Why do we have a mind, if not to get our own way?

DOSTOEVSKY

Somewhere in the 19th century certain parts of the globe—negligible in terms of surface—developed an unprecedented condition: through the simultaneous explosion of modern technologies and human population on their limited territories, they found themselves supporting the mutant form of human coexistence that is known as Metropolis.

The Metropolis invalidates all the previous systems of articulation and differentiation that have traditionally guided the design of cities. The Metropolis annuls the previous history of architecture.

But if the Metropolis is a true mutation, it can be assumed that it has also generated its own Urbanism: an architecture that is exclusively concerned with the "splendeurs et misères" of the Metropolitan Condition; an architecture with its own theorems, laws, methods, breakthroughs and achievements that has remained largely outside the field of vision of official architecture and criticism, both unable to admit a fundamental rupture that would make their own existence precarious.

Manhattan

By an unspoken consensus, Manhattan is considered the archetype of the Metropolitan Condition, to the point where the two are often interchangeable. Manhattan's spectacular growth coincided exactly with the definition of the concept of Metropolis itself. Manhattan represents the apotheosis of the ideal of density per se, both of population and of infrastructures; its architecture promotes a state of congestion on all possible levels, and exploits this congestion to inspire and support particular forms of social intercourse that together form a unique *culture of congestion*.

The following episodes of Manhattan's history circumscribe such an Urbanism that is specifically Metropolitan.

Coney Island

Coney Island is a clitoral appendage at the mouth of New York harbor, discovered one day before Manhattan itself.

From 1600 to 1800 the shape of the peninsula changed under the combined impact of natural forces—(shifting sands)—and human intervention—(the cutting of a canal that turned Coney actually into an island). These modifications together followed a "design" that turned the Island more and more into a miniature of Manhattan.

From the mid-19th century, the obstacles of geography that had so far ensured relative inaccessibility to the island were one by one transcended by new transportation technologies.

In 1883 the Brooklyn Bridge removed the last obstruction that had kept Manhattan's inhabitants in place. From then on they escaped to the Atlantic beach in a weekly Exodus that concentrated more than 1 million people on the minuscule island on a good day.

The virgin nature that is the destination of this frantic migration disappeared under the onslaught of the unprecedented hyper-density. As compensation for this loss of nature, a battery of new technologies was developed to provide equivalent conditions on a scale that was commensurate with the new Metropolitan numbers.

Coney Island became a laboratory of the collective unconscious: the themes and tactics of its experimentation were later to reappear in Manhattan.

Cow

The first natural element to be converted was the cow. Since no amount of real cows could deal with the insatiable thirst of the million, a machine was designed and built: the Inexhaustible Cow. Its milk is superior to the natural product in terms of quantity, regularity of flow, hygiene, and controllable temperature.

Bathing

Similar conversions follow in rapid succession. Since the total surface of the beaches and the total length of the surfline were finite and given, it followed with mathematical certainty that not each of the hundreds of thousands of visitors could find a place to spread out in the sand, let alone succeed in reaching the water within the limit of a single day.

Toward 1890, the introduction of electricity in this impasse made it possible to create a second daytime—intense electric lights were placed at regular intervals along the surfline, so that the sea could be enjoyed in a truly Metropolitan shift system. Those unable to reach the water in the day were given a 12-hour extension. What is unique in Coney Island—and this syndrome of the Irresistible Synthetic sets the tone for later events in Manhattan—is that this illumination was not seen as a second-rate experience, but that its very artificiality was advertised as an attraction in itself: Electric Bathing.

Horses

The preferred activity of the happy few who had enjoyed the island in its virgin state had been horseback riding. Of course, that experience was unthinkable on the scale of the new masses. Real horses in adequate numbers would require a separate infrastructure as big as the island itself.

Also, the ability to ride a horse was a form of "knowledge" not available to the proletariat that had made the island its playground.

In the mid-1890s George Tilyou laid out a mechanical track that leads through Coney's natural landscapes, along the oceanfront and across a number of man-made obstacles. He named it "Steeplechase" . . . "an automatic racetrack with gravitation as its motive power. . . . Its horses resemble in size and model the trackracer. Staunchly built, they are to a certain extent under the control of the rider, who can accelerate the speed by the manner in which he utilizes his weight and his position on the ascending and descending grades."

Steeplechase combined in a single attraction the provision of entertainment with a form of emancipation through machinery—the elite experience of horseback riding democratized through technology.

Love

Two years later, even the most intimate processes of human nature were converted.

It is often alleged that the Metropolis creates loneliness and alienation. Coney Island responded to this problem with the "Barrels of Love."

Two horizontal cylinders—mounted in line—revolve in opposite directions. At either end a narrow staircase leads up to the entrance; one feeds men into the apparatus, the other women. It is impossible to remain standing in the machine; men and women are thrown on top of each other. The unrelenting rotation then creates synthetic intimacy between couples who would never have met without its assistance.

If necessary, this intimacy could be further processed in the "Tunnels of Love," an artificial mountain next to the couple-forming machine. The freshly formed pairs would board a small boat that disappears inside a system of dark tunnels where complete obscurity ensues—or at least—visual privacy.

The rocking movement of the boats on the shallow water was supposed to increase sensuality.

Conclusion: 1

With the sequence of: Cow, Electric Bathing, Steeplechase and Barrels of Love, all the natural elements that had once defined the attraction of the Island, were systematically replaced by a new kind of machinery that converted the original nature into an intricate simulacrum of nature, a compensatory technical service.

This technology is not the agent of objective and quantifiable improvements—such as raising the levels of illumination, controlling temperature, etc.—it is a superior substitute for the "natural" reality that is being depleted by the sheer density of human consumers.

Together, this apparatus constitutes an alternative reality that is invented and designed, instead of accidental and arbitrary.

Since this "instrumentarium" of true modernity creates states and situations that have never existed before, it can never escape its aspect of fabrication—of being the result of human fantasy.

The Metropolis is irrevocably the resultant of such identifiable mental constructions, and that is the source of its fundamental "otherness" from all previous Urbanisms.

Elevator

In 1853, at Manhattan's first World's Fair, the invention that would, more than any other, become the "sign" of the Metropolitan Condition, was introduced to the public in a singularly theatrical format.

Elisha Otis, the inventor of the elevator, mounts a platform. The platform ascends. When it has reached its highest level, an assistant presents Otis

with a dagger on a velvet cushion. The inventor takes the knife and attacks what appears the crucial component of his invention: the cable that has hoisted the platform upward and that now prevents its fall. Otis cuts the cable; nothing happens to platform or inventor.

Invisible safety-catches prevent the platform from rejoining the surface of the earth. They represent the essence of Otis's invention: the ability to prevent the elevator from crashing.

Like the elevator, each technical invention is pregnant with a double image: the spectre of its possible failure. The way to avert that phantom disaster is as important as the original invention itself.

Otis introduced a theme which would become a *leitmotiv* in the performance of the Metropolis: a spectacle that features a neck and neck race between an astronomical increase in the potential for disaster that is only just exceeded by a still more astronomical increase in the potential to avert disaster.

Elevator 2

From the 1870s, the elevator became the great emancipator of all the floors above the ground floor. Otis's apparatus recovered the innumerable planes that had so far been purely speculative, and revealed their superiority in the first Metropolitan paradox: the greater the distance from the earth—the more unnatural the location—the closer the communication with what remains of nature (i.e., light, air, views, etc.).

The elevator is the ultimate self-fulfilling prophesy: the further it travels upward, the more undesirable the circumstances it leaves behind.

Through the mutual reinforcement of the elevator and the steelframe (the latter with its uncanny ability to support the newly identified territories without itself taking any space), any given site in the Metropolis could now be multiplied ad infinitum, a proliferation of floorspace that was called Skyscraper, prime instrument of the architecture of density.

Theorem

In 1909 the "layering" of the world's surface through the action of the elevator was posited in the form of a visual theorem that appeared in the popular press.

A slender steel structure supports 84 horizontal planes, all the size of the original plot. Each of these artificial levels is treated as a virgin site to establish a private domain around a single countryhouse and its attendant facilities such as stables, servants' cottages, gazebos, etc., all implanted in an airborne meadow.

Emphatic permutations of the styles of the villas suggested that each of the elevator stops corresponded to a different lifestyle—an implied ideological variation—all of them supported with complete neutrality by the steelframe rack.

Life inside this building is fractured to the extent that it could not conceivably be part of a single scenario: on the 82nd floor a donkey shrinks back from the void, on the 81st a cosmopolitan couple hail a plane.

The privacy and isolation of each of the aerial plots seemingly conflicts with the fact that, together, they form a single building. In fact, the diagram implies that the structure is successful exactly to the extent that the individuality of each plot is respected. The structure "frames" their coexistence without interfering with their contents.

The Building is an accumulation of privacies.

Only 5 of the 84 floors are visible on the drawing. Hidden in the clouds other activities occupy other plots; the use of each platform can never be known in advance of its construction. Villas go up and collapse, other facilities replace them, but that does not affect the framework.

100-Story Building

In 1911 a project for a "100-Story Building" was unveiled that incorporated many of the breakthroughs which, only two years earlier, seemed entirely theoretical. The Building was a straightforward extrusion of the block it occupies multiplied by 100.

The lower third of the Building is devoted to industry, the middle part to business, the upper part to living. On every 20th story is a public plaza that occupies a whole floor and articulates the demarcation between the different functional sectors: a "general market" on the 20th, a cluster of theatres on the 40th, a "shopping district" on the 60th, a hotel on the 80th, and an "amusement park, roof garden and swimming pool" on the roof.

At first sight, the rooms inside this structure are conventional, equipped with fireplaces and wood panelling. But they are also equipped with 7 outlets for "temperature and atmosphere regulating tubes" which demonstrate once more the antipragmatic, in fact, poetic usage of the Metropolitan infrastructure: "A = salt air, B = fresh air, C = dry salt air, D = dry fresh air, E = medicated air (to suit disease), F = temperature switch, GHI = perfumes."

The outlets of this techno-psychic battery are the keys to a scale of synthetic experiences that ranges from the hedonistic to the hyper-medical. Some rooms can be "set" on Florida, others on the Canadian Rocky Mountains The perfumes and the medicinal air suggest even more abstract destinations. In the 100-story Building each cubicle is equipped to pursue its private existential journey.

The building has become a laboratory for emotional and intellectual adventure; the fact that it is implanted in Manhattan has become—almost—immaterial.

Downtown Athletic Club

Within 20 years, the promise of the 100-story Building—that of a skyscraper fully conquered by higher forms of social intercourse than mere business—was realized in 1931 with the Downtown Athletic Club.

Rem Koolhaas, *A Machine for Metropolitan Bachelors . . .*, painting by Madelon Vriesendorp, from *Delirious New York*, 1978.
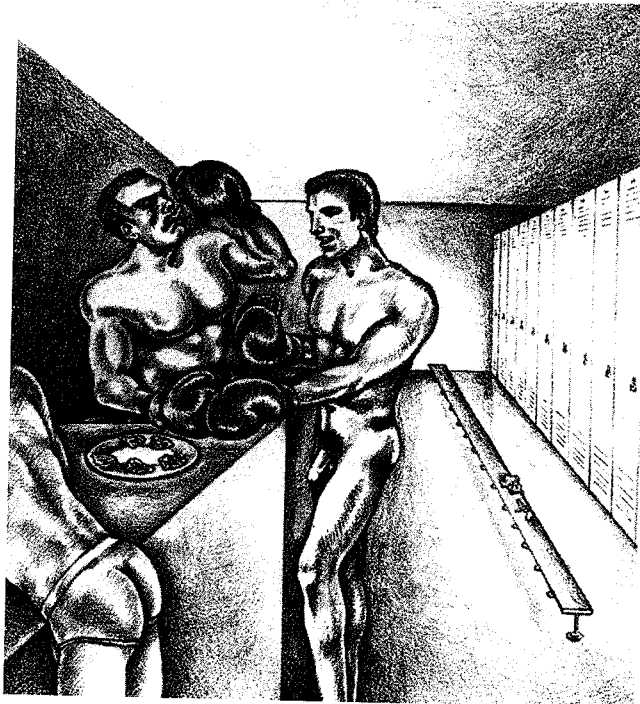
All the latent potential of the skyscraper as a type is exploited in a masterpiece of the Culture of Congestion, a Constructivist Social Condenser materialized in Manhattan.

It is one of the rare 20th century buildings that is truly revolutionary: it offers a full inventory of the fundamental modifications—technical and psychological—that are caused by life in the Metropolis, and that separate this century from all previous ones. Its existence allows a spectrum of experiences on a single place that was previously unthinkable.

The Club—externally indistinguishable from the other skyscrapers in the Wall Street area—is located on the Hudson near Battery Park on a lot 23 meters wide and 54 meters deep.

The Club is the 1909 theorem made concrete: a sequence of superimposed platforms that each repeat the original rectangle of the site, connected by a battery of 13 elevators concentrated along the north wall of the structure.

"The plan is of primary importance, because on the floor are performed all the activities of the human occupants"; that is how Raymond Hood (the most theoretical of Manhattan's architects) defined Manhattan's interpretation of functionalism: each plan as a collage of functions that describes on the synthetic platforms an episode of Metropolitan ritual. Each of the rectangles of the Downtown Athletic Club is such a scenario with a highly suggestive—if abstract—plot.

Each floor is a separate installment of a complex intrigue—their sequence as random as only the elevator man can make them—this form of architecture is a form of Modernistic writing: the planning of choreography of mankind through experimental techno-psychic apparatus designed by themselves to celebrate their own redesign.

The lower 15 floors of the building are accessible only to men. Their sequence from the ground to the top corresponds to an increasing refinement and artifice. From the 17th to the 18–1/2th floor, the men, perfected in the lower floors, are allowed to communicate with the opposite sex in the dining room, the roof terrace and the dance floor. The final 20 floors are devoted to Hotel accommodation.

Floors 7, 9, 11 and 12 deserve special analysis for their extreme daring: Emerging from the elevator on the 9th floor, the visitor—probably a Wall Street stockbroker—finds himself in a vestibule that leads directly to a locker-room at the center of the floor (where there is no daylight). There he undresses, puts on gloves and enters an adjoining space that is equipped for boxing and wrestling. But on the southern side, the locker-room is also served by a small oyster bar.

Eating oysters with boxing gloves, naked, on the 9th floor—such is the plot of this floor—the 20th century in action.

The 10th floor is devoted to preventive medicine. On one side of a large dressing room and lounge an array of body manipulations—sections for massage and rubbing, an 8-bed station for artificial sunbathing (open to the river), a 10-bed rest area—is arranged around a Turkish bath. The south-east corner of the floor is a medical facility capable of treating five patients at once. A doctor is charged with the process of "colonic irrigation," the literal invasion of the human body with cultivated bacteria that modify and accelerate the natural metabolism of the human body.

This final step completes the sequence of radical intervention and voluntary self-experimentation initiated by such apparently innocent attractions as Coney Island's "Barrels of Love."

On the 12th floor, a swimming pool occupies almost the full rectangle. At night, it is illuminated by an underwater lighting system, so that the entire slab of water with its frenetic swimmers appears to float in space, between the electric scintillation of the Wall Street skyline.

Of all the floors, the Interior Golfcourse is perhaps the most significant enterprise: an interior English garden landscape of small hills and valleys, a little river that curls across the rectangle, green grass (real), a bridge. . . . A mural extends the landscape toward a nebulous horizon, but the regular punctuation of the lighting fixtures on the ceiling reminds, irrevocably, of fabrication.

The presence of the Golfcourse argues that nature, obliterated by all the Metropolitan structures, will now be resurrected as merely one of the layers of the Metropolis. After its total eclipse, nature returns as one of the services of the Culture of Congestion.

Conclusion: 2

Through the medium of the Skyscraper, each site in the Metropolis accommodates— in theory at least—an unstable and unforeseeable combination of superimposed and simultaneous activities whose configuration is fundamentally beyond the control of architect or planner.

As a vehicle of Urbanism, the indeterminacy of the Skyscraper suggests that—in the Metropolis—no single specific function can be matched with a single *place*.

Through this destabilization it is possible to absorb the "change that is life" by continuously rearranging functions on the individual platforms in an incessant process of adaptation that does not affect the framework of the building itself.

Exteriors and interiors of such structures belong to two different kinds of architectures. The first—external—is only concerned with the appearance of the building as a more or less serene sculptural object, while the interior is in a constant state of flux—of themes, programs, iconographies—in which the volatile metropolitan citizens, with their overstimulated nervous systems, combat the perpetual threat of ennui.

Radio City Music Hall

The application of technology at the service of metaphor occurs at a still more explicit level and on a larger scale than the Athletic Club in Radio City Music Hall, a theater for 6200.

Rem Koolhaas with Zoe Zenghelis, *The City of the Captive Globe*, painting by Madelon Vriesendorp, from *Delirious New York*, 1978
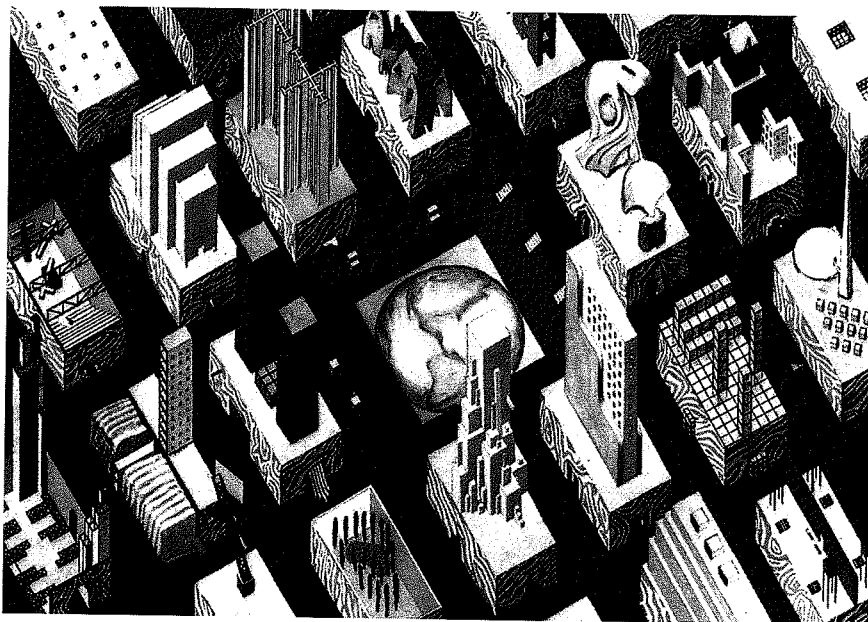
It is a prototype of a strictly interior architecture inserted in the neutral envelope of Rockefeller Center. Its cosmogony was not invented by its official architects, but by their client, the impresario Samuel Rothafel, known as Roxy.

In the early 1930s a group of architects—among them Wallace Harrison—took Roxy on a European tour—all the way to Moscow—in an attempt to convert him to Modern Architecture.

But Roxy remained indifferent to the antiseptic accommodations which modern architects had designed for the fundamentally irrational culture of the theater. On his return to New York, he had a revelation when he watched a mid-Atlantic sunset. "I didn't conceive of the idea. I dreamed it. I believe in creative dreams. The picture of Radio City Music Hall was complete and practically perfect in my mind before architects and artists put pen on drawing paper." His theater is to be a simulation of the spectacle he beheld from the railing of the ship: a sunset.

Roxy's architect dutifully executed the metaphorical theme. A vast ovoid space is covered with plaster "rays" that extend across the ceiling of the entire theatre, embracing the audience like a firmament. The curtain is made of an especially developed synthetic fiber—so glittering that it outshines the real sun. When the lights are slowly dimmed, the impression of a sunset is inescapable.

But the lights have to go on again. And off again. There are three or four such cycles for each complete performance. If the metaphor is taken seriously, the audience lives through three or four accelerated days.

Then Roxy discovered that the air-conditioning system could be used for more creative purposes than simple cooling and heating—i.e., to increase the density of metaphor in the auditorium. First he considered adding laughing gas to its atmosphere, so that his 6200 clients would be transported to "another world" where they would be more receptive to the impact of the movies. However, he desisted after urgent pleading by his lawyers, but only after substituting health-giving Ozone for the N2O. Now his theater combines "Supertime" with "Superhealth," a union that is caught perfectly in his advertisement: "A visit to Radio City Music Hall is as good as a month in the country."

Conclusion: 3

As in the example of Radio City Music Hall, planning in Manhattan consists of the imposition on the explosive substance of the Metropolis of metaphoric models—at once primitive and efficient—that replace literal organization—impossible in any case—with a form of conceptual control.

Such hermetic, self-contained enclaves offer emotional shelter to the disinherited Metropolitan masses, ideal worlds removed in time and space, protected against the corrosion of everyday reality in their interior locations. These sub-Utopian fragments are all the more convincing for having no territorial ambitions beyond occupying their interior allotments through a private hyperdensity of symbolism and localized paroxysms of the particular. Together, such moments form a matrix of frivolity, a system of poetic formulas that replaces traditional quantifiable planning in favor of metaphoric planning.

Movement in the Metropolis becomes ideological navigation between the conflicting claims and promises of "islands" of a metaphoric archipelago.

Postscript

The three episodes above present a provisional triangulation of a truly Metropolitan architecture. If they appear extravagant, or even unreal, that is only a sign of the narrowness of our architectural focus and of our refusal to admit that a fundamental break has occurred between traditional and modern Urbanisms.

These "stories" describe a tradition of modernity that insists on systematically exploiting all available apparatus and all the fresh infrastructures of the age to establish fantasies as realities in the world. The cumulative effect of such scattered episodes—and no doubt the cause of the anxieties they inspire—is that they discredit the idea of Reality as an immutable and indestructible presence—of reality as an ultimate safety net under our flawed acrobatic performances.

Instead, the "hysterical" structures of the Metropolis represent a free fall in the space of human imagination, a fall with unpredictable outcome, not even the certainty that it will end on the ground.

The true ambition of the Metropolis is to create a world totally fabricated by man, i.e., to live *inside* fantasy. The responsibilities of a specifically Metropolitan architecture have increased correspondingly: to design those hermetic enclaves—bloated private realms—that comprise the Metropolis. Such an architecture not only creates the "sets" of everyday life, but it also defines its contents with all possible means and disciplines such as literature, psychology, etc. Through the magical arrangement of human activities on all possible levels, it writes a scenario for the scriptless Metropolitan extras.

If that appears a form of megalomania, such a megalomania is tempered by the fact that its expressions are always localized, since they address, by definition, only a part of the total audience, never the whole. Metropolitan architecture is megalomaniac on a modest scale.

Metropolitan architecture thus defined implies a 2-fold polemic: against those who believe that they can undo the damage of the Modern Age—i.e., the Metropolis itself—through the artificial respiration and resuscitation of "traditional" architecture of streets, plazas, boulevards, etc.; empty spaces for dignified and decent forms of social intercourse, to be enforced in the name of a stoic good taste . . . and against that Modern architecture which—with its implacable aversion to metaphor—has tried to exorcise its fear of chaos through a fetish for the objective and to regain control over the volatility of the Metropolis by dispersing its bulk, isolating its components, and quantifying its functions, and render it predictable once more. . . . Both squander the potential of the Culture of Congestion.

The Urbanism of the 3 episodes was subconscious and spontaneous, not the result of an explicit doctrine. It was followed by an interval in which the architecture of the Metropolis has regressed, or at least fallen under the domination of official architecture.

The Overexposed City

Paul Virilio

At the beginning of the 1960s, with black ghettoes rioting, the mayor of Philadelphia announced: 'From here on in, the frontiers of the State pass to the interior of the cities.' While this sentence translated the political reality for all Americans who were being discriminated against, it also pointed to an even larger dimension, given the construction of the Berlin Wall, on 13 August 1961, in the heart of the ancient capital of the Reich.

Since then, this assertion has been confirmed time and again: Belfast, Londonderry where not so long ago certain streets bore a yellow band separating the Catholic side from the Protestant, so that neither would move too far, leaving a chain-link no man's land to divide their communities even more clearly. And then there's Beirut with its East and West sections, its tortured internal boundaries, its tunnels and its mined boulevards.

Basically, the American mayor's statement revealed a general phenomenon that was just beginning to hit the capital cities as well as the provincial towns and hamlets, the phenomenon of obligatory introversion in which the City sustained the first effects of a multinational economy modelled along the lines of industrial enterprises, a real urban redeployment which soon contributed to the gutting of certain worker cities such as Liverpool and Sheffield in England, Detroit and Saint Louis in the United States, Dortmund in West Germany, and all of this at the very moment in which other areas were being built up, around tremendous international airports, a METROPLEX, a metropolitan complex such as Dallas/Fort Worth. Since the 1970s and the beginnings of the world economic crisis, the construction of these airports was further subjected to the imperatives of the defence against air pirates.

Construction no longer derived simply from traditional technical constraint. The plan had become a function of the risks of 'terrorist contamination' and the disposition of sites conceived of as sterile zones for departures and non-sterile zones for arrivals. Suddenly, all forms of loading and unloading – regardless of passenger, baggage or freight status – and all manner of airport transit had to be submitted to a system of interior/exterior traffic control. The architecture that resulted from this had little to do with the architect's personality. It emerged instead from perceived public security requirements.

As the last gateway to the State, the airport came to resemble the fort, port or railway station of earlier days. As airports were turned into theatres of necessary regulation of exchange and communication, they also became breeding and testing grounds for high-pressured experiments in control and aerial surveillance performed

for and by a new 'air and border patrol', whose anti-terrorist exploits began to make headlines with the intervention of the German GS.G9 border guards in the Mogadishu hijacking, several thousand miles away from Germany.

At that instant, the strategy of confining the sick or the suspect gave way to a tactic of mid-voyage interception. Practically, this meant examining clothing and baggage, which explains the sudden proliferation of cameras, radars and detectors in all restricted passageways. When the French built 'maximum security cell-blocks', they used the magnetized doorways that airports had had for years. Paradoxically, the equipment that ensured maximal freedom in travel formed part of the core of penitentiary incarceration. At the same time, in a number of residential areas in the United States, security was maintained exclusively through closed-circuit television hook-ups with a central police station. In banks, in supermarkets, and on major highways, where toll-booths resembled the ancient city gates, the rite of passage was no longer intermittent. It had become immanent.

In this new perspective devoid of horizon, the city was entered not through a gate nor through an *arc de triomphe*, but rather through an electronic audience system. Users of the road were no longer understood to be inhabitants or privileged residents. They were now interlocutors in permanent transit. From this moment on, continuity no longer breaks down in space, not in the physical space of urban lots nor in the juridical space of their property tax records. From here, continuity is ruptured in time, in a time that advanced technologies and industrial redeployment incessantly arrange through a series of interruptions, such as plant closings, unemployment, casual labour and successive or simultaneous disappearing acts. These serve to organize and then disorganize the urban environment to the point of provoking the irreversible decay and degradation of neighbourhoods, as in the housing development near Lyon where the occupants' 'rate of rotation' became so great – people

staying for a year and then moving on – that it contributed to the ruin of a place that each inhabitant found adequate...

In fact, since the originary enclosures, the concept of boundary has undergone numerous changes as regards both the façade and the neighbourhood it fronts. From the palisade to the screen, by way of stone ramparts, the boundary-surface has recorded innumerable perceptible and imperceptible transformations, of which the latest is probably that of the interface. Once again, we have to approach the question of access to the City in a new manner. For example, does the metropolis possess its own façade? At which moment does the city show us its face?

The phrase 'to go into town', which replaced the nineteenth-century's 'to go to town', indicates the uncertainty of the encounter, as if we could no longer stand before the city but rather abide forever within. If the metropolis is still a place, a geographic site, it no longer has anything to do with the classical oppositions of city/country nor centre/periphery. The city is no longer organized into a localized and axial estate. While the suburbs contributed to this dissolution, in fact the intramural–extramural opposition collapsed with the transport revolutions and the development of communication and telecommunications technologies. These promoted the merger of disconnected metropolitan fringes into a single urban mass.

In effect, we are witnessing a paradoxical moment in which the opacity of building materials is reduced to zero. With the invention of the steel skeleton construction, curtain walls made of light and transparent materials, such as glass or plastics, replace stone façades, just as tracing paper, acetate and plexiglass replace the opacity of paper in the designing phase.

On the other hand, with the screen interface of computers, television and teleconferences, the surface of inscription, hitherto devoid of depth, becomes a kind of 'distance', a depth of field of a new kind of representation, a visibility without any face-to-face encounter in which the

vis-à-vis of the ancient streets disappears and is erased. In this situation, a difference of position blurs into fusion and confusion. Deprived of objective boundaries, the architectonic element begins to drift and float in an electronic ether, devoid of spatial dimensions, but inscribed in the singular temporality of an instantaneous diffusion. From here on people can't be separated by physical obstacles or by temporal distances. With the interfacing of computer terminals and video monitors, distinctions of *here* and *there* no longer mean anything.

This sudden reversion of boundaries and oppositions introduces into everyday, common space an element which until now was reserved for the world of microscopes. There is no *plenum*; space is not filled with matter. Instead, an unbounded expanse appears in the false perspective of the machines' luminous emissions. From here on, constructed space occurs within an electronic topology where the framing of perspective and the gridwork weft of numerical images renovate the division of urban property. The ancient private/public occultation and the distinction between housing and traffic are replaced by an over-exposure in which the difference between 'near' and 'far' simply ceases to exist, just as the difference between 'micro' and 'macro' vanished in the scanning of the electron microscope.

The representation of the modern city can no longer depend on the ceremonial opening of gates, nor on the ritual processions and parades lining the streets and avenues with spectators. From here on, urban architecture has to work with the opening of a new 'technological space-time'. In terms of access, telematics replaces the doorway. The sound of gates gives way to the clatter of data banks and the rites of passage of a technical culture whose progress is disguised by the immateriality of its parts and networks. Instead of operating in the space of a constructed social fabric, the intersecting and connecting grid of highway and service systems now occurs in the sequences of an imperceptible organization of time in which the

man/machine interface replaces the façades of buildings as the surfaces of property allotments.

Where once the opening of the city gates announced the alternating progression of days and nights, now we awaken to the opening of shutters and televisions. The day has been changed. A new day has been added to the astronomers' solar day, to the flickering day of candles, to the electric light. It is an electronic false-day, and it appears on a calendar of information 'commutations' that has absolutely no relationship whatsoever to real time. Chronological and historical time, time that passes, is replaced by a time that exposes itself instantaneously. On the computer screen, a time period becomes the 'support-surface' of inscription. Literally, or better cinematically, time surfaces. Thanks to the cathode-ray tube, spatial dimensions have become inseparable from their rate of transmission. As a unity of place without any unity of time, the City has disappeared into the heterogeneity of that regime comprised of the temporality of advanced technologies. The urban figure is no longer designated by a dividing line that separates here from there. Instead, it has become a computerized timetable.

Where once one necessarily entered the city by means of a physical gateway, now one passes through an audiovisual protocol in which the methods of audience and surveillance have transformed even the forms of public greeting and daily reception. Within this place of optical illusion, in which the people occupy transportation and transmission time instead of inhabiting space, inertia tends to renovate an old sedentariness, which results in the persistence of urban sites. With the new instantaneous communications media, arrival supplants departure: without necessarily leaving, everything 'arrives'.

Until recently, the city separated its 'intramural' population from those outside the walls. Today, people are divided according to aspects of time. Where once an entire 'downtown' area indicated a long historical period, now only a few monu-

ments will do. Further, the new techno-
logical time has no relation to any calendar
of events nor to any collective memory. It is
pure computer time, and as such helps con-
struct a permanent present, an unbounded,
timeless intensity that is destroying the
tempo of a progressively degraded society.

What is a monument within this regime?
Instead of an intricately wrought portico or
a monumental walk punctuated by sump-
tuous buildings, we now have idleness and
monumental waiting for service from a ma-
chine. Everyone is busily waiting in front of
some communications or telecommunica-
tions apparatus, lining up at tollbooths,
poring over captains' checklists, sleeping
with computer consoles on their night-
stands. Finally, the gateway is turned into
a conveyance of vehicles and vectors whose
disruption creates less a space than a count-
down, in which work occupies the centre of
time while uncontrolled time of vacations
and unemployment form a periphery, the
suburbs of time, a clearing away of activ-
ities in which each person is exiled to a life
of privacy and deprivation.

If, despite the wishes of postmodern
architects, the city from here on is deprived
of gateway entries, it is because the urban
wall has long been breached by an infini-
tude of openings and ruptured enclosures.
While less apparent than those of antiquity,
these are equally effective, constraining and
segregating. The illusion of the industrial
revolution in transportation misled us as
to the limitlessness of progress. Industrial
time-management has imperceptibly com-
pensated for the loss of rural territories. In
the nineteenth century, the city/country at-
traction emptied agrarian space of its cul-
tural and social substance. At the end of the
twentieth century, urban space loses its geo-
political reality to the exclusive benefit
of systems of instantaneous deportation
whose technological intensity ceaselessly
upsets all of our social structures. These
systems include the deportation of people
in the redeployment of modes of produc-
tion, the deportation of attention, of the
human face-to-face and the urban *vis-à-vis*
encounters at the level of human/machine

interaction. In effect, all of this participates
in a new 'posturban' and transnational
kind of concentration, as indicated by a
number of recent events.

Despite the rising cost of energy, the
American middle classes are evacuating
the cities of the East. Following the trans-
formation of inner cities into ghettoes and
slums, we now are watching the deterior-
ation of the cities as regional centres. From
Washington to Chicago, from Boston to
Saint Louis, the major urban centres are
shrinking. On the brink of bankruptcy,
New York City lost 10 per cent of its popu-
lation in the last ten years. Meanwhile, De-
troit lost 20 per cent of its inhabitants,
Cleveland 23 per cent, Saint Louis 27 per
cent. Already, whole neighbourhoods have
turned into ghost towns.

These harbingers of an imminent 'post-
industrial' deurbanization promise an
exodus that will affect all of the developed
countries. Predicted for the last forty years,
this deregulation of the management of
space comes from an economic and polit-
ical illusion about the persistence of sites
constructed in the era of automotive man-
agement of time, and in the epoch of the
development of audiovisual technologies of
retinal persistence.

'Each surface is an interface between two
environments that is ruled by a constant
activity in the form of an exchange between
the two substances placed in contact with
one another.'

This new scientific definition of surface
demonstrates the contamination at work:
the 'boundary, or limiting surface' has
turned into an osmotic membrane, like a
blotting pad. Even if this last definition is
more rigorous than earlier ones, it still sig-
nals a change in the notion of limitation.
The limitation of space has become com-
mutation: the radical separation, the neces-
sary crossing, the transit of a constant
activity, the activity of incessant exchanges,
the transfer between two environments
and two substances. What used to be the
boundary of a material, its 'terminus', has
become an entryway hidden in the most
imperceptible entity. From here on, the

appearance of surfaces and superficies conceals a secret transparency, a thickness without thickness, a volume without volume, an imperceptible quantity.

If this situation corresponds with the physical reality of the infinitesimally small, it also fits that of the infinitely large. When what was visibly nothing becomes 'something', the greatest distance no longer precludes perception. The greatest geophysical expanse contracts as it becomes more concentrated. In the interface of the screen, everything is always already there, offered to view in the immediacy of an instantaneous transmission. In 1980, for example, when Ted Turner decided to launch Cable News Network as a round-the-clock live news station, he transformed his subscribers' living space into a kind of global broadcast studio for world events.

Thanks to satellites, the cathode-ray window brings to each viewer the light of another day and the presence of the antipodal place. If space is that which keeps everything from occupying the same place, this abrupt confinement brings absolutely everything precisely to that 'place', that location that has no location. The exhaustion of physical, or natural, relief and of temporal distances telescopes all localization and all position. As with live televised events, the places become interchangeable at will.

The instantaneity of ubiquity results in the atopia of a singular interface. After the spatial and temporal distances, *speed distance* obliterates the notion of physical dimension. Speed suddenly becomes a primal dimension that defies all temporal and physical measurements. This radical erasure is equivalent to a momentary inertia in the environment. The old agglomeration disappears in the intense acceleration of telecommunications, in order to give rise to a new type of concentration: the concentration of a domiciliation without domiciles, in which property boundaries, walls and fences no longer signify the permanent physical obstacle. Instead, they now form an interruption of an emission or of an electronic shadow zone which repeats the play of daylight and the shadow of buildings.

A strange topology is hidden in the obviousness of televised images. Architectural plans are displaced by the sequence plans of an invisible montage. Where geographical space once was arranged according to the geometry of an apparatus of rural or urban boundary setting, time is now organized according to imperceptible fragmentations of the technical time span, in which the cutting, as of a momentary interruption, replaces the lasting disappearance, the 'program guide' replaces the chain link fence, just as the railroads' timetables once replaced the almanacs.

'The camera has become our best inspector,' declared John F. Kennedy, a little before being struck down in a Dallas street. Effectively, the camera allows us to participate in certain political and optical events. Consider, for example, the irruption phenomenon, in which the City allows itself to be seen thoroughly and completely, or the diffraction phenomenon, in which its image reverberates beyond the atmosphere to the farthest reaches of space, while the endoscope and the scanner allow us to see to the farthest reaches of life.

This overexposure attracts our attention to the extent that it offers a world without antipodes and without hidden aspects, a world in which opacity is but a momentary interlude. Note how the illusion of proximity barely lasts. Where once the *polis* inaugurated a political theatre, with its *agora* and its *forum*, now there is only a cathode-ray screen, where the shadows and spectres of a community dance amid their processes of disappearance, where cinematism broadcasts the last appearance of urbanism, the last image of an urbanism without urbanity. This is where tact and contact give way to televisual impact. While tele-conferencing allows long-distance conferences with the advantage derived from the absence of displacement, tele-negotiating inversely allows for the production of distance in discussions, even when the members of the conversation are right next to each other. This is a little like those telephone crazies

for whom the receiver induces flights of verbal fancy amid the anonymity of a remote control aggressiveness.

Where does the city without gates begin? Probably inside that fugitive anxiety, that shudder that seizes the minds of those who, just returning from a long vacation, contemplate the imminent encounter with mounds of unwanted mail or with a house that's been broken into and emptied of its contents. It begins with the urge to flee and escape for a second from an oppressive technological environment, to regain one's senses and one's sense of self. While spatial escape may be possible, temporal escape is not. Unless we think of lay-offs as 'escape hatches,' the ultimate form of paid vacation, the forward flight responds to a post-industrial illusion whose ill effects we are just beginning to feel. Already, the theory of 'job sharing' introduced to a new segment of the community – offering each person an alternative in which sharing work-time could easily lead to a whole new sharing of space as well – mirrors the rule of an endless periphery in which the homeland and the colonial settlement would replace the industrial city and its suburbs. Consider, for example, the Community Development Project, which promotes the proliferation of local development projects based on community forces, and which is intended to reincorporate the English inner cities.

Where does the edge of the exo-city begin? Where can we find the gate without a city? Probably in the new American technologies of instantaneous destruction (with explosives) of tall buildings and in the politics of systematic destruction of housing projects suddenly deemed as 'unfit for the new French way of life', as in Venissieux, La Courneuve or Gagny. According to a recent French study, released by the Association for Community Development,

> The destruction of 300,000 residential units over a five-year period would cost 10 billion francs per year, while creating 100,000 new jobs. In addition, at the end of the demolition/reconstruction, the fiscal receipts would be 6 to 10 billion francs above the sum of public moneys invested.

One final question arises here. In a period of economic crisis, will mass destruction of the large cities replace the traditional politics of large public works? If that happens, there will be no essential difference between economic-industrial recession and war.

Architecture or post-architecture? Ultimately, the intellectual debate surrounding modernity seems part of a de-realization phenomenon which simultaneously involves disciplines of expression, modes of representation and modes of communication. The current wave of explosive debates within the media concerning specific political acts and their social communication now also involves the architectural expression, which cannot be removed from the world of communication systems, to the precise extent that it suffers the direct or indirect fall-out of various 'means of communication', such as the automobile or audiovisual systems.

Basically, along with construction techniques, there's always the construction *of* techniques, that collection of spatial and temporal mutations that is constantly reorganizing both the world of everyday experience and the aesthetic representations of contemporary life. Constructed space, then, is more than simply the concrete and material substance of constructed structures, the permanence of elements and the architectonics of urbanistic details. It also exists as the sudden proliferation and the incessant multiplication of special effects which, along with the consciousness of time and of distances, affect the perception of the environment.

This technological deregulation of various milieux is also topological to the exact extent that – instead of constructing a perceptible and visible chaos, such as the processes of degradation or destruction implied in accident, aging and war – it inversely and paradoxically builds an imperceptible order, which is invisible but just as

practical as masonry or the public highways system. In all likelihood, the essence of what we insist on calling urbanism is composed/decomposed by these transfer, transit and transmission systems, these transport and transmigration networks whose immaterial configuration reiterates the cadastral organization and the building of monuments.

If there are any monuments today, they are certainly not of the visible order, despite the twists and turns of architectural excess. No longer part of the order of perceptible appearances nor of the aesthetic of the apparition of volumes assembled under the sun, this monumental disproportion now resides within the obscure luminescence of terminals, consoles and other electronic nightstands. Architecture is more than an array of techniques designed to shelter us from the storm. It is an instrument of measure, a sum total of knowledge that, contending with the natural environment, becomes capable of organizing society's time and space. This geodesic capacity to define a unity of time and place for all actions now enters into direct conflict with the structural capacities of the means of mass communication.

Two procedures confront each other. The first is primarily material, constructed of physical elements, walls, thresholds and levels, all precisely located. The other is immaterial, and hence its representations, images and messages afford neither locale nor stability, since they are the vectors of a momentary, instantaneous expression, with all the manipulated meanings and misinformation that presupposes.

The first one is architectonic and urbanistic in that it organizes and constructs durable geographic and political space. The second haphazardly arranges and deranges space-time, the continuum of societies. The point here is not to propose a Manichaean judgment that opposes the physical to the metaphysical, but rather to attempt to catch the status of contemporary, and particularly urban, architecture within the disconcerting concert of advanced technologies. If architectonics developed with the rise of the City and the discovery and colonization of emerging lands, since the conclusion of that conquest, architecture, like the large cities, has rapidly declined. While continuing to invest in internal technical equipment, architecture has become progressively introverted, becoming a kind of machinery gallery, a museum of sciences and technologies, technologies derived from industrial *machinism*, from the transportation revolution and from so-called 'conquest of space'. So it makes perfect sense that when we discuss space technologies today, we are not referring to architecture but rather to the engineering that launches us into outer space.

All of this occurs as if architectonics had been merely a subsidiary technology, surpassed by other technologies that produced accelerated displacement and sidereal projection. In fact, this is a question of the nature of architectural performance, of the telluric function of the constructed realm and the relationships between a certain cultural technology and the earth. The development of the City as the conservatory of classical technologies has already contributed to the proliferation of architecture through its projection into every spatial direction, with the demographic concentration and the extreme vertical densification of the urban milieu, in direct opposition to the agrarian model. The advanced technologies have since continued to prolong this 'advance', through the thoughtless and all-encompassing expansion of the architectonic, especially with the rise of the means of transportation.

Right now, vanguard technologies, derived from the military conquest of space, are already launching homes, and perhaps tomorrow the City itself, into planetary orbit. With inhabited satellites, space shuttles and space stations as floating laboratories of high-tech research and industry, architecture is flying high, with curious repercussions for the fate of post-industrial societies, in which the cultural markers tend to disappear progressively, what with

the decline of the arts and the slow regression of the primary technologies.

Is urban architecture becoming an outmoded technology, as happened to extensive agriculture, from which came the debacles of megalopolis? Will architectonics become simply another decadent form of dominating the earth, with results like those of the uncontrolled exploitation of primary resources? Hasn't the decrease in the number of major cities already become the trope for industrial decline and forced unemployment, symbolizing the failure of scientific materialism?

The recourse to History proposed by experts of postmodernity is a cheap trick that allows them to avoid the question of Time, the regime of trans-historical temporality derived from technological eco-systems. If in fact there is a crisis today, it is a crisis of ethical and aesthetic references, the inability to come to terms with events in an environment where the appearances are against us. With the growing imbalance between direct and indirect information that comes of the development of various means of communication, and its tendency to privilege information mediated to the detriment of meaning, it seems that the *reality effect* replaces immediate reality. Lyotard's modern crisis of grand narratives betrays the effect of new technologies, with the accent, from here on, placed on means more than ends.

The grand narratives of theoretical causality were thus displaced by the petty narratives of practical opportunity, and, finally, by the micro-narratives of autonomy. At issue here is no longer the 'crisis of modernity', the progressive deterioration of commonly held ideals, the proto-foundation of the meaning of History, to the benefit of more-or-less restrained narratives connected to the autonomous development of individuals. The problem now is with the narrative itself, with an official discourse or mode of representation, connected until now with the universally recognized capacity to say, describe and inscribe reality. This is the heritage of the Renaissance. Thus, the crisis in the concep-

tualization of 'narrative' appears as the other side of the crisis of the conceptualization of 'dimension' as geometrical narrative, the discourse of measurement of a reality visibly offered to all.

The crisis of the grand narrative that gives rise to the micro-narrative finally becomes the crisis of the narrative of the grand and the petty.

This marks the advent of a disinformation in which excess and incommensurability are, for 'postmodernity', what the philosophical resolution of problems and the resolution of the pictorial and architectural image were to the birth of the Enlightenment.

The crisis in the conceptualization of dimension becomes the crisis of the whole.

In other words, the substantial, homogeneous space derived from classical Greek geometry gives way to an accidental, heterogeneous space in which sections and fractions become essential once more. Just as the land suffered the mechanization of agriculture, urban topography has continuously paid the price for the atomization and disintegration of surfaces and of all references that tend towards all kinds of transmigrations and transformations. This sudden exploding of whole forms, this destruction of the properties of the individual by industrialization, is felt less in the city's space – despite the dissolution of the suburbs – than in the time – understood as sequential perceptions – of urban appearances. In fact, transparency has long supplanted appearances. Since the beginning of the twentieth century, the classical depth of field has been revitalized by the depth of time of advanced technologies. Both the film and aeronautics industries took off soon after the ground was broken for the grand boulevards. The parades on Haussmann Boulevard gave way to the Lumière brothers' accelerated motion picture inventions; the esplanades of Les Invalides gave way to the invalidation of the city plan. The screen abruptly became the city square, the crossroads of all mass media.

From the aesthetics of the appearance of a *stable* image – present as an aspect of its

static nature – to the aesthetics of the dis-
appearance of an *unstable* image – present
in its cinematic and cinematographic flight
of escape – we have witnessed a transmuta-
tion of representations. The emergence of
forms as volumes destined to persist as long
as their materials would allow has given
way to images whose duration is purely
retinal. So, more than Venturi's Las Vegas,
it is Hollywood that merits urbanist schol-
arship, for, after the theatre-cities of An-
tiquity and of the Italian Renaissance, it
was Hollywood that was the first Cinecittà,
the city of living cinema where stage-sets
and reality, tax-plans and scripts, the living
and the living dead, mix and merge deliri-
ously.

Here more than anywhere else advanced
technologies combined to form a synthetic
space-time.

Babylon of filmic de-formation, indus-
trial zone of pretence, Hollywood was
built neighbourhood by neighbourhood,
block by block, on the twilight of appear-
ances, the success of magicians' tricks, the
rise of epic productions like those of D. W.
Griffith, all the while waiting for the meg-
alomaniacal urbanizations of Disneyland,
Disney World and Epcot Center. When
Francis Ford Coppola, in *One From the
Heart*, electronically inlaid his actors into
a life-size Las Vegas built at the Zoetrope
studios in Hollywood (simply because the
director wanted the city to adapt to his
shooting schedule instead of the other way
around), he overpowered Venturi, not by
demonstrating the ambiguities of contem-
porary architecture, but by showing the
'spectral' characters of the city and its deni-
zens.

The utopian 'architecture on paper' of
the 1960s took on the video-electronic
special effects of people like Harryhausen

and Tumbull, just at the precise instant that
computer screens started popping up in
architectural firms. 'Video doesn't mean I
see; it means I fly,' according to Nam June
Paik. With this technology, the 'aerial view'
no longer involves the theoretical altitudes
of scale models. It has become an opto-
electronic interface operating in real time,
with all that this implies for the redefinition
of the image. If aviation – appearing the
same year as cinematography – entailed a
revision of point of view and a radical mu-
tation of our perception of the world, info-
graphic technologies will likewise force a
readjustment of reality and its representa-
tions. We already see this in 'Tactical Map-
ping Systems', a video-disc produced by
the United States Defense Department's
Agency for Advanced Research Projects.
This system offers a continuous view of
Aspen, Colorado, by accelerating or decel-
erating the speed of 54,000 images, chang-
ing direction or season as easily as one
switches television channels, turning the
town into a kind of shooting gallery in
which the functions of eyesight and weap-
onry melt into each other.

If architectonics once measured itself
according to geology, according to the tec-
tonics of natural reliefs, with pyramids,
towers and other neo-gothic tricks, today
it measures itself according to state-of-the-
art technologies, whose vertiginous prow-
ess exiles all of us from the terrestrial hori-
zon.

Neo-geological, the 'Monument Valley'
of some pseudo-lithic era, today's metro-
polis is a phantom landscape, the fossil
of past societies whose technologies were
intimately aligned with the visible trans-
formation of matter, a project from which
the sciences have increasingly turned away.