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Toward the Global City: Monument, Machine, and Network.

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It is said that when astronauts fly above the dark side of the earth, they can see from their spaceships the lights of earth as we see the stars: scintillating archipelagos of Europe and the East and West coasts of North America; islands of light of the great metropolitan areas of South America, Africa, and Australia; tighter clusters of those of Asia, from India to China and Indonesia to Japan. Inhabited earth thus appears as an urban galaxy, as if the starry universe that surrounds the globe had been projected onto it in the form of cities; as if humans were returning to the cosmos by night the image of the light that they receive from it; as if, after centuries of technological civilization, we had finally succeeded in turning the whole of our artifacts, in the form of constructed space, into another nature; no longer a series of cities as microcosms but a whole world built on the scale of the cosmos itself.

Yet, as evocative as this may be, it is nothing more than a metaphor. Let us return to earth. We know that 80% of the population of industrialized countries now lives in cities; the

rest of the world is moving in the same direction. We also know that within fifty years there will be almost no strictly rural population left. Recent statistics indicate that the proportion of the *whole world's* urban population is now 50% (therefore about 3 billion out of 6); it was 8% in 1800 and 10% in 1900; it rose to 30% in 1950: there are more people in cities today than there were over the whole planet in 1950 (2.5 billion); the rise in urban population is now about 65 million a year. It would be tempting to claim that the urban form has prevailed everywhere. But is this statement quite accurate? This extension of constructed space can only be considered as pertaining to the city if we agree to call any conglomeration of buildings a city. Can this be done without misusing language and acknowledging that we understand nothing about what the city has been for millennia, the logic of its emergence and expansion, and what it probably still is to this day?

This question therefore arises: either every civilization is indeed bound for a future made of cities, and if this is the case, the earth can

be considered an urban planet; or the growth of the inhabited world in the form of these archipelagos of constructed spaces that we mentioned above no longer have anything to do with the concept of city as an organic whole and as the image of the world that we have known since its origins. If the latter were true, we would have to face this paradox: at the very time *when it seems to us that the world is becoming a city, the city itself would cease to be a world.*

In short, either the concept of the city has spread throughout the world and provided a model for its organization and image; or the city has dissolved into the world in spite of the extension of constructed space. If the latter is true, two hypotheses must be considered: either this dissolution must be understood as the beginning of a chaotic evolution, as the disappearance of every architectural project and expectation of organization of constructed space; or we are entering a new paradigm that remains to be identified and clarified. This involves considerable stakes, not only at the level of our understanding of ongoing evolutions but as a reflection in view of determining policies of urban planning and deciding the organization of space.

In order to attempt to bring some answers to these complex questions, I propose the following approach to this essay: 1. I will first try to analyze the model of the city as a world, which is to say the city as it has been designed as an architectural whole; this involves its integrated operation not only as a *monument* but also as a *machine* and *network*—the latter two being generally ignored; I will shortly clarify these three concepts; 2. I will then compare the results of the enquiry with the concept of *public space* inasmuch as the urban locus, because of its visibility and political function, seems by definition to presuppose the existence of a common sphere of social practices (such as meetings, ceremonies, festivals, and parades) and institutional practices (such as the organizing of debates and political decisions). However, it goes without saying that the expression of such practices dif-

fers widely from one culture to another—yet is this true to the extent that the very existence of a public space should be denied in certain cases? This will require a debate; everything will depend on which definitions we choose. At the closure of this double critical enquiry, I hope to be able to propose an answer to the original question regarding the permanence or disappearance of the classical urban model and to confirm or deny the emergence of a new paradigm that would make it possible to understand ongoing mutations and necessary evolutions.

In his influential book, *The Architecture of the City*, Aldo Rossi (1982) forcefully asserted that the question of the city could not be rigorously theorized without affirming the central character of its architectural reality. This opposed a then dominant trend that had been mostly developed by American urban planners which was meant to reduce the urban phenomenon to an aspect of the environmental issue. However, while Rossi was right to reintroduce a consideration of constructed space and of the art that it implies, he tended to ignore the fact that the city is always also a means of concentrating and organizing a population and making it produce and consume, in short that the city is a powerful transforming device and that, from this point of view, this monument is a *machine*. There is more: this locus of architectural visibility and technical activity is also, and just as much, a space of circulation, connection, and information; in short, the city is from its very beginning a *network* and even a network of networks. Under these three aspects it can be said that the city is a world and tends to have a global character, since a world not merely constitutes a whole as an image, which is to say a space offered to an observer, but also a populated space and a population that lives under certain rules and that works, transforms its environment, and accumulates experiences. A city is also a set of groups and individuals involved in movements, communication, and exchanges conducted through opportunities that can only be provided by urban space. This question thus arises: what happens to this way

of life when the space of the city itself undergoes a profound transformation?

**A MONUMENT: THE CITY
AS WHOLE AND IMAGE OF
THE WORLD**

No matter how diverse the conditions that have made its emergence possible over more than 10,000 years, the city immediately affirms its presence as a *monument* and more precisely as a monument that summarizes the universe, as the work of men and at the same time the dwelling of the gods, as the core of a political space of which it is the expression and image, but also the instrument.

Mirror of Heaven. The city is the privileged space of the relationship between men and gods; it sets the celestial world onto earth; it is a *mirror of heaven*. From the sacred mound of the Sumerians and the ziggurat of the Mesopotamians to the temples that Greeks and Romans erected on hilltops, archeology always reveals this constant: not only does the city (including its citadel and walls) belong to religious symbolism from the start but this symbolism is specifically associated with celestial divinities (the sun, light, and the heavens as a whole) in contrast with a lower world that is presented as conquered, as being the old world of earthly divinities, the rural world, and traditions of lineage (such as the Greek Furies). In civilizations as diverse as those of Sumer, China, Greece, Rome, Japan, and the Aztecs, it is clear that building a city amounted to constructing a world. This is why the city as such is a monument. It is the global work in which every specific work takes its place. Research conducted on the first known cities (first in Mesopotamia and Assyria, then in the Indus valley and in China) has shown that the city presents itself as an *image of the world*. The city is a replica of the cosmos and the realization on earth of a world that reflects that of the gods.

Nothing shows this more clearly than the rituals of foundation of certain ancient civiliza-

tions such as Rome and China. Roman rituals are well-documented. Let us first note this: the location of a future city was decided by seers who read it in the sky and projected its outline onto the ground along an East-West and a North-South axis, with the help of land surveyors and following complicated calculations. A furrow was dug out to delineate the perimeter of the city, marking the sacred space of the city as the privileged dwelling of the gods.

The Roman conquest, setting up the central city on the ground of every new site in every new province of every country subjected to its power and authority, amounted to replicating this model with its sacred space, gods, monuments, division along two axes, and grid of streets and neighborhoods. The *œcoumène** thus arose. Every city, as a local reproduction of the model of the *urbs*, was the book in which Roman thought was learned and the Roman image of the world was reproduced. The city includes the world; but does so by reproducing itself in an identical manner everywhere. Rome provides a first model of globalization. This line by the poet Ovid, written in the times of Augustus, perfectly expressed this: "The limits of foreign territories are well-defined; those of the City of Rome are those of the world." The world had become Rome and Rome had become the world.

As in Mesopotamia, Rome, and Greece, the Chinese city (as well as the Japanese city, which emulated its model) affirmed itself through the monumental construction of space as a world of men that reflected and reproduced the world of the deities, as a sacred or privileged space confronting an ordinary space, and as replicating the order of the world as cosmos; better yet: as confirming and guaranteeing this order through its very construction. From one culture to the next the type of monumentality vastly varied in style, techniques, and even dimensions, but the architectonic project was always there. The case of ancient Greece is particularly interesting because of a radical change in the urban model around the 7th century

BCE. During the so-called “archaic” era, the city was mostly made up of a conglomeration arranged around the citadel—*astu*. Ancient Greek society was highly hierarchical and ruled by a king (*wanax* or *basileus*) with his warriors. The rest of the city was made up of craftsmen and shopkeepers; peasants cultivated the surrounding land and found shelter in the *astu*, the citadel, in case of external attack. This system was overthrown when military organization was radically transformed due to various crises: all craftsmen and peasants capable of fighting formed a democratic assembly in which social and ethnic origins were cancelled. There was now an empty space in the middle of the circle of warriors where the booty was paced and shared and common matters were discussed. This was the birth of public space, which would forever mark* Greek cities, the space of the people’s assembly, the Common Hearth, temples, stadiums, and theaters. The agora was the space of political debate and the marketplace. A remarkable detail should be noted: unlike Sumerian and Chinese cities, the Greek city did not include a palace for the rulers; the only public monuments were religious or associated with places of assembly—the *ecclesia*—or dedicated to cultural activities (theaters, gymnasiums). There is more: temples were places of public and civic worship, without any initiatory secret or full-time priesthood holding any privileged knowledge. At the same time, the law was regarded as the thing that by definition must be known by all and promulgated in writing in order for its terms to be entirely devoid of ambiguity. This democratic arrangement of the Greek city was the counterpart of a whole set of geometric and cosmological representations. The space of the city reproduced the order of the cosmos.

Walls and Organic Unity. In every known civilization, ancient cities were set within a carefully circumscribed perimeter. The fact that this perimeter most often took the form of walls and had an obvious defensive—and therefore military—function must not confuse us. Every

piece of archeological evidence shows that the primary significance of city walls was religious.

The city marked the separation between an inside and an outside. *City walls* were the decisive element in assigning the figure of a monument to the city. They turned the city into an individualized entity, a visible whole, and an architectural body with recognizable features. However, this external unity referred to a deeper unity inasmuch as the *architectonic* monument is not a mere building but is literally a *tektonia*—construction—that has a relation with the *arché*—origin—i.e., through the law of harmony that ensures its internal coherence, it contains its own origin within itself. In this way it is an *analogon* of the world.

For as long as cities have been in existence (whatever the particular reasons that have led to their appearance may be in each specific case) something seems to be undisputable when we consider the symbolic arrangement of urban space and the forms taken by the institutions that have developed within them: *the city is constructed and organized in order to be a world in and of itself*. It connects the earth and the heavens, appears as a summary of the universe, and organizes the cohabitation of men and gods; within its perimeter, its public and private buildings form a monumental whole that expresses the shared thought, belief system, and sensibility of a community. The city is meant to constitute a spiritual unity and organic whole through its constructed form. It is a work of thought; it is even the visible embodiment of the thought of a community. It is the architectural body of a desire for community. This is what has traditionally endowed it with such an exceptional dignity. It is not merely the place where monuments stand: *it is the monument par excellence*.

We must therefore remember this: the city as a monument, image of the world, and microcosm, is the canonical figure of the place where humans live; it expresses the whole and symbolic unity; this is why it is also the locus of political sovereignty; it is moreover the privileged space of knowledge and the arts. It will

therefore also be the very figure of utopia: the ideal Athens or celestial Jerusalem. This idea of the city—its form—seems to have still been preserved intact as late as the end of the 18th century: it was shown by engravings and writings as coiled within its walls, well-inserted within the surrounding landscape, a most often harmonious combination of the dwelling and activity of humans. This unity-totality as summary of the world—*compendium mundi*—is best visible in a pictorial genre that had been very fashionable in Europe since the Renaissance: the tableau of the city or architectural landscape seen from a distance that displayed its original character: we thus find a whole set of urban *vedute* (*vistas*) from the best-known (such as Florence, Sienna, Toledo, Paris, Salzburg, Heidelberg, Delft, Dresden, Prague, Krakow, Moscow) to more humble ones. They display the specific character of each city with its unique outline shaped by the line of its walls and its churches or palaces emerging from the mass of its roofs and houses: “panorama,” “skyline,” “*Stadtbild*.” More than landscapes, they are portraits, as if this monumental character ended up giving the city a *face*, a unique face that would match the original quality of its name.

A MACHINE: THE CITY AS ORGANIZER AND PRODUCER

The fact that the city was first identified with this image of a constructed whole, ideally defined by its monumental outline, is made evident by the violent way in which the break with this ancient equilibrium is experienced. The industrial revolution indeed disintegrated the traditional city, as can be seen in Europe—but this is a worldwide phenomenon. This revolution is often described (as it has been by Mumford and Toynbee) as a kind of history that would be external to the city itself, as the emergence of an evil and uncontrollable power that would have appeared out of a different region of our civilization and swept through our cities, forever laying waste to this organic unity, this

peaceful enclosure in which the heavens were reflected, the world summarized, and the code of nature and the order of reason expressed.

We must reject this myth and propose the hypothesis that *the industrial revolution was the direct consequence of the very success of the city*, which is to say of the logic of development inherent to the urban phenomenon. In a great diversity of civilizations, the city as such implied something that belonged to a different order than monumental splendor alone. This additional element, which was crucial to the very emergence of the urban phenomenon, was the fact that the city is a social machine and even a *mega-machine*, to quote Mumford, who had a remarkable intuition, all the consequences of which still remain to be drawn. “Social machine” means the organization of society as a whole as a systematic system of production. But this machine can only operate and produce through an administrative framework that ensures the organization of the population, provides services, and makes it possible for the whole to function in a stable manner; it is under these socio-technical conditions that the city as a new model of social organization can become an engine of economic growth. We must now consider these three aspects.

The City as a Social Machine. This mega-machine must be understood as the social system of organization of work, particularly regarding the setting up of great building tasks, in short in the very construction of monuments; although Mumford’s (1961) analyses on the city are now challenged, he convincingly presented this:

[In the large fluvial valleys] 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 has been invented: long invisible to archeologists because the substance of which I was composed—human bodies—has been dismantled

and decomposed. The city was the container that brought about this implosion, and through its very form held together the new force, intensified their internal reactions, and raised the whole level of achievement (p. 34).

It is important to keep in mind the fact that the city is above all a unique phenomenon of concentration of population. It is unique for its spatial stability and temporal persistence (which constitute the polar opposite of the ephemeral character of nomadic gatherings), its quantitative aspect (relative to the limited scale of rural settlements), and also for its type of organization (which is no longer primarily based on kinship systems).

The city is therefore the concentration of a large number of individuals in a constructed space that lies within a relatively limited area; this in itself constitutes an entirely new technical and social phenomenon:

- *a technical phenomenon* first because building something presupposes the availability of means (various materials such as stone, wood, and bricks, as well as highly diversified and specific tools), know-how (such as that of architects, builders, and craftsmen), and labor, all of which constitute a break with the rural mode of work;
- *a social phenomenon*, since the city, which concentrates human beings, can only survive through the division and systematic organization of tasks. This is why it tends to value functions and professions rather than kinship. Hierarchies and statuses are increasingly defined through professional activities.

Compared to the rural mode of organization of work, the city performs a considerable transformation. It disconnects work from seasonal rhythms; it therefore operates at a distance from the nature that surrounds it; it also releases (or at least tends to release) individuals from prescriptions associated with age, lineage, and gender, in order to consider and constitute

them based on their technical or administrative competence; this represents a significant movement away from tradition. Moreover, in great construction projects, the city deals with individuals as if they were mere forces to be organized and assigned to tasks that have been defined, without consulting them, by agents in possession of knowledge (such as geometers, architects, and engineers) or endowed with power (such as civil servants, guards, or monitors). The city performs very early on a concentration of forces as quantitative and exploitable forces; as purely mechanical energy to be applied to a goal and coordinated with others in order to gain increased power and to be focused on an object to be constructed, such as a wall, a pyramid, a fortress, a palace, a temple, or a canal.

This constitutes a techno-social machine since the city is probably the first form of arrangement of human beings to gather, distribute, and order them toward collective technical achievements. This mega-machine itself constituted the major technological transformation from which all others would follow; it is the privileged environment from which they could emerge, be invented and utilized. Long before the advent of industrial society, the city started to break traditional bonds and to invent an order associated with the abilities and initiatives of individuals. The city gave birth to modernity.

It can therefore be said that the city is a world in a different sense than that of a monument. It creates a world in that it transforms the world and, as a mega-machine, it tends to disconnect itself from the heavens of which it was meant to be the image and to generate its own dynamic of production of forms. It is the technical environment par excellence and it confronts nature as its other, regarding it as a material to be shaped, measured, and exploited. It constantly mobilizes traditional know-how and calls for formal knowledge. This transformation was only made possible by what could be called a technology of organization and supervision. At this point we must call attention to this

paradox: the city as a monument already possesses this dynamic. As architecture, it is the result of collective work; it never stops inducing its own existence and reproduction as a megamachine. This is why the city is only possible through powerful organizational engineering.

Administrative Rationality and Economic Dynamic. This engineering is first expressed in the administrative organization that the city needs in order to exist. From the earliest cities—but this is well-documented in the cases of Greece, Rome, and China—civil servant corps were dedicated to law enforcement, monitoring of measurements, markets, and constructions, defense, water and grain supply, waste disposal, maintenance of public buildings, hygiene, tax collection, et cetera. In short, the city is the locus par excellence of emergence and formation of the permanent and specialized bureaucratic systems that constitute, according to Max Weber, the rational framework of states and ensure their accession to modernity.

It is becoming clearer that cities became the focus of economic development and transformation precisely because they were social megamachines. All cities, even residential ones, are places of exchange, marketplaces. But, because of the amount of available population, they are also and increasingly the place where workshops and factories are established. Everywhere cities have brought about an economic dynamic. In the West, they have even been the engine of formation and expansion of capitalism, for example, of the dynamic of a development that was perceived as being unrestricted and legitimate in and of itself no matter what the human costs may be (we will later return to this point). But for this dynamic to be possible required legal and political conditions that initially prevailed only in the cities of Western Europe, as Weber explained it and Braudel confirmed it: these conditions amounted above all to the emergence of urban law (as opposed to feudal law), that opened access to property, its preservation, and its transmission; moreover, the political autonomy of cities had to be asserted

before the central power. These legal and political conditions and this new freedom played a crucial part in generating the energy and trust of modern entrepreneurs, whose willingness to boldly invest was proportional to the legal guarantees offered by the legislation of cities. At least this was what happened in Western Europe; less so in Eastern Europe, and practically nowhere else (in the Middle East and Asia) in spite of the importance of trade and the growth of investment.

Without entering into this complex debate, let us just recall that the Industrial Revolution was primarily an urban phenomenon. The steam engine in the late 18th century, and later electricity in the early 20th, made an autonomous production of energy possible, thus allowing all industries to settle within the vicinity of the great concentrations of population, namely cities. This was the triumph of the city as a megamachine; yet the expansion of often poverty-stricken and unhealthy industrial suburbs also brought along the dislocation of the old monument-city as an organic whole.

We are thus confronted with this paradox: the city, which had been born as a monument rivaling the world of the gods and appearing to be the embodiment on earth of a potentially united and balanced world, was the instrument of its own destruction, for while it was a monument it already was a megamachine; it seems to have forever lost its spiritual unity and symbolic form. This crisis began with the advent of the civilization to which the city itself had given rise and which it had allowed to prevail. This is precisely the paradox that we must face: the worldwide triumph of the *urban form* seems to coincide with the *defeat of the city*, or at least the defeat of what was wished for and constructed for millennia as being the idea of the city. As a technical phenomenon, the city has been the locus of the most radical transformations in our history; it has been the instrument of history, (i.e., of the fact that an accumulation and acceleration of the pace of change has taken place).

This disarticulation of the city by the city itself makes it possible to understand the architectural crisis that developed between the early 19th century and the period of the Modernist Movement. It seems that the issue can be defined as follows: the break with the classical city was experienced and interpreted as if external forces had broken into the city, as if the triumph of the machine had been entirely alien to the urban universe. The more urgent the threat, the more of a reaction there was during the 19th century to try and preserve the ideal of the traditional monument against what was perceived to be the new “barbarity.” The contradiction experienced between the need to accept the new technical conditions and the impossibility to simply resign oneself of the dislocation of the old city seems to be evidence that a different question was arising but was not being confronted: that of the emergence of a new model of space associated with a different set of experiences and representations: the network.

THE AGE OF NETWORKS AND THE GLOBAL CITY

But what does the word *network* mean when it is applied to the city? And what is a network in general? This definition can be proposed: a network is formally a system of interconnection between terms (places, persons, or things) such that any relation with one of these terms makes it possible to access others. However, this statement remains abstract and non-specific. The specificity of the network may be better grasped by turning to etymology, to the extent that etymology brings practical knowledge to the fore.

A network literally is a net (*reticulum*). A net is defined as a loose-knit fabric forming a grid of threads that intersect each other at regular intervals along two axes (the *warp* and the *thread*) and that holds together through the connections between each square and the others, but mostly through the thread that forms

the edge of the squares. The function of the net is that of a light, spaced-out, and flexible capturing instrument. These various qualities of the *reticulum* have generated a whole set of metaphorical extensions in a number of different fields such as: 1/ circulation: networks of streets, roads, canals, railways, sea and air lines; 2/ transport of energy: networks of gas or electrical power supply; 3/ transmission of information: semaphore, telegraph, telephone, and television networks; the Internet; 4/ networks of privileged relationships between persons and groups: political, professional, religious, and commercial networks; all forms of solidarity organized for various causes—be they legitimate or not—such as crime networks.

This great diversity of uses of the term network could appear to be excessive and difficult to rigorously conceptualize. However, there is a reason for this extension. While keeping the urban space in mind, it may be possible to identify a certain number of *formal features* that underlie these various uses.

- The first of these features could be *decentring*; in terms of transportation, this means that within a grid pattern (such as that of Roman cities) any point can be reached from any other through at least two lines intersecting at right angles, without the need for any single interconnection nexus (which is not the case with a star-shape arrangement); among other things, this provides freedom of circulation within this space, or, at a different level, a certain flexibility in social relationships (contrary to a hierarchical model) and value added to vicinity.
- A second feature can be designated as *coherence*; or *interdependence* of elements, such as links joined through reciprocal connections; this involves the question of interconnection, as in the case of electrical and electronic networks or networks of acquaintances; this coherence therefore primarily results from local connections, although a central control can also

be present. In social terms, this feature is expressed in terms of the importance of local solidarities.

- Let us call the third feature *openness* or capacity for extension. This designates the possibility of developing new connections by either tightening the mesh or widening the perimeter; the model can be proportionally replicated without changing the scale. The advantage involved is that the size of the network can change without affecting the form of the relationships.
- The last feature can be called *specification* or particularization; it is the possibility of constituting niches of relationships within the network under consideration or of forming subsets associated with local conditions or new projects; these local groupings then complement the whole without being considered marginal. The result is a *distribution* model that implies the capacities for openness, de-centring, and interconnection that have been discussed above.

Other relevant features could probably be identified, but these are sufficient to progress in our questioning regarding the issue of the city. Two preliminary questions arise at this point; first, can this concept, whose contemporary use presupposes a specific definition, be applied to ancient cities? Second, does the new use of this concept refer to a decisive transformation regarding the two aspects that we have indicated—monument and machine?

As for the first aspect, it is worth noting that the so-called checkerboard pattern of building, which is to say following a rectangular grid pattern, appeared in cultures that were very far apart in time and space (Sumer, Etruria and Rome, China, Greece, and Tenochtitlan). Although each case involved different architectural arrangements and functioning, this grid pattern (or alignments of regularly-spaced blocks) is in and of itself endowed with that capability to induce original social practices

and an original way of life. From this point of view, the case of Rome remains exemplary. The rectangular grid pattern does not only regulate the urban layout on religious, political, and technical levels; it also regulates cultivated space and makes it possible to establish a cross-ruling register of every inhabited land under the same geometric rules; paved roads complement the interconnection of cities and provinces; the city is a network and the empire a network of networks.

It is now clear that the question of the network is not new. The grid model is in fact the best possible—mini-max type—answer to the requirement to organize a large population concentrated on a limited space; this model makes it possible to better articulate flows (of persons and goods) with positions (within both physical space and social order). The best expression of this was and remains the street. The *street* has a strange status: it is not a monument but an empty line, an interstice, and a space of transit for men and goods; it often becomes a marketplace; socially, it is above all a meeting place. Not only can the street blend the most diverse populations, but it also gives them access to every monument and building in the city (or at least to their proximity). From any street one can reach any other. On a spatial and social level, the arrangement of streets, whether or not it forms a grid pattern, constitutes a network that tends to erase the monumental hierarchical order, even if this order is very salient. In its spatial existence, the street presupposes a non-centred network that lends itself to a random use of its connections; it anticipates and contains a possibility that is specific to the city: that of an equalitarian relationship, which in the West for instance has never ceased to be asserted as “communal freedom.” In the monumental city itself, the street is evidence of the network, and it calls for democracy.

However, the network effect is most clearly noticeable within the contemporary urban space. This involves the monumental aspect as well as the machine aspect. Monuments as polit-

ical, religious, or administrative symbols and centres are becoming obsolete when confronted with new means of information, communication, and management. Power used to be associated with the control of stocks. It is now associated with flows. This is not only true of political and administrative power but also of systems of industrial production and trade, which can be set up either within existing cities or far away from them, depending on land value, local taxes, climate, et cetera. In short, what we observe is the increasing emergence of metropolitan areas formed without any specific urban project; and, when projects do develop (in order to attract a wealthier population) this always takes place in an islet pattern, in units that are not associated with a comprehensive project. This is the case of the sprawling cities discussed by American urban planners. Compared to what old cities used to be, these often shapeless metropolitan areas certainly are a failure. Yet should we start building classical or medieval cities once again? Obviously not. We are undergoing a period of transition. What is emerging is indeed the network-city that will increasingly cover our planet. The monumental and centred model will not return. What is taking shape around us—but requires an effort of architectural imagination and rigor—is the archipelago-city, non-centred and with an open system of circulation, inseparable from the whole of the landscape. We must now rethink public space in a relationship between local and global levels. The classical concept of public space was inseparable from the stage and the monument, in short from a certain theatre of power, including in the case of democratic power.

Yet we must recognize that for a long time (at least 3 centuries) the public sphere has not so been much a physical space as it has been a virtual space. Of course there is still a place where elected officials gather and debate. But the public sphere—that of opinions and debates—is now constituted through networks of publications (books, journals, and reviews) and, lately, communication networks (radio, television,

and the Internet) that are disconnected from any spatial identity. This is why demanding that the city be the visible expression of public space is becoming problematic. The fact is that, in the same way as the information networks, the city itself is becoming a space of relationships. The monumental model is undoubtedly a thing of the past. At the same time, the old cities are themselves entering the space of the network. They constitute points of intensity and memory within the planet's urban archipelago. It is this planetary archipelago (rather than any particular giant city) that can be called the global city.

CONCLUSION

I started with this question: are we witnessing the end of the city, at the very time when the urban form, as a habitat, is prevailing all over the earth? Yet we must recognize that, rather than the city itself, what is now prevailing is a worldwide network of urban *zones* or *modules* in which preserving the strong presence of a privileged architectural space (one that is centred, monumental, and primarily designed for the observer's gaze) no longer seems necessary. Should we lament this and record the failure of our old urban civilization? Or should we instead try to understand that what has disappeared is the purpose of the traditional city?

Should the expansion of the *network model* and remote communications, which opens new opportunities, amount to the acceptance of a *community without human bodies*? If this were the case, it would become more important than ever to rethink urban planning and architecture and to wonder once again about the meaning we should give to *constructed space* so that we may be able to articulate social functions and architectural forms within the contemporary city in a way that is not only sensible but also *sensitive*—in a space that is becoming less and less dependent on the immediate presence of human bodies and yet in which bodies still exist and feel, just as well as they did in the age of the ancient Sumerian, Greek, Inca, and Indian

cities, but must express it in a different way. In the information age, how can we think of constructed space as the space of communities? This is our challenge.

The question then becomes that of determining how, in the age of virtual space, a concrete space can be preserved for bodies, dwelling, professional and personal relationships, and ultimately how we can reinvent the pleasure of being together; how we can reinvent the *street*; how we can display *public*—which is to say *visible*—signs of our identity, while being aware that communication technologies, which are redefining our access to information, distribution of knowledge, and social relationships, are also radically transforming our relationship with the physical environment, other human beings, and other cultures, and consequently transforming our global perception of space and time as well as our sense of life in common. Understanding the movement from the *monumental* to the *virtual* within the emerging city would probably amount to understanding one of the major transformations of our civilization.

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