

## Is Mumford's "The City in History" relevant after more than 40 years?

*"...Modern man's only alternative is to emerge once more into the light and have the courage, not to escape to the moon, but to return to his human center –and to master the bellicose compulsions and irrationalities he shares with his rulers and mentors. He must not only unlearn the art of war, but acquire and master, as never before, the arts of life."*

Lewis Mumford ("The City in History")

In 1938 Mumford wrote "The Culture of Cities" many parts of which he included or extended in "The City in History" in 1961. One of these parts, with a different title, was the chapter "Brief Outline of Hell" which many critics considered, as he himself writes in 1961, "unduly pessimistic, indeed perversely exaggerated and morbidly unrealistic". And he continues: "*Many were sure then that no dangers worse than chronic unemployment threatened the Western World; and above all they were certain that war and the total destruction of cities were both highly improbable...*" in 1961, years after "*the large scale-destruction of Warsaw in 1939 and that of the center of Rotterdam in 1940, the total destruction in five years of vaster urban areas and the extermination of large populations from London to Tokyo, from Hamburg to Hiroshima, the killing of millions of people-six million Jews alone- by Germans in their suburban extermination camps, by starvation and cremation...*" this chapter seemed to have lost its relevance in the way predictions that were fulfilled but could not stop anything, lose it. We know that Mumford wished the following could become applicable as a writing on his tombstone "Herein lies a fool who would be happy if he learned that none of the predictions he so reluctantly made came true". We know that as the greatest threat to life on the planet he considered, as he was writing in the '50's, the "post historic man"\* who would try to intervene in the biological evolution, too, and would do it with optimization criteria inspired by the laws of free market, and we know that as the only margin for optimism he considered the emergence, from "the race between destruction and education" in which humanity finds itself, of a new kind of universalized man, not the globally homogenized construct of electronic media that are sustained, through advertisement, by the competition of different brands of similar products that are equally useless. We already see companies promoting genetically modified food trying to beat, following the laws of free market, not only each other but also nature itself; and achieving as a result the undoing, in a few years, of equilibria that nature had stabilized through the experimentations of millions of years. And we also see "rulers and mentors" thwarting, through undisguised and extravagant destructiveness, wishful thoughts of analysts unable to see not half a century but not even half a year ahead. Upshot? Is the work of Lewis Mumford relevant in an essential way at this moment? That is, can its reading inspire some idea worth trying out with respect to the efforts, that we are all seeking, to prevent worse things that possibly are still not inevitable? Or the only thing still to do with the ideas, of even such a man, is what is essential only in the so called "days of innocence" (which every now and then not only seem lost but also seem as if, possibly, never having really existed). In those days, OK, it feels substantial to enjoy the work of any Mumford, e.g. about the city, with regard to how many details he discovered in the course of its writing, how carefully and painstakingly he substantiated them from which exotic sources, how original or even revolutionary in comparison with other researchers he had been, in how beautiful and pedagogic ways he presented his findings, how much food for further thought and how many sparks for further inspirations and sequels he gave etc. (And in particular, for this work, on the city, what would constitute success would not be academic recognition but, of course, the application of some proposal of his or of people he presented, to city planning) But in our days? Days like those of '38 in which Mumford in USA was writing "Brief Outline of Hell" and about which Sikelianos in Greece was writing, correspondingly, "the threat this time is that life can roll back to the pre-ontological abyss"? In what ways should we read Mumford in

\*A term coined by R. Seidenberg which we'll see Mumford use in its original context later.

days for which A. Xyftilis of “The Perfect State. The night of the reptiles” finishes his book writing “The only hope I have that we are not entering an everlasting and very dark night is that my analysis is wrong despite my not being able myself to find where I am making a mistake”. Mumford himself helps us in this by saying in which spirit he himself wrote this book of his (the fact that he wrote it in 1961 does not change anything since at that time he , with “the reluctant predictions of his analysis which he would be happy to see not coming true”, did not only live “the days of innocence” like most of us in Western conditions , but also lived , through his concerns, the hell of today, as well; and he had already lived the previous hell (not only as he had outlined it before it took place but in reality : like an overseas spectator through seeing the second World War and Hiroshima; and in his immediate circle through the death of his son in one of the last battles of the war)), OK, he writes: *“Now, if the total picture were as grim as that I have painted in the present chapter , there would be no excuse for writing this book, or rather, it would be just as irrational a contribution as the many other irrationalities and futilities I have touched on . If I have duly emphasized the disintegrations of the metropolitan stage, it has been for but one reason: only those who are aware of them will be capable of directing our collective energies into more constructive processes. It was not the die-hard Romans of the fifth century A.D., still boasting of Rome’s achievements and looking forward to another thousand years of them, who understood what the situation required : on the contrary, it was those who rejected the Roman premises and set their lives on a new foundation who built up a new civilization that in the end surpassed Rome’s best achievements, even in engineering and government. And so today : those who work within the metropolitan myth, treating its cancerous tumors as normal manifestations of growth, will continue to apply poultices, salves, advertising incantations, public relations, magic, and quack mechanical remedies until the patient dies before their own failing eyes”*. OK, in his book, Mumford means all this in the context of the monstrously gigantic megacities, not of the issues upsetting us today. As quack mechanical remedies he considers solutions like slum demolition , model housing, civic architectural embellishment, suburban extension, urban renewal etc. But , on the one hand, the issues are not only analogous at places but also mutually overlapping indeed; on the other hand , our passions for the issues of today’s TV news must not make us forget that the problems Mumford analyzes belong to today, too, since they have not been solved and since, as we will see, his book also refers to city planning proposals which will be opportune in a valuable and indispensable kind of way for a long time to come. Lastly, one of the many components of his book and of the way in which it is written, not only transfers to our days but is also significant in the most pressing and urgent way at this moment. The book is written as to also function like a collective psychoanalysis of the collective man in the present moment of civilization with the help of a collective psychoanalyst and most lucid and wise mirror. Mumford does not base his final optimism on a wishful analogy with Rome but on things he does see and which he points out to us : these are the good points of the monstrously gigantic megacity whose bad points and their consequences in short and long runs of time he has analyzed throughout the whole book with a profundity of the most rigorous logic and with a sarcasm of the most humane lucidity. These good points, by being situated towards the end of the book , also function as a catharsis to de-depress us , but we cannot just mention them right off because they are of the kind also presupposing the previous analysis. So, for us to realize that the catharsis is believable as real and not just wishful , we too have to leave those good points for the end of our summary, a summary which , by the way, we allow to be very imperfect since no presentation of such a book can aspire to any degree of perfection.

Mumford , as a precedent of city and village, does not even consider the villages , colonies and architectural works of castors (which has drawn the attention of the “philosophical writings” of Marx’s youth) but already the somewhat more permanent settlements groups of fish or birds make to secure food . As one of the first needs that differentiate the existing practical activities of human groups from those of animal groups, he considers the concern, checked in all paleolithic findings, to create a cemetery in all settlements. Man’s respect for the dead makes the necropolis

a nucleus of every living city, already since that time but also up to the closer times when the traveler entering Egyptian, Greek and Roman cities would first meet the dead ancestors of the inhabitants, and maybe also the remote mythical and deified founders of the city, before meeting the inhabitants themselves. Another repeating feature, already since paleolithic times, is the cave which, frequently, was found at the end of a difficult road and concentrated the artistic expression of its time and also attracted as a magnet, like sourcesprings and glades attracted too, the dwellers from around in regular intervals for rites, and was, as it seems, the ancestor of the pyramids, the ziggurats, the Mithraic caves and the Christian crypts, and also of the astronomical observatories, of the theater and of the university. Thus, part of the history of the city, according to Mumford, is that even before the city's creation, immediately after the human mind became liberated from immediate animal needs, it played freely with the whole spectrum of existence and began to leave its trace in caves, trees and sourcesprings. In the mesolithic period, maybe 15,000 years ago, man begins to store food, learning to salt it and smoke it, and is released from the hunter's everyday starvation anxiety, this releasing for him both time and energy for erotic activities and it may even be that a sexual revolution preceded the agricultural revolution that was led, in the neolithic age, by the woman, as is rather well known. The village became for the young a collective nest where they could play and be fed for extended periods of time, and the stored food supplies created a feeling of security for the adult too. Without this feeling and without the foresight and planning that were then cultivated, maybe the creation of city would not have become possible. The presence of woman became felt everywhere in the village and the similarities with her protective enclosures presented either by granary and oven etc. or, later, by the wall and the moat etc. do not need the belated speculation by psychoanalysis to be noticed, it suffices for that to know that e.g. in Egyptian hieroglyphics "home" and "city" also represent "mother" and that, in the somewhat more primitive constructions, houses, rooms and tombs have round shapes. Phallus and vulva, sometimes symbolically as obelisks and enclosures and sometimes quite literally, have a constant presence in the village. Also, fences protect from lions and tigers the children playing during the day and the domestic animals during the night. *"The village, in the midst of its garden plots and fields, formed a new kind of settlement: a permanent association of families and neighbors, of birds and animals, of houses and storage pits and barns, all rooted in the ancestral soil, in which each generation formed the compost for the next. The daily round was centered in food and sex: the sustenance and reproduction of life... Village life is embedded in the primary association of birth and place, blood and soil. Each member is a whole human being, performing all the functions appropriate to each phase of life, from birth to death, in alliance with natural forces that he venerates and submits to... Before the city came into existence, the village had brought forth the neighbor: he who lives near at hand, within calling distance, sharing the crises of life, watching over the dying, weeping sympathetically for the dead, rejoicing at a marriage feast or a childbirth. Neighbors hurry to your aid, as Hesiod reminds us, while even kinsmen "dawdle over their gear"... What we call morality began in the mores, the life-conserving customs, of the village. When these primary bonds dissolve, when the intimate visible community ceases to be a watchful, identifiable, deeply concerned group, then the "We" becomes a buzzing swarm of "I's", and secondary ties and allegiances become too feeble to halt the disintegration of the urban community. Only now that village ways are rapidly disappearing throughout the world can we estimate all that the city owes to them for the vital energy and loving nurture that made possible man's further development."* And running a little ahead in the story, we must remark that according to Mumford one of the most outstanding reasons why *"the Greek city, and Athens particularly, became a symbol for what was truly human and ran in two centuries through stages of evolution through which other cities had not run in millennia... and created a human ideal in which being human was more divine than being a god of the past"*, the reason for that was that the Greeks found the size up to which a city can continue to be a village. But let us return to the history of the city in temporal order: The paleolithic phase, with man as a hunter in the protagonist's role, was not replaced by

the neolithic-agricultural phase, with woman in the protagonist's role, overnight. (Even now, on weekends, so many people become engaged in the paleolithic occupation of fishing, a tendency that would be even stronger at those times). The adventurous hunter man who had become used to risking had no reason to lay down his arms, on the contrary he used them, e.g. to protect his fellow villagers or their cattle from being attacked by savage beasts that would never become domesticated, yet it would not be infrequent that his fellow villagers would need protection, from his attacks on them, but this protection they would not find. Regarding when the existence of war begins, the examination of various conjectures (of course there are no monuments dating from that time) tends to conclude that the first conflicts were not between different communities but within the interior of each of them and ended with the prevalence of the "noble" over their "peasants". Thus the protector lives in the elevated, inaccessible and, by now, guarded citadel of the village (and the inaccessible shrine of the village sometimes has its own wall against its own, supernatural, enemies, and sometimes it is within the citadel, like the roles of the leader and the priest too sometimes are differentiated, sometimes they support each other and sometimes coincide. In the task of coercing others the two roles usually collaborate in ways that gradually help the scale of the imposition to take off). But the feats of the muscular strength and courage of such a protector-hero are not limited to the confrontation of wild animals but extend to the confrontation of dangers from the physical environment, through carrying out tasks more demanding than e.g. simple and usual cultivation. Also, his decisiveness and his imposition help at moments at which the council of elders would take too long to face an urgent situation (elders because in the times when only an oral transmission of experience was possible one became wise only by getting old and accumulating lots of experience). We already see clearly some latent possibilities that could, with the creation of towns, emerge and further themselves; e.g. an extended physical destruction, like a flood destroying cultivations, could only be confronted with works necessitating the collaboration of many villages and with the continuous work of people (who would identify with their superhuman protector in feeling heroes when they would give their all, if only to avoid the whip of their supervisor). In general, excruciatingly painstaking works are assumed that no small community would ever start, the aesthetics of the ceramics and sculptures is not equal to that of the paintings in the caves of the paleolithic hunters, but the pains necessary for hunting now extend to the handling of all the natural environment. The evolutionary changes leave no traces, only later crystallizations suggest what could have happened, the monuments show images from the unconscious that accompany the magnification of the human ego, the superhuman hero-idol we saw crystallizes as Gilgamesh and Hercules. In a few millennia we reach 3,000 B.C., witnessing (there are proofs for that) the simultaneous appearance of grain cultivation, the plow, the potter's wheel, the sailboat, the draw loom, copper metallurgy, abstract mathematics, exact astronomical observation, the calendar, writing... We will better understand the nature of the change if we compare it to the change we are now living: *"We live in fact in an exploding universe of mechanical and electronic invention whose parts are moving at a rapid pace ever further and further away from their human center, and from any rational, autonomous human purposes. This technological explosion has produced a similar explosion of the city itself: the city has burst open and scattered its complex organs and organizations over the entire landscape. The walled urban container indeed has not merely been broken open: it has also been largely demagnetized, with the result that we are witnessing a sort of devolution of urban power into a state of randomness and unpredictability. In short, our civilization is running out of control overwhelmed by its own resources and opportunities, as well as its superabundant fecundity. The totalitarian states that seek ruthlessly to impose control are as much the victim of their clumsy brakes as the seemingly freer economies coasting downhill are at the mercy of the runaway vehicles. Just the opposite happened with the first great expansion of civilization: instead of an explosion of power, there was rather an implosion. The many diverse elements of the community hitherto scattered over a great valley system and occasionally into regions far beyond, were mobilized and packed together under pressure, behind the massive walls of the city. Even the*

gigantic forces of nature were brought under conscious human direction: tens of thousands of men moved into action as one machine under centralized command building irrigation ditches, canals, urban mounds, ziggurats, temples, palaces, pyramids, on a scale hitherto inconceivable. As an immediate outcome of the new power mythology, the machine itself had been invented: long invisible to archaeologists because the substance of which it was composed-human bodies-had been dismantled and decomposed. The city was the container that brought about this implosion, and through its very form held together the new forces, intensified their internal reactions, and raised the whole level of achievement. This implosion happened at the very moment that the area of intercourse was greatly enlarged, through raidings and tradings, through seizures and commandeering, through migrations and enslavements, through tax-gatherings and the wholesale conscription of labor. Under pressure of one master institution, that of kingship, a multitude of diverse social particles, long separate and self-centered, if not mutually antagonistic, were brought together in a concentrated urban area. As with a gas, the very pressure of the molecules within that limited space produced more social collisions and interactions within a generation than would have occurred in many centuries if still isolated in their native habitats without boundaries, or to put it in more organic terms, little communal village cells, undifferentiated and uncomplicated, every part performing equally every function, turned into complex structures organized on an axiate principle, with differentiated tissues and specialized organs, and with one part, the central nervous system, thinking for and directing the whole. What made this concentration and mobilization of power possible? What gave it the special form it took in the city, with a central and political nucleus, the citadel, dominating the entire social structure and giving centralized direction to activities that had once been dispersed and undirected, or at least locally self governed? What I am going to suggest as the key development here had already been presaged, at a much earlier stage, by the apparent evolution of the protective hunter into the tribute-gathering chief: a figure repeatedly attested in similar developments in many later cycles of civilization. Suddenly this figure assumed superhuman proportions: all his powers and prerogatives became immensely magnified, while those of his subjects, who no longer had a will of their own or could claim any life apart from that of the ruler, were correspondingly diminished. Now I would hardly be bold enough to advance this explanation if one of the most brilliant of modern archaeologists, the late Henri Frankfort, had not provided most of the necessary data, and unconsciously foreshadowed if not foreseen this conclusion.....I suggest that one of the attributes of the ancient Egyptian god, Ptah, ...-that he founded cities- is the special and all but universal function of the kings. In the urban implosion, the king stands at the center: he is the polar magnet that draws to the heart of the city and brings under the control of the palace and temple all the new forces of civilization. Sometimes the king founded new cities; sometimes he transformed old country towns that had long been a-building, placing them under the authorities of his governors: in either case his rule made a decisive change in their form and contents...In the final creation of the city, the "little city", the citadel, towered above the village and overwhelmed the humble village ways. No mere enlargement of its parts could turn the village into the new urban image; for the city was a new symbolic world, representing not only a people, but a whole cosmos and its gods".

Before going on to the history of the city in temporal order, let's also go to the last paragraph of the book, this really helps, and Mumford himself, before even starting the book, in the prologue, mentions things from that end, maybe because he knows that it would help us in our understanding if we knew what he was driving at. So let's see the first paragraph of the prologue and, after the dots, let's see the last paragraph of the whole book and, if it sounds to us overly poetic to inspire tangible optimism, let's keep in mind that we keep saving for the end the tangible optimistic of Mumford because it is based on the analysis still to be carried out, and out of which we have only seen the beginning of the beginning. So: "This book opens with a city that was, symbolically, a world; it closes with a world that has become, in many practical aspects, a city. In following through this development I have attempted to deal with the forms

*and the functions of the city, and with the purposes that have emerged from it; and I have demonstrated, I trust, that the city will have an even more significant part to play in the future than it has played in the past, if once the original disabilities that have accompanied it through history are sloughed off.....The city first took form as the home of a god; a place where eternal values were represented and divine possibilities revealed. Though the symbols have changed the realities behind remain. We know now, as never before, that the undisclosed potentialities of life reach far beyond the proud algebraics of contemporary science; and their promises for the further transformations of man are as enchanting as they are inexhaustible. Without the religious perspectives fostered by the city, it is doubtful if more than a small part of man's capacities for living and learning could have developed. Man grows in the image of his gods, and up to the measure they have set. The mixture of divinity, power and personality that brought the ancient city into existence must be weighed out anew in terms of the ideology and the culture of our own time, and poured into fresh civic, regional, and planetary molds. In order to defeat the insensate forces that now threaten civilization from within, we must transcend the original frustrations and negations that have dogged the city throughout its history. Otherwise the sterile gods of power, unrestrained by organic limits or human goals, will remake man in their own faceless image and bring human history to an end. The final mission of the city is to further man's conscious participation in the cosmic and the historic process. Through its own complex and enduring structure, the city vastly augments man's ability to interpret these processes and take an active formative part in them, so that every phase of the drama it stages shall have, to the highest degree possible, the illumination of consciousness, the stamp of purpose, the color of love. That magnification of all the dimensions of life, through emotional communion, rational communication, technological mastery, and above all, dramatic representation, has been the supreme office of the city in history. And it remains the chief reason for the city's continued existence". It is also worth here seeing the last phrase of "The Myth of the Machine" which he wrote some years later, where, among other things, he saw the machine in history from the time of the megamachine made of human bodies up to the time of the writing of that book (or rather, because of the possibility for happy end which he traced in that book, too, let's wish he saw the history not only up to now but also for many future years)*

*"On the terms imposed by technocratic society, there is no hope for mankind except by "going with" its plans for accelerated technological progress, even though man's vital organs will all be cannibalized in order to prolong the megamachine's meaningless existence. But for those of us who have thrown off the myth of the machine, the next move is ours: for the gates of the technocratic prison will open automatically, despite their rusty ancient hinges, as soon as we choose to walk out".*

Before we return to the history of the city in temporal order, it's worth also seeing the, not poetic but practical, last but one paragraph of Mumford's book, if not for any other reason at least to also add to our, positive or negative, first impressions as to where he's driving at, the, be it oversuspicious, question of whether he's simply a daydreamer, and then see if his analysis will confirm this mistrust or will prove it unnecessary. It is not unusual nor unreasonable for a reader to take glances at the last pages of a book as he is reading the first ones, especially if it's thick. It's in this way we've read this book of Mumford's and it's in this way we are presenting it. The only "made up" thing is the mistrust we pretend we're having in him: we would indeed suspect, during our first back-and-forth leafings through the present book of his, that he might be a blissfully naïve daydreamer, but it is not the first book by him we've read so this mistrust was not really there. So let's go to his last but one paragraph and to a photo of his (to also see the body language with which he said the things we'll immediately see, and with which he expounded the analysis we'll see in the sequel) :

*"As of today, this resurgence of reproductive activity might be partly explained as a deep instinctual answer to the premature death of scores of millions of people throughout the planet. But even more possibly, it may be the unconscious reaction to the likelihood of an annihilating*

*outburst of nuclear genocide on a planetary scale. As such , every new baby is a blind desperate vote for survival: people who find themselves unable to register an effective political protest against extermination do so by a biological act . In countries where state aid is lacking , young parents often accept a severe privation of goods and an absence of leisure, rather than accept privation of life by forgoing children...(Note: This also reminds Palestinian mothers shouting to TV cameras “We’ll bear more children to become human bombs”)...The automatic response of every species threatened with extirpation takes the form of excessive reproduction. This is a fundamental observation of ecology. No profit-oriented, pleasure-dominated economy can cope with such demands: no power-dominated economy can permanently suppress them. Should the same attitude spread toward the organs of education, art , and culture, man’s super-biological means of reproduction, it would alter the entire human prospect : for public service would take precedence over private profit , and public funds would be available for the building and rebuilding of villages, neighborhoods, cities , and regions, on more generous lines than the aristocracies were ever able to afford for themselves. Such a change would restore the discipline and the delight of the garden to every aspect of life; and it might do more to balance the birth rate, by its concern with the quality of life , than any other collective measure. As we have seen , the city has undergone many changes during the last five thousand years; and further changes are doubtless in store. But the innovations that beckon urgently are not in the extension and perfection of physical equipment: still less in multiplying automatic electronic devices for dispersing into formless sub-urban dust the remaining organs of culture. Just the contrary: significant improvements will come only through applying art and thought to the city’s central human concerns, with a fresh dedication to the cosmic and ecological processes that enfold all being . We must restore to the city the maternal, life-nurturing functions, the autonomous activities, the symbiotic associations, that have long been neglected or suppressed. For the city should be an organ of love; and the best economy of cities is the care and culture of men.”*



**Lewis Mumford**

Let’s return at last , to the history of the city in temporal order, without very much interrupting him from now on:

Note: From now on the dots may mean not only missing phrases or paragraphs but also missing pages or even whole chapters. But the selection of excerpts will be such that the text here can be, almost, self contained and also “continuous with respect to reading” (in the sense that if an “oral reading” didn’t mention the dots they would be hardly audible. Also in the sense that we will, almost\*, not at all separate paragraphs or even chapters)

\*Roughly , we’ll separate , by one spacing , the story–life and death–of cities before the Greek city, then that story from the story of the Roman city, then that from the story of the medieval city, then that from the story of the city of modern times and ours. Extra separations will be self-explanatory where they occur.

...The early city, as distinct from the village community, is a caste-managed society, organized for the satisfaction of a dominant minority: it is no longer a community of humble families living in mutual aid. At that point kingly power claimed and received a supernatural sanction: the king became a mediator between heaven and earth, incarnating in his own person the whole life and being of the land and its people. Sometimes a king would be appointed by priesthood but even if he were a usurper, he needed some sign of divine favor, in order to rule successfully by divine right... Does all this not indicate a fusion of secular and sacred power, and was it not this fusion process that, as in a nuclear reaction, produced the otherwise unaccountable explosion of human energy?... Out of this union, I suggest, came the forces that brought together all the inchoate parts of the city and gave them a fresh form, visibly greater and more awe-inspiring than any other work of man. Once this great magnification had taken place, the masters of the citadel not merely commanded the destinies of the city: they actually set the new mold of the civilization, which combined the maximum possible social and vocational differentiation consistent with the widening processes of unification and integration. Kingship enlarged the offices of the priesthood... which measured time, bounded space, predicted seasonal events. Those who had mastered time and space could control great masses of men. Not merely the priesthood, but a new intellectual class, thus came into existence, the scribes, the doctors, the magicians, the diviners, as well as "the palace officials who dwell in the city and have taken an oath to the gods" as quoted ... from a letter. In return for their support, the early kings gave these representatives of the "spiritual power" security, leisure, status, and collective habitations of great magnificence... Was the building of the temple with all the vast physical resources the community now commanded the critical event that brought the sacred and secular leaders together? Surely the approval of the priesthood and the gods was as necessary for the exercise of the king's power as his command of weapons and his ruthless domination of large human forces was required to enhance theirs... The rebuilding and restoration of the ancient temple was no mere act of formal piety, but a necessary establishment of lawful continuity, indeed a re-validation of the original "covenant" between the shrine and the palace,... and transformed the local chieftain into a colossal emblem of both sacred and secular power, in a process that released social energies latent in the whole community... The development of kingship seems to have been accompanied by a collective shift from the rites of fertility to the wider cult of physical power... Although never complete it brought, at the opening of civilization, a change of outlook, accompanied by a progressive loss of understanding of the needs of life, and a gross overestimation of the role of physical prowess and organized control as determinants of communal life not just in a crisis but in the daily routine. Backed by military force, the king's word was law. The power to command, to seize property, to kill, to destroy—all these were, and have remained, "sovereign powers." Thus a paranoid psychal structure was preserved and transmitted by the walled city: the collective expression of a too heavily armored personality. As the physical means increased, this one-sided power mythology, sterile, indeed hostile to life, pushed its way into every corner of the urban scene and found, in the new institution of war, its completest expression. To understand the nature of this regression ... and to understand an infantile trauma of the civilization that created war and left its unmistakable mark upon the structure of the city... and has remained in existence to warp the development of all subsequent societies, not least our own, one must go further into the origins of kingship itself ... (Hocart, ... Frankfort, ... Frazer)... All over the world one finds evidence of totemic rites, with almost identical formulae, aimed at securing the abundance of food. These rites indicate a fertility cult that may even be older than the practice of agriculture. Everywhere, in both Old World and New, the birth and death of vegetation was associated with the birth and death of the corn god, the lord of the human arts of sowing and planting. With kingship, the two figures, god and king, became virtually interchangeable, for with his assumption of divine powers the ruler himself personified the pervading forces of nature... At the same time he accepted responsibility for its biological and cultural existence... With the growth of population under neolithic agriculture, the proto-urban community became increasingly

*dependent upon natural forces outside its control: a flood or a plague of locusts might cause widespread suffering or death...to mobilize new forces and to bring them under control the king gathered to himself extraordinary powers; he not only incarnated the community, but by his very assumptions held its fate in his hand. This shifted the ground for a state of collective anxiety... Urban man sought to control natural events his more primitive forerunners once accepted with dumb grace. Did kingship pay for this exorbitant increase of magical power? There is scattered evidence, too ancient and too widespread to be wholly disregarded, that fertility rites to ensure the growth of crops were consummated by human sacrifice... Very possibly the original subject of the sacrifice was the most precious member of the community, the god king himself... Frazer sardonically points out that this practice somewhat lessened the attraction of the noble office of the king and as his organizational skill and intelligence became as important as his implied magical functions, a more rational method would suggest itself: the selection of a "stand-in," who would first be identified with the king by being treated with all the honors and privileges of kingship, in order finally to be ceremoniously slaughtered in his place on the altar... Among the Aztecs, the need for sacrificial victims—as many as twenty thousand in a single year—was the main reason for the ferocious wars these people waged... Invasions in force to round up captives for slavery, rather than sacrifice, may well have been an independent source of war... If the city had not served as a focal center for organized aggression, the search for sacrificial victims need never have gone beyond the relatively innocent limits that were still visible in many primitive tribal communities down to the 19<sup>th</sup> century—a perverse but selective effort to obtain a few symbolic captives from another community. This practice was misinterpreted by missionaries and even by anthropologists... who took for granted that "war is as old as humanity" and never bothered to look carefully at the actual evidence... But the object of primitive interchange of blows between armed men was not the killing of a mass of people in battle or the robbing and razing of their village—but rather the singling out of a few live captives for ceremonial slaughter, and eventual serving up in a cannibal feast, itself a magico-religious rite. Once the city came into existence, with its collective increase in power in every department, this whole situation underwent a change. Instead of raids and sallies for single victims, mass extermination and mass destruction came to prevail. What had once been a magic sacrifice to ensure fertility and abundant crops, an irrational act to promote a rational purpose, was turned into the exhibition of the power of one community, under its wrathful god and priest-king, to control, subdue, totally wipe out another community. Much of this aggression was unprovoked, and morally unjustified by the aggressor; though by the time the historic record becomes clear, some economic color would be given to war by reason of political tensions arising over disputed boundaries or water rights. But the resulting human and economic losses, in earlier times no less than today, were out of all proportion to the tangible stakes for which they were fought... Thus by a curious act of transvestiture a ceremony that began by the invocation of more abundant life, turned into its very opposite: it invited a centralized military control, systematic robbery, and economic parasitism—all institutions that worked against the life-promoting aspects of urban civilization, and finally brought one city after another to its ruin. That was a final ambivalence and contradiction: for the many gains made through the wider associations and laborious co-operations of the city were duly offset by the negative economic activity of war. That cyclic disorder was embedded in the very constitution of the ancient city. But this much must be conceded: as soon as war had become one of the reasons for the city's existence, the city's own wealth and power made it a natural target. The presence of thriving cities gave collective aggression a visible object that had never beckoned before: the city itself, with its growing accumulation of tools and mechanical equipment, its hoards of gold, silver, and jewels, heaped in palace and temple, its well filled granaries and storehouses: not least, perhaps, its surplus of women. If war had originated in one-way raiding parties, sent out by the city, the existence of a new professional caste, armed warriors, may have turned those raids more and more away from the source of raw materials to the places that held the largest store of finished products. Cities*

*that had first drawn tribute from primitive folk now learned to prey on each other... Too easily have historians imputed war chiefly to man's savage past, and have looked upon war as an incursion of so-called primitive nomads, the "have-nots" against normally "peaceful" centers of industry and trade... with naïve projections—lacking both imagination and factual knowledge—from the 19<sup>th</sup> century imperialist and capitalist on the primitive man... War and domination, rather than peace and co-operation, were ingrained in the original structure of the ancient city. No doubt the urban surplus tempted poorer folk, for each city must have seemed a sitting duck to swift-moving raiders from the highlands or steppes: but the very facilities that enabled them to move swiftly, with horses and boats, came only after the city itself... And though anything like satisfactory proof of the early connection between kingship, sacrifice, war and urban development will always be lacking, I have put together enough evidence of the surviving fragments to cast serious doubts on the assumptions of either a biologically inherited belligerence or an "original sin" as the sufficient operative cause in producing the complex institution of war. But here, if anywhere, the doctrine of natural selection worked with classic exactitude, for in the course of five or six thousand years many of the milder, gentler, more co-operative stocks were killed off or discouraged from breeding, while the more aggressive, bellicose types survived and flourished at the centers of civilization. The peripheral successes of urban culture bolstered up its central failure —its commitment to war as the elixir of sovereign power and the most effective purgative for popular discontent with that power... If anything were needed to make the magical origins of war plausible, it is the fact that war, even when it is disguised by seemingly hardheaded economic demands, uniformly turns into religious performance; nothing less than a wholesale ritual sacrifice. As the central agent in this sacrifice the king had from the very beginnings an office to perform. To accumulate power, to hold power, to express power by deliberate acts of murderous destruction—this became the obsession of kingship... By the very act of war the victorious king demonstrated the maximum possibilities of royal control and invoked further divine support by wholesale infliction of death... With the king's command of its entire manpower, the city became, so to say, a permanently mobilized standing army, held in reserve. This power of massed numbers in itself gave the city a superiority over the thinly populated widely scattered villages and served as an incentive for further growth both in internal area and numbers. To meet this challenge, the aboriginal villages may themselves have often combined into larger urban units... Not merely did the walled city give a permanent collective structure to the paranoid claims and delusions of kingship, augmenting suspicion, hostility, non-cooperation, but the division of labor and castes, pushed to the extreme, normalized schizophrenia; while the compulsive repetitious labor imposed on a large part of the urban population under slavery, reproduced the structure of a compulsion neurosis. Thus the ancient city, in its very constitution, tended to transmit a collective personality structure whose more extreme manifestations are now recognized in individuals as pathological. That structure is still visible in our own day, though the outer walls have given way to iron curtains.*

(Of course Mumford who would only be very happy to have known that his reluctant pessimistic predictions were proved wrong after his death, would\* barely have time to rejoice for the undoing of the iron curtain before he saw in the everyday news, like we all see today, the "paranoid, parasitic, and military in an extremely violent way" repetition of the stages he describes; and so conspicuously that we all become, whether we wished it or not, reluctant pessimist prophets of the Mumford type; of course only for the events of the next day—that Mumford too predicts along with us but not the day before but in 1961 (and in 1938). Now we also learn (one thing or two) about the way he does it: on the one hand he thinks rationally and directly what he himself would do if he were e.g. a cultivator, a warrior, a priest, a bandit, a cannibal etc in such and such an age, so as to fill in the data he lacks in the same way he would fill them in if he were thinking about the future (for which the data are always lacking!) and on the other hand he looks very carefully into the existing data on those ages so as to spell out their

\*Actually this is not a "would" but a "did" since he died in 1990.

differences from the contemporary and recent data and not have his imagination blocked by them\* (e.g. if what is needed is to think like a cannibal, then to think like a cannibal of those times and not like a cannibal of the British colonialist type in India). The image that then results, though he is still in 1961, reminds aspects of 1999-2006 through reminding aspects of 3000 B.C. (not only because of the ignorance of the past that neocons have! After all, if they knew how extremely violent that past was, it is not at all certain that they would know, or care, to be taught how not to imitate it; maybe they would boast of having rediscovered it unaided or would consciously imitate it since CIA did learn brainwash methods from Nazis, Nazis did learn genocide methods from Turks and since neocons use even Orwell's "1984" for shortcuts towards fulfilling rather than avoiding its predictions. Besides, some of the ones among them who do not opt for violence consciously might not recognize it even in the past in the same way that they do not recognize it in the present). The past may remind the present for deeper reasons too (like the reasons that make the citadel, as the politico-religious nucleus of the city, remind the nucleus of a cell, with respect to its functions of centralized management). The break with the past for emergence of new functions etc (to any direction that may be in the mind of he who makes it) would surprise, with its leaps and bounds and backfires, even the deepest knower and analyst of the past and the philosopher and/or biologist of emergence of new forms, of ontological creation etc; and even more it would surprise somebody ignorant of all that – or would surprise him even less, or not at all, if he, once more, did not notice or did not even see whatever was to see even in front of his eyes in the present. Example: Americans who program military actions on the basis of data, on history or human nature, collected from Hollywood films and which Iraqis –even if they had any reason, or wish, to, obligingly, fulfill– just don't know about or cannot imagine, have one educational surprise/contact with the outside world after another (with scores of dead Iraqis and Americans per educational experience). Indicative is also the critique of a neocon to a journalist who spelled this out: "Your critique is too reality-based. A nation that can impose itself does not have to learn about reality. It creates its own realities". A rationale supplementing another rationale (that used to drive CIA's Colby crazy, when Rumsfeld and Cheney and other members of the present gang, then still promising young men, who then were his employees and were called "the crazies" by their not so avant garde–or rather "avant garbage" as an expression goes–colleagues) going like: "it is not so relevant that US Intelligence learns what Russians are up to, as to make Americans believe the Russians are up to what US Intelligence says Russians are up to")

*...The walls bring to light another urban ambivalence. In a townless culture, like that of the Spartans, living in open villages and declining to take refuge behind walls, the ruling classes had to remain savagely alert and threatening, under arms at all times, lest they be overthrown by the enslaved helots. Whereas such rulers had to back their naked power by overt terrorism, in walled cities the wall itself was worth a whole army in controlling the unruly, keeping rivals under surveillance, and blocking the desperate from escaping...In the early cities the inhabitants were "all in the same boat", and in a ship all learn to trust the captain and to execute orders promptly...But for religion, and all social rites and economic advantages that accompanied it, the wall would have turned the city into a prison, whose inmates would only have one ambition: to destroy their keepers and break out. From the beginning, however, law and order supplemented brute force. The city, as it took form around the royal citadel, was a man-made replica of the universe. This opened an attractive vista: indeed a glimpse of heaven itself. To be a resident of the city was to have a place in man's true home, the great cosmos itself...and witness the general enlargement of powers and potentialities in every direction...Living in the sight of the gods and their king, was to fulfill the utmost potentialities of life. Spiritual identification and vicarious participation made it easy to submit to the divine commands that governed the community...Once*

\*About some aspects of human history, even earlier than the above, at least those that relate to the emergence of language, Mumford shows that one can similarly use some anthropological data, thinking, and imagination, and do infer some things. But this needs a different context to describe (e.g. an appendix).

*the urban transformation had been effected, the city as a whole became a sacred precinct under the protection of its god: the very axis of the universe went, as Mircea Eliade has made clear, through the temple; while the wall, under pressure of the new institution of war, was both a physical rampart for defense and spiritual boundary of even greater significance, for it preserved those within from the chaos and formless evil that encompassed them. The “innerness” needed for further human development found in the city—and above all in the sacred precinct—the collective form that would help call it forth. Behind the walls of the city life rested on a common foundation, set as deep as the universe itself: the city was nothing less than the home of a powerful god. The architectural and sculptural symbols that made this fact visible lifted the city far above the village or country town. Without the sacred powers that were contained within the palace and the temple precinct, the ancient city would have been purposeless and meaningless. Once those powers were established by the king, widening the area of communication and unifying behavior through law, life prospered here as it could not hope to prosper anywhere else. What began as control ended as communion and rational understanding. Without the religious potencies of the city, the wall itself could not have succeeded in molding the character as well as controlling the activities of the city’s inhabitants... But all organic phenomena have limits of growth and extension, which are set by their very need to remain self-sustaining and self-directing: they can grow at the expense of their neighbors only by losing the very facilities that their neighbors’ activities contribute to their own life... Urban communities, engrossed in the new expansion of power, forfeited this sense of limits: the cult of power exulted in its boundless display: it offered the delights of a game played for its own sake, as well as the rewards of labor without the need for daily drudgery, by forcible collective seizure and wholesale enslavement. The sky was the limit. We have the evidence of this sudden sense of exaltation in the increasing dimensions of the great pyramids; as we have the mythological representation of it in the story of the ambitious Tower of Babel, though that was curbed by a failure of communication, which an over-extension of linguistic territory and culture may in turn have repeatedly brought about. That cycle of indefinite expansion from city to empire is easy to follow. As a city’s population grew, it was necessary either to extend the area of immediate food production or to extend the supply lines, and draw by co-operation, barter and trade, or by forced tribute, expropriation and extermination, upon another community. Predation or symbiosis? Conquest or co-operation? A power myth knows only one answer... If I interpret the evidence correctly, the co-operative forms of urban polity were undermined and vitiated from the outset by the destructive, death-oriented myths which attended, and perhaps partly prompted, the exorbitant expansion of physical power and technological adroitness... Thus the most precious collective invention of civilization, the city, second only to language itself in the transmission of culture, became from the outset the container of disruptive internal forces, directed toward ceaseless destruction and extermination. As a result of that deep-rutted heritage, the very survival of civilization, or indeed of any large and unmutilated portion of the human race, is now in doubt—and may long remain in doubt whatever temporary accommodations may be made. Each historic civilization, as Patrick Geddes long ago pointed out, begins with a living urban core, the polis, and ends in a common graveyard of dust and bones, a Necropolis, or city of the dead: fire-scorched ruins, shattered buildings, empty workshops, heaps of meaningless refuse, the population massacred or driven into slavery... “And he took the city,” we read in Judges; “and slew the people therein; and he beat down the city and served it with salt.” ... The terror of this final episode, with its cold misery and blank despair, is the human climax toward which the “Iliad” moves; but long before that, as Heinrich Schliemann proved, six other cities were destroyed; and long before the “Iliad” one finds a lamentation, equally bitter and heartfelt, for that marvel among ancient cities, Ur itself, a wail uttered by the goddess of the city: “Verily all my birds and winged creatures have flown away. “Alas! For my city,” I will say. My daughters and my sons have been carried off. “Alas! For my men,” I will say. O my city which exists no longer, my city attacked without cause, O my city attacked and destroyed!”. Finally consider Sennacherib’s inscription on the total annihilation of Babylon:*

*“The city and its houses, from its foundations to its top, I destroyed, I devastated, I burned with fire. The wall and the outer wall, temples and gods, temple towers of brick and earth, as many as they were, I razed them and dumped them into the canal. Through the midst of the city I dug canals, I flooded its site with water...I made its destruction more complete than by a flood.” Both the act and the morals anticipated the ferocious extravagances of our own Nuclear Age; the only things the destruction described in the above inscription lacked was our swift scientific dexterity and our massive hypocrisy in disguising our intentions even from ourselves. Yet again and again the positive forces of co-operation and sentimental communion have brought people back to the devastated urban sites, “to repair the wasted cities, the desolation of many generations.” Ironically—yet consolingly—cities have repeatedly outlived the military empires that seemingly destroyed them forever. Damascus, Baghdad, Jerusalem, Athens still stand on the sites they originally occupied, alive though little more than fragments of their ancient foundations remain in view. The chronic miscarriages of life in the city might well have caused their abandonment, might even have led to a wholesale renunciation of city life and all its ambivalent gifts, but for one fact: the constant recruitment of new life, fresh and unsophisticated, from rural regions, full of crude muscular strength, sexual vitality, procreative zeal, animal faith. These rural folk replenished the city with their blood, and still more with their hopes. Even today, according to the French geographer Max Sorre, four fifths of the world lives in villages, functionally closer to their neolithic prototype than to the highly organized metropolises that have begun to suck the village into their orbits and, even more swiftly, to undermine their ancient mode of life. But once we allow the village to disappear, this ancient factor of safety will vanish. That danger mankind has still to reckon with and fend .*

*...The Greeks, it seemed, had in some degree freed themselves from the outrageous fantasies of unqualified power that Bronze Age religion and iron Age technology had fostered: their cities were cut closer to the human measure, and were delivered from the paranoid claims of quasi-divine monarchs, with all the attending compulsions and regimentations of militarism and bureaucracy. The Greeks broke down, indeed they had hardly developed, the hard caste and occupational divisions that had come with civilization itself: at this early moment they had the flexibility and inventiveness of the amateur, not willing to sacrifice too much of his life to specialized competence. As the city developed, the democratic habits of the village would be often carried into its heretofore specialized activities, with a constant rotation of human functions and civic duties, and with a full participation by each citizen in every aspect of the common life... Colonization did not have the character of expansion of size that would change the way of life of the metropolis but aimed at preserving the original way of life when the population growth pushed toward undesired changes... The village ways made the post-Homeric Greeks distrustful of kingly power and centralized rule: even at Troy this was plain. The mystique of kingship did not fit well with either their village parochialism or their inbred self-respect...Agamemnon reproached Clytemnestra for her servile effusiveness of speech: “as a man, not as a god, let me be honored.” The delusion of divinity in a ruler was a product of their civic decadence. Even the growth of imperialism in the fifth century, though it turned Athens itself into a ruthless exploiter of smaller Greek cities, did not bring about the restoration of kingship or enlarge the dominion of the Olympian gods. Quite the contrary: not merely did the Greeks discard the more superstitious claims of royalty, making their leaders dependent upon popular support, cutting them down to human dimensions, but their gods are represented either to have the same build as other human figures, as in the Parthenon frieze, or as slightly larger creatures of the same mold. By the fifth century they even made the gods themselves a little ridiculous, if not contemptible, by playing up their amorous foibles and jealous rivalries... For a time the Greeks’ pride in their unfettered humanity possibly had a humanizing effect upon religion: it resulted, as Gilbert Murray pointed out, in a moralization of Olympus, in an effort to bring the gods up to at least the human level of conduct, and to cover over, as unworthy of godhead, the scandalous amours and knavish tricks*

that the members of the Greek pantheon had carried over from the cosmic delinquents of an earlier day. Olympus itself must be turned into a polis of respectable citizens. So the least godlike of all gods, Hephaestus the blacksmith, found a temple built for him, to celebrate his solid craftsmanlike virtues, hard by the old quarters of the potters and smiths below the Acropolis, while Prometheus, he whom Hesiod characterized as “sly”, became in Aeschylus’s drama, the moral superior of Zeus. Though Athens offers most of the ready examples of the deification of the polis, the spirit itself prevailed everywhere. God, city, and citizens became one compact manifestation of ego...Not till the barbarous Macedonian, Alexander, set out on his conquests were the aboriginal claims of the divine king revived...This sparse material culture, in many places little better than a subsistence regimen, gave rise to a new kind of economy of abundance...The Greek poleis in their best days had no great surplus of goods: what they had was a surplus of time, that is leisure, free and untrammelled, not committed—as in America today—to excessive materialistic consumption, but available for conversation, sexual passion, intellectual reflection, and esthetic delight . Is it an accident that in the short Ephebic Oath the vow to do one’s duty “single handed or with the support of all” is uttered twice?...Athens had no patent on these virtues: those who live in villages and value their intimacies do not confuse size with significance. Lonely courage played a part that mass obedience to the leader’s command could never rival. Such courage produced heroes of the mind as well as of the battlefield, often in the same person. In their formative period the Greek cities never lost their connections with their countryside or their villages... Independence and self-reliance were as ingrained in pre-imperialist Greece as in Emersonian New England: there was pride in the old saying “Greece and poverty are twins.”...This new kind of economy of abundance opened up virgin territories of mind and spirit that had hardly been explored, let alone cultivated. The result was not merely a torrential outpouring of ideas and images in drama, poetry, sculpture, painting, logic, mathematics and philosophy; but a collective life more highly energized, more heightened in its capacity for esthetic expression and rational evaluation, than had ever been achieved before. Within a couple of centuries the Greeks discovered more about the nature and potentialities of man than the Egyptians or the Sumerians seem to have discovered in as many millennia.. All these achievements were concentrated in the Greek polis, and in particular, in the greatest of these cities, Athens...Somewhere between the second and first century B.C., Dicaearchus could observe: “The road to Athens is a pleasant one, running between cultivated fields the whole way. The city is dry and ill-supplied with water. The streets are nothing but miserable old lanes, the houses mean, with a few better ones among them. On his first arrival a stranger would hardly believe that this is the Athens of which he had heard so much.” The best one could say about the housing situation in Athens is that the quarters of the rich and the poor were side by side, and that except perhaps in size and inner furnishings, were scarcely distinguishable: in the fifth century, noble poverty was more esteemed than ignoble riches, and public honors and family repute counted for more than public wealth...In the biggest cities of the fifth century the spottiness , if not the downright lack, of sanitary facilities was scandalous, almost suicidal: a fact that the great plague during the Peloponnesian War , which had crowded Athens with refugees, emphasized...To understand the full achievement of the Hellenic polis, one must take one’s eyes off the buildings and look more closely at the citizen...who had mastered Emerson’s great secret: Save on the low levels and spend on the high ones. What we regard as an unfortunate handicap may in fact be partly responsible for the greatness of Athens. The Greek citizen was poor in comforts and convenience; but he was rich in a wide variety of experiences, precisely because he had succeeded in by-passing so many of the life-defeating routines and materialistic compulsions of civilization. Partly he had done this by throwing a large share of the physical burden on the slaves; but even more by cutting down on his own purely physical demands, and expanding the province of the mind. If he did not see the dirt around him, it was because beauty held his eye and charmed his ear. In Athens at least the muses had a home... What distinguished the Greek polis in its developing phase was the fact that no part of its life was out of sight or out of mind. Not

*merely was every part of existence within view; only the most servile mechanical activities were denied to the citizen: in most occupations, the free man worked side by side with the slave, and the physician received the same rate of pay as a craftsman. All that men did was open to inspection, alike in the market, the workshop, the law court, the council, the gymnasium; and whatever was natural was acceptable, so that the naked body would be proudly shown in athletic contests, and even its most repulsive physiological processes were not excluded from consciousness. In that sense the Greek had a completely open mind...The citizen not merely performed military service at call, contributing his own equipment, but he served in the assembly and the law courts...Almost every male Athenian, at one time or another, had to take part in public business...As Fowler emphasizes, work now done by executives, permanent secretaries, inspectors, and magistrates, was done by ordinary Athenians, rotating in sections of fifty. Participation in the arts was as much a part of the citizen's activities as service on the council or in the law courts...In a hundred years, Ferguson tells us, two thousand plays of picked quality were written and staged in Athens, while six thousand new musical compositions were created and presented...every year something like two thousand Athenians, it has been estimated, had to memorize the words and practice the music and dance figures of a lyric or a dramatic chorus. This was an intellectual discipline as well as an esthetic experience of the highest order; and as an incidental result no small part of the audience consisted of ex-performers, expert judges and critics as well as enthralled spectators. Thus the public life of the Athenian citizen demanded his constant attention and participation, and these activities, so far from confining him to an office or a limited quarter, took him from the temple to the Pnyx, from the agora to the theater, from the gymnasium to the harbor of the Piraeus where matters that concerned trade or the navy would be settled on the spot...That open, perpetually varied and animated world produced a correspondingly unfettered mind. Both in arts and in politics, Athens had largely overcome the original vices of the city, its one-man rule, its segregation of activities, its occupational narrowness, and worse, its bureaucratization—and they had done this for at least one generation without forfeiting skill or lowering the standard of excellence. For a while, city and citizen were one, and no part of life seemed to lie outside their formative, self-molding activities., This education of the whole man, this “Paideia,” as Jaeger has called it, to delimit it from a narrower pedagogy, has never been equaled in another community so large...If the Greeks were notably successful in throwing off the institution of kingship, which had hardly passed beyond the claims of the earliest tribal chieftains, their achievement of democracy remained slow, partial, fitful, never fully effective. Not merely did landed oligarchies and tyrannies long continue in powering many regions; but even where democracy prevailed, as it did in Athens, it retained the old principles of segregation and monopoly. Athenian democracy excluded the foreigner and the slave: no small part of the total population... We must look elsewhere for the forces of the mind that seemed ready to breach the invisible walls that had confined the new attributes of personality to the king and his nobles, and limited a general human development in the ancient city. To find the special secret of the Greek city one must look outside the bigger centers. And if one wanted to sum up in three words what supremely distinguished Greek urban culture from that of its predecessors, one might say simply: Olympia, Delphi, Cos. It was the contribution of these three centers that raised the whole ceiling of human achievement so high. None of these places had any pretenses to being a great city. Each stands in fact for a specialized kind of town, with a power of attraction that drew men together, occasionally or seasonally, from the farthest regions of Magna Graecia, sending them back again, with their parochial limitations challenged, and with a salient aspect of their life renewed and lifted to a higher level. What the transport and interchange of goods had done to stimulate the daily life of the Mesopotamian city, the personal visits to Olympia, Delphi, or Cos did for the religious, political, literary, and athletic development of the Greeks. The first was the home of the Olympian games; the second held the chief shrine and the sacred oracle of Apollo, the one great unifying civic and religious influence, comparable to that of the Vatican in Roman Catholic countries; while the third was one of the*

great health resorts and sanatoria, where a new group of physicians, the predecessors and followers of Hippocrates (460-375 B.C.), sought through a rational understanding of nature to cure disease and promote health. From these three centers flowed currents of vital energy, transmitted by pilgrims and participants, faring on foot and by boat, which brought into every Greek city a whole stream of unifying and self-transcending ideas and norms of life. The characteristic work of each of these centers was carried on in many other cities: Cnidus and Epidauros, the original home of the Asclepius cult, rivalled Cos; and the Apollonian shrine at Delos turned that barren isle into both a pilgrim's refuge and a center of international banking and trade despite its treacherous approach by water. Similarly, once the inter-urban games were started, many other cities competed with Olympia. Through the influence of these institutions, the more adventurous members of the polis came into direct contact with other cities, other peoples, other ways; and the participants experienced that process of "withdrawal-and-return" which both Patrick Geddes and Arnold Toynbee have demonstrated historically is an essential mode of human growth. These festivals and congregations challenged the ingrained parochialism of the polis. The four great Panhellenian festivals—the Olympian, the Pythian, the Isthmian, and the Nemean—drew Greeks together from every part of Hellas, along the sacred roads, where wayfarers were immune to attack at such seasons. Such mobilization and congregation forecast even freer movement in an even wider world... Olympia stood for the body as the active physical expression, through disciplined play, of the human spirit. Whatever the later sins of Greek dualism, in the formative days of their culture, the classic Greeks never identified spiritual development with incorporeality, still less with a contempt for the body or a monkish masochistic pleasure in degrading it or courting disease. Delphi represented through its oracle the combination of the unconscious, in its depths, accessible through darkness, sleep, drugs, intoxication, with open-eyed intelligence and a far-seeing providence: its twin gods, as Werner Jaeger reminds us, were Apollo and Dionysus, not just the orderly, clear-thinking, Apollo alone, himself a symbol of both solar and spiritual illumination. Those who were put to sleep by the priestess at Delphi were visited by the god in their dreams: probably under the influence of hypnotism or a soporific, even perhaps an anesthetic; for there is a report from that center of the lifting of a cataract from a sufferer's eye during the night, unknown to the dreamer. It was such a Delphic priestess, Diotima, who bade Socrates listen to his daimon; so that, at the moment rational thought left the temple to run the gauntlet of common experience in the marketplace, it was accompanied by a vivid reminder of its pre-rational cosmic beginnings in cave and grotto and animal rite. The masters of Greek tragedy never forgot that lesson. It was not for nothing that Delphi in Greek legend, like Jerusalem on medieval Christian maps, occupied the exact center of the earth. This was its precise position in the Greek mind. The original function of the Delphic priesthood was to determine the correct order of the religious festivals, and it is quite probable that Delphi as early as the seventh century sought, though unsuccessfully, to spread its recognition of a uniform type of calendar in the Greek world. Finally, Cos was the great center from which a new concept of health radiated: at once a sanatorium, a hospital, a center of medical research, as George Sarton has pointed out, medical thought matured. But these centers were not just a collection of utilitarian buildings, half factory, half hotel, like most of our modern hospitals. They also possessed the calm attributes of a cloister: here, for perhaps the first time, the function of the cloister, of withdrawal and inner dedication, escaped the confines of the temple, even while the temple of Asclepius itself remained close at hand. The physicians at Cos knew the healing qualities of seclusion and beauty, space and order: they set their sanatoria on a little island, famous for its grapes and mulberry trees, and its specially fine silk, with a wide view over the sea: a noble landscape freed from the clutter, the disorder, the smells and noises of the Greek city. Perhaps no one has ever translated these ideals so effectively, if quite unconsciously, as Henry James in his dream allegory, "The Great Good Place." People traveled hundreds of miles by land and by sea to be under the care of such dedicated physicians, bound by their noble oath, working in such a healing environment. By the very act of detachment through

*travel, the patient took his first step toward rehabilitation; and the psychosomatic discovery of the curative properties of a change of scene may have been a contribution of Hippocratic lore, based on improvements the physicians observed in newcomers even before they applied their positive remedies. Can one doubt that the order that came into the new cities of the fourth century registered, in collective form, some of the lessons that this great school of healers and hygienists applied to the individual patient? That sense of space and harmony, in nature and of nature and yet surpassing nature through man's own ordered effort, left its mark on later cities... At Olympia the cities met, so to say, in person; and the contests were concerned with the body as an expression of the human spirit. These games brought together poets as well as athletes; and both were moved to give their utmost to the competition, since their audience was not merely their fellow-townsmen, but the assembled representatives of a larger commonwealth, wide-flung Hellas. Under the impetus from these games, a new institution entered the Hellenic city, and a new place must be found for it: the palestra or wrestling ground. This in time developed further into the gymnasium, an enclosed sports-ground, often set in a grove of plane trees...equipped with baths, dressing rooms and finally with classrooms; for, following Olympic precedent, the mind was not left apathetic and idle by too violent physical exercise. Here is where the young and the old came together for friendly bouts of wrestling or boxing, for racing, for hurling the discus or javelin. Out of three such sacred groves, already established in the sixth century, came three famous schools of learning, the Lyceum, the Academy, and the Cynosarges...But so ingrained was the sense of sportsman ship at first, that even wars between cities sometimes took the manner of a sporting contest, for honor than for more vicious stakes. Witness the "war" between Chalcis and Eretria, in the seventh century, held only as a contest, with all hurled missiles, spears, slings and arrows barred. These cities had emerged from the barbarous depravity of total war and had sublimated brutal aggression...The spiritual by-products of this new institution proved as important as its gifts to health; for here the old and the young came into constant companionship, not as parents and children, or even as teachers and students, but as partners in discussion, led by the older members, all the more stimulating because of the difference in age and the escape from purely parental authority. Sometimes this intimacy proved an encouragement to a sterile homosexuality, in provoking passionate infatuations relieved from any threat of offspring; but it was also, as the Platonic dialogues remind us, a contribution to higher education. Did an authoritative priesthood have anything of comparable value to offer by way of method? And as long as the gymnasium invited physical exercise, it helped to overcome the bodily slackness that too often was the price exacted for adaptation to the constricted, sedentary urban environment.*

*The part played by the Delphic shrine is harder to describe, especially since the cult left behind no readable record other than its treasury and its votive monuments. Though the cult of Dionysus may have come from much farther afield, it was perhaps with the sanctions of Delphi, itself constantly bringing together Apollonian measure and clarity with Dionysian darkness and ecstasy, that the drama captured the Greek city. Here we may pause to take in the theater as an urban institution which entered the Greek city at about the same time as the gymnasium, perhaps first performing in the agora on improvised grandstands of wood, as depicted in three early sixth-century vases. But soon, because of the crowds attending in the growing town, the theater established itself on the slope of a hill on the outskirts, under the open sky. The festivals out of which the theater arose were religious festivals, long celebrated in the village; and the priests from the temple occupied the front row of the "orchestra." If the Attic comedy grew out of old fertility rites, rooted in the neolithic past, tragedy wrestled with the problems of human development opened up by the new urban order: fate, chance, free will. As the city itself developed, the drama sloughed off both sides of its religious heritage: mere cerebral amusement took the place of bawdy rites and horseplay as well as solemn edification. With this went a loss of cosmic perspective. At the very moment its pride and confidence became overweening, the human self began to shrivel. Cut off from its sense of the cosmic and the divine, it seemed more and more a prey to meaningless change and external caprice. In its own development, the drama*

*thus symbolized the course of urban development, as the vulgar, the trivial, the sordid, the spectacular displaced the sacraments of birth, citizenship, vocation, marriage, death. Yet in its post-tragic phase, when the religious connection was broken, the theater remained one of the distinguishing marks of the classic city, visible in the most distant of towns built for the colonizers and the pensioners of Empire. Even today, on the hillside of Fiesole near Florence, the semi-circle of stone benches looking over the valley that spreads below and the mountains that rise beyond, recaptures the all but universal form of the Greek theater, and exhales a faint breath of the original culture that produced it. The beauty of ordered space within an ordered cosmos. If one mark of the end of the classic city is the termination of the Olympic games, the other is the abandonment of the theater. For it was in the theater that the Greek citizen saw himself and obeyed the Delphic maxim: Know Thyself. Best of all, the relentless comedies of Aristophanes tell us, he learned to see himself, wryly, as others saw him, chastened by their painful laughter. But at the same time he beheld, in the larger figures of heroes and gods, beckoning potential selves whose imitation in moments of crisis would help him overpass the mediocrity of the safe and the habitual. Self-consciousness and self-realization, even self-transcendence, became the new marks of the urban personality—or at least of an awakened minority. But even more directly and practically, Delphi worked still another change in the development of the Greek city. Because the founding of the city was for the Greeks, as it had been for earlier cultures, primarily a religious act, Delphi naturally assumed charge of the new foundations; and especially in the early period of colonization, the Pythian Apollo gave specific advice that dispatched new colonies in every direction, under the aegis of Apollo himself. Few cities would undertake such an expedition without consulting the oracle. Thus at the moment when the growth of the population might have led to congestion within the city, to random emigration, or to conflicts for arable land in the more densely populated regions, Delphi, willy-nilly, faced the population problem and conducted a program of organized dispersal. Through this program, the keepers of that shrine lessened both the acerbic economic competition and the wars of conquest, while it spread Greek culture and the Greek polis to the thinly settled village communities of the perimeter. The control of city growth by orderly colonization, repeated as often as numbers demanded, was the first practical recognition of an organic limit to city growth. During the century in which it was most widely practiced, when the norm was maintained, the Greek city proved an extremely favorable environment for human development. The Delphic doctrine of the golden mean held for the cities as well as for men. Note that religious persuasion and voluntary action brought about this colonization movement: not centralized military control. The latter came under Alexander the Great, when religious authority had crumbled and civic norms had vanished. Cos, Cnidus, and Epidaurus were no less symbols of the Greek concern for wholeness and balance than the Olympic games or the Delphic shrine; and the lessons they taught played a part in later town planning, though they have not yet been fully assimilated even today. One of the most famous Hippocratic treatises is “Air, Water, and Places”; a work which laid down the outlines of public hygiene in relation to the choice of sites and the planning of cities. If Greek love for the concrete object led these keen physicians to neglect forces and organisms below the ordinary threshold of sight, so that they apparently never suspected that diseases might be transmitted by invisible agents, they nevertheless did full justice to matters more easily discovered and handled: the orientation of buildings and city streets to evade the summer sun and catch the cooling winds; the avoidance of marshy lands and insanitary surroundings; the procuring of pure sources of water, as a matter doubly necessary for the sick, to whom wine must usually be forbidden. These prescriptions did not make headway quickly. It was easier for the wealthy and the leisured to visit a distant sanatorium when they were ill than for a municipality to provide the capital needed for great works of engineering that would bring pure water down from the hills, provide ample open spaces for recreation within the city, open up the crowded dwelling places and secure circulation of air...But gradually the Hippocratic injunctions would bring into the city pure water for drinking and bathing and spacious parks for exercise and spiritual rejuvenation...One phase of*

hygiene is, however, strangely missing: the medical school left no text on public sanitation; and there are no references to the proper disposal of excreta. Such were the decisive contributions the wide-ranging Greek assembling periodically in special centers, made to the culture of cities: the gymnasium, the sanatorium, the theater. Not merely did they remold the form of the city: each introduced, likewise, a motive for wider circulation and cultural interchange, by travel and pilgrimage. This was a Panhellenic influence. In the poems of Tyrtaeus even surly Sparta made a contribution to the common literary culture. The people who ventured forth, in trickles or in broad streams, to Olympia, Delphi, and Cos, and their sister cities, had temporarily detached themselves from the self-enclosed world of the polis. They became members of a larger unity, brought about, not by encirclement and enclosure, but by a vivid attraction. At the point of meeting, they overcame the particularization and parochialism of their native city and gazed on a wider horizon. The sacred roads that led from Elis to Olympia, or from many other places to Delphi, served as a visible bond of this unity. Potentially, these practices had within themselves the basis for a new kind of urban polity, based on federated organization, operating over wider areas, not by centralized command but through voluntary transactions and mutual services. If these efforts had been more thoroughly understood and more consciously appraised by the political thinkers of Greece, even as late as the fourth century, they might still have left their mark on the city. But Greek practice was far in advance of Greek theory: indeed, theory accentuated the separate, the particular, the static, the archaic, and neglected the new tendencies toward dynamic cultural intercourse, and political federation. Aristotle examined the constitutions of 158 Greek cities, each sufficiently different to merit separate analysis; but there is no record of his paying attention to the efforts of trying to create a general league of cities, though this had begun as early as the sixth century, and before Rome had wiped out the last vestige of Greek freedom, Greece had produced some twenty such confederations. The majority of these leagues, McDonald pertinently notes, got their start in a common religious festival, and in the organization needed to protect and supervise a special cult. And all too belatedly two new devices of urban government were introduced: the principle of isopolity, by which one city gave its citizenship to another city, while remaining separate and self-governing; and that of sympolity, by which a city became part of a co-operative group, under a co-ordinating authority, with each citizen professing a double loyalty. In a peaceful world, these efforts might have multiplied and come to fruition. Even those whose knowledge of Greece is as exhaustive as that of Toynbee are inclined to attribute the divisiveness of the Greek cities to their topographical situation, to jealousy and rivalry, or to their narcissistic infatuation with their own image. That all of these played a part one cannot doubt: but the fact that so many efforts were made at federation demonstrates the existence of many counter-pressures. The earliest federal state in Greece for which J.A. Larsen finds an adequate description was the Boeotian Confederacy of the period 447-386 B.C. The appreciation of that effort dates only from the discovery of the Hellenic *Oxyrhynchus papyrus* in 1908. Perhaps this innovation was favored by the absence of mountain barriers and strong cities in that wide fertile plain; but despite its Attic reputation for thick-wittedness, Boeotia had in fact created a well-organized federal system, with a board of magistrates, a large representative council, a treasury and a command of an income, even a federal court or courts; and it was strong enough to impose uniform local governments upon the member cities. In all a brilliant innovation. This achievement of representative federal government, with its combination of union and local autonomy, was a political development of no little magnitude. What caused it to fail was not the inveterate particularism of Greek cities, something fatally inherent in their character and constitution: on the contrary, this federal system was overthrown by a brutal specific act, namely the "King's Peace" of 386, which stipulated that Greek cities were to be "free." Under Spartan rule, this meant that they were not free to join together in a federal union. All this occurred before Demosthenes sought to rally the cowed cities confronting Philip of Macedon. Had Boeotian federalism prevailed against Spartan isolationism the cities of Hellas might have fended off the fatal blow at Chaeronea. If the force

*and self-confidence of the Greek cities had not been wrecked by the series of wars that began among themselves, their later efforts at federation, born largely of desperation, might have given them a better chance against the empires that finally swept over them. But the larger concept of a federated urban polity, which would have rectified the failures of both urban isolationism and imperialistic political and cultural expansion, never had a career long enough to create a radically new pattern of civic life. War dragged the polis back to the more regressive pattern of the earliest king-centered cities, and finally wiped out all but a vestige of their independence and autonomy. So it was as conquered refugees, subjects, and slaves, not as free citizens, that the Greeks ultimately carried the lessons of Olympia, Delphi, and Cos to the rest of the world...Athens, supreme in every department except colonization, was the embodiment of all fresh promises of civilization and of the achievements of the Greek polis. But while Athens created a cultural legacy to which every succeeding age has been indebted, it sought to pre-empt for its own vainglory the goods that every other city had contributed to, and had a right equally to share in. though conserving, indeed cultivating, the benefits of internal democracy, Athens chose to act the king among lesser cities, demanding homage and tribute in tyrannous fashion, in return for protection...Pericles' funeral oration tells a different story from that Greek scholars often have drawn from it, once one escapes the hypnosis of Thucydides' rhetoric. Covered by an affable mask of modesty and moderation, that speech is in fact a hymn of complacent self-worship: in it ideals still only partly realized were treated as if they were solid actualities, and injustices all too palpably actualized were hardly even glanced at, still less repented of...The Parthenon, which was the public-works project of Pericles himself, was made possible by mounting acts of flagrant injustice and calculated terrorism, perpetrated by Athens upon her weaker neighbors and allies. This culminated in the wholesale extermination of the males of Melos, even after the surrender of its inhabitants. Such elaborate public works perhaps kept the surplus population of Athens in employment; but the money that made them possible was blood money, which degraded the taker...By the sixth century a new god had captured the Acropolis, and had by an imperceptible passage, merged with the original deity. This new god was the polis itself; for the people who built these great temples were seized with an ecstasy of collective self-worship...to set high upon a hill their image of order and beauty they would show exorbitant pride and shocking moral callousness...Parthenon itself presented this insidious inflation of the collective ego: the moral weakness is not less visible because it had materialized in a flawless esthetic image: the Panathenaic frieze is an idealized presentation of the actual procession that wound about the narrow streets and climbed upward into the temenos of Athene, the members beholding themselves...the self looked admiringly upon the self that looked upon the self: a statue of enraptured narcissism...deepened, no doubt, by reason of the final triumph over the Persians...Pericles used words woven out of the deeds of free men to conceal a policy of "colonial" exploitation, enslavement, and merciless extermination...The excrement of early civilization – war, exploitation, enslavement, mass extermination – backed up on Athens as from an ancient sewer. In the end these forces overcame a movement toward a wider fellowship, with more humane goals, that was already visible in the seventh century. Had Greece's intellectual leaders fully grasped the implications of this universalism, they might have liberated urban culture from its chronic involvement in the practice of human sacrifice for perverse and irrational ends. Between the forthright Solon, who cast off, as it were a soiled garment, the political power he had gathered into his hands, and the devious Pericles, between these polar opposites there was less than the span of a century. But in that brief period Athens was rich in citizens as no city had ever been rich before...The secret of creating such citizens as the polis had briefly produced was eagerly sought by philosophers and educators, from Plato to Isocrates; but it was never successfully analyzed or revealed, and much of it doubtless still eludes us...For a brief generation in Athens, the ways of the gods, the ways of nature, and the ways of men came close to a common point: it seemed as if the arrests and fixations, the aberrations and perversions embedded almost from the beginning in the very stones of the ancient city might be overcome.*

*And it was not merely in sculpted figures that a new ideal of the human form, indeed of the fully developed personality at each of the climactic stages of life, had taken shape: that was but the crystallization of a more living moment that life itself had held in solution. In the generation that had thrown back the Persian invasion, a new idea of human wholeness took possession of this society and pervaded every life. In the activities of the polis, if not in all its architectural furniture, human nature suddenly rose to fuller stature. In two men whose overlapping lives span the fifth century, the new idea of wholeness, balance, symmetry, self-discipline became incarnate: Sophocles and Socrates. And not by accident was each in his own way a master of the dialogue; for it was by struggle and by opposition, not merely by symmetrical growth, that they rose to their fuller stature. Sophocles, the older, handsome in body and face, the leader of the dance, skilled in warfare as a general, carrying on through his tragedies the new form of the drama, itself suddenly released from ancient village ritual—here was such a man as Solon had first foreshadowed, in his detachment from all jealous preoccupations of power. Sophocles was the opposite of the archetypal specialist, the crippled, fragmentary man, molded by civilization to fill his little role and to serve with antlike devotion the needs of the hive. Just the contrary, here was a personality capable of facing life in all its dimensions, even in its furious irrationalities and obscure compulsions: at home in every environment, equal to every occasion, ready to assume moral responsibility for his choices, though the whole community might oppose him. “Single-handed or with the support of all.” Alongside Sophocles stands the contrasting figure of Socrates, likened in his old age to a Silenus, snub nosed, far from handsome, but with a magnificent physical frame and a constitution impervious to the rigors of war or climatic extremes; cool-headed in the midst of fighting, clear-headed in his cups, when others were reeling drunk: introvert and extrovert: capable of both solitary mental rapture and endless conversational inquiry. Like many other freemen, he was a stonecutter by training, and the son of two working people, a stonecutter and a midwife, but entirely at home in every part of the polis: an athlete among athletes, a soldier among soldiers, a thinker among thinkers. These men were but two outstanding representatives of the new city, the city that was latent as an idea but was never adequately realized in brick or marble. They were not alone, for they were surrounded by people of similar dimensions, figures like Aristides and Aeschylus, Themistocles, Thucydides. Euripides, Plato. By their very existence these spirits gave evidence of that sudden mutation which produced, among a few million people, within a space of less than two centuries, a far richer efflorescence of human genius than history anywhere else records, except perhaps in renaissance Florence... When this moment was over, buildings began to take the place of men... By the time Plato was ready to put the question [of how Athens was as rich in citizens as no other city had ever been] the original synergy had turned partly into a concentration of stone, and part of it was dispersed in the wastage of war: Plato’s own answer to the problem showed only the courage of desperation... he never suspected, apparently, that the Athens of Solon and of Themistocles was itself a greater school than any imaginary commonwealth he was capable of creating in his mind. It was the city itself that had formed and transformed these men, not alone in a special school or academy, but in every activity, every public duty, in every meeting place and encounter... As a result, the philosophers who followed Plato and Aristotle, if they still sought balance and fullness of life, no longer dared to seek it in the city. They betrayed their own creed by dodging their civic responsibilities or by turning to an idealized empire or a purely heavenly polity confirmation... The naive utopia to which Plato regressed would be a city in which Socrates would have remained a stonecutter, but Plato never realized that... Till now mankind has been saved from Plato’s dream by its technological innocence – and impotence. But we today, who have the means of achieving Plato’s ambition without yet having plumbed its horrible implications, would do well to pause and examine the prospect. If we continue in science and technology along the lines we are now following, without changing direction, lowering our rate of speed, and re-orienting our mechanisms toward more valid human goals, the end is already in sight. Cybernetics, medical psychiatry, artificial insemination, surgery and chemotherapy have*

given the rulers of men the power to create obedient automatons, under remote control, with just enough mind left to replace the machine when its cost would be prohibitive. The polite name for this creature is “man-in-space,” but the correct phrase is “man out of his mind.” Another century of such “progress” may work irreparable damage upon the human race. Instead of deliberately creating an environment more effective than the ancient city, in order to bring out the maximum number of human potentialities and the maximum amount of significant complexity, our present methods would smooth out differences and reduce potentialities, to create a state of mindless unconsciousness, in which most of man’s characteristic activities would be performed only by machines. Even if the infamous nuclear and bacteriological weapons that already threaten wholesale extermination remained unused, historic man, he who lives in cultural time and space, who remembers and anticipates and makes choices would disappear...

...Is the city of ...Plato and of beautiful-goodness [kalon-k’agathon] in which, as Anaxagoras said, mind “sets things in order”, and in which the forms of art mirror a super-mundane perfection—is all this an illusion? Did the forms of Phidias rise in this barnyard scattering of workshops and booths and cattle-pens and shrines and fountains, mid these mud-walled huts, hardly to be dignified with the name of houses? Is there no counterpart in the outer city to the order and clarity of the Greek mind? There is no better place to confront the paradoxical relation between the mind and the body through which it expresses itself ...than in the Greek polis, above all in Athens. One aspect of the order we find in the Greek mind was indeed passed to the city during the later Hellenistic Age; but what we find in the fifth century was something more deeply organic, closer to the quick core of human existence. That order had emerged as idea in the seventh and sixth centuries, a wild union of opposites, restriction and exuberance, Apollonian discipline and Dionysian delirium, rational intelligence and blind intuition, skyward flight and muddy tumble: the very opposite of all that one would now characterize as classical. The highest product of that experience was not a new type of city, but a new kind of man. For a little more than a generation—between 480 and 430 B.C., roughly, —the polis for the first time assumed an ideal form that distinguished it from all earlier villages and cities: an ideal form not primarily in stone but in flesh and blood. In a great succession of citizens the new urban order, the ideal city, became visible, transcending its archaic outlines, its blind routines, its complacent fixations. For the Greeks added a new component to the city, all but unknown to earlier cultures, dangerous to any system of arbitrary power or secret authority: they brought forth the free citizen. Like Sophocles’s lonely heroes, he was a king if not a god in his own right: acting alone and seeking by the exercise of his intelligence to “hold a hand uplifted over fate.” Whatever the city possessed the citizen considered as his own birthright: between citizens as between friends there were to be no secrets, no professional walls, no presumption of inequality. The freeborn citizen owed nothing to princely favor or to his economic or official function: he resumed the place he had once in village culture, that of being first of all a man, endowed with every human dimension, to whom every part of life was open and accessible. This at least was the ideal. And it is by its capacity to formulate that ideal—not by its failure to achieve it—that we still properly measure the Greek polis... The role of the polis was admirable: every part of the city had come to life in the person of the citizen...Never had the life of men in cities been so significantly animated, so varied and rewarding, never had it been so little blighted by external mechanisms and compulsions, as during the period I have sought briefly to characterize. Work and leisure, theory and practice, private life and public life were in rhythmic interplay, as art, gymnastic, music, conversation, speculation, politics, love, adventure, and even war, opened every aspect of existence and brought it within the compass of the city itself. One part of life flowed into another: no phase was segregated, monopolized, set apart. Or so at least it must have seemed to the full-fledged citizens, however doubtful the proposition might appear to their slaves or their womenfolk. In such a human constellation, temple ritual might turn into tragedy and the boisterous bantering and the rude horseplay of the marketplace might become satiric comedy; while the gymnasium, at first meeting place for athletes, would become in the Academy of Plato, in the Lyceum of Aristotle, or

*the Cynosarges of Antisthenes, the gathering place of a new kind of school, a true university, wherein learning became socially responsible, linked to a moral system that had become self-critical and rational. But that inner unification never quite produced an outward form that reflected and sustained in equal degree the life that had brought it into existence...despite the admirable role of the polis, the worship of that institution and that role was an obstacle to further development, for however great the goods Athens achieved, they could not remain transfixed into a static image of perfection. No human institution, be it polis or papacy, can claim its own being any ultimate perfection, worthy of worship...In the division that had taken place during the sixth century between natural philosophy, which considered the cosmos as a thing or a process apart from man, and humanistic wisdom, which considered man capable of existing in a self-contained world outside the cosmos, the older insights into man's conditions, truer if more confused, had been largely lost. Even in Socrates, at least in Plato's Socrates, the limitations of the worship of the polis became patent, just at the point where they should have disappeared. For exclusive preoccupation with the polis further widened the distance between the understanding of the natural world and the control of human affairs In the "Phaedrus," Socrates declares that the stars, the stones, the trees could teach him nothing: he could learn what he sought only from the behavior of "men in the city." That was a cockney illusion: a forgetfulness of the city's visible dependence upon the country, not only for food, but for a thousand other manifestations of organic life, equally nourishing to the mind; and not less, we know now, of man's further dependence upon a wider network of ecological relations that connect his life with creatures as obscure and seemingly as remote as bacteria, the viruses, and the molds; and ultimately with sources of energy as remote as the radiations from distant stars. Babylonian superstition was closer to the truth in its erroneous associations of the planets' movements and human events than was Greek rationalism in its progressive dissociation of man and nature, polis and cosmos. To know oneself, as Socrates advised, is to know that one is not a disembodied mind or a walled-in city dweller, but an integral part of an enveloping cosmos, glimmering at last with self-consciousness. Neither the Greek polis nor the Greek cosmos took the full measure of man: both were conceived in a static image that allowed for neither time nor organic development. By making the city their god, the Greeks generally and the Athenians particularly, lost hold of the greatest gift of divinity—that of transcending natural limitations, and pointing to goals beyond any immediate fulfillment...Though his years had witnessed an extraordinary burgeoning of human powers, the fifth-century citizen did not find a way of producing a city capable of continuing the process itself: he sought only to fit the mold already achieved. But the polis could not become a cosmos, and a cosmos that did not allow for change, for transcendence and transformation, could not produce a higher order in the city... For Aristotle, the ideal was not a rationally abstract form to be arbitrarily imposed on the community: it was rather a form potential in the very nature of the species, needing only to be brought out and realized...he did not overlook the role of time and the way he went beyond the limitation of using geometry like primitives used magic was that of a biologist, rather than a mathematician... which a future generation will perhaps consider a limitation of our days...Aristotle was not handicapped by the restricted conception of causality that 17<sup>th</sup> century physics imposed on modern thought, in order to keep all changes on the plane of the external and the observable...He was forced to use an abstract noun, entelechy, to describe the form-determining elements; thus he turned an observable process into an extraneous and unobservable entity. But Aristotle's static terminology should not lead one to overlook the familiar facts that it points to. To use the word "mechanism" when faced with the need to recognize a teleological process is to overlook the fact that machines are themselves exquisite examples of purpose...Though he brought to the discussion of the cities something that Plato lacked, a knowledge of the immense variety of species and an appreciation of the endless creative manifestations of life itself...neither Plato nor Aristotle had any just insight into the happy moment that Athens, and in some degree all other Greek cities, had lived through, from the time of Solon to that of Pericles: therefore their ideal cities made no provision for continuing and*

strengthening these creative forces. They had no vision of a wider polis, incorporating the ideal principles of Cos, Delphi and Olympia and working them into the generous complexities of an open society. Their ideal city was still just a small, static container, under the grim direction of the citadel...but on such terms the burgeoning mind of the actual polis would have withered and wilted. "It needs a whole society to give the symmetry we seek" observed Emerson. Aristotle and Plato sought this symmetry in less than half a society—not even a full polis but a class segment frozen in archaic image. Not Athens or Corinth, alone, not Sparta or Delos, could flourish apart from its neighbors. Nor indeed could any of the cities of Hellas embody the Greek ideal of life without calling upon men and ideas and institutions that no one could appropriate exclusively for itself. Still less could any single class achieve the noble symmetry these philosophers sought. As a result, the growing polis, in its flux and disorder, swelling beyond all previous bounds, did more justice to the ideal possibilities of urban society than did those utopian projections, for all their crystalline perfection. This failure to understand the dynamics of human development as a key to urban form was not overcome by any further progress in the natural sciences after Aristotle. Under tyrannous rulers it is safer to pursue the physical sciences than to study human nature and society. The Hellenic polis was arrested by another weakness: inability to understand the human contribution of the slave, the industrial worker, the foreigner, and the barbarian: that is to say, the rest of mankind...The notion that the whole community must share the active life of the city, as all the peasants shared the life of the village, did not occur to Aristotle any more than to Plato. The good life could be found only in noble leisure; and noble leisure meant that someone else must do the work. This exclusion of a large portion of city dwellers from citizenship partly accounts for the debacle of the Greek city. By keeping the majority of its inhabitants outside politics, the area of full citizenship, the polis gave them a license to be irresponsible. What was equally bad, it gave them no other occupation than self-promoting economic activity, and relieved that of any moral end or obligation even in those affairs they could govern. Thus it prompted the traders, in Plato's words, "to seek inordinate gains, and having people at their mercy, to take advantage of them."...Except the commercial cities of Ionia, which had thrown off the aristocratic customs of Homeric Greece...the Greek citizens rejected trade as a possible mode of the good life. Thieving and cheating, if we may judge from Homer, were not incompatible with the aristocratic virtues; but plain dealing, on the basis of value given and received, was treated as more ignoble than one-sided expropriation by forceful means. The Corinthians alone were sufficiently proud of their success as merchants to be exempt of this prejudice. This de-moralized money-making paved the way for other forms of demoralization. The Greek contempt for trade was self-defeating: the good faith and reciprocity needed in all forms of long-distance commerce, dependent upon credit, never spread from business to politics; indeed, just the opposite happened, for Athens turned herself into a ruthless exploiter of the helpless, and the systematic enemy of her economic rivals, at a moment when her own growth of population demanded a widening of the whole field of joint effort for the common good. In building up her empire, Athens used the strong-arm methods of the nobility, with an extra twist of civilized brutality, in order to claim exclusively as hers the surplus that should have enriched all of Hellas\*...The movement that had begun in fact with Socrates and his lower class follower, Antisthenes, to open up the best life possible even to the handicraft worker and give him the full benefits of spiritual growth, halted in thought as it halted in action...The goods that the Greeks had imagined and created were human goods, not limited in their origin or their destination to the Greeks alone. Plato might recognize, after his travel to Egypt, that the Egyptian priesthood had funded esoteric knowledge that surpassed any he had access to: but the fact is that other peoples—the Jews, the Persians, the Babylonians—had much to contribute to the Greeks, and it should have been possible to embrace this otherness without being looked upon as a renegade or a traitor. That the Greeks never repaired the error of slavery, that some of their best minds could not even admit that it was an error, shows how easily they submitted to arrest, how far they fell short even in

\*The repetitions seen here, above, and below, of course go to show how relevant it now is to learn history.

*their concept of democracy of the generically human... \*By making the city, the artifact they had themselves created into their god, the Greeks lost hold of the greatest gift of divine experience – the impulse and the capacity to transcend natural limitations. The invisible city, as yet only incarnated in a handful of great citizens, whose new lines of magnetic force had issued from Olympia, Delphi, and Cos, never assumed a more effective political and physical structure. While that city was still in fluid form, it had nurtured men of larger stature, of higher potentialities, than had ever before in such numbers, among such a small population. But when the moment to pass from individual ideation and incarnation to collective embodiment took place, the city, self-infatuated, returned to an earlier form, highly organized and ordered, sanitary, wealthy, even sumptuously beautiful; but sadly inferior to the inchoate polis of the fifth century in its capacity for creation... We have here perhaps an explanation of why the Greek idea of wholeness and beautiful-goodness, incarnated in great personalities who flourished during and immediately after the Persian War, never fully created a city in its own image. What took the place of such an image was the Hellenistic city: sanitary, orderly, well-organized, esthetically unified; but grossly inferior in its capacity for fostering creative activity. From the fourth century on buildings began to displace men... Except in the physical sciences, in the more quantitative scholarly disciplines, and in the production of material goods, nothing prospered in the post-Hellenic city. For as technological organization and wealth increased, the ideal purposes of the city no longer found expression in the daily life. Even the mind was starved, not for lack of food, but by its being overstuffed with depleted and sterile nutriment. The museum and the library took precedence over life and experience: academicism replaced the organic balance of the original academy: collection and classification became the chief avenues of intellectual activity. The proliferation of devitalized knowledge, knowledge treated as a substitute for responsible action, not as instrument of life, properly takes its name from the great metropolis of Alexander. “Alexandria” brought such knowledge to heights rivalled only by the suavely empty productions fostered by the great educational foundations of our own time. This sterile, academic knowledge, like a dangerous virus prudently killed and diluted, must, if we can judge by present experience, often give complete immunity against original thought or fresh experience for a whole lifetime. Yet, as with various other features of the Hellenistic city, something permanently valuable – a patience, an order, a discipline, an ability to cope mechanically with large quantities – was passed on through the devious channels of classical scholarship to later cities in Western Europe. But quantitative expansion was not confined to the market or the museum: every part of the city underwent the same process. The streets grew longer and wider, the buildings bigger, the external regimentation became more oppressively evident. But the more effectively the centralized controls and beneficent handouts of the great empires worked, the more plainly did the Greek city depart from its original premises and – what is more important – its original promise. Whatever it was, after 300 B.C. the polis no longer was internally strong enough to challenge, even in thought, the political oppressions, the class divisions, and the irrational sacrifices, the futile war and pillage and destruction, that characterized the ancient city... Doubtless the physical structure of the Hellenistic town improved as technological facility increased: Archimedes’ feat of destroying the enemy’s ships by using the sun and a mirror to set fire to their sails may serve as a symbol of the kind of ingenious activity that began to pervade this fading classic culture, whilst it kept repeating the old myths and going through the old motions, ever more empty, for a full thousand years. But to the vacancy and triviality of the life there is little doubt. The old polis was dead. Nightmarish fears and superstitious auguries overwhelmed men at the very moment the sciences were becoming more rigorous in their method and ever larger parts of the physical world seemed “under control”. We have seen the same dark fantasies rising under similar conditions in our own time.*

*...The outward form of the Hellenistic town hardly betrayed a hint of what was going on below the surface of its life. For a counter-movement of the spirit, challenging all the assumptions of*

*\*The next few of Mumford’s thoughts illuminate the previous by both extending and recapitulating them.*

civilized power, had been gathering headway from at least the sixth century. This movement arose in the classes that the old polis had excluded from citizenship; that is, among women, slaves, and foreigners, to say nothing of disaffected and alienated citizens. As the common life of the polis, apart from spectacles, became emptier—and perhaps the “spectacle” was itself the emptiest of all manifestations—a new life sprang up, private, hidden, in clubs, friendly societies, burial groups, fraternities: above all in those secret congregations that met together for the worship of Bacchus, god of the corn and the vine, and Orpheus, god of the lyre, or later still, the more ancient Phrygian goddess of sex and fertility, the Great Mother herself, a carry-over from matriarchal days. Most of these clubs, according to W.W.Tarn, were small, a membership of even a hundred was uncommon; they were usually grouped around a small temple, and were apparently, after 200 B.C., often family associations, to perpetuate the family memory. With the polis in dissolution, these clubs formed, as it were, a private polis that served the needs of excluded foreigners and even sometimes of slaves. The old shrines and temples with their daylight rituals and their bloody sacrifices were not for these new cults. The mystery religions, at first no doubt houseless, meeting far outside the city on the wooded slopes of mountains, finally brought into existence a new urban form, an enclosed hall, whose darkness corresponded to the darkness of the underworld from whence Bacchus was reborn, where Orpheus sought Eurydice. This was no longer a temple, maintained by a priesthood, but a meeting house (synagogue) built to enclose a congregation. Those who were purified, and who believed in the new god, were included into the mysteries and were saved: that is, they formed a new polis, more universal than any empire, but a polis “not of this world.” No matter how hard life pressed on the believers now, they had the promise of a life beyond the grave, a real life, not as leaden shadows in a Plutonian world. Thus the participants in the mysteries seem to have escaped the limitations of the old polis: each found himself the member of a wider society that recognized neither temporal nor geographic boundaries. A political wisdom that the wisest members of the ancient city lacked, a wisdom unknown to Thucydides or Aristotle, to Socrates or to Plato, became the working creed of the mystery religions. The classes and groups that had been rejected by the polis became the leading members of the Great Society. But apart from their formal meeting places, like the great Telesterion, or “Hall of the Mysteries,” in Eleusis, the home of one of the new cults, the new polis existed only in the mind. Those who sought salvation renounced the earthly city: they put behind them the transitory and corrupt body of the polis, courting only those moments of ecstasy or illumination that might offset a lifetime of frustration. After the sixth century B.C. this new spirit began to express itself everywhere, in new religions and new philosophies, alike in China, India, Persia, the Near East, and the West: whatever their individual accents, these axial ideologies revealed a profound disillusion with the fundamental premises of civilization: its over-emphasis on power and material goods; its acceptance of grade and rank and vocational division as eternal categories; and along with this, the injustice, the hatred, the hostility, and the perpetual violence and destructiveness of its dominant class-structured institutions. But those who sought to reverse the polarities of civilized life could not do so and yet remain within the city that had first contained and increased the potential of all those destructive powers. To achieve a new life, the holders of the new vision must desert the city: they must either establish themselves in the rural hinterland, in lonely forest or hillside cave, at least on the outskirts of the city, in gymnasia or in garden colonies, a few dozen or a few hundred, hardly enough to form even a village. Witness Pythagoras and Epicurus, witness the followers of Lao-tse, of the Buddha, of the Master of Righteousness. If they enter the city, they must form a secret society and go underground in order to survive. The movement that resulted in the creation of these new religions and cults must be interpreted, I submit, as a profound revolt against civilization itself: against its lust for power and wealth, its materialistic expansion and repletion, its degradation of life to the servitude of the body, its degradation of life by vacant routine, and the misappropriation of higher goods of life by a dominant minority. All this began far earlier than the sixth century B.C., for the emptiness of civilization that had no other goals than its own

*existence had become visible, as I have pointed out, long before: Vanity of vanities, all is vanity under the sun. The spirit expressed in the new religions had found utterance as early as the Assyrian tablet on Utnapishtim, Noah's alter ego: "Give up possessions, seek thou life: Forswear [worldly] goods and keep the soul alive." Since the new fraternities and the religious groups had no part in the city and could not keep either their possessions or their city secure, they were driven, in compensation, to make the soul their chief object and to retain only so much of the city as would serve their cult. The polis, now, shrunk to a church, at last could in the great dispersion of emigrants, refugees, colonists, expand beyond the city's walls. Many centuries must pass, indeed, before the new religions could overcome their original alienation from the city and all its works. And an even longer time must pass before they seek even in theory to overcome the dualism between body and spirit, between the earthly and the heavenly city, which lay at the bottom of both this alienation and this special system of salvation. So before the prophetic religions and mysteries leave their imprint on the city, the scene shifts. Rome conquers the Hellenistic conquerors, and overcomes the surviving free or semi-free cities of the Mediterranean and the Aegean seas. In the Roman world the principles of Hellenistic town planning were carried further, and mingled with other urban elements derived from remoter municipalities in Africa and Asia. The muscular-cerebral culture of the Greeks gave way to the massively visceral culture of the Romans: the lean Attic diet was replaced by daily feasts on the most colossal scale. What the oral Greeks lacked almost entirely in their cities in the best Hellenic days, the anal\* Romans acquired in suffocating abundance. What the Greeks originally had in abundance, the gifts of improvisation and spontaneous creativity, qualities as visible in the small dimensions of an epigram or a tombstone as in an epic or a temple, the costive Romans could hardly show at all, at least after the death of the Republic, except by vulgar imitation and inflation.*

*...The Roman Empire, the product of a single expanding urban power center, was itself a vast city-building enterprise; it left its imprint of Rome on every part of Europe, Northern Africa, and Asia Minor, altering the way of life in old cities and establishing its special kind of order, from the ground up, in hundreds of new foundations, "colonial" towns, "free" towns, towns under Roman municipal law, "tributary" towns: each with a different status if not a different form...Even after the city of Rome had been sacked in the fifth century, the poet Rutilius Namatianus could say, with undiminished admiration: "A city of the far-flung earth you made." That tribute was well-earned by Rome; for at the height of its protective power, old walls fell into disrepair or were disregarded in the further building of its cities, while new cities were built without walls. Under the empire, for perhaps the first time since the foundation of cities, Western mankind had a brief glimpse of what it would be like to live in a completely open world, in which law and order everywhere prevailed, and a citizenship, in every sense, was the common human heritage.....With Rome's skill in highway-building in mind, one turns to the new towns to see if it produced any modifications in the standard... plan: all the more because traffic jams became the subject for municipal regulation, first in Rome in the first century B.C., then in the provinces. One might have thought that experience would have suggested the need for a sharp differentiation between main avenues and minor service streets, or even that the Roman engineers aware of Rome's traffic congestion, which was spreading to the provincial towns, would have anticipated Leonardo da Vinci's proposals for separating wheeled traffic routes from pedestrian ways, carrying them on another level... But there was, as far as can yet be discovered, no bold departure for the Greek precedent...But as for colonnaded streets, with the same sort of mixture of private and public buildings as one finds today on Piccadilly or Fifth Avenue, Libanius, in his oration on Antioch around A.D. 360, puts the case for them in so many words: "... Well, it seems to me that the pleasantest, yes, and the most profitable side of city life is society and human intercourse, and that, by Zeus, is truly a city where these are most to be found. It is good to talk and better to listen, and best of all to give advice, to sympathize with one's friends' experiences, \*"Oral", "anal" are obviously meant in the sense of the Freudian jargon!*

*sharing their joys and sorrows and getting sympathy from them—these and countless other blessings come of a man’s meeting his fellows. People in other cities who have no colonnades before their houses are kept apart by bad weather; nominally, they live in the same town, but in fact they are as remote as if they lived in different towns...” But something else, equally “modern,” characterized Antioch and distinguished it from Rome: street lighting...Unlike Rome where even at the height of the Empire the streets were dark at night and people ventured forth only at the risk of their lives, exposed to lower-class cut-throats and roistering upper-class hoodlums, as in the eighteenth-century London...in Antioch , according to Libanius’ testimony, “...night differs from day only in the kind of lighting. Trades go on as before; some ply their handicrafts, while others give themselves to laughter and song.”...One notes that it is with the multiplication of street lights and show-window lighting that the new commercial spirit announced itself in London early in the nineteenth century...Did such night lighting first encourage the mid-afternoon siesta in the hot southern city, or did it merely impose longer hours on the proletariat?...To find what Rome stood for , at both its physical best and its human worst, one must center attention on the city of Rome itself. Here is where the new scale was established: here is where the soldier and the engineer joined forces, not just to create walls and moats, but embankments and reservoirs, on a cyclopean scale. Here is where, in its great public structures, Rome attempted, not merely to cope with the large quantities of people it had brought together, but to give to its otherwise degraded mass culture an appropriate urban guise, reflecting imperial magnificence. To investigate this contribution one must fortify oneself for an ordeal: to enjoy it, one must keep one’s eyes open, but learn to close one’s nose to the stench, one’s ears to the screams of anguish and terror, one’s gullet to the retching of one’s own stomach. Above all, one must keep one’s heart on ice and check any impulse to tenderness and pity, with a truly Roman stolidity. All the magnitudes will be stretched in Rome: not least the magnitude of debasement and evil. Only one symbol can do justice to the contents of that life: an open sewer. And it is with the sewer that we shall begin. Surely it is no accident that the oldest monument of Roman engineering is the Cloaca Maxima, the great sewer, constructed in the sixth century on a scale so gigantic that either its builders must have clair-voyantly seen , at the earliest moment, that this heap of villages would become a metropolis of a million inhabitants, or else must have taken for granted that the chief business and ultimate end in life is the physiological process of evacuation. So sound was the stone construction, so ample the dimensions, that this sewer is still in use today. With its record of continuous service for more than twenty-five hundred years, that structure proves that in the planning of cities low costs do not necessarily denote economy; for if the utility needed has been soundly conceived and built, the final costs , extended over its whole prospective lifetime, are what really matter. On these terms the Cloaca Maxima has turned out to be one of the cheapest pieces of engineering on record...Strabo remarked that while the Greeks attended chiefly to beauty and fortification, to harbors and to fertile soil, in planning their cities, the Romans were conspicuous for the pavement of streets—... the pedestrian in Pompeii had even elevated sidewalks and stepping stones across the traffic...— the water supply and the sewers...Rome’s capital achievements in more than one department might be summed up with words once used by a great scientist about a flatulent architectural interpretation of his highly revolutionary concepts of space and time: “Poorly digested but splendidly evacuated.”...As frequently happens in the vulgar applications of engineering, the physical benefits were limited by a certain poverty of imagination in carrying them through. The superabundant engineering was inadequate because —as in so much imposing American highway construction today — the human end in view was too dimly perceived or too reluctantly accepted as a final guide. Thus just as our expressways are not articulated with the local street system, so the great sewers of Rome were not connected with water-closets above the first floor. Even worse, they were not connected to the crowded tenements at all...Though the mass of the population might by day patronize at a small fee the public toilets in the neighborhood, they deposited their domestic ordure in covered cisterns at the bottom of the stair wells of their crowded tenements, from which they would be*

*periodically removed by the dung-farmers and scavengers...But the load of excrement from this vast slum population must have been greater than the nearby land could bear; for there are records of open sewers and cess trenches in residential quarters, which were finally covered over, though not removed, at a later day...By its very bigness and its rapacity, Rome, defeated itself and never caught up with its own needs. There seems little doubt that the smaller provincial cities were better managed in these departments, just because they had not overpassed the human measure...In the heyday of the empire Rome must have numbered around a million people...If the disposal of fecal matter in carts and in open trenches was a hygienic misdemeanor, what shall one say of the disposal of other forms of offal and ordure in open pits? Not least, the indiscriminate dumping of human corpses into such noisome holes, scattered on the outskirts of the city, forming as it were a "cordon malsanitaire". Even without this invitation to typhoid, typhus, and cholera, the prevalence of malaria had made Rome and the surrounding campagna one of the most unhealthy areas in the world, right through the nineteenth century...To make up for lack of health-department statistics, a large number of altars and shrines dedicated to the Goddess of Fever testify to the chronic threat of malarial infection; while the repeated onslaught of desolating plagues even in the palmiest days of imperial glory, is on record, with thousands dying in a single day...(23 B.C. and A.D. 65, 79, 162)...As an emergency measure to meet mass inhumations, there might have been some justification for these pits; but as a matter of everyday practice they testify to Rome's chronic contempt for life. The quantity of dead matter that was dumped every day might indeed have frightened an even better technical organization than the Romans ever developed; for when the great gladiatorial spectacles were put on, as many as five thousand animals, including creatures as large as the elephant and the water buffalo, might be slaughtered in a single day, to say nothing of the hundreds of human beings who were likewise done to death in the arena. So incredible is the evidence that I prefer to quote directly one of the scholars who examine it first hand, the archaeologist Rodolfo Lanciani "It is hard to conceive ...an assemblage of pits into which men and beasts, bodies and carcasses, and any kind of unmentionable refuse, were thrown into in disorder..." says Lanciani...and he remembers "I was obliged to relieve my gang of workmen from time to time, because the stench from that putrid mount, turned up after a lapse of twenty centuries, was unbearable...Imagine times of plague when the pits were kept open by night and day, and when they became filled up to the mouth ...the level of the adjacent streets was reached..."... Under the provident Augustus, at the beginning of the Empire, inhumation—...hardly a decent burial...—was substituted by cremation...But this did not solve the other serious problem, that of garbage disposal...While a handful of patricians, about eighteen hundred families, occupied large private mansions, often with ample gardens and houses big enough to contain a whole retinue of free servants and slaves, many of the houses veritable palaces, the members of the middle classes, including officials, merchants, small industrial employers, probably lived in apartment houses ...that were decent but the rent, in Caesar's time was four times that of other towns in Italy... The great mass of the proletariat, in dire contrast, lived in some forty-six thousand tenement houses, which must have contained, on the average, close to two hundred people each...The houses of the patricians were perhaps the most commodious and comfortable houses built for a temperate climate until the twentieth century...But the tenements of Rome easily take the prize for being the most crowded and insanitary buildings produced by Western Europe until the sixteenth century, when site-overfilling and room-overcrowding became common from Naples to Edinburgh... These buildings, forming huge blocks, called insulae or islands, were unheated, unprovided with waste pipes or water closets, unadapted to cooking, indecently over-crowded, had an undue number of airless rooms, rose as high as ten stories, offered no safe exit from the frequent fires that occurred, "shook with the wind", collapsed easily, were allowed to be rented by rapacious landlords at whatever rent they could extort from their tenants and were the depressive shelters that matched the equally depressive meagerest ration that would keep his body alive, that the "free citizen" of Rome enjoyed ...at a time Rome was boasting of its world conquests...As Rome*

grew and its system of exploitation system turned more and more parasitic... the main population of the city was undergoing daily indignities and terrors that coarsened them and brutalized them and in turn demanded compensatory outlets. These outlets carried the brutalization even further, in a continuous carnival of sadism and death. But before examining the chief recreations of the proletariat, by which they relieved their own sufferings by lasciviously gloating on people made to endure even worse tortures and degradations, let us behold Rome at its best. For Rome had more human attributes; and to the masses it exploited, it presented, even in its worst moments, astonishing glimpses of civic beauty and order, seemingly untainted by violence and greed... The architectural counterparts of these attributes were the forum, the vomitorium, a name peculiarly apt in its reflection of the character and practices of the Romans\*, and the public baths... The Bath was, perhaps, Rome's most characteristic contribution both to urban hygiene and to urban form. In the history of the great baths one reads the condensed history of Rome itself. This people began as a nation of sturdy farmers, close to the earth, abstemious, hard-working, strong-muscled delvers and hewers, becoming through their very capacity for enduring hardship and taking blows the strongest people in antiquity. But their very strength and their unflagging industry turned them into a nation of grabbers and cadgers, living off neighbors, converting their mother city into a gigantic mouth and stomach sucking in foods, booty, works of art, slaves, religions, gods, scraps of knowledge, turning every refinement of culture, every decency of daily life, into something at once lurid and brutal, sensational and disgusting, pretentious and meaningless. The bath as it was known to Scipio Africanus was a pool of water in a sheltered place where the sweaty farmer made himself clean again... As early as the second century B.C. the habit of going to public baths was established in Rome; and by 33 B.C. Agrippa introduced free public baths in the form that this institution was going to take: a vast enclosure, holding a great concourse of people, one monumental hall leading to another, with hot baths, tepid baths, cold baths, rooms for massage and rooms for lolling about and partaking of food, with gymnasia and playfields attached, to serve those who sought active exercise, and libraries as well, for the more reflective or more indolent... comparing, in its grand scale and in its combination of different facilities, with the modern American shopping center, though not particularly to the latter's advantage. But whereas life for the everyday American, under a compulsive economy of expansion, is essentially a gadget-ridden, goods-stuffed emptiness puffed up for profit, in Rome acquisition was largely restricted to the upper classes and their financial agents, while for the majority life was largely a matter of finding surrogates and compensations at public expense. What began as a farmer's necessity for hygiene became a ceremonious ritual for filling the vacuity of an idle day... The religion of the body was as near as the Romans ever got to religion, once they lost their original gods... and the public baths was its temple. An ideal environment for lollers spongers, voyeurs, exhibitionists—body coddlers all... In the bath the patron got over the debauch of the night before and made ready for the coming one... Even in modern times, the last vestige of the Roman bath, the so-called Turkish bath, maintained its ancient association with drunkenness and sexual debauchery... Certainly... the habit of cleaning the body thoroughly possibly helped to diminish the hygienic and sanitary misdemeanors of the city in other quarters, while the spatial magnificence of these buildings in itself was an aid to psychological composure, which offset in some degree the drab hurdle and muddle of domestic existence... Those who built up the power of Rome were driven to widen the frontiers of the Empire; their fears of invasion as well as their mounting commitments to protect their supply lines and their sources of food and raw materials encouraged a dream of universal political order. Under the Pax Romana, that dream endured for about two centuries. To the extent that this peace was real, the conquest could be partly justified, even to the conquered; for a universal society, free from war or the menace of war, based on the justice, not on oppression and terrorism, had never yet been achieved among men. It was for this that thousands of good Romans had plotted and schemed, had fought battles, had held distant frontier posts, had endured

\*A room by the dining hall where one could vomit before eating more food.

voluntary exile, and had filled their days with the chores of public office: administrative regulations, legal codes, tax lists, property records. These Roman officials did their duty despite hardship and boredom, remembering in their dying hours the cold but comforting thoughts of Zeno of Citium, or Terence, or Virgil... "I am human and nothing human is foreign to me". As an empire, Rome had succeeded better than Athens, which had never been strong enough to protect, even for a generation, the areas it exploited. Yet Rome had not in fact succeeded. For the city of Scipio's and Cicero's dreams vanished even before the sleepers awoke: in fact, it had never existed. Rome's justice, Rome's peace were all built on a savage exploitation and suppression... The empire that had pushed back the barbarous tribes that threatened its borders, had erected a greater barbarism at the very heart of its dominion, in Rome itself. Here the prospect of wholesale destruction and extermination from which the city had largely escaped, thanks to Roman arms, came back in the acting out of even more pathological fantasies. Predatory success underwrote a sickening parasitic failure... There are many precedents of this in the animal world. In nature, this parasitism is often as ruinous to the host as it is to the creature that batters on him: if the latter loses the capacity for free movement or self-maintenance, the host, in turn, becomes dependent and must exert himself further to keep the seemingly weaker creature going. The rich and the powerful often found themselves in this position: the decent living that they refused to give to the lower classes on economic terms, they were forced to yield in outbursts of indiscriminate public largesse... In Rome, a whole population, numbering hundreds of thousands, took on the parasitic role for a whole lifetime; and the spreading empire was turned into an apparatus for ensuring their continued existence, supporting them "in the state in which they were accustomed," by shamelessly bribing the army that alone guaranteed the flow of tribute, slaves, captives, and wild beasts, which poured incessantly into the maw of this insatiable city. So vital are the autonomous activities of the organism, so necessary are they for keeping it whole, that any surrender of independence has deep psychological repercussions. Particularly, the infantile feeling of dependence prolonged into adulthood, awakens self-distrust and self-hatred, which exacts a suicidal desire for revenge. The impotent develop a craving for virtual, if not active, power while those who have not lived their own lives experience a violent desire to impose a humiliating death on others. To atone for the limitations of a parasitic existence, the parasite himself transposes the values of life, so that all his acts take a negative form. The hatred the parasite feels for himself he projects upon suitable victims and scapegoats, covering them with his own despair, his own self-loathing, his own desire for death. By giving a municipal form to its parasitism, indeed by giving it a solid collective basis in the dual handout of bread and circuses, Rome solidified the fatal errors of its political exploitation of other lands and cities. Ironically, in yielding to parasitism it forfeited at the same time the predatory vitalities that had made it possible. Sinking under the soporific illusions of the Pax Romana, the old patrician leaders lost their grip. Even outside Rome, self-government gradually disappeared under the Empire: the once autonomous municipalities were governed by local magnates, representing the landed or the commercial interests, nominally servants to the state, who kept themselves and their kin in power by the same brazen methods that had been evolved in Rome. The peace and justice that the Romans boasted had about the same degree of reality as the "competition" that operates under the current monopolistic control and forced consumption imposed by American business. It was a cold sham... The existence of a parasitic economy and a predatory political system produced a typically Roman urban institution that embraced both aspects of its life and gave them a dramatic setting: the old practice of the religious blood sacrifice was given a new secular form in the arena... In the pursuit of sensations sufficiently sharp to cover momentarily the emptiness and meaninglessness of their parasitic existence, the Romans took to staging chariot races, spectacular naval battles set in artificial lakes, theatrical pantomimes in which the strip tease and the lewder sexual acts were performed in public. But sensations need constant whipping as people become inured to them: so the whole effort reached a pinnacle in the gladiatorial spectacles, where the agents of this regime applied a diabolic inventiveness to human

*torture and human extermination. The inhabitants of the modern metropolises are not psychologically too remote from Rome to be unable to appreciate this new form. We have our own equivalent in the daily doses of sadism that follow, like contaminated vitamin capsules, our deficient commonplace food: the newspaper accounts, the radio reports, the television programs, the novels, the dramas, all devoted to portraying as graphically as possible every variety of violence, perversion, bestiality, criminal delinquency, and nihilistic despair. So, to recover the bare sensation of being alive, the Roman populace, high and low, governors and governed, flocked to the great arenas to participate in person in similar entertainments, more vividly staged, more intimately presented. Every day, in the arena, the Romans witnessed in person acts of vicious torture and wholesale extermination, such as those Hitler and his agents later devised and vicariously participated in—but apparently lacked the stomach to enjoy regularly in person. (So this was what Mumford meant that to understand Rome one must arm oneself with Roman apathy and close one’s nose, and that Rome did not only construct a great sewer as an architectural innovation but should also be symbolized by an open sewer. Before standing some more (just a little more) of such stuff, let us note something that Mumford also teaches us about how he studies human nature along such great lengths of its potentialities, something that also is not unrelated to how he makes his predictions (and about which he taught us something some pages ago) : like astronomers take snapshots of different stars at different stages of their development and order them in a way that looks as if they see the history of one and the same star, and thus can know the past of the stars they now see and also predict their future, Mumford, like some archaeologists too, looks at different cities and different civilizations (not in stages, however, but from their beginning to their end—or death) and gets an idea about the courses of human potentialities (and he explicitly states somewhere that the only time machine or diviner’s crystal bowl that exists is knowledge of history). Let’s also note that although the course of thought and images of Mumford runs at, so called, “Koyaanisqatsi speeds” (and although as corresponding soundtrack of the Philip Glass type, the soundtrack of the original Koyaanisqatsi would fit fine, at least to a first approximation) yet at no point does Mumford’s train of thought and image-making create a confusion and dimness blowing us out through the fusion of superposed images as it happened in Koyaanisqatsi itself (mainly because his thoughts act as to connect the images logically. With only images and with such thoughts absent, how many of us realized, with any permanence lasting for more than a week, that the scenario of Koyaanisqatsi about “what a Hopi Indian sees if, sitting on the verge of a cliff in the desert, he lets his mind travel over the desert and over the city” said the same as what Mumford says? OK, maybe it was not only said in images and without words but also “understood by us in images and without words” as another idiom goes. OK, maybe this too did help in something, but, admittedly, it also helped in reminding us the way in which we also can see without understanding them, not just images in films but also images of the real world itself. While the way Mumford’s mind flies over human history (in flights to be envied even by those who called their own such flights “recognitions of the spirit by itself” even without having reached conclusions of one tenth of that clarity) is accessible to the comprehension of everybody (even more accessible than the way of the film). We of course mean that the content of what Mumford writes and gives us ready to read is easily accessible to comprehension upon reading. We do not mean that it is easy to comprehend and read civilization itself (and not just a book about it) like Mumford himself does and writes about!) OK, let’s go back to the subject of Rome’s end:)*

*...Even before Rome had changed from Republic to Empire, that city had become a vast collective torture chamber...So thoroughly was Rome committed to this evil that even the adoption of Christianity as the official religion of the State did not do away with the practice. When the Vandals were hammering at the gates of Hippo, Augustine’s city, the groans of the dying defenders on the wall mingled with the roar of the spectators in the circus, more concerned with their day’s enjoyment than with even their ultimate personal safety. With their taste for extermination so deeply developed over many centuries, it is no wonder that the Romans thought*

*Greek athletics a little effeminate and uninteresting...The life that had taken form in Rome after the suppression of the slaves' rebellion under the Gracchi and the vanquishment of its great commercial rival, Carthage... had internally rotted. From the first century B.C. Rome entered those stages of urban existence that Patrick Geddes characterized as "parasitopolis" and "patholopolis": the city of parasites and the city of diseases. Thus Rome became a container of negative life: life turning against itself in perverse and destructive activities. In this, Rome perpetuated and enlarged the evils to which all civilizations seem to expose themselves; for it found an architectural form and a public ritual that favored the constant expression of these negations. Like our own preparations for nuclear and bacterial extermination, this form gave an acceptable "normal" outlet to what were otherwise unspeakable and privately inexpressible psychotic acts. In a disintegrating civilization the sanction of numbers makes madness and criminality "normal." Affliction with the universal disease then becomes the criterion for health. The economic basis of this sadistic ritual was the fact that the proletariat of the city of Rome was supported by a dole: that is, by regular handouts to about 200,000 people of bread issued from public storehouses in various parts of the city. The temptation to lead an industrious life, with the hope of improvement in economic status, was weakened, especially in favored Rome itself, by the fact that the chief needs of existence, like bread and circuses, were available gratis, or in the case of baths, nearly gratis, to the populace. To make attendance at these spectacles even easier, as early as the reign of Claudius, 159 days were marked as public holidays, and as many as 93, a quarter of the whole year, were devoted to games at the public expense. Vast fortunes were spent on staging even a single one of these events. This was the popular justification for the rapacity of the rich and the rapine of the military leaders...New, unexpected, holidays were created to celebrate a victory and, far from this habit's being curbed when Roman power began to fail, the number of red-letter days steadily increased. By A.D. 354 there were 175 days of games, almost twice the number as under Claudius, while the total number of public holidays came to two hundred, or more than half the year. No body of citizens, not even Athenians at the height of their empire, ever had such an abundance of idle time to fill with idiotic occupations. Even mechanized United States, with the five-day week\*, cannot compare with Rome; for after the hour of noon, in addition, the Roman workers, who had doubtless risen at daybreak, suffered no further demand on their time. The transformation of the active, useful life of the early republican city into the passive and parasitic life that finally dominated it took centuries. But in the end, attendance at public spectacles, terrestrial and nautical, human and animal, became the principal occupation of their existence; and all other activities fed directly or indirectly into it. Just as today "real life", for the millions, exists only on the television screen, and all immediate manifestations of life are subordinate, accessory, almost meaningless, so for the Roman the whole routine of the spectacle became a compulsive one: The show must go on! Not to be present at the show was to be deprived of life, liberty, and happiness. Seneca, the teacher and companion of young Nero, regarded his own presence at the gladiatorial games as nothing less than an affliction of the soul; but he went. The habit of resorting to the spectacles regularly was something that even the most sadly sane of Roman emperors, Marcus Aurelius, could not break without fear of hostile public response. It was dangerous for the Emperor to show, even by his absence, his personal distaste. The need for such mass entertainment became imperative in proportion to the futility of the rest of existence. Even the intellectual life of Rome, never acute as those of the Greek cities, betrayed a similar inanity and emptiness. Though Rome did not go so far as to invent the quiz show beloved by television audiences, people became interested in the same kind of vacuous questions: How many men rowed in Aeneas' galley? or what kind of food did Scipio have for breakfast before he conquered the Carthaginians?.....The theater departed from original semi-circular plan, to a complete circle. With that change, the old drama in the Greek style gave way to a form of opera, dependent upon spectacular effects, and the opera evolved into a pantomime –doubtless*

\*Let's remind ourselves that this was written by Mumford in 1961. Of course now, and since a long time actually, this would be said about Europe too.

necessary for an audience too big to hear words clearly in the open air...it was here that the Roman mastery of engineering problems perhaps reached its height; it was here that the Roman delight in quantitative achievement conceived an architectural form whose very success depends upon mass and scale, with the spectators ranged, tier upon tier, in a steeply angled ascent...The characteristic institutions that helped make the Hellenic city memorable, the gymnasium and the theater, derived ultimately from a religious source, the funerary games, the springtime and harvest rituals. One may say the same of Rome, but with a difference. In Rome, tragic death, religiously conceived, evoking pity and sober introspection, turned into mass murder, spewing unlimited terror without a saving touch of pity; while, by the same token, the healthy bawdiness of the old Attic comedy, with all its coarse sexual humor, became an obscene toying with the collective genitalia, in which impotence resorted to sadism to counterfeit and exacerbate sexual desire. In the Roman spectacle, even honest animal impulses were deformed and defiled...The Romans gave the gladiatorial games a more utilitarian turn by employing the deadly contests as a popular means for the public punishment of criminals, at first presumably as much for an admonitory deterrent as an enjoyment. Too soon, unfortunately, the ordeal of the prisoner became the welcome amusement of the spectator; and even the emptying of the jails did not provide a sufficient number of victims to meet the popular demand...The original excuse that justified substituting the gladiatorial games—with their chances of a reprieve—for the sullen execution of criminals was overwhelmed by the mass demand for inexorable murder, no matter who might be the victim...As with the religious sacrifices of the Aztecs, military expeditions were directed toward supplying a sufficient number of victims, human and animal. Here in the arena professionals, thoroughly trained for their occupation, degraded themselves, and wholly innocent men and women were tortured with every imaginable body-maiming and fear-producing device for public delight. And here wild animals were butchered, without being eaten, as if they were only men...Not the least popular of these horrors was the chain killing, in which a single victim was appointed to be killed by another, who in turn was disarmed and killed, and so on down the line. The later use of Christian maidens as special offerings in the spectacle gave then an additional fillip: that of innocent virginity, being stripped naked before being thrown to the lions. In strict justice, let me add that it is on record that the crowd demanded the release of Androcles, when the lion from whose paw he had once extracted a thorn refused to eat him. Such an exhibition of sportsmanship was far too rare to be passed over even now...The arena and the bath were, in fact, the new Roman contribution to the urban heritage, one contaminating it, the other purifying it...These two forms came into existence together and vanished together; and in their passage they absorbed interests and energies that might have gone, if they had been more beneficently directed, into the replenishment of the common life and the restoration of the autonomous activity. What a grip the gladiatorial shows held one may gather from the fact that Constantine, who dared to make Christianity the official religion of the Roman State, did not abolish the spectacles, not even the gladiatorial games. At most, in 326, he terminated the throwing of the criminals to the beasts; and it was not until 404, six years before the barbarian armies of the Alaric sacked Rome, that gladiatorial combats were ended by Honorius. By that time the old lights of the classic world, one by one, were going out. In 394, the last Olympic games were held; and in 537 water ceased to flow in the baths of Caracalla, though the cartloads of wood for heating the water had ceased to come in regularly for many years before. Even more significantly, the greatest contribution made by Greece to this otherwise over-corporealized life, the School of Athens, was closed in 529. So the old Hellenic culture of the well-minded body and the fully embodied mind, and the Roman culture of the largely mindless body, servile to its own sensations, parasitic upon its own power, both vanished together. But the doom of the Roman way of life...must have been visible at a much earlier date in the amphitheaters for those who had eyes to see. As daily life itself became more grim...and death could no longer be confined to the circus...those who were awake to its realities or sensitive to its evils must have shrunk from these ugly diversions...leaving their vacant seats visible in the arena, with ever-widening gaps as the

population itself diminished in number. Parasitopolis had become Patholopolis; and even further, Patholopolis had turned into Psycho-patholopolis, with a Nero or a Caligula as absolute rulers. That Patholopolis was beyond saving, even when it turned to Tyrannopolis, and sought to achieve security and continuity by fixed status and fixed residence. The mere momentum of habit, the inertia of numbers, increased the velocity of its downward descent. "Sauve qui peut!" Only one further stage of city development remained, and that came soon: Necropolis, the city of the dead. By the fifth century the show was over at the center, though it went on for another thousand years on the eastern fringe of the Empire, where Byzantium, by an immense effort of will, sufficiently modified the contents of Roman life to preserve its institutions in a state of carefully arrested development—notable chiefly for improvements in the military arts. Some of that art and life still is visible in Rhodes. But when the amphitheaters became only empty shells, the old performers did not suddenly disappear. You would find them straggling over the highways of this old Roman world, stopping at a barbarian court, drawing a crowd at a fair: the weight-lifter, the acrobat, the daring horse-back rider, the man leading a bear. As an after-image in the European mind, perhaps in the living linkage of the flesh, from generation to generation, handing on their arts from parents to children, sometimes greatly venturesome, but no longer committed to death, the old circus folk perhaps continued their play. The monks' chronicles would not notice them, nor, if aware of their existence, even be able to identify them. But as shadow or substance, the circus remained in existence and eventually came back to life in the modern city. Expunged of their Roman sins, the surviving circuses and menageries still recall the Roman way of life. They remind one, too, that Rome itself was once upon a time "the greatest show on earth."

...Rome never faced the problem of its overgrowth, for to do so it would have to challenge both the political and the economic basis of the whole imperial regime...The secret of its domination was Divide and Rule...The rise of one Christian heresy after another in the provinces from England to Africa may also be taken as an effort to express, through religious convictions, the independence that the Roman state had otherwise denied. But his challenge came too late. Rome lacked the basis for two-way intercourse, since at the end it had no equivalent to offer in exchange. And by making cities dependent for their charters of self-government on the central state, Rome involved them in the cumulative weaknesses of that state...Instead of etherializing its organization, by education...and by inventing a means for diffusing its power and order...with two-way intercourse and communication between its parts, Rome tried to maintain order with resort to either overt force or seizure...which is impossible after a size... If Rome had achieved such a system, and had exercised such a self-restraint, she might, with her great talent for law and system, have supplied a necessary universal element that the Ionic pattern of colonization had lacked. Failing this, Rome's chief contribution to city development is the negative lesson of her own pathological over-growth; a lesson that is apparently so hard to read that city after city has taken mere physical and economic expansion as a testimony to its prosperity and culture... But instead of strengthening the economic and military position of the smaller cities, particularly in Germany, England, and Gaul, Rome met the challenge of its own over-growth by that act of fission which created two autonomous empires, in the West and the East...Byzantium for a thousand years made a virtue of arrested development. Those who still held in the fourth century that the Roman empire had yet another thousand years to live were right, insofar as they identified Rome with Constantine's new city. But Byzantium, in overcoming the parasitism and disorder of Rome, created a shell in which century after century the living creature diminished in size, and its movements became more and more constricted...until it became a city with walls around empty lots with food grown to feed the last remnants of its population until it surrendered to the Turks. Much that was precious in Rome was kept in existence in Byzantium in a state of elegant fossilization: the pandects of Justinian, the Greek Anthology, the art of mosaic painting... From the standpoint of both politics and urbanism, Rome remains a significant lesson of what to avoid: its history presents a series of classic danger signals to warn one when life is moving in the wrong direction. Wherever crowds gather in suffocating numbers, wherever rents rise steeply

*and housing conditions deteriorate, wherever a one-sided exploitation of distant territories removes the pressure to achieve balance and harmony nearer at hand, there the precedents of Roman building almost automatically revive, as they have come back today: the arena, the tall tenement, the mass contests and exhibitions, the football matches, the international beauty contests, the strip-tease made ubiquitous by advertisement, the constant titillation of the senses by sex, liquor and violence—all in true Roman style. So, too, the multiplication of bathrooms and the over-expenditure on broadly paved motor roads, and above all, the massive collective concentration on glib ephemeralities of all kinds, performed with supreme technical audacity. These are symptoms of the end: magnifications of demoralized power, minifications of life. When these signs multiply, Necropolis is near, though not a stone has yet crumbled. For the barbarian has already captured the city form within. Come, hangman! Come vulture!...As a symbol of the maximum possibility of urban confusion, of the orderly and the accidental, the rational and the capricious, the ennobled and the debased, Rome has remained unique for more than two thousand years. Like London today, it had something for everybody; and perhaps like London, too, it was full of unexpected good things that have left no record behind. Plainly Rome suffered from megalopolitan elephantiasis. Now, in discussing an organism afflicted with a grave disease, which has become chronic, one has a natural tendency to identify the pathological condition, whose effect is often pervasive, with the whole life of the organism itself. Obviously this is an error: as long as an organism remains alive, its major organs must be functioning more or less normally, or at least sufficiently well to maintain it. So it doubtless was with Rome. Though it contained a greater number of pathological cells than any healthy body should tolerate, the larger part of it could still function as a human community: lovers exchanged the gifts of love, parents protected and enjoyed and planned for their children, craftsmen, whether slaves or free, performed the work of their calling with interest and fidelity, and not until, toward the end of the Empire, their vocations were turned into forced, hereditary occupations did they attempt to escape from the city and its grim regimen. More than this: new institutions appeared to make up for the decay of civic institutions and family life. Even before the Mithraic, the Manichean, or the Christian Churches found their adherents, a new civic grouping, the college, came into existence. These colleges were the sociable successors of the eight original economic guilds—never greatly favored by public authority—and the forerunner of the craft guilds that emerged again in written record in the early Middle Ages. For though groups meeting regularly, especially if in secret, were looked upon with dire suspicion by the authorities, it became necessary in the second century A.D. to license colleges as social institutions which cherished the obligation to give a decent funeral to their dead members, and to provide a monthly collation for those alive. Slaves were permitted to join these colleges: they thus supplied a bond of fellowship to overcome the anonymity—and the anomie, that is the spiritual rootlessness and loneliness of the overgrown city...The inscriptions and monuments let by obscure craftsmen and tradesmen in every part of the Roman world indicate a satisfaction in their work and a self-respect: the smith with his hammer, the cooper with his cask were proud to have their effigies carved on their gravestones. Had this large foundation of sound, normal existence not remained, Rome would have crumbled away centuries before it did. Yes: when the worst has been said about urban Rome, one further word must be added: to the end men loved her, even the saintly Jerome. When she was only a shadow of her former self, wrinkled and grizzled, like Rodin's old courtesan, they remembered still the immense vitality and charm of her matronhood, if not the blotched innocence of her youth. Nothing that men have once loved can be wholly vile; and what they have continued to love over the centuries must, in face of all appearances, have been somewhat lovable...The dying was a slow process, and in the midst of the urban decay fresh life was sprouting, like the seeds from garbage on a compost heap...The Christian inheritors of Rome, despite their searing memories of the arena and their grievous retreat in the catacombs, chose Rome as the cornerstone on which to build a new urban civilization. When the cults of Mithras and Manes had passed—they were both still alive in Augustine's day—and Christians undertook to place their*

*whole life on a new foundation, they beheld in the dying city itself the center of a new world. Over the centuries Rome survived as a city, better than Hippo, Bethlehem, or Antioch. From Rome, ultimately, came the Christian brotherhoods that spiritually re-colonized the old empire and extended its earthly realm. Rome thus remained a human reservoir. Much purer fountains, like that of Ionia, could not pipe their water so far, or dispatch their couriers over such well-built roads.*

*...By the fifth century the life-blood was ebbing from the opened veins of Rome and the hands that had once grasped an empire could no longer keep any part of it securely in their hold. As the fingers relaxed, the parts fell away...The most profound retreat from Rome was not that of the refugees who sought to save their bodies: it was above all a retreat of the devout who wished to save their souls. The great spirits who led this retreat were not unconscious of all the joys and virtues they were leaving behind: both Augustine and Jerome were honest enough to confess that, at least in sleep, they were allured and teased by the sensuous images of Rome. But in the third century the retreat had passed into a collective stage: groups of hermits, sharing their solitude and developing a new routine for life, banded together, first on the edge of a great city like Alexandria, facing the desert, then far away, on rocky hilltops, like Monte Cassino or Mount Athos, or, later, on lofty Monte Senario near Florence (A.D. 1233), where the fragrant air of the pines is still sweeter than any incense...After the seventh century a return of pasture and woodland went throughout Western Europe...By the eleventh century there was a serious problem of land clearance: the draining of fens, the cutting down of forests, the building of bridges, called for a new crop of pioneers. Here as elsewhere the disciplined monastic orders took the lead. One lacks a clue to the new urban form if one overlooks the role of the monasteries ...Many reasons have been assigned for the triumph of Christianity; but the plainest of them is that the Christian expectation of radical evil—sin, pain, illness, weakness, and death—was closer to the realities of this disintegrating civilization than any creed based on the old images of “Life, Prosperity, Health”... that had to accompany any utterance of the name of the Pharaohs...The whole drama of life for the Christian derived from his method of encountering negations... Giving a positive value to all the negations and defeats that the Romanized peoples had experienced, it converted physical illness into spiritual health, the pressure of starvation into the voluntary act of fasting, the loss of worldly goods into increased prospects for heavenly salvation—even sin offered a path to salvation—by renouncing all that the pagan world had striven for, the Christian took the first steps toward building up a new fabric out of the wreckage... Whereas in all the older civilizations, men had been freely sacrificed to their 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. Instead of evading the ugly realities of his time, the Christian embraced them. By doing willingly what pagans sedulously avoided, he both neutralized and in some measure overcame the forces that threatened him. He visited the sick; he comforted the widow and the orphan; he redeemed the ignominies of starvation, sickness, and squalor by making them an occasion for fellowship and love. Instead of clinging for security and comfort to the presence of large crowds, he accepted their dispersal and looked for solace in a more intimate union when only two or three were gathered together in the name of Christ: indeed the holiest withdrew altogether, seeking solitude and silence. All these inner transformations left their imprint, during the next thousand years, on the cities of Western Europe. But even before Rome fell, by the third century in fact, the Christian sect had begun to anticipate the worst; and their members, threatened with persecution and butchery, had begun to establish a new life for themselves in the caves that honeycomb the hills of Rome, where the Christians gave their fellow communicants a Christian burial, carving out subterranean chapels and altars, as well tombstones. The new sense of fellowship first expressed in the Greek mystery religions now found a fuller expression...Christian Rome found a new capital, the Heavenly City; and a new civic bond, the communion of the saints. Here was the*

*invisible prototype of the new city...The monastery was in fact a new kind of polis; an association, or rather, a close brotherhood of likeminded people, not coming together just for occasional ceremonies, but for permanent cohabitation, in an effort to achieve on earth a Christian life, addressed solely and single-mindedly to the service of God. Augustine , the Bishop of Hippo, founded such an order in the fourth century, and by the sixth, Benedict of Nursia gave it the form that was to influence, by direct impact or by indirect stimulus and challenge, every successful monastic order. Here was the nodal point of a new kind of religious culture... which sought to transcend the limitations of earlier civilizations by withdrawing from their typical institutions...like property, prestige, power...The monastic colony became in fact the new citadel: a religious holding point that kept the general retreat from turning into a rout. But it was a citadel of the soul... Whatever the confusions of the outer world, the monastery established, within its walls, a pool of order and serenity. No one doubted that the essential values of a Christian life were embodied there, though not all men were qualified to live at such a pitch of concentration and dedication: not even, as it turned out, the more prosperous monks themselves. So attractive were the manifestations of the Christian life that Joachim of Floris, in the twelfth century, looked forward to a final period of human development, the period of the Holy Ghost, when all mankind would be united, as monastic brethren and sisters, in the Monastery Universal. To Bernard of Clairvaux, in the same century, the cloister was a stronghold of paradise: he even coined the term “paradisus claustralis.”...The secular Church was entangled in earthly responsibilities, at the mercy of worldly rulers, tempted to compromise with pagan beliefs and institutions... but the monasteries kept alive the image of the Heavenly City...Before a new life could shape itself in the Middle Ages , it was necessary for the old life to disintegrate even further. But we must not picture this change as either sudden or uniform. That life, in general, throughout Europe, became more crude and chaotic, there is little doubt; and that the formative forces were no longer “Roman” had been true, even before the empire disintegrated. At one moment, the ships bringing papyrus from Egypt would be cut off by pirates; at another, the postal service would go out of existence; or again, an old Roman patrician, on his way to becoming the most important civil officer in Rome, would disappear, and turn up after four years of silence in a Spanish monastery. Famine and disease reduced the population as a whole; probably the birth rate dropped—how much it is hard to say. Certainly, fewer people were left in the cities; and the old towns ceased to function as centers of production and trade. Because of the wealth of literary evidence, we have a better picture of what went on in Gaul than elsewhere. And there is no doubt that the cities that managed to fortify themselves against the barbarians occupied a much smaller area than they had previously spread over...In Nimes the old amphitheater was transformed by the Visigoths into a little town, with two thousand inhabitants and two churches...the heavy masonry walls served as ramparts...other amphitheaters became fortresses against the Arabs... Between the sixth and eleventh centuries ...the emphasis is upon enclosure, protection, security, durability, and continuity but from the eighth century to the eleventh, the darkness thickened; and the early period of violence, paralysis, and terror worsened with the Saracen and the Viking invasions. Everyone sought security. When every chance might be a mischance, when every moment might be one’s last moment, the need for protection dominated every other concern. Isolation no longer guaranteed safety. If the monastery had conducted the retreat, the city led the counter-attack... Life went down hill toward a subsistence level; for bodily security, no more, one was glad to place oneself under the protection of some barbarian chief; indeed, as the city disintegrated, its various original parts reappeared separately: so the old chieftain with his war band, in his fortified stronghold, ruling a nest of villages, comes back again\*. Urban developments that one can only speculate about with cautious reservations in Palestine and Mesopotamia can now be documented on the site all over Europe...Sheer necessity led to a*

*\*To say that, in our days, not only Mumford, in such paragraphs, but also everyday evening news on the TV, regarding chieftains in Afghanistan and Iraq, is a “crash course” in history, is black humor for reasons that are more than one.*

rediscovery of that ancient urban safeguard, the wall...Against sudden raids a wall, on guard at all hours, was more useful than any amount of military courage...In terror of the invaders ...broken Roman walls were restored ...walls were built even around monasteries and nunneries to guard them from pagan attack...Military service became a necessity of citizenship, and it is even possible that the ability to provide a permanent army and to repair walls around a town was, as Frederick William Maitland suggests, one of the qualifications for corporate urban franchise...The container, re-established, became also a magnet. The extension of the wall from the castle or the abbey to the neighboring village often marked the physical beginning of a town ...Once a town was encircled by a wall, other normal attributes of urban life would appear:...the greatest economic privilege, that of holding a regular market once a week, assembling for exchange the neighboring peasants, fishermen, craftsmen, depended upon both physical security and legal sanctuary. So, as in ancient Greece, those who came to market were protected, during the marketing hours, by the market Peace...here a new class got protection against theft and arbitrary tribute, and began to settle down permanently, at first just outside the walls: the merchants. When they became permanent members of the town corporation, a new era began, which helped reopen old highways and waterways...In the medieval town, the spiritual and the temporal powers, with their vocational orders, the warrior, the merchant, the priest, the monk, the bard, the scholar, the craftsman and tradesman, achieved something like an equilibrium. The balance remained delicate and uncertain; but the effort to maintain it was constant and the effect real, because each social component was weighted, each duly represented. Until the close of the Middle Ages – this is indeed one of the signs of the close – no one element was strong enough to establish permanently its own command over all the others. As a result, both physically and politically, the medieval city, though it recapitulated many of the features of the earliest urban order, was in some respects an original creation. Freedom, corporate equality, democratic participation, autonomy, were never fully achieved in any medieval town; but there was perhaps a greater measure of these qualities there than had ever existed before, even in Greece. For a brief while “communitas” triumphed over “dominium.” The practice of granting freedom to cities from the eleventh to the fourteenth centuries was in fact a renunciation, on the part of the masters of the citadel, of the very tributes and exactions that originally had brought the city into existence. Though the castle often towered grimly above the city, always threatening to resume its original prerogatives, in the free cities feudal lordship took a place as just another semi-corporate entity: first among equals – though a few centuries later, through the growth of centralized absolutisms, princes regained the territory they had lost, and even greatly enlarged it. (Are there additional things that lead Mumford to so much esteem the medieval town? Let’s hear some more phrases from his book: “...In appraising the medieval town we should avoid two kinds of errors:... We must, of course, dismiss the charming tapestry of ...writers who often treated intentions as if they were accomplished facts, and ideals as if they were realizations...But if we dismissed medieval culture as a whole because of the torture chamber and the public burning of heretics and criminals, we should also wipe out all pretensions to civilization of our own period. Has not our enlightened age restored civil and military torture, invented the extermination camp, and incinerated or blasted the inhabitants of whole cities? The contradictions of medieval life were minor compared to those we conceal in our own breasts. In certain respects, the medieval town had succeeded as no previous urban culture had done. For the first time, the majority of the inhabitants of a city were free men: except for special groups, like the Jews, city dweller and citizen were now synonymous terms. External control had now become internal control, involving self-regulation and self-discipline, as practiced among members of each guild and corporation...”, “... A vast number of people arrayed in the religious medieval procession...and underwent these esthetic experiences, and, in the very twisting and turning of the procession could, as it were, see themselves in advance, as in a mirror, by observing the other parts of the procession: thus participant and spectator were one, as they can never be in a formal parade on a straight street...As in the church itself, the spectators were also

*communicants and participants: they engaged in the spectacle, watching it from within, not just from without: or rather feeling it from within, acting in unison, not dismembered beings, reduced to a single specialized role. Prayer, mass, pageant, life-ceremony, baptism, marriage, or funeral—the city itself was stage for these separate scenes of the drama, and the citizen himself, even while acting his varied roles, was still a whole man, made one by the cosmic vision and held in tension by the human drama of the Church, imitating the divine drama of its founder. Once the unity of this social order was broken, everything about it was set in confusion: the great Church itself became a contentious, power seeking sect, and the city became a battleground for conflicting cultures, dissonant ways of life.”, “...The cloister, in both its public and its private form, has a constant function in the life of men in cities; and it was not the least contribution of the medieval city to demonstrate that fact. Without formal opportunities for isolation and contemplation, opportunities that require enclosed space, free from prying eyes and extraneous distractions, even the most extroverted life must eventually suffer. The home without such cells is but a barracks; the city that does not possess them is only a camp. In the medieval city the spirit had organized shelters and accepted forms of escape from worldly importunity in chapel or convent; one might withdraw for an hour or withdraw for a month. Today, the degradation of the inner life is symbolized by the fact that the only place sacred from intrusion is the private toilet.” (The end of the last phrase of the last passage, out of context, belongs to those things than can also be seen by just googling for “gags” by Mumford). Now if our objection to the Medieval town happens to be related to lack of cleanliness then Mumford’s comment should be included in detail and not just in sketchy outline: “...Even as early as the thirteenth century the private bath made its appearance...in 1417 hot baths in private houses were specially authorized by the city of London. But if anything were needed to establish the medieval attitude toward cleanliness, the prevalence of public bath-houses should be sufficient...In 1387 Frankfurt had 29 bath-house keepers, Ulm had 11, Nurnberg 12...So widespread was bathing in Middle Ages that the custom even spread back into rural districts, whose inhabitants had been reproached by the writers of the early fabliaux as filthy swine. What is essentially the medieval bath has lingered in the Russian or Finnish village up to this day. Public baths were for sweating and steaming, for almost antiseptic cleanliness. Such a purging of the epidermis was customary at least every fortnight, sometimes weekly. The very act of coming together in a bath-house promoted sociability, as it had done in Roman times, without any embarrassment about bodily exposure, as Durer plainly showed in one of his prints. The bath was a place where people gossiped and ate food, indeed sometimes soaked sociably in a tub with a companion of the opposite sex; ...in 1530 there were no bath-house keepers in Frankfurt. Doubtless the rising price of hot water had something to do ...with the scarcity of wood fuel in the immediate neighborhood of the bigger cities...In the seventeenth century, after a breach, the bath was re-introduced as a foreign importation, a luxury, a means of renovating the body after a debauch; the so-called Turkish or Russian bath. But almost immediately these baths became pleasure haunts and houses of assignation: bagnio again meant brothel. Dirt diseases, such as smallpox, flourished in this period; and with the crowding of the cities the volume of water that had been sufficient when the mains were installed in the sixteenth century proved altogether inadequate and since they were often neither renewed nor extended, the inhabitants of the town would have a much smaller quantity of water per capita in the eighteenth century than they had two or three centuries before. When the bathroom finally made its way into the house in the nineteenth century, to the chants of mechanical progress that then arose, only a belated antiquary might possibly recognize that Johann Andreae had assigned such a room to each three room apartment in his ideal city, Christianopolis, and that such rooms had been common, in the better burgher houses in Germany, in the Middle ages.”*

Maybe now we are ready for shortcuts to the contemporary megalopolis, especially to the one in America, but taking a shortcut does not consist in just transferring ourselves to the 19<sup>th</sup> century but to leaving (almost) unread everything concerning baroque or le Roi Soleil; and completely unread (but we can imagine some of it) everything about the implications of the invention of

gunpowder for city walls, and for the implications for the ordering and the width of streets of the necessity for military parades and of transportation with fast coaches within the city; but not skipping Francis of Assisi and the comparison Mumford makes of Venice with Thomas More's Utopia/Eutopia; also not skipping an outline of the transition from the thirteenth century to the eighteenth, through excerpts of the chapters "the new divinity" and the "the new freedom", showing in nascence some things that are now solidified into commonplaces taken for granted; also not skipping some very helpful elucidations Mumford makes of Descartes, elucidations whose absence in most books becomes both a source of silly boldness in statements of immature deconstructionists against Cartesianism, and a source of estranged and estranging self-circling of physicists, mathematicians etc because of some natural questions they have in front of some anti-Cartesian statements of philosophically mature deconstructionists etc. So let's begin with Francis of Assisi and Thomas More; passing from both Christianopolis and Venice:)

*... What would be involved in a realization of the Christian city? Nothing less...than a thoroughgoing rejection of the original basis on which the city had been founded: the renunciation of the long-maintained monopoly of power and knowledge; the reorganization of laws and property rights in the interests of justice, free from coercion, the abolition of slavery and of compulsory labor for the benefit of a ruling minority, and the elimination of gross economic inequalities between class and class. On those terms, the citizens might find on earth at least a measure of that charity and justice that were promised to them, on their repentance, in heaven. In the Christian city, one would suppose, citizens would have the opportunity to live together in brotherhood and mutual assistance, without quailing before arbitrary power, or constantly anticipating external violence and sudden death. The rejection of the old order imposed originally by the citadel was the minimal basis of Christian peace and order. From the very moment the Church became the official religion of the Roman State, in A.D. 313, that program was in jeopardy, and the City of God drew ever farther away. Patches of Christian peace and order remained visible in the monastery; and not a little of that spirit entered the city through the brotherly offices of the guild. But the Christian idea flourished best in adversity...In no previous urban culture was there anything like the large scale provision for the sick, the aged, the suffering, the poor that was in the medieval town. But these philanthropic achievements were somewhat like the intellectual achievements of the Schoolmen: the structure seemed unshakable provided that one did not scrutinize the groundwork. All too soon, the Church rendered to Caesar not merely the things that are Caesar's, but also the things that are God's. Not alone did the Church refrain from touching the ancient foundations of political and military power, private property, and intellectual monopoly. So far from rejecting these counterclaims to the holy life, the Church accepted them and took them for her own; when necessary, she sought to achieve by threat and force what she could not obtain by allegiance and free gift. By the time of Dante, supposedly the height of the medieval synthesis, he dreamed of an emperor to rule Christendom, who would be able to rescue the world from the claims of an iniquitous and rapacious Pope. Because the Church expected human suffering and was inured to it, its clergy handled without quailing life's denials and frustrations, its miscarriages and tragedies. But when life flowed back into this whole culture, as trade prospered and wealth accumulated, the Church began increasingly to utilize for its own pride and power all the prevailing un-Christian or anti-Christian practices, so that even her most reputable dogmas often took on a superstitious form. If the Church protected the human corpse against violation by physicians seeking to gain medical knowledge of the body through anatomic dissection, she graciously allowed the bodies of the living to be fiendishly mutilated in punishment, in execution of her own judgment of heretics. Once the Inquisition was started in the thirteenth century, she even invented ingenious mechanical devices of her own to perform torture on suspected heretics, in order to enforce confession. By the thirteenth century, the wealth, luxury, and worldly power embodied in the leading medieval cities had undermined the radical postulates of Christianity: namely, poverty, chastity, non-resistance, humility, obedience to a divine mandate that transcends all*

considerations of bodily security or material satisfaction. The Church itself, as the wealthiest institution in Christendom, was the very scene of this sordid revolution. No matter how many individual saints she might continue to bring forth, her own worldly example was not such as to chasten those who sought for wealth in ever larger quantities in the market place, for power on the battlefield, or for loot and treasure in a conquered city. This perhaps explains why Christianity did not create a Christianopolis...By the fourteenth century, it became plain that the forces that might have reclaimed the medieval town for a Christian way of life would meet their most serious opposition, not at first in the market place, but within the Church itself. The great symbol of the effort to restore the original Christian spirit—and its decisive defeat, too— is Francis of Assisi...himself a merchant's son, who sought to substitute voluntary Christian service, a free exchange of gifts, for the ordinary arrangements of hiring and buying. Those who sought to live like the early Christians, Francis thought, would no longer withdraw from life like the early monks, but would go among men, setting a smiling example of Christian love, preaching by acts as much as by words, working for others, living in poverty without any permanent shelter, and taking no thought for the morrow. All labor was to become a labor of love: life, instead of being encased in buildings and walls, was to be a "Song of the Open Road," and its material requirements were to be improvised, as Francis improvised the great meeting of Christian brothers and sisters at Portiuncula, with a success in voluntary provisioning that astounded his rival, Dominic. In Francis' dream, this new order of brothers and sisters was to have no building of its own, no permanent possessions to bind the spirit to possessiveness itself. This was one more attempt, along the lines of Lao-tse and Jesus, to break down the walls of the power-driven, wealth-encrusted ego and dismantle, ultimately, the walled city, that ego's greatest collective expression. In a word, emancipation from the closed container: a true and complete etherialization. The Papacy put down this heresy as sternly as it stamped out that of Peter Waldo (c. 1170), the pious merchant, who founded the first of the great protestant sects for a similar purpose. Not without statesmanlike cunning, the Pope insisted on making the Franciscan order an instrument of Papal power, and he ensured its subordination, indeed its inner subversion, by encouraging a heavy investment in appropriate conventual buildings, in the very birthplace of the new order; for there is no quicker way of killing an idea than to "materialize" it too soon...A short while later, by a bull of Pope John XXII, the reawakened belief in Christian communism, the notion that a sharing of possessions and the means of life had been practiced by the early apostles, as related in the New Testament, was anathematized as a heresy. Yet the desire to create a Christian city for long haunted the medieval mind, from the time of Waldo and Langland to that of John Bunyan and Johan Andreae. Heaven itself, we must remember, was an urban artifact; a city where immortal souls met each other and beheld the ineffable Presence throughout eternity. The longing for a Christian city kept cropping out, shyly, despite papal frowns, in the orders of dedicated laymen...But the one power that might have made Christianopolis more than a utopian dream, the Church itself, was firmly against it. If at the beginning the medieval city was truly shaped by Christian needs and interests, it was never completely transformed by the Christian challenge: the ancient powers and principalities were all too firmly lodged behind its walls. The jealous gods who had presided over the birth of the city in Mesopotamia and Egypt were more persistent and persuasive than the new teacher from Palestine, who, like Buddha, had turned his back upon all the symbols of material permanence and all self-estranging formalisms. The repetitive ritual of the old temple, the coercive violence of the old citadel, the hostile enclosures and isolations that gave ancient magical aberrations a permanent form—these institutions remained at the very core of the medieval town. Though repeatedly threatened by outside invasions, Huns, Saracens, Mongols, Turks, the worst damage inflicted on medieval towns was that which one Christian community perpetrated on another, in an endless round of savage, merciless urban wars. Over that scandal and shame, the voice of the Church remained monotonously silent. How could it be otherwise? Rome's own acts would have choked her admonitory words. For this miscarriage of the medieval city, Christian theology had an answer:

*namely , the doctrine of the original sin. This presupposes a radical flaw in the constitution of man, arising out of Adam's disobedience, which turned his original sin into an organic, hereditary ailment: a perverse tendency set aside God's purposes by putting his own selfish nature first. So inveterate is this tendency, according to Christian theology, that in the very act of combating it, man may commit what he is trying to avoid; the only way out, therefore, is the acknowledgment of chronic failure and the hope for repentance and grace. The fact is that sin had become the Church's principal source of worldly revenue. Only by enlarging this sphere and inflating these debits could the Church's monopoly of salvation yield sufficient profits. So, when the goods of civilization were replenished , from the tenth century onward, its evils were restored in due proportion, by the very institution that should have addressed itself to reducing them... Whatever the medieval city might be, then, it remained only the pale simulacrum of Christianopolis. The outline of that city was strong enough to give one hope for a new urban order, based on the religious and social premises of the most widespread of all axial religions. But in the very growth of the town the spiritual substance tended to disappear. Again we face the same paradox of static, one-sided materialization we first examined in the growth of the Greek city.*

*...If people were aware of the uniqueness of Venice's plan, they treated it as a mere accident of nature, not as a series of bold adaptations which, though based on singular natural features, had a universal application... Venice pushed even further, right into our own age, the organization by neighborhoods and precincts whose recovery today, as an essential cellular unit of planning, is one of the fundamental steps toward re-establishing a new urban form. Venice was the creation of a group of refugees from Padua in the fifth century A.D., fleeing across the lagoons from the invader. The shallow waters of the Adriatic took the place of the stone wall for protection, and the swamps and islands, connected only by water, suggested the dredging of canals to fill in the nearby lands and to establish channels of transportation. The gondola (mentioned as early as 1094 was the perfect technical adaptation to these narrow, shallow waterways. Though Venice had to develop cisterns for collecting rainwater, to supplement the supply that came by boats from the mainland, she solved the ever-vexing problem of sanitation more easily than her mainland rivals, by being able to dump her sewage directly into the sea, where the action of salt and sunlight, along with tidal movements, seems capable of neutralizing reasonable concentrations of noxious bacteria...At the core of Venice lies the Piazza San Marco: an open space in front of its ancient Byzantine Church...In 976, close to the where the Campanile was first built in the twelfth century, a lodging house for pilgrims to the Holy Land was established. This was the beginning of the later hotel quarter. As early as the twelfth century, a piazza, filled with market stalls, was taking shape here...in 1172 it was widened...in 1176 St. Mark itself was rebuilt...in 1180 the old campanile, in 1300 the Ducal Palace, in 1520 the old Procurator's Hall ...in 1536 the Library...but the final addition to the present square was not made till 1805...a continuous development...Gradually, the political and social functions of the Piazza pushed back the original rural and marketing functions; and the latter were, step by step, transferred to other parishes of the city, leaving only restaurants, cafes, shops, and hotels near the site of the first hostelry for pilgrims...In brief, both the form and the contents of the Piazza were the products of cumulative urban purposes, modified by circumstances, function and time: organic products that no single human genius could produce in a few months over a drafting board...the plan of Venice was no static design, embodying the needs of a single generation, arbitrarily ruling out the possibilities of growth, re-adaptation, change: rather, here was continuity in change, and unity emerging from a complex order. Significantly, in a city ruled by an iron-handed patriciate, ruthless in its centralization of power and responsibility, the members of the Council of 480 were decentralized: they were compelled to reside in the parishes they represented...this prevented that over-concentration of upper-class housing that so often leads to the toleration of urban disorder in the remoter districts of a town... What the casual tourist often does not realize is that the pattern of St. Mark's is repeated on a smaller scale in each of the parishes of Venice. Each has*

*its campo or square, often of an odd trapezoidal shape, with its fountain, its church, its school, often its own guildhall; for the city was originally divided in six neighborhoods, each harboring one of the six guilds of the city...The canals are both waterbelts and arterial highways, functioning like the greenbelts of English New Towns and like motor ways of well-designed modern towns...Many of these characteristics of Venice can be matched in other medieval cities. What was never so clearly expressed elsewhere was the system of functional zoning; a system established more easily here, because of the disposition of the greater and lesser islands around the central city. Venice turned this seeming handicap into an opportunity...An industrial quarter was erected in 1104, enlarged in 1473, and again in the sixteenth century...a shipyard in the fifteenth century employed 16,000 workers and harbored 36, 000 seamen. Another principal industry of Venice, its glass industry, was established ...on the separate island of Murano by 1255...Now these were the first large scale industrial areas to be set apart from the mixed uses of the ordinary medieval city. Had there been eyes to see and intelligence to appraise, Venice might have set the pattern for the development of heavy industries in growing urban centers after the sixteenth century; and as rapid transport facilities increased, the nuclear but open plan of Venice would, if imitated, have overcome the tendency to provide for extension by solid massing and overcrowding and sprawling, in the fashion of other expanding cities. By making the most of their opportunities, in other words, the Venetians, no doubt inadvertently, invented a new type of city, based on the differentiation and zoning of urban functions, separated by traffic ways and open spaces. This was zoning on the grandest scale, practiced in a rational manner, which recognized the integrity of neighborhoods and which minimized the wasteful "journey to work." ...The neighborhoods and industrial zones of Venice, so far from destroying the unity of the city, served only to keep the central quarter from being unduly congested. But on days of public holiday, like the magnificent water festival...the Piazza san Marco, the Piazzetta, and the nearby quays brought the whole city together...in the collective ritual...Despite its prosperity and continuity, its political state was much less successful than its makers supposed...Its political order was based on an ultimately demoralizing combination of violence and secrecy: its rulers used private informers and secret assassination as a commonplace weapon of control...those at the center were finally stultified, like the members of any totalitarian system today, by their own morbid fantasies and hallucinations. We have seen, even under our own formally democratic government in America, that any group that operates in secret, be it an Atomic Energy Commission or a Central Intelligence Agency, loses touch with reality by the very terms on which it operates. What begins as the suppression of a critical opposition ends with the suppression of truth and the elimination of any alternative to the accepted policy, however patent its errors, however psychotic its plans, however fatal its commitments...[In Venice] the urban community was kept in some degree of balance because its ruling group at least paid the price for their system, as totalitarian states do today, by trading security for freedom: thus they provided over many centuries for steady industrial employment, social services of many sorts, and dazzling public festivals. So, typically, it was not the workers, but rival members of the ruling classes, that usually threatened treason or revolt...But the physical order created by the Republic of Venice was even better than its makers knew: they had in fact, without any apparent consciousness of their achievement, devised a new type of urban container, marked by the etherialization of the wall... What Venice could achieve for not more than two hundred thousand people, a modern municipality, with our facilities for rapid communication and transport, might do for a community of ten times that number... Venice itself had grown out of the grim realities of forced immigration, war, conflict, piracy, and trade. Though it commanded men's allegiances, over the generations, by its splendor and order, it made no pretense to being an ideal city: it was merely the best that a succession of energetic merchants and industrialists, who courted money and power, and the luxuries that money and power can buy, were able to conceive. Let us contrast it then with a city whose fabricator sought, in fact, to present an ideal pattern: namely, with Amaurote, the capital of Sir Thomas More's "Utopia," a book published in 1516, just at the*

turning point of Venice's own fortunes. Amaurote, situated in the center of the island of Utopia, is one of the 54 cities or country towns, none of which is less than 24 miles from the next, though "none is so isolated that you cannot go from it to another in a day's journey on foot." Amaurote itself, the capital, ...is on a tidal river, like London, to bring the boats in from the sea. The streets, twenty feet wide, "are well laid out both for traffic and to avoid the winds," and every house has both a street door and a garden door; indeed, their zeal for gardening "is increased not merely by the pleasure afforded them, but by the keen competition between streets, which shall have the best kept gardens." This outer green belt and this inner spaciousness are re-enforced by two years of country living, mandatory under the law, for every inhabitant. Thus More makes sure of his garden city by educating garden-citizens. Each Utopian city is divided into four quarters. In the center of each quarter is a marketplace, with shops and stores about it. But the more intimate organization, the neighborhood, is based on the family. Each thirty families selects a magistrate, while the whole body of magistrates selects the Mayor, and all the cities send representatives to the Utopian legislature. The basis of this whole system of representative government is the thirty neighborhood families, whose members dine together regularly in one of the spacious dining halls that line the street. There the chief magistrate and his wife preside at High Table. Perhaps this innovation of More's was not altogether lost: it foreshadows that of the Amana communities in Iowa, with their common dining halls, now used as public restaurants. Along with More's grouping of household goes a common nursery... The primary form of organization is not the guild but the family and the neighborhood... In the communal institutions More restores the sharing and largesse that were common in simple communities before the introduction of a money economy. More's greatest innovation, perhaps, was to give institutional support for the medieval townsman's love of country life and sports. He decreed that agriculture should be one common pursuit, for both men and women: they are all instructed in it from their early years, partly by regular teaching at school, partly by being taken out into land adjacent to the city, as if for amusement, where they do not merely look on rural activities, but, as opportunity arises, do the actual work. Since participation in work is universal, the Utopians work only six hours a day. This gives them both an economy of abundance and a fullness of leisure; and they devote the latter chiefly, through both private study and public lectures, to learning. The idle rich, the swashbuckling retainers, and the lusty beggars have no place in More's Utopia: neither have the "great and idle company of priests and the so-called religious." A devout man himself, ready to die at the stake for his honor and his Church, More well knew the hollowness of much of the ostentatious religious devotion of the late medieval city. In some ways, it would seem, More's imaginary city is not merely a great advance over Venice, but in its desire for equality, in its effort to spread both goods and leisure, in its conversion of work into a form of play, and both into a means of sustaining the mind, it anticipates the social potentialities our own period has begun to outline. In Amaurote, collective service and friendly association have softened the rigid forms of power. Here, in faint outlines at least, is the social city of the future, as Venice, in much bolder and clearer form, possibly pre-figures the future physical city. Toward both goals, the great cities of the world have still a long way to go. But precisely at the point where More must translate his social improvements into material forms, his imagination halts, as Plato's had halted before him. Or rather, More's images freeze into the forms of his own time, which were just beginning to come forth out of the medieval order. Thus his scale is no longer the medieval pedestrian scale; the city is roughly two miles square; and the distribution of people, with ten to sixteen adults in a family, six thousand families in all, brings the total population up well over one hundred thousand. At this point, it is true, he sets a limit; for after filling up deficient population in such cities as are below this level, More provides for colonization outside the country. Along with this new spatial scale goes a new uniformity, yes, and a new drabness and monotony. "He who knows one of the cities," he observes, "will know them all, so exactly alike are they, except where the nature of the ground prevents." The same language, the same manners, customs, laws. The same similarity in appearance: no variety in urban form. No variety

*in costume: no variety in color. This was the new note: the note of standardization, regimentation, and collective control: Quaker drab or prison drab. Is this Eutopia—the “good place”? Was More attuned in advance to the coming age of despots, ready though he was to challenge the nearest despot in person? What caused him to look upon the absence of variety and choice as in any sense an ideal requirement? Did he, even more intuitively, suspect the price that our own age would have to pay eventually for its mechanized production and economy of abundance? And was he therefore prepared, in the name of abstract justice, to pay that price, heavy though it might be in terms of other goods, equally essential to human life? He has left no clue to the answer. In some respects, the reader will note, More’s Utopia struck at the radical defects and shortcomings of the medieval town: the preponderance of private riches, the over-specialization of the crafts and professions into a strict, hierarchic, often mutually hostile, non-communicating order. By giving the urban citizens a country education and a period of compulsory agricultural services, he sought to break down the disparities and the latent hostilities that existed between the two realms. So too, he restored and extended the urban garden, as an essential part of the town plan, at the moment when it had begun to be cramped, and in place had already disappeared. More’s desire for inner spaciousness was repeated, incidentally, in the large blocks provided in William Penn’s plan for Philadelphia in 1688; but by the eighteenth century...the generous original blocks were subdivided by streets and alleys that reduced the living quarters to doll’s house size, with open spaces correspondingly cribbed and cabined. Above all, it would seem, More consciously tried to “withdraw as much time as possible from the service of the body and devote it to the freedom and culture of the mind,” not just for a class but for a whole community. And yet, even in the seemingly untrammelled dreams of this humane man, he was still fastened to the ancient walls of the citadel: slaves, in punishment for their crimes, performed the viler labors of the community and war, though hateful to the Utopians, remained an integral part of their institutional life. In fact, Utopians were experts at propaganda and subversion as an instrument of warfare, and used physical blows only for coup de grace. Is this, again, Eutopia? If Venice was the highest product of medieval practice, Utopia was perhaps, with regard to the constitution and organization of urban communities, the fullest example of late medieval thought. But who would exchange Venice for the dreary regimentation and uniformity of Amaurote? And yet who would exchange the civic decencies of Amaurote for secretive tyranny, the festering suspicions and hatreds, the assassinations of character, the felonious assaults and murders that underlay the prosperous trade and the festive art of Venice? The flaw that had been handed on from civilization to civilization, through the urban container, was still visible in both cities. When we admire the surviving outward form, we must not forget the persistence of the inner trauma—the trauma of civilization itself, the association of mastery and slavery, of power and human sacrifice.*

*...Human cultures do not die at a given moment, like biological organisms. Though they often seem to form a unified whole, their parts may have had an independent existence before they entered the whole, and by the same token they may still be capable of continuing in existence after the whole in which they once flourished no longer functions. So it was with the medieval city. The habits and forms of medieval life were still active at least three centuries after it “close” —if one takes the sixteenth century as that decisive point. Even today, the Church of Rome...holds itself the sole repository of a truth and a faith essential to human salvation. Some medieval institutions in fact renewed themselves in the sixteenth century by adopting the style of their time: thus monasticism took on a new life by reorganization on military lines, with absolute obedience to the head of the order, appropriately called Director General, in the Society of Jesus, and this society, no longer content to set an example of piety or to preach, met the new demands of education by establishing a new kind of school, the secondary school, intermediate between the grammar school and the university...A new complex of cultural traits took shape in Europe...The new pattern of existence sprang out of a new economy, that of mercantilist capitalism; a new*

political framework, mainly that of a centralized despotism or oligarchy, usually embodied in a national state; and a new ideological form, that derived from mechanistic physics, whose underlying postulates had been laid down long before, in the army and the monastery...The two arms of this new system are the army and the bureaucracy: they are the temporal and the spiritual support of a centralized despotism...One must remember, with Max Weber, that the rational administration of taxation was an accomplishment of the Italian cities in the period after the loss of their freedom. The new Italian oligarchy was the first political power to order its finances in accordance with the principles of mercantile bookkeeping—and presently the fine Italian hand of the tax—expert and financial administrator could be observed in every European capital. The change from a goods economy to a money economy greatly widened the resources of the state. The monopoly of rent, the booty from piracy and brigandage, the loot of conquest, the monopoly of special privileges in production and sale through patents granted by the state, the application of this last system to technical inventions—all these resources swelled the coffers of the sovereign. To increase the boundaries of the state was to increase the taxable population: to increase the population of the capital city was to increase the rent of the land...Not merely did the royal governments become capitalistic in their workings, founding industries of their own, in arms, porcelain, tapestry: but they sought, under the notion of a “favorable balance of trade,” to create a system of exploitation ...in which it would receive ...more in exchange than what it had given...classic colonial economics. Capitalism in turn became militaristic: it relied on the arms of the estate when it could no longer bargain to advantage without them: the foundations of colonial exploitation and imperialism...The new merchant and banking classes emphasized method, order, routine, power, mobility, all habits that tended to increase effective practical command...Interests that were later sublimated and widened in physical science first disclosed themselves in the counting house: the merchant’s emphasis upon mathematics and literacy—both so necessary to long-distance trade through paid agents acting on written instructions—became the fundamental ingredient in the new education of the grammar schools. It was not by accident that Newton, the physicist, became master of the mint, or that the merchants of London helped found the Royal Society and conducted experiments in physics. These mechanical disciplines were in effect interchangeable. Behind the immediate interests of the new capitalism, with its abstract love of money and power, a change in the entire conceptual framework took place. And first: a new conception of space. It was one of the great triumphs of the baroque mind to organize space, make it continuous, reduce it to measure and order, and to extend the limits of magnitude, embracing the extremely distant and the extremely minute; finally, to associate space with motion and time. These changes were first formulated by the painters and architects and scene painters ...and developments in painting...like the use of frame and straight lines...were contemporary with parallels like the political consolidation of territory into the coherent frame of the state and the building of visually limitless avenues...If the earlier painters demonstrated Cartesian mathematics before Descartes, on their system of co-ordinates, the general sense of time likewise became more mathematical...baroque time lacked dimensions: it was a moment-to-moment continuum. Time no longer expressed itself as cumulative and continuous (*durée*), but as quanta of seconds and minutes: it ceased to be life-time. The social mode of baroque time is fashion which changes every year; and in the world of fashion a new sin was invented—that of being out of date. Its practical instrument was the newspaper, which deals with scattered, logically incoherent “events” from day to day: no underlying connection except contemporaneity...As for the archaeological cult of the past, it was plainly not a recovery of history but a denial of history. Real history cannot be recovered except by its entering into a fresh life with new form. The abstractions of money, spatial perspective, and mechanical time provided the enclosing frame of the new life. Experience was progressively reduced to just those elements that were capable of being split off from the whole and measured separately: conventional counters took the place of organisms. What was real was that part of experience which left no murky residues; and

anything that that could not be expressed in terms of visual sensations and mechanical order was not worth of expressing at all.

.(Let's see how, already Blake, expressed this state (in "The Marriage of Heaven and Hell") : "The Visions of Eternity, by reason of narrowed perceptions, are become weak Visions of Space and Time fixed into furrows of death, till Deep dissimulation is the only defense left to an honest man")

*In art, perspective and anatomy; in morals, the systematic casuistry of the Jesuits; in architecture, axial symmetry, formalistic repetition, the fixed proportions of the Five Order, and in city building, the elaborate geometrical plan. These are the new forms. Do not misunderstand me. The age of abstract analysis was an age of brilliant intellectual clarification. The new system of dealing with mathematically analyzable fragments instead of with wholes gave the first intelligible collective means of approaching such wholes: as useful an instrument of order as double-entry bookkeeping in commerce. In the natural sciences, the method of analytic abstraction led to the discovery of units that could be investigated swiftly and accurately just because they were dismembered, fragmentary, incomplete. The gain in the power of systematic thought and in the accurate prediction of physical events was to justify itself in the nineteenth century in a series of mighty advances in technics. But in society the habit of thinking in terms of abstractions worked out disastrously. The new order established in the physical sciences was far too limited to describe or interpret social facts, and until the nineteenth century even the legitimate development of statistical analysis played little part in sociological thought. Real men and women, real corporations and cities, were treated in law and government as if they were imaginary bodies; whilst artful pragmatic fictions, like Divine Right, Absolute Rule, Sovereignty, were treated as if they were realities. Freed from his sense of dependence upon corporation and neighborhood, the "emancipated individual" was dissociated and delocalized; an atom of power, ruthlessly seeking whatever power can command. With the quest for financial and political power, the notion of limits disappeared—limits on numbers, limits on wealth, limits on population growth, limits on urban expansion: on the contrary, quantitative expansion became predominant. The merchant cannot be too rich; the state cannot possess too much territory; the city cannot become too big. Success in life was identified with expansion. This superstition still retains its hold in the notion of an indefinitely expanding economy...In the desire for more subjects – that is, for more cannon fodder, more milch-cows for taxation and rent—the desires of the Prince coincided with those of the capitalists who were looking for more and more concentrated markets filled with insatiable customers. Power politics and power economics reinforced each other. Cities grew; consumers multiplied; rents rose; taxes increased. None of these results were accidental. Law, order, uniformity— all these then are special products of baroque capital: but the law exists to confirm the status and secure the position of the privileged classes; the order is a mechanical order, based not upon blood or neighborhood or kindred purposes and affections but upon subjection to the ruling Prince; and as for uniformity – it is the uniformity of the bureaucrat, with his pigeonholes, his dossiers, his red tape, his numerous devices for regulating and systematizing the collection of taxes. The external means of enforcing this pattern of life lies in the army; its economic arm is mercantile capitalist policy; and its most typical institutions are the standing army, the bourse, the bureaucracy and the court. Thus the baroque rulers reinstated all the institutions of the original urban implosion, even in some cases the union of sacred and temporal powers in a state church presided over by a king under divine appointment. The old god of the city now became a national deity, as the old city walls became the "national frontiers." That god renewed the original demands for tribute and human blood. "Le Roi Soleil" was near as Christian theology permitted to being a veritable Sun God...The breakup of the medieval church set free the "ions" that were re-polarized in the baroque city...Follow the dismemberment: the protestants captured the preacher's rostrum and made it the core of their new chapels, where no graven image competed with the speaker's face, and no rich ceremonial distracted attention from his urgent voice. The aristocracy commanded the painter and the*

*architect: art was carried away to special halls and galleries...angels and saints became Bacchuses and Graces: first, secular faces of popes, courtiers, business men surrounded the Holy Image: finally they displaced it. So with the other parts of the edifice. The choir, which once chanted hymns to God, was removed to the concert hall or to the balcony of the ballroom: the religious festival became the court masque, to celebrate a mundane birthday or a wedding; while the drama, leaving the porches of the church, where the clergy and guildsmen once enacted their mysteries and moralities, was turned over to professional actors under the patronage of the nobility...Finally the nave, the bare assembly place, became the bourse. Do not fancy the latter is a faked parallel: in the seventeenth century the brokers plied their trade in the nave of St. Paul's, and the money changers all but drove the representatives of Christ from the temple—till at last the stench became too great for even a venal Church to endure. Wren's unused plan for the reconstruction of London after the fire...did not give the dominating site to St. Paul's: he planned the new avenue so as to give this honor to the Royal Stock Exchange. This analytical decomposition of the Church...on the positive side, gave fresh life and growth to institutions that would be stifled there. There would have been no Shakespeare if the Church had kept control of the drama, and no great Rembrandt portraits if he had continued to paint the staple group portraits of the complacent worthies of the Guild. But these various fragments of art and culture were dispersed with respect to the population as a whole: dispersed and put out of their reach. It was only in the court of the prince that the parts were united again to form a new whole for the exclusive benefit of those who wielded power. We have seen what became of the medieval cathedral. But what became of its God? Here the transformation can be recorded only in terms of blasphemy. The absolute ruler by divine right usurped the place of the Deity and claimed his honors; he might even call himself Le Roi Soleil, superstitiously arrogating to himself the myth of a Pharaoh or an Alexander the Great. In the new cult, the part of the Virgin Mary, most powerful intercessor at the throne of heaven, was taken by the king's mistress. The powers and principalities of the new heaven...were the courtiers who crowded around the throne of the Monarch and proclaimed his glory. The parallel was not absent from even pious minds in the seventeenth century. "Whoever," said La Bruyere, "considers the king's countenance is the courtier's supreme felicity, that he passes his life looking at it and within sight of it, will comprehend to some extent how to see God constitutes the glory and the happiness of the saints." ...Luxury spread from dress and amusements to eating, and from eating in the palace to eating in similar fashion even on the battlefield. Hot meals were served at every halt during marches, and repasts carried to the trenches during a siege were like feasts, with several courses, fruits and ices; and all kinds of wine in profusion...This concentrated triviality had a discouraging effect on good minds. Francis Bacon, imaginatively picturing the new world of science, could not resist the courtly impulse to describe the elaborate costumes in which the experimenters in the new Atlantis performed their scientific labors. The demand for unlimited funds infected every rank in society... When taxation did not supply sufficient means for the prince and his favorites, he resorted to pillage: distant kingdoms in the case of Philip of Spain, or nearer monasteries for Henry VIII; when these did not suffice, he robbed the poor man of his pennies in order to bestow gold on those already rich. Hence the whole policy of licenses and patents: one needed a special permission, to be obtained at a price, even to build a house...it finally came down to this: a whole country was run for the benefit of a few dozen families, or a few hundred, who owned a good share of the land—and who batted on the unearned increments from industry, trade, and urban rents...In relation to the city, capitalism was from the beginning anti-historic; and as its forces have consolidated over the last four centuries, its destructive dynamism has increased. The human constants had no place in the capitalist scheme: or rather, the only constants it recognized were avarice, cupidity, and pride, the desire for money and power. The condition of pecuniary success was to despise the past, because it was an accomplished fact, and to welcome the new, just because it was a departure, and therefore an opening for profitable enterprise. In the interest of expansion, capitalism was prepared to destroy the most satisfactory social equilibrium. Just as*

*the new ideas of business resulted—gradually after the sixteenth century, rapidly after the eighteenth – in the suppression and destruction of the guilds, so these new ideas brought about the demolition of old buildings and the effacement of playing fields, market gardens, orchards, and villages that stood in the way of the growing city. No matter how venerable these old uses might be, or how salutary for the existence of the city itself, they would be sacrificed to fast-moving traffic or to financial gain...From medieval universality to baroque uniformity, from medieval localism to baroque centralism, from the absolutism of God and the Holy Catholic Church to the absolutism of the temporal sovereign and the national state, as both a source of authority and an objective of collective worship—there was a passage of four or five centuries...The underlying tendency of their new order did not become fully visible until the seventeenth century: then every aspect of life departed from the medieval pole and re-united under a new sign, the sign of the Prince. Machiavelli’s work on “The Prince” provides more than one clue to both the politics and the plan of the new city, and Descartes, coming later, will re-interpret the world of science in terms of the unified order of the baroque city...The very shock of the Black Death also produced a quite different reaction: a tremendous concentration of energies, not on death, eternity, security, stability, but on all that human audacity might seize and master within the limits of a single lifetime. Overnight, six of the seven deadly sins turned into cardinal virtues; and the worst sin of all, the sin of pride, became the mark of the new leaders of society, alike in the counting house and on the battlefield. To produce and display wealth, to seize and extend power, became the universal imperatives: they had long been practiced, but they were now openly avowed, as guiding principles for a whole society...Between the thirteenth and the eighteenth centuries, the innovations of capitalism consolidated as a body of doctrine and a rule of practice: habits of abstemiousness, abnegation, systematic order, the practice of postponing present pleasures for much greater future rewards, were transferred from religion to business, where they produced immense visible gains. The introduction of town clocks in the thirteenth and fourteenth centuries was but one symptom of the fact that business was no longer regulated by the sun and the powers of the human frame. In the large-scale textile factories at the end of the Middle Ages, diligence was enforced on workers by a stricter, more impersonal overseership than could be exercised in the loose intimate routine of the small workshop, with its intervals of gossip, its rude horseplay and playful inattention to business...Capitalism, denying the holiness of poverty or the imaginative sustenance of art, sought solely to increase the amount of consumable goods and measurable gain. At the critical moment after the Black Death, when population was again beginning to increase with compensatory vigor that soon offset those great losses, capitalist enterprise and a growing technological resourcefulness sought to meet the challenge of numbers. They did so by giving to economic factors a degree of sustained effort they had never before achieved. The success of capitalist enterprise engendered confidence in the human powers; and in a period of religious schism and corruption, capitalism appeared as a healthy, liberating activity, whose private gains would ultimately work public benefit. Many of the practices introduced by capitalism were in fact salutary and of permanent profit to any humane society; but the immediate effect of this new system by the seventeenth century, was to transform the complex social order of the city into the over-simplified routines of the market. Its ultimate result was a money-making economy that had no definable ends or purposes other than its own further expansion. Yet these new entrepreneurs needed the old cities, particularly the big capital cities or their provincial equivalents: for rents and profits were there at hand, avid for investment. In these well-established towns, large bodies of consumers were assembled, striving for place and favor by luxurious display, aping their aristocratic superiors; there, likewise, old structures, representing heavy capital investments, were still standing, capable of being turned to new uses without drawing off capital and labor from more profitable new ventures. The cities that offered the new municipal privileges of free trade and free deposit of goods, without entry tax, to encourage further business transactions, were first to feel the stir of new enterprises and to further economic concentration. That is why Antwerp and Lyons flourished mightily in the*

sixteenth century. What the capitalist meant by “freedom” was escape from protection, regulation, corporate privilege, municipal boundaries, legal restriction, charitable obligations. Each individual enterprise was now a separate entity, claiming the right to be a law unto itself, in competition with other self-sufficient particles, which put the pursuit of profit over every social obligation. In the Middle Ages “freedom” had meant freedom from feudal restrictions, freedom for the corporate activities of the municipality, the guild, the religious order. In the new trading cities...freedom meant freedom from municipal restrictions: freedom for private investment, for private profit and private accumulation, without any reference to the welfare of the community as a whole. The apologists for this order, from Bernard Mandeville to Adam Smith, assumed that the pursuit of individual activities deriving from greed, avarice, and lust would produce the maximum amount of goods for the community as a whole. In the period when this creed was the prevailing orthodoxy—roughly up to the third quarter of the nineteenth century, when industrial and municipal regulations began timidly to mitigate the resultant filth and illth—the rich grew richer and the poor grew poorer. This fact was expressed, with diagrammatic clarity, in the contrast between the West End and the East End of more than one great city. Now, as with the growth of the national state itself, the development of capitalism was, in part, a necessary effort to overcome the serious limitations of the medieval economy. In the effort to achieve a static security, the medieval corporations had resisted new inventions and new methods of work: they clung to their trade secrets, their esoteric formulae, their “mysteries.” Their members sought, too, to keep guild privileges within families or self-limited groups, raising obstacles against the extension of citizenship to outsiders, even seeking by conspiracy and war to keep down the possible competition of urban neighbors. Instead of accepting the traditional products of the regional economy as relatively fixed and limited, the new merchant adventurers sought to expand production and widen the market: they furthered the technological improvements like the knitting machine, and they drew widely on overseas areas alike for raw materials and for finished products. The shipment and interchange of these goods formed an increasingly large part of the activities of prosperous cities; and with this more and more of the economic life escaped the control of the municipalities. Thus capitalism, by its very nature, undermined local autonomy as well as local self-sufficiency, and it introduced an element of instability, indeed of active corrosion into existing cities. In its emphasis on speculation, not security, upon profit-making innovations, rather than on value-conserving traditions and continuities, capitalism tended to dismantle the whole structure of urban life and place it upon a new impersonal basis: money and profit. All this had a direct effect upon both old structures and new. The old became expendable: the new were conceived, almost from the beginning, as ephemeral. Capital... tended to favor buildings of a utilitarian character, quick to construct, easy to replace—except when the need for public confidence in an institution’s wealth and solidity justified a heavy investment in ostentatious masonry...When land became a commodity, not a stewardship, it passed out of any kind of communal control. There were many efforts to slow down the transfer of municipal and feudal land to individual proprietorship; but the change from feudal holdings, with reciprocal duties between landlord and tenant, and commercial proprietorship, with no obligations save the payment of taxes, went on steadily...As soon as the principles of capitalist conversion, divorced from any sense of social responsibility, were accepted, slum accommodations and slum housing received authorization...Instead of being penalized for his anti-social exploitation of land, the slum landlord, on capitalist principles, was handsomely rewarded: for the values of his decayed properties, so far from being written off because of their age and disrepair, became embedded in the structure of land values and taxes. If a new use were proposed for the land, it could only be done profitably by maintaining a slum level of congestion, or by admitting even higher densities. The more dense the occupation, the higher the income: the higher the income, the higher the capitalizable value of the land...London...Berlin...On the outskirts of the commercial town, this process went on at an accelerating rate. From the beginning of the nineteenth century, laissez-faire meant, municipally speaking, “Let him who will, speculate on rise in land values and

*rents.” With the military wall demolished, the social controls over the indefinite expansion and dispersion of the city disappeared: the acceleration of transportation, first private then public, increased the possibilities of turnover and hastened the pace of the whole urban transformation. Commercial speculation, social disintegration, and physical disorganization went hand in hand. At the very moment that cities were multiplying in numbers and increasing in size all through Western civilization, the nature and the purpose of the city had been completely forgotten: forms for social life that the most intelligent no longer understood, the most ignorant were prepared to build. Or rather, the ignorant were completely unprepared, but that did not prevent their building.*

(In so few pages Mumford has moved us by so many centuries that the speed is maybe not even “Koyaanisqatsi-like” but like the speed of educational documentaries on the life of plants in which flowers seem as if they were opening in front of our eyes so that we may have a view of the processes which we would not have at smaller speeds. In this way, Mumford makes to us visible the formations and shaping of towns and also of other things –e.g. of some abstract nouns like the pseudoscientific economic doctrines are—but he always remains present during our reading, so as to make sure we will not see all this just as a sequence of images but we will also see “inside the flowers” the things that a biologist would focus our attention on; this procedure also exists more literally in his book, namely there are many air-photos of cities at different stages (among many other photos taken from land level with very noticing and very wise remarks in the subtitles). All this on many-many pages off the numbering ending on page 576 (before he starts the many-many pages where he cites (and comments on) his sources). Anyway, let’s again skip, or just postpone, a few things from the book to reach the present more quickly (and let’s postpone, for a while, a 2003 analysis which, among other things it does, very comprehensively complements Mumford’s analysis and history of the laissez-faire we’ve just seen). What, for the time, we skip, leaving both old and contemporary slums, in order to go to the suburbs, is “Coketowns”, something familiar through films of Dickens-like atmosphere, and as Mumford informs us it was Dickens who called them this name; city planners call them “conurbations”, following Mumford’s mentor Patrick Geddes, who introduced this term for towns that are not towns but, built and sprawling around coal mines, factories etc remind settlements for refugees after natural or man-made catastrophes, which do not have, nor has it been provided for them to have, ways promoting, or even allowing social, political or cultural life. So we depart from the temporal order of presentation and we also skip completely the way in which Mumford, both here and in other books of his \*, describes how both visionaries (be it with a Quaker’s mentality if hippies did not exist in those times) and adventurers (be it with a mentality of genocidal conqueror if the forerunners of Emerson and Thoreau were too few) left old Europe to try out on a continent new, rich in resources, and virgin (but not exactly uninhabited!), dreams and plans for the materialization on earth of Utopias (like More’s, among other types, too\*\*) For now, we skip the escape from the old world and we go to the escape from (European or US) monster cities to the modern utopia called “suburbs”. Then we’ll return to excerpts outlining what we skipped) \*E.g. in “The Myth of the Machine”. Vol. 2.

\*\*In the book of \* just above, Mumford examines history from a point of view from which the history of modern man starts with Columbus’ discovery and from which one does not distinguish the man of the American capitalist system from the man of the Soviet systems since with the October revolution, too, like with the discovery of a continent, a chance was found to try out another great dream that had existed since the time of Plato, that is the dream of philosophers becoming the governors, in this case the governors being people who represented and further developed the thought of Marx, a philosopher. He considers however that both in the attempt to create a new world in America and its counterpart in Russia, those who tried to make a new beginning tried it through the annulment of their previous experience and through a start without historical or psychological self-knowledge, and that this did not result in their being reborn as naked and innocent as the paradisiacal couple of the first-created but on the contrary it resulted in their taking with them some utmostly heavy luggage, worst of which was the terrible violence and aggression (which did find expression: Against the Indians in the one case and against the dissidents in the other)

...Those who led the “march of civilization” from the eighteenth century on were inclined to be contemptuous of the countryside, the home of backward farmers, shaggy yokels, or pleasure-seeking aristocrats living on their feudal rents, not on profit wrung from trade and manufacture. Yet even among the utilitarian leaders and beneficiaries the impulse to escape from their industrial environment was a common one: in fact to have enough wealth to escape was a mark of success. Well before the industrial town had taken form the notion of leaving behind the complexities of civilization had become attractive to the European mind once more, just as it had been during the decadence of Rome. For the restless and the hardy, there was the conquest and colonization of new lands, mingled with the romantic call of the unspoiled wilderness; for more domestic, reflective souls, there was fishing, rambling, botanizing, going on family picnics or musing in solitude deep in the woods...The suburb becomes visible almost as early as the city itself and perhaps explains the ability of the ancient town to survive the insanitary conditions that prevailed within its walls...Not merely did the Aesclepium at Cos lie outside the city, but the gymnasium and even the academy were often located in the suburbs of the Hellenic city, like the garden we associate with the name of the philosopher Epicurus. In medieval times, we have seen, too, that the monastery often settled outside the city’s walls after the twelfth century, before the city, by its further growth, surrounded it. In every case, the suburban pattern was typically an open one: gardens and orchards and shaded walks, not just gaping spaces, accompanied the buildings. Great universities like Oxford and Cambridge, which grew up in country towns, sought and wrought for themselves the same kind of parklike environment...By the eighteenth century, it is true, the romantic movement had produced a new rationale for the suburban exodus, and the increasingly smoky and overcrowded town provided a new incentive. But it would be an error to regard suburbanism as a mere derivative of this ideology, for it had older, deeper roots. What needs to be accounted for is not the cult of nature that became popular in the eighteenth century ...but rather the obstinacy with which people had often clung for centuries to a crowded, depleted, denatured, and constricted environment, whose chief solace for misery was the company of equally miserable people...To be your own unique self; to build your unique house, amid a unique landscape; to live in this Domain ...a self-centered life, in which private life and caprice would have license to express themselves openly, in short, to withdraw like a monk and to live like a prince—this was the purpose of the original creators of the suburb. They proposed in effect to create an asylum, in which they could, as individuals, overcome the chronic defects of civilization while still commanding at will the privileges and benefits of urban society. This utopia proved to be, up to a point, a realizable one: so enchanting that those who contrived it failed to see the fatal penalty attached to it—the penalty of popularity, the fatal inundation of a mass movement whose numbers would wipe out the goods each individual sought for his own domestic circle, and worse, replace them with a life that was not even a cheap counterfeit, but rather the grim antithesis. The ultimate outcome of the suburb’s alienation from the city became visible only in the twentieth century, with the extension of the democratic ideal through the instrumentalities of manifolding and mass production. In the mass movement into suburban areas a new kind of community was produced, which caricatured both the historic city and the archetypal suburban refuge: a multitude of uniform, unidentifiable houses, lined up inflexibly, at uniform distances, on uniform roads, in a treeless communal waste, inhabited by people of the same class, the same income, the same age group, witnessing the same television performances, eating the same tasteless pre-fabricated foods, from the same freezers, conforming in every outward and inward respect to a common mold, manufactured in the central metropolis. Thus the ultimate effect of the suburban escape in our times is, ironically, a low-grade uniform environment from which escape is impossible. What has happened to the suburban exodus in the United States now threatens, through the same mechanical instrumentalities, to take place, at an equally accelerating rate, everywhere else—unless the most vigorous countermeasures are taken. But before we confront this final caricature of the unfettered suburban life, lived according to nature, for the sake of health and child nurture, let us consider more closely the actual

*development of the suburban container. For we shall see that out of this breakup of the old urban forms, out of the chaotic freedom and spatial senses of the suburban community, came the first substantial changes in urban structure, which matched, unconsciously, the changes that have been taking place in our whole conception of the cosmos. The open basketwork texture of the suburb bears little resemblance to the solid stone container of late neolithic culture. Though the suburb lacked many of the attributes of the ancient city, it has served as an experimental field for the development of a new type of open plan and a new distribution of urban functions. Thus the suburb has prepared the way for a better order of planning, not yet fully expressed or achieved anywhere, in which both the static and dynamic functions, those of the container and the magnet, would find fresh expression. Though the suburb, as such, belongs to the past and has already been enveloped by the conurbation, some of the lessons that modern planners first mastered in the suburb must be incorporated into the new concept of the city...From the thirteenth century on, the dread of the plague prompted a periodic exodus from the city...Pure air and water, freedom from raucous human noises, open fields for riding, hunting, archery, rural strolling—these are qualities that the aristocracy everywhere has always valued; and they are responsible perhaps for their bodily fitness and self-confidence, which contrasts with the occupational disabilities and deformations of the specialized urban drudge, too long confined to the workshop, the counting house, the library...The demand for space changed the whole scale of urban planning once the protective fortification ceased to be essential for security...Following romantic principles, the suburban house and plot and garden were deliberately de-formalized. The street avoided straight lines, even when no curves were given by nature: it might swerve to save a tree, or even to preserve the robust contours of a hillside...Now it happens that simple natural forms are often less expensive than their mechanical substitutes: this was no small discovery in an age that preferred iron fences to privet hedges, paving to greensward, or paper and wax flowers made to in sweat shops to flowers grown in the earth. This is still worth remembering in our present age, when architects lay out buildings without regard to orientation or view or micro-climate in order to justify a mechanically elaborate air-conditioning system...By contrast to the present spurious “romanticism of the machine” the architects and planners of the early romantic movements were demonstrably more scientific and rational. Because the suburban plan economized on mechanical conveniences, it had space and facilities for more vital functions. The suburban house was often consciously oriented for sunlight, for summer breezes, for a view; while plantations of trees and bushes served as windbreaks for both garden and home...In these new suburbs the problem of creating an urban environment favorable to the health and nurture of children was solved by the middle classes as it had never been solved before, except in the almost equally open country town or village. The mere opening up of space was an essential part of the solution. Yet, the scattering of dwellings raised an older rural problem, that of isolation...and it magnified the need for private vehicular transportation...once suburban growth became untrammled, the open plan made rapid locomotion and an extravagant road system a necessity...as soon as the suburban pattern became universal, the virtues it at first boasted began to disappear...The popularity of the mode of the escape undermined some of the results it aimed to achieve, above all privacy and solitude... As the city crept nearer the suburbs, the rural note vanished: presently the suburbanite had the advantage of neither society nor solitude...Land values went up with accessibility by railroad...one paid a heavy price for fresh air...beginning as a mechanism of escape, the suburb has turned into its very opposite. All that is left of the original impulse toward autonomy and initiative is the driving of the private motor car ...It was a segregated community, set apart from the city, not merely by space but by class stratification...in contrast to the city...which by its nature is a multi-form non-segregated environment...little groups of people may indeed form social islands...as people from a Greek or a Polish village may form temporary nests...in the same block in Chicago or New York...But the suburb tended to remain a one-class community, with just a sufficient fringe of tradesmen and servants to keep it going—the latter often condemned to use the central metropolis as their dormitory...like some suburbanites had to commute to the*

metropolis for their daily activities...Also, for esthetic and intellectual stimulus, the suburb remains dependent upon the big city; the theater, the opera, the orchestra, the art gallery, the university, the museum, are no longer parts of the daily environment...not merely did the suburb keep the busier, dirtier, more productive enterprises at a distance, it likewise pushed away the creative activities of the city. Here life ceased to be a drama, full of unexpected challenges and tensions and dilemmas: it became a blind ritual of competitive spending...Thus the genuine biological benefits of the suburb were undermined by its psychological and social defects: above all, the irreality of its retreat. In the town poor men demonstrated: beggars held out their hands in the street: disease spread quickly from poor quarters to the residence of the comfortable, via the delivery boy, the washerwoman, the seamstress, or other necessary menials: the eye, if not carefully averted, would, on a five-minute walk in any direction, behold a slum, or at least a slum child, ragged and grimy. Even in the heyday of Coketown, sensitive and intelligent souls could not remain long in such an environment without banding together to do something about it: they would exhort and agitate, hold meetings and form parades, draw up petitions and besiege legislators, extract money from the rich and dispense aid to the poor, founding soup kitchens and model tenements, passing house legislation and acquiring land for parks, establishing hospitals and health centers, libraries and universities, in which the whole community played a part and benefitted. In the suburb one might live and die without marring the image of an innocent world, except when some shadow of its evil fell over a column in the newspaper. Thus the suburb served as an asylum for the preservation of an illusion. Here domesticity could flourish, forgetful of the exploitation on which so much of it was based. Here individuality could prosper, oblivious of the pervasive regimentation beyond. This was not merely a child-centered environment: it was based on a childish view of the world in which reality was sacrificed to the pleasure principle...In a recent study in Boston, a survey showed that only one male resident out of three spends any time on community or civic activity in his dormitory suburb, and that he likewise fails to participate actively in his professional or business association. In effect the suburbanite renounces the obligations of citizenship at both ends; and the farther he goes from the center the more dissociated he becomes. Neither neighborhood nor city give cohesion to the suburb of the "motor age". The suburban shopping centers, the suburban factories and business offices and research institutions, provide a minimum of facilities for association while imposing through their random distribution a maximum exertion of effort—whether counted in time, mileage, or cost...As an attempt to recover what was missing in the city, the suburban exodus could be amply justified, for it was concerned with primary human needs. But there was another side: the temptation to retreat from unpleasant realities, to shirk public duties, and to find the whole meaning of life in the most elemental social group, the family, or even in the still more isolated and self-centered individual. What was properly a beginning was treated as an end. In many places, the change toward playful emptiness and civic irresponsibility...of the exodus also quickened the inner corrosion of the city and worked toward its destruction. Only as a nursery for bringing up children did the suburb prove a more adequate environment, particularly in the early days of the railroad suburb, when each settlement was surrounded by a broad greenbelt of woods and fields. Here children could gambol safely, without supervision...That was a permanent contribution. But too soon, in breaking away from the city, the part became a substitute for the whole, even as a single phase of life, that of childhood, became the pattern for all the seven ages of man...As leisure generally increased, play became the serious business of life; and the golf course, the county club, the swimming pool, and the cocktail party became the frivolous counterfeits of a more varied and significant life. Thus in reacting against the disadvantages of the crowded city, the suburb itself became an over-specialized community, more and more committed to relaxation and play as ends in themselves. Compulsive play fast became the acceptable alternative to compulsive work: with small gain either in freedom or vital stimulus. Accordingly, the two modes of life blend into each other; for both in the suburb and in the metropolis, mass production, mass consumption, and mass recreation produce the same kind of standardized and denatured

*environment. Even children suffered from this transformation of the whole community into a mere recreation area. For such a segregated community, composed of segregated economic strata, with little visible daily contact with the realities of the workaday world, placed an undue burden of education on the school and the family. The smallest village where people still farm and fish and hunt, the drabest industrial town whose population still engages in essential productive enterprise, has educational possibilities that the suburb lacks. In the end, the operative differences between the contemporary suburb and the big city become increasingly minimal: for in these seemingly different environments reality has been progressively reduced to what filters through the screen of the television set. But both childhood and the suburb are transitional stages: so a well-planned urban community must have a place for other phases of life and other modes of living. A universal suburb is almost as much of a nightmare, humanly speaking, as a universal megalopolis: yet it is toward this proliferating nonentity that our present random or misdirected urban growth has been steadily tending. A large scale pattern of expressways and airfields and sprawling car parks and golf-courses envelops a small scale, increasingly shrunken mode of life...As it has worked out under the impact of the present religion and myth of the machine, mass Suburbia has done away with most of the freedoms and delights that the original disciples of Rousseau sought to find through their exodus from the city. Instead of centering attention on the child in the garden, we now have the image of "Families in Space." For the wider the scattering of the population, the greater the isolation of the individual household, and the more effort it takes to do privately, even with the aid of many machines and automatic devices, what used to be done in company often with conversation, song, and the enjoyment of the physical presence of others. The town housewife, who half a century ago knew her butcher, her grocer, her dairyman, her various other local tradesmen, as individual persons, with histories and biographies that impinged on her own, in a daily interchange, now has the benefit of a single weekly expedition to an impersonal supermarket, where only by accident is she likely to encounter a neighbor. If she is well-to-do, she is surrounded with electric or electronic devices that take the place of flesh and blood companions: her real companions, her friends, her mentors, her lovers, her filler-ups of un-lived life, are shadows on the television screen or even less embodied voices. She may answer them but she cannot make herself heard: as it has worked out, this is a one-way system. The greater the area of expansion, the greater the dependence upon a distant supply center and remote control. On the fringe of mass Suburbia even the advantages of the primary neighborhood group disappear. The cost of this detachment in space from other men is out of all proportion to its supposed benefits. The end product is an encapsulated life, spent more and more either in a motor car or within the cabin of darkness before a television set: soon, with a little more automation of traffic, mostly in motor car, travelling even greater distances, under remote control, so that the one-time driver may occupy himself with a television set, having lost even the freedom of the steering wheel. Every part of this life, indeed, will come through official channels and be under supervision. Untouched by human hand at one end: untouched by human spirit at the other. Those who accept this existence might as well be encased in a rocket hurtling through space, so narrow are their choices, so limited and deficient their permitted responses. Here indeed we find "The Lonely Crowd." The organizers of the ancient city had something to learn from the rulers of our society. The former massed their subjects within a walled enclosure, under the surveillance of armed guardians within the smaller citadel, the better to keep them under control. That method is now obsolete. With the present means of long-distance mass communication, sprawling isolation has proved an even more effective method of keeping a population under control. With direct contact and face-to-face association inhibited as far as possible, all knowledge and direction can be monopolized by central agents and conveyed through guarded channels, too costly to be utilized by small groups or private individuals. To exercise free speech in such a scattered, dissociated community one must "buy time" on the air or "buy space" in the newspaper. Each member of Suburbia becomes imprisoned by the very separation that he has prized: he is fed through a narrow opening: a*

telephone line, a radio band, a television circuit. This is not, it goes without saying, the result of a conscious conspiracy by a cunning minority: it is an organic by-product of an economy that sacrifices human development to mechanical processing. In a well organized community, all these technological improvements might admirably widen the scope of social life: in the disorganized communities of today, they narrow the effective range of the person. Under such conditions, nothing can happen spontaneously or autonomously—not without a great deal of mechanical assistance. Does this not explain in some degree the passiveness and docility that has crept into our existence? In the recent Caracas revolution that deposited a brutal dictator in Venezuela, the starting signal, I have been told by an eye-witness, was the honking of motor car horns. That honking, growing louder, coming nearer, converging from every quarter of the city upon the palace, struck terror into the hearts of the rulers. That, too, was an urban phenomenon. Suburbia offers poor facilities, for meeting, conversation, collective debate, and common action—it favors silent conformity, not rebellion or counter-attack. So Suburbia has become the favored home of a new kind of absolutism: invisible but all-powerful. I might be uneasy about the validity of this analysis had not the prescient de Tocqueville anticipated it long ago, in “Democracy in America.” He sought to “trace the novel features under which despotism may appear in the world.” “The first thing that strikes observation,” he says, “is an uncountable number of men, all equal and alike, incessantly endeavoring to produce the petty and paltry pleasures with which they glut their lives. Each of them living apart, is a stranger to the fate of all the rest—his children and his private friends constitute to him the whole of mankind; as for the rest of his fellow-citizens, he is close to them, but he sees them not; he touches them, but he feels them not; he exists but in himself and for himself alone; and if his kindred still remain to him, he may be said at any rate to have lost his country.” De Tocqueville was describing in anticipation the temper and habit of life in Suburbia a habit that has worked back into the city and made even democratic nations submit, with hardly a murmur, to every manner of totalitarian compulsion and corruption. What this great political philosopher foresaw with his inner eye, less gifted observers can now see with their outer eye. This is the last stage in the breakup of the city. The expansion of our technology only quickens the pace of this change. What is left, if no counter-movement takes place, will not be worth saving. For when the container changes as rapidly as its contents nothing can in fact be saved...Yet in its original effort, when the suburb approached nearest the romantic goal, it made a positive contribution to the emerging conception of the city as a mixed environment, interwoven in texture with the country; and many of these contributions need to be appraised and selectively adapted and improved, not discarded.

(Before going on to either the outline of optimistic prospects too, or the outline of proposals that have already been tried out in part, or the outline of additional obstacles, let's return to what we skipped when we violated the temporal order of the presentation to see a little sooner the recent utopia of the suburb and its impasses. What we will now see will also show us the most recent form and follow-up of what the suburbanites-refugees were retreating from)

...Up to the nineteenth century, there had been a rough balance of activities within the city. Though work and trade were always important, religion and art and play claimed their full share of the townsman's energies. But the tendency to concentrate on economic activities, and to regard as waste the time or effort spent on other functions, at least outside the home, had been growing steadily since the sixteenth century. If capitalism tended to expand the province of the marketplace and turn every part of the city into a negotiable commodity, the change from organized urban handicraft to large scale factory production transformed the industrial towns into dark hives, busily puffing, clanking, screeching, smoking for twelve and fourteen hours a day, sometimes going around the clock. The slavish routine of the mines, whose labor was an intentional punishment for criminals, became the normal environment of the new industrial worker. None of these towns heeded the old saw, “All work and no play makes Jack a dull boy.” Coketown specialized in producing dull boys. As witness to the immense productivity of the machine the slag heaps and rubbish heaps reached mountainous proportions, while the human

beings whose labor made these achievements possible were crippled and killed almost as fast as they would have been on a battlefield. The new industrial city had many lessons to teach; but for the urbanist its chief lesson was what to avoid. By reaction against industrialism's misdemeanors, the artists and reformers of the nineteenth century finally arrived at a better conception of human needs and urban possibilities. In the end the disease stimulated the antibodies needed to overcome it. The generating agents of the new city were the mine, the factory, and the railroad. But their success in displacing every traditional concept of the city was due to the fact that the solidarity of the upper classes was easily breaking up: the Court was becoming supernumerary, and even capitalist speculation turned from trade to industrial exploitation to achieve the greatest possibilities of financial aggrandizement. In every quarter, the older principles of aristocratic education and rural culture were replaced by a single-minded devotion to industrial power and pecuniary success, sometimes disguised as democracy. The baroque dream of power and luxury had at least human outlets, human goals: the tangible pleasures of the hunt, the dinner table, the bed were always temptingly in view. The new conception of human destiny, as the utilitarians projected it, had little place for even sensual delights: it rested on a doctrine of productive exertion, consumptive avarice, and physiological denial; and it took the form of a wholesale disparagement of the joys of life, similar to that necessitated by war, during a siege. The new masters of society scornfully turned their backs on the past and all the accumulations of history and addressed themselves to creating a future, which, on their own theory of progress, would be just as contemptible once it, too, was past—and would be just as ruthlessly scrapped... The political base of this new type of urban aggregation rested on three main pillars: the abolition of the guilds and the creation of a state of permanent insecurity for the working classes: the establishment of the competitive open market for labor and for the sale of goods: the maintenance of foreign dependencies as source of raw materials, necessary for the industries, and as a ready market to absorb the surplus of mechanized industry. Its economic foundations were the exploitation of the coal mine, the vastly increased production of iron, and the use of a steady, reliable—if highly inefficient—source of mechanical power: the steam engine. But the basis of this system, in the ideology of the period, was thought to be the atomic individual: to guard his property, to protect his rights, to ensure his freedom of choice and freedom of enterprise, was the whole duty of the government. This myth of the untrammelled individual was in fact the democratization of the baroque conception of the despotic Prince: now every enterprising man sought to be a despot in his own right: emotional despots like the romantic poets: practical despots like the business men. Adam Smith in "The Wealth of the Nations" still had a comprehensive theory of political society: he had a correct conception of the economic basis of the city and valid insight into the non-profit-making economic functions. But his interest gave way, in practice, to the aggressive desire to increase the wealth of individuals: that was the be-all and the end-all of the new Malthusian struggle for existence. Maybe the most gigantic act in the whole urban transition was the displacement that occurred over the whole planet. For this movement and re-settlement was accompanied by another fact of colossal import: the astounding rise in the rate of population increase. This increase affected industrially backward countries like Russia, with a predominantly rural population and a high rate of births and deaths, quite as much as it affected progressive countries that were predominantly mechanized and de-ruralized... Urbanization increased in almost direct proportion to industrialization: in England and new England it finally came about that over eighty per cent of the entire population was living in centers with more than twenty five hundred population. Into the newly opened lands of the planet, originally peopled by military camps, trading posts, religious missions, small agricultural settlements, there came an inundation of immigrants from countries suffering from political oppression and economic poverty. This movement of people, this colonization of territory, had two forms: land pioneering and industry pioneering ... The extensive land migration in turn helped to bring to the European system of agriculture the resources of hitherto untapped parts of the world: particularly a whole series of new energy

*crops, maize and potato—and that pungent agent of relaxation and social ceremony, the tobacco plant. Moreover the colonization of tropical and subtropical lands added a further energy crop now supplied to Europe for the first time on a grand scale—cane-sugar. This enormous increase in the food supply was what made possible the increase of the population...In the new industrial centers was a chance to build on a firm foundation and make a fresh start: such a chance as democracy had in the eighteenth century claimed for itself in political government. Almost everywhere that opportunity was fumbled. In an age of technical progress the city, as a social and political unit, lay outside the circle of invention. Except for utilities such as gas mains, water pipes, and sanitary equipment, often belatedly introduced, often slipshod, always ill-distributed, the industrial city could claim no important improvements over the seventeenth century town. Indeed, the most wealthy and “progressive” metropolises often denied themselves elementary necessities of life like light and air that even backward villages still possessed. Until 1838 neither Manchester nor Birmingham even functioned politically as incorporated boroughs: they were man-heaps, machine-warrens, not agents of human association for the promotion of a better life...The leading philosophy of life was the offspring of two entirely dissimilar types of experience. One was a rigorous concept of mathematical order derived from the renewed study of the motions of the heavenly bodies: the highest pattern of mechanical regularity. The other was the physical process of breaking up, pulverizing, calcining, smelting, which the alchemists, working with the mechanically advanced mine workers of the late Middle Ages, had turned from a mere mechanical process into the routine of scientific investigation. As formulated by the new philosophers of nature, this new order had no place for organisms or social groups, still less for the human personality. Neither institutional patterns nor esthetic forms, neither history nor myth, derived from the external analysis of the “physical world”. The machine alone could embody this order: only industrial capital boasted corporate form. So immersed are we, even at this late date, in the surviving medium of paleotechnic beliefs that we are not sufficiently conscious of their profound abnormality. Few of us correctly evaluate the destructive imagery that the mine carried into every department of activity, sanctioning the anti-vital and the anti-organic. Before the nineteenth century the mine had, quantitatively speaking, only a subordinate part in man’s industrial life. By the middle of the century it had come to underlie every part of it. And the spread of mining was accompanied by a general loss of form throughout society: a degradation of the landscape and a no less brutal disordering of the communal environment. Agriculture creates a balance between wild nature and man’s social needs. It restores deliberately what man subtracts from the earth; while the plowed field, the trim orchard, the serried vineyard, the vegetables, the grains, the flowers, are all examples of disciplined purpose, orderly growth, and beautiful form. The process of mining, on the other hand, is destructive: the immediate product of the mine is disorganized and inorganic; and what is once taken out of the quarry or the pithead cannot be replaced. Add to this the fact that continued occupation in agriculture brings cumulative improvements to the landscape and finer adaptation of it to the human needs; while mines as a rule pass quickly from riches to exhaustion, from exhaustion to desertion, often within a few generations. Mining thus presents the very image of human discontinuity, here today and gone tomorrow, now feverish with gain, now depleted and vacant. From the eighteen-thirties on, the environment of the mine, once restricted to the original site, was universalized by the railroad. Wherever the iron rails went, the mine and its debris went with them. While the canals of eotechnic phase, with their locks and bridges and tollhouses, with their trim banks and their gliding barges, had brought a new element of beauty into the rural landscape, the railroads of the paleotechnic phase made huge gashes: the cuts and embankments for the greater part long remained unplanted, and the wound in the earth was unhealed. The rushing locomotives brought noise, smoke, grit, into the hearts of the towns: more than one superb urban site, like Prince’s Gardens in Edinburgh, was desecrated by the invasion of the railroad. And the factories that grew up alongside the railroad sidings mirrored the slatternly environment of the railroad itself. If it was in the mining town that the characteristic process of “Abbau” –mining or un-building–*

was seen in its purest, it was by means of the railroad that this process was extended by the third quarter of the nineteenth century to almost every industrial community. The process of un-building, as William Morton Wheeler pointed out, is not unknown in the world of organisms. In un-building, a more advanced form of life loses its complex character, bringing about an evolution downward, toward simpler and less finely integrated organisms. "There is," observed Wheeler, "an evolution by atrophy as well as by increasing complication, and both processes may be going on simultaneously and at varying rates in the same organism." This held precisely true of nineteenth-century society: it showed itself clearly in the organization of urban communities. A process of up-building, with increasing differentiation, integration, and social accommodation of the individual parts in relation to the whole was going on: Food-chains and production chains of a complicated nature were being formed throughout the planet...A universal postal service, fast locomotion, and almost instantaneous communication by telegraph and cable synchronized the activities of vast masses of men...this was accompanied by a steady differentiation of crafts, trades, organizations, and associations: mostly self-governing bodies, often legally incorporated; this significant communal development was masked by the fashionable theory of atomic individualism...But at the same time, an Abbau, or un-building, was taking place, often at a more rapid rate, in other parts of the environment: forests were slaughtered, soils were mined, whole animal species, such as the beaver, the bison, the wild pigeon, were practically wiped out, while the sperm whales and white whales were seriously decimated. Therewith the natural balance of organisms within their ecological regions was upset, and a lower and simpler biological order—sometimes marked by the complete extermination of the prevalent forms of life—followed Western man's ruthless exploitation of nature for the sake of his temporary and socially limited profit economy. Above all, as we shall see, this un-building took place in the urban environment. In so far as there was any conscious political regulation of the growth and development of cities during the paleotechnic period, it was done in accordance with the postulates of utilitarianism. The most fundamental of these postulates was a notion that the utilitarians had taken over, in apparent innocence, from the theologians: the belief that a divine providence ruled over economic activity and ensured, so long as man did not presumptuously interfere, the maximum public good through the dispersed and unregulated efforts of every private, self-seeking individual. The non-theological name for this pre-ordained harmony was *laissez-faire*. To understand the uncouth disorder of the industrialized town one must analyze the curious metaphysical preconceptions that dominated both the scientific and the practical life. "Without design" was a laudatory term in the Victorian period. As in the decadent period of Greece, Chance had been elevated into a deity that was supposedly in control not only of human destiny, but of all natural processes as well. "The gist of Darwin's theory," wrote Ernst Haeckel, the biologist, "is this simple idea; that the struggle for existence in nature evolves new species without design, just as well as man produces new varieties in cultivation with design." It was by following what they presumed was nature's way that the industrialists and the municipal officer produced the new species of town, a blasted, de-natured man-heap adapted, not to the needs of life, but to the mythic "struggle for existence"; an environment whose deterioration bore witness to the ruthlessness and intensity of that struggle. There was no room for planning in the layout of these towns. Chaos does not have to be planned.\* The historic

\*It would be ludicrous to try to add (in the name of the continuing relevance of Mumford's ideas) the even more ludicrous neocon ways of the already ludicrous post modern contexts of "creative chaos", especially as formulated in the mouth of Rumsfeld during various stages of the attack on Iraq. An, undeservedly mild, form of sarcasm replying his stupid remark that losses of Iraqi civilians in Baghdad were still a smaller percentage of its population than the one of losses due to traffic accidents in Washington, is to just comment on this as-if-worthy-of-emulation implementation of optimization via creative-chaos-logistics, by citing, as if one were talking rational and human talk, Mumford on "traffic" from somewhere later in this book: "For the sake of rapid locomotion, we in the United States kill some 40,000 people outright every year and fatally maim hundreds of thousands of others." (By the way, would Rumsfeld ban traffic accidents in Iraq to keep total mortality quotas within peacetime mortality margins?)

*justification for the laissez-faire needs no demonstration now: it was an attempt to break through of stale privileges and franchises and trade regulations that the absolute State had imposed... The new enterprisers had good reason to distrust the public spirit of a venal court or the social efficiency of the Circumlocution Offices of the growing taxation- bureaucracy. Hence the utilitarians wanted to reduce governmental functions to a minimum... Unfortunately , the pre-ordained harmony of the economic order turned out to be a superstition: the scramble for power remained a sordid scramble, and individual competition for ever-greater profits led the more successful to the unscrupulous practice of monopoly at the public expense . But design did not emerge. In practice, the political equality that was slowly introduced into the Western politics from 1789 onward, and the freedom of initiative that was demanded by the industrialists were contradictory claims. To achieve political equality and personal freedom , strong economic limitations and political restraints were necessary...*

(It would not be outside the concerns of a title wondering about whether the relevance of Mumford's book is still continuing , nor outside the spirit of the last few remarks, on the debunking of the "laissez-faire", if we here made a parenthesis to include an article of equal clarity, of a similarly debunking function, of equal interest (actually of an even greater interest, at least to that reader who might naturally feel, at least on a first reading, that he got an overdose of past history , and too little of the present, to form an opinion on present relevance etc ) :

Enslaved By Free Trade  
by George Monbiot  
June 06, 2003  
(From ZNet. [www.zmag.org](http://www.zmag.org))

The founding myth of the dominant nations is that they achieved their industrial and technological superiority through free trade. Nations which are poor today are told that if they want to follow our path to riches, they must open their economies to foreign competition. They are being conned.

Almost every rich nation has industrialised with the help of one of two mechanisms now prohibited by the global trade rules. The first is "infant industry protection": defending new industries from foreign competition until they are big enough to compete on equal terms. The second is the theft of intellectual property. History suggests that technological development may be impossible without one or both.

Britain's industrial revolution was founded upon the textile industry. This was nurtured and promoted by means of ruthless government intervention. As the development economist Ha Joon Chang at the University of Cambridge has documented, from the 14th Century onwards, the British state systematically cut out its competitors, by taxing or banning the import of foreign manufactures and banning the export of the raw materials (wool and unfinished cloth) to countries with competing industries:<sup>1</sup> The state extended similar protections to the new manufactures we began to develop in the early 18th Century.

Only when Britain had established technological superiority in almost every aspect of manufacturing did it suddenly discover the virtues of free trade. It was not until the 1850s and 1860s that we opened most of our markets.

The United States, which now insists that no nation can develop without free trade, defended its markets just as aggressively during its key development phase. The first man systematically to set out the case for infant industry protection was Alexander Hamilton, the first Secretary of the US Treasury. In 1816 the tax on almost all imported manufactures was 35%, rising to 40% in 1820 and, for some goods, 50% in 1832.<sup>2</sup> Combined with the cost of transporting goods to the US, this gave domestic manufacturers a formidable advantage within their home market.

Protectionism was arguably a more immediate cause of the American civil war than the abolition of slavery. High tariffs helped the northern states, which were industrialising rapidly, but hurt the southern states, which remained heavily dependant on imports. The Republicans' victory was the victory of the protectionists over the free traders: in 1864, before the war ended, Abraham Lincoln raised import taxes to the highest level they had ever reached. The US remained the most heavily protected nation on earth until 1913. Throughout this period, it was also the fastest-growing.<sup>3</sup>

The three nations which have developed most spectacularly over the past 60 years - Japan, Taiwan and South Korea - all did so not through free trade but through land reform, the protection and funding of key industries and the active promotion of exports by the state. All these nations imposed strict controls on foreign companies seeking to establish factories.<sup>4</sup> Their governments invested massively in infrastructure, research and education. In South Korea and Taiwan, the state owned all the major commercial banks, which permitted it to make the major decisions about investment.<sup>5</sup> In Japan, the Ministry of International Trade and Industry exercised the same control by legal means.<sup>6</sup> They used tariffs and a number of clever legal ruses to shut out foreign products which threatened the development of their new industries.<sup>7</sup> They granted major subsidies for exports. They did, in other words, everything that the World Trade Organisation, the World Bank and the IMF forbid or discourage today.

There are two striking exceptions to this route to development. Neither Switzerland nor the Netherlands used infant industry protection. Instead, as the economic historian Eric Schiff showed in *Industrialisation without National Patents*, published in 1971, they simply stole the technologies of other nations.<sup>8</sup> During their key development phases (1850-1907 in Switzerland; 1869-1912 in the Netherlands), neither country recognised patents in most economic sectors. Switzerland's industrialisation took off in 1859, when a small company based in Basel pilfered the aniline dyeing process which had been developed and patented in Britain two years before. The company was later named Ciba; more recently, after a series of mergers, it became Novartis and then Syngenta. In the Netherlands, in the early 1870s, two enterprising firms called Jurgens and Van Den Bergh nicked a patented French recipe and started producing something called margarine. They later merged to form a company named Unilever. In the 1890s, one Gerard Philips stole Thomas Edison's design for incandescent lamps, and founded Europe's most successful electronics company.<sup>9</sup>

The nations which are poor today are forbidden by the trade rules from following either route to development. New industries are immediately exposed to full competition with established companies overseas, which have capital, experience, intellectual property rights, established marketing networks and economies of scale on their side. "Technology transfer" is encouraged in theory, but forbidden in practice by an ever fiercer patents regime. Unable to develop competitive enterprises of their own, the poor nations are locked into their position as the suppliers of cheap labour and raw materials to the rich world's companies. They are, as a result, forbidden from advancing beyond a certain level of development. While there is no sound argument for permitting rich nations to protect their economies, there is a powerful case for permitting the poor ones to follow the only routes to development which appear to work.

George Monbiot's book *The Age of Consent: a manifesto for a new world order* is published on June 16th by Flamingo.

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Before returning to Mumford's account, let's also read the following:

### **Akerlof, Spence, Stiglitz bag Nobel Economics Prize**

George Akerlof, Michael Spence and Joseph Stiglitz, all from the United States, won the 2001 Nobel Prize for Economics, the Royal Swedish Academy of Sciences said on Wednesday. They shared the prestigious \$1-million prize for laying the foundation for modern information economics by working out what happens when some in a market place know more than others, the academy said in its citation. George Akerlof demonstrated how a market where sellers have more information than buyers about product quality can contract into an adverse selection of low-quality products. He also pointed out that informational problems are commonplace and important. Akerlof's pioneering contribution thus showed how asymmetric information of borrowers and lenders may explain skyrocketing borrowing rates on local Third World markets; but it also dealt with the difficulties for the elderly to find individual medical insurance and with labour-market discrimination of minorities. Michael Spence identified an important form of adjustment by individual market participants, where the better informed take costly actions in an attempt to improve on their market outcome by credibly transmitting information to the poorly informed. He showed when such signaling will actually work. While his own research emphasized education as a productivity signal in job markets, subsequent research has suggested many other applications, e.g., how firms may use dividends to signal their profitability to agents in the stock market. Joseph Stiglitz clarified the opposite type of market adjustment, where poorly informed agents extract information from the better informed, such as the screening performed by insurance companies dividing customers into risk classes by offering a menu of contracts where higher deductibles can be exchanged for significantly lower premiums. In a number of contributions about different markets, Stiglitz has shown that asymmetric information can provide the key to understanding many observed market phenomena, including unemployment and credit rationing.

George Akerlof, 61, has a PhD from MIT and has held professorships at Indian Statistical Institute and London School of Economics. He is Goldman Professor of Economics at the University of California at Berkeley. A Michael Spence, 58, has a PhD from Harvard and has held professorships at Harvard and the Graduate School of Business, Stanford and has also been Dean at both these universities. Stiglitz, 58, a PhD from MIT has held professorships at Yale, Princeton, Oxford and Stanford, and has been the Chief Economist of the World Bank. He is Professor of Economics, Business and International Affairs at Columbia University.

Now google also key words like "Akerlof ,civil disobedience", "A monster con game, freedom to deceive, deregulation is a false god, Krugman, Pfaff"

Let's return to Mumford's account:)

*...The freedom demanded by the utilitarians was in reality freedom for unrestricted profits and private aggrandizement. Profits and rent were to be limited only by what the traffic would bear: decent customary rents and a just price were out of question. Only hunger, distress, and poverty, Townsend observed in his commentary on the English Poor laws, could prevail on the lower classes to accept the horrors of the sea and the battlefield; and only these same helpful stimuli would "spur and goad" them on to factory labor. The rulers, however, maintained an almost unbroken class front on any issue that concerned their pocketbooks as a class; and they never scrupled to act collectively when it was a question of beating down the working classes. This theological belief in pre-ordained harmony had, however, an important result upon the organization of the paleotechnic town. It created the natural expectation that the whole enterprise should be conducted by private individuals, with a minimum amount of interference on the part of local or national governments. The location of factories, the buildings of quarters for the workers, even the supply of water and the collection of garbage, should be done exclusively by private enterprise seeking for private profit. Free competition was supposed to choose the correct location, provide the correct time-sequence, and create out of a thousand un-coordinated efforts a coherent social pattern. Or rather, none of these needs was regarded as worthy of rational appraisal and deliberate achievement. Laissez-faire, even more than absolutism, destroyed the notion of a co-operative polity and a common plan. Did not the utilitarian expect the effects of rational design to appear from the unrestricted operation of conflicting private interests? By giving rein to unrestricted competition, reason and co-operative order were to emerge: indeed rational planning, by preventing automatic adjustments, could, it was supposed, only interfere with the higher workings of a divine economic providence. The main point to note now is that these doctrines undermined such municipal authority as had survived, and they discredited the city itself as anything more than a "fortuitous concourse of atoms" –as the physics of the time erroneously described the universe–held together temporarily by motives of self-seeking and private profit. Even in the eighteenth century, before either the French revolution or the coal-and-iron revolution had been consummated, it had become the fashion to discredit municipal authorities and to sneer at local interests. In newly organized states, even those based on republican principles, only matters of national moment, organized by political parties, counted in men's hopes and dreams. The time of the Enlightenment, as W. H. Riehl sharply said, was a period when people yearned for humanity and had no heart for their own people...*

*"Slum, semi-slum, and super-slum—to this had come the evolution of cities." Yes: these mordant words of Patrick Geddes apply inexorably to the new environment. Even the most revolutionary of contemporary critics lacked genuine standards of building and living: they had no notion how far the environment of the upper classes themselves had become impoverished. Thus Friedrich Engels, in order to promote the resentment needful for revolution, not merely opposed all "palliative" measures to provide better housing for the working classes: he seems to have held that the problem would be solved eventually for the proletariat by a revolutionary seizure of the commodious quarters occupied by the bourgeoisie. This notion was qualitatively inept and quantitatively ridiculous. Socially speaking, it merely urged as a revolutionary measure the miserable process that had actually gone on in the older towns as the richer classes moved out of their original quarters and divided them up for the working class occupation. But above all the suggestion was naïve because it did not perceive that the standards embodied even in the more pretentious new residences were often below those desirable for human life at any economic level. In other words, even this revolutionary critic was apparently unaware of the fact that he upper-class quarters, were more often than not, intolerable super-slums. The necessity for increasing the amount of housing, for expanding the space, for multiplying the equipment, for providing communal facilities, was far more revolutionary in its demands than any trifling expropriation of the quarters occupied by the rich would be. The latter notion was merely an impotent gesture of revenge: the former demanded a thoroughgoing reconstruction of the entire*

*social environment – such a reconstruction as the world is perhaps on the brink of today, though even advanced countries, like England and Sweden and the Netherlands, have not as yet grasped all the dimensions of this urban change. Let us look more closely at these new houses of the working classes. Each country, each region, each population group had its own special pattern...but in industrial housing there are certain common characteristics. Block after block repeats the same formation: there are the same dreary streets, the same shadowed, rubbish-filled alleys, the same absence of open spaces for children's play and gardens; the same lack of coherence and individuality to the local neighborhood. The windows are usually narrow; the interior light insufficient; no effort is made to orient the street pattern with respect to sunlight and winds. The painful grayish cleanliness of the more respectable quarters, where the better-paid artisans or clerks live, perhaps in a row, perhaps semi-detached, with a soiled pocket-handkerchief of grass before their houses, or a tree in a narrow courtyard in the rear—this respectability is almost as depressing as the outright slatternliness of the poorer quarters: more so indeed, because the latter often at least have a touch of color and life, a Punch-and-Judy show in the street, the chatter of the market stalls, the noisy camaraderie of the public house or bistro; in short, the more public and friendly life that is lived in the poorer streets. The age of invention and mass production scarcely touched the worker's house or its utilities until the end of the nineteenth century. Iron piping came in; likewise the improved water closet; eventually the gas light and the gas stove, the stationary bathtub with attached water pipes and fixed outlets; a collective water system available for every house, and a collective sewage system. All these improvements slowly became available to the middle and upper economic groups after 1830; within a generation they became middle-class necessities. But at no point during the paleotechnic phase were these improvements made available to the mass of the population. The problem for the builder was to achieve a modicum of decency without these new expensive utilities... Whole quarters and cities...were filled with dwellings which mocked every boast of material success that the "Century of Progress" uttered...Poverty and the environment of poverty produced organic modifications: rickets in children, due to the absence of sunlight, malformations of the bone structure and organs, defective functioning of the endocrines, through a vile diet; skin diseases for lack of the elementary hygiene of water; smallpox, typhoid, scarlet fever, septic sore throat, through dirt and excrement; tuberculosis, encouraged by a combination of bad diet, lack of sunshine,, and room overcrowding, to say nothing of the occupational diseases, also partly environmental. Chlorine, ammonia, carbon monoxide, phosphoric acid, fluorine, methane, not to add a long list of some two hundred cancer-producing chemicals, pervaded the atmosphere and sapped vitality: often in stagnant lethal concentrations, increasing the incidence of bronchitis and pneumonia, causing widespread death—presently the recruiting sergeant was not able to use the children of this regime even as cannon fodder, so the medical discovery of England's mistreatment of her workers, during the Boer War and the First World War, did perhaps as much as any one other factor to promote better housing there...The crude results of all these conditions creating a race of defectives...were visible in the mortality tables for adults, in the disease rates for urban workers compared with agricultural workers, in the expectations of life enjoyed by the various occupational classes. Above all, perhaps the most sensitive barometer of the fitness of the social environment for human life is the infant mortality tables...There have been much unwarranted congratulation over improvements in urban health under industrialism because those who believed that progress automatically occurred in every department of life during the nineteenth century refused to face the harsh facts. They did not let themselves make comparative studies between town and country, between the mechanized and the unmechanized; and they assisted further in creating confusion by using crude mortality tables, not corrected according to age and sex groups, and not therefore allowing for the heavier distribution of adults in the cities and the larger incidence of children and old people, more subject to disease and death, in the countryside. Similar misleading analyses, disguised as objective research, continue to be made. Thus Mabel Buer attempted to vindicate the industrial revolution from the charge of creating*

urban blight by making a study of the decrease in the death rate that took place before 1815—that is, before overcrowding, bad sanitation, and the general urbanization of the population had produced their characteristic devitalizing results... Instead of giving credit for the early advance to the mechanization of industry, one should give due credit to quite another department—the increase of the food supply, which provided a better diet and helped raise resistance to disease. Still another factor may have had a part: the wider use of soap, made possible by the increased amount of available fats. The use of soap in personal hygiene may have extended from the washing of the nipples of the nursing mother to the child in her care... the spread of the soap-and-water habit might well account for the lowering of infant mortality rates before the nineteenth century; even as the dearth of water and soap might account in part for the deplorable infant death rates of the paleotechnic town... One may grant that at the tempo at which industrialism was introduced into the western World, the problem of building adequate cities was almost insoluble. The premises which made these operations possible also limited their human success. How build a coherent city out of the efforts of a thousand competing individualists who knew no law but their own sweet will?... The new urban emergent, the coal-agglomeration, which Patrick Geddes called the conurbation, was neither isolated in the country, nor attached to an old historic core. It spread in a mass of relatively even density over scores and sometimes hundred of square miles. There were no effective centers in this urban massing: no institutions capable of uniting its members into an active city life: no political organization capable of unifying its common activities. Only the sects, the fragments, the social debris of old institutions remained, left like the muddied debris scattered by a great river after the flood had subsided: a no-man's-land of social life. These cities not merely failed for the most part to produce art, science, or culture: they failed at first even to import them from older centers... Approach more closely the paleotechnic town: examine it with eye, ear, nose, touch. Present-day observers, because of the growing contrast with the emerging neotechnic environment, can at last see what only poets like Hugo or Ruskin or Morris saw a hundred years ago: a reality that the philistines, tangled in their utilitarian web of dreams, alternately denied as a sentimental exaggeration or greeted with enthusiasm as an indisputable mar of “progress.”... The leakage of escaping gas... the poisonous smoke... the rivers turned dark poisonous sewers through black dyes... the by-products of chemical industries... the finely divided particles of iron from the grinding and sharpening operations..., all these things smarted the eyes, rasped the throat and lungs, lowered the general tone, even when they did not produce in contact any definite disease... Under such conditions one must have all one's senses blunted to be happy... first to lose one's taste... even well-to-do people began to eat canned goods and stale food when fresh ones were available because they could no longer tell the difference... Next to the dirt, the new towns boasted another distinction equally appalling to the senses... I refer to the noise... today numerous experiments have established the fact that noise can produce profound physiological changes... One must remember too that the paleotechnic towns made no effort to separate factories from workers' homes... Never before in recorded history had such vast masses of people lived in such a savagely deteriorated environment, ugly in form, debased in content. The galley slaves of the Orient, the wretched prisoners in the Athenian silver mines, the depressed proletariat in the insulae of Rome—these classes had known, no doubt, a comparable foulness; but never before had human blight so universally been accepted as normal: normal and inevitable... Today, had the energy that has been put into styling car bodies gone into the design of a silent thermo-electric power unit, the modern city would not be as backward as its paleotechnic predecessor in the matter of noise and fume. Instead, the “progressive” metropolises of motordom, like Los Angeles, exhibit, indeed magnify, all the urban evils of the paleotechnic period... Perhaps the greatest contribution made by the industrial town was the reaction it produced against its own great misdemeanors; and, to begin with, the art of sanitation or public hygiene... The counter-attack in the reform of the industrial town began from the pest-ridden prisons and hospitals; their improvement made them pilot plants... Nineteenth century achievements in molding large glazed drains and casting iron

*pipes, made possible the tapping of distant supplies of relatively pure water and the disposal, at least as far as a neighboring stream or sewage; while the repeated outbreaks of malaria, cholera, typhoid, and distemper served as a stimulus to these innovations...John Ruskin had spoken to the point: "Providing lodgments for working people means a great deal of vigorous legislation and cutting down of vested interests that stand in the way; and after that, or before that, so far as we can get it, through sanitary and remedial action in the houses that we have, and the building of more, strongly, beautifully and in groups of limited extent, kept in proportion to their streams...and walled round with a belt of beautiful garden and orchard, so that, from any part of the city, perfectly fresh air and grass and the sight of the far horizon may be reachable in a few minutes' walk."...Camillo Sitte insisted upon the hygienic function of the urban park:...the "lungs" of the city, whose function became newly appreciated through their absence. The cult of cleanliness had its origins before the paleotechnic era: it owes much to the Dutch cities of the seventeenth century, with their plentiful water supplies, their large house windows showing up every particle of dust inside, their tiled floors; so that the scrubbing and scouring of the Dutch housewife became proverbial. Cleanliness got new scientific reinforcements after 1870. As long as the body was dualistically separated from the mind, its systematic care might be slighted, as almost an indication of more spiritual preoccupations. But the new conception of the organism that grew in the nineteenth century, with Johannes Mueller and Claude Bernard, reunited the physiological and the psychological processes: thus the care of the body became once more a moral and esthetic discipline. By his researches in bacteriology Pasteur altered the conception of both the external and the internal environment of organisms: virulent microscopic organisms flourished in dirt and ordure, and largely disappeared before soap- and-water and sunlight. As a result, the farmer milking a cow today takes sanitary precautions that a mid-Victorian London surgeon did not trouble to take before performing a major operation, till Lister taught him better. The new standards for light, air, and cleanliness which Florence Nightingale established for hospitals she even carried into the white-walled living room of her own home – a true prelude to Le Corbusier's admirably hygienic "Esprit Nouveau" in modern architecture. At last, the industrial town's indifference to darkness and dirt was exposed for what it was, a monstrous barbarism. Further advances in the biological sciences threw into relief the misdemeanors of the new environment with its smoke and fog and fumes. As our experimental knowledge of medicine increases, this list of evils lengthens: it now includes the two hundred-odd cancer-producing substances still usually found in the air of most industrial cities, to say nothing of the metallic and stone dusts and poisonous gases that raise the incidence and increase the fatality of diseases of the respiratory tract. Though the pressure of scientific knowledge worked slowly to improve conditions in the city as a whole, it had a quicker effect on the educated and comfortable classes: they soon took the hint and fled from the city to an environment that was not so inimical to health. One of the reasons for this tardy application of modern hygiene to city design was the fact that individual improvements in the hygienic equipment of dwellings made a radical alteration in costs; and these costs were reflected in heavier municipal investments in collective utilities, and in heavier municipal taxes to keep them up. Just as early industrialism had squeezed its profits not merely out of the economies of the machine, but out of the pauperism of the workers, so the crude factory town had maintained its low wages by depleting and pauperizing the environment. Hygiene demanded space and municipal equipment and natural resources. In time, this demand enforced municipal socialization, as a normal accompaniment to improved service. Neither a pure water supply, nor the collective disposal of garbage, waste, and sewage, could be left to the private conscience or attended to only if they could be provided for a profit. In smaller centers, private companies might be left with the privilege of maintaining one or more of these services, until some notorious outbreak of disease dictated public control; but in the bigger cities socialization was the price of safety; and so, despite the theoretic claims of laissez faire, the nineteenth century became, as Beatrice and Sidney Webb correctly pointed out, the century of municipal socialism. Each individual improvement within the building demanded its collectively*

owned and operated utility: watermains, water reservoirs, and aqueducts, pumping stations: sewage reduction plants, sewage farms... Though this effective and widespread socialization, the general dearth rate and the infant mortality rate tended to fall after the eighteen-seventies... New York was the first big city to achieve an ample supply of water, though the building of the Croton systems of reservoirs and aqueducts, opened in 1842; but in time every big city was forced to follow this example. Sewage disposal remained a difficult matter, and except in cities small enough to have sewage farms capable of transforming all such waste, the problem has not been adequately solved... As for garbage, the usual dumping or burning of this valuable agricultural compost remains one of the persistent sins of unscientific municipal housekeeping... All in all, the work of the sanitary reformers and hygienists, a Chadwick, a Florence Nightingale, a Louis Pasteur, a Baron Haussmann, robbed urban life at its lower levels of some of its worst terrors and physical debasements... The bodies of the dead contributed to improvements: a green ring of mortuary suburbs and parks around the growing cities was formed; and here, again, Haussmann's bold and masterly treatment of problems must earn a respectful salute... The new industrial environment was so glaringly lacking in the attributes of health, that it is hardly any wonder that the counter-movement of hygiene provided the most positive contributions to town planning during the nineteenth century. The new ideals were provisionally embodied in a Utopia, called "Hygeia, or the City of Health," brought forth by Dr. Benjamin Richardson in 1875.. Among other ideas he proposed a system of chimneys connected to central shafts, to convey the unburned carbon to a gas furnace where it would be consumed... also he advocated a small hospital for every 5,000 people... with ample rational justification he proposed to go back to the high medical and human standards of the medieval town... his ideas are now dated but some of them were not merely ahead of his own times but equally ahead of our own day, his contributions to collective medical care are still, I submit, worth pondering.... Mainly it was by the reactions that it produced, by the exodus that it prompted, that the paleotechnic regime had an effect upon future urban forms. These counter-attacks were abetted, from the eighteen-eighties on, by a transformation within industry itself, furthered by the application of science directly to invention; for the new regime was based on electric energy and the lighter metals, like aluminum, magnesium, and copper, and on new synthetic materials, like rubber, bakelite, and the plastics. The inner improvements of the industrial towns proceeded partly from these innovations, which we associate with the spread of the private bathroom, the telephone, the motor car, and radio communication; but the even deeper reaction to the classic pattern of Coketown was that embodied in the emerging concept of the Welfare State... Legislation on sanitary regulations, health services, free public schools, job security, minimum wage provisions, workers' housing, slum clearance, along with public parks and playgrounds, public libraries and museums. These improvements had yet to find their full expression in a new form of the city. But the archetypal industrial town nevertheless left deep wounds in the environment; and some of its worst features have remained in existence, only superficially improved by the neotechnic means. Thus the automobile has been polluting the air for more than half a century without its engineers making any serious effort to remove the highly toxic carbon monoxide gas from its exhaust, though a few breaths of it in pure form are fatal; nor have they eliminated the unburned hydrocarbons which help produce the smog that blankets such a motor-ridden conurbation as Los Angeles. So, too, the transportation and highway engineers who have recklessly driven their multiple-laned expressways into the heart of the city and have provided for mass parking lots and garages to store cars, have masterfully repeated and enlarged the worst errors of the railroad engineers. Indeed, at the very moment the elevated railroad for public transportation was eliminated as a grave nuisance, these forgetful engineers re-installed the same kind of obsolete structure for the convenience of the private motor car. Thus much of what appears brightly contemporary merely restores the archetypal form of Coketown under a chrome painting... As soon as the motor car became common, the pedestrian scale of the suburb disappeared, and with it, most of its individuality and charm. The suburb ceased to be a neighborhood unit; it became a diffused low-

*density mass, enveloped by the conurbation and then further enveloping it. The suburb needed its very smallness, as it needed its rural background, to achieve its own kind of semi-rural perfection. Once that limit was overpassed, the suburb ceased to be a refuge from the city and became part of the inescapable metropolis, "la ville tentaculaire"... This fact will not cease to be true even if jet transportation brings an area twelve hundred miles away as near as one sixty miles distant today. For when one conquers space one also increases the populations to whom that distant space is accessible. The prospective net gain is considerably less than zero... In the more urbanized parts of America, electric transportation... achieved far higher rates of speed than the present motor bus. Far from supplementing public rail transportation, the private motor car became largely a clumsy substitute for it... and devoured the one commodity the suburb could rightly boast: space. Instead of buildings set in a park, we now have buildings set in a parking lot ... the motor car either doubled the number of cars needed per family, or turned the suburban housewife into a full time chauffeur... With the destruction of walking distances has gone the destruction of walking as a normal means of human circulation... As a result, Unwin's salutary demonstration (of 1903), "Nothing Gained by Overcrowding," must now be countered with a qualifying admonition: "Something Lost by Overspacing." ... To ensure the continuous flow of traffic, even in rural areas, immense clover leaves and jug-handles are designed, demolishing still more open space. And instead of freight yards and marshalling yards at the far terminals of a railroad system, the very dispersion of motor traffic demands similar facilities around every individual building where people congregate. Thus, each new factory or office, each new department store or shopping center, established in the midst of the open country, demands parking lots so ample that those who park on the rim have a far longer walk to the shop than they would have in a densely crowded city after leaving their bus or their subway train, though they still obstinately retain the illusionist image of the motor car's taking them from "door to door." All this is a far cry from the aristocratic enjoyment of visual space that provided the late baroque city with open squares and circles and long vistas for carriage drives down tree-lined avenues. Under the present suburban regime, every urban function follows the example of the motor road: it devours space and consumes time with increasing friction and frustration, while under the plausible pretext of increasing the range of speed and communication, it actually obstructs it and denies the possibility of easy meetings and encounters by scattering the fragments of a city at random over a whole region. At the bottom of this whole miscarriage of modern technics lies a fallacy that goes to the very heart of the whole underlying ideology: the notion that power and speed are desirable for their own sake, and that the latest type of fast-moving vehicle must replace every other form of transportation. The fact is that speed in locomotion should be a function of human purpose. If one wants to meet and chat with people on an urban promenade, three miles an hour will be too fast; if a surgeon is being rushed to a patient a thousand miles away, three hundred miles an hour may be too slow... The fastest way to move a hundred thousand people within a limited urban area, say a half mile radius, is on foot: the slowest way of moving them would be to put them all into motor cars. The entire daytime population of historic Boston would assemble on foot on Boston Common, probably in less than an hour if the streets were clear of motor traffic. If they were transported by motor car, they would take many hours, and unless they abandoned their unparkable vehicles would never reach their destination... The absurd belief that space and rapid locomotion are the chef ingredients of good life has been fostered by the agents of mass suburbia... The reductio ad absurdum of this myth is, notoriously, Los Angeles... which has now become an undifferentiated mass of houses, walled off into sectors by many-laned expressways, with ramps and viaducts that create bottlenecks of their own. These expressways move but a small fraction of the traffic per hour once carried by public transportation, at a much lower rate of speed, in an environment befouled by smog, itself produced by the lethal exhausts of the technologically backwards motor cars. More than one third of the Los Angeles area is consumed by these grotesque transportation facilities; two thirds of central Los Angeles are occupied by streets, freeways, parking facilities, garages. This is*

space-eating with a vengeance. The last stage of the process already beckons truly progressive minds—to evict the remaining inhabitants and turn the entire area over to automatically propelled vehicles, completely emancipated from any rational human purpose... Our highway engineers and our municipal authorities, hypnotized by the popularity of the private motor car, feeling an obligation to help General Motors to flourish, even if General Chaos results, have been in an open conspiracy to dismantle all the varied forms of transportation necessary to a good system, and have reduced our facilities to the private motor car (for pleasure, convenience, or trucking) and the airplane. They have even duplicated railroad routes and repeated all the errors of the early railroad engineers, while piling up in the terminal cities a population the private motor car cannot handle unless the city itself is wrecked to permit movement and storage of automobiles... To safeguard more efficient methods of mass transportation, to maintain both the city's existence and the least time-wasting use of other forms of transportation... it is necessary to find appropriate channels for every form of it: it is the deliberate articulation of the pedestrian, the mass transit system, the street, the avenue, the expressway, and the airfield that alone can care for the needs of a modern community. Nothing less will do... If we want to improve our highway system, we should be zealous to keep as large a part of goods haulage as possible on the rails... By pushing all forms of traffic onto high speed motor ways, we burden them with a load guaranteed to slow down peak traffic to a crawl; and if we try to correct this by multiplying motor ways, we only add to the total urban wreckage by flinging the parts of the city even farther away in a formless mass of thinly spread semi-urban tissue... The only effective cure for urban congestion is to so relate industrial and business zones to residential areas that a large part of their personnel can either walk or cycle to work, or use a public bus, or take a railroad train... But there is one aspect of the modern city where the hold of Coketown grips even tighter, and the final effects are even more inimical to life. This is the knitting together of necessary underground utilities to produce a wholly gratuitous result: the underground city, conceived as an ideal. As one should expect of a regime whose key inventions came out of the mine, the tunnel and the subway were its unique contributions to urban form; and not uncharacteristically, both these utilities were direct derivatives of war, first in the ancient city, and later in the elaborate sapping and mining necessary to reduce the baroque fortification. Though the surface forms of Coketown's transportation and shelter have been widely replaced, its underground network has prospered and proliferated. The water main and the sewer, the gas main and the electric main, were all valuable contributions to the upper level city; and under certain limited conditions, the underground railroad, the motor car tunnel, and the underground lavatory could be justified. But these utilities have now been augmented by the underground shops and stores, finally by the underground air raid shelter, as if the kind of environment that served the physical mechanisms and utilities of the city brought any real advantage to its inhabitants. Unfortunately, the underground city demands the constant attendance of living men, also kept underground; and that imposition is hardly less than a premature burial, or at least preparation for the encapsulated existence that alone will remain open to those who accept mechanical improvement as the chief justification of the human adventure. The underground city is a new kind of environment: an extension and normalization of that forced upon the miner—severed from natural conditions\*, under mechanical control at every point, made possible by artificial light, artificial ventilation, and the artificial limitations of human responses to those that its organizers deem

\*We postpone, for the time being, some extended indicative excerpts from Mumford's "The Myth of the Machine", Vol. 2 referring to some parallels of the Nuclear Age with the Pyramid Age and also resembling in spirit the above context of man severed from natural conditions. Let's only mention the following excerpt: "Even at the risk of seeming to push the parallel between the ancient Pyramid Age and the modern age too far, I would suggest that the manned space capsule, as now conceived, corresponds exactly to the innermost chamber of the great pyramids, where the mummified body of the Pharaoh, surrounded by the miniaturized equipment necessary for magical travel to Heaven, was placed..."

*profitable or serviceable... Given the pressure to sink capital more extensively into the underground city, less money becomes available for space and architectural beauty above ground: indeed, the next step in the city's development, already taken in many American cities, is to extend the principle of the underground city even to the design of buildings that are visibly above ground... with air conditioning and all-day fluorescent lighting, the internal spaces in the new American skyscraper are little different from what they would be a hundred feet below the surface. No extravagance in mechanical equipment is too great to produce this uniform internal environment: though the technical ingenuity spent on fabricating sealed-in buildings cannot create the equivalent of an organic background for human functions and activities. All this is merely by way of preparation. For the successor of the paleotechnic town has created instruments and conditions potentially far more lethal than those that wiped out so many lives in the town of Donora, Pennsylvania, through a concentration of toxic gases, of that which in December 1952 killed in one week an estimated five thousand extra of London's inhabitants. The exploitation of uranium to produce fissionable materials threatens, if continued, to poison the lithosphere, the atmosphere, the biosphere—to say nothing of the drinking water—in a fashion that will outdo the worst offenses of the early industrial town; for the pre-nuclear industrial processes could be halted, and the waste products be absorbed or covered over, without permanent blight. Once fission takes place, however, the radioactivity released will remain throughout the life of the products, sometimes a life measured in many centuries or even millennia: it cannot be altered or disposed of without contaminating, ultimately, the area where it is dumped, be it the stratosphere or the bottom of the ocean. Meanwhile, the manufacture of these lethal materials goes on, without abatement, in preparation for collective military assaults aimed at exterminating whole populations. To make such criminally insane preparations tolerable, public authorities have sedulously conditioned their citizens to march meekly into cellars and subways for “protection.” Only the staggering cost of creating a whole network of underground cities sufficient to house the entire population as yet prevents this perverse misuse of human energy. The Victorian industrialist, exposing his fellow citizens to soot and smog, to vile sanitation and environmentally promoted disease, still nourished the belief that his work was contributing, ultimately, to “peace and plenty.” But his heirs in the underground city have no such illusions—they are the prey of compulsive fears and corrupt fantasies whose ultimate outcome may be universal annihilation and extermination; and the more they devote themselves to adapting their urban environment to this possibility, the more surely they will bring on the unrestricted collective genocide many of them have justified in their minds as the necessary price of preserving “freedom” and “civilization”. The masters of the underground citadel are committed to a “war” they cannot bring to an end, with weapons they cannot control, for purposes that they cannot accomplish. The underground city threatens in consequence to become the burial crypt of our incinerated civilization\*. Modern man's only alternative is to emerge once more into the light and have the courage, not to escape to the moon, but to return to his human center—and to master the bellicose compulsions and irrationalities he shares with his rulers and mentors. He must not only unlearn the art of war, but acquire and master, as never before, the arts of life.”*

(In any case, let's consider we have to emerge from a basement less deep and resume the thread from the paragraphs: “Yet in its original effort, when the suburb approached nearest the romantic goal, it made a positive contribution to the emerging conception of the city as a mixed environment, interwoven in texture with the country; and many of these contributions need to be appraised and selectively adapted and improved, not discarded.”, “De Tocqueville was describing in anticipation the temper and habit of life in Suburbia, a habit that has worked back into the city and made even democratic nations submit, with hardly a murmur, to every manner of totalitarian compulsion and corruption. What this great political philosopher foresaw with his inner eye, less gifted observers can now see with their outer eye. This is the last stage in the breakup of the city. The expansion of our technology only quickens the pace of this change. What

\*See again Mumford's excerpt in the footnote of the previous page.

*is left, if no counter-movement takes place, will not be worth saving. For when the container changes as rapidly as its contents nothing can in fact be saved.*" Are we violating the spirit of Mumford's analysis if we continue from here rather than from the grim paragraph just above this parenthesis? Not at all! We actually restore that spirit\*, because if we had not rearranged the excerpts at some point of the presentation, for purposes we had explained, we would see that the things which follow in Mumford's book—a proposal-intervention that Mumford wants to help and promote— and which we'll now present, are right after the paragraph on de Tocqueville we saw just saw above, so let's repeat that outside the parenthesis too and go on:)

*...De Tocqueville was describing in anticipation the temper and habit of life in Suburbia a habit that has worked back into the city and made even democratic nations submit, with hardly a murmur, to every manner of totalitarian compulsion and corruption. What this great political philosopher foresaw with his inner eye, less gifted observers can now see with their outer eye. This is the last stage in the breakup of the city. The expansion of our technology only quickens the pace of this change. What is left, if no counter-movement takes place, will not be worth saving. For when the container changes as rapidly as its contents nothing can in fact be saved. Fortunately, the countermovement began over half a century ago; and it was directed both against the suburban exodus and against the metropolitan congestion that prompted it. The first forward-looking interpretation of the urban situation in general, in terms of new processes and potentialities already visible in civilization, was made by two remarkable observers toward the end of the nineteenth century...The earlier of the two, Peter Kropotkin, wrote...in 1889...the remarkable book "Fields, Factories, and Workshops." Almost half a century in advance of contemporary economic and technical opinion, he had grasped the fact that the flexibility and adaptability of electric communication and electric power, along with the possibilities of intensive biodynamic farming, had laid the foundations for a more decentralized urban development in small units, responsive to direct human contact, and enjoying both urban and rural advantages. He saw that industry ...with the [cable] transmission of electric power... was no longer tied to the coal mine, even when coal remained a source of power, nor was it tied to the railroad and the big city: neither efficiency nor economy was to be equated with the big units of production. Kropotkin foresaw what many big corporations were to discover only during the Second World War; namely, that even when the total assemblage was a big one, the farming out of special industrial operations in "bits and pieces" actually often made the reputed economies of concentrated large scale organizations— the industrial tendency that justified other forms of metropolitan bigness— dubious. Effective transportation and fine organization were often superior to the mere physical massing of plant under one roof. The finer the technology, the greater the need for human initiative and skill conserved in the small workshop. Kropotkin realized that the new means of rapid transit and communication, coupled with the transmission of electric power in a network, rather than a one-dimensional line, made the small community on a par in essential facilities with the overcongested city. By the same token, rural occupations once isolated and below the economic and cultural level of the city could have the advantages of scientific intelligence, group organization, and animated activities, originally a big city monopoly; and with this the hard and fast division between urban and rural, between industrial worker and farm worker, would break down too. Kropotkin understood these implications before the invention of the motor car, the radio, the motion picture, the television system, and the worldwide telephone— though each of these inventions further confirmed his penetrating diagnosis by equalizing advantages between the central metropolis and the once peripheral and utterly dependent small communities. With the small unit as a basis, he saw the opportunity for a more responsible local life, with greater scope for the human agents who were neglected and*

\*Besides, and hopefully, this last, de Tocqueville, part is more factual since it based on past and not on extrapolated future like the grim paragraph (more precisely: it is based on what for de Tocqueville's days was extrapolated future but for our days is factual past)

*frustrated by mass organizations. Ebenezer Howard carried these ideas a large stride further than Kropotkin...whose influence...he gratefully acknowledged like also the influence of earlier utopian writers like Thomas Spence and James Silk Buckingham...Behind the new concept of the Garden City he saw “the splendid possibilities of a new civilization based on the service of the community.” He saw that the growth of the big city was self-defeating, for with every new increment of population, its traffic became more congested, its central institutions less accessible, and the larger part of its population was as little benefitted by its higher institutions of culture as if they were entirely outside its orbit. He believed that the time had come to establish a new pattern of city development: one that would use modern technical facilities to break down the widening gap between the countryside, with its depleted economic and social facilities, and the city, with its equally depleted biological and natural advantages: he proposed to overcome both the prevalent apoplexy at the urban center, and the paralysis at the extremities, by promoting a new pattern of city growth. Unlike the advocates of continued urban expansion, he rejected the suburb as a tolerable compromise; indeed he hardly considered it. Howard saw that the relief of congestion was not a matter of widening the dormitory areas of the city, but of decentralizing all its functions. In rejecting the temporary, transitional form of the suburb he sought a stable marriage between city and country, not a weekend liaison. In “Garden Cities of Tomorrow,” Howard re-introduced into city planning the ancient Greek concept of a natural limit to the growth of any organism or organization, and restored the human measure to the new image of the city. To achieve this, he also introduced the Greek practice, which had been reformulated in fresh terms by Robert Owen and Edward Wakefield, of colonization by communities fully equipped from the start to carry out all the essential urban functions...Certain aspects of the new form had already been prefigured in the self-contained early suburb, from Riverside, Illinois, on; but Howard’s greatest contribution was less in recasting the physical form of the city than in developing the organic concepts that underlay this form.; for though he was no biologist, like Patrick Geddes, he nevertheless brought to the city the essential biological criteria of dynamic equilibrium and organic balance: balance as between city and country in a larger ecological pattern, and balance between the varied functions of the city: above all, balance through the positive control of growth in the limitation in area, number, and density of occupation, and the practice of reproduction (colonization) when the community was threatened by such an undue increase in size as would lead only to lapse of function. If the city was to maintain its life maintaining functions for its inhabitants, it must in its own right exhibit the organic self control and self containment of any other organism. Howard sought, in other words, to give to the new kind of city all the advantages that the big city possessed before its inordinate expansion put them beyond the means or beyond the reach of its inhabitants. He saw that, once it has achieved an optimum size, the need for the individual town is not to increase its own area and population, but to be part of a larger system that has the advantages of large numbers and extensive facilities...Against the purposeless mass congestion of the big metropolis, with its slums, its industrial pollution, and its lengthening journeys to work Howard opposed a more organic kind of city: a city limited for the beginning in numbers and in density of habitation, limited in area, organized to carry on all the essential functions of an urban community, business, industry, administration, education; equipped too with a sufficient number of public parks and private gardens to guard health and keep the whole environment sweet. To achieve and express this reunion of city and country, Howard surrounded his new city with a permanent agricultural greenbelt. This two-dimensional “wall” would serve not merely to keep the rural environment near, but to keep other urban settlements from coalescing with it: not least, it would, like the ancient vertical wall, heighten the sense of internal unity. Apart from the concept as a whole, the principle of establishing permanent greenbelts around urban communities was a major contribution. Possibly the best name for such communities would be “Greenbelt Towns”...The title that Howard chose for this new urban conception proved unfortunate: not only because it had been pre-empted much earlier by the dingy railroad metropolis of Chicago, but also because*

*the existence of gardens, though integral to the new city, was not its distinctive feature; since it characterized even more copiously many a contemporary suburb. Howard in his book had suggested a density of 70 to 100 people per acre...a truly urban density, approximately that of the New York Plan of 1811, when its new streets were lined with two and three story buildings...five times as high as many contemporary parts of Los Angeles. Superficial students patently ignorant of Howard's work still unfortunately make the error of calling suburbs garden cities, or the suburban open plan a "garden city type of plan": even worse they refer to the classic garden cities [that were really created] as if they were mere suburbs...But the garden city, in Howard's view, was first of all a city...It was in its urbanity, not in its horticulture, that the Garden City made a bold departure from the established method of building and planning...Viewed in historic perspective, more than half a century after its inception, Howard's proposal has proved more realistic—and immensely more fruitful—than Le Corbusier's so-called Vertical Garden City, which is in fact only a vertical suburb...or Soria y Mata's Linear City, or any of the later "Roadtowns" which made transportation the sole determinant of the city plan...And in the English Garden City, gardens actually abound, rich in fruit trees, flowers and vegetables; but Howard's new formulation gained distinction precisely because he refused to be tied down to a particular physical image of the city or a particular method of planning or a particular type of building. The specific forms of such a city would be a resultant of the landscape and the climate, the industries and the technological facilities available, and above all, the arts of the builders and the inhabitants: as for the ideal elements, he expressed them almost as mathematical abstractions...Unlike those who fled from the city, he, a born Londoner, did not underestimate the urban advantages of large numbers and extensive facilities, any more than, as an assiduous inventor of machines, he underrated the advances of the new technology. Rejecting the pattern of the suburb, he believed that industry should be an integral part of the city, and that the workshop and factory—he was not reckoning here with chemical industries, blast furnaces, coal pits—should usually be within a reasonably short distance from every home. He estimated that with a population of 32,000 people, of whom two thousand would be in the agricultural belt, the new city would provide a variety of enterprises, a mixed population with different vocations, and a thriving social life...In Howard's mind, the Garden City was a sensible invention, like the railroad, based on welding into a workable whole a number of different factors, some practical, some ideal. The very simplicity of his premises gave sharpness and clarity to his concrete proposals. He did not have to wait for a total canvass of the urban situation, such as Charles Booth had begun in his all too exhaustive survey of London, or for a national conversion to his point of view, as his contemporary Henry George had sought in his program for land reform before moving into action. Still less did he wait for the motor cars to open a technical exit for escaping the city's congestion. Howard did what a capable engineer does today when he seeks to create a new type of structure whose complexity produces strains and stresses that are incalculable on the basis of past experience and traditional forms: he created a small model and tested it out; or rather he persuaded other people with sufficient capital and faith to join him in this experiment, the building of the First Garden City of Letchworth, which was begun in 1904. Half a generation later, he started another garden city, Welwyn: and the fresh pattern of growth has laid the beginning of what is now a persistent movement toward urban integration. Such an experiment was worth years of statistical research and carefully marshalled reports—judiciously inconclusive, nicely calculated to frustrate action... Not that Howard was infallible. In his original picture of the coming decentralization of London, Howard ...underestimated the gravitational pull of a big metropolitan center in a money-oriented economy, where salesmanship is the supreme art, where success demands the magnification of crowds, and where high rents and expensive congestion have a status value. Howard was doubtless correct in believing that many essential metropolitan goods and services were by-products of congestion itself and would, like the long journey to work, be greatly reduced or vanish in the new town. But his concrete proposal to create a self-contained community of 32,000 people, as an alternative to the*

*overburdened life of London, did not by itself do full justice to the social and technical complexities of present day culture. He was nevertheless right in believing that 32,000 people formed a sufficiently big experimental unit to test the validity of this new method of city growth...Many of the elements in Howard's proposal were already familiar; neither in his ideas nor in his practical initiatives did he seek to start from scratch: his ideal city was a combination of the possible and the practical, ideal enough to be desirable, close enough to contemporary practice to be realizable. His genius was to combine the existing organs of the city into a more orderly composition based on the principle of organic limitation and controlled growth. He began, not with the inertia of disintegration, but with an analysis of the life-maintaining human functions as related to the urban and rural environments. Though his analysis was not a profound one, it had the merit of doing justice to the variety and inter-relationship of urban activities. What was significant about the garden city was not the mere presence of gardens and open spaces: what was radically new was a rational and orderly method for dealing with complexity, through an organization capable of establishing balance and autonomy, and of maintaining order despite differentiation, and coherence and unity despite the need for growth. This was the transformative idea...In framing his new program, Howard had stuck to the essentials, and had not tried to give the architectural and planning details the stamp of his own imagination. He had come forth, not with a new plan for the city—he carefully refrained from confusing the essential issues with any visual image whatever—but with a new program for the balanced organization and contained growth of the cities, in a general process that could take care of an indefinite increase in the national population. Howard expressed his diagnosis and his program by means of a series of clarifying diagrams: but even the scheme that pictures the arrangement of the physical parts of the city was carefully labeled "A Diagram Only." His idea of the balanced community lent itself to a variety of urban forms, from that of his utopian predecessor to Charles Fourier, to that of Le Corbusier; and more than once, often in the guise of refuting Howard or demolishing the garden city idea, the principles of balance and functional completeness which Howard enunciated have been re-invented or re-stated without such assignment of credit to Howard as he himself always made to his precursors...Howard's point of view had still another office: it called general attention to the whole process of city development that hitherto had been lacking...If anything were needed to establish the extraordinary range and penetration of Howard's thinking, his chapter on Social Cities should suffice. For Howard, the garden city did not imply either isolation or parochial self-containment, in the fashion of a sleepy country town in a remote inaccessible area. Howard was not disconcerted by the fact that a minority of the New Town's inhabitants would, for professional reasons have to go either occasionally or even daily to London; for it was enough if there was a sufficient concentration of economic opportunities and social interests to keep most of the inhabitants fully occupied for most of the time, in an environment that possessed many positive urban values that London itself could no longer give even to the wealthy. As if to anticipate the temptation to regard the town of limited size as capable of completely containing and transmitting our modern culture, Howard sought to find an equivalent pattern, based not on congestion but on decentralized organization. In his concept of Social Cities, even before the first garden city was founded, he carried this development to its next stage. If the garden city was not to depend for its higher functions upon the over-burdened metropolis, reducing its own status to that of mere satellite, then the smaller new towns, since they were sufficient in number, must deliberately group together in a new political and cultural organization, which he called a "Social City",...to pool their resources and provide such facilities as large numbers alone make possible: a technical college or a university, a specialized university or a professional symphony orchestra. Howard pointed out that ten cities of thirty-thousand population each, connected by fast public transportation, politically federated and culturally associated, could enjoy all the advantages that a single unitary city of three hundred thousand could make possible; and it could have these advantages without the disabilities of the larger unit. What was once done by close building could now be done by close*

organization, thanks to rapid transportation and instantaneous communication. By this federating device, a phase of his thought too long neglected, Howard grasped the potential form of the etherialized city of the future, which would unite the urban and the rural component into a porous regional complex, multi-centered but capable of functioning as a whole. If the first step was to erect an experimental model of the new urban unit to demonstrate the feasibility of decentralization and self-contained growth, the next step was to create a new kind of large-scale urban community, in which the garden city would become a co-operating member... By his insight into the corporate and unified structure of a city, Howard also called attention to the fact that the growth of a city must be in the hands of a representative public authority; and that the best results could be achieved only if this authority had power to assemble and hold the land, plan the city, time the order of building, and provide the necessary services. No longer were the most essential agents of city developments to be left to the individual investor, whether speculator or owner, dealing with individual building lots, individual houses, individual business sites; for no individual exercise of either foresight or public spirit could produce the equivalent of a coordinated and meaningful whole. Nor was the city's responsibility to provide for the well-being of all its inhabitants to be recognized only after the maximum amount of disorder had been created by unregulated private effort... and it is no accident that the finest examples of civic design in the twentieth century have been in cities like Amsterdam, Frankfurt-am-Main, and Stockholm, where the medieval tradition of corporate responsibility had not been overthrown by the speculative scramble and ideological laissez-faire of the nineteenth century... Howard's proposal, if viable, would be so superior in both its social organization and its physical layout to the existing villages, country towns, suburbs, industrial conurbations, or congested metropolises that it would set a new pattern for future city building: instead of agglomeration, planned dispersal; instead of monopolistic concentration, decentralization; instead of disorganization, a higher type of unity. Once the feasibility of his conception was established, other advances would be possible: for with the land in corporate or municipal ownership, as would be necessary in founding a new community, the unearned increment of growth, which hitherto had gone to the individual landlord and had tended to promote profitable overgrowth, the bonus would go to the improvement of the community, either through reduced taxes or added services. By changing constant urban expansion by piecemeal addition, to orderly decentralization in "self-contained" cities, Howard believed it would be possible to halt the continued congestion and expansion of London. So in time a sufficient proportion of the metropolitan population would be drawn off to lower land values and make possible the reconstruction of the historic center on more open lines, with greater respect for health, social convenience, and the amenities. The success of the new garden city would give back to the overpopulated center the fresh air, sunlight, and beauty that its own inordinate growth had largely robbed it of... Concerning Howard's proposal to test the possibility of creating such a viable urban form by building an experimental model... the building of the new town in the long run proved far cheaper, as well as far more effective, than the kind of exhaustive "urban research" that is so popular today. For the new community within a reasonable time liquidated the cost of its own promotion and answered more definitely than any purely hypothetical formulation could have done, the question of whether such a new urban unit could survive even though it ran contrary to the established canons of profit-making, land speculation and metropolitan domination. When one considers the institutional and psychological obstacles opposing Howard's demonstration, it stands out as a consummate piece of statesmanship, on a par with the founding of the Mormon communities of Utah, or the Cooperative Wholesale Society in England... So antipathetic is Howard's organic approach to the life and growth of cities to the dominant ideology and practice of our time, that many people of considerable competence in the practice of city-planning still regard his program as a wholly chimerical one, doomed to failure by the very nature of our expanding technological economy. So large is this blind spot, that they dismiss as unreal every evidence of its success. But the fact is that in the first generation of its

existence, Howard's "impractical" proposals succeeded in bringing about the establishment of two Garden Cities, Letchworth and Welwyn; and both of these communities, starting as private enterprises, with limited prospects of gain, not merely survived indifference and opposition, but have affected the pattern of housing and city building in many areas, from Scotland to India. It was the success of these cities that led Sir Anthony Montague Barlow's parliamentary committee to recommend the industrial decentralization in garden cities as a remedy for the increasing congestion of London; and this led in turn to the New Acts of 1946, which projected a ring of New Towns around London and in various other parts of England. This is surely a singular kind of "failure." What other new conception of city improvement has resulted in the layout and building of fifteen New Towns, in Britain alone, to say nothing of similar foundations, either achieved or in progress, in Sweden, in The Netherlands, in Italy, and in Soviet Russia? To belittle this achievement by saying that the congestion of London is still unabated, is to overlook the fact that in Britain half a million people, thanks to Howard's idea, are now living under physical and biological conditions immensely superior to those enjoyed by the majority of Londoners: conditions equal to, if not better than those prevailing in the richer suburbs of the past, since they hold more of the social ingredients of genuine urban life. The fact that the New Towns program was abruptly terminated at the moment that searching criticism of its achievements and further experiments in the formal organization of new towns was needed, was a failure of the British political imagination, not a failure of the New Towns themselves, and still less a failure of the premises upon which they were built. Both the premises and the programs demanded revision in the light of further experience: the need for creating New Towns on a regional scale and inventing a new kind of administrative authority, with facilities both for construction and administration on the scale of the great Port Authorities and the London Council has still to be recognized. But those who cry failure at the beginning of a movement, perhaps in the hope that their hue and cry will produce the end, actually show what a radical challenge to their complacencies and unexamined premises this new mode of city growth presents. What Howard called the "town-cluster," set in a permanent green matrix to form a new ecological and political unit, was in fact the embryonic form of a new type of city that would transcend the spatial limitations of the historic city, even that of the metropolis, and yet overcome the boundless expansion and random diffusion of the conurbation. The next step in defining this new urban unit, in which the visible parts formed an invisible but tightly knit whole, was taken by Henry Wright and his associates in the New York State Commission for Housing and Regional Planning... who pointed out that the continuance of metropolitan growth at the terminal cities of New York and Buffalo would help heap up their already massive disabilities... A serviceable system of transportation, private and public, using canal, river, railroad, highroad, and air, would lead to the creation of four or five regional entities, focussed in existing cities, but far more widely diffused, capable of directing further growth into balanced communities. This would have carried Howard's concept of Social Cities to its conclusion. Instead, the combined efforts of the Highway Commission and Port of New York Authority have been to increase terminal congestion and extract profit from further disorder. So far, then, Howard's proposals have failed to halt, or even retard, the automatic processes that are at work in our civilization. The underlying reason for this failure is that Western civilization is still carried along by the inertia of three centuries of expansion: land expansion, industry expansion, and population expansion; and these movements have taken place at a rate that would have made public organization and containment difficult, even if the need for a more stable life- economy had been recognized. From the beginning all three movements exhibited irrational and disruptive features, and so far from having diminished during the last two generations, they have been intensified. As both anxiety and disorder widen, the possibility of achieving planned distribution, a dynamic equilibrium, and normal growth decrease. The present planless suburban spread with its accompanying metropolitan congestion and blight, is an ignoble substitute for civic order and regional design.

*So much must be granted. But response to the present disintegration may already be in process, concealed as Christianity was concealed for two full centuries under the panoply of the Roman Empire. Should the forces of integration reassert themselves, all communities will have to take account of Howard's theorem: that every city, every organ of the community, indeed every association and organization, has a limit of physical growth, and with it the corollary that every plan to overpass that limit must be transposed into an etherialized form. This hold true for the overcentralized hospital or research institution as it has already proved for the elephantine department store. In effectively planning the new dimensions and the new purposes of the city, we shall no doubt go beyond Howard's vision; but we shall still owe him a debt of gratitude for first outlining the basis of this wider order.*

(So this was the proposal-intervention that Mumford had in mind when he was writing as we had seen: "It was not the die-hard Romans of the fifth century A.D., still boasting of Rome's achievements and looking forward to another thousand years of them, who understood what the situation required : on the contrary, it was those who rejected the Roman premises and set their lives on a new foundation.")

With the Howard proposal-intervention and its detailed description until 1961 when Mumford wrote his book, whether the proposal sounds pedestrian and anticlimactic or sounds the best justification and culmination of his whole effort, "The City in History" is almost completed. But let's now go to the last two chapters of the book that have titles "The Myth of Megalopolis" and "Retrospect and Prospect" and show more clearly the nature and the function of the intervention of Mumford himself which consisted in "writing a prologue" to the eleven pages on Mumford of his book (pages 514-524) with the previous 513 pages and to also "see them off" with their "epilogue" of 52 pages (pages 525-576). So let's go to the last two chapters:)

*...Those who ignored Geddes's original definition [of conurbation] have recently re-discovered the phenomenon itself...i.e. the diffusion of undifferentiated urban tissue without any relation either to an internally coherent nucleus or an external boundary of any sort... and treated it as if it were an entirely new development and some have even misapplied to it the inappropriate terms Megalopolis [Mega-city], though it represents, in fact, the precise opposite of the tendency that brought the original city of this name into existence\*. The overgrown historic city was still, residually, an entity: the conurbation is a nonentity, and becomes more patently so as it spreads ...Megalopolis is fast becoming a universal form, and the dominant economy is a metropolitan economy, in which no effective operation is possible without a close tie to the big city. Does this represent a final stage in urban development?...There is surely no evidence of stability in a civilization that has, within forty years, undergone two world wars and prematurely terminated the lives of some sixty million people, on the lowest careful estimate: a civilization that has resurrected the most barbarous forms of compulsion, torture, and wholesale extermination, and now [1961] threatens, in future struggles to "extend communism" or "preserve freedom", to annihilate the population of entire continents and perhaps make the whole planet permanently uninhabitable. This metropolitan civilization contains within itself the explosive forces that will wipe out all traces of its existence; and to make plans for the future without taking account of this fact is to betray one of the typical symptoms of that divorce from reality which has characterized the current exploitation of the scientific agents of mass extermination and mass destruction...Perhaps a consciousness of the historic evolution of cities will provide an insight, hitherto lacking, that will enable new measures of control to be introduced into their otherwise automatic, because unconscious, processes. Even many present factors that now seem blind and spontaneous may prove, in fact, to be conscious and calculated efforts to stimulate growth that*

\*We will leave it to the reader to decide if it updates Mumford, but it will sure update the present collection of excerpts, if one googles "Znet, Mike Davis, megaslum" (then one may also google "Davis, Mumford" and see how efficiently some people understand, promote and extend Mumford's work. Google also "Monbiot Mumford" and also "Michael Albert, parecon, Mumford". Also "Chomsky, Mumford, Weisskopf"

*should be curbed, or to concentrate functions and powers that should be diffused. Possibly one of the reasons for the oft-repeated urban cycle of growth, expansion, and disintegration...lies in the very nature of civilization itself. We have seen that in many instances the city tends to encase the organic, many-sided life of the community in petrified and overspecialized forms that achieve continuity at the expense of adaptation and further growth...Both the citadel and the wall had long been obsolescent in the great capitals; but at the very moment they disappeared, a network of organizational controls centering in the dominating capital city, ramifying by instant communication everywhere, came into existence and performed the same functions more effectively. Just to the extent that the new powers were shadowy, impossible to pin down or come to grips with, etherialized, they were all the more effective. One might breach a wall or kill a king; But how could one assault an international cartel? Only when one national capital came into conflict with another capital did it become apparent that all the archaic and disruptive forces in the old citadels were still active—and indeed had become grossly magnified and increasingly irrational...Though the removal of limits [in the extension or population of the Megalopolis] is one of the chief feats of the metropolitan economy, this does not imply any abdication of power of the part of the chiefs in charge...The metropolis is in fact a processing center, in which a vast variety of goods, material and spiritual, is mechanically sorted out and reduced to a limited number of standardized articles, uniformly packaged and distributed through controlled channels to their destinations, bearing the approved metropolitan label. “Processing” has now become the chief form of metropolitan control...and has brought a whole range of inventions, mechanical and electronic...which handle every operation from bookkeeping to university examinations ...and eliminate all activities of ...a humanly subtle nature...just as “yes” or “no” answers eliminate delicate discriminations that lie between spuriously “correct” answers...Processing and packaging do not end on the production line: they finally make over the human personality. In short the monopoly of power and knowledge that was first established in the citadel has come back, in a highly magnified form, in the final stages of metropolitan culture...Every aspect of life must be brought under control: controlled weather, controlled movement, controlled association, controlled production, controlled prices, controlled fantasy, controlled ideas. But the only purpose of control, apart from the profit, power, and prestige of the controllers, is to accelerate the process of mechanical control itself...The very division of labor that makes specialized scientific research possible also restricts the number of people capable of putting the fragments together, so the whole system, in its final stages, rests on the proliferation of secret, and thus controllable, knowledge: the priests of this regime are easy to identify...But where are the gods? The nuclear reactor is the seat of their power: radio transmission and rocket flight their angelic means of communication and transportation; but beyond these minor agents of divinity the Control Room itself, with its Cybernetic Deity, giving His lightning-like decisions and His infallible answers: omniscience and omnipotence, triumphantly mated by science. Faced with this electronic monopoly of man’s highest powers, the human can come back only at the most primitive level. Of what can man be proud? And in what can he be autonomous? Sigmund Freud detected the beginnings of creative art in the infant’s pride over his bowel movements. We can now detect its ultimate manifestation in paintings and sculpture whose contents betray a similar pride and a similar degree of autonomy – and a similar product. One of the ancient prerogatives of the gods was to create man out of their flesh, like Atum, or in their own image, like Yahweh. When the accredited scientific priesthood go a little farther with their present activities, the new life-size homunculus will be processed, too: he will look remarkably like a man accoutered in a “space-suit”: outwardly a huge scaly insect. But the face inside will be incapable of expression, as incapable as that of a corpse. And who will know the difference?... The very structure of the city itself, with the stone container dominating [the attractions of] the magnet, may in the past have been in no small degree responsible for this resistance [to growth]. In the end it has made physical disintegration –through war, fire, or economic corrosion and blight – the only way of opening the city up to the fresh demands of life. If this is true, the prime need of the city today is*

*for an intensification of collective self-knowledge, a deeper insight into the processes of history, as a first step toward discipline and control: such a knowledge as is achieved by a neurotic patient in facing a long-buried infantile trauma that has stood in the way of his normal growth and integration... The fact that the same signs of overgrowth and overconcentration exist in “communist” Soviet Russia as in “capitalist” United States shows that these forces are universal ones, operating almost without respect to the prevailing ideologies or ideal goals. While one must recognize such facts, it would be premature to believe that these processes are final and irreversible; we have already surveyed a vast amount of data that demonstrate that, even in cultures far less committed to quantitative growth than our own, there comes a point when the tumorous organ will destroy the organism at whose expense it has reached such swollen dimensions. Meanwhile normal birth, growth, and renewal may elsewhere shift the balance. Sociologists and economists who base their projects for future economic and urban expansion on the basis of forces now at work...tend to arrive at a universal megalopolis, mechanized, standardized, effectively dehumanized, as the final goal of urban evolution. Whether they extrapolate 1960 or anticipate 2060 their goal is actually “1984”. Under the guise of objective statistical description, these social scientists are in fact leaving out of their analysis the observable data of biology, anthropology or history that would destroy their premises or rectify their conclusions. While rejecting the scholastic doctrine of final causes, these observers have turned Megalopolis itself into a virtual final cause...Beneath their superficial regard for life and health lies a deep contempt for organic processes that involve maintaining the complex partnership of all organic forms, in an environment favorable to life in all its manifestations ...The popular technology of our times devotes itself to contriving means to displace autonomous organic forms with ingenious mechanical (controllable! profitable!) substitutes. Instead of bringing life into the city...these naïve apostles of progress had rather bring sterility to the countryside and ultimately death to the city. Their “city of the future” is one leveled down to the lowest possibility of active, autonomous, fully sentient life: just so much life as will conform to the requirements of the machine...this would only carry the present forces at work to their ultimate goal –total human annihilation. Such prophecies tend to be self-fulfilling. The more widely they are believed the better they work...the more swiftly they work, the sooner they may come to a dire climax\*. Today the end of our whole megalopolitan civilization is all-too-visibly in sight. Even a misinterpreted group of spots on a radar screen might trigger a nuclear war that could blast our entire urban civilization out of existence and leave nothing behind to start over with – nothing but death by starvation, pandemic disease, or inexorable cancer from strontium 90 for the thrice-miserable refugees who might survive. To build any hopes for the future on such a structure could occur only to the highly trained but humanly under-dimensioned “experts” who contrived it... But the cyclic process we are in the midst of is not necessarily a fixed and fatal one. On this fact all wise plans must be based. Our modern world culture, with its ever deepening historic sources and its ever widening contacts, is far richer in still unused potentialities, just because it is world-wide, than any other previous civilization. Our problem in every department is to slow down or bring to a halt the forces that now threaten us: to break into the cycle of expansion and disintegration by establishing new premises, closer to the demands of life, which will enable us to change our direction and in many areas, to make a fresh start. The very existence of the New Towns of England and Sweden, though they have not yet altered the dominant metropolitan pattern, still bear witness to the possibility of a different mode of urban growth. That small sign may be a harbinger of a larger transformation. In the present chapter, I purpose to look more closely at some of the formidable negative aspects of metropolitan civilization. This will serve as a prelude to a fresh analysis of the role of the city as magnet, container, and transformer, in modern culture.*

\*Hopefully the prophecies and analyses about the opposite can work equally self-fulfillingly; at least now that easy reproduction and storage and communication of information, and internet, gives them a chance they did not have in the past.

[The titles of the subchapters of the book will be in parentheses]

(“THE SLAVERY OF LARGE NUMBERS”)

...Yes: the present metropolis, even in its most confused and corrupted form, reveals certain fresh achievements in diffusing human culture that hardly existed in earlier times, when all the higher forms were a monopoly of citadel and temple. The historic metropolitan core still has a function to perform, once its members understand that neither its original monopoly, nor its present disintegration can be indefinitely maintained. The great problem of today, if one may borrow a cliché from physics, is to transmute physical mass into psychic energy. We must invent new agencies for turning automatic congestion into purposeful mobilization: for etherializing the container, for repolarizing the magnet and widening the field. These possibilities will perhaps become more tangible, if we examine the miscarriages of effort that have taken place:

(THE TENTACULAR BUREAUCRACY...THE REMOVAL OF LIMITS...SPRAWLING GIANTISM...THE SHADOWS OF SUCCESS...CONGESTION AND DE-CONGESTION...THE BURSTING CONTAINER...)

The form of the metropolis, then, is its formlessness, even as its aim is its own aimless expansion ... Frank Lloyd Wright's project for a skyscraper a mile high was the ultimate reduction to absurdity of this whole theory of city development... Once an economy is geared to expansion, the means rapidly turn into an end, and “the going becomes the goal.” Even more unfortunately, the industries that are favored by such expansion must, to maintain their output, be devoted to goods that are readily consumable, either by their nature, or because they are so shoddily fabricated that they must soon be replaced. By fashion and built-in obsolescence the economies of machine production, instead of producing leisure and durable wealth, are duly cancelled out by mandatory consumption on an even larger scale... The container must change as rapidly as its contents. This imperative undermines a main function of the city as an agent of human continuity. The living memory of the city, which once bound together generations and centuries disappears: its inhabitants live in a self-annihilating moment-to-moment continuum. The poorest Stone Age savage never lived in such a destitute and demoralized community... The image that Charlie Chaplin carried from the past into “Modern Times” is just the opposite of megalopolitan reality ... Work is no longer so brutal in the light industries... The energy and application that once went into the productive process must now be addressed to consumption. By a thousand cunning attachments and controls, visible and subliminal, the workers ... are tied to a consumption mechanism: they are assured of a livelihood provided they devour without undue selectivity all that is offered by the machine – and demand nothing that is not produced by the machine... In such a “free” society Henry Thoreau must rank as a greater public enemy than Karl Marx. The metropolis, in its final stage of development, becomes a contrivance for making this irrational system work, and to give those who are in reality its victims the illusion of power, wealth, and felicity... But in actual fact they... increasingly find themselves “strangers and afraid,” in a world they never made: a world ever less responsive to direct human command, ever more empty of human meaning. To believe, therefore, that human culture has reached a marvelous final culmination in the modern metropolis one must avert one's eyes from the grim details of the daily routine. And that is precisely what the metropolitan denizens schools himself to do: he lives, not in the real world, but in a shadow world projected around him at every moment by means of paper and celluloid and adroitly manipulated lights: a world in which he is insulated by glass, cellophane, pliofilm from the mortifications of living... What is visible and real in this world is only what has been transferred to paper or has been even further etherialized on a microfilm or a tape recorder. The essential daily gossip of the metropolis is no longer that of people meeting face to face at a cross-roads, at the dinner table, in the market place: a few dozen people writing in the newspapers, a dozen or so more broadcasting over radio and television, provide the daily interpretation of movements and happenings with slick professional adroitness. Thus even the most spontaneous human activities come under professional surveillance and centralized control. The spread of manifold devices of every sort gives to the most ephemeral and mediocre products of the mind a temporary durability they do not deserve: whole books are printed to

*justify the loose evacuations of the tape recorder... That life is an occasion for living, and not a pretext for supplying items to newspapers, interviews on television, or a spectacle for crowds of otherwise vacant bystanders – these notions do not occur in the metropolitan mind. For them the show is the reality, and “the show must go on!” This metropolitan world, then, is a world where flesh and blood are less real than paper and ink and celluloid. It is a world where the great masses of people, unable to achieve a more full-bodied and satisfying means of living, take life vicariously, as readers, spectators, listeners, passive observers. Living thus, year in and year out, at second hand, remote from the nature that is outside them, and no less remote from the nature that is within, it is no wonder that they turn more and more of the functions of life, even thought itself, to the machines that their inventors have created. In this disordered environment only machines retain some of the attributes of life, while human beings are progressively reduced to a bundle of reflexes, without self-starting impulses or autonomous goals: “behaviorist man.”\*.....*

*...Those who think that there are no alternatives to this urban fate, and no human way out, may prove correct in their estimate of probabilities. But if this is so, it will be because our contemporaries have a limited insight into the forces of history, a poor understanding of the functions of the city, and a naïve tendency to overvalue the instruments of technology, considered apart from any relevance to human ends. At bottom they are the victims of a quasi-scientific metaphysics incapable of interpreting organic processes or furthering the development of human life. The very defects of the prevailing ideology of our leaders will tend to bring about a fulfillment of their prophecies, and thus justify their dismal plans. The controllers themselves have, with exquisite irony, produced a collective mechanism that is not, in fact, under control, and once set in motion is not capable of being brought under control by the kind of mind that has devised it. They console themselves over their helplessness with the quaint notion that “you cannot put the hand of a clock back.” But that ill-chosen metaphor reveals the basic error. Who could trust a clock to keep time accurately if its hands could not be put back: a clock subject only to one kind of regulation—that for going faster? The more automatic our organization becomes, the more necessity there is for a system of regulation; and that system, like the clock’s, must be adjusted in terms of an external standard, independent of the mechanism. In the case of the clock—the revolution of the earth: in the case of human institutions—the whole nature of man, not just that portion of it which has become fascinated by the machine and become submissive to its needs. So with cities: to correct the deficiencies of our over-mechanized civilization, we shall have to build up a multi-centered system of control, with sufficient development or morality, intelligence, and self-respect to be able to arrest the automatic processes—mechanical, bureaucratic, organizational—at any point where human life is in danger or the human personality is threatened with loss of values and choices.*

(DESTINY OF MEGALOPOLIS)

*In following the growth of megalopolitan culture to its conclusion we reach a whole series of terminal processes, and it would be simple-minded to believe that they have any prospect of continuing in existence indefinitely. A life that lacks any meaning, value, or purpose, except that of keeping the mechanism of breathing and ingestion going, is little better than life in an iron lung, which is only supportable because the patient still has hope of recovery and escape. The metropolitan regime now threatens to reach its climax in a meaningless war, one of total extermination, whose only purpose would be to relieve the anxieties and fears produced by the citadel’s wholesale commitment to weapons of annihilation and extermination. Thus absolute power has become in fact absolute nihilism. Scientific and technological over-elaboration, unmodified by human values and aims, has committed countries like the United States and Russia to collective mechanisms of destruction so rigid that they cannot be modified or brought under control without being completely dismantled. Even instinctual animal intelligence remains*

*\* Of course here too is applicable a phrase of Mumford’s we saw a while ago, and we’ll see again, in other connections: “Such prophecies tend to be self-fulfilling. The more widely they are believed, the better they work...the more swiftly they work, the sooner they may come to a dire climax.”*

*inoperative in this system: the commitment to the machine over-throws all the safeguards to life, including the ancient law of self-preservation. For the sake of rapid locomotion, we in the United States kill some 40,000 people outright every year and fatally maim hundreds of thousands of others. For the sake of wielding absolute nuclear power our leaders are brazenly prepared to sacrifice from fifty to seventy-five million of their own citizens on the first day of an all-out nuclear war, and mutilate, or even possibly in the end eliminate the human race. The illusionist phrase to cover these psychotic plans is “national security,” or even, more absurdly, “national survival.” .....The... rehabilitation of the cities of Europe after the second world war...took place in less than twelve years. That almost superhuman mobilization of energies demonstrated that urban reconstruction and renewal on a far greater scale might be accomplished, within a single generation, provided the economy was directly oriented to human needs, and that the major part of the national income was not diverted to the studious consumptive dissipations and planned destructions demanded by the expanding metropolitan economy: above all, by ceaseless preparations for collective genocide and suicide. Unfortunately as soon as the economy recovered and returned to the pursuit of its original ends, all its irrational features likewise came back: to keep going, an even larger part of its energies must be dissipated in pyramid-building. Nowhere have the irrationalities of the current metropolitan myth been more fully exposed than in the development of so-called “absolute” weapons for limitless nuclear, bacterial and chemical genocide. The building up of these weapons among the “Nuclear Powers” has given the “death wish” the status of a fixed national policy, and made a universal extermination camp the ideal terminus of this whole civilization. Even if the nations take timely measures to eliminate the stock of such weapons, it will be long before the vicious moral effects of this policy are dissipated: adult delinquency, on the scale not merely contemplated but actually prepared for in detail, requires therapeutic counter-measures that may take a full century to show any positive effect. This is the last and worst bequest of the citadel (read “Pentagon” and “Kremlin”) to the culture of cities. In a few short years our civilization has reached the point that Henry Adams, with uncanny prescience, foresaw more than half a century ago. “At the present rate of progression, since 1600,” he wrote, “it will not need another century or half century to tip thought upside down. Law in that case would disappear as theory or a priori principle and give place to force. Morality would become police. Explosives would reach cosmic violence. Disintegration would overcome integration”\*. Every part of this prophecy has already been fulfilled; and it is useless to speculate about the future of cities until we have reckoned with the forces of annihilation and extermination that now, almost automatically, and at an ever accelerating rate, are working to bring about a more general breakdown. Metropolitan civilization thus embodies and carries to its conclusion the radical contradiction we found already embedded in the life course of the city from the moment of its foundation: a contradiction that comes out of the dual origin of the city, and the perpetual ambivalence of its goals. From the village, the city derives its nature as a mothering and life-promoting environment, stable and secure, rooted in man’s reciprocal relations with other organisms and communities. From the village, too, it derives the ways and values of an ungraded democracy in which each member plays his appropriate role at each stage in the life cycle. On the other hand, the city owed its existence, and even more its enlargement, to concentrated attempts at mastering other men and dominating, with collective force, the whole environment. Thus the city became a power\*\*-trapping utility, designed by royal agents gathering the dispersed energies of little communities into a mighty reservoir, collectively regulating their accumulation and flow, and directing them into new channels—now favoring the smaller units by beneficially re-molding the landscape, but eventually hurling its energies outward in destructive assaults against other cities. Release and enslavement, freedom and*

\*For how exactly Adams thought—in 1909!—and reached his predictions much earlier than physicists working on relativity and on radioactivity in those days, see a whole chapter on Adams in Mumford’s “The Myth of the Machine” Vol.2. (Subtitle: “The Pentagon of Power”)

\*\*Just power in the sense used in physics, i.e. rate of production of work, work produced per unit time.

*compulsion, have been present from the beginning in urban culture. Out of this inner tension some of the creative expressions of urban life have come forth: yet only in scattered and occasional instances do we discover political power well distributed in small communities, as in 17<sup>th</sup> century Holland or Switzerland, or the ideals of life constantly regulating the eccentric manifestations of power. Our present civilization is a gigantic motor car moving along a one-way road at an ever-accelerating speed...the car as now constructed lacks both steering wheel and brakes, and the only form of control ...consists in making the car go faster, though in his fascination with the machine itself and his commitment to achieving the highest speed possible the driver has forgotten the purpose of the journey...The state of helpless submission to the economic and technological mechanisms modern man has created is curiously disguised as progress, freedom and mastery of man over nature...As a result every permission has become a morbid compulsion...Never before has the "citadel" exercised such atrocious power over the rest of the human race. Over the greater part of history, the village and the countryside remained a constant reservoir of fresh life, constrained indeed by the ancestral patterns of behavior that had helped to make man human...no matter what the errors and aberrations of the rulers of the city they were still correctible. Even if whole urban populations were destroyed, more than nine-tenths of the human race still remained outside the circle of destruction. Today this safety factor has gone: the metropolitan explosion has carried both the ideological and the chemical poisons of the metropolis to every part of the earth; and the final damage may be irretrievable. These terminal possibilities did not, I repeat, first become visible with the use of nuclear weapons: they were plain to alert and able minds, like Burckhardt in the eighteen-sixties, and like Henry Adams at the beginning of the present century. Adam's contemporary, Henry James, put the human situation in an image that curiously holds today: that of the Happy Family and the Infernal Machine. "The machine so rooted as to defy removal, and the family still so indifferent, while it carries on the family business of buying and selling, of chattering and dancing, to the danger of being blown up." The machine James referred to was the political machine of Philadelphia, then the classic embodiment of corruption and criminality; but only a too-guileless observer can fail to see that it applies to other demoralized mechanisms in our expanding metropolitan civilization. Once-local manifestations of criminality and irrationality now threaten our whole planet, smugly disguised as sound business, enterprise, technological progress, communist efficiency, or democratic statesmanship. No wonder the popular existentialists, mirroring our time, equate "reality" with the "absurd." A large portion of the painting and sculpture of the past generation symbolically anticipates the catastrophic end products of this death-oriented culture: total dismemberment and dehumanization in a lifeless, featureless void. Some of the best of this art, like Henry Moore's archaic pinheaded figures, foretells a new beginning at a level so primitive that the mind has hardly yet begun to operate. Now, if the total picture were as grim as that I have painted in the present chapter, there would be no excuse for writing this book, or rather, it would be just as irrational a contribution as the many other irrationalities and futilities I have touched on. If I have duly emphasized the disintegrations of the metropolitan stage, it has been for but one reason: only those who are aware of them will be capable of directing our collective energies into more constructive processes...In the fifth century A.D. those who understood what the situation required were those who rejected the Roman premises and set their lives on a new foundation...*

(we have already seen these things, that relate to the one source of optimism of Mumford, the greenbelt towns; now we will see their relation to his other source of optimism:)...

*Yet in the midst of all this disintegration fresh nodules of growth have appeared and, even more significantly, a new pattern of life has begun to emerge. This pattern necessarily is based on radically different premises from those of the ancient citadel builders or those of their modern counterparts, the rocket-constructors and nuclear exterminators. If we can distinguish the main outlines of this multi-dimensional, life-oriented economy we should also be able to describe the nature and the functions of the emerging city and the future pattern of human settlement. Above*

*all, we should anticipate the next act in the human drama, provided mankind escapes the death-trap our blind commitment to a lop-sided, power-oriented, anti-organic technology has set for it.*

*(...THE BURSTING CONTAINER...*

*CULTURAL FUNCTION OF THE WORLD CITY)*

*Having seen the worst we are at last in position to understand the positive function of the historic metropolis, not as the focus of a national or imperial economy, but in its far more important potential role, as world center. Blindly moving to fulfill this essential but still-unrealized role, it has attempted to achieve by a mere massing together of forces and functions and institutions what can only be accomplished by a radical re-organization... Conditions of congestion that should have been a badge of shame became almost a mark of honor. Strangely the greatest justification for metropolitan congestion has passed almost unnoticed. Through the operation of these forces the big city, in the 19<sup>th</sup> century, served by the very size and variety of its population to foster functions that had never been sustained on anything like the same scale before: corporate associations and societies of like-minded persons, pursuing special interests that covered every aspect of human life. Up to this time, the church, the university, the school, the guild, had been the main foci of associated activities, apart from the city itself. But from the early Renaissance onward, these new associations began to flourish and took a thousand different forms: scientific societies, museums, sociable clubs, insurance associations, political parties, economic groups, historic societies, fellowships of all kinds. Though the 19<sup>th</sup> century metropolis boasted of its individualism, it was actually more significant because of the range and variety of its voluntary corporate associations. Consult the classified telephone directory of a big American city under its listing of clubs and associations: the immense number of purposeful associations you will find there are in part the by-product of metropolitan concentration and they flourished as long as a large part of their members could conveniently come together for at least weekly or monthly meetings. With that solid core of participation, wider organizations of national and international range became possible. Just like the concentration of political and economic power in the citadel produced urban institutions and social benefits not directly intended by the rulers, so did the proliferation of clubs and societies. However vast the metropolis, within it one could find at least a handful of like-minded people, to enhance and sustain any conceivable interest. This was a precious contribution to human development; and not a little of the credit for creativity and productivity that has gone to our technological inventions and our industrial organizations could be traced in the first place to these multitudinous organs of association. In short, though the congestion of the metropolis has tended to suppress or destroy the organic tissue of neighborhoods and smaller communities, it has helped to create new organs of a more specialized and more selective nature, made possible by their accessibility to an unusually large population. This has an important bearing on the future reconstruction of cities and regions. We are now faced with a condition for which, so far as I know, there is no precedent in history. Though the metropolitan container has burst, the institutional magnets still maintain to a large degree their original attractive power... The conscious motives that concentrated so much power in a few great centers would not be sufficient to account for their immense powers of attraction or for the part they play in the culture of our time. And the fact is that the metropolitan massiveness and congestion has actually a deeper justification, though it is not fully recognized: it is a focus of those activities that, for the first time, are bringing all the tribes and nations of mankind into a common sphere of co-operation and interplay. What Henry James said of London may be said equally of its great rivals: it "is the biggest aggregation of human life, the most complete compendium of the world. The human race is better represented there than anywhere else." Its new mission is to hand on to the smallest urban unit the cultural resources that make for world unity and co-operation. Thus the very traits that have made the metropolis seem at once alien and hostile to the folk in the hinterland are an essential part of the big city's function: it has brought together ...all races and cultures...with their languages, their customs, their costumes, their typical cuisines: here the representatives of mankind met face to face on neutral ground.*

*The complexity and the cultural inclusiveness of the metropolis embody the complexity and the variety of the world as a whole. Unconsciously the great capitals have been preparing mankind for the wider associations and unifications which the modern conquest of time and space has made probable, if not inevitable. Here we have, too, the essential reason for the most typical institution of the metropolis, as characteristic of its ideal life as the gymnasium was of the Hellenic city or the hospital of the medieval city—the Museum. This institution sprang out of the very necessities of its own excessive growth. Inevitably the museum has taken on many of the negative characteristics of the metropolis: its random acquisitiveness, its tendency to over-expansion and disorganization, its habit to gauge its success by the number of people who pass through its gates...yet in its rational form the museum serves not merely as a concrete equivalent of the library, but also as a method of getting access, through selected specimens, and samples, to a world whose immensity and complexity would otherwise be far beyond human power to grasp... But if the big city is largely responsible for the invention and public extension of the museum, there is a sense in which one of its own principal functions is to serve as a museum: in its own right, the historic city retains, by reason of its amplitude and its long past, a larger and more various collection of cultural specimens than can be found elsewhere. Every variety of human function, every experiment in human association, every technological process, every mode of architecture and planning, can be found within its crowded area. That immensity, that retentiveness, is one of the greatest values of the big city. The breadth of human experience that the dynamic, still healthy metropolis offers is rivaled by its density and depth, its capacity for making available layer upon layer of human history and biography, not merely through its own records and monuments, but through distant areas that its great resources make it possible to draw upon. A civilization as complex and many sided as ours needs such a stable urban organization, capable of attracting and holding in close co-operation many million of human beings, to carry on all its activities. But what is on one side the city's capacity for cultural inclusion makes it, through the very necessities of condensation and storage, an agent of digestion and selection. If all the materials of our culture were too widely scattered, if the relevant data and artifacts were not capable of being assembled in one place, assorted, made available for redistribution, they would exercise only a small fraction of their influence. Though the great city is the best organ of memory man has yet created, it is also –until it becomes too cluttered and disorganized—the best agent for discrimination and comparative evaluation, not merely because it spreads out so many goods for choosing, but because it likewise creates minds of large range, capable of coping with them. Yes: Inclusiveness and large numbers are often necessary; but large numbers are not enough. Florence, with some four hundred thousand inhabitants, performs more of the functions of the metropolis than many other cities with ten times that number. One of the main problems of urban culture today is to increase the digestive capacity of the container without letting the physical structure become a colossal, clotted, self-defeating mass. Renewal of the inner metropolitan core is impossible without a far greater transformation on a regional and inter-regional scale.*

(We had seen that before the subchapter “The Slavery of Large Numbers” Mumford was finishing by saying: “*In the present chapter, I purpose to look more closely at some of the formidable negative aspects of metropolitan civilization. This will serve as a prelude to a fresh analysis of the role of the city as magnet, container, and transformer, in modern culture.*” In the subchapters that intervened he spoke about the role of the contemporary city as a magnet and as a container. And just above he announced that he would speak of its role as a transformer. Thus he will also address the problem he had posed finishing that subchapter: “*The great problem of today, if one may borrow a cliché from physics, is to transmute physical mass into psychic energy. We must invent new agencies for turning automatic congestion into purposeful mobilization: for etherializing the container, for repolarizing the magnet and widening the field.*” Let's see which transformation he meant at the level of being literal and not at the level of metaphor or analogy)

(THE INVISIBLE CITY)

(In this subchapter we can afford shortcuts through the omission of things that now are known even to small kids (who know them better than us adults since they learned them along with the alphabet and the multiplication table) but in 1961 that Mumford was writing they were known only to some people who had to be somewhat of a Jules Verne. What we mean is that the “transformer” Mumford has in mind (and outlines in detail) is all that is now meant by terms like “web”, “internet”, “google” etc. This is not said to imply that Mumford is redundant (!) and obsolete (!) but to repeat that he is as timely now as he was prophetic then. Maybe someone could think he is self-inconsistent: “But wasn’t Mumford going on and on about the horrible consequences of the fact that the metropolitan world was unreal and shadowy – “virtual” as we now call it whether in contempt or emulation– and made of celluloid and providing its viewers a vicarious life and thrills which, to be felt, the viewers didn’t even have to live? How can he, of all people, also be talking about the PC screen as a transformer? Isn’t it full of shadowy pixel being?” The answer to this very natural objection is the kind of transformation he considers as feasible through this “transformer”. About this issue our excerpts will be detailed, what we’ll be skipping will be the excerpts referring to that portion of the technical part that in our days everyone knows is feasible, or, rather, already available–and on a massive scale too)

*There is another side to this reorganization of the metropolitan complex that derives from the dematerialization, or etherialization, of the existing institutions... Many of the original functions of the city, once natural monopolies, demanding the physical presence of all participants, have now been transformed into forms capable of swift transportation, mechanical manifolding, electronic transmission, worldwide distribution [etc etc we all know that now]. If a remote village can see the same motion picture or listen to the same radio program as the most swollen center, no one need live in that center or visit it in order to participate in that particular activity. Instead, we must seek a reciprocal relation between smaller and larger units, based on each performing the sort of task for which it is uniquely fitted... Let us approach the more abstract relations of the invisible city by drawing a parallel to the new relation on a more visible plane: a small but accurate sample. Scattered over France, often in remote villages and monasteries, are many superb examples of early fresco paintings. Under the earlier metropolitan regime, many of these paintings would have been removed, often not without damage, from their original site and housed in a museum in Paris. This would have left a gaping hole in the place of origin, and would have deprived the inhabitants of a possession that had both communal and economic value, without providing in Paris any true sense of their original setting. Today a better program has been achieved. In the Museum of Murals in the Palais de Chaillot, a large number of admirable replicas have been brought together. In a single afternoon one may see more paintings than one could... in a fortnight of traveling. For those who wish a more intimate experience of the original on site, the paintings have been identified and located. This is the first step toward a more general etherialization...*

(Much of the rest is now well known too, since , e.g. through google, we can see them in the museum or even in their original setting (not quite; of course!) without even stepping out of our house. Then Mumford mentions the example of visiting libraries from a distance, now quite a common fact too, etc etc... Let’s not forget to mention at this point that some university has put on some site all of Mumford’s books (all the books of his library, not all the books he has written only; and with the notes he had written on their margins. One can easily google up all this) ... Not by accident, then, have the old functions of the urban container been supplemented by new functions, exercised through what I shall call the functional grid: the framework of the invisible city. Like the old container the new grid, in all its forms, industrial, cultural, urban, lends itself to both good and bad uses... Technologically, two of the most perfect examples of this new network are in our power and communication systems... The further advantage of such networks is that they permit units of different size, not merely to participate , but to offer their unique advantages to the whole: thus a little library holding a precious collection of manuscripts need

*not surrender them to the bigger institution in order to make sure of their adequate use: it can be an effective part of the whole, making demands, communicating desires, influencing decisions, without being swallowed up by the bigger organization. This gives back to the region its proper autonomy without impeding—indeed rather encouraging—the universal processes. Here is a pattern for the new urban constellation, capable of preserving the advantages of smaller units, and enjoying the scope of the large scale metropolitan organization. In a well ordered world, there would be no limits, physical, cultural, or political, to such a system of co-operation: it would pass through geographic obstacles and national barriers as readily as X-rays pass through solid objects. Given even the present facilities for telephotography as well as fast transportation, such a system could in time embrace the whole planet. Once technics releases itself from the costly wholesale preparations for genocide that now engross the big national states and empires, or from the fulsome production of salable goods designed for premature obsolescence and a profitable rapid turnover, there would be abundant facilities for perfecting such large scale intercultural associations; and the new regional city, visible and invisible, would be the chief instrument. What this point to is a more organic method of creating and diffusing the goods of the city, than those practiced by the historic metropolis or in the present day conurbation. The original limitations of the city, once imposed by its monopoly of communication and political control, cannot be overpassed by a mere augmentation of numbers or a mere extension of roads and buildings. No organic improvement is possible without a re-organization of its processes, functions, and purposes, and a redistribution of its population, in units that favor two-way intercourse, I-and-thou relationships, and local control over local needs. The electric grid, not the stone age container, provides the new image of the invisible city and the many processes it serves and furthers. It is not merely the pattern of the city itself, but every institution, organization, and association composing the city, that will be transformed by this development. In this radical innovation, the great universities and libraries and museums, if they were capable of self-regeneration, might lead the way, as their predecessors did in creating the ancient city. The building materials for the new urban order, if I have interpreted the facts correctly, are at hand. But the possibility that they will continue to be misused and perverted by the existing political system is high. The prospect of massive extension of our present mechanical-electronic facilities, without any change in social purpose, or any attempt to translate the product into higher terms of human association, remains ominous. Countries like Soviet Russia, theoretically immune to the usual seductions and corruptions of contemporary capitalist enterprise, are plainly open to the same temptations—under equally virtuous disguises—to push bureaucratic command of power and centralized authority at the expense of free human association and autonomous development. But the essential promise of this new order was expressed a century ago by Emerson: “Our civilization and these ideas,” he observed, “are reducing the earth to a brain. See how by telegraph and steam the earth is anthropolized.” The thought was independently elaborated in our own day by Teilhard de Chardin; but even he did not understand the ambiguous nature of this promise, or see the necessity of forfending these new dangers. (Maybe not to spell out de Chardin’s ambiguity seems ambiguous on Mumford’s behalf; it isn’t: he has a whole chapter on what he means in his “Myth of the Machine Vol. 2”; in upshot, and in the terms of the present book of Mumford’s, the ambiguity is between “organic brain” and “cybernetic brain”. We reproduce most of that chapter, in some excerpts, after we make a recapitulation and an epilogue—both merely optional for the reader; they can be skipped with no loss of continuity—of “The City in History”, the excerpts from which are finishing right below:)*

*Our civilization is faced with the relentless extension and aggrandizement of a highly centralized, super-organic system, that lacks autonomous component centers capable of exercising selection, exerting control, above all, making autonomous decisions and answering back. The effective response to that problem, which lies at the very heart of our future urban culture, rests on the development of a more organic world picture, which shall do justice to all dimensions of living organisms and human personalities. The thinkers who will do for this organic and human*

*conception what Galileo, Bacon, and Descartes did for our now-insufficient and even dangerously outmoded concepts of science and technology have long been at work. But it may need another century or two before their contributions will have dethroned our Cybernetic Deities and restored to the center of our existence the images and forces and purposes of Life.*

(The next, and last, chapter of Mumford's book, is titled "Retrospect and Prospect" and is about eight pages long. Already at the outset of this presentation, we had mentioned what the prospect was about, but we shall repeat it, before finishing, to check on our possible suspicion, at the outset again, that Mumford might be too much of a poet or a daydreamer, or even a wishful thinker or a silly-jolly chap (or, maybe a growling complainer and catastrophologist). But rather than taking excerpts from his retrospect or repeating some of the excerpts that we've seen, let's make, in free rendering, a summary, in two pages, of what we've seen (we've seen a summary of his 576 book-pages in about 80 screen-pages. If a reader insists that something eludes him and what is to blame is the thin-ness rather than the denseness of Mumford's points or of their presentation and if that thin-ness feeling persists even after the rendering of 576 pages in 2 pages of summary-of-the-summary, then we suggest a change of font-size by two grades and a skipping of the footnotes occurring, which, if we checked correctly, enables the summary to fit in one page only. (OK, we're joking: Mumford's huge density and specific gravity nowhere makes his writing difficult. The only implausible thing about him just feels like: "His books are too good to have really ever been written"). So :) Mumford must have been ecstatic with enthusiasm over Howard's proposal for "Greenbelt Towns" and did everything in his power to help it. Part of his help was his book we've seen. The first reason for his enthusiasm and help was that he considered it as a feasible way for all of us to live in a beautiful way, and to also start reversing the catastrophic path of civilization in a time-schedule shorter than the time needed for our full destruction. The other reason was that the way Howard saw the city as an organic entity inspired in Mumford an approach and a train of thought about how the city functioned in history that elucidated for him many things which he both wanted to share with us and to use them (use them by just sharing these elucidations with us) to help Howard's proposal. For what reason he thought he had to try to convince us and in what way he thought he could do it? The reason was that he had diagnosed as one root of destructiveness of our civilization, a schizophrenia rooted in the city already at the time of its formation: During the transition to the neolithic age and to the agricultural revolution, in which a very significant role was played by the woman, the paleolithic hunter/risker did not let go of his arms, he often protected and saved the village from dangers, he often helped it in works requiring Herculean strength and he often repressed and suppressed it. In works that needed the collaboration of many villages for extended natural dangers many villages were grouped together and with the discovery of war between such groups of villages a protective wall was erected, on the one hand to protect the ones inside and on the other hand to imprison them. The schizophrenia consists in the fact that on the one hand city and democracy derive from the neolithic village, but on the other hand the directing citadel of the city and the power and repression (to degrees often not merely eccentric but psychotic) derive from the way the wall was erected around the groups. Mumford follows the course of the citadel, of the wall and of the "magnetic attractions" of the city from Mesopotamia and Egypt to Greece, to Rome, to the Christian world, to the age of baroque, to the 19<sup>th</sup> and to the 20<sup>th</sup> century, to the 2<sup>nd</sup> world war, to the atom bomb, to the cold war, and to the electronic age, and asks himself which "etherialized"\* survivals of the centralization-and-citadel and the wall-and-attractions constitute perpetuations, or even aggravations, of the tendencies that destroy life and which are the ones that promote life, cultivate it, free it and deepen it. In the Howard type of etherialization-decentralization he sees a group of islets, hopefully being the growing droplets of a phase transition of civilization on a \*"Etherialization" is e.g. the replacement of walls with abstract, mental, boundaries, the replacement of rails for trains carrying coal by cables for transfer of energy from a thermoelectric plant built right by the coal-mine, the replacement of the stage-coach by the telegraph or telephone or wireless, the participation in cultural life of the city through television or internet etc etc etc.

course reversing the catastrophic path to the lifeless. The way in which Mumford wants to convince us is by debunking all the supposedly scientific objections formulated by economists against the desirability or attainability of such reversal, and this he does, on the one hand by historically following the course of laissez-faire (when was it what its name really means? And when did it become exactly the opposite of what it calls itself? –i.e. monopoly capitalism with the blessing of the state and at the state’s expense), and on the other hand he does this by analyzing the objections of economists that appeal to pseudo-analogies of laissez-faire with physics (physics of a stage which, anyway, is still not mature enough to study organic phenomena) and they only end up with the well-known doctrine that intervention in economy is a harmful thing because “order emerges, by itself, through automatic self-corrective movements of the market” and with sole “proof” of the “fact” that our situation is the optimal (possible), the pseudoscientific claim (that is non-provable anyway) that with any other handling the situation would have been even worse (! And all this in the name of science, and of “analogies” with physics (of all sciences!) which supposedly prove that the plight does not derive from options that are both idiotic and immoral). Concerning quantitative proofs that other options are possible, Mumford mentions that Europe was rehabilitated after the 2<sup>nd</sup> world war in 12 years). As a positive kind of backfire of the overpopulation of large cities, Mumford sees the fact that they themselves become a kind of museum of human civilizations; he also sees as very promising the formation of clubs and groups of kindred spirits who in such cities can find and meet each other\*; he sees that these huge cities-museums of the history of civilization and some of these clubs can function in ways that can act like a process of collective psychoanalysis and self-awareness of civilization\*\*. The potentialities of electronic communication he sees as very helpful in also enabling remote villages to be reached by this transformative process in which people who grasp the way in which civilization functions educate each other and the people around them instead of waiting for something like that to be undertaken by the–increasingly standardized and adapted to the market– state education. Thus all the world like one city, a city not in the scheme “container-like wall, attractions, citadel” but in the scheme “green belt, attractions, transformative process” –in short, a city in the form of a “brain”, “organic and not Cybernetic”–may still have the time to proceed to confront the existing impasse and to dethrone the so very misleading and so very, provedly, harmful model of knowledge which, considering as pseudoscientific the existence of organic processes tends to eliminate whichever type of intelligence does not resemble artificial intelligence and whichever life does not resemble machines (“to dethrone the Cybernetic Deities” is the expression of Mumford). By way of epilog: \*Obviously he would see similarly, i.e. as nodules/islets and growing droplets of the onset of a phase transition, sites like [www.zmag.org](http://www.zmag.org), [antiwar.com](http://antiwar.com), [truthout.com](http://truthout.com), [indymedia.org](http://indymedia.org), etc ... and their public; nodules and growing droplets of collective self-knowledge and self-picturing of society helping towards a phase transition of civilization that seems to presuppose the formation of a catalyst by a phase transition in information

\*\*Here let’s bring to mind again three paragraphs on collective original sins, traumas, and therapies:

1. “...In the end it *has made physical disintegration –through war, fire, or economic corrosion and blight – the only way of opening the city up to the fresh demands of life. If this is true, the prime need of the city today is for an intensification of collective self-knowledge, a deeper insight into the processes of history, as a first step toward discipline and control: such a knowledge as is achieved by a neurotic patient in facing a long-buried infantile trauma that has stood in the way of his normal growth and integration...*”
2. “...Metropolitan civilization thus embodies and carries to its conclusion the radical contradiction we find already embedded in the life course of the city from the moment of its foundation: a contradiction that comes out of the dual origin of the city, and the perpetual ambivalence of its goals... Release and enslavement, freedom and compulsion, have been present from the beginning in urban culture...”
3. “...To understand an infantile trauma of the civilization that created war and left its unmistakable mark upon the structure of the city... and has remained in existence to warp the development of all subsequent societies, not least our own, one must go further into the origins of kingship itself...and to the ritual sacrifice of the king...”(paragraph occurring in a subchapter titled “Anxiety, sacrifice, and aggression”)

To overall spell out the function of “The City in History” as a book we can say that it itself is, par excellence, such a city/museum which acts like a promoter of self-awareness (and at a catalyst’s time rates ) and which, like all substantial interventions in the course of humanity , accelerates the spontaneous/random processes that it spells out through being a similar, but conscious and not random , process. And concerning the relation of this and other books by Mumford to other books , whether we mean the authors who are touched by Mumford (consciously or unconsciously and directly or through other authors touched by him) or the authors Mumford is touched by (always consciously and with explicit comment, positive or negative in his bibliographical notes) we can say that if we consider the functions of the books being written as a kind of citizens , then the work of Mumford , with respect to all other books, is a city which has exactly the shape “container, attractions, organ effecting transformations”. End of epilogue and of the summary-of-the-summary by way of recapitulation; let’s go to hear again the “prospect” which we were talking about and with which Mumford’s book ends :

*“As of today, this resurgence of reproductive activity might be partly explained as a deep instinctual answer to the premature death of scores of millions of people throughout the planet . But even more possibly, it may be the unconscious reaction to the likelihood of an annihilating outburst of nuclear genocide on a planetary scale. As such , every new baby is a blind desperate vote for survival: people who find themselves unable to register an effective political protest against extermination do so by a biological act . In countries where state aid is lacking , young parents often accept a severe privation of goods and an absence of leisure, rather than accept privation of life by forgoing children . The automatic response of every species threatened with extirpation takes the form of excessive reproduction. This is a fundamental observation of ecology. No profit-oriented, pleasure-dominated economy can cope with such demands: no power-dominated economy can permanently suppress them. Should the same attitude spread toward the organs of education, art , and culture, man’s super-biological means of reproduction, it would alter the entire human prospect : for public service would take precedence over private profit , and public funds would be available for the building and rebuilding of villages, neighborhoods, cities , and regions, on more generous lines than the aristocracies were ever able to afford for themselves. Such a change would restore the discipline and the delight of the garden to every aspect of life; and it might do more to balance the birth rate, by its concern with the quality of life , than any other collective measure. As we have seen , the city has undergone many changes during the last five thousand years; and further changes are doubtless in store. But the innovations that beckon urgently are not in the extension and perfection of physical equipment: still less in multiplying automatic electronic devices for dispersing into formless sub-urban dust the remaining organs of culture. Just the contrary: significant improvements will come only through applying art and thought to the city’s central human concerns, with a fresh dedication to the cosmic and ecological processes that enfold all being . We must restore to the city the maternal, life-nurturing functions, the autonomous activities, the symbiotic associations, that have long been neglected or suppressed. For the city should be an organ of love; and the best economy of cities is the care and culture of men. The city first took form as the home of a god; a place where eternal values were represented and divine possibilities revealed. Though the symbols have changed the realities behind remain. We know now, as never before, that the undisclosed potentialities of life reach far beyond the proud algebraics of contemporary science; and their promises for the further transformations of man are as enchanting as they are inexhaustible. Without the religious perspectives fostered by the city , it is doubtful if more than a small part of man’s capacities for living and learning could have developed. Man grows in the image of his gods, and up to the measure they have set. The mixture of divinity, power and personality that brought the ancient city into existence must be weighed out anew in terms of the ideology and the culture of our own time , and poured into fresh civic , regional, and planetary molds. In order to defeat the insensate forces that now threaten civilization from within , we must transcend the original frustrations and negations that have dogged the city throughout its*

*history. Otherwise the sterile gods of power , unrestrained by organic limits or human goals, will remake man in their own faceless image and bring human history to an end. The final mission of the city is to further man's conscious participation in the cosmic and the historic process. Through its own complex and enduring structure , the city vastly augments man's ability to interpret these processes and take an active formative part in them, so that every phase of the drama it stages shall have , to the highest degree possible, the illumination of consciousness , the stamp of purpose , the color of love. That magnification of all the dimensions of life , through emotional communion, rational communication, technological mastery, and above all, dramatic representation, has been the supreme office of the city in history. And it remains the chief reason for the city's continued existence”.*



**Lewis Mumford**

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