

*Scholars often date the historical era from the time cities were first founded, labeling events before that time as “pre-historical.” Although most of mankind was rural throughout most of the historical era, cities as seats of power and as icons played a central role in the evolution of civilizations. The physical placement of a city (its landscape), the presence or not of a wall or other fortifications, street layout, building styles, the degree of centrality given to buildings serving certain purposes, and the nature of urban ornaments were all nonverbal symbols, modes of communication that reflected not only the will to power but also helped to shape social structure and influenced personal identity.*

*In January, 1968, I went to Paris on a Guggenheim Fellowship, renting an apartment which was part of a large elaborate flat on the Avenue des Ternes near what was then called the Étoile, centered on the Arc de Triomphe. While I was improving my French and doing other research, my daughter attended a French school in Parc Monceau. I spent five months’ worth of weekends in Paris that spring, walking through the city’s neighborhoods one by one, buying neighborhood histories when I could find them. In April I spent some time walking through Rome, London, Brussels, Stuttgart, Lyons, Marseilles, Florence and other European cities. When I left Paris in June, 1968 after experiencing first-hand the student rebellion that ripened into a general strike and came close to toppling General de Gaulle’s government, I traveled through central and eastern Europe. One place I visited was Prague, which was in a hopeful mood as it strained to move away from the Communist bloc. Later that summer, Russian tanks rolled in. Traversing Yugoslavia by train and boat, pausing to walk through the streets of Belgrade, Skopje, Dubrovnik, Sarajevo and other cities, I learned first-hand about the ethnic differences that later, in the 1990s, caused the country to split apart. As I traveled I worked on the following paper, which I delivered that fall at the 1968 annual meeting of the American Political Science Association in Washington, D.C. Alert to the vivid events happening that year in Europe and in the United States, I was at the same time thinking about broader*

*topics connected with the history of cities. [There is a direct connection between the topic below and the kinds of spatial analysis presented in Part IV of this book. There is also a connection between the form and style of a city and the sense of selfhood its residents can achieve.]*

## CHAPTER 9



### City Form, Governmental Structure, and the Space of Power

To face up to the urban challenge, we must understand how cities reflect the structure of society. Every socio-economic-political system has distinctive modes of defining and differentiating its units, integrating (relating) those units, and holding itself together as a system, cohering. For example, take the pattern of Anglo-American development. The building blocks of medieval England prior to American settlement were prescriptive statuses adhering to idiosyncratic individuals; the American system today is structured around generic vocational categories; and in the intermediate American past, individual persons or family units were licensed to define themselves as best they could. Statuses related to one another through customary codes; vocational categories adjusted to one another through a gamut of private and public bargaining and rule-making; and the freewheeling individual of the past related to others in an ad hoc way through bargain and contest, contract and cash. Medieval European and American Puritan village societies cohered through common reference to a God at once pantheistic and transcendental; recent society relies for cement on mass communication and mass education; and the American 19th-century nation held together by reference to the idea of state plus the emotional cement provided by patriotism, public opinion, or even sometimes evangelical religion, and by a belief in progress, giving a sense of thrust in time.

Each particular mode of differentiation, integration, and cohesion has a different spatial-temporal dimension, not only in measure but also sometimes altogether different in kind. As Eddington depicted the evolution of pure mathematics from the charming hypothetical situation of an elephant sliding on its rump down a hill, one can cut away the flesh of most aspects of society to find the clean white bones of space and time within.

Prescriptive status has depended on patrilineal continuity often linked to a particular land-space—fixed space and a time line. The 19th-century American freewheeling individual, cut off from hereditary continuity, felt he must repeatedly test his own position and hence repeatedly acquired and gave up land, moving westward each time. Loss in personal temporal continuity thus led to spatial expansionism. It also led to the imputation of temporal linear thrust to the system as a whole.

Modern large-scale organizations owe some of their internal tensions, as well as reinforcement of the division of labor, to discrepancies in spatial reference among their several kinds of members. Because American trade unions have been nominally international, and with real cohesion over a region broader than the space dominated by many businesses with which they have bargained, they have been able to use the tactic of whipsawing. As businesses extend both their markets and power over vast areas of the globe, then unions will be encircled and blanketed and may lose their spatial leverage.

Although American government and European parliamentary systems both use space as the base of representation, unlike many parliamentary systems, American government uses differences in time (term of office) between executive and legislators to help keep their spheres of action apart. China, in a different way, uses space rather than time as a separator. In this case, separation is between bureaucrats and the masses. While non-bureaucrats are kept rooted to locality, bureaucrats (including party members) are deliberately moved about to delocalize their referential space.

In the past, modes of differentiation, integration, and cohesion have all had space as a common denominator. In past agrarian economies, the status of an individual, his very image of himself, and his part in the total system have depended on the kind of title he held over land. Later, the State, located in space, has been a basis for cohesion. Space has been particularly important in providing a base for family units in defining the self. A man's home has been his castle and his freedom. Different kinds of political space have in a vicarious way buttressed and enfranchised the individual citizen's sense of self. Renaissance cities became enclaves of space in which self could find new horizons. Like Louis XIV, every Frenchman—even today—thinks in a corner of his mind, “L'état, c'est moi.” Nineteenth-century nation-states, with their emphasis on “racial” unity and linear “growth,” were patently expressions and extensions of the self. Throughout history, unless (and sometimes even when) a major focus was on other-worldly space, there has been a tension between the political self- or we-space and the area beyond. The outsiders, or “others,” were called barbarians by Romans and Chinese alike. That is, the self had boundaries. To extend the political space, to push back the barbarians, the “others” (because as Sartre said, “Hell is other people”), was hopefully to extend and protect the self.

Examples of how space and time are at the base of systems could be multiplied many times over. All of this is prefatory to one of the three propositions forming the basis for what follows: namely, that socio-economic-political structure, treated holistically, is characterized by a number of interacting interdependent spatial-temporal patterns, both behavioral and imagistic in nature. The second proposition is that the artifacts of the human environment (most intensely, the forms of great world cities) are symbolic notations, crystallizing,

focusing, and channeling the spatial-temporal patterns of particular total systems. Hence the title of this chapter: urban form, governmental structure, and the space of power. A third proposition, whose discussion will be deferred to the end of this chapter, is that pluralistic temporal and spatial thrusts in an interdependent industrialized economy require and produce dispersal of urban focus and may lead to the eventual dissolution of the nation-state—with inevitable but uncharted consequences for the self.

### The City and Heaven: Time and Eternity

Sometimes the space and time of a city may include a referent toward “heaven” (differently defined in each case) when this ingredient is an essential part of the socio-political structure. Then the city may seem at first glance to be a refutation of the first two propositions stated above. Imperial Peking is a good example, because of all that its form did not reflect: change in regime from Chinese to Mongol to Manchu; drastic changes in the spread of the empire from the Yellow River basin to a reach fingering the Mediterranean and back again; migrations of Chinese overseas and the sometimes forceable entry of foreigners; the spread of commerce; and rapid increases in population and urban development long before population boomed in Europe. All of these changes, continuing over the early centuries of Peking’s life as a city, left little mark on the city’s form.

To be sure, Peking did show some changes over the centuries. Emperors built summer palaces outside the walls. A much hated foreign legation quarter, beginning in the late 17th century, was given extra-territoriality in 1860 up to the edge of the Imperial City. And a railroad line was completed around the Inner City by 1916. There was also gradual decay, conspicuous by 1911 and continuing up through 1949.

Yet Peking, built on an ancient Chinese model long antedating its own origins, retained its basic form for several centuries. And this fact is a testament to the power of ideas. For, despite change, the Chinese had an idea of unchangingness. Despite human weakness, they believed in the basic perfectibility of man. Despite disharmony, they believed in the underlying harmony of everything: each should obey the dictates of its own nature as part of the harmony of the whole idea, too.

Included in the idea of harmony was a feeling that heaven was not an untouchable place beyond reach and time. Heaven and earth met at the concave rooftops of the city. The city was low and horizontal and open to this meeting—“the will of heaven shared by all.” One had afterlife only in the sense that one’s memory was cherished by one’s descendants—an afterlife in the world, not outside it, in time, not eternity.

The emperor bore a mandate from heaven, and twice a year he ritualized the contact at the Altar of Heaven, a huge marble platter flat and open to the skies

(the circle representing heaven and the chaos and truth of nature). Nearby was a small square building (the square representing the earth, or man-made order and knowledge), where the ceiling progressed from square to circle, from cyclical time to eternity, which was simply the unchanging unity of things, not a “place” beyond.

China itself was symbolized as square and yellow, the color of earth. So the tile roofs of the emperor’s palace were yellow, and Peking was intended to be a series of concentric squares, but the walls of the southern part, the Outer City, were never continued all around as originally planned.<sup>1</sup>

The city was far north, close to the Great Wall, and the pass through which invasions came. Geographically it was at the point of cultural convergence between Mongol, Manchu, and Chinese, and also at the focal danger point of possible violence and political change. The Ming dynasty, under which Peking was perfected, was far from harmonious. Heavy taxes and famine led to rebellions and large-scale banditry in the provinces. The first Ming emperor put his prime minister to death and abolished his secretariat, imposing the death penalty on anyone who advocated its return. By the early 17th century, soldiers were living by plunder and loot.<sup>2</sup>

Yet the military was composed of professional soldiers—that is, violence was not a part of normal expectancies—and were usually kept outside Peking. Their mode of fighting was ritualistic. For example, they marched from different gates at different seasons, and regulated troop movements by the stars. Chinese philosophy did not approve of violence.

The Chinese ideal for society was regulated harmony—order through a balance of complements. The order created by man, given his behavior and emotions, was operational only when it had four walls as a reference. For the Chinese, traditionally, if there were no walls it was not a city. Although the square was an emblem of the underlying harmony of nature, outside the walls all was chaos (including foreign invaders and possibly revolting peasants).

The Chinese had no idea of State, and of governmental authority and control derived from and coextensive with political jurisdictional space, and no idea of nation. China was a wilderness spotted by centers of manmade order whose society was held together (i.e., integrated) by kinship patterns. The emperor’s edicts were more exhortations than commands. The activities of Confucian-trained civil servants had little to do with the regulation of society and little real reach below the county level.<sup>3</sup> Cohesion of the society was provided by a common tradition and culture, which Mongol and Manchu rulers simply co-opted.

The base of society was the family unit. Official Confucianism perpetuated a patriarchal ethic. For the family, the house was the chief symbol. So Peking was like a Chinese house; a Chinese house was like Peking. The individual house was

walled, as the city was walled. In either case, outer walls were blank except for a few gates. For both house and city, the gates were nonaligned, with spirit screens behind them. This was to ward off evil spirits, who moved in straight lines. (For a long time, no structure in Peking was over 99 feet tall, because good spirits flew at a height of 100 feet). The gates of Peking (at different times, or differently interpreted) bore such names as Everlasting Peace, Understanding, Good Manners, Abundance, Moral Excellence, Uprightness, Reverence, Learning, Great Harmony, Quiet or Just Rule, and Brightness and Prosperity. One moved past gate and screen into a court (for house or houses) or a square (for the city). Every place and every thing was symbolic. Fantastic winged heads and small carved animals sat on the roofs of gate towers. The city abounded in stone or metal cranes, turtles, horses, bulls, lions, and especially dragons, but not in statues of people. The city turned southward, as did Greek houses, toward the sun. Each wall stood for a different season and color. Each season stood for a different kind of time, and colors represented elements and qualities. Imperial buildings, stairs, platforms, and screens ran to the symbolic number of three and its multiples.<sup>4</sup>

Confucianism saw society as ordered inequality. Officials and scholars were highest in rank; merchants, almost at the bottom. Virtually all of the education in China was oriented to civil service examinations. These were theoretically open to all and more open under the Mings than in some other regimes, but for the most part they were hereditary for the Mandarin class, though competitive within that class. Ming civil servants wore robes with square badges of their rank. Officials were flogged before the emperor to debase, not punish, them, and from 1506–22 they were flogged naked.<sup>5</sup> (All of this, in the light of Chinese philosophy, rendered all the more ironic the capture of governmental power by palace eunuchs. These latter owed their position to the emperor's large harem and household expense, whose revenue sources the eunuchs administered, plus the emperors' tendency to delegate decisions while at the same time officially centralizing decision-making in themselves). But to be in the city at all was a badge of social standing.<sup>6</sup>

Inequality was built into the symbolism of the city. Large areas were preempted for imperial palaces and gardens. The central north–south processional avenue, whose whole length only the emperor could travel, cut through arches and walls which were more closely spaced—so that the tempo quickened—as one neared the palace. “Those whose business took them within the palace courts entered by side doors, fell on all fours.”<sup>7</sup> Most houses, except those of the rich, were gray and all were low, so that the palaces (on three-tiered platforms) could be highest (three times higher) and gleam with color like a jewel in the center. Few could enter the northern part of the Forbidden City, where

the private quarters were. One could not climb Coal Hill or walk the city walls, because one could not be higher than the emperor. Grandeur is a derivative of the word tall; *hauteur*, high.

A word should be said about Peking's treatment of nature, for though trees were ruthlessly cut outside city boundaries, within private courtyards they were cherished. Gardens were asymmetrical, a halfway zone between society and nature. Chinese religion was originally animist. Sky, mountains, seas, rivers, and rocks were all thought to be materializations of spirits. In the garden, every stone and plant was a symbol of natural elements which man could rearrange at will.<sup>8</sup> One is reminded of Jean Piaget's account of why and how children play, to assimilate reality to the ego. But the garden also had a spiritual aim, and it was in this sphere that low and high could meet in harmony. Wu has written:

When man leaves his courtyard and enters his garden away from organized society, he is not the social man who has to be myopic to eternal values so that he may function well in an immediate situation, nor is he the biological man who is constantly becoming and is responsible for reproduction. He is instead the eternal man of Chinese landscape painting and poetry. His physical being has been idealized to become a means to an intellectual end. Gifted youth as eternal man may mingle with his elders at a literary gathering or the emperor may momentarily join his courtiers in the conversation of poetry, calligraphy, painting.<sup>9</sup>

The great palaces and gardens of the emperor were not public places, the way Paris's Luxembourg and Tuileries gardens became public places. Only the streets were "public." For this political system—entirely unlike ancient Athens—did not think in terms of a collectively shared sphere of interaction, a *civitas* in which the self could come to flower. The self matured within a social discipline which was essentially political, flowered in the quiet private gardens where earth and heaven joined.

Peking and Rome of the Catholic Counter-Reformation took their shape at approximately the same time. Peking was built in 1264, but extensively rebuilt by the Mings beginning in 1417–20. Pope Nicholas v first decided to reconstruct Rome in the middle of the 15th century. Major building of St. Peter's began in 1509, the Piazza del Popolo was planned in 1513, and the rebuilding of the Capitoline began in 1536. Bernini's colonnades were done in front of St. Peter's by 1667. Additions were made to Peking until the Outer City wall was done in 1564, the year Michelangelo died.

Although Counter-Reformation Rome was a Catholic city, the seat of the pope, although the pope also had a mandate from Heaven, and although Rome

too was not primarily shaped by the vectors of secular political jurisdiction, Rome—unlike Peking—was pervaded with political symbols and language, a legacy from *past* experience of political power over secular space. The pope owed his claim to be first among the five main bishops of the late Roman Empire not only to the Petrine succession, but also to the fact he was bishop of Rome, the empire's ancient center. Except for the 14th-century years at Avignon, popes continuously kept Rome as their capital. The internal spatial jurisdictional structure of the Church also owed a debt to the Roman Empire, for dioceses and provinces in the Church imitated similar units (with the names reversed) set up by Diocletian. When the 6th century's Pope Gregory declared himself spiritual ruler of all Christendom, he stepped into the vacuum left when the Western Empire fell. In the institution of the Holy Roman Emperor, the Church attempted to recreate an approximation of what the original Western Roman emperors had been, and in this way the idea of a universal political state persisted throughout the time that feudalism rose and waned. After the secular empire had effectively been dissolved as the result of the long struggles for nationalism and Protestantism, beginning with France's independent stand at the end of the 13th century, through diminutions of the power of the Holy Roman Emperor during the 14th century, through the events that followed Luther's revolt in 1517, down to the Treaty of Westphalia in 1648, still the idea of a universal political state lay dormant. Even today, its spirit is alive.

The city of Rome's claims to special political power also remained stubbornly alive, though the population had abandoned the hills by the 6th century and huddled in huts on the Campus Martius and Trans Tiberim; and though, even down to the 14th and 15th centuries, Rome was a filthy, disease-ridden place, spiky with defensive towers, with thieves, wolves, and sometimes bestial mobs in the streets, and with the old *fora* piled high with mud and rubbish.<sup>10</sup> Like the late empire rulers after whom they were modeled, the Holy Roman Emperors did not use Rome as a capital and often eschewed it altogether, partly because of the city Senate's lingering claim to a voice in the choice of emperor. Until 1059, the city's populace had the legal right to confirm papal elections. The College of Cardinals, created that year, included until much later ranking priests only from Rome and its near-environs.<sup>11</sup>

Since the 9th century, the Capitoline had been the seat of Rome's municipal administration, but each of the fourteen wards or districts (reminiscent of those laid out by Augustus) still had its own governmental meeting place. Yet the Vatican had gradually gained effective control over the city government, and this was subtly dramatized by Michelangelo's reconstruction of Capitoline Hill. The whole setting was rebuilt like a stage, with the steps oriented off to one side toward the river. The Senators' Palace, which originally looked toward the Forum and Colisseum, now looked in the other direction and toward St. Peter's,

while its continuity with imperial (not Republican) Rome was still retained in the classical forms of the architecture and through the statue of Marcus Aurelius, placed in the center of the square.<sup>12</sup>

Although the Church's secular power was being cut away in Europe, its adherents were spreading throughout the world, as a result of the settlement of South America and a vigorous overseas missionary program. Backed by a revival of the Inquisition and the efforts of the Jesuits (formed 1537–1540), the Church moved to buttress its claims to universal spiritual sway. Rome was then rebuilt, not as a symbolic mirror of either heaven or earth, but rather as a stage for the ritual that points man from earth toward heaven, not the friendly Chinese heaven, but a heaven in future time (or outside time) and separate from this earth, a heaven reached for, but often not attained.

The whole city became like a religious palace in which the primary life was a public one in parvis and square centered around religious pageantry. The Piazza del Popolo acted as a vestibule and funnel for all pilgrims coming into Rome from the north. In 1589, an obelisk was set in the Piazza facing the twin churches that flanked the Corso (the old Via Flaminia), the city's north-south central axis lined with palaces and site of carnivals and races. The Corso led to the towered medieval Palazzo Venezia near, but not touching or acknowledging, the abandoned Roman *fora*. The obelisk was a radical focal point for a fanlike street system that guided pilgrims to the principal churches around the city. Streets like corridors opened onto squares like reception halls, often with obelisks (Egyptian phallic symbols of regeneration) pointing the eye skyward.<sup>13</sup>

By the end of the 17th century, the town was alive with fountains and statues as well as buildings in the baroque manner accentuating individual parts within a whole but also with a feeling of single organic action, dramatizing and emphasizing volumes and masses—dynamic, open, with a tendency to expand, expressing feelings at their extremes. “Individual architectural elements, always self-sufficient yet never fragmentary, were interconnected by extended views, the one farther away always based on the existence of the one closer by. The purpose of this interconnection was to astonish the spectator by the unexpected, and yet not to let him lose the feeling of spatial unity.” “The continuum, seemingly infinite, was to be perceived through a sequence of different vistas.” “All these effects were based on the possibility of movement. Thus the dimension of time was added as a decisive factor—in contrast to the timelessness of the Renaissance equilibrium.” The squares provided an infinite number of psychological aesthetic stimuli. “And since sensory responses are related to specific somatic states, the result of the continuous shift of vistas meant an increase of nervous and physical tension, identical with the psychological effect of church interiors of the same period. In Rome, the new building established lines of

force which defined the tension between various landmarks. The artistic cohesion of the city was by tension and force.”<sup>14</sup>

At the end of the pilgrimage around town were the welcoming arms of Bernini’s colonnade, with another obelisk in the center (since 1586). From there one went down the long arm of St. Peter’s to where St. Peter himself lay buried under a vaulting dome and a sheltering baldaquin whose bronzes came from the Pantheon. (The roof of Peking’s Temple of Heaven also bore some resemblance to the Pantheon.) In sum, having reshaped both actual physical materials and the institutions of the ancient political empire to reinforce itself, the Church had converted city form into a vehicle for religious ritual, to point upward toward space and time beyond earth and life. In this form, Rome endured, as the quite different form of imperial Peking also endured!

### The Will to Space

If, for different reasons, these two are semi-negative examples of the correlation of city form with the space of power, today’s Peking as capital of the People’s Chinese Republic and ancient Rome both provide positive examples of the fact that the form of most great world cities has as its referents patterns of worldly social and material existence shaped by the boundaries of political jurisdiction. The nature of cities as places to live and work, their mishaps and successes of form, reflect their holistic sociological and political context.

After centuries of sameness under successive empires and simple neglect in the first half of the 20th century, Peking, as capital of the Chinese People’s Republic, has undergone drastic alterations of form.

Twelfth largest city of the world in 1960, Peking today is different from imperial Peking in that it is the center of a nation-state and the center of centralized policy-making and administration. From this city is directed a spatially mobile bureaucracy, attempting a massive transformation of the values and habits of a locally fixed population. The new government has stressed the building of transportation and communication (railroads and telephones) to bind the nation but primarily for the use of the bureaucracy, not the populace. Outside Peking are new large freight yards. Trains and train engines are considered glamorous.<sup>15</sup> (Note my discussion later in this chapter of the significance of railroads in French and American national development.) Whereas before, government had little effect on daily life, now it has much; where before its local reach was limited, now it penetrates down and out to the smallest unit. Tens of thousands of city-dwellers after 1956 were forcibly transported to work in the country. More than 20,000,000 had been sent back to their native villages by 1963.<sup>16</sup> While the bureaucracy is indeed hierarchical, with a tendency to gravitate back toward ancient rigidities, official policy since 1956 has been egalitarian. In 1964, insignia

of rank were abolished for the army.<sup>17</sup> If the frame is the state, the power base is now presumed to be the masses, not the individual family. Both husband and wife work and are often separated from one another and their children. Many bureaucrats live in government apartment buildings and send their children to collective care centers. Evenings and weekends are occupied with party meetings and training.<sup>18</sup> Privacy is minimized. All is public.

Values and assumptions have greatly changed. No longer is the eye on social harmony, but rather on violence and class struggle as a means toward progress. The emphasis is on youth, not age, to effect the cultural revolution. Far from being outside the system, the army provides key leaders for the party. One's status in party and bureaucracy depends on how soon and how long one served the military revolutionary movement. Since 1964, the army has served as a model for ideological transformation as well as an anti-bureaucratic weapon.

Man does not live apart from and through nature, but violently attempts to transform it. Great factories boom in the areas outside the former walls of Peking. No longer is the eye on excellence of spirit under the vault of heaven; rather, willpower and workpower are directed toward collective material progress. Time is not cyclical, but linear. No longer is emphasis on the unchanging, but rather on change.

With all of these socio-political changes, changes in the capital city have inevitably come, too. No longer does the city stand for man-made order carved out from natural chaos. The city is the former citadel of power and social standing now captured, controlled, and used for control of the country by a party whose main base was rural and peasant. The walls have nearly all been torn down. Only the gate towers and a few stretches of wall are left.<sup>19</sup> Now the walls are around the nation as a unit, and order of a new sort is being imposed across the homogenized nation-space. The Legation Quarter has been opened—China is now in command of its own territory. The new political and spiritual heart of Peking and the nation is at Tienanmen Square, at the gate to the former imperial city. Tradition has not been entirely scuttled. Tienanmen Gate has yellow tile roofs, stone lions, and two stone pillars carved with clouds and dragons. In the square are still seven marble bridges. But on the gate's red brick walls are huge inscriptions: Long Live the People's Republic of China, and Long Live the Great Unity of the Peoples of the World. Nearby, 14 feet higher than the gate tower, is the Monument to the People's Heroes. One of its inscriptions reads, "The People's Heroes Are Immortal." On either side of the bridges, reviewing stands hold up to 10,000 people to watch parades. The square is vast and used for mass meetings (otherwise it is almost empty, except under the quiet cover of nighttime). It was here, in 1949, that the People's Republic was proclaimed.<sup>20</sup>

The city has greatly expanded. Housing is more westernized. Swamps are drained. Streets are paved and clean, but a puritan spirit of thrift and efficiency

has also killed all the dogs and the sparrows. The imperial grounds of the formerly forbidden city are now open to the public, restored as a People's Museum. The great imperial parks are public parks. Life is all public, not for the flowering of the individual as in ancient Athens, but rather to raise and redeem the whole nation by transforming it collectively into modern industrialism—an industrialism building on labor more than capital. China is still deemed the center of the world, but now as the center and potential leader of world revolution. The selfhood of the individual is to be identified with the nation-space and its progress (temporal linear development), not in order to expand the self but to subsume it within the whole.

Peking made the sudden leap—some would say the great leap forward—to become capital of a nation-space. The perennial and true cliché about ancient Rome is that it never managed to make that transition successfully. One reason for the difference is that imperial Peking was never a city-state, whereas Rome was entrenched early and strongly as a city-state and never quite gave up that image. Romans, who found in the city a larger self, who expanded the personal self through the acquisition of country estates, and whose restless energy conquered provinces, were never quite able to stretch their self-space to encompass a whole empire as *civitas*. They did make a valiant try.

The first step was to establish a city based on territory because initially, of course, Rome was simply a collection of independent tribes (i.e., family groups) governing themselves on their separate hills as independent villages and sharing a common necropolis on the site of the later Forum. Once Rome was established as a city, with a governmental system based on territory, there followed territorial expansion and gradual dispersement over space of the duties and privileges of citizenship down to 212 A.D., when Roman citizenship was granted to all the provinces (where, through various special events and provisions, citizenship was already widespread). The next step was to homogenize the provinces into a reasonably uniform governmental spatial entity. For a long time, a province meant an official sphere of duty (senatorial or imperial, but increasingly the latter), not a territorial area.<sup>21</sup> An important step was taken under Augustus when, in effect and for the first time, provinces were treated as departments of a single state. Italy's special provincial status was taken away piecemeal and eventually abolished. Local constitutions, framed and granted by imperial edict, became more uniform. The Imperial Council increased in importance and became the center of government, from the end of the 2nd century A.D. onward.<sup>22</sup>

Concomitantly with all this had come the development of an imperial bureaucracy, and the diminishment of the spatial scope of the powers of the Roman Senate. Under Aurelian (270–275), the Senate lost most of what remained of its

special privileges and centralization was complete. Diocletian (284–305) created separate civil and military hierarchical administrative systems, dividing the empire into many small provinces, in turn grouped into dioceses, in turn grouped into prefectures.

Only the city of Rome and its environs remained a special diocese, but Rome had long ceased to be the capital. All this while, the army had moved from a citizen army to a professional one, from a primarily Roman and then Italian array to one almost entirely comprised and led by provincials. By the 3rd century A.D., soldiers and emperors alike tended to come from Illyria (the Balkans). When barbarians were threatening the very life of the empire, in the latter part of the 2nd century, emperors became purely soldiers, chosen by the army, living not in Rome but in army camps. The capital was not in Rome, but in fact, if not officially, where the emperor was. Under Diocletian, Trèves, Milan, Sermium, and Nicodemia were all raised to the level of capital.<sup>23</sup> When Constantine moved permanently to Constantinople, the end of the Western Roman Empire was in sight, and the city of Rome was already rapidly on its downward path toward chaos and decay.

Emperors had once united in their persons, and thus in the State, combined civil, military, and religious powers, buttressed and dramatized by the monuments and rituals of the city of Rome. As the empire expanded and barbarians gnawed back at its borders and emperors had to leave the city on military missions, the role of emperor as embodiment of *civitas* tended to disintegrate until a low point was reached when emperors became merely soldiers, chosen by soldiers. Emperors tried to reverse these trends by an increase in pomp and despotism. Under Severus (180–192 A.D.) the emperor's person and environs all became sacred. He lived like an Eastern potentate, surrounded by eunuchs. "Hidden in the depths of his palace, like an idol in its shrine, the sovereign did not deign to appear before ordinary men except on rare and carefully organized occasions. He could only be approached with complicated rites of prostration and worship."<sup>24</sup> Emperors began to wear a diadem in public.

When mystique was centered primarily in a person (the emperor) and only derivatively in a place (the city), a device was needed to spread its aura to give cohesion to the wide space of the empire. So the Sun was declared god, and the emperor his corporeal emanation. When emperors became Christian, they became self-proclaimed representatives of God on earth.

As in the Chinese empire, government of the Roman Empire did not penetrate deeply. Provinces had been primarily for glory, taxes, and economic exploitation. The Roman roads and law, like the language, sat lightly over the top and did not engage the whole society. No common culture provided cement. The kind of government evolved in the city of Rome depended on face-to-face relationships (of a kind people in Paris as a capital city now hunger for), but these were

lacking in the broader empire. Military force, administrative reorganization, and the mystique of despotism did not give such an empire adequate cohesion.

The drift of the government was centrifugal. So was the drift of the city. There was direct correlation between the changes in Roman government and the changes in Roman city form.

Built in the early days when Rome was still supreme, all roads radiated from the city center, near the Rostra, becoming broader and straighter near the outskirts. Beyond the gates, roads paved and straight ran to the boundaries of the empire.<sup>25</sup> Their center, the Forum, where the Rostra originally sat between a market and the comitium for open-air town meetings, was the center of Roman life. Imperial fora joined it. (All except the original forum were built on axial lines—that is, with the effects of vista and control in mind, as France's rulers later built axes in Paris.) Despite provisions for commerce elsewhere, the fora remained centers of economic activity.<sup>26</sup> Numerous temples were there also, of course, though by the first century B.C. religion had become almost purely formal and political. The fora were—as every schoolboy knows—sites for governmental debate, voting, and lawmaking; then, for libraries, judicial activities, and governmental administration. Lavish public banquets were held there, and sometimes public executions. Processions and funerals went down the Via Sacra, their rhythms accentuated by colonnades down outdoor corridors, footsteps spatially directed toward monumental stops.

With such a living core, for all its chicanery and brutality, Rome had no need for walls to make itself a city. The Servian wall (built for defense in the 4th century B.C. and earlier) was gradually left to decay. The Aurelian wall, putting a new ring around the expanded city, did not appear until 274 A.D. and, too, was only for defense against “barbarians” (the “others”), not the embodiment of a civic idea.

Theatre and personal hedonism as part of the Roman way of life existed even during the austere days of the Republic. Early public games and shows were nearly as brutal, if not so spectacular, as later ones. The first circus on the site of Circus Maximus was held in the 6th century B.C., and the Circus Maximus itself was established by the time of Caesar’s death. So were the Circus Flaminius and the Theatre of Pompey (though Republican Romans considered theatre immoral); and other theatres soon followed. The first bathhouses appeared in the 2nd century B.C. and by 33 B.C. there were 170 public baths.<sup>27</sup>

The precedents were there. Yet it is still accurate to say that as the empire evolved, with its centrifugal pulls, the city moved from *civitas* to bread and circus (welfare and mass culture), and then to personal hedonism as the main basis for its integration and cohesion. Emperors were adding their monumental fora at the core, but other fora and public squares were also being scattered around town—18 altogether, by 315 A.D., dispersing focus. A policy of welfare

and mass culture was necessary to satiate the huge idle population that had drifted into the city partly as the result of the demoralization of farming during the long provincial wars. The Colisseum became the symbol of circus and mass culture. Perhaps Trajan's market might be taken as a symbol of bread and welfare, if some of its offices were really used for the mass distribution of corn.<sup>28</sup> The third stage reached a zenith when Caracalla (at the beginning of the 3rd century) and Diocletian (in 305–6 A.D.) built their giant public baths. By the beginning of the 4th century A.D., Rome had eleven public and from 800 to 1000 private baths.<sup>29</sup>

Oddly enough, if one traces the location of these different kinds of public buildings, the main fora remained at the heart of the city (symbol of *civitas*, and place where all the roads met), the theatres and stadii were in a ring somewhat further out, and the great baths of the late Empire were in a still more outward ring. Counter-Reformation Rome “sucked” people inward; as it developed, ancient Rome moved people outward. Thus urban form provided visible symbols of the centrifugal governmental process, the dissolution of a city-state.

Though filled with lootings from Rome, Constantinople as a city form never achieved Rome's symbolic power but remained a pastiche of various cultures.<sup>30</sup> The power of Rome was to remain dormant until the Church revived it and gave it new form.

### The Nation as Self-Space

In Paris, we finally find a city that acts as the focus and center of a nation, a star example of the capital of a state such as Rome never really became and Peking is still trying to become. The shape of the present city was crystallized between 1850 and 1870 under the guiding hands of Louis Napoleon and Baron Haussmann, his Prefect of the Seine. Star is a good word, for (like many other cities whose radii grew around public transportation lines) present Paris is shaped like a starfish. It is the center from and to which all lines radiate in France. General de Gaulle visualizes it as the radial center of a Europe whose bounds stretch as far as Rumania; and one of its prevalent street-forms is the *étoile*.

France only gradually became a nation. Paris only gradually became a capital. Under feudalism, space had a complex body and texture, when personal status and authority were perquisites of title to particular pieces or uses of land. Then, as kings combined forces with a new nationalistic and rationalistic mercantilism and battled to gain ascendancy over the nobility, authority became once more centralized over more homogeneous political space, and the Roman aspiration was finally actualized. Present Peking attempts to impose a monolithic governmental structure, subsuming the local and the individual. Ancient Rome had two kinds of political space, local and imperial, with personal identification primarily in the former so that the citizen never quite considered

imperial space his own. Intervening feudalism linked people to space in an ascending chain of personal identifications, the higher rank also having broader space and a kind of jurisdiction over all the lower and smaller, though each level retained its special rights and identity. To build a state, kings, as the highest in the chain, with the broadest spatial domain, had simply to subordinate the middlemen and bind the citizen in direct fealty to the crown and all its land.

On Paris, these spatial changes had centripetal effect, the reverse of the Roman process. The early kings built castles on the Loire. Later ones stayed closer to Paris—Fontainebleau, St. Germain, and Versailles. By the mid-19th century, Emperor Louis Napoleon stayed even closer, at St. Cloud. In Paris, kings dramatized their drive to absolutism by building and rebuilding palaces with gardens and streets on an axial line, for vista and impressiveness—the Roman axis, tempered by Renaissance style and then adapted to the aims of divine right absolutism through classical baroque as stylized in Versailles. The axial line with its will to power persisted: in the École Militaire—Champ de Mars—Trocadero, capped by the Eiffel tower, monument to an era that invented dynamite; in the Invalides, for injured soldiers; more strangely, in the walks and grass marching up the hill to the basilica Sacré Coeur, which was conceived at the time of the Montmartre cannon and the violence of the Commune; and most recently in the extension of the Champs Elysées—Neuilly axis out to a new center, the Rond-Point de la Défense, where forward-projecting modern industry and military research are juxtaposed.

As kings centralized their power, partly through the aid of mercantilism, nobles began to aggregate where the kings were. In the Marais, near the Bastille and the Louvre (both once palace-forts) they built *hôtels particuliers*. After the gardens of Catherine de Medicis's Luxembourg Palace cut a north–south line across the center of the Left Bank, nearby Faubourg St. Germain became fashionable. When royalty dwelt in the Tuileries Palace, and when Cardinal Richelieu (who as prime minister had abetted the growth of divine right absolutism and had sponsored the codification of the French language) built the Palais Royal and then gave it to royalty, both sets of gardens became centers for aristocratic rendezvous. In the years before Louis Napoleon came to occupy the Tuileries, a new high bourgeoisie (including the Rothschilds) were filling out the Quartier St. Honoré and were soon to grace the outer stretches of Champs Elysées.<sup>31</sup>

Once the nation-state was established, both the feudal links and kings could be jettisoned, and the people could claim the whole thing as their own. In a land of peasants working their own small holdings, and shopkeepers and artisans working on their own premises, the nation-space could be the self-space written large.<sup>32</sup> Local and national could be mirror images of one another, linked, but at the same time separate. When the mood suited, the Napoleonic patterns of centralized administration for education and government, adapted from the

*ancien régime* and still operative today, could be eroded from below by individualism and localism. Especially after 1870, when new railroads provided a binding network, France could become a republic which eschewed a strong executive and turned its legislators into errand boys for local interests. Or, using the same double-layered interwoven central-local structure, France could turn to emperors or Restoration kings or a General de Gaulle to embody and enforce the state idea, to perform a kind of holding action, and—even more—to act out on a larger scale the individual Frenchman's self-conception.<sup>33</sup>

France has been a colonial nation. Napoleon I, of course, was vigorously expansionist. And the French still identify somewhat with the ancient Romans—as their secular heirs, perhaps? But just as the individual Frenchman has often husbanded his property holdings rather than seeking to expand his land, France is not innately imperial in spatial terms. More than territory, France has wanted the kind of glory that could be obtained through influence, through cultural ascendancy, and through command presence dominating space the way a piece of sculpture dominates the space around it. (The French do not seem to ponder that many of their statues are of rather flaccid women.) Hoping to be secure in their familiar space, the individual and the country take the stance that they will truckle to no one, but they are not by preference militarily aggressive. They prefer to stay at home protected, if possible, by a Maginot line or the *force de frappe*.

While French government has persisted on its old two-plane spatial basis, a more organic social and political structure has been growing, particularly in Paris. The postwar period has seen a sudden increase in industrialism, which—because of traditions going back to the *ancien régime*—also means an increase in state capitalism. Today, assembly line methods of production and supermarkets have finally begun to supersede former more particularistic ways of doing things. Today [i.e., 1968], the state “owns” much of the important banking and transportation, 40 per cent of industry, and a variety of unrelated enterprises.<sup>34</sup> Furthermore, cities, and especially Paris, have been rapidly growing. Paris, which had only 5.2 per cent of the nation's population in 1861, now has 16.5 per cent. The Paris region had 81 per cent of the nation's growth between 1851 and 1954, now declined to 31 per cent, though its absolute growth is higher than ever.<sup>35</sup> It has 82 per cent of the head offices of big enterprises and a near monopoly in some businesses, more than 50 per cent of important new industries, and 25 per cent of industries of transportation.<sup>36</sup> Workers began pouring into the city even before the mid-19th century. Today it has one-fourth of all the country's industrial workers, 63 per cent of all automobile workers, and 37 per cent of workers in mechanical industries. It also has one-fourth of all the nation's governmental employees. It always was and still is the nation's cultural capital. In 1939, Paris had 45.7 per cent of students in the country, though the percentage was 32.7 by 1964.<sup>37</sup>

Many of these urban people (and the dwellers within other French cities, also growing) function and identify themselves as parts of generic categories rather than as individuals in family units shored up within their private property. As such, they tend to combine with their peers and to have international affiliations. Many of the workers and students are actually foreign. One out of every six persons in Paris was born in another country.<sup>38</sup> Since the Middle Ages, students have had international linkages. Under the Second Empire, France had over one-third (90,000) of the 250,000 members of the Workers' International.<sup>39</sup> France's largest confederation of unions today, the CGT, since World War II has been led by Communists who follow the Moscow line. Civil servants are unionized, and tend to be left-wing. Some business, too, has international leanings. Today, many of France's largest industrial groups have affiliates in other nations beyond the Common Market.<sup>40</sup> A small technocratic element among owners and managers is impatient with the sharply growing research and development gap between the USA and Europe. Whatever their other differences, all of these people have in common the fact that they do not think or feel in the peasant's or shopkeeper's age-old spatial terms.

The stratifications of industrialism invoke protests different from the peasants' demand for land in 1789. Workers ask for a better distribution of income. Students protest authoritarian class-discriminatory quality of instruction and examination. Both workers and students alike ask for more voice and responsibility: the key word is participation. President de Gaulle proposed that vocational organizations be given representation in the Senate, which now over-represents small rural areas. But no remedies are in sight to give the Assembly more real power, or to give left-wing elements representation commensurate with their popular vote. (In the 1958 Assembly, the seven million electors who voted for Socialists and Communists were represented by only 50 deputies, whereas the 3.5 million who voted for de Gaulle's UNR were represented by over 200 deputies.<sup>41</sup> Despite an only modest change in the popular vote in 1968, Communists lost 39 seats and the Federation of the Left lost 61. These figures are before the final tally on July 10.)

Students also protest the sterilities of emergent trends. Something is missing now that they had in the past. They reject a society of consumption that reduces everyone to a producer or consumer, or a society of technique that threatens to make all robots. Though some use the language of anarchism or revolution, the underlying demand is for warmer human relationships and more meaningful values, achieved in new ways.

As all of these factors converge, Paris becomes like a pressure cooker, for it is as if Congress, the White House, the New York Stock Exchange, dozens of vocational association headquarters, San Francisco's hippies, Washington's embassy row, and several campusfuls of University of California students were all within

walking distance of one another. Demonstrations in the streets play on the city's symbolic function. On May 13, 1968, workers and students marched from northeast to southeast, through the Place de la Bastille. On May 30, pre-Gaullists went from the Place de la Concorde, symbol of unity, down the Champs Elysées (which bourgeois governments developed) to Napoleon's Arch of Triumph.

City form always expresses underlying structure, and Paris of the past 100 years has been no exception. To be sure, Paris in the mid-19th century and Paris today have had many of the problems faced by other large cities: excess population density; inadequate city services and housing; the need for more green space; acute traffic problems; and social unrest which is augmented by the concentration of particular social classes in particular parts of the city and suburbs. Haussmann's solutions for these problems in the mid-19th century and the proposed solutions today are similar. What is even more important, solutions represent a similarity of underlying intent.

In both eras, the desire was to keep the old royal-mercantile-Napoleonic radial, axial, concentric street patterns. (De Gaulle seems to have no real intent to give up the old space-based patterns of government.) Haussmann even dramatized them, through a tearing away of distracting ramifications and rubble, through the further development of the Champs Elysées, and the building of new streets radiating into the Étoile. In both eras, as long as the basic old forms were preserved, new changes might be made to let the city serve as a catalyst. Haussmann adapted the city to bourgeois demands for comfort, ease of movement, a more mass culture, more popularized social interaction, and more centralized exchange points (in the newly built Halles, the Bourse, and the new department stores). Then, as now, efforts were made to ameliorate the worse conditions of workingmen's suburbs and to bring them under greater central control—in 1860, through annexation and now, through reorganization of Parisian regional administration. Through the building of railroad stations and abolition of the tax wall then, through highways and airports now, city and country have been made more accessible to one another. But until recently, clear urban-rural differences and hostilities have persisted. The present regime has made a conscious effort to decentralize—to move industrial plants further out, to build up government university services outside of Paris, and to build up regional economic development throughout France, but the threads of central control make a tighter-than-ever bond.<sup>42</sup>

Compared with other great cities, the face of Paris has remained relatively static, high-rise apartments in the suburbs notwithstanding. Because so much of its center is monumental, and has been conscientiously restored, it does not decay as is the case in other cities. With the removal of the food markets, the city in 1968 had for "renewal" near its heart the 40 acre site of the old Halles. A very grave question indeed was what would be done there.

France for a long time was closed and static because systems can stay static only if they are closed, and vice versa. Perhaps all of de Gaulle's efforts were only strategic adjustments to keep the system closed within a new European context. However, industries are abandoning their old concept of limited production for a closed market. The country is expanding its foreign trade. The French are even traveling as tourists to other countries, and above all—after being static and even declining—the population is suddenly growing.

The human demand in France is for a more satisfying organic society, based on more person-to-person meaningful communication between different social elements, and yet the potential international thrust of many of these elements means that a viable nexus may be somewhat beyond the nation-state which is still the somewhat rigid frame.

There are also thrusts into the future, into a new kind of open-ended time. The temporal orientations of a nation of peasants and shopkeepers have not been linear. In a political state composed of planes of personal, local, and national space, the “now” has been a sort of platter with a kind of rigid perpetuity. To one side has been another platter, the remote past; beyond has been still another platter, the future—both a bit apocryphal. Because there are major hiatuses within such a system, with too little built-in provision for linear growth, discomforts accumulate and periodic resort is had to violence, not because it makes satisfactory readjustments but because at least it releases tension.

Substitution since 1946 of *planification* for mere codification might be taken as evidence of a new temporal orientation. However, this French word for planning invokes the English word “plane,” which carries the connotation of a kind of spatial extension of the will, an axial vista, over time—with a foreclosed rather than open-ended future. Better evidence is the fact that France has moved from a value system stressing balance and harmony to one putting more emphasis on change and growth. People are abandoning their longtime dislike for the use of credit. (That is, they are willing to project their personal fortunes into the future.) Then there has been a dramatic “youthification” of the population. In 1939, France had the oldest population in Europe; now it has the youngest, with one-third of its 1968 population under 20.<sup>43</sup> Among the young people is a new spirit, a breaking ways from old confining temporal as well as spatial bounds. Inevitably, though reluctantly, they assess the United States both as a challenge and a model to be at once imitated and avoided.

### Polynuclear Pluralistic Interdependence

Early colonial American villages brought to the New World the *gemeinschaft* of medieval society. In the medieval villages of their forebears, the “future” was in heaven. Political jurisdiction was a correlative of interpersonal relationships, not primarily spatial. People whose work had a spatial thrust beyond the organic

community were somewhat isolated and tolerated as necessary evils, and had to evolve and enforce their own specialized law.

Much of American history since then has been the story of interaction between three different uses of geographic space: 1) the far-flung, but only sometimes inhabited, space-time planes occupied by such wanderers as ship captains and railroad porters; and the changing spatial-temporal structure of 2) ecological and 3) political community. The changes in modes of differentiation, integration, and cohesion (from a medieval status society to an individualist society with a cash nexus, to a mass society integrated through generic vocational categories) have been correlatives of the changing interactions of these three different kinds of geo-social space.<sup>44</sup>

During much of America's colonial period, in a medieval fashion the spatial boundaries of political jurisdiction were ambiguous. Political authority was intertwined with the structure of ecological community. A new historical landmark came when political jurisdiction was measured primarily in terms of geographic space. This step reflected the fact that the old bonds which held communities together (either organically, by custom, or contractually, by covenant) were breaking up, for there was an empty continent to settle. A new form of jurisdiction had to be devised which would be like a box within which the contents could separate and move about. To base political-legal jurisdiction on such a neutral element as geography, over which law spread in abstract generic thrusts, under American circumstances meant that men need not stay in fixed locations and yet social control could persist even when men were strangers to one another. Political and ecological community did not have to coincide.

Seventeenth-century New England towns had allocated differently shaped and sized lots on the basis of social standing and on the presumption of stable continuing organic relationships. Eighteenth-century New York City was a seaport, with a quality of extraterritoriality; within the framework of mercantile regulations, it had the "feel" of a free port. Its early 19th-century form was like that of many other American cities, for most of them were dedicated to exchange and trade. A group of conservative New York gentlemen decided in 1824 against the type of plan Major L'Enfant had made for Washington, modeled on the baroque so influential in Paris, on the grounds that it was undemocratic for building plots not to be of the same shape, size, and value.<sup>45</sup> New York's lots were designed for ease of buying and selling, a paradigm of an era when the freewheeling individual related to others in an ad hoc fashion through bargain contest, contract and cash. New York's traffic arteries were planned in 1811 on the assumption of two- to three-story buildings. The streets were for rapid movement in one or another direction (the original planners did not anticipate the stoplight), not primarily for random strolling and leisurely social outdoor dining. Although there were parks and squares, the city's form did not focus

primarily or centripetally on squares or a commons for collective social or civic life.<sup>46</sup>

The American federal constitution represented a new phase in spatial interactions. Political jurisdiction was based on geography, and economic groups with a special wide-space orientation were not ostracized or ignored, as they had been earlier, but were provided, through the federal government, with a set of institutions separate from, but formally connected with, the state institutions serving more local communities. What Charles Beard saw as differences in class interest, which *were* differences in class interest, were differences in space orientation as well. In the brilliant concept of federalism, the writers of the Constitution provided for differences in political and legal jurisdiction which permitted necessary degrees of autonomy between economic groups with different patterns of spatial activity. Moreover, the connections between levels were not accidental and informal, as such connections had been in England and in the American colonies between the law merchant and local law.<sup>47</sup> The connections and the parts connected were all intrinsic elements of a conceptual whole.

When we look at the American 19th century as a unit, what a complex choreography we see:

1. The rapid extension of the reach of national jurisdiction from the Mississippi to the Pacific, and the rapid formation and assimilation of new states.
2. The rupture of old local ecological communities and the continual establishment of new ones in the West.
3. The casting across the nation of a new network of communication (turnpikes, canals and steamboats, railroads, telegraph, and telephone), new paths for special planes of work.
4. The abandonment or modification of old social structure and economic forms, to be superseded by new ones serving the industrial-urban revolution.

All of these were changes in space. How serviceable the Constitution was! The geographic concepts of state and nation held men together without binding them too tightly while they were westering. Federalism permitted a decentralization of local government. At the same time, the entrepreneurs of industry and transportation could play up and down the rungs of federal, state, and local jurisdiction, evading the limitations proposed by local ecological communities and using the political state for their own purposes. So they were able to construct in a hurry the far-flung paths of communication that formed a basis for eventual national integration. Because their special planes of work were largely *within* the boundaries of the nation and, in fact, were essential to tie the space of that nation together, they could gain political power and not remain outsiders, as the medieval wandering merchants and 17th- and 18th-century sedentary merchants had been. Railroads were also lifelines to local communities. Like federalism itself, their multiple orientations permitted functioning at every

spatial level. Their interdependence lent itself to coordination from a center (New York City), but the multi-levels of the total system permitted and encouraged the wide distance (quickly spanned, if need be) between Washington and New York. (Remember the similar division of labor between big city and rural capital in individual states.)

(German railroads were built during the same era, and in 1871, after centuries of political fragmentation, Germany adopted her own form of federalism. Primarily agricultural until then, she surged ahead industrially. Her urban centers were also multiple and widely spaced, with an important axis developing between the Ruhr Valley and Berlin.)

Today, numerous groups and organizations function across the whole space of the American nation and beyond it. The purposive thrusts of a variety of different segments within an interdependent system need to coordinate with or adjust to one another at varying intervals over time as well as space. For a "frame," they need neither the plane-like space nor the time Peking now favors. They need a four-dimensional space-time matrix with non-rigid boundaries, to give room for variations and contingencies in movement and connection. *In governmental terms*, for European nations this probably means some kind of European federalism. For the USA it means new forms of private and public activity beyond the conventionalities of the nation-state. *In ecological terms*, it points to the utility of polynuclear urban complexes when there is a division of labor among connected cities accommodating federally multiple levels of private and public activity. The New York-Washington complex is one example. Another is provided by the division of labor between Bonn, Cologne, Düsseldorf, and Essen in the Rhine-Ruhr Valley, potentially linking with the similar Ransdorp complex in the Netherlands.<sup>48</sup> It also means that within such big cities as New York, one can find many almost equally important centers. (By the end of the 19th century, J. P. Morgan's bank seemed to be the center of New York City, and New York focused one level of control whose network spanned the whole country. But today who can say whether the Chase Manhattan Bank, the Stock Exchange, the World Trade Center, Madison Avenue, Gracie Mansion and Foley Square, Union Square, Harlem or any of a number of other places in New York is really more important than the "others"? *In personal terms*, it means a continuing gulf of noncommunication between groups and people who occupy quite different planes of spatial activity—e.g., the localized ghetto dweller and the international jet-traveling executive or technical expert. For the self, it means loss of the sure parameters provided by rootedness in one place on one's own land. For in the long run, to talk about "planes" and "centers" will not be appropriate. Old fashioned "authority" tends to disappear in huge complex organizations using large numbers of highly trained people. New mass communication methods and ecological sprawl are obliterating city-country distinctions

so that—as Lewis Mumford once wrote—the whole world is becoming a city. Since, from the time of ancient Rome onward, the State has been based on differences between a central control point and its hinterland, between capital and provinces, as well as distinctions between “us” and the “others,” when these distinctions break down, can there be a State at all? In the very long run, what happens to time, which also depends on distinctions and discrepancies? And when the self loses not only personal land space but also vicarious nation-space, will it be defined purely in terms of “role” and “personality”? How will it distinguish itself from others? How will ethics and manners (so interwoven with spatial distinctions) readjust?

Changes in social structure require and produce changes in ontology, which in turn require and produce changes in epistemology. Quantification is valuable. Mathematics can lend limpid clarification. But current statistical political analyses tend to treat space as an independent variable perennially structured in Newtonian block dimensions and to treat time as simply linear,<sup>49</sup> a set of assumptions remarkably analogous to the space-time imagery of the present Chinese state. Arithmetic and algebra crowd out geometry (particularly non-Euclidean varieties) and calculus. With all the social changes in process, more sophisticated methods of objective analysis are needed, but also needed are more sensitivity and insight into aesthetics and values because a fourth proposition may be derived from the three propositions already elaborated: namely, that beauty and morality, in their most profound sense, are at the nodes where spatial-temporal social structural patterns and environmental symbolic patterns interact.