town of the Renaissance and later the Baroque City was the result of a changing economic and political system, in which a new ruling class as well as new types of the city emerged. The resulting form was what Arthur Korn terms "the town of early capitalism", whose development is the continuation of the private accumulation of power as manifested by the growth of the capitalist economy in Italy, Flanders and the Hanse region. Generally, this new political power is the result of profits from banking, mining and the manufacture and trade of wool.

As is true of any human culture, transition does not occur at any precise moment, but rather the habits and forms of the previous culture continue to exert influence far into the development of the latter as do the foundations of the latter begin long before any physical change is readily apparent. "The collectivism of the Middle Ages - the submergence of the individual in the guild, in the church and in the social order to which he belongs - now gave way to a rabid egoism which glorified almost every form of self-assertiveness and elevated pride from a deadly sin to a cardinal virtue." (1) The age of Gothic Cathedrals as the expression of a city and her citizens came to a close as the early Christian foundation of poverty and the ideal of universal
control under the authority of the Holy Roman Emperor or the Pope lost all meaning. The Scholastic philosophy was attacked as the ridiculous mixture of logic and religious dogma and the ethical and religious interpretations of life as by attitudes of supremacy of the human mind.

Of the dominant ideals and attitudes which were prevalent in this epoch of thought and action, optimism, worldliness, naturalism, individualism and hedonism, perhaps the most significant is described by the term humanism; the glorification of the human mind and the natural above the religious and mystical. The age of discovery both of new lands and of man himself further reinforced interest in the physical world. The astronomical discoveries of Copernicus, Galileo and Kepler "destroyed all outer evidence of man's focal and privileged situation in the universe, upon which his philosophical and theological systems he had preened himself so long." (2) Thus the goal of knowledge was extended almost to an indefinite position, and man's possibility of self-realization became cosmic in scope. No longer did the explanations of the Medieval Christian epic suffice.

But perhaps the greatest changes between medieval and modern thought were to be found in the field of politics. The medieval central authority of the Church gave way to the idea that every individual city state, regardless of size, should be absolutely sovereign. The authority of the ruler was no longer bound by an ethical basis of politics.
Instead, the power of the prince or the power of the state which he ruled justified whatever was necessary to insure continued control. In the revolt against medieval collectivism with its emphasis on self-governement, almost any form of self-aggrandizement became acceptable whether it be the accumulation of wealth, the pursuit of power, the suppression of rivals or the flaunting of egoism by control of arts, literature, architecture or planning. The culmination of these attitudes are reached in the seventeenth and eighteenth centuries with the elaborate expressions of the power of despotic kings as witnessed in Paris and Versailles.

It comes as no great surprise that the Renaissance began in Italy, and under the domination of the merchant princes, flowered into fruition in Florence as the physical affirmation of wealth and power. Not only did Italians have a stronger classical tradition than any other country in Europe, but they were the main beneficiaries, both economically and culturally, of the revival of commerce with the East. For a number of years the cities of Venice, Genoa, Naples and Pisa maintained a monopoly of Mediterranean trade and the wealth which came to Italy from the East was accumulated by Italian merchants and bankers. The merchants of Florence, Bologna and Piacenza were the chief links between the commerce of northern and southern Europe. Their rise to power as a result of this economic prosperity was the principle foundation of the later intellectual and artistic
The fifteenth century saw the growth of the great banking companies of the Albizi, Pitti, Strozzi and the Medici, and in 1496 Cosimo di Medici commissioned the first buildings of the new style. Also the monstrous cathedral of Florence with its massive dome was completed, forcibly asserting itself in the cityscape. During the same century Venetian power was at its zenith, but while dominated by wealthy merchants and industrialists and constantly under the threat of revolution, Venice retained her medieval tradition of restraint and order. The Ducal Palace which was completed at this time was both the residence of the Doges and the seat of the government which controlled the city. Because of the geographical isolation of Venice, the physical enclosure of the walls was not a necessity. The Piazza San Marco, which was not completed until 1805, was the point of central activity of the city announcing the entry into the Grand Canal. It contained all of the elements which culminated at the core of a medieval town, the Byzantine church, the palace of government and the market, and this pattern is repeated on a smaller scale in each of the districts of the city. Although Venice experienced the same centralization of power and authority as did her neighbors, her limitation of available space probably saved her from the crass display of wealth on a monumental scale.

During the time of this economic and political development in
Italy, the Flemish and the German towns of the Hanseatic League were flourishing in the north of Europe. The Flemish towns of Bruges, Ghent, Malines, and Ypres grew to be the centers of the textile industry, with export being conducted by Flemish merchants and Italian bankers of Lombardy. Shipping was extensive between the Flemish ports and England, and land trade routes between the north and south across the Alps promoted commerce in the towns of Southern Germany; Augsburg, Nuremberg, Ulm and Strasburg. Lacking sufficient capital to conduct the large scale importation or exportation of goods, associations of merchants had to be formed. The most successful of these was the Hanseatic League which was at the height of power at the beginning of the fifteenth century, and had a membership of some eighty towns under the leadership of Lubeck, Hamburg and Bremen. This alliance controlled northern trade until the beginning of the seventeenth century at which time the power of the national state assumed authority. The contents of these towns do not display the self-assertive accumulations of wealth as do the cities of northern Italy. Rather, as displayed in Lubeck, the central focus of the town contains the town hall and the market square, with the cathedral and the castle assuming secondary importance on the periphery of the town. In these independent cities, the town halls and guild houses assume primary importance.

With the monopoly of Mediterranean trade by the Italian cities,
and the flourishing commerce of Flanders and the Hanse Region, the Spanish and Portugese became interested in sharing in the trade with the Orient. At this time there were three routes open, one controlled by the Hanseatic towns and two by the Italian cities, with the result that the peoples of the Iberian peninsula were forced to pay high prices for silks, spices, tapestries and other wares from the East. As a further complication, the Turks, who had conquered Constantinople in 1453, were threatening the trade route to India. It is understandable that the Spanish and Portugese should attempt to discover a water route to India independent of Italian and Turkish control. Under the protection of the government, the Portugese had discovered the islands of Madeira and Azores and had explored the African coast as far as Guinea. In 1498, Vasco da Gama reached India by a route around the Cape. This route became a Portugese monopoly which forced the Spanish to seek a new route to India via the west, and with the discovery of the New World by the Spanish, the English, French and Dutch were soon to follow.

The founding of these colonial empires had incalculable effect on the face of Europe. Commerce expanded from the narrow limits of the Mediterranean trade into a world enterprise, and the Italian cities of Genoa, Pisa and Venice became almost obscure in comparison to the harbors of Lisbon, Bordeaux, Liverpool, Bristol and Amsterdam. But probably the most significant change brought about
by the discoveries was the great increase in the supply of gold and silver principally in the hands of the Spanish, and for a period of time, the Spanish and the Portugese were the wealthiest powers in Europe. As gold and silver began to be used as tokens of payment rather than being commodities, the idea of trade as an equal exchange ceased to exist. This commercial revolution, which is the foundation of modern capitalism, was to change the entire concept of business and wealth accumulation.

The commercial banking which had originated in the northern Italian towns soon spread to southern Germany, France and the Low Countries. The Fuggers of Augsburg lent money to kings and bishops, served as brokers for the Pope in the sale of indulgences, and even provided the funds which Charles V used to buy his position as Emperor of the Holy Roman Empire. The growth of banking was accompanied by the adoption of credit facilities similar to the present system of checking accounts. This system of international clearance, and the later substitution of bank notes for gold and silver, greatly increased the volume of trade, as the credit resources of banks could be extended far in excess of actual amounts of cash available.

In 1581, the Low Countries gained independence from Spain, and by the middle of the seventeenth century, Holland had become the wealthiest country in Europe with a navy four times larger than all other European nations combined. Amsterdam grew to be the most
important port in Europe and population rose from 50,000 in 1610 to over 200,000 in 1663.

The growth of private banks was followed by the establishment of government banks. The first of these was the Bank of Sweden, founded in 1656, and the Bank of England was established in 1694.

The influx of wealth from the new world and the new capitalist economy also resulted in fundamental changes in the methods of production. No longer were production and trade to be conducted for the benefit of society, with prices fixed by the guilds to insure a reasonable profit. The growth of power of monarchies in England, Spain and France was paralleled by the establishment of large standing armies which made demands for new equipment, particularly from the textile industries. Also, with the development of gunpowder in the fifteenth century, the war industry was greatly stimulated. And with the influx of gold from the new world and ease of availability of capital from the developed banking systems, the entrepreneur was able to organize labor into a new form of production. The domestic system which was developed in the textile industries made possible the housing of all phases, from acquisition of the raw material to the finished product, under one roof. The finished product of this system was then sold on the competitive market for the highest price it would bring. There was to be only one more fundamental change in the method of production; the factory system of mass production which began in the
nineteenth century.

The political and economic innovations which began in Italy, the rise of commerce and industry in the Flemish and Hanseatic towns and the influx of wealth from the New World had different as well as considerable influence in the various areas of Europe. In Italy itself, the Renaissance style was witnessed only in specific buildings as few new towns were founded and the age of vistas and monumental avenues was not to occur until later. "The architecture of the Renaissance is pre-eminently an architecture of Taste. The men of the Renaissance evolved a certain architectural style, because they liked to be surrounded by forms of a certain kind. These forms, as such, they preferred, irrespective of their relation to the mechanical means by which they were produced, irrespective of the materials out of which they are constructed, irrespective sometimes even of the actual purposes they were to serve." (3) The style was applied only to individual buildings in Florence and Venice, and the decline in importance of the latter as a result of the shifting center of commerce, saved her from poliferation. But with the development of gunpowder and the new forms of artillery of the late fifteenth and early sixteenth centuries, the fortifications of almost all continental towns underwent a revolutionary change. As can be seen in Turin, Geneva, and Vienna, the new fortifications assumed greater significance, and were to have a direct effect in the later physical forms of the city.
It was Germany which first felt the impact of the Italian awakening, particularly in her universities. Heidelberg became the chief seat of the humanist movement. In 1500, Germany was composed of numerous kingdoms, duchys, ecclesiastical states and imperial cities under the great houses such as the Hapsburgs and Hohenzollerns. Martin Luther's 95 theses against indulgences were to begin a movement which revolutionized religious life, and later saw a century and a half of wars against Catholics and Protestants. With the end of the Thirty Years War in 1648, Germany was defeated, her population was greatly depleted and France emerged as the dominant power of Europe. With the imprisonment of Napoleon in 1870 and the crowning of the German Emperor at Versailles, the nation knew no bounds to her ambition.

In France, where feudalism was stronger than in any other country in Europe, the reformation obtained little hold and ecclesiastical policy remained much the same until the end of the eighteenth century. Few churches of the Renaissance style were erected in France, as in England, as the Gothic churches were plentiful. French imperialism was furthered by Charles VIII as he marched through Italy and conquered the kingdom of Naples. Under Francis I, Paris became the capital of the court and became the center of the art and literature. During the first half of the sixteenth century Italy was the battlefield of Europe. By the time of Louis XIV, the power of the
monarchy was absolute, and as is witnessed in the Louvre and Versailles, architecture and planning were patronized to enhance the power and the grandeur of the state. Under Louis XV despotism, bad government and selfishness of the corrupt nobility became more pronounced. The public dissatisfaction voiced by Voltaire and Rousseau paved the way for revolution. In the new Republic under Napoleon I and Napoleon III the center of social life shifted from Paris to the country. In 1870, Napoleon was taken prisoner by the Germans and deposed by the French. In Italy, the Papal States came to an end, Rome became the capital and Papal supremacy began.

The Reformation in England began early in the sixteenth century and in 1559 Henry VIII's Act of Supremacy ended the relation between the crown and the church. Between 1536 - 40 the property of the monasteries had been distributed among the courtiers of Henry VIII. The accession of Elizabeth and the defeat of the Spanish Armada in 1588 not only ended the power of Spain in Europe but established the independent position of England during which time great artistic and political achievements were made. Under Cromwell not only did trade prosper and new industries arise, but colonial possessions were successfully defended and new colonies organized. The "Glorious Revolution" of 1688 saw the defeat of absolutism in England, and the emergence of Parliament as the supreme power. Under the House of Stuart the control of foreign trade was transferred from Holland to
England, while the victories over France and the Peace of Utrecht, in 1713, saw England in virtual control of European trade. The wealth which resulted allowed England to build a navy which gave her full supremacy at sea. By the end of the eighteenth century, the colonies had gained independence and an industrial revolution had begun which was destined to change the entire face of urbanity. By the middle of the nineteenth century, England was the supreme industrial, political and sea power of the world.

With the rise of supreme monarchy and the large standing armies of France, the court of Paris became the model whose manners, arts, dress and habits were copied by minor despots throughout Europe. The expression which began as single palaces of the Renaissance was to emerge as the physical demonstration of absolutism and wealth. The grand vistas, the royal parks and the ostentatious display of the palaces reflected the personal grandeur of the ruler who controlled and impressed the masses. The influence of planning of Paris and Versailles can be seen all over Europe as in the cities of Vienna, Potsdam and St. Petersburg, and the smaller towns Karlsruhe and Mannheim. Even the new American capital of Washington adopted this expression of corrupt authoritarian control. At Versailles the immense complex of buildings wedded to nature came as the "architectural response to a new sociological demand, the demand for a new setting for the personal, the ceremonial and the governmental
life of an absolute king." (4) But with all of the pomp and display the palace, which could accommodate 10,000 persons, did not have the conveniences of a medieval castle.

Inside Paris, the Place des Voges was completed in 1605, as the first circular place intended as a meeting point of streets. The Place des Victories was built thirty years after Bernini's Colonnade at St. Peter's. The largest public square of the period was the Place Vendom, 1699. But the most significant development of Paris under Louis XIV was the extension of the road connecting the Louvre and Versailles, later destined to bear the name Champs-Elysees, the only broad exit from the city. Square construction was continued under Louis XV, the best known example of which is the Place de la Concorde. After the revolution, Napoleon I and especially Napoleon III continued to open the congested Paris. The city became the embodiment of the industrial metropolis, with the emphasis wholly on the street and circulation. This culmination of the Baroque plan signified the military conquest of space. The tyrannical power of Haussmann and Napoleon III was used to sacrifice the city to traffic, by unmercifully uniting endless lines of unbroken streets to aid in putting down the increasingly frequent riots. It is ironic indeed that the Place Vendome is a public parking place, and the Champs-Elysees and the Place de la Concorde are virtually impassable. The same is true of the Place Royale of Nancy, the Piazza del Popolo and the Piazza S. Pietro of
Rome and the Piazza della Signoria of Florence.

In contrast to Paris, the London squares which developed in the Bloomsbury district were meant to be lived in with the arteries of traffic excluded. Bloomsbury, Russel and Bedford squares, the first of which originated in 1667, were similar to the French place or the Italian piazza in that they were wholly dependent on a resident of a noble. These London squares were reserved exclusively for the wealthy as their primary purpose of origination was the enhancement of a monetary investment. And although these squares are today public, probably due to the British Museum and the University in the area, the visitor of today will continually encounter the continuation of this attitude in other parts of London, the fenced green to which he will not be admitted.

Perhaps the greatest achievement of early capitalism occurred in Amsterdam at a time when rapidly increasing commerce and a more rapid growth of population demanded expansion of the city. The development of the city from the time it was a settlement on the Amstel River was based on an excellent control of water under cooperative management, which resulted in the creation of Water Catchment Boards. In the sixteenth century, Amsterdam became the center of monetary power, and by the seventeenth century her ships were the commercial carriers of the world. A chamber of assurance was established in 1602, a new city hall in 1608 and a lending bank in 1614.
The collective heritage, aided by the establishment of the Building Ordinance of 1565 culminated in the Three Canals, the Heerengracht, the Prinzengracht and the Keizersgracht. "The plan of the Three Canals was a miracle of spaciousness, compactness, intelligible order. It accepted all that was valid in baroque planning, with just sufficient variation in the individual units, combined with the rich tracery of trees bordering the canals, to take the curse off the military regimentation of baroque classicism. The successive breaks in direction of the spider webb plan keep the distant vista from being empty and oppressive." (5) This urban extension has been far in advance of any planning on such a scale even until this day. As of this time, capitalism in the United States has not been able to produce anything remotely comparable to the seventeenth century urban facilities of Amsterdam.
FOOTNOTES

(1) Burns, Western Civilization, p. 368-369
(2) Fuller, History of Philosophy, p. 17
(3) Scott, The Architecture of Humanism, p. 36
(4) Gideon, Space Time and Architecture, p. 73
(5) Mumford, The City in History, p. 245
Lübeck's market square about 1200.

Lübeck's market square about 1620.
"The existence of an area of free land, its continuous recession, and the advance of American settlement westward, explained American development." Thus the 'frontier thesis' of Frederick Turner was introduced to Americans in 1893 and served as the basis of understanding of our nation's past for over a half century. And this emphasis on the western movement continues to recur with succeeding generations even if they ultimately decide to reject it. Turner concludes "the true point of view in history of this nation is not the Atlantic coast, it is the Great West." (1)

This "Great West" of Turner's was primarily agrarian, the pure and wholesome state of relationship between man and nature which fostered extreme self-reliance, unsurpassable energy and extreme confidence of will. "Rejecting both the belief in a fixed social order and the belief in the depravity of human beings, the American created a society whose special characteristics was the freedom enjoyed by its individual members." (2) This over emphasis of the West, the heart of real democracy, is continually recalled as a protest and an overcompensation for the importance of the East, "dependent on a sequence that only occasionally occurred, and most importantly in its insistence on the primacy of agrarian elements, it neglected the importance of cities." (3) In recent planning proposals, these agrarian principles
are best exemplified in F.L. Wright's Broadacres plan, providing every human being with a piece of ground "with which he can identify himself by the use of it." In our own generation we experienced an attempt at political recall of the sturdy individual with the promise of an upsurgent "grass roots movement," the agrarian democracy again triumphant. This sounds extremely Jeffersonian on the surface, but as the Goodmans point out, "Jefferson was great because of his polarity with Paris, London and New York." To accent the city as the single area of examination of the American experience would raise many of the objections inherent in the frontier argument. But the urban approach is a necessity in examining both cultural and physical growth of the United States, placing only due emphasis on the influence of the American frontier.

The early settlements along the Atlantic Coast varied greatly in origin; the largest colonies in Massachusetts, Pennsylvania and Virginia were English; the Dutch settled New York, the Swedes were in Delaware, and both Germans and Swedes lived in and around Philadelphia. The settlers of this new land might have developed a new indigenous art of town planning, but actually they made no attempt to be original. Instead they built the same type of house they had known at home, modified only somewhat by the new circumstances they encountered and the limitation of many materials which were usually in short supply. Initially, the first settlements were only
crude villages carved out of the wilderness. Boston, the first important city in American history, was a reflection of medieval London, a maze of narrow winding streets, with heavy beamed structures filled with brick, rubble and stucco, small leaded casement windows, the second story hanging out ponderously over the first. It was not until the end of the seventeenth century that clapboard, white paint and ornament came into use.

As Gallatin illustrates, the village, which is the product of a feudal or slave economy, could not long exist in a nation of free land holders. "Two strong social forces transformed it; the communal drive on the one hand, and the individual drive on the other. The first created the market town... and the second the American landscape dotted with farms." (4) The most distinctive feature of the New England town was the common or the green. This open space assumed a variety of shapes, from a wide strip along the main street to the triangle of New York, and the oval of Woodstock, Vermont. The division of plots faced on the main streets and usually extended out of town to the farmlands. As the initial plots of land were far more spacious than any readily available in Europe and the house could be freely placed in relation to the street. Instead of joining each other, as is typical of the European village, the houses stood apart, and as population grew, the common lands beyond the township were sold and the free-standing home was placed without the restrictions of an
established order. The open lot of today's suburban scene is a result of not only this system of the division of land, but also the founding of the American as his own landlord, with his plot of land and his individual castle, disassociated from previous crowded urban situations. This attitude, becoming deeply ingrained, has as much effect on later urban sprawl as does the development of personal mobility afforded by the automobile.

William Penn, appalled by this situation, wrote to England in 1685, "... many that had right to more land were first covetous to have their whole quantity without regard to the way of settlement, tho' by such wilderness vacancies they had ruin'd the country, and that to our interest of course." In support of closely-settled towns he wrote "society, assistance, busy commerce, instruction of youth, government, of people's manners, conveniency of religious assembling, encouragement of mechaniks, district and beaten roads...." The location of Penn's Philadelphia and the manner in which it was laid out is no great surprise, the only distinctive feature being the provision of five squares. Like all of the early settlements, Philadelphia was located within easy access of the Atlantic Ocean, sheltered somewhat by being inland between the Delaware and Shuylkill Rivers. The physical order of the street layout, like that of the later New Orleans (1718) settled by the French on a two foot high ridge which allowed dry portage between the Mississippi and Lake Pontchartrain, was determined
not only by the ease of division which rectangular blocks allowed, but by the interest of the European at this time in the geometrical pattern and the straight line.

In other parts of the new country urban environments were developing in a manner similar to that of New England towns. In the years after the Revolutionary War, almost every town of the middle west, and even as far as Wisconsin, had a central square, often an elm-shaded green. The courthouse town, the first of which developed in Virginia and later spread to other areas of the south, remains even today. This square was the point of social contact as well as the trade and political center for surrounding communities. In typical Renaissance fashion, the county courthouse was located in the center of the square.

The eighteenth century brought a profound change in the physical plan of the American community. There was a shift to brick as the basic building material, as wood was a great fire hazard, and right angled streets paved and lined with trees began to be widespread. In 1740 the church steeple pioneered by Sir Christopher Wren first appeared on Christ Church in Boston, and from then was to have a large measure of influence on the skylines of practically all American cities. The European influence is further witnessed by the development of the American Baroque Garden. Entire civic planning was sacrificed to the purpose of public building display as in Williamsburg,
Virginia. Both this type of planning and attention paid to the buildings themselves had been unknown in previous centuries.

But the culmination, or rather the disaster of American Baroque planning occurred with Major Pierre Charles L'Enfant's plans for the construction of Washington, submitted in 1791, little more than a century after the design of Versailles. "Despite L'Enfant's firm republican convictions, the design he brought forth for the new capital was in every respect what the architects and servants of despotism had originally concieved." (5) The imaginative use of the site by L'Enfant was nullified by the laissez-faire philosophy of the new United States government. The bold conception of the city as the stage of absolute monarchy was "brutally massacred", and in time, "visually disrupted and defiled by a wide scattering of unkept and irrelevant buildings."

The American city, at least before the Civil War, was a mixture of European influences coupled with the unique principle of the primacy of property rights. The wholly American contribution was the use of geometric surveys of land which allowed easy division, and the institution of the free-standing building of minor importance. The unfortunate but extremely widespread land speculation was not to occur until the early part of the nineteenth century. The development of American architecture as well as American planning was of little consequence until after the shift to "finance capitalism" in 1890. "All
of this dabbling in architectural styles in an attempt to find something appropriate for an emergent American culture was enforced by a literary, musical and philosophical heritage quite unrelated to, indeed regarded as an amelioration to, rather than an expression of the industrial civilization." (6)

Three revolutions occurred in Europe which were to change the social, economic and physical patterns of the Western world: the scientific revolution, the philosophical revolution and the industrial revolution. And perhaps the young colonies of America, being removed from the tangible heritages of the past, were to absorb the impact most fully. With the end of Medieval Scholasticism began the first inquiries which serve as the basis not only of modern science but of modern philosophy. The awakening of pure science based on empirical knowledge, led to work in astronomy and mathematics by Copernicus, Galileo and Kepler, ultimately destroying philosophical and theological conception based on man's central position in the universe. Kepler's laws of planetary motion and interplanetary gravitational attraction to some degree anticipated the discoveries of Newton. At the same time, traditional beliefs were being upset in other fields of scientific investigation. Under the leadership of Versalius, medicine and anatomy removed itself from the authority of Galen, botany and natural history made great advances under Gesner, the first steps toward modern photography were the result of Porta's discovery of
the "camera obscura", and Gilbert conducted experiments in magnetic and electrical phenomena. These scientific advances based on the physical world and empirical rather than rational knowledge, became the basis for the majority of philosophical thought. It is not coincidence that Immanuel Kant obtained his formal education in the sciences, receiving his doctorate in physics.

"John Locke (1632-1704) had much the same relation to the American Revolution as Karl Marx later had to the Communist Revolution in Russia." (7) Essentially, Locke's philosophy was a reaction against the rationalism of Aristotle and the medieval theories of Hooker and St. Thomas Aquinas. For Aristotle, man by his very nature as an individual was a social man; "a political animal."

Political organization is not something from which man can refrain, or something into which he may voluntarily enter, but rather he must, by his very nature, participate in both the social and natural order.

"For Locke, on the other hand, the basis for ecclesiastical or civil laws is quite different. First, nature is made of material substances which, instead of entering into the teleological, hierarchical order of Aristotalian and medieval science, obey the purely mechanistic laws of Newton's physics; thus there is no basis for social laws in nature. Second, the person is an independent, atomic mental substance, knowable only in one's own self by subjective introspection, and having no conceivable or specified relations to other mental substances or persons. Thus, in the essential nature of the Lockean person, there is no scientifically and philosophically grounded social relation joining him to other
persons, with a content sufficient to provide a new law of nature, independent of the private opinions of individual men, for the grounding of ecclesiastical or civil law. Consequently, nothing remains but to regard all laws as mere conventions, having their authority solely in the free consent of the majority." (8)

The importance of John Locke in both the American Revolution and the establishment of government cannot be overemphasized. His writings furnished most of the theoretical foundation for the colonial revolt against British oppression. The Declaration of Independence is so consistent with Locke that whole passages might as well have been copied verbatim from his "Second Treatise of Civil Government". Lockean principles also influenced the drafting of the Constitution and were the basis of arguments by Hamilton, Madison and Jay in the "Federalist" support of its ratification. To this day citizens and statesmen have been concerned not with which philosophical position to support, but rather how to interpret, primarily as a matter of degree, the theories of government of John Locke. At what point does the personal freedom of the individual in the quest to protect his natural rights to life, liberty and property undermine the joint power of all the members of society? If indeed ours is a system of "one dollar one vote" and "two or three percent of the population now own forty or fifty percent of the private property in the United States," (9) then we are past that point.

The Industrial Revolution which began in England during the
middle of the eighteenth century, and the resulting increase of production brought about by the factory system and the machine was to change the appearance of the world. Unlike a political revolution which is usually confined to a specific country or area, the fever which gripped all levels of society in England in 1760 were to effect the social upheavals which have yet to subside. This age of the machine and of unlimited production gave impetus toward widespread invention. Richard Arkwright invented the water frame and in 1771 he established the first factory operated by water power. The spinning jenny (1765) was followed by the introduction of the steam engine of Newcomen (1782) and Cartwright's power loom patented in 1785. In 1790, John Fitch's steamboat carried passengers on the Delaware River for several months, Whitney's cotton gin made its appearance (1792) and in the year 1837, three systems of electric telegraphy were invented by the German Karl Steinheil, by the Englishman Charles Wheatstone and the American Samuel Morse. By 1825, the first steam operated railway was in operation.

During the earlier Commercial Revolution in England (1688-1750) capital was accumulated, which was later to finance the developments of the Industrial Revolution, from three main sources; by loans, primarily to the State, by overseas trade and by imperialist acquisition and looting of India. And the consequences of the commercial and industrial expansion were first witnessed in England. At the
beginning of the eighteenth century, the population of five and a half million were generally employed in agriculture and nearly all of them lived in the country. No town except London had a population of more than 30,000. After 1750, there was an enormous increase in wealth and population, and by 1850 the eighteen million population was about equally divided between town and country. The highly industrialized Britain, which was to remain the economic power of the world, until the time of the first world war, became spattered with newly expanding towns comprised of "only two components: the factories with their transport and storage facilities and the houses of the workers. The centre of the city consisted of mills, warehouses, railways, docks and canals." (10) In the cotton, wool and steel towns, as well as the mining communities, speculators built hundred of thousands of houses packed as closely as possible, without any consideration for human life, comfort or hygiene.

In c. 1860, the Industrial Revolution entered a new phase, in such contrast to that which had preceeded it that it is often termed the Second Industrial Revolution. There are three main events which are generally responsible for its occurrence; the development of the Bessemer process for making steel in 1856; the perfection of the dynamo in 1873; and the invention of the internal combustion engine in 1876. In the United States, the end of the Civil War removed all obstacles to industrial expansion and to the growth of large businesses
and corporations. During the next three generations, the United States surpassed England both industrially and commercially, and emerged as not only the wealthiest but the most powerful nation in the world. The results of this Second Industrial Revolution were to force the social, political and economic changes which have persisted even unto this day. The sources of impetus for these changes may be summarized as follows; the replacement of iron by steel as the basic industrial and building material; the widespread use of gas, oil and electricity in place of coal as the principle source of power and energy; the increase in transportation and communication as a result of the growth of railroads, the internal combustion engine (airplane, 1903), and development of telephone and telegraph systems; and the use of automatic machinery and a high degree of specialization of labor.

At the same time, the United States "was transformed from a country in which the average citizen was an independent property owner to one in which there were extreme economic inequalities and most citizens were dependent for their livelihood on big corporations owned and controlled by a small minority of the population." (11) Since 1890, industrial capitalism had been replaced by "finance capitalism." Industry became dominated by investment banks and insurance companies, resulting in huge aggregations of capital, the separation of ownership from management and the growth of holding com-

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panies. The numerous trusts, mergers and cartels were organized for the same purpose; that of restricting or preventing competition. And although the owners of industrial enterprises are millions of men and women who have invested in shares of stock, management is under the control of a small group of officers and directors, chosen by a minority of shareholders who have monopolized the voting stock. The economic power which developed is not difficult to understand upon realization that a total investment of $1.2 billion can be controlled by an investment of $2.5 million in a second degree holding company. In 1960, "sketchy surveys suggest that the top one percent (about 550,000) of the families hold about two thirds of all privately held stock." (12)

The beginnings of land speculation at the turn of the nineteenth century, continuously unfettered and rampant until this day, had a profound effect on the urban pattern of America. In the middle of the seventeenth century the Dutch settlement of New Amsterdam, on the tip of Manhattan, was economically dependent on local agriculture and commercial fur trade. With the growth of population, farms were subdivided for residences, and expansion northward followed the topographical features and an old Indian trail already laid out. In 1807 almost the whole area was surveyed as a gridiron, "that lay across the aboriginal paths and the early lanes and roads, unable to alter either the stronger topological features or the areas already built up,
but dominating the future. The rectangles of 1807 were subdivided by real estate speculators into the lots and back alleys of 1907." (13) When John Jacob Astor died in 1848, he had amassed a fortune of almost forty million dollars, the majority of it in Manhattan real estate, while the same year in Chicago, there are accounts of a parcel of land changing ownership ten times in a single day.

The resultant rise of land prices, later reinforced by the subway systems developing in New York as early as 1907, contributed in no small part to the unique American contribution in the fields of architecture and planning: the skyscraper. It is not surprising that the first of these structures, occupied in 1885, was financed by the Home Life Insurance Company of Chicago. This, the first temple of commerce, was to be witnessed later in every large city of the United States. "The overwhelming presence of business in the plans of American cities. The skyscraper is one symbol, the gridiron plan another." (14)

Although in 1790, only five percent of the American population was living in urban areas, the city was the economic, political and cultural center of the surrounding region. And like the European city, it became the point of intellectual exchange for surrounding areas, having a virtual monopoly of printing presses, newspapers, bookstores, and circulating libraries. As the towns grew, so did the opportunities for the resident, continually intensifying the cultural
separation between the rural dweller and the urbanite.

America knew no Avignon, York, or Aix-la-Chapell, artificially built up by enormous religious or political power, and then gradually being worn down by economic reality after the exodus of the support. (a few, such as Washington, Indianapolis and Columbus, were established as political capitols, but government was not the big business it is now). Instead, the cities of the United States owed their initial success to commerce. "Each carved out large dependencies in its immediate area, but, never fully satisfied, reached out for more. These aggressive lunges into new regions led to collisions between great metropolises, as each sought to annex the growing market." (15)

Of the instruments employed by these growing urban centers, railroads, canals and roads, the railroad was the most influential in altering not only the regional pattern of America, but in transforming the inner structure of the existing cities. Because of the great costs of demolition, the early lines did not cut into the heart of the city, but found a position as near the core as could be inexpensively maintained and that was easily accessible. Near the terminal soon grew the second center of the city, which was in direct competition with the original downtown centered about the waterfront, and in most cases this new center was to become the main point of interchange in the city. As the trains began to carry more and more of the passenger traffic, hotels moved from the waterfront to the terminal area, and
business dependent on communication began to relocate, as well as new urban additions desiring the more prestigious address.

As spurs branched out from the main line of the railroad to serve new industry, rapid transit lines became necessary to move people between work in the factories and offices, (as Robert Futterman points out these were usually in the same buildings until after the turn of the century) retail shops and residences. Whether these rapid transit lines, or subways, were the cause or the result of high density has long been open to discussion.

By 1925, virtually all of the areas conveniently served by rapid transit were already built up with row or small lot housing. Near the transit stops and the commuter railroad stations, speculators began apartment projects, as the areas between service lines were inadequate for easy mobility. By the late 1940's the mass exodus to suburbia was underway. After twenty years of poverty and shortage and the deficient and dilapidated urban housing, prosperity and a rapid change in population was a result of the Second World War and the great availability of the automobile caused this movement to assume the proportions of an explosion. "In the decade of the 1950's, virtually all the net growth of population in most metropolitan areas came in the sections outside the boundaries of the central city." (16) The single plot of land with its openly situated house again became the triumphant American expression. The affluent middle class individual
was able to assert himself as proprietor of an evening and weekend urban dormitory providing privacy for himself and his offspring.
FOOTNOTES

(1) Problems in American Civilization - Turner Thesis, p. 2
(2) Parkes, American Experience, p. 9
(3) Wade, The City in History - Urban Life and Urban Form, p. 61
(4) Tunnard and Reed, American Skyline, p. 36-37
(5) Mumford, The City in History
(6) Bush-Brown, The Architecture of America, p. 177
(7) Williams..., A History of the United States, p. 151
(8) Northrop, The Meeting of the East and West, p. 88
(9) C. Wright Mills, White Collar Class, p. 63
(10) Korn, History Builds the Town, p. 67
(12) Bach, Economics, an Introduction to Analysis and Policy, p. 320
(13) Goodman, Communitas, p. 40
(14) Tunnard and Reed, American Skylines, p. 20
(15) Wade, The City in History - Urban Life and Urban Forms, p. 65
(16) Futterman, The Future of Our Cities, p. 58
CHARLESTON 1704

NEW AMSTERDAM 1664

NEW HAVEN 1679
TRANSPORTATION AND URBAN DEVELOPMENT
(Paullson pp. 55)
POLITICAL, ECONOMIC AND SOCIAL FORCES

THE PRESENT SITUATION

Thus far in the twentieth century, Americans have been faced with four major developments, each of which has and will continue to compel changes in the traditional customs, attitudes and institutions. The settlement of the geographical United States, which has been a major occupation for the past three hundred years, has been completed. The growth of "finance capitalism" has caused wide economic inequality and insecurity, resulting in the rapid expansion of governmental power and responsibility, and a serious loss of individual freedom and opportunity. The growth of international conflict in a rapidly shrinking world threatens with the extermination of freedom. Finally, as recent studies of population growth have indicated a rebuilding at least equaling the present physical structure of the world must be accomplished to accommodate the peoples of year 1995. In the world of today, it has become necessary to plan for freedom.

The modern world is divided between two rival social systems, one based on the ideal of personal equality and freedom and the other on totalitarian collectivism. And while the Western World may highly prize individual freedom, it may turn toward collectivism, finding that the opposite alternative is freedom only for the few with economic and political exploitation for the majority. There is yet to be a demon-
stration of human equality and freedom in a competitive mechanized society. The first objective of capitalism has been to maximize production and sales, and where there is a choice between the dignity of the individual personality and this increased productivity, capital usually chooses the latter.

The conflict between the ideals of personal freedom, and competitive acquisition are more than adequately stated by Henry R. Parkes. "For while Americans have believed in the right of all men to freedom and opportunity, they have also exalted the drive of the individual toward wealth and power; they have adopted a morality of personal (and largely material) success, and as a result of their economic system and their Calvinist heritage, they have exalted activity above contemplation and material accumulation above aesthetic, intellectual, and spiritual development." The conflict between power oriented individuals for privilege and success and the ideal of freedom for all has been omnipresent in our nation's history. Much of our development confirms the fact that men are unable to respect the rights of their fellow man. Certainly democracy cannot be preserved without some kind of controlled restraint upon the will of individuals.

In every civilization there is a recognizable sense of order in which individuals belonging to the society are conditioned according to prevalent values and standards. In a free society, this order must be a native product of individuals maintaining allegiance only for the
purpose of developing his own personality. The individual must of necessity be a part of the social unity operating under the objective ideals rather than asserting his will against the social and economic environment. In this way the unit of power will be the majority participating in the collective enterprise of society. Yet, at the same time, the majority, subordinating themselves to this social order, do not endow it as the ultimate authority as in the totalitarian states. In the succeeding generations, both a greater restraint upon the individual and a further activation of social enterprise will be necessary. "Either the Americans will achieve an organic order based on the free participation of individuals, or they will succumb to a mechanistic order imposed by an absolute state." (1)

Recent political events in Europe should be considered and understood. After six years of opposition, Holland's Labor Party has assumed power in the Dutch government. At the same time, Ireland's small labor party acquired extra seats as a result of the elections. Not long ago, Britain's Labor Party gained control of the government even if by only a small majority. Socialists are in the Italian coalitional government as a result of the "opening to the left" experiment. And although General De Gaulle's position seems to be quite secure, the strong French left might be able to assume power in the event of his departure. As London economist Joseph Rogaly points out, the exclamations from Americans that this creeping
socialism will lead to eventual communism and the end of European freedom, are complete nonsense. "The world has changed, and perhaps the only sure general doctrine of Socialism in Western Europe today is that the opposite of old-fashioned Marxism, untrammeled capitalism, is a bad policy... If the present swing to the left means anything in terms of the home policies of the countries concerned, it might best be described as accelerated welfare capitalism, plus an increased willingness to upset businessmen if social justice demands it. Recent legislative programs which included Medicare for the aged, and state aid for education and for the poor, demonstrates some degree of consensus in American society for the same ideals contributing to a social order.

The impetus for social and economic reform is gathering strength as its questioning of our direction continues. If indeed, our free society allows equal opportunity, placing no limits on the property any individual may acquire by his own ability and resources, then certainly the process of inheritance should be examined. And, since no free economy can exist without a free market, perhaps some of the interferences which developed under capitalism, such as the tariff and monopolistic price fixing, should be removed, with the widest possible diversity of ownership encouraged. But since certain forms of enterprise are inherently monopolistic, as various levels of transportation and communication, society might best be served under
public rather than private ownership. Some of these social and economic issues were confronted in the work of the T. V. A.

Of the multitude of urban problems continually discussed (by the socially prominent as well as by the seriously concerned), poverty, inequality, insecurity, unemployment, education, insanity, suicide, public health dangers, slums, crime, inadequate recreational facilities, housing, duplication of inadequate governmental levels, disunity, dispersal and congestion, perhaps the exploitation of urban land by private owners is most commonly attacked as the greatest menace to urban existence. Certainly many of the denunciations of land speculation are not unfounded, but usually they are at best only negative statements of dissatisfaction. The real problem is not the speculative exploitation, but social failure to realize the potential of urban land. The use of urban, as well as all other land is of vital public concern, demanding cooperative attention with regard to public ownership and private usages. As few reforms can be on an exclusively local scale, new principles and policies in urban land economics must be expressed on state and national levels.

As in the past, the physical forms of cities and towns were a product of the power structure society prevalent at the time, the American cities of the future will be the expression of the developing social order, based on a respect for the freedom of every individual. And as the pattern of opinion in a free society will be in continual
flux, so the physical pattern of cities will be undergoing continuous change, not reaching a final goal which could be imposed by an authoritarian or dictatorial state. Mobility through different modes of transportation will continue to play a fundamental role in determining the structure of man's habitat as it has done thus far in our century. The responsibility of future movement must of necessity be delegated by citizens to a National Transportation Authority, responsible for the coordination of all possible means of movement, below, upon and above the earth's surface.

There are generally two schools of thought with regard to the intensity of urban development, centralization and decentralization, with the vast majority of schemes falling somewhere between the two extremes. At the turn of the last century, centralization of businesses based on communication was necessary, but today this argument would not be supported in actuality. In a metropolitan area the size of Los Angeles, as Kelvin Lynch pointed out, the average dweller is not conscious of either the total pattern or the availability of facilities in any but his own immediate area of contact. But at the same time, there are facilities such as the museum, federal and municipal offices, the opera, and the main center of finance which cannot be repeated on the community level and hence might best comprise the "center" of the region. However, consolidation of these facilities do not in any way suggest the necessity of physical and human congestion of New York
City.

As the physical structure of the city is the expression of society, the manner of building results from the technological capabilities of the culture. The elimination of the monumental waste of both human and material resources will be imperative in the provision of shelter for future generations. One can only hope that the dynamic process of city building will continue, employing structures commensurate with technological innovation, directed and guided by a social order as the expression of a free people.
FOOTNOTE

(1) Parkes, The American Experience, p. 342
PART III - SYNTHESIS

ANALYSIS OF HISTORICAL EXAMPLES AND SOME RECENT PROPOSALS

The examination of physical form can be approached from two directions. The first, which has been the subject of this paper, is the study of political, economic and social forces and their role in the determination of urban development and physical environment. The second method involves the analysis of a proposed plan to discover the implied political, economic and social forces which would have had to be present to bring the suggested physical environment to fruition. Each proposed model intimates something about how its citizens have organized themselves politically, how they satisfy their material wants, the types of social activity which are considered important, and the degree and purpose of their technological capabilities. The implied political, economic and social forces of any valid plan will correlate with the actual situations found in the society for which the plan is proposed. The physical form suggested by any proposal cannot be considered an end in itself, but only a suggested means of giving order to the ideals and attitudes of man.

Too often, suggested physical environments are misunderstood or misused. Frequently, in view of substantially contrary evidence, architects and planners support the argument that mere physical form
can substantially influence political, economic and social forces. It is fortunate that societies have been spared both the economic and psychological expense of empirical proof, using some of the larger models for demonstration.

Recent planning proposals are generally of three types. First, a scheme may result as an emotional reaction to a present condition. Usually, such a scheme is based on subjective criteria and would require either authoritarian control or complete ignorance to be realized. Secondly, a scheme may be based entirely on information derived from limited analysis. It should be pointed out that an efficient movement and storage system for automobiles or the elimination of factory smoke does not constitute a city. The third type involves the acceptance of prevalent political, economic and social forces as the basis of ordering man's physical environment.

It is this third type of approach which offers the greatest possibility for future urban planning. The determinant of urban form is an increasingly complex and changing power structure. The planner has two choices; one is to react to society and produce physical forms counter to its aims and ambitions; the other is to accept his role as a responsible member of his society and work toward the goal of providing meaningful physical expression of its power structure. The opportunity for the planner to effect urban growth and physical form is limited. But, the more clearly these limitations are recognized
and accepted, the more effective will be the opportunities for influencing urban development.
DEFINITION OF TERMS

POLITICAL - of or pertaining to the organization or action of individuals. The method of organization of the state and its governing agencies, reflecting what men regard as the supreme good. Throughout much of history, the determination of supreme good has been controlled by the action of very few individuals.

ECONOMIC - of or pertaining to the production, distribution and consumption of natural (including human) resources. During the course of man's satisfaction of his material wants, economic control has determined political organization, and political authority has determined political allocation.

SOCIAL - of or pertaining to the interrelations and interdependencies of persons. Throughout the organization and development of human society, political and economic ideals of man have been little affected by a collective social order. Rather, social organizations within society have been most influential in altering political and economic situations. (For example, role of political clubs in the overthrow of Athenian democracy and the establishment of oligarchy, 411-404 B.C.)

POWER - simply the ability to act. The exercise of power for the means of achieving pre-determined objectives may have a political, economic or social basis. Looking at the broad
spectrum of history, the structure of power has been in a state of flux, as has been urban development and urban form.
BABYLON IN THE CHALDEAN AGE (612-539 B.C.)

POLITICAL - Under the domination of Nebuchadnezzar II, the city was restored to its earlier splendor. Under his strong government stability and order were maintained. But because of their superior factual knowledge and their position as teacher and judge, the priests had a great degree of political and economic power.

ECONOMIC - Although agriculture was of great significance, industry and trade prospered under the powerful government. With the production of metal objects, weapons, jewelry, textiles and building materials (chiefly brick), urban life flourished. Trade ranged from the shores of the Mediterranean to Eastern Asia.

SOCIAL - By the time of Nebuchadnezzar II, a clear division of labor had appeared. The social structure was feudal in character with strongly marked class stratifications. The position of the king and the priests who served as judges, teachers, prophets and government bureaucrats commanded the vast majority of economic and political control. The second level of society was comprised of land holding nobility who gained economic power when the irrigation canals were extended. "However, the nobility's control of landed estates was made dependent upon its rendering military or administrative service to the ruler."(1)
Of minor social as well as political and economic significance were the freeholders and slaves.

PHYSICAL FORM - By this time many of the elements of the city were present. Protective walls not only fortified the city from external assault, but allowed military control from within. Bridges connecting the town's two sides were left open at night to discourage internal revolt. The city was situated on the Euphrates River, one of the main arteries of commerce, not only for supply of water, but also to control commerce. City life and commerce revived one another, much as they did in the Middle Ages; and the overflow of citizens housed themselves in suburbs outside the city walls. Since the king and the priests held dominant political, economic and social control, the castle and temple district occupied the central position in the plan and life of the city. "Excavations have shown that a straight highway for ceremonies and processions ran from north to south and then turned west to the bridge over the river. This road was flanked by palaces and a ceremonial arch spanning the road at the Ishtar Gate." (2)

FOOTNOTES

(1) Kirchner, Western Civilization, p. 16

(2) Korn, History Builds the Town, p. 23
ATHENS - FIFTH CENTURY B. C.

POLITICAL - Greek political development went through many stages, finally culminating in democracy during the fifth century B. C. But the rights of democracy were extended only to the citizen class. The women, slaves and "half-free" who comprised about three quarters of the total Athenian population were not included in this category. But limited as it was to aristocrats, large land owners and wealthy merchants, the application of democracy was more complete then than it is today. As Frederick Hiorns points out, the subordination of personal interests to public good was the basis of the Greek polis. Citizens sought satisfaction in the service of the state, the interchange of ideas and in athletics. The public good was manifest in the physical development of the acropolis, the agora, the theaters and stadii, the backgrounds for public, while frequent plagues and dire living conditions were prevalent in the remainder of the city.

ECONOMIC - During this period, Athens pursued a policy of economic, as well as political expansion, securing domination of the Agean Sea and areas of the Eastern Mediterranean. Athenian imperialism denied citizenship to inhabitants of subordinated towns, while forcing them to pay arbitrary taxes. Agricultural
surplus increased as a product for external commerce as well as wine, fruits, olives, oil, marble and ceramics. A large portion of the resulting revenues was used for the construction of temples and civic buildings to enhance the public life of those who made political and economic decisions.

SOCIAL - The estimated population of Athens in the fifth century was 300,000, of which one quarter were citizens. For many of this privileged group, the city offered the finest education, music, art (including the art of war), literature, and drama that western man had ever produced. But the public life of Athens was at the expense of the majority of her population and the inhabitants of subordinated towns. Since all important activity was outside, with living conditions and services given little importance, houses were a place for eating, sleeping and the performance of other bodily functions. Plagues and epidemics were common. Women, slaves and the "half-free" shared the physical conditions without being able to introduce opinion. Even the writings of Plato and Aristotle suggest no change in the existence of slaves.

PHYSICAL FORM - The city of Athens is the product of centuries of struggle, both political and economic. The physical form of the city is demonstrative of this struggle rather than a product of a rational planning process. Athens, like other Greek cities,
originated from a nucleus containing the "castle" and the marketplace. After the Persian siege of 480 B.C., the fortifications of the Acropolis were severely damaged. But instead of rebuilding the stronghold, the citizens elected to construct the free-standing structures that exist today. The Acropolis exists as the realization of the principles of Greek optical order. As political development culminated in democracy, the agora became the dominant element of the city with all major lines of movement leading directly into it. This focus of community life was the center of political debate and governmental decision. The theaters and gymnasia were the secondary points of social communication. Their locations are not a result of a prescribed planning order, but rather are a utilization of natural factors; but by being situated away from the vicinity of the agora, they avoided what could have been paralyzing congestion. With the exception of the temples and the public buildings, everything else was left to develop as it would. For the majority of the population, living conditions, health and sanitation were extremely unfavorable.
ATHENS
THE AGORA AND ITS ENVIRONS
IN THE SECOND CENTURY A.D.
LUBECK - 12th TO 14th CENTURIES

POLITICAL - After the destruction of Slavic Lubeck in 1138, a new town was founded between the Trane and Wakenity Rivers. Shortly thereafter, the area was ceded to Henry the Lion, who established Lubeck as a religious center and began construction of the cathedral in 1173. To attract settlers and wealthy merchants, he built a market and a residential area near the port, fortified the town with earthwork and allowed a large degree of political and economic privilege. "He recognized that the great economic prosperity of the towns in western Germany had been born and was maintained in a spirit of freedom; now he adopted their liberal constitutions for his own new foundation." (1) The community enjoyed economic prosperity as its influence spread throughout the region of the Baltic. Lubeck became a free city in 1226. By the fourteenth century, Lubeck shared leadership of some eighty towns in the powerful Hanseatic League with Hamburg and Bremen.

ECONOMIC - The basic economic institutions of Lubeck, as is true of other medieval cities, were the merchant and the craft guilds. The economic theory upon which they were based was greatly different from that of the capitalist system. The purpose of economic activity was to provide goods and services
for the community and allow each member some degree of economic prosperity. Business was not for the minority to accumulate wealth at the expense of the majority. However, strict adherence to these theories, which were largely devoid of the profit motive, was seldom found in actual practice. The craft guilds became dominated by the wealthier members, resulting in large numbers of people being destined to remain wage earners for the rest of their lives. It was these wealthy members coupled with the wealthy merchants who ultimately determined the economic policy of the towns.

In order to protect their interests and compete with the prosperous Flemish towns, German towns joined together in leagues. By the fourteenth century, wealthy merchants who controlled the Hanseatic League, had a well developed fleet and an established system of credit. "The Merchants of the Hanse was essentially a profitmaking organization, and the activities of its members foreshadowed the growth of a capitalist economy in the Commercial Revolution that was soon to begin." (2)

SOCIAL - The initial function of merchant and craft guilds was to maintain a monopoly of the local market and sustain the non-competitive market system. In addition, they served the purposes of religious associations, welfare societies, social clubs, supported hospitals and the local drama company. In time, the
more prosperous members of the craft guilds began to dominate the organizations by limiting the various crafts to their own families. Together with the more influential merchants, these small scale industrialists gained political control of their town and determined its economic future. As a result, the great majority of the workers were reduced to the lowest class of society; that of a day laborer without possession of capital, possibility of professional advancement or the ability to effect political decision.

**PHYSICAL FORM** - Lubeck is situated fourteen miles from the Baltic Sea on a hill-shaped island in the river Trane, and was fortified by earthworks. Two main streets run north and south with parallel and perpendicular streets following the contour lines of the island. The city hall, the marketplace and the cathedral were located on the high ground at the center of the city, serving as the main point of contact for the interchange of goods, services and ideas. As Lubeck merchants gained in wealth and importance, extensions were added to the city hall. As the final manifestation of economic success, governing merchants built Renaissance arcades (1570) along the market side of the hall. The two other churches were situated so as to accentuate the verticality of the town complex. Lubeck's position as a trading town is further expressed by its high, gabled dwellings. Since street
frontage was expensive, narrow, deep buildings with high windows developed. "The wealthier the merchant, the higher the windows - hence the gables with their blind windows and walls projecting above the roof." (3)

FOOTNOTES

(1) Gutkind, Urban Development in Central Europe, p. 409
(2) Burns, Western Civilizations, p. 33
(3) Gutkind, Urban Development in Central Europe, p. 410
Lübeck's market square about 1200.

Lübeck's market square about 1620.
SOME RECENT PROPOSALS

CORBUSIER - A Contemporary City

POLITICAL - The scheme is to be realized by "captains of industry" whose technological and financial resources assure them the political ability to accomplish anything.

ECONOMIC - The Contemporary City, the author states is "a model city for commerce! ...The city which can achieve speed will achieve success... Actually, the whole question becomes one of daily intercommunication with a view to settling the state of the market and the conditions of labor. The more rapid this intercommunication made, the more will business be expended." (1) The great financiers who study the market and exploit labor will hold economic and political control of production, communication and technology.

SOCIAL - Society would be stratified by economic class, each member receiving wages "according to his merits and services rendered". The important social communication would naturally be between the "captains of industry". The worker would be dependent entirely on the financier and the market, "for labor will shift about as needed and must be ready to move bag and baggage".

PHYSICAL FORM -- This "model city for commerce" is an extremely clear realization of Le Corbusier's prediction of future political,
economic and social forces. The four basic planning principles are outlined:

"1. We must decongest the centers of our cities.
2. We must augment their density.
3. We must increase the means for getting about.
4. We must increase parks and open spaces." (2)

Circulation is proposed as a triple system of superimposed levels. The first level is service, the second contains the network of ordinary streets and the third consists of arteries for fast one-way traffic. The one passenger station and the main aerodrome are positioned in the geometric center of the city. The "captains of industry" and their necessary corps of office workers are housed in the skyscrapers. From these towers come the political and economic decisions that determine the life patterns of society. Surrounding the skyscrapers are the housing rings. The innermost ring includes the residential blocks with "setbacks" which are occupied by the wealthy. The outer rings are composed of housing blocks on the "cellular system" for the average citizen who will be shifted from town to town as the labor market dictates. Beyond the protected zone the industrial city, the warehouses and the goods station are located.

The "City of Tomorrow" is the physical expression of a
pure capitalist system in which the "captains of industry" control the economic market and exploit the labor of their fellow men. The static composition of the plan suggests irrevocable domination by the great financiers. It is a plan based on economics as well as physical inflexibility. Even the distinctions between members of different economic classes are expressed to enhance the particular physical order.

There can be no quarrel with Le Corbusier's preparation of this extremely fine plan from the given set of political, economic and social forces. The Contemporary City was the "perfecting of a status quo, 1925, that as an ideal has already perished - it died with the great Depression ... Le Corbusier was a poor social critic and a bad prophet." (3)

FOOTNOTES

(1) Le Corbusier, The City of Tomorrow, p. 190
(2) Le Corbusier, The City of Tomorrow, p. 170
(3) Goodman(s), Communitas, p. 47-8
HILBERSEIMER

POLITICAL - Hilberseimer argues that cities such as we have today are abnormal. The disordered conglomerative growth has caused insoluble traffic and parking problems, encouraged slum development and increased crime, and has polluted our natural resources. He states that "traffic and parking restrictions, smoke abatement, slum clearance and other strongly urged reform measures are palliatives only. They can never solve the problem that faces us." (1) The implication is that this realization will be made, and collectively man will commit himself (politically and economically) to the problem of the "total city".

ECONOMIC - "The cities of our age are dominated by industry and commerce and ruled by interests." (2) American finance capitalism has produced what C. Tunnard terms the "temples of commerce" and the "speculative pattern" of parceling land. Implied in Hilberseimer's schemes is a more equitable distribution of economic resources to produce cities more basic to the needs of man.

SOCIAL - Hilberseimer states that the social decision to decentralize is an established fact. He expresses the hope that man's social consciousness will develop to such a stage that he will replan
cities into well-functioning organisms. "Some day, perhaps cities and regions will be planned and developed according to the needs of man and ruled by reason." (3)

PHYSICAL FORM - Hilberseimer presents a method for decentralization of existing cities and a direction for organizing future urban growth. "The extraordinary advancement of our Technology has all but destroyed the city ..... The city built for an ancient pedestrian age has failed to adapt itself to the requirements of the motor age. This failure is underlined by countless surveys and statistics on traffic, accidents, overcrowding, slums, housing, disease, crime.... This problem concerns the total city. Its solution requires the rearrangement of the city's constituent parts, and the relating of these parts to each other properly. It requires the integration of the city with its environs." (4)

One proposal is to replace the usual gridiron system with a "settlement unit" containing all of the essentials of a small community. The industrial area of this unit is located on one side of the transportation line. On the other side of this line are the commercial and administrative functions with housing, recreational and educational facilities beyond. Both the final scheme of this unit and the method of replanning the small community are suggested in the proposal for Elkhorn. The
theories applied to an existing large urban center can be seen in Hilberseimer's studies for the replanning of Chicago.

Hilberseimer's approach involves the acceptance of the ideals and attitudes of society. For him, there should be no dominating form concept to which everything is subordinated. The "order is autonomous; its guiding principle is that each part must develop according to its own law, that each part must also have its due place, according to its importance and function, within the whole." (5)

FOOTNOTES

(1) Hilberseimer, The Nature of Cities, p. 192
(2) Hilberseimer, The Nature of Cities, p. 13
(3) Hilberseimer, The Nature of Cities, p. 14
(4) Hilberseimer, The Nature of Cities, p. 192
(5) Hilberseimer, The Nature of Cities, p. 133
FLKHORN REPLANNED Different stages
Brasilia is mentioned here because it stands as one visionary scheme that is in the process of being realized. This $600 million diagram of a city is physical evidence of President Juscelino Kubitschek's promise to the citizens of Brazil for "50 years progress in five." But, "by the time Kubitschek's term was up - Brazilian Presidents cannot succeed themselves - the cost of living was climbing 29.4% a year and corruption was everywhere." (1)

The plan is a vague instruction for the placement of objects in what is probably the world's largest sculpture garden. In the words of Victor Gruen, "Lucio Costa, the planner of the new city of Brasilia, is rumored to have won the competition for this undertaking on the basis of a sketch on the back of an envelope. Characteristics of the plan ..... make these rumors appear believable." (2) This formal vision appears to be devoid of human needs and requirements. It is pure form, approached as an end in itself, which came into existence by political fiat.

FOOTNOTES

(1) Time Magazine, vol. 89 no. 16, p. 31
(2) Gruen, The Heart of Our Cities, p. 110
3. GENERAL LAYOUT OF THE CITY

1. Plaza of the Three Powers
2. Ministries
3. Cathedral
4. Cultural area
5. Entertainment center
6. Banking and office area
7. Trade center
8. Hotels
9. Radio and television tower
10. Sports center
11. Municipal plaza

12. Military barracks
13. Railroad station
14. Small industries and freight depots
15. University City
16. Embassies and legations
17. Residential section
18. Family dwellings
19. Large living quarters
20. Botanical Garden
21. Zoological Garden
22. Platform and traffic center

23. Yacht Club
24. President's residence
25. Brasilia Palace Hotel
26. Fair and exhibition grounds
27. Riding club
28. Cemetery
29. Airport
30. Golf club
31. Observatory
32. Government printing office
33. Private lots

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TEAM 10

The process of Team 10 members has been that of inquiry. As urbanists, their main concern is with urban form, and with the establishment of methods for guiding urban structure. This group is having considerable influence on students, young architects and planners in Europe and America, but as a movement it has not yet defined a clear philosophy of planning approach. It contains many of the expected contradictions which accompany any search. Included here is the examination of statements made by four of their members, Peter Smithson, Aldo van Eyck, G. Candillis, and S. Woods.

Peter Smithson:

"We are concerned with the problems of form, and we need, immediately, to develop techniques which enable us to transform our experience as social beings into the plastic expression of architect-urbanists." (1) "The aim of urbanism is comprehensibility, i.e., clarity of organization." (2)

The basic question here for Peter Smithson is how. He is committed to the idea of a clearly organized urban structure; one that not only functions but assures the identity of the parts within the whole. Continuing; "... we accept the ineffectiveness of trying to achieve an urban order through form-studies in advance of actual programmes and in the absence of the executive capacity to build."(3)
"...we would say that the only appropriate tool for guiding the
evolution of the urban structure lies in the strategic location of
systems of access." (4)

The third is a particularly pregnant statement, and certainly
one that needs to be made at this time. But, unfortunately, it does
not consider how a program could possibly be developed. The
fourth statement shows that Peter Smithson is intent on guiding the
evolution of urban structure. The question arises as to what would
be the political, economic, and social implications of this guidance.
"... for driving about is the one freely undertaken communal act of
our time; in some way it should be allowed to realize special sorts
of places as the market found the market place." (5)

The question of how has here been answered. Peter Smithson
has suggested that the British new towns have been too rigidly con-
ceived. As an alternative he proposes that a road system be estab-
lished as the basis of community structure. Within this functional
system of communication, the physical form of the community would
develop in line with the aims and ambitions of the citizens. From
this basic approach to planning, and from other statements that
Peter Smithson has made, he is, in my opinion, very close to
Hilberseimer. The fundamental difference would seem to be bet-
ween American and British ecology.
Aldo van Eyck:

"We shall have to make habitable places of our cities before it is too late." (6)

"The slum has gone, behold the slum edging into the spirit." (7)

"In what way are people to participate in fashioning their own immediate surroundings within a conceived overall framework? ... If society has no form, how can architects build the counterform?" (8)

"... a kind of planning above all which is not merely the expression of human values, but which actually consist of their very counterform." (9)

The position of Aldo van Eyck should be clear. For him, the primary purpose of planning is not to help society realize its aims and ambitions. In my opinion he would use planning to change the developing social form. Here is the prophetic call to his fellow man to alter his course. If, as a human being, one disagrees with the direction in which his society moves, then he certainly should point out possible consequences, and suggest that the course be altered. But any appreciable social change, through altered physical structure, is an impossible task.

B. Candillis and S. Woods (with Josic):

"Town planning and architecture are parts of a continuous process. Planning is the correlating of human activities; architecture is the housing of these activities. Town planning establishes the milieu in which archi-
tecture can happen. Both are conditioned by the eco-

nomic, social, political, technical and physical climate.
In a given environment thorough planning will lead to 
architecture. Planning remains abstract until it gen-
erates architecture. Only through its results (buildings, 
ways, places) can it be. Its function is to establish 
optimum conditions in which the present becomes 
future. To do this it must seek out, explore and ex-
plain the relationships between human activities. It 
must then bring these activities together so that the 
whole life in the city becomes richer than the sum of 
its parts.

"The important question is not 'how?' but 'why?' or 
'what for?'. Town planning, like architecture, has to 
help society to achieve its ends, to make life in a 
community as rich as possible, to aspire to a present 
utopia." (10)

FOOTNOTES

(1) Smithson, (editor), _Team 10 Primer_, p. 570

(2) Ibid, p. 574

(3) Smithson, _Forum_, January, 1967, p. 39

(4) Ibid, p. 39

(5) Ibid, p. 39

(6) Smithson, (editor), _Team 10 Primer_, p. 565

(7) Ibid, p. 572

(8) Ibid, p. 565

(9) Ibid, p. 591

(10) Ibid, p. 602
1. The new sector of Bilbao, in northern Spain, uses the stern principle, which is diagrammed below.
In the opinion of many, Louis Kahn is the "world's greatest architect". Presumably, this opinion is based on Kahn's ability to inspire thought, and not specifically on what he has said or accomplished professionally. Embodied in Kahn's analysis of the "nature of things" may be the fundamental relation between architecture and urban planning.

Kahn states that in architecture there is the measurable and the immeasurable. What is done must be objective. How it is done may be personal. As an approach to the measurable, Kahn searches for the soul of the building, its centralized truth. This essential nature of an institution of man is the basis of architecture. And for Kahn, "Form emerges out of a system of construction." (1) In this analysis he is correct. "The history of architecture is primarily the history of spatial conceptions." (2) These spatial conceptions and the method of organization have always been determined by the way in which they were intended to serve man. And the physical aspects of architecture have resulted from the method of construction employed.

But for Kahn, the order of architecture, the "Design" is a "circumstantial act" which can be intuitive and personal. This is his "art" of architecture, the immeasurable quality of which he speaks. The basic question is, what results when this immeasurable quality
of architecture is continually given more importance? Is the result pure physical expression? Kahn seems to be so involved in the art of architecture that he hides the essential truth of his work. His series of attempts to reduce glare have developed into contrivances. Certainly such an indirect and involved way of solving an architectural problem cannot be necessary.

This same preoccupation with "Design" is evidenced in Kahn's planning schemes for the city of Philadelphia. He states that the real essence of a city can be found in its institutions; that of education, government, commerce, family, etc. But rather than deal with the ordering of these institutions, he elects to pursue the "architecture of movement". In the end, the proposals imply that the greatest, if not only, institution of man is that of the automobile. Are these schemes the result of serious analysis of the ideals and attitudes of man, or has he become so involved in the attempt to influence the structure of the city that he has lost his sense of values. "But the grand Form conception is there, giving the heart of the city what Kahn believes it most needs: a defining wall." (3)

Perhaps the great problem in both urban planning and architecture is that the designer can become so involved in physical form that he contrives the expression of elements or activities which should play a much more subservient role. It is not the position of the planner to willfully determine the predominant elements of the city. Not
only does he not have the right, but he does not have the political means to effect his decision. This choice has, and will be made by the political, economic and social order of man. This is the area of study in which the planner may gain insight into the "nature of things".

For Kahn, "Architecture is the thoughtful making of spaces.... It is the creating of spaces that evoke a feeling of appropriate use." (4) "Kahn... regards the city as a product of Form and Design, a complex of memory and action, with an Order of boundary and definition, not an animal sprawl." (5) At Rice University, Kahn stated that in his work he is seeking simplicity. Compare the idea of Benjamin Thompson; "True simplicity comes at the end of an exploration of complexity, from a concise summing up of all that really needs to be said." (6)

FOOTNOTES

(1) Vincent Scully, Jr. Louis I. Kahn. (Statement by Kahn) p. 113
(2) Bruno Zevi, Architecture as Space, p. 32
(3) Vincent Scully, Jr. op cit. p. 41
(4) ibid. (statement by Kahn) p. 118
(5) ibid. p. 40
(6) Architectural Record, January, 1966, p. 112

Philadelphia City Plan, project, 1952–53.
Parking Garage and Shopping Tower for Philadelphia, project, 1956-57. Section and perspective drawing.
PRIENE, VALLINGBY, LIJNBAAN

These have been examples where the political, economic and social forces of societies have produced a conceptual form of the city, and the power structure of the society has elected to manifest this conception physically. Some of these examples, historical and current, are discussed here.
PRIENE

By the time of the refounding of Priene, in the latter part of the fourth century B.C., the most important institutions of the Hellenistic city had been determined by political, economic and social forces. These institutions had been architecturally defined in cities such as Athens. But in Priene, each of the elements was related to other elements and to the city as a whole. On a small scale, the planning achieved a structure as the result of the comprehensive ordering of established components.

Priene was a small town located on the Aegean coast with a total population of about 4000. The main streets of the city ran east to west following the lines of the site and securing the desired southerly orientation. Cross streets ran perpendicular and were stepped as the slope became too great for comfortable movement.

The agora (open space 120 by 230 feet) was positioned in an elevated central portion of the city and included colonades, shops, altars, temples, a gymnasium and a meeting hall. The theater and the large gymnasium complex were located to the north and the south respectively. The acropolis was north of the town on a site of a higher elevation than the city. A wall with periodic towers and three entrance gates surrounded and protected the city.

The city blocks, averaging 120 by 160 feet, were comprised of
four to five two story houses. The natural terracing provided not only light and ventilation, but also drainage and water supply from the hillsides.

The city of Priene was the ordered reality of activities and physical elements that were determined by an existing culture. As Hilberseimer suggests, the necessary had become sources of inspiration to direct the creative impulse. The lesson of Priene is that the city form was not an end in itself.

The ordered structure was the physical result of the articulation of the functions and activities of man. As Andre Bonnard states, "All the most important conquests of Greek civilization aimed at the same end: humanity. It was man and life that the Greeks tried to make more perfect."
VALLINGBY, the Stockholm City Planning Commission

The basic political machinery which would enable planning was organized comparatively very early in Sweden. "With great foresight, the city fathers bought farm and forest land outside the ancient city limits, moving these limits outwards to include land needed for development." (1) Under this policy, begun in 1904, land was acquired often twenty years ahead of planning and development. In 1943, national legislation provided the necessary financial mechanism to allow large scale planning through national housing funds and a guaranteed interest rate on mortgages. During this time, the area of Stockholm was comprised of a central core of high density surrounded by a ring of low density suburbs. But because of unexpected increases in the population of the area, it was decided to supplement the outer ring with urban units of higher density and connect them with the central city by the extension of the local underground railway. Later, the increase in the use of the automobile further reinforced the necessity of this neighborhood planning.

Vallingby is one of these "neighborhood units" which not only alleviates the problems of density in the center of Stockholm but fulfills the desires of many city workers to live in a semi-rural area. By the end of 1960, the population of Vallingby was 24,000, most of whom are housed in apartment units. The maximum distance from
housing unit to the city center is a five or six minute walk. An addi-
tional 70,000 live in eight "neighborhood units" located a further dis-
tance from the core. Covering about six acres, Yallingby center is
located above the railroad tracks which carry travelers the nine miles
to the center of Stockholm. Here are located all of the essential parts
of downtown business district; including the transportation connection,
offices, restaurants, shops, and amusement and cultural facilities.

On the whole, Vallingby is an extremely clear realization of
the ideals and attitudes of Swedish society. And, in its implemen-
tation, the quality of design has been exceptionally high.

FOOTNOTE

(1) Sidenbladh, Planning Problems in Stockholm, p. 2. (unpublished)
Plan of Vällingby's shopping center.

Key:
1. Shops
2. Shopping Center
3. Subway Building
4. 5. Public Health
5. Theater (projected)
6. Cinema
7. Assembly Halls
8. Church (under construction)
9. Town Hall (projected)
10. Library
11. Youth Center
12. Garage (projected)
13. Shops (projected)
14. Offices and Shops (projected)
LIJNBAAN, ROTTERDAM, van den Broek and Bakema, architects

After the 1940 bombing of the city of Rotterdam, only two buildings of historical significance remained; the medieval church of St. Lawrence and the seventeenth-century city hall. Devastation of the central city was so great that complete replanning and reconstruction was necessary. "Even before the debris had been cleared away, city planners and other public officials were proposing a new center." (1) The T shaped Lijnbaan mall lies in the heart of Rotterdam's most active commercial and business center. The short leg of the mall is located perpendicular to Rotterdam's main street, the Coolsingel, providing connection with the railway station. The long mall, 2,950 feet, runs parallel to the Coolsingel and is terminated by the area's largest department store, the De Bijenkorf. At the juncture of the two malls is located a broader plaza which is visually dominated by the city hall. This plaza serves as the connecting link between the apartment projects and the main business district of the city. Parking for shoppers and inhabitants of the area is located adjacent to the mall.

The Lijnbaan mall was conceived within the total fabric of downtown Rotterdam. It serves not only as a commercial center of social and visual excitement, but also as a link between different activities of the city. And the spatial organization gives great urban significance to the historical city hall. It exists as the clear understanding of the meaning of the city, fusing architecture with planning.

(1) Meyerson, Face of the Metropolis, p. 85
PART IV

CONCLUSION

In this paper, it has been stated frequently that political, economic and social forces determine physical form. The research and analysis supports this argument. The terms political, economic and social have been clearly defined. By determine it is meant "to give definite direction or impetus." (1) Form can be defined as "the shape and structure of anything." (2) In a given culture, as the political, economic and social forces are in the process of developing, their influence is constantly affecting physical reality. Cities can and do develop without a clear conception of what the structure could and should be. This materialization of physical form comes from the possibility of action. The ability to act is embodied in the power structure. And, as Arthur Korn points out, "The town has always been and must be, the expression of the power-structure of society prevailing at the time." This I will refer to as actual physical form.

But in this deterministic process, the relationship of man to environment and the relation of man to man occurs conceptually as well as physically. Form can also be defined as the "ideal or intrinsic character of anything."; "the essential nature of a thing as distinguished from the matter in which it is embodied." (3) The form here is idea, independent in space and time. This idea-form in-
cludes all of the aspects intrinsically involved in one of man's individual and collective institutions, the city. The physical form of the city is the same idea of the city but is conceptually physical. This I will call conceptual physical form.

In my opinion, actual physical form and conceptual physical form develop simultaneously, as the product of the interaction of the same forces, political, economic, and social. This process of development is the constant in all cultures of man. It is the nature of man to give meaning to life and conceptual order to his physical environment. The various forces acting upon actual and conceptual physical form are the variables. At any point in this process there exists the purely physical manifestations of the developing idea of form acting upon the inherited urban structure. The resultant physical environment is a record of this development.

For example, the city of Athens is the product of centuries of struggle, both political and economic. The physical form (structure) of the city is demonstrative of this struggle rather than a product of a rational planning process. Athens, like other Greek cities, originated from a nucleus containing the "castle" and the marketplace. After the Persian siege of 480 B. C., the fortifications of the Acropolis were severely damaged. But instead of rebuilding the stronghold, the citizens elected to construct the free-standing structures that exist today. The Acropolis exists as the realization of the prin-
ciples of Greek optical order, but without sociological content. As political development culminated in democracy, the agora became the dominant element of the city with all major lines of movement leading directly into it. This focus of community life was the center of political debate and governmental decision. The theaters and gymnasia were the secondary points of social communication. Their locations are not a result of a prescribed planning order, but rather are a utilization of natural factors. With the exception of the temples and the public buildings, everything else was left to develop as it would. Paralleling the physical development of Athens is the conceptual development of physical form. Although it is not manifest to any great degree in the total structure of Athens, it is apparent in the colonies which were founded later.

By the time of the refounding of Priene, in the latter part of the fourth century, B. C., the most important institutions of the Hellenistic city had been determined by political, economic and social forces. These institutions had been architecturally defined in cities such as Athens. But in Priene, each of the elements was related to other elements and to the city as a whole. On a small scale, the planning achieved a structure which was clearly commensurate with the Greek concept of city.

Here is the important point to be made. Actual physical form is the tangible environment, often not displaying the level of the total
concept of the finished product. In this case, the "mother city" is the physical record of the developing concept of the city, and at the same time is the place where further conceptual physical form is being formulated in the minds of man. In any specific city, the knowledge or experience of form comes through sense perception. As sense perceptions vary from person to person, so does the experience of form. This experience is subjective and is the least reliable of all knowledge, opinion. (This is the basis of the "Townscape" approach.) The idea-form is developed from all aspects of society. Through the capability of the planner, this conceptual physical form can become physical reality. When the power structure has a clear direction, the idea-city becomes manifested physically.

Historically, the actual physical form has preceded realization of the conceptual physical form, and must continue to do so. Large scale planning has seldom been accomplished until the aims and ambitions of a society are firmly established in the operating power structure. For example:

New Babylon was built upon the ruins of the old city.

Miletus and Priene were founded after culmination of Athenian thought.

Timgrad was realized after Rome became the greatest power of the western world.
The "Bastide" towns were founded after Louis IX conquered the lands. Palmanova came after the establishment of Venice as the undisputed mistress of the seas. The grand designs of Paris and Versailles came after final expulsion of the English and the establishment of a nation state. British and Swedish new towns came after years of development and acceptance of a socialized system of democratic government.

Once the political, economic, and social forces show a sense of direction, then a clear conception of the form of the city is possible. Said another way, the ideals and attitudes of society determine programmatic form. Planning is the making of conceptual or programmatic form into actual physical form. Once the idea of the city is established, then it can be manifested physically.

The question arises as to where we are in this process. It is obvious that the British, Swedish and Dutch have more clearly established a political, economic, and social direction than is evidenced in the United States. Van Eyck can state "The new is always social", but we in this country cannot. In my opinion, we are at a crossroads. Economically we are in a situation of "if we want, we can have." But there exists no clear formulation of what we want. Our economic and technological capabilities have far surpassed our political and social development. Domestically we are in confused and troubled times.
We continually experience the problems of civil rights, of attempting to provide medical care for the underprivileged, and of training people who, in their present situation, have no possibility of sharing in the "great American dream." These are only a few of the situations to which there is no social commitment. This confusion and lack of direction is also seen in our foreign affairs. Without any clear concept of political, economic, and social direction, there can be no clear conceptual physical form.

But for meaningful planning to exist, there must be a program. And because of the complexity and lack of direction of society today, the establishment of this conceptual form of the city can only come from the objective analysis of the direction of political, economic, and social forces prevalent in the society in which the planning is intended. The merit of any proposed scheme will be determined by how well its implied conceptual form correlates with the aims and ambitions of society.

In my opinion, there are two valid approaches to planning, both of which have as their basis the direction of political, economic, and social forces of society. The first includes the formulation of a program based on the clear understanding of the present ideals and attitudes of society. The physical structure then would be the manifestation of this established programmic form. The second approach involves the use of the traditional tools of the planner, i.e. facilities
for transportation, location of community and governmental activities, etc., to solve physical problems. But, during this process, the political, economic, and social implications of the employment of these tools must be constantly analyzed. To be meaningful, these implications must correspond to the direction of society. In both of these approaches the purpose of planning is to help society achieve its aims and ambitions.

There is, however, one other thing to be considered in any proposal. While the scheme must come from the objective analysis of the aims and ambitions of society, the method of ordering the physical environment can be qualitatively evaluated. Although the idea of the city is determined by objective criteria, the specific city differs from other cities in the richness and quality provided for its inhabitants. As these qualities can only be subjectively interpreted, no attempt to further define them will be made here; but their importance cannot be overstated.

FOOTNOTES

(1) Webster's New Collegiate Dictionary, p. 226
(2) Webster's New Collegiate Dictionary, p. 326
(3) Webster's New Collegiate Dictionary, p. 326
IN SUMMATION

Political, Economic, and Social Forces determine physical form,

form in the physical sense

form in the sense of idea

This process is constant

That which changes is social form

With no clearly defined social form, there can be no clear understanding of conceptual physical form

Hence the urban environment continues to develop as the physical record of the lack of this clear idea of the city, i.e. Athens, Houston.

But when there is clear social form, there is clear programmatic form.

The translation of this programmatic form into physical reality is planning.


Wright, F. L. *When Democracy Builds*. Chicago, University of Chicago
